märklin

Complete Program 1999 / 2000 E

märklin 140 Years

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märklin 140 Years

General Information for the Hookup and Operation of the Märklin Model Railroads

Märklin products adhere to the European safety regulations (EC standards) for toys. Achieving the greatest possible safety in practice requires, however, that the individual products are used in accordance with regulations. In the instructions accompanying the products, directions are therefore given for their correct hookup and operation which are to be followed at all times.
It is recommended that parents sit down and go through the instructions with their children before the trains are operated for the first time. This will provide safety and many years of enjoyment in the use of the model railroad.

Several important points of general significance are given on this page.

Electrical Equipment for Building a Layout

All Märklin products intended for electrical/electronic operation may by used only with Märklin transformers or low voltage, plug-in power packs designed for this purpose.

Hookup of Track Layouts

Every electrical conductor has an electrical resistance. Naturally, this is also true for model railroad track, especially for the rail joint or the electrical connection between two sections of model railroad track. To minimize the drop in voltage that results from this, we recommend that additional voltage connections be made every 2–3 meters (approx. 6–9 feet) (depending on how clean or corroded the rail joints in the track are) using a feeder track or other feeder connection, to enable trouble-free operation and a safe way to shut off power in the event of excess current (example: short circuits from derailments).

Please note:
The transformer may be operated only with alternating current. Operation in damp or wet areas as well as outdoors is not permitted. When Märklin transformers are used properly, damage due to overloads is largely avoided.

In the event of a short circuit the built-in thermal switch shuts off the current automatically. We recommend that the speed control knob be set to "0" and that you wait about one minute. After the cause of the short circuit has been corrected, you will then be able to continue operation.

The transformer may be operated only with alternating current. Operation in damp or wet areas as well as outdoors is not permitted. When Märklin transformers are used properly, damage due to overloads is largely avoided.

Transformers should be examined regularly for possible damage (example: to the electrical cord, plug or housing). Damaged transformers must not be used.

Installation of Digital Equipment

Because of the many possibilities for control with Märklin Digital, it is recommended that on very large layouts the control components be installed at various points around the layout. The 6038 and 6039 adapter cables enable you to install individual components in a decentralized manner.

Please note:
The sum of all distances between the individual components may be a maximum of six meters (19′6″).

Television/Radio Reception and Model Railroad Layouts

All Märklin products conform to the current EC regulations for preventing interference with television/radio reception. Wear and/or faulty maintenance of these items as well as operating them in a manner other than indicated in the instructions can lead to increased interference with television/radio reception. A magazine dealing with this range of topics is available on request.

In addition to this general information, please follow the instructions included with individual Märklin products to maintain their operating reliability.

This catalog contains **no price list** from Märklin. Please see your local, authorized dealer for his price list.

The pictorial symbols next to individual items will give you clear, simple information about our quality and system features. The handy foldout page at the end of this catalog explains the different symbols.

The factory sells only through its authorized dealer network. Your local dealer will be happy to show you the full range of Märklin model trains and will gladly advise you about them.

We reserve the right to make changes and availability is not guaranteed. Electrical and mechanical data and dimensions given may vary in accuracy.
Some of the models illustrated are handmade samples. The regular production models may differ slightly from the models illustrated.

This Märklin full line catalog supercedes all previous Märklin catalogs.

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D-73008 Göppingen

Dear Märklin Enthusiasts,

märklin

140 years of Märklin – in today's fast paced business world 140 years are almost biblical in duration; only a few firms are able to look back that far. One reason for our success is the innovative energy with which Märklin has consistently set trends in motion and has transferred current developments in technology to high quality, toy models rich in working features. It has also been this way with model railroading. There has been a consistent goal to make the hobby of model



railroading still more realistic with even more action. An example of the recent past is Märklin Digital, which expands the operating possibilities that make model railroading more attractive and ready for the future.

You can therefore expect innovations in this our anniversary year. Among them are the "official anniversary model", the historic Esslingen steam locomotive that we are offering in H0 (with appropriate cars from the period) and in 1 Gauge, both in the quality of limited run series. No less attractive is the class 55, the totally new tooling for a so-called everyday locomotive at the latest level of model railroading technology: made of long lasting diecast metal, with a super fine frame and a high-quality propulsion design. The futuristic ICE 3 in Z and H0 gives you a look into the future. Model railroaders will be particularly happy to see several new items such as the wide radius C Track turnouts in H0. Or the long, four-axle passenger cars in 1 Gauge. Models and variations for railroads from all of the eras round out our new items program. Also, gift giving is back in style, and we are encouraging it with another H0 starter set with a complete DELTA setup and an exclusive mini-club gift cube.

A high point of the anniversary year was the Göppingen 1999 Model Railroad Meet in May. Around 40,000 visitors shuttled back and forth in beautiful weather between the train station, the Märklin Museum, and the different event halls. The immense interest in all of the gauges and the direct contact with Märklin fans of all ages was a beautiful motivation for all of us at Märklin. We would like to thank all of the participants from the city of Göppingen, the DB, Inc., the accessory manufacturers, and the model railroad clubs who contributed to the success.

Our new Märklin C-Sine motor is a "technological sensation". A first H0 model of the ICE-S with this motor is already in the testing phase every day on a layout. The practical experience from this will help us perfect the regular production version of this new motor. With its excellent control and operating characteristics, the C-Sine motor is a genuine innovation in the spirit of our company's tradition.

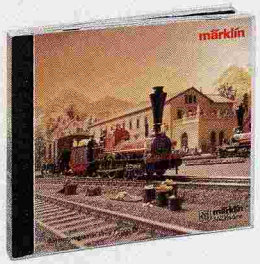
Moreover, we have also transferred this catalog to CD-ROM. In addition to the complete Märklin program with extensive product descriptions, this CD-ROM contains sound excerpts for all of our sound effects modules, and various search possibilities for models, item numbers, or spare parts. This will make it easy to assemble order and parts lists.

We hope very much that we can fulfill your expectations with out program. And we are sure that in the 140th year of our company history you will again be able to link several milestones in model railroading technology with the name Märklin.

Your Märklin Team

N

15332 "Ein Jahr mit Märklin" ("A Year with Märklin") Video Cassette.
European VHS system. 55 min. running time + 18 min. of new items for 1999. German narration only.



N

15010 CD-ROM Catalog for 1999/2000.
The Märklin CD-ROM catalog contains the complete Märklin program with illustrations and extensive descriptions. Sample recordings of all of the sound effects modules. With the help of various search possibilities you can generate a dealer order form. This CD-ROM has numerous other features in addition to information about spare parts. German language only.

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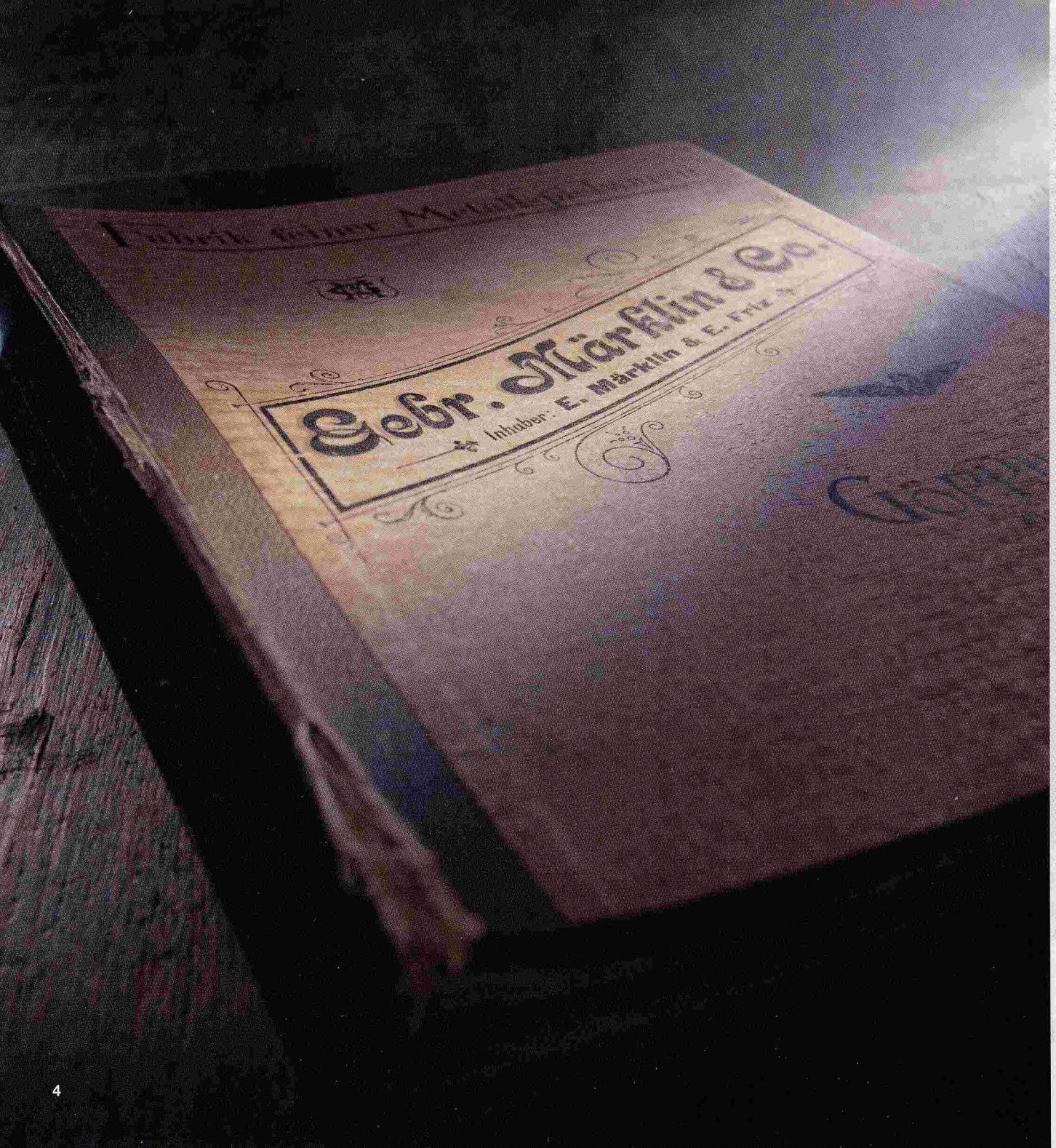
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märklin H0

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märklin 1



140 Years of Märklin:

Beautiful Toys and Technical Innovations.

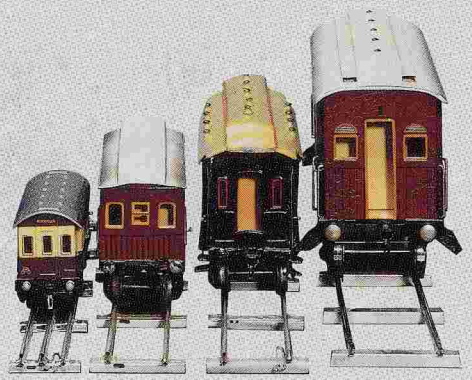
Since Märklin's discovery of the "System Railroad", numerous innovations run through the company's history like a red string. Contemporary developments were constantly taken up and turned into technically challenging models, all depending on the possibilities of the times. A motor for this development was the railroad whose new mobility for people and freight was revolutionizing society. The railroad also gave Märklin considerable stimulus, and not just the prototype for models, but also as the basis for distribution. For the wife of the company's founder, Caroline Märklin, traveled with product to the dealers, formed a dense distribution network, and in this way created the foundation for lasting success.

Märklin has set milestones again and again for technology and quality. We have maintained this innovative power down to the present, as this abbreviated model railroading chronicle illustrates. Did you know?

märklin 140 Years

The tinsmith Theodor Friedrich Wilhelm Märklin begins in Göppingen with the production of accessories made of tin for dolls' kitchens.

The gauges and scales 0, I, II and III become international standards on the basis of the Märklin scales.



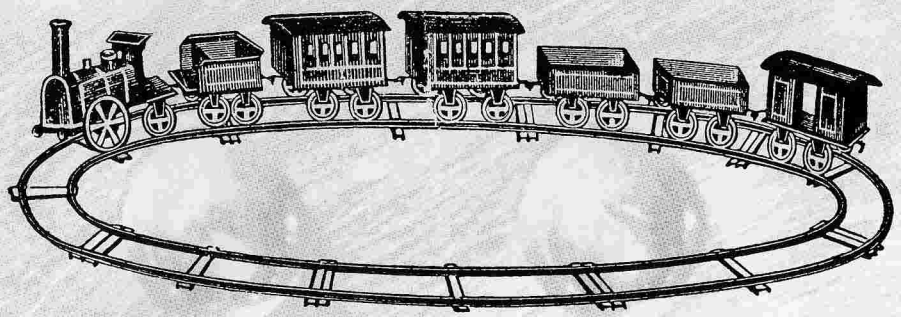


By "halving" 0 Scale to H0 (half of zero or "0"), Märklin expands the world of model railroading: The compact dimensions allow complete layouts as table top railroads. In addition, the center rail track system is easy to set up and provides reliable operation.

1859 — *1891* — *Around 1900* — *1926* — *1935* — *1938*

MÄRKLIN

Märklin presents the first system railroad: A windup locomotive with cars and an expandable track system.



With the new 20 volt system the electric trains previously operated with normal household current become safer to run.

MÄRKLIN

The "perfect circuit" enables remote controlled direction reversing on the Märklin alternating current system – a big step towards prototypical model railroad operations.

The first fully functioning catenary expands operating enjoyment to include an additional, independently controlled train circuit.



The new Märklin CCS 800 Crocodile can also be run on sharp model railroad curves thanks to an articulated frame similar to that on the prototype.

The standard coupler is developed further into the RELEX coupler. It allows pre-uncoupling over a new uncoupler track.



Märklin

The first sound effects module – a horn that can be retrofitted into a locomotive – ends the silence of the latter.

1939 *1947* *1953* *1956* *1958* *1966*

Märklin's standard H0 coupler couples gently and reliably and keeps a train composition together. It is adopted by other manufacturers and later becomes NEM Standard 360.

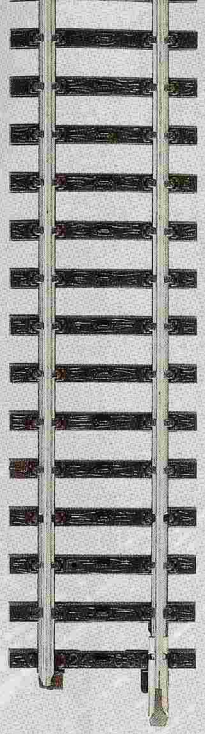


Up to now the solid third rail has lain on top of the ties; now it is placed under the roadbed and only stud contacts stick up through the ties. This makes the three-rail track visually more acceptable to model railroaders and becomes a synonym for the Märklin system.



The TELEX coupler for switch engines takes couplers a step further. It enables remote controlled uncoupling anywhere on the layout.





mini-club

märklin

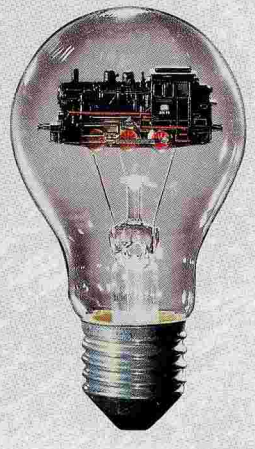
1969

With K Track Märklin presents a track system without roadbed. With flex track, large radius curves, and wide radius turnouts it is suitable for an experienced model railroader's layout.

The new Märklin 1 Gauge introduces a renaissance of the large gauge. A previously unknown level of detail on regular production Märklin models appeals to even the most demanding model railroaders.

1972

The presentation of mini-club. With a scale of 1:220, it is the smallest, mass produced electric train system in the world.



1982

A locomotive's direction of travel is now changed by an electronic circuit.

märklin

1984



Märklin Digital catapults model railroading into the age of electronics. Processing the command signals digitally – with an electronic receiver circuit in every locomotive – makes it possible to have independent, multi-train operation.

1985

The close coupler completes a train's appearance by having the cars in the train's composition coupled together closely like the prototype. It is also compatible with the standard couplers.



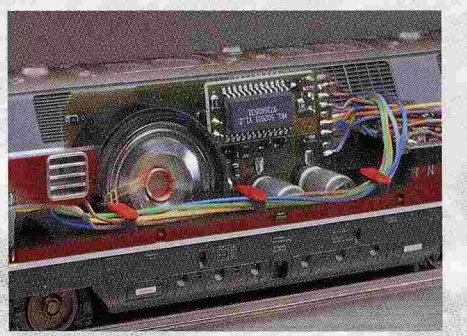


1988

The H0 Swedish train is a highlight of the models in this year: The bodies for the locomotive and the cars are covered with real veneer. Super fine details are proof of the high level of modeling technology.

1991

The new digitally controlled high-efficiency propulsion can be adjusted for the maximum speed as well as the acceleration and braking delay appropriate for each individual locomotive.



1992

DELTA

With DELTA Märklin brings out an entry into Digital with a multi-train system for small to medium size layouts.



1993



The Märklin Insider Club is founded. The dyed-in-the-wool model railroaders receive access to still more information and special exclusive models.

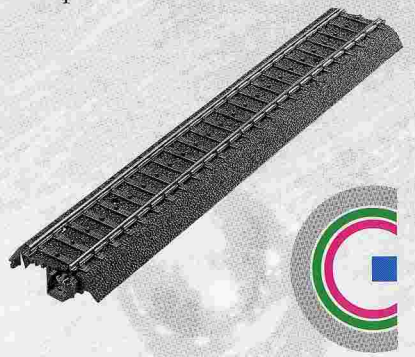
1994



With Maxi Märklin reinvigorates its tin-plate tradition. The robust construction and 1 Gauge's large scale make Maxi the ideal adventure and garden railway – fully compatible with the standard 1 Gauge assortment.

1996

The new C Track combines the operational advantages of center rail track with click assembly easy enough for a child, prototypical appearance and modular setup.



1997

Märklin Digital is expanded. A signal module and controllable locomotive functions bring new prototypical functions to the operation of a layout.

For the 25th anniversary of mini-club Märklin builds a steam locomotive with a body of solid 18 carat gold. This special exclusive model is accepted with enthusiasm by the Z Gauge enthusiasts.

With the Maxi camera locomotive Märklin brings out a video system that transmits to a television screen a train's trip from the view of the engineer. Running your train by sight is now possible, even in the most distant corner of the layout in your house or in your garden.

1998

A high point in the Reproduction Series is the carriage, a cooperative project of Heidi Ott (dolls), Hutschenreuther (porcelain horses), and Märklin (carriage).

A new concept for starter sets with track extension sets and a premium digital starter set makes getting started in model railroading even more attractive.

Märklin presents a new motor concept on the 140th anniversary of the company: The brushless C-Sine motor is maintenance free, has a high torque and promises excellent running characteristics in conventional and digital operation.

1999





märklin 140 Years

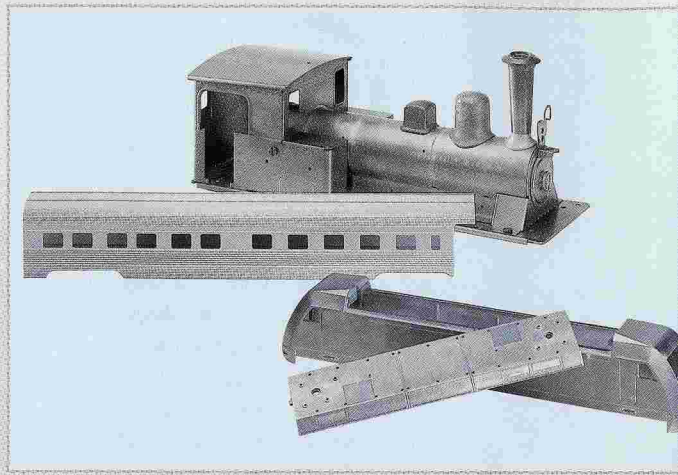
Special models for the anniversary

The Märklin Philosophy

Many models have enjoyed unbroken popularity for decades. And yet our current class 44 has no components in common with the model from the 1953 catalog – except for its important prototype. This is the way it is with many Märklin models in all gauges, because these models are subject to refinement again and again. This extends from improvements in detail, to being equipped with a DELTA electronic circuit capable of multi-train operation, to totally new tooling for a model.

Modeling appropriate to the prototype and to accepted practice in the model railroading field
With our models we are always striving for an optimal synthesis of prototypical detailing and practical robustness that is in harmony with the scale of the models. This is not a rigid process; rather, thanks to improved raw materials and refined production techniques the result is models that are more and more satisfying.

The raw materials
The quality of a model is determined by its raw materials. We adhere to the prototype as much as possible and use a wide variety of metals and metal alloys, fine sheet metals, aluminum, high quality plastics and also wood. Models with diecast metal bodies are a special Märklin tradition, and they will impress you with their precision and high quality.





The latest technology for operating enjoyment and prototypical realism
The propulsion technology is designed for great durability with powerful motors and metal gear trains. The propulsion systems for locomotives are easily accessible and easy to service. Märklin makes use of electronic circuits for more operating enjoyment by means of multi-train systems (DELTA) and prototypical operations (Märklin Digital) with individually adjustable running characteristics and controllable auxiliary functions on locomotives and operating models. In the process we pay close attention that new developments are compatible with the earlier technology or that they can be retrofitted into older models.

Modern, environmentally friendly production
In recent years Märklin has introduced new production processes again and again that are at the current level of the technology: CAD designing, prototype construction with 3-D methods, aluminum extrusion processes for car bodies, the replacement of chlorofluorohydrocarbons and the use of solvent-free, water-soluble paints are keywords here for the progress going on behind the scenes.

Partnership with the specialty dealers

A part of Märklin is its faith in the specialty dealer. Many model railroaders, particularly beginners, appreciate the experienced advice given by the specialty dealer. Experienced model railroaders also look for service and spare parts at a well-stocked specialty dealer.

Reliable and compliant with standards

CE

Märklin model railroad equipment fulfills the strict safety requirements for toys. The CE (European Community) designation confirms that we adhere to the guidelines and standards. Clear, easy to understand operating instructions enhance the setup and correct use of our products.

Information and clubs

We are proud of the good relations between Märklin and its model railroaders. This did not happen by chance; it's the result of a carefully nurtured partnership spanning decades. We provide our customers with comprehensive, attractive information about products, systems, and new items. The catalog, books, Märklin Magazin, CD-ROMs, Internet, videos, spare parts lists and instructions offer comprehensible, expert information, tips, and ideas.





The good old days. The good new days.

How good the good old days really were often depends less on the historical truth than on personal memories – for example, on the ownership at that time of an original Märklin model. In this sense we have given new life to the good old days and have reissued some of the most beautiful models from Märklin's 140 year old history as reproductions. Examples of this are the Ju 52, cook stove and doll carriages, car and truck models from the construction set series, or the Märklin carriage that we have been able to produce in cooperation with Heidi Ott (for the dolls) and Hutschenreuther (for the porcelain horses).

Producing challenging technical toys from sheet metal is an art. It requires experience with the handling of the material, a multitude of refining, forming, embossing, and stamping processes as well as a great deal of talented manual labor for lacquering, painting and assembly. In order to exclude the possibility of mistaking them for historic, original models, our reproductions have on purpose detail changes. These reproductions are authentic and are finished with the same care and love. This requires much extensive manual labor that is naturally more valuable today then in the past. For this reason there are always limits placed on the production capacity.
Märklin reproductions have the same high quality as their historic prototypes and are highly valued by collectors. Of course, they are quite suitable for what they were originally intended: to play with.





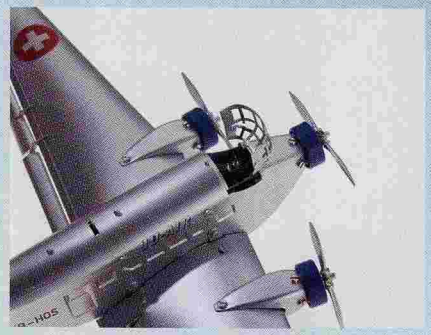
Swiss Ju 52

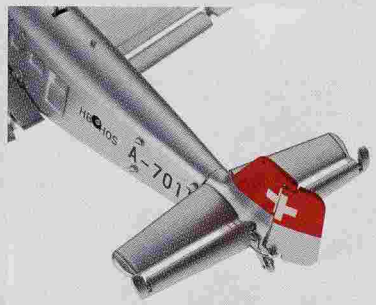
Shortly before the outbreak of the war in 1939, three Ju 52's were delivered to the Swiss army as transport airplanes. These airplanes were used in Switzerland for over 40 years. They were particularly popular with the Swiss people for use as emergency transport during the winter of 1951. During this very snowy January only air transport could supply many communities and farms with the necessary food or heating and fuel.
In 1982 an organization was founded for the preservation of 3 of these nostalgic airplanes. With the help of donations it was possible to overhaul these planes, and they have been available since then for excursion flights.
This model is appearing as a one-time series on the 60th anniversary of these 3 "elderly ladies". The basis for the model is the Märklin Ju 52 from the 1930s.



N

19801 Swiss Commercial Airplane.
Model of a Ju 52 for the Swiss Ju-Air Air Line Company. Model is made of metal. Built-in windup motor to power the three propellers. Movable elevator, vertical rudder, and aileron. Pilot's cockpit can be opened.
Wing span: approx. 56 cm (22-3/64").





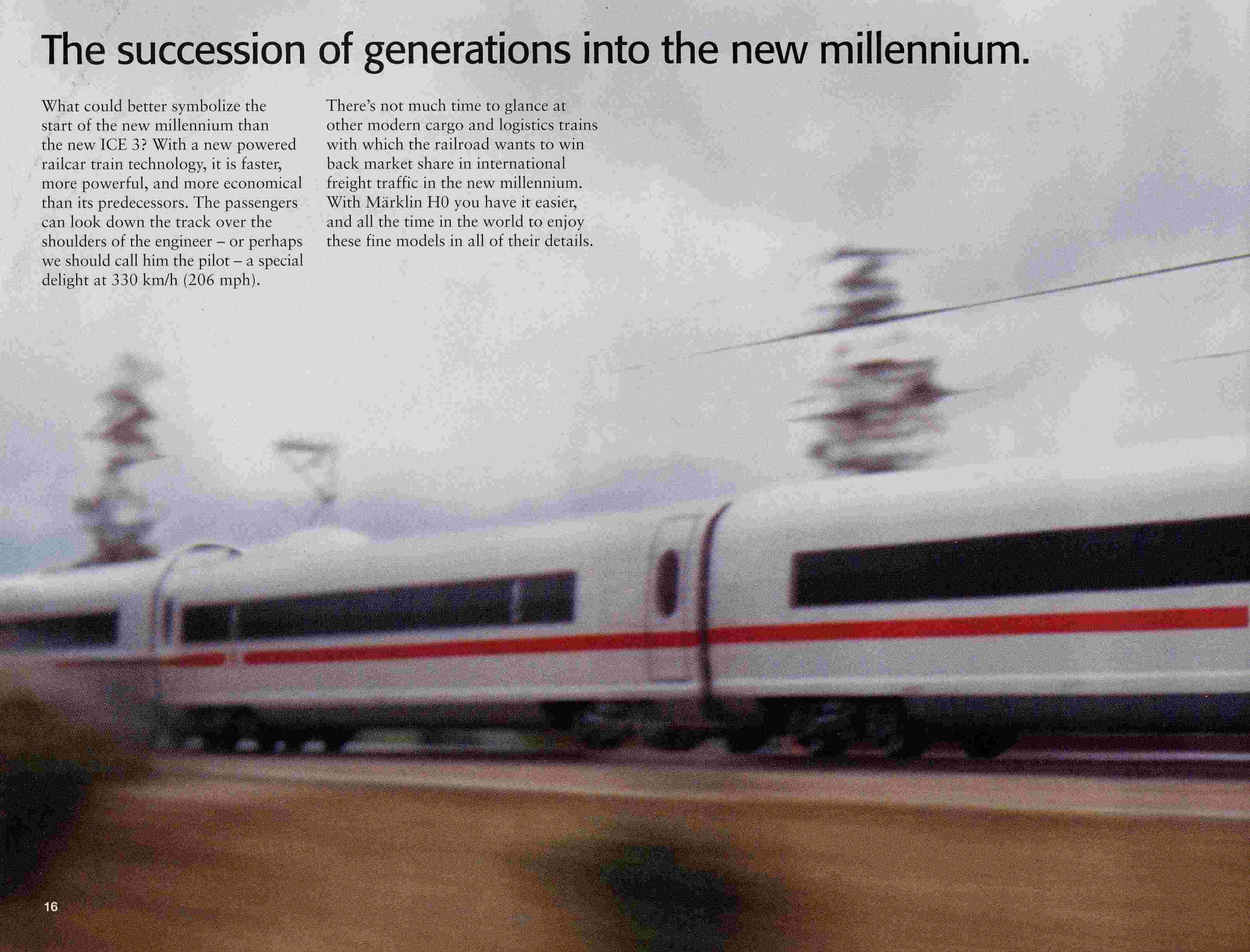


Special one-time series in 1999.
Delivery starting the 4th quarter of 1999.

The succession of generations into the new millennium.

What could better symbolize the start of the new millennium than the new ICE 3? With a new powered railcar train technology, it is faster, more powerful, and more economical than its predecessors. The passengers can look down the track over the shoulders of the engineer – or perhaps we should call him the pilot – a special delight at 330 km/h (206 mph).

There's not much time to glance at other modern cargo and logistics trains with which the railroad wants to win back market share in international freight traffic in the new millennium. With Märklin H0 you have it easier, and all the time in the world to enjoy these fine models in all of their details.





märklin
HO

Model Size H0
Gauge 16.5 mm (5/8″)
Scale 1:87

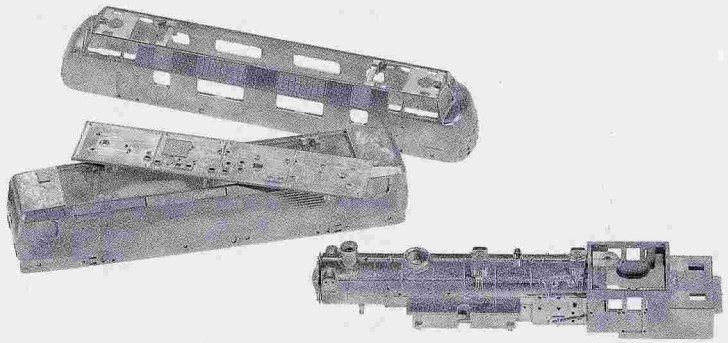
H0 – The gauge in the middle.

Everything tends towards the middle. This is true in politics as it is in normal life. After Märklin presented H0 Gauge as the scale in the middle in 1935, it quickly won over the majority of the model railroaders. For H0 is both: large enough for the naked eye and for normal handling. Small enough for the average home. Yet, a good concept is not enough to hold a majority of the market; the way it is carried out must also work.



Suitable for hard, everyday use on a layout

A Märklin model railroad layout fulfill very different, in part contradictory demands. It will survive the rough and tumble enjoyment of children's play and also satisfies model railroaders with its high quality models. Complex track patterns and operations can be easily set up. Märklin models always offer the best possible compromise between robust reliability and prototypical detailing. The propulsion technology is designed with proven motors and a high level of durability.



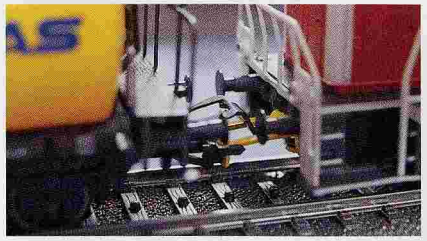
Quality metal construction

We produce the frame, gear train and body out of metal on our high quality models of locomotives. The costly, high-pressure die-casting process, done in part in a vacuum, produces complex body forms that are as finely detailed and free of flaws as the flat design of modern electric locomotives. The high level of weight improves running characteristics and pulling power. It proximity to the prototype makes metal construction even more authentic and appeals to the senses.



Simple electrical system

An essential feature of the Märklin H0 system is the simple and easy to understand electrical system resulting from the use of center rail track. Complete, illustrated instructions explain the setup of power circuits, signals with train control functions, and multi-train control. Children and the less technically minded will be able to understand them, and experienced model railroaders will find it easier with these instructions to set up complex layout control systems.



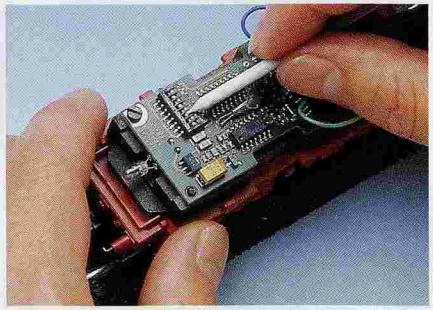
Compatible couplers

The Märklin standard coupler became a common standard for the H0 system in Europe. Interesting switching operations are possible with the RELEX coupler and uncoupler tracks. The TELEX coupler allows remote control uncoupling anywhere on the layout. With the Märklin close coupler cars can be coupled together very closely like the prototype. On many of the models the coupler head fits into a standard coupler pocket.

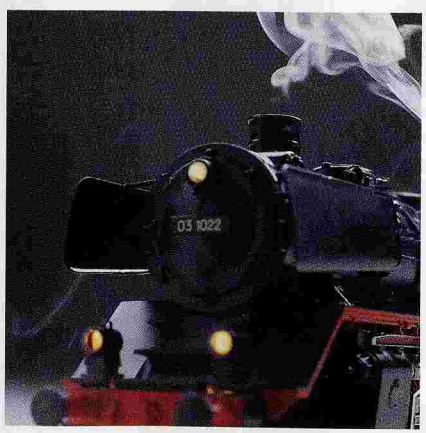


Working features just right for play and for operation

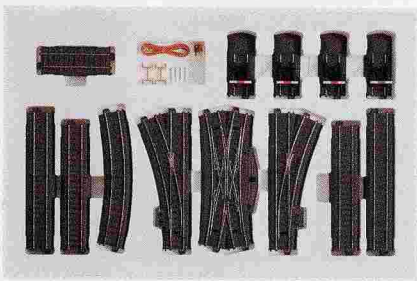
Märklin models are focused on their prototypes in appearance and in function. Removable stakes, hoppers that can be tipped, unloading hatches, and working models such as a turntable or a crane give life to operations on a layout. Digital operation offers even more working features depending on the model, such as lighting circuits and sound effects circuits that can be controlled, and adjustable running characteristics.







Prototypical lighting
The headlights on most of the locomotives change over with the direction of travel, on modern cab control cars they change from 3 white headlights to 2 red marker lights. More and more locomotives are coming out with near constant brightness for the headlights and maintenance-free LED's. Light diffusion bars spread light through the passenger cars. With current-conducting couplers, a single pickup shoe powers the lighting for an entire train. In digital operation, locomotive headlights and car lighting are also on when the train is stopped and can be turned on and off with function buttons. Auxiliary long-distance headlights for locomotives or lighting in working models can be turned on and off digitally.



Various ways to expand
The Märklin H0 program offers you an almost inexhaustible selection: Attractive starter sets and track extension sets, three track systems for expanding in steps, layout technology for conventional or digital operation, multi-train control with DELTA or Märklin Digital, fully functioning catenary with an independently controlled power circuit, locomotive and car models from all eras as well as prototypes from Europe and the USA, an extensive range of operations and layout accessories. Your Märklin layout will grow with you and with your interests, and it will offer new ideas and themes again and again.

The Märklin H0 System.

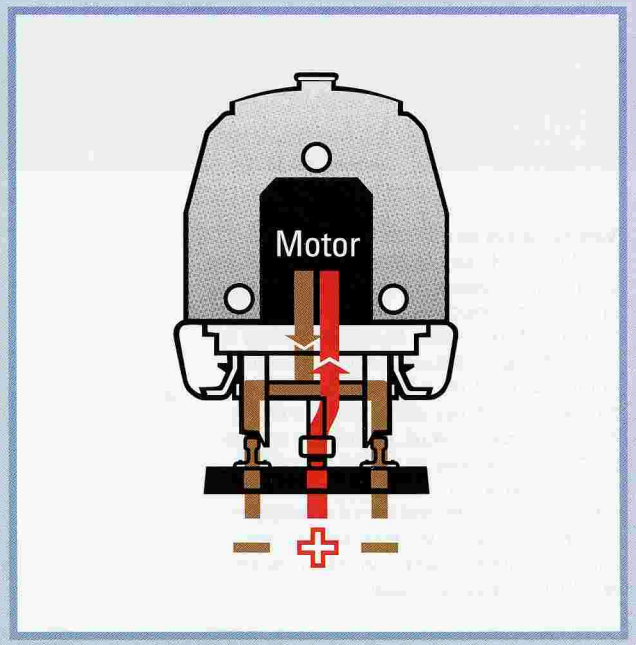
Why should you decide on Märklin H0 before getting involved with model railroading? Simply pointing out the worldwide, enduring success of this system would be too easy. Because this success is only the result of many good reasons of which any one can tip the scales in favor of Märklin H0, and which form the sum of the Märklin system.

The core of the Märklin H0 system is the center rail track system. Examining its advantages makes the comparison clear:



More contact area for reliable electrical pickup

With two-rail track, as with most direct current systems, one rail is the positive side, the other is the negative side. The current flows up through the wheels on one side to the motor and back through the wheels on the other side into the track. The wheels must be insulated from each other. On a small, three-axle switch engine this means that there are three wheels each for the positive and negative sides. If you take into account two traction tires necessary for appropriate tractive effort, the contact area is reduced to just 2 wheels each for the positive and negative sides.

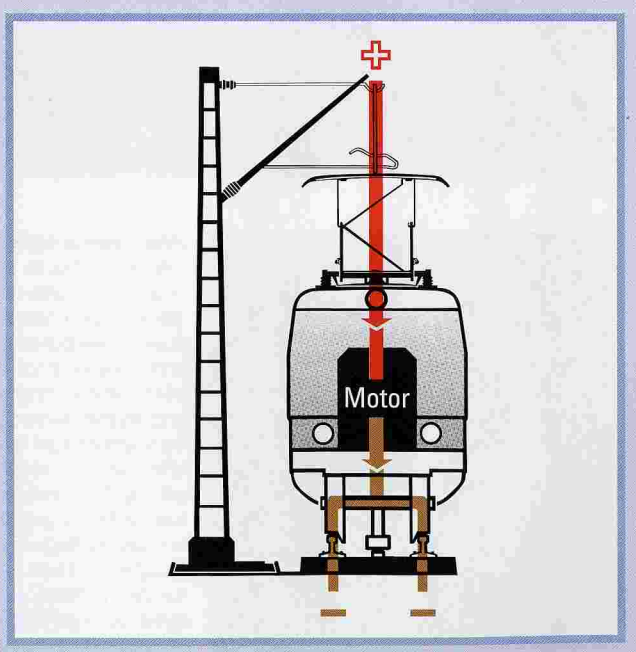


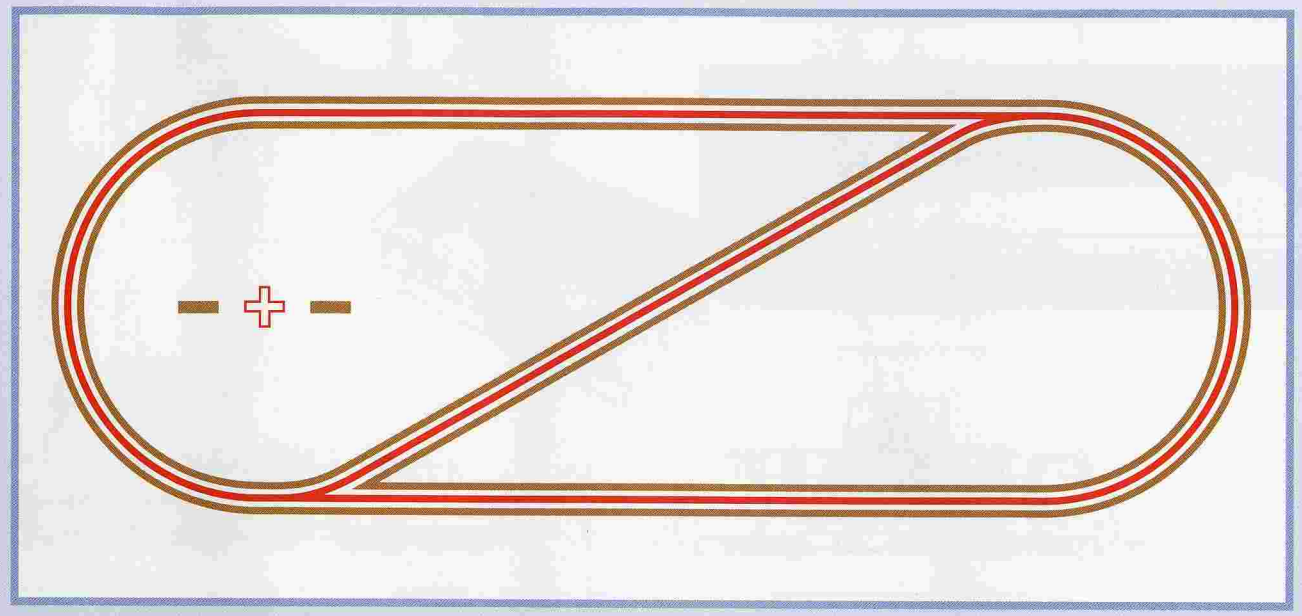
With the three-rail system the electrical current flows through an additional center rail and the pickup shoe to the motor in the locomotive and returns to the track (ground) through the wheels. Since both rails have the same polarity, the three-axle switch engine can use all six wheels just to return the current. The center conductor is likewise always linked with several stud contacts. Moreover, the pickup shoe keeps the contacts clean.

This double contact basis makes the Märklin system very reliable in operation and less susceptible to dirt. Good contact is guaranteed on critical areas of the layout with dense concentrations of turnouts.

Symmetrical current conduction

The second advantage of the center rail system is its electrical symmetry. A very simple example is the reverse loop – a track that returns on itself in a curve for the purposes of turning a train. On the normal two-rail system the two opposite polarities meet each other at the turnout. This requires additional electrical circuits to avoid a short circuit in the track and to reverse the polarity in the locomotive traversing the reverse loop.

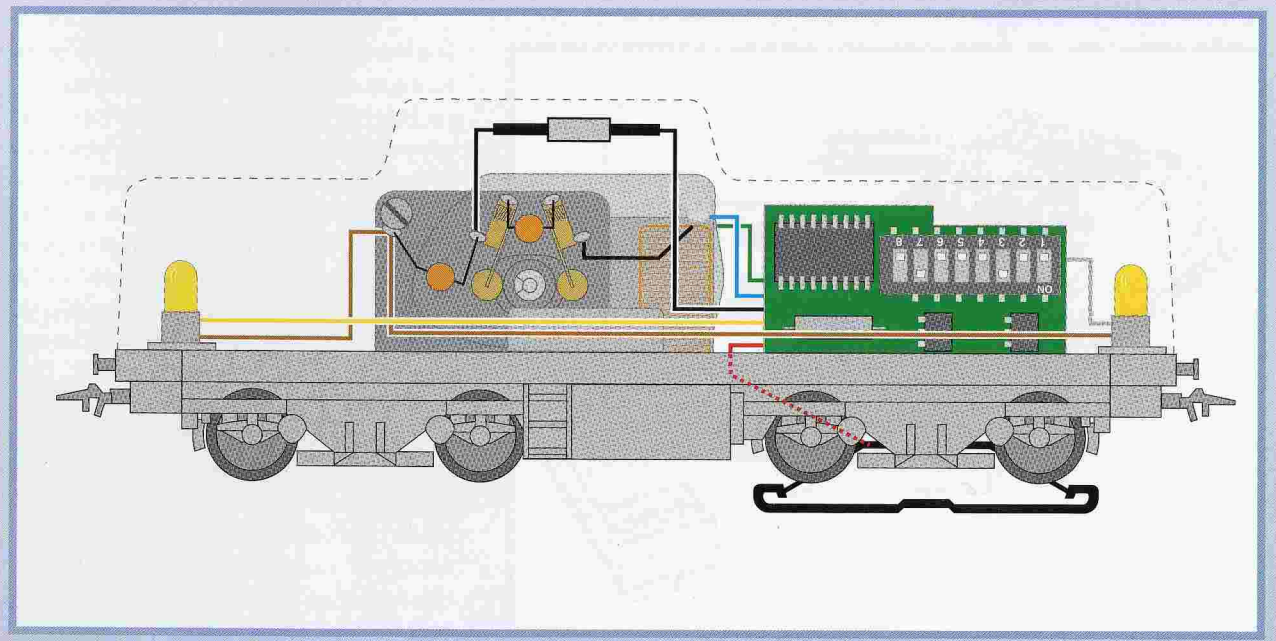


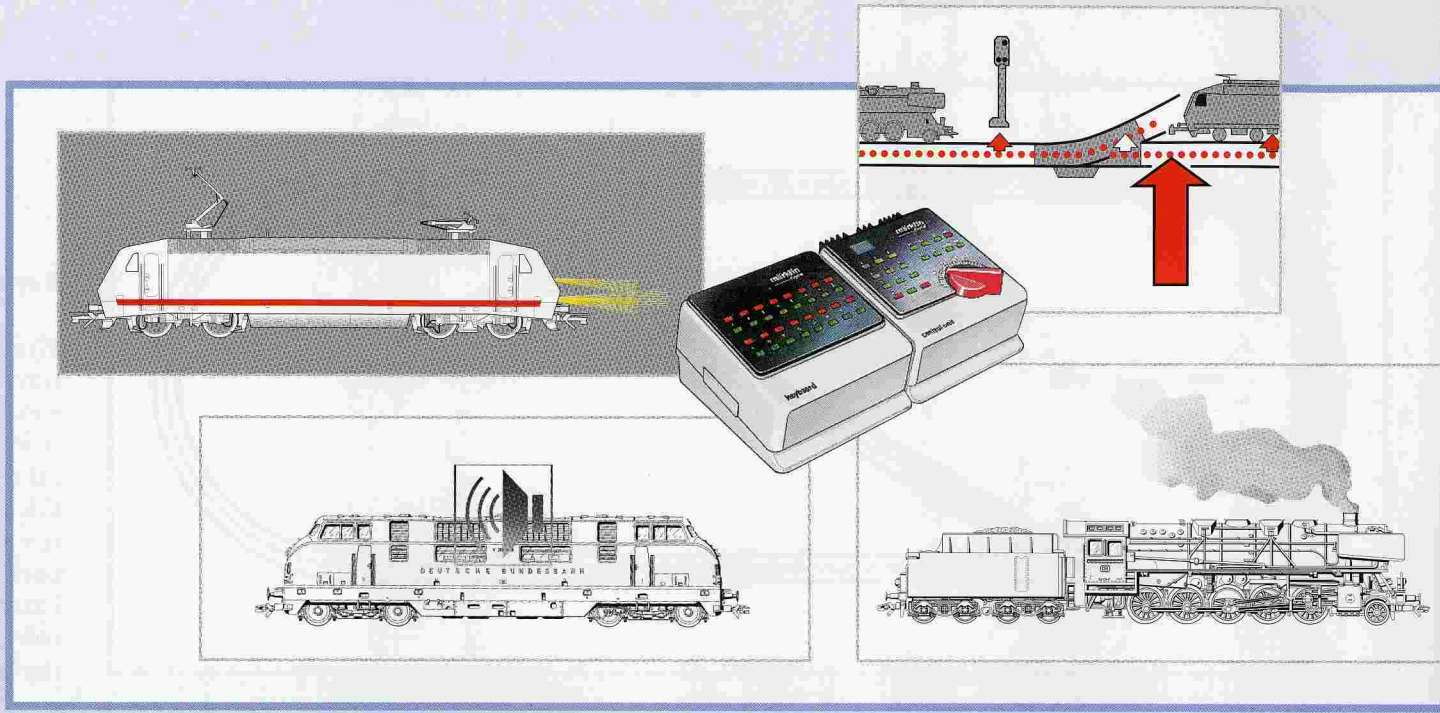


With center rail track the same polarities always meet each other at the turnout, because the center conductor is always in the center rail and both outer rails always have the ground or negative polarity. Whether it's a reverse loop, a wye, or complicated track configurations – the electrical setup remains simple and manageable. The locomotive will traverse all sections of the layout in the direction set for it without the need for electrical circuit tricks. Setting up a working catenary system is also very simple. As with the center rail in the track, the current flows symmetrically from the pantograph on an electric locomotive to the motor and through the wheels to both outer or running rails in the track. The practical use of this is a second independently controllable power circuit for electric locomotives.

Reverse unit for changing direction

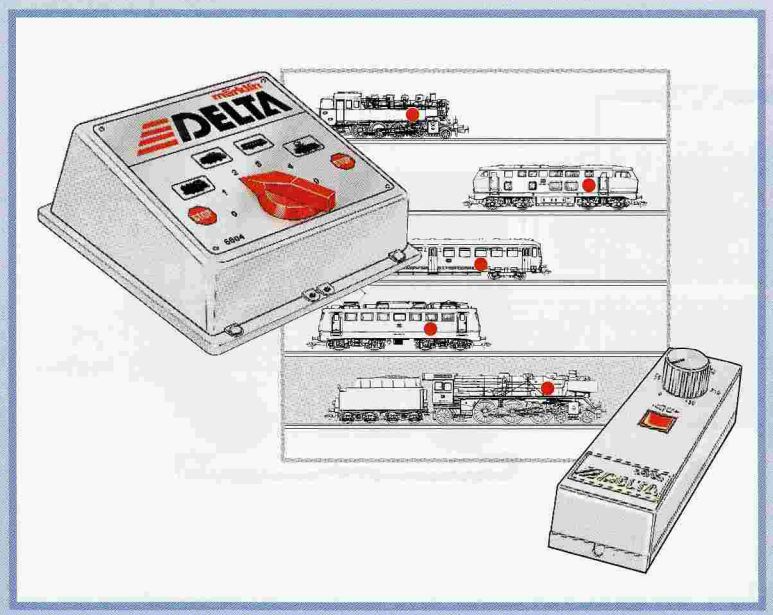
With the Märklin system a locomotive's direction of travel is not changed by reversing the polarity in the entire track; it is done by a reverse unit in the locomotive itself. In the past this was an electromechanical relay; today it's an electronic circuit that reverses the motor when a short impulse of current is sent to it – as a side benefit it can also activate other functions. The difference here is that each locomotive has its own direction of travel, while with the direct current system all locomotives travel in the same direction for a particular polarity in the track.





DELTA multi-train system and Märklin Digital

The Märklin multi-train systems offer totally new possibilities for joint play, or for realistic train operations. As the entry level system for small to medium size layouts, the DELTA multi-train system can control four to five locomotives independently on a single power circuit. Most Märklin locomotives come from the factory with the electronic receiver circuit built into them. A wide variety of other possibilities

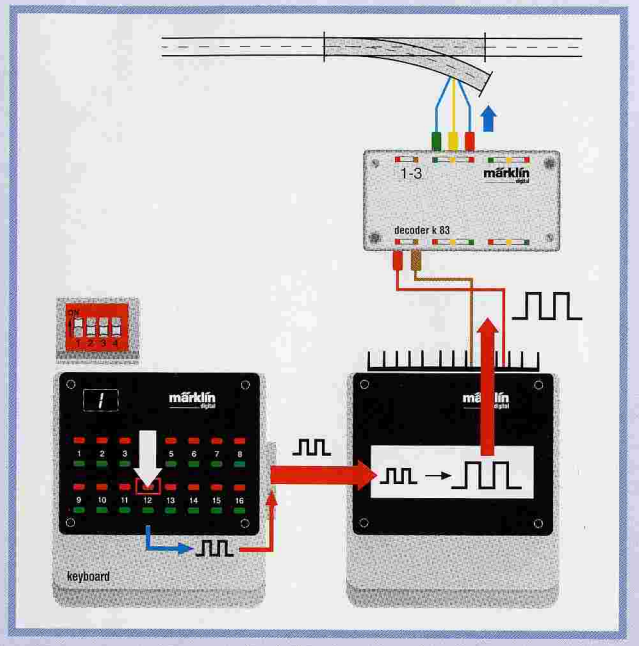


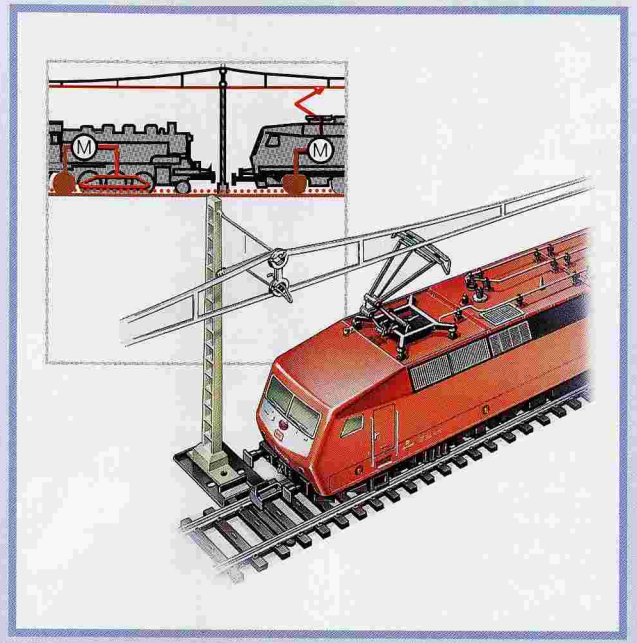
is offered by Märklin Digital: Up to 80 locomotives can be controlled independently from each other. Locomotives with high-efficiency propulsion systems will catch your eye with prototypically controllable running characteristics, and locomotives with a special function decoder will get your attention with additional, remote controlled functions such as headlights / marker lights, long-distance headlights, smoke generator, locomotive horn, motor sound effects, or TELEX couplers.

Any one wanting to control accessories digitally, will profit from the easy wiring and practical functions such as the Memory and automatic route control. And the connection to a personal computer makes it possible to control accessories and train movements from a computer monitor screen.

Compatible and here for the future

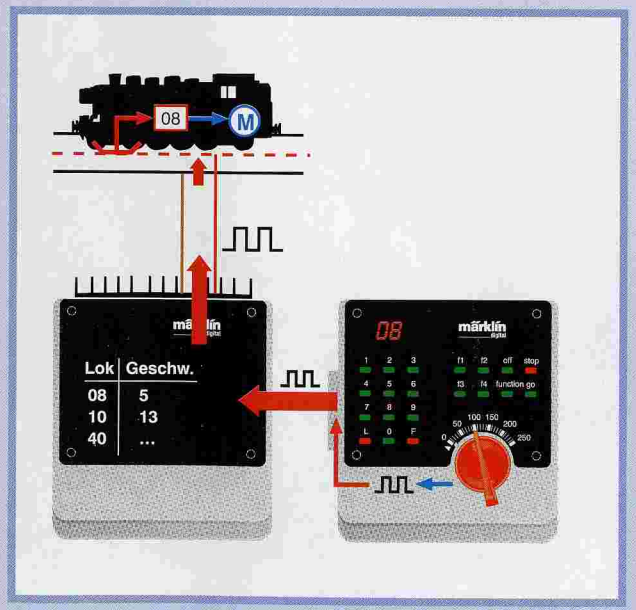
It is an important Märklin principle that locomotives, cars, and technology remain compatible as much as possible. Hence, most of the locomotive models from the 1950s will also run on the latest C Track sections, and Märklin close couplers will also mate with standard couplers. Many older locomotives can be retrofitted with a DELTA electronic circuit, digital decoders, or high-efficiency propulsion systems. You can convert your layout to Märklin Digital step by step, run trains digitally and operate accessories conventionally or digitally. With the Motorola format Märklin Digital will be here for the future.



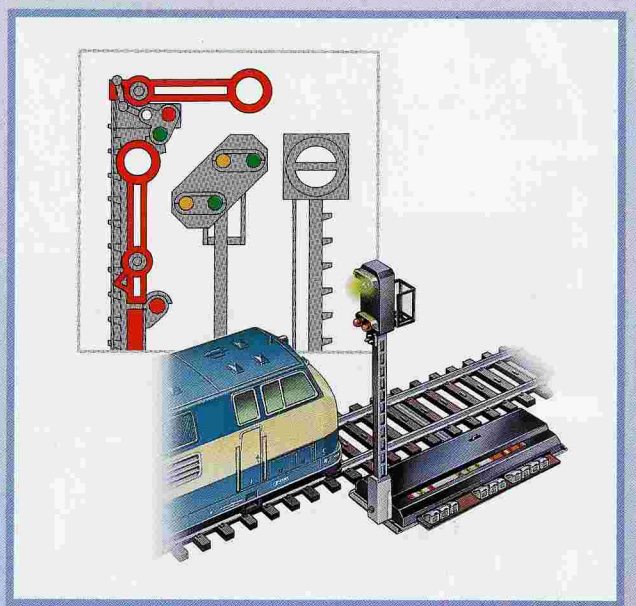


Complete range of accessories

The Märklin H0 system has everything to make operating trains varied and realistic; three track systems, working models, signals with train control functions, working catenary, lights as well as electrical and layout accessories. In addition, the accessory companies offer an abundance of buildings, vehicles and working models that you can use.



The three H0 track systems are also compatible with one another: the earlier M Track, the new C Track, and the K Track without a roadbed. Naturally, you can't just put track from the three systems just anywhere on a layout, but the transition sections allow you to connect entire sections of a layout with each other as well as use working models such as the turntable and the transfer table. C Track with K and M, K Track with C and M, M Track with C and K, naturally.



Starter Sets

The most important switch setting is at the beginning.

A good beginning is often half of the success. This holds true for sports as well for the decision concerning a model railroad. With Märklin you have a system that can be expanded in all sorts of ways, but that is simple and reliable. Above all, Märklin will be here for the future: You can expand your layout step by step, or convert to Märklin Digital and add on to your layout with new functions. Your investment will last and will always be technically at the top for the times.

Märklin has revised the starter set assortment to make your selection as easy as possible. Following the motto "Unpack. Set up. Play.", all of the starter sets come complete with a train, transformer, track, and wire and plugs for electrical connections. A richly illustrated instruction booklet helps you get started with useful tips and motivates you with additional ideas. All of the locomotives in the starter sets will run on conventional or DELTA and Digital layouts, because the DELTA electronic circuit for multi-train operation is already built in, and the new ICE starter set also has a DELTA Control to go with the transformer. With the exception of the smallest starter set, the track layouts in the sets include two turnouts and track for a passing siding. The track extension sets are designed to go with the starter sets and can expand them to include switchyard tracks, storage sidings and passing sidings or a parallel oval.



Start off at a speed of 280.

This new starter set is two in one: First, the ICE is the most attractive symbol of modern railroading, prototype for comfort and fast, environmentally friendly travel from city center to city center. Second, this starter set has in addition to the transformer a DELTA controller for multi-train operation. If you already have a locomotive with a DELTA electronic circuit – and almost all of the current models have this – or if you want to get a second locomotive later for multi-train operation, then you will be able to run several locomotives at the same time and independent of each other without the need for additional equipment.





HOBBY DELTA

N V

29785 230 volts

DELTA Starter Set with High Speed Train, large C Track Layout (C1 + C3), DELTA Control and transformer.

Contents: 1 German Railroad, Inc. ICE 2 high speed train, consisting of 1 powered end unit with built-in DELTA electronic circuit, 1 intermediate and 1 cab control car. 14 sections 24130 curved track, 9 sections 24188 straight track, 9 sections 24172 straight track, 1 each 24671 curved turnout, 1 each 24672 curved turnout, 1 DELTA Control (DELTA central unit), 1 each 32 VA transformer, feeder wires and different instructions and information brochures on model railroading. The turnouts can be retrofitted with the 74490 electric turnout mechanism.

The transformer in the starter sets has connections for the track and for electric accessories. Other locomotives and also turnouts and signals can be operated with this transformer.



29785

My Start with Märklin.

We didn't randomly give our smallest starter set the promising title "My Start with Märklin". We paid a great deal of attention to its features, in order to assemble a train composition rich in play potential. Different kinds of piece and bulk freight can be loaded in the three open freight cars; a tractor comes with the set as a load. A baggage car with an open door and a cupola on the roof makes up the end of the train. The tank locomotive is painted in blue and black and is typical for a branchline operation rich in variety. The C Track oval with the easy-to-use click system goes together quickly. The track's sturdy roadbed makes it reliable and it can be set up on the floor.





The plug-in connection with the “Click”.



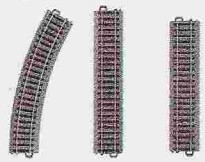
DELTA III

29175 230 volts
29176 120 volts
“My Start with Märklin” Freight Train Starter Set with C Track Oval and Transformer.
Contents: 1 class 74 tank locomotive with DELTA electronic circuit, 1 no. 4459 stake car, 1 no. 4430 gondola, 1 no. 4423 low side car, 1 tractor, 1 no. 4038 baggage car, 12 no. 24130 curved track, 2 no. 24188 straight track, 2 no. 24172 straight track, feeder wire set, 32 VA transformer with stepless speed control and connections for electric accessories. Illustrated instruction book with numerous tips and ideas. Can be expanded with the C Track extension sets and the entire C Track program.

The transformer in the starter sets has connections for the track and for electric accessories. Other locomotives and also turnouts and signals can be operated with this transformer.



29175



12x 2x 2x



Loading Foreman Wanted.

With this starter set you'll have "action" on your layout right from the very start. Because the crane car must be used anywhere that something has to be loaded or transferred. A stake car and tank car as well as a boxcar with a lighted marker light reproduce a typical train from the early period of the DB. The class 38 locomotive with a tender is modelled on a prototype that was built in the largest numbers for a German locomotive, and that was still in use in the 1950s and 1960s. The locomotive's sturdy body is all metal, the headlights light up, and the red glow of the fire can be seen through the firebox doors in the engineer's cab.



Light from the glow in the engineer's cab.

The layout accessories illustrated here are not included in the 29525/29526 starter set.



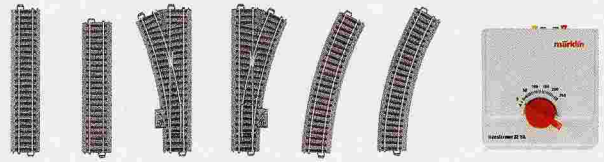
DELTA IV

29525 230 volts
29526 120 volts
Freight Train Set with Large C Track Layout and Transformer.
Contents: 1 German Federal Railroad class 38 locomotive with tender. With DELTA electronic circuit. Imitation of the glowing light of the fire shining through the firebox door in the engineer's cab. 1 no. 4459 stake car, 1 crane car, 1 crane boom support car, 1 no. 4442 tank car, 1 no. 4411 boxcar with lighted marker light, 12 no. 24130 curved track, 2 no. 24224 curved track, 5 no. 24188 straight track, 7 no. 24172 straight track, 1 no. 24611 turnout, 1 no. 24612 turnout, feeder wire set, 32 VA transformer with stepless speed control and connections for electric accessories. Illustrated instruction book with numerous tips and ideas. Can be expanded with the C Track extension sets and the entire C Track program. The turnouts can be retrofitted with the 74490 electric mechanism.

The transformer in the starter sets has connections for the track and for electric accessories. Other locomotives and also turnouts and signals can be operated with this transformer.



29525



5x 7x 1x 1x 2x 12x

The Express Freight Train.

The stately class 41 makes this starter set specially attractive. This powerful locomotive with a tender was specially built for fast freight trains, but was also used for heavy passenger trains. The headlights and running gear lights on this locomotive will make it stand out on your layout. Two open freight cars for any type of freight as well as a car for concentrated feed, a boxcar and a freight train baggage car complete the train. This train composition also stems from Era III of the German Railroad.



Running gear lights.



The layout accessories illustrated here are not included in the 29625 starter set.



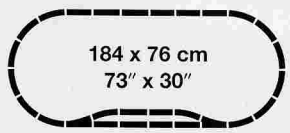
DELTA III

29625 230 volts

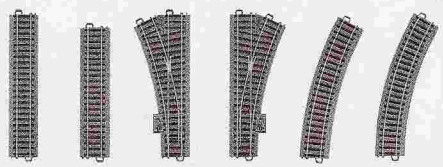
Freight Train Set with Large C Track Layout and Transformer.

Contents: 1 German Federal Railroad class 41 freight locomotive with tender. With DELTA electronic circuit. Running gear lights on all the time. 1 silo car, 1 boxcar with silver painted vents, 1 gondola with brakeman's cab, 1 stake car with removable stakes, 1 freight train baggage car, 12 no. 24130 curved track, 2 no. 24224 curved track, 5 no. 24188 straight track, 7 no. 24172 straight track, 1 no. 24611 turnout, 1 no. 24612 turnout, feeder wire set, 32 VA transformer with stepless speed control and connections for electric accessories. Illustrated instruction book with numerous tips and ideas. Can be expanded with the C Track extension sets and the entire C Track program. The turnouts can be retrofitted with the 74490 electric mechanism.

The transformer in the starter sets has connections for the track and for electric accessories. Other locomotives and also turnouts and signals can be operated with this transformer



29625



5x 7x 1x 1x 2x 12x



Speed, Power, Capacity.

This starter set stands for the modern freight railroad that is mastering the growing transportation demands of the economy with high capacity cars and fast locomotives. Sliding wall boxcars for industrial and logistical freight, a four-axle tank car and high side gondola offer large load capacities. The double stake car is loaded with pipe.

The 12X experimental locomotive, in operation on the DB as the class 128, provides appropriate motive power. The all metal construction with its fine detailing underscores the modern design. The headlights change with the direction of travel from three white to two red marker lights.

This starter set comes with the K Track system. K Track does not have a roadbed and requires permanent benchwork. The K Track assortment includes large radii curves and flex track that enables you to have a specially generous and realistic reproduction of track layouts.



White triple headlights.



The layout accessories illustrated here are not included in the 29805 starter set.



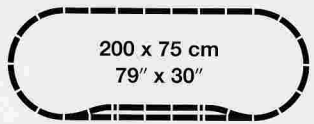
DELTA V

29805 230 volts

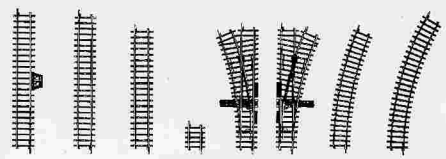
Freight Train Set with Large K Track Layout and Transformer.

Contents: 1 class 12X electric locomotive, used on the German Railroad, Inc. as the class 128. With DELTA electronic circuit. 1 tank car, 1 gondola, 1 double stake car loaded with pipe, 1 DB Cargo sliding wall boxcar, 1 "Weiße Riese" sliding wall boxcar, 12 no. 2221 curved track, 2 no. 2232 curved track, 12 no. 2200 straight track, 2 no. 2207 straight track, 4 no. 2208 straight track, 1 pair no. 2264 turnouts, 1 no. 2290 feeder track, 32 VA transformer with stepless speed control and connections for electric accessories. Illustrated instruction book with numerous tips and ideas. Can be expanded with the KOMBI track extension program and the entire K Track program. The turnouts can be retrofitted with the 7549 electric mechanism.

The transformer in the starter sets has connections for the track and for electric accessories. Other locomotives and also turnouts and signals can be operated with this transformer



29805



1x 12x 2x 4x 1x 1x 2x 12x



A Premium Start in the Digital Era.

It's exaggeration for us to speak of a super starter set that outdoes everything that Märklin has ever offered for a starter set. It offers a complete entry – or transfer – to Märklin Digital with two trains, locomotives with digital decoders and controlled, high-efficiency propulsion, digital locomotive controller, and transformer. Controllable auxiliary functions in the locomotives such as headlights, running gear lights, smoke generator, or whistle, as well as the prototypically adjustable operating characteristics show clearly all the things that the Digital system can do.

Setup and electric connections are quite simple: Assemble the C Track layout, connect any track section desired to the Control Unit with the two feeder wires, connect the Control Unit to the transformer and plug the latter into a wall outlet – finished. You use the ten button keypad on the Control Unit like a pocket calculator to type in the address for one of the two locomotives. The locomotive's speed is set with the rotary control knob, and the function buttons are used to turn the headlights or running gear lights on or to activate the whistle.





Breakthrough into a New Era.

The compositions of the passenger and freight train are modelled on the German Federal Railroad of the 1950s and 1960s. This is the most attractive era for many model railroaders, because the side by side operation of steam, diesel and electric locomotives offers a rich variety of attractive themes. The Economic Miracle caused passenger and freight traffic to grow by leaps and bounds, and almost everything that had wheels was put to use. This meant that you could see old German State Railroad cars in addition to rebuilt cars with new bodies on old car frames as well as totally new designs.

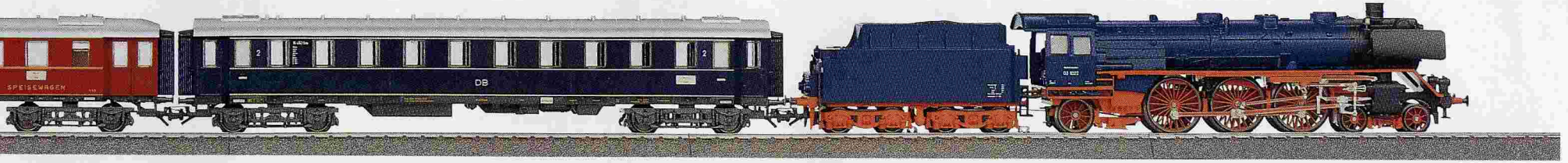
Typical of this period is the express train with the mighty class 03 and its cars from the earlier State Railroad period. These cars were heavy and were still of riveted construction, but were a favorite with passengers because of their good riding characteristics.
The class 216 stands for the new designs of the time. The end of the steam locomotives began with the diesel locomotives. The advantages of the latter were too great; they didn't have to be turned, fired up or have ashes emptied from them.





The layout accessories illustrated here are not included in the 29845 starter set.



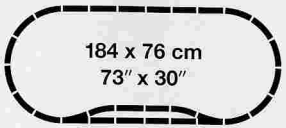


fx III

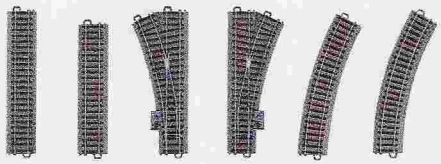
29845 230 volts
Premium Starter Set with a Freight Train and a Passenger Train as well as Large C Track Oval, Digital Control Unit and Transformer.
Contents: 1 German Federal Railroad class 03 express steam locomotive with tender. With digital decoder and controlled high-efficiency propulsion. Built-in smoke generator and running gear lights. **Headlights digitally controlled. Smoke generator and running gear lights can be turned on digitally with the 6021 Control Unit.** The headlights and smoke generator will work in conventional operation. 1 express passenger car 1st class, 1 express passenger car 2nd class, 1 entertainment car.

1 German Federal Railroad class V 160 diesel locomotive. With digital decoder and controlled high-efficiency propulsion. Built-in air whistle. **Headlights digitally controlled. Air whistle can be turned on digitally with the 6021 Control Unit.** The headlights will work in conventional operation. 1 stake car, loaded with 2 contemporary automobiles, 1 sliding roof gondola with sliding roof halves, 1 tank car, 1 "ATA" boxcar.

12 no. 24130 curved track, 2 no. 24224 curved track, 5 no. 24188 straight track, 7 no. 24172 straight track, 1 no. 24611 turnout, 1 no. 24612 turnout, feeder wire set, 1 no. 6021 Control Unit, 1 6002 transformer to power the Control Unit. Illustrated instruction book with numerous tips and ideas. Can be expanded with the C Track extension sets and the entire C Track program. The turnouts can be retrofitted with the 74490 electric mechanism.



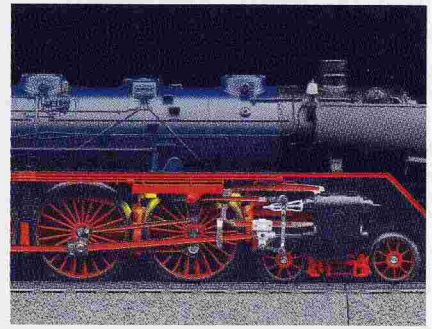
29845



5x 7x 1x 1x 2x 12x



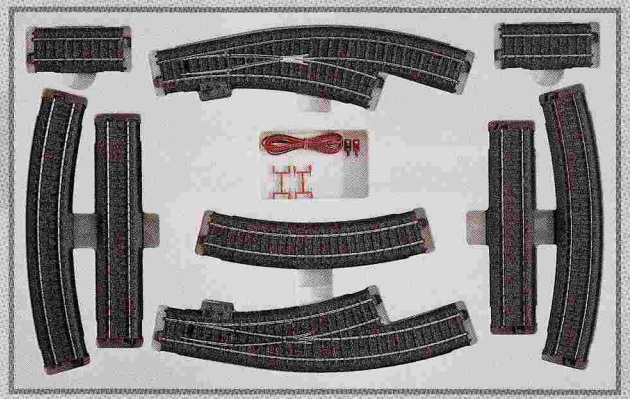




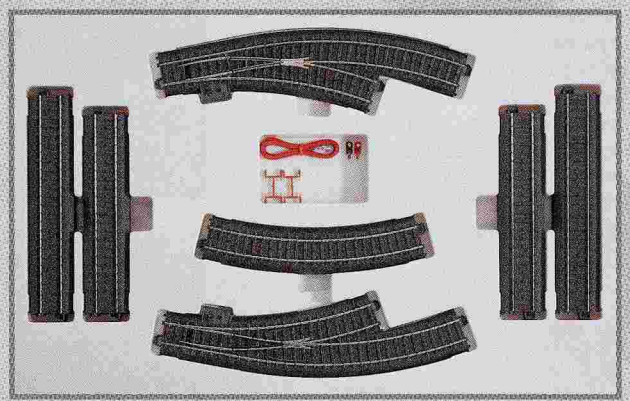
Smoke generator and running gear lights can be turned on digitally.



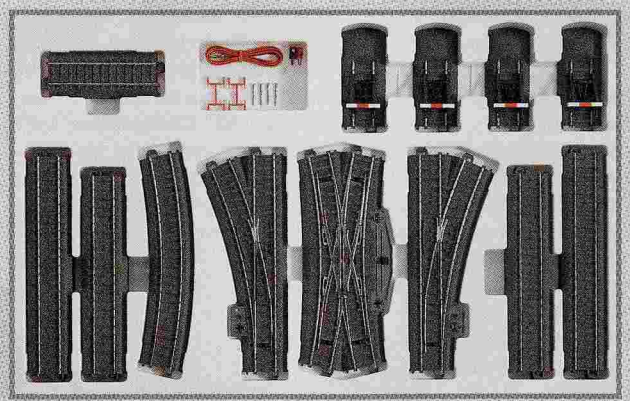
24902 C_2 C Track Extension Set.
For expanding the small C Track starter set (C_1 contents) to include a passing siding.
Contents: 3 no. 24188 straight track, 5 no. 24172 straight track, 2 no. 24224 curved track, 1 no. 24611 turnout, 1 24612 turnout, wire, plugs, and instructions.



24904 C Track C_4 Track Extension Set.
For expanding the C Track starter sets to i
nclude a passing siding with curved turnouts.
A parallel route can be created when combined with the 24903 C_3 track extension set. Contents: 4 no. 24188 straight track, 4 no. 24172 straight track, 2 no. 24077 straight track, 2 no. 24130 curved track, 6 no. 24230 curved track, 1 no. 2467 1 curved turnout, 1 no. 24672 curved turnout, wire, plugs, connectors and instructions.



24903 C Track C_3 Track Extension Set.
For expanding the C Track starter sets to include a passing siding with curved turnouts.
Contents: 7 no. 24188 straight track, 7 no. 24172 straight track, 2 no. 24130 curved track, 1 no. 24671 curved turnout, 1 no. 24672 curved turnout, wire, plugs, connectors and instructions.

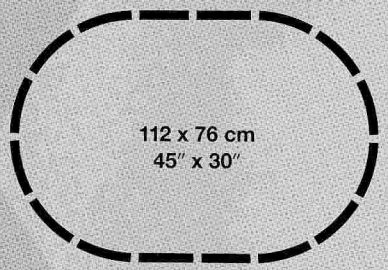


24905 C Track C_5 Track Extension Set.
For expanding the C Track starter sets to include storage sidings and a switch lead. Contents:
7 no. 24188 straight track, 7 no. 24172 straight track, 2 no. 24094 straight track, 1 no. 24224 curved track, 1 no. 24611 turnout, 1 no. 24612 turnout, 1 no. 24620 double slip switch, 4 no. 24977 track ends with track bumpers, wire, plugs, connectors and instructions.

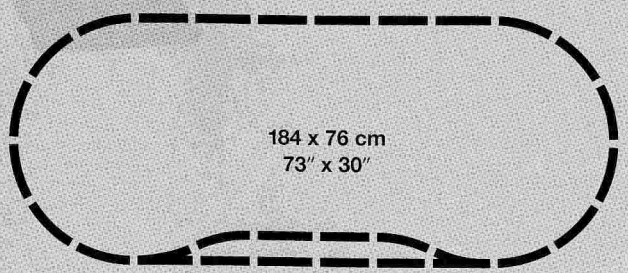
Ideas for how to expand the C Track starter sets

The easiest way to more "action" leads you to our C Track extension sets. These expand the track layout of a starter set to include passing sidings, switching tracks and storage sidings. The individual sets have been designed in such a way that they complement each other in the expansion of the starter set up to a parallel double oval, for example. You don't have to master track planning books to open up the way to operation with several trains, to multifaceted station layouts or to challenging switching operations. All of the turnouts and the double slip switch can be retrofitted in steps with electric turnout mechanisms, digital decoders and lighted turnout lanterns.

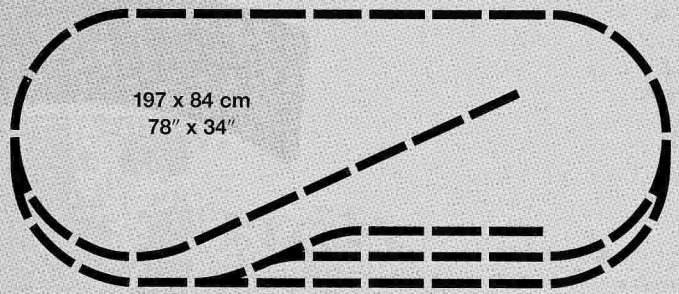
Small Start (C_1), this is the same as the small starter sets (29175/29176, 29201, 29205/29206).



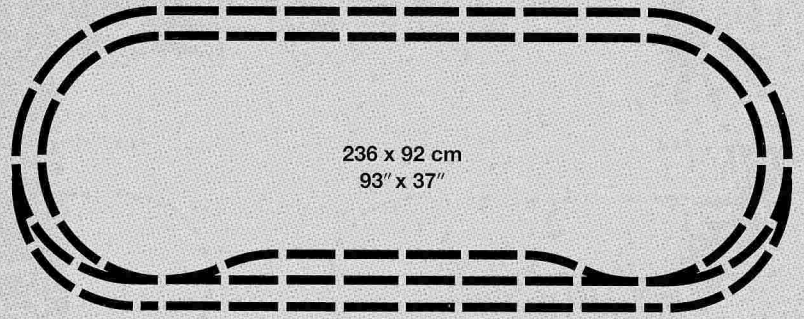
Small Start (C_1), expanded with the C_2 track extension set (24902). This is the same track content as the large starter set (29525/29526 and 29625).



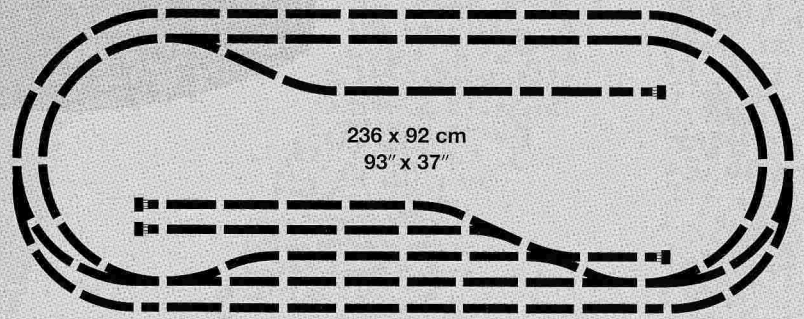
Sample track plan for the small starter set together with the C_2 (24902) and C_3 (24903) track extension sets.



Small Start + 24902 + 24903 + 24904



Small Start (C_1), expanded with all of the track extension sets.



K + O + M + B + I = "KOMBI" Extension Set Program.

The extension sets O, M, B and I are available for starter sets with K Track for step-by-step expansion of a model railroad layout.

The contents of these extension sets are specially designed for the 29805 K starter set, the earlier 29835 set, and the 2995 H0 Anniversary set offered in 1995.

This extension set program can be used with some limitations with the 29865 starter set or other, earlier K starter sets.

Several examples show different expansion combinations of current and former starter sets with the KOMBI program.

The manual turnouts and double slip turnouts contained in the starter sets and extension sets can be converted to electromagnetic remote control with the 7549 turnout mechanism.

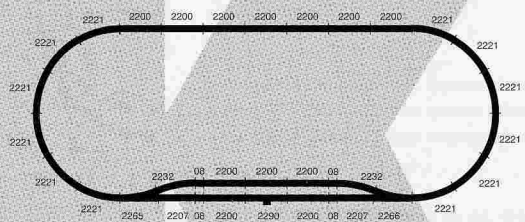
2215 O Extension Set.
With this extension set a K Track starter set can be expanded to include a passing siding or spur tracks. Contents: 6 no. 2200 straight track, 2 no. 2201 straight track, 2 no. 2207 straight track, 2 no. 2208 straight track, 2 no. 2232 curved track, 1 pair no. 2264 turnouts with hand levers, 1 no. 2290 feeder track, instructions.



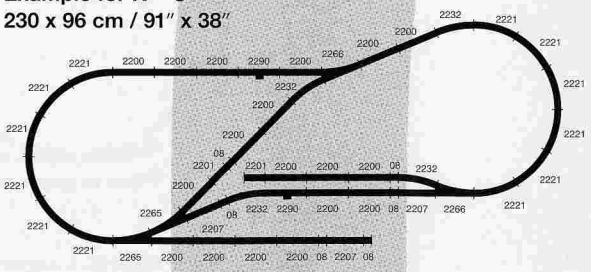
2216 M Extension Set.
With this extension set a K Track starter set can be expanded to include a passing siding or spur tracks with curved turnouts. Has limited uses with the 29865 K Track starter set. Contents: 6 no. 2200 straight track, 2 no. 2221 curved track, 1 pair no. curved turnouts the same as 2267 but with hand levers, 1 no. 2290 feeder track, instructions.



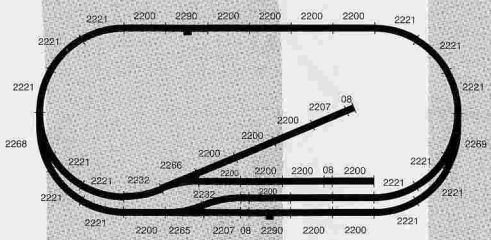
29805 K
200 x 75 cm / 79″ x 30″



Example for K + O
230 x 96 cm / 91″ x 38″

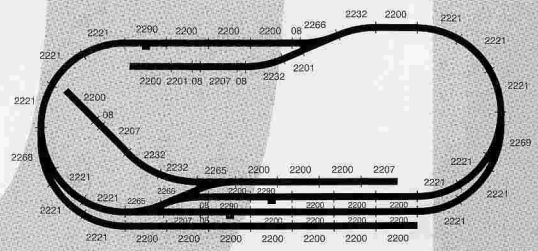


Example for K + M
182 x 82 cm / 72″ x 33″

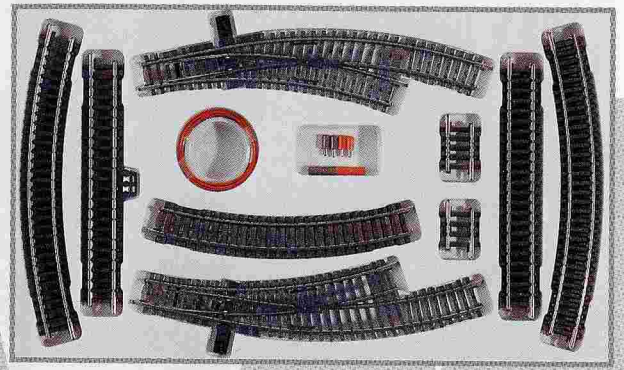


Additional examples for expanding the K Track starter sets

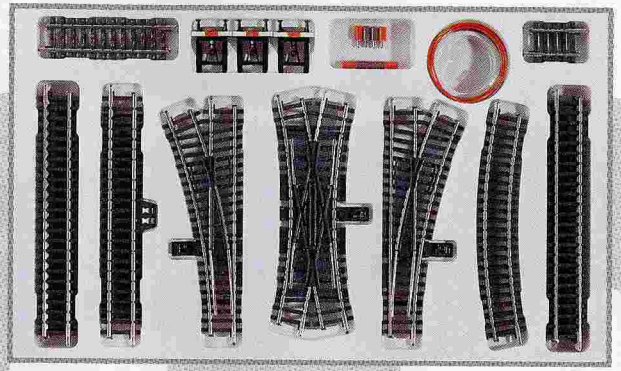
Example for K + O + M
201 x 89 cm / 80″ x 36″



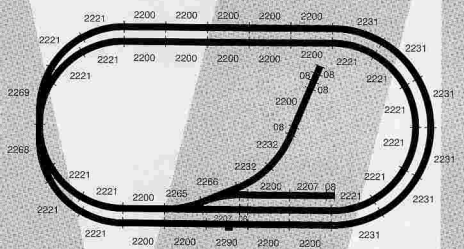
2217 B Extension Set.
With this extension set a K Track starter set can be expanded to include a long passing siding or spur tracks with curved turnouts. Has limited uses with the 29865 K Track starter set. Contents: 6 no. 2200 straight track, 2 no. 2203 straight track, 2 no. 2208 straight track, 2 no. 2221 curved track, 6 no. 2231 curved track, 1 pair no. curved turnouts the same as 2267 but with hand levers, 1 no. 2290 feeder track, instructions.



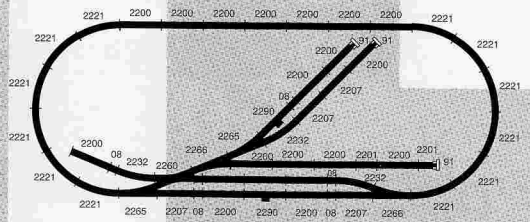
2218 I Extension Set.
With this extension set a K Track starter set can be expanded to include spur tracks with a pair of turnouts and a double slip turnout. Contents: 8 no. 2200 straight track, 2 no. 2201 straight track, 2 no. 2207 straight track, 2 no. 2208 straight track, 2 no. 2232 curved track, 1 pair no. 2264 turnouts with hand levers, 1 double slip turnout the same as 2260 but with hand lever, 1 no. 2290 feeder track, 3 no. 7391 track bumpers, instructions.



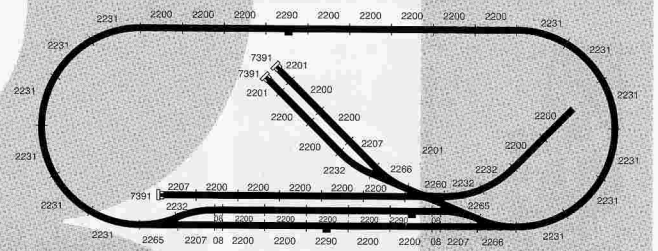
Example for K + B
171 x 88 cm / 68″ x 35″



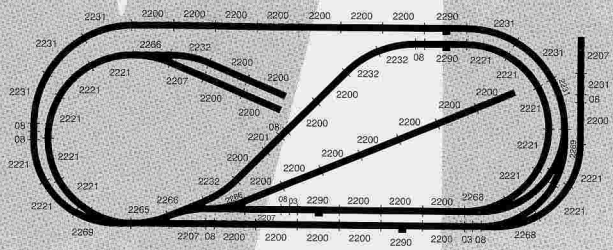
Example for K + I
200 x 75 cm / 79″ x 30″



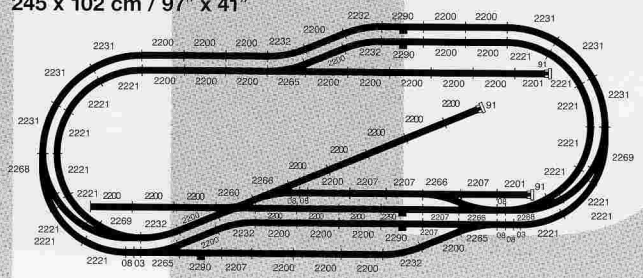
Example for 29865 + O + I
250 x 88 cm / 99″ x 35″



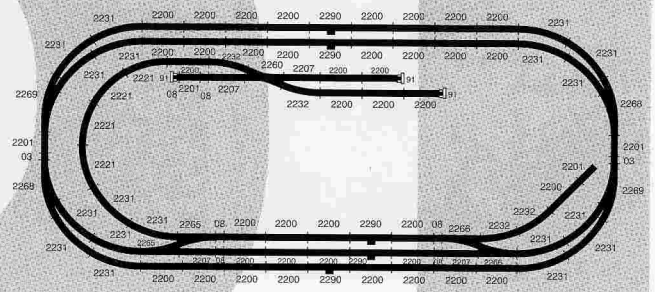
Example for K + O + M + B
238 x 88 cm / 94″ x 35″



Example for K + O + M + B + I
245 x 102 cm / 97″ x 41″

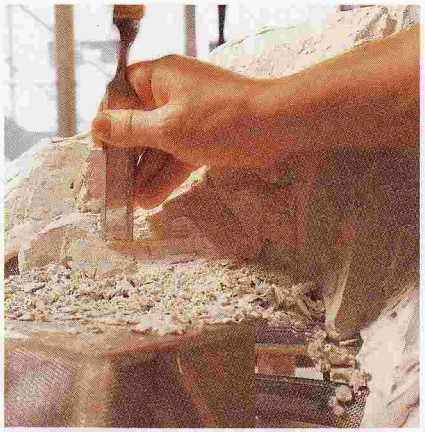


Example for 29865 + O + M + B + I
248 x 108 cm / 98″ x 43″



From a Plywood Board to Scenery.

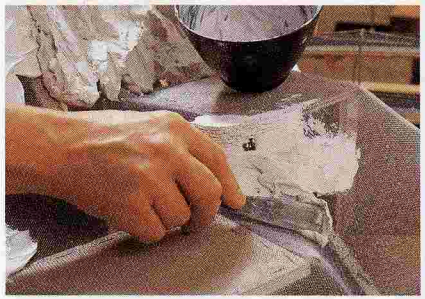
One day your layout becomes too complex for a temporary setup – time for a permanent layout. After a careful study of countless track plans, themes, and eras you're finally ready to start. From now on many types of skills will be called into play. Take your time, don't rush into anything, go step by step. Make use of the tips and experiences in the Märklin books on layout building by the experts. Do test runs and try to keep your layout operational in every phase of construction. Because perhaps you may not feel like building today, but you still like to operate your model railroad.

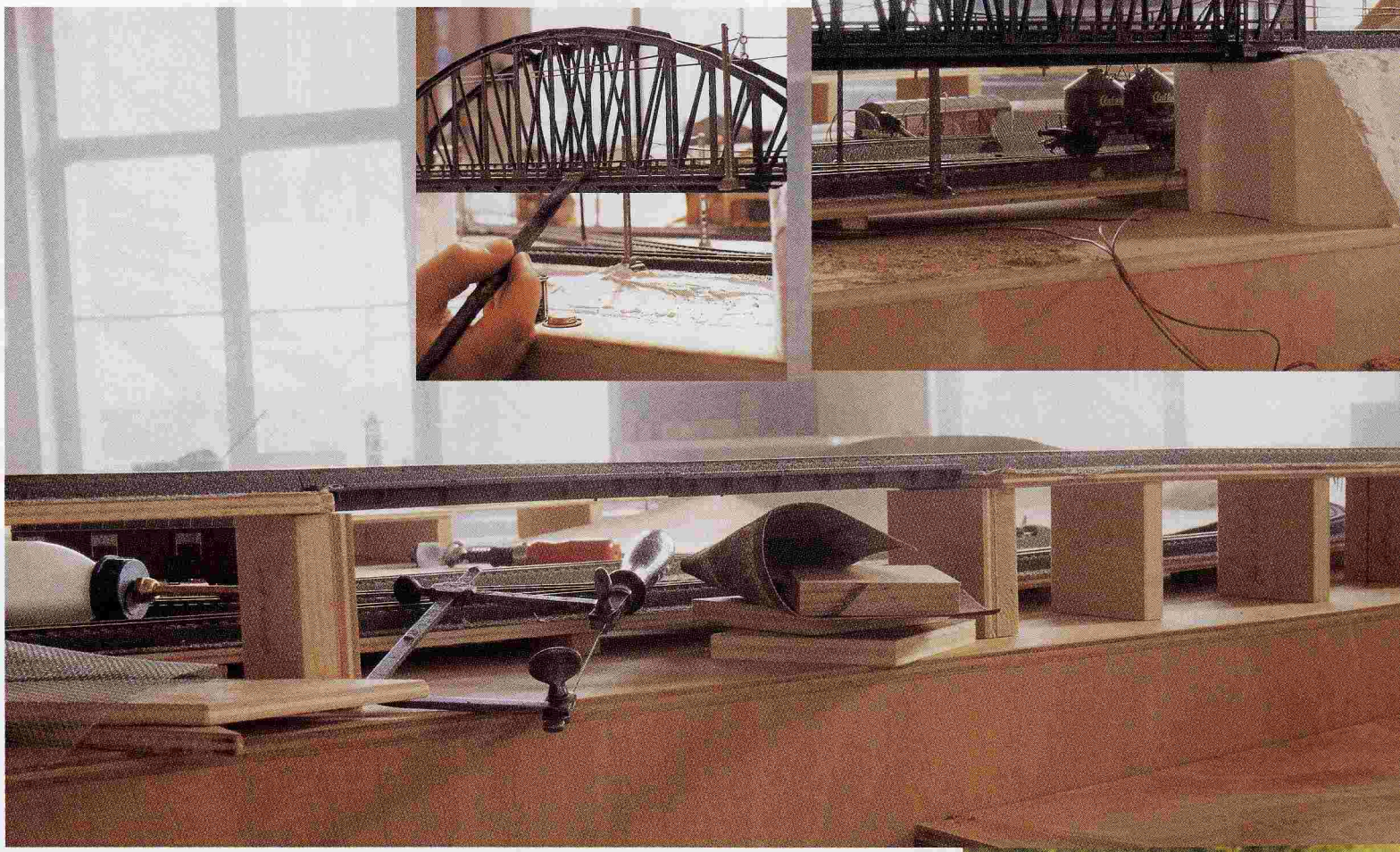




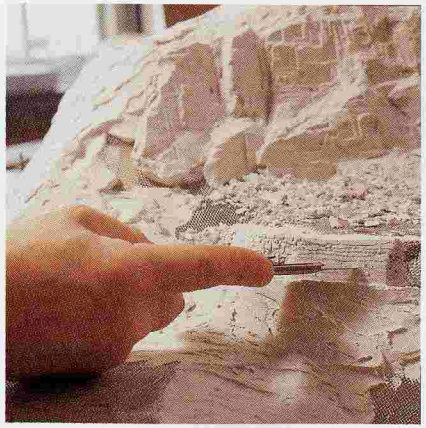


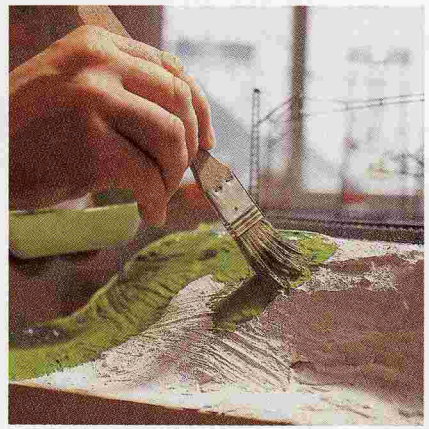




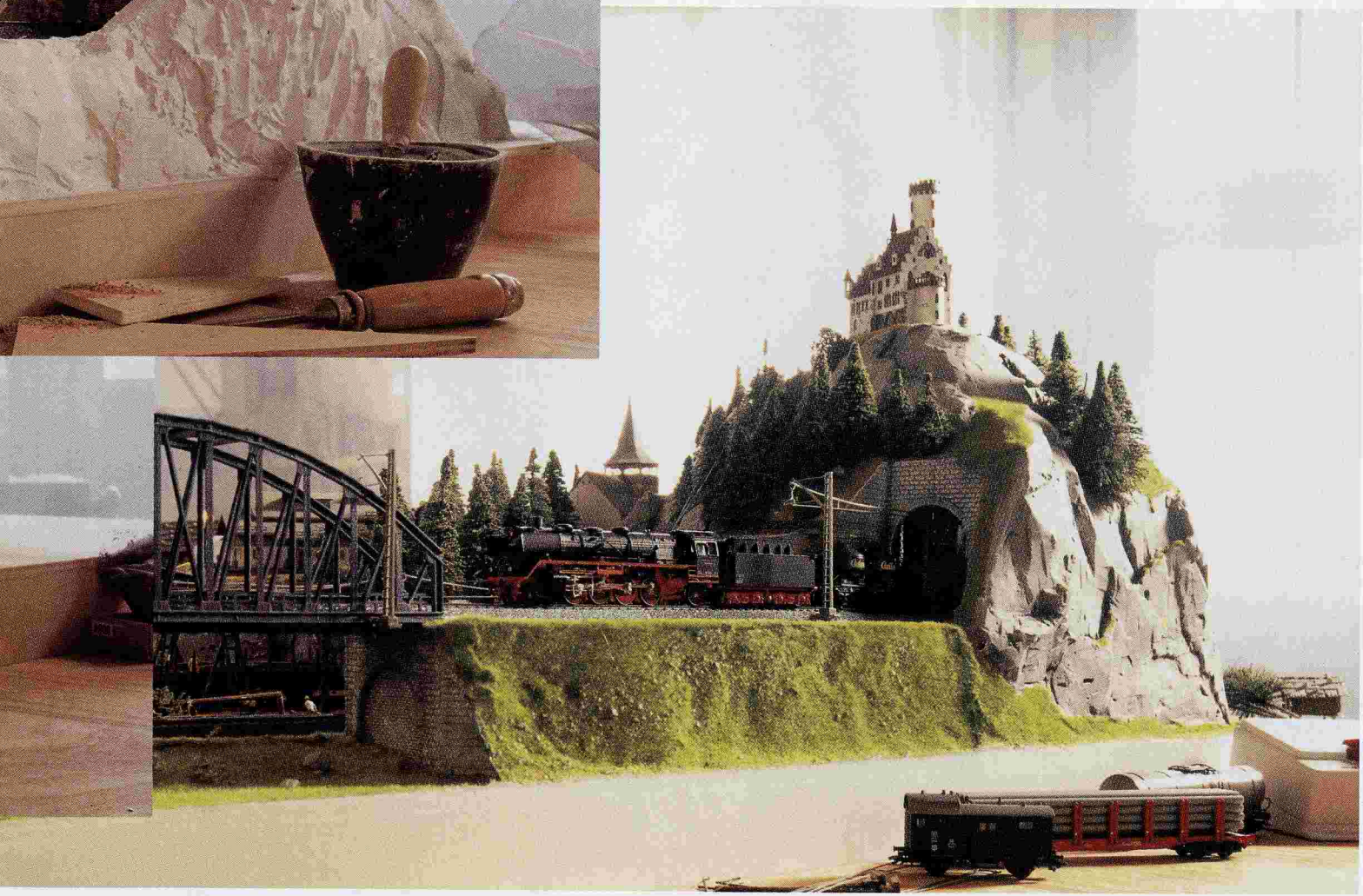


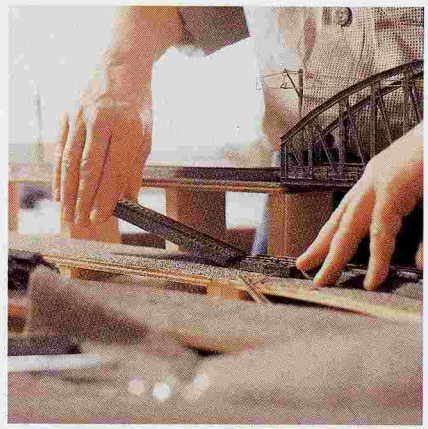


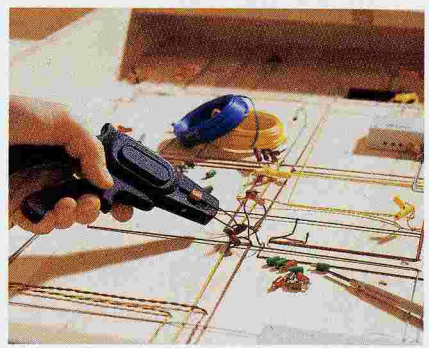












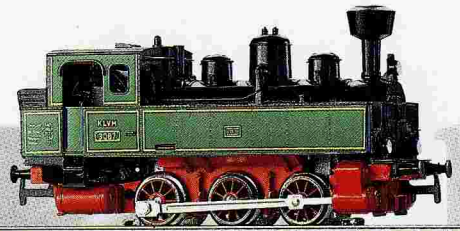
The Roaring Sixties.

The gold miner atmosphere of the Economic Miracle period was also an interesting era for the railroad in Germany. The end was approaching for steam locomotives, the growing demand for transportation capacity accelerated the modernization of the rolling stock. The juxtaposition of steam, diesel, and electric motive power, of old and new designs for cars, makes the sixties particularly attractive for model railroaders. The most important locomotives as new items appear in our version of Era III, of which the finely detailed class 55 in metal sets a new standard with its high quality propulsion concept. The E 69 is also made of metal, and with this model our engineers even succeeded in installing the interior in its tiny body along with the propulsion system and electronic circuit. The opposite pole from this is the ICE 3, the third generation of the high speed train.




55 5555

Steam Locomotives

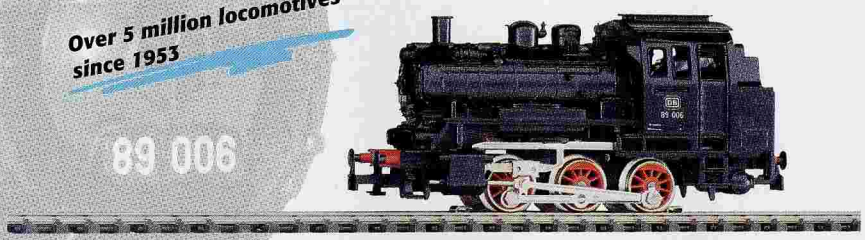


HOBBY I

3087 Tank Locomotive.
Provincial railroad design. Reverse unit. 1 axle powered. 1 traction tire. Coupler hooks. Length over buffers 10.8 cm (4-1/4″).

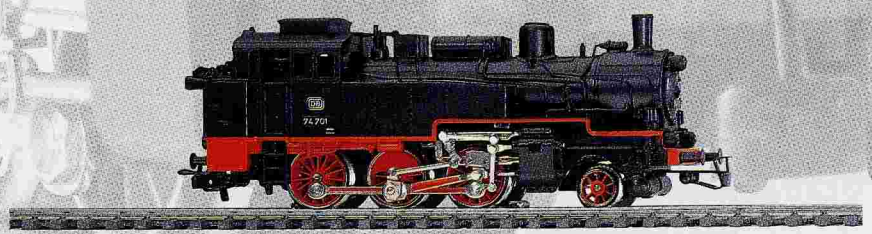
In earlier times tank locomotives were indispensable for switching or transfer work on short routes. The concept was built on the ability to turn the locomotive, universal applicability and low maintenance and repair costs. In addition, they were supposed to use little energy and be usable on branch lines with low capacity.

Over 5 million locomotives since 1953



HOBBY III

3000 Tank Locomotive.
German Federal Railroad class 89. Reverse unit. 3 axles powered. 1 traction tire. Coupler hooks. Length over buffers 11.0 cm (4-5/16″).



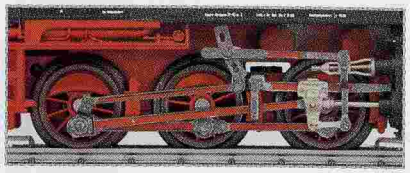
HOBBY III

3095 Tank Locomotive.
German Federal Railroad class 74. Reverse unit. 3 axles powered. 1 traction tire. Coupler hook on front with pre-uncoupler, RELEX coupler on rear. Length over buffers 13.5 cm (5-5/16″).

These locomotives were used by the German Federal Railroad in suburban commuter service and pulled passenger trains. During the German State Railroad period they operated on the Berlin S-Bahn routes, before the latter were electrified.

The 39 class 80 standard design locomotives with the characteristic "snub nose" were built in 1927/28 for switching work in passenger yards and for work on short routes. After the war they were employed in both parts of Germany well into the 1960s. Several particularly durable, used units were then sold to private companies and used for years in industrial work.

A little heavyweight with many details: Heusinger valve gear.

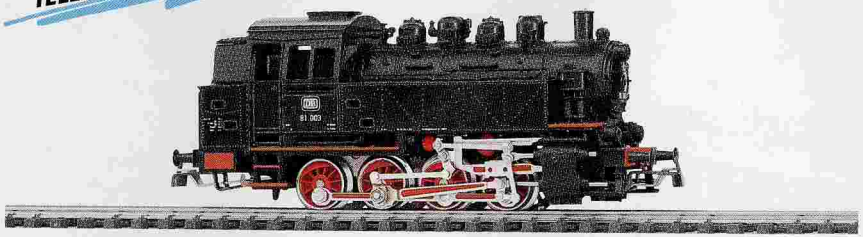




NEM III

33041 Tank Locomotive.
German Federal Railroad class 80. With DELTA electronic circuit. 3 axles powered. 2 traction tires. Slow speed gear drive. Length over buffers 11.1 cm (4-3/8″).

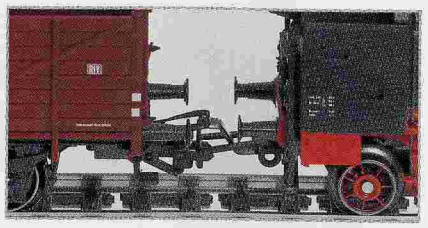
TELEX couplers



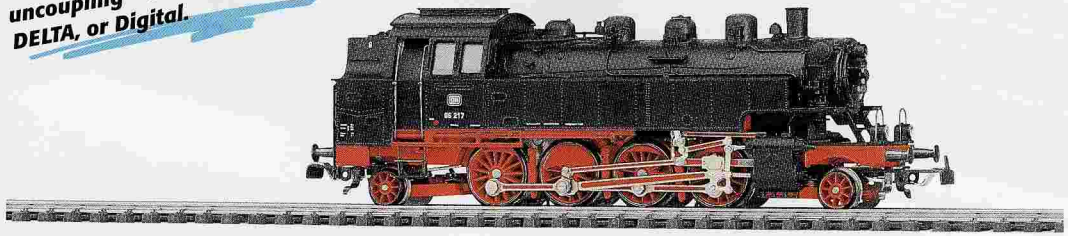
HOBBY III

30321 Tank Locomotive.
German Federal Railroad class 81. Reverse unit. 4 axles powered. 2 traction tires. TELEX couplers for remote control uncoupling of unit from cars anywhere on a layout. Length over buffers 12.8 cm (5″).

See fold-out page at end of catalog for explanation of drawings.



TELEX couplers for remote control uncoupling – with transformer, DELTA, or Digital.



III

33961 Tank Locomotive.
German Federal Railroad class 86. With DELTA electronic circuit. 4 axles powered through side rods. 2 traction tires. TELEX couplers for remote controlled uncoupling of cars at any spot on a layout. Length over buffers 15.8 cm (6-1/4″).


1140

The Märklin Magazin

In every respect the Märklin Magazin is a color filled publication about the hobby of model railroading. It is devoted, as its name promises, first and foremost to the Märklin systems, mini-club, center rail H0 and 1 Gauge. It does this without blinders, however, because many reports, building suggestions, technology and layout tips also deal with models and accessories from other manufacturers.

The Märklin Magazin is a well established specialty magazine focused on the practical side of the hobby and possessed of an extraordinarily broad range of themes: layout planning, layout construction, scenery formation, model railroad technology; converting or super detailing models, buildings and accessories; techniques for circuits and wiring layouts for conventional and digital operation; sample layouts and reports by Märklin enthusiasts on their experiences; presentation of new items from the toy fair and other trade fairs, models and their prototypes; tips for collectors, current information about events, special models, discontinued models, and promotions.

46193 Märklin Magazin Annual Car for 1999 "Paper Cutter".
Type Tms 851 sliding roof boxcar. Metal roof halves that can be slid open. Loaded with 2 "POLAR" paper cutters. Finely detailed reproduction of the paper cutters in metal. Car painted in the typical MM blue and lettered "Märklin Magazin 1999". Length over buffers 11.5 cm (4-1/2").
DC wheel set 70 0580

As with all predecessor models, this exclusive MM car is also being produced in a one-time series only in 1999.





Steam Locomotives

HOBBY III

30032 Passenger Locomotive with Tender.
German Federal Railroad class 24. Large type T26 tender. Reverse unit. 3 axles powered. 1 traction tire. Coupler hook on the front, RELEX coupler on the tender. Length over buffers 22.5 cm (8-7/8″).



The prototype of this locomotive was equipped with the type 2'2' T26 tender from the class 50. This expanded the range of this unit considerably. This original combination, in which the locomotive and the tender were almost the same length, turned out to be excellent even at speeds over 100 km/h (63 mph).

The class 24 locomotive with tender was built for passenger service on branch lines of the German State Railroad. Two of this locomotive have returned after the end of the steam locomotive era in the Federal Republic of Germany and have been used often to haul steam excursion trains. Railroad enthusiasts have given it the nickname "Steppenpferd" ("Prairie Pony").

HOBBY III

3003 Passenger Locomotive with Tender.
German Federal Railroad class 24. Reverse unit. 3 axles powered. 1 traction tire. Coupler hook on the front, RELEX coupler on the tender. Length over buffers 20.0 cm (7-7/8″).



French Export Model



N NEM III

34131 Tank Locomotive.
French State Railways (SNCF) class 040 TC. Former Prussian T 13 / DR class 92. With DELTA electronic circuit. Special motor with flywheel. 4 axles powered. 2 traction tires. Length over buffers 12.8 cm (5-1/16″).

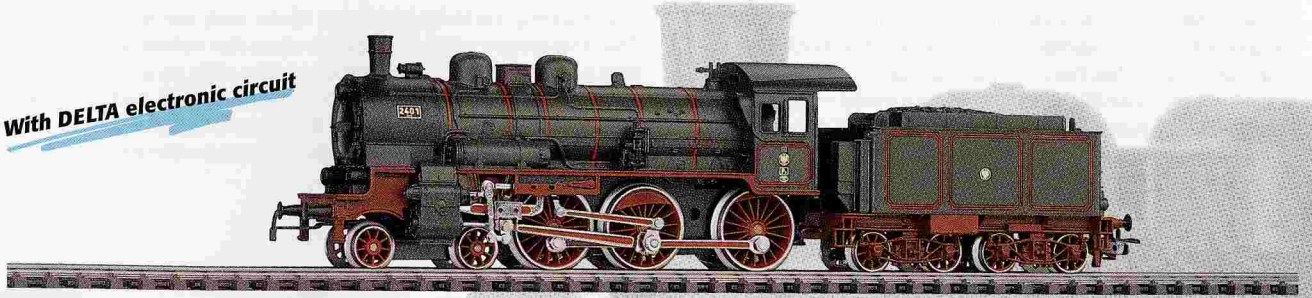
The 34131 tank locomotive is being produced in a one-time series only in 1999.

The car set (Märklin model 43972) to go with the class 040 TC tank locomotive can be found on page 173.

HOBBY N I

34988 Passenger Locomotive with Tender.
Royal Prussian Railroad Administration (KPEV) class P 8. With DELTA electronic circuit. 3 axles powered. 2 traction tires. Painted boiler rings. Smoke box set off in a different color. Coupler hook on the front, RELEX coupler on the tender. Length over buffers 21.8 cm (8-9/16″).

With DELTA electronic circuit





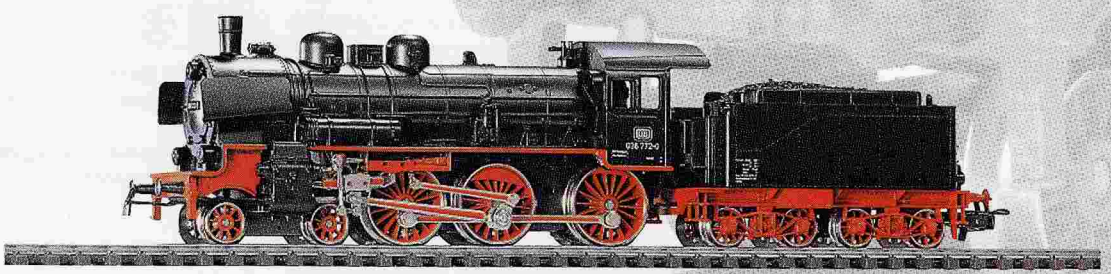
HOBBY I

3091 Passenger Locomotive with Tender.
Baden State Railways class P 8. Reverse unit. 3 axles powered. 2 traction tires. Coupler hook on front, RELEX coupler on tender. Length over buffers 21.8 cm (8-9/16″).

With the Prussian P 8 the designer Robert Garbe defined the basic features of German standard design locomotives in 1905. This locomotive was considered indestructible and was used all over Central Europe well into the 1970s. It pulled passenger trains of all types, from suburban commuter trains to the "Rheingold".

HOBBY IV

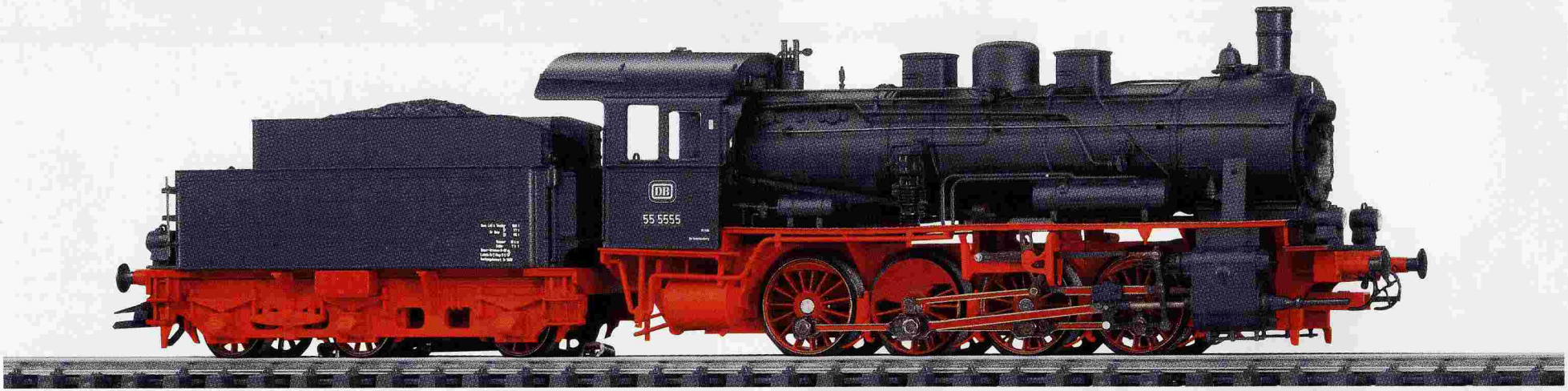
3099 Passenger Locomotive with Tender.
German Federal Railroad class 038. Reverse unit. 3 axles powered. 2 traction tires. Coupler hook on front, RELEX coupler on tender. Length over buffers 21.8 cm (8-9/16″). Figures of engineer and fireman included.



Steam Locomotives

Many model railroaders would rather have standard locomotives instead of the exotic models, but with the latest technology. With our compliments:The class 55 5555 has more than just a unique road number; it's rather special as a model – a completely new design in which we have used the latest production methods. For example, the new vacuum metal casting technique that enables even finer details with prototypical proportions.

Consequently the frame, boiler and tender body are made of metal. The drive system with a bell type armature also corresponds to this high level of quality. It is fascinating by virtue of its good slow speed characteristics, stabilized by a supplemental flywheel, and by the fine control that can be exercised over it. The motor sits in the boiler and powers the driving wheels which also promotes near prototypical operating characteristics.



The class G 8.1 Prussian freight steam locomotive was a further development of the G 8. The first locomotives were delivered in 1913. While something over 1,000 units of the G 8 were built, the G 8.1 was a success like no other locomotive before it. A total of 4,934 locomotives were delivered to the Prussian Railroad Administration (KPEV) and to the German State Railroad Company (DRG). Ten units went to the Mecklenburg Friedrich-Franz Railroad (MFF) and 137 units to Alsace-Lorraine Imperial Railways. By 1922 Linke-Hofmann had delivered 50 locomotives to the Polish State Railroad. In addition, other locomotives of this class went into the export market , among others, to the Baghdad Railroad, to Lithuania, and to Rumania. The class 8.1 was an essential part of the German State Railroad's motive power. Even after 1945 there were still over 1,000 locomotives on the roster in both parts of Germany. The locomotive with the remarkable road number 55 5555 was built as the Prussian "Magdeburg 5242" by Orenstein & Koppel and was in service until 1961 on the DB.

See fold-out page at end of catalog for explanation of drawings.

34550 Freight Locomotive with Tender.
German Federal Railroad (DB) class 55. With DELTA electronic circuit. 4 axles powered. 2 traction tires. Special, high-efficiency motor with flywheel built into the boiler. Close coupling between locomotive and tender. Ready for installation of a smoke generator (Seuthe). Length over buffers 21.0 cm (8-1/4").

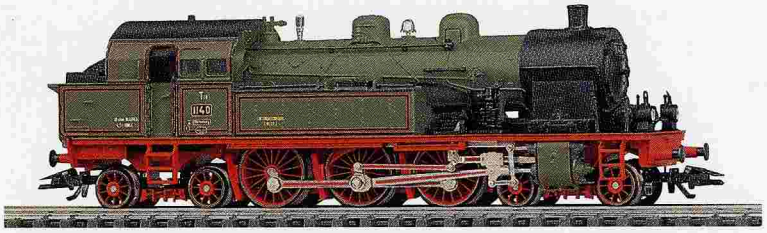
37550 Same as 34550, but with digital decoder and controlled, high-efficiency propulsion. Headlights digitally controlled.

This model is being offered for two-rail DC systems by TRIX (T22532).

- ✗ ***Completely new tooling.***
- ✗ ***Metal locomotive and tender.***
- ✗ ***Smooth as silk and powerful: mechanism in the locomotive.***
- ✗ ***Bell armature motor with flywheel in the boiler.***
- ✗ ***Close coupler with guide mechanism in the front and back of the locomotive and tender, close coupled drawbar with guide mechanism between the locomotive and tender.***
- ✗ ***Digital version:***
  - ***controlled, high-efficiency propulsion***
  - ***headlights can be turned on/off***



Steam Locomotives



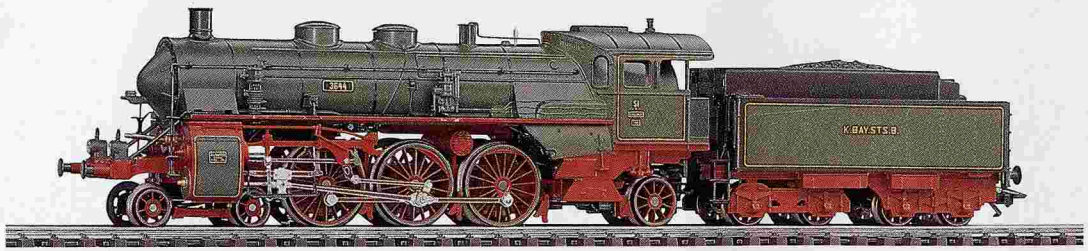
33071 Tank Locomotive.
Royal Württemberg State Railways (K.W.St.E.) class T 18. With DELTA electronic circuit. 3 axles powered. 2 traction tires. Length over buffers 16.9 cm (6-5/8″).

37071 Same as 33071, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled.

The class T 18 tank locomotives were delivered in Prussia between 1912 and 1923. These 14.8 meter (48' 6-11/16″) long locomotives were able to operate forward and in reverse at 100 km/h (62 mph) thanks to their symmetrical wheel arrangement. Twenty units of this class were delivered in 1919 by Vulkan to the Royal Württemberg State Railways (K.W.St.E.). Their Prussian ancestry could be seen in the typical decorative striping that was applied to only a few units. These locomotives were used for many years in Southwest Germany for fast regional passenger service.

Connoisseurs have considered the S 3/6 as one of the most successful and beautiful locomotives in the world. The unusual tapered cab, the cone-shaped smoke box door and the immense cylinder block were characteristic features of this popular class. Its efficient coal consumption and good running qualities proved its use in regular operation. The two inboard high-pressure cylinders and the two outboard low-pressure cylinders were coupled to the center driving wheels. A very high level of thermodynamic efficiency was achieved with this four-cylinder running gear. The last of the locomotives of this successful class was not retired until 1960.

The Royal Bavarian State Railroad class S 3/6 is the appropriate unit to go with the Bavarian express passenger cars (Märklin models 41351, 41361 and 41371) that can be found on page 144.



33181 Express Locomotive with Tender.
Royal Bavarian State Railways (K.Bay.Sts.B.) class S 3/6. With DELTA electronic circuit. 3 axles powered. 2 traction tires. Length over buffers 24.9 cm (9-13/16″). Equipped for installation of Seuthe no. 20 (conventional operation) smoke generator or Seuthe no. 24 smoke generator (DELTA/Digital operation).

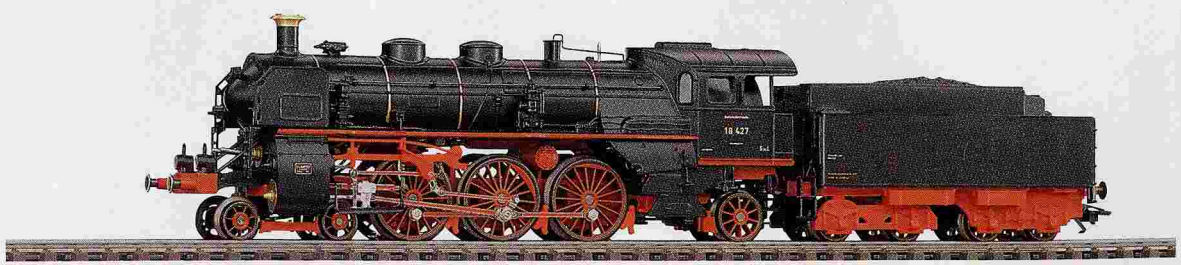
37181 Same as 33181, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled. Equipped for installation of smoke generator (Seuthe no. 24).

33184 Express Locomotive with Tender.
German State Railroad Company (DRG) class 18.4. Painted boiler bands. Gold colored smoke stack rim. With DELTA electronic circuit. 3 axles powered. 2 traction tires. Length over buffers 24.9 cm (9-13/16″). Equipped for installation of Seuthe no. 20 (conventional operation) smoke generator or Seuthe no. 24 smoke generator (DELTA/Digital operation).

37184 Same as 33184, but with digital decoder and controlled high-efficiency propulsion. Built-in locomotive whistle and bell. Equipped for installation of smoke generator (Seuthe no. 24). **Headlights digitally controlled. Smoke generator (when installed), locomotive whistle and bell can be turned on digitally with 6021 Control Unit.** The headlights and the smoke generator will work in conventional operation.

This model is being offered by Trix (T22513) for two-rail DC systems.

The "Rheingold" Train salon cars are appropriate for this locomotive and are available as a complete car set under item no. 4288 (see page 147).



At the beginning of this century the locomotives employed on the steep grades of the Bavarian State Railroad no longer met the requirements for hauling freight. The Maffei Company was therefore given the contract to design and build a powerful tank locomotive for these routes. The result was the Gt 2 x 4/4. At a length of 17,700 mm (58' 27/32") and with an output of 1,470 hp (1,080 kilowatts) it was the largest and most powerful tank locomotive in Europe at that time. The Mallet design with two high pressure and two low pressure cylinders enabled it to achieve a high degree of thermodynamic efficiency.

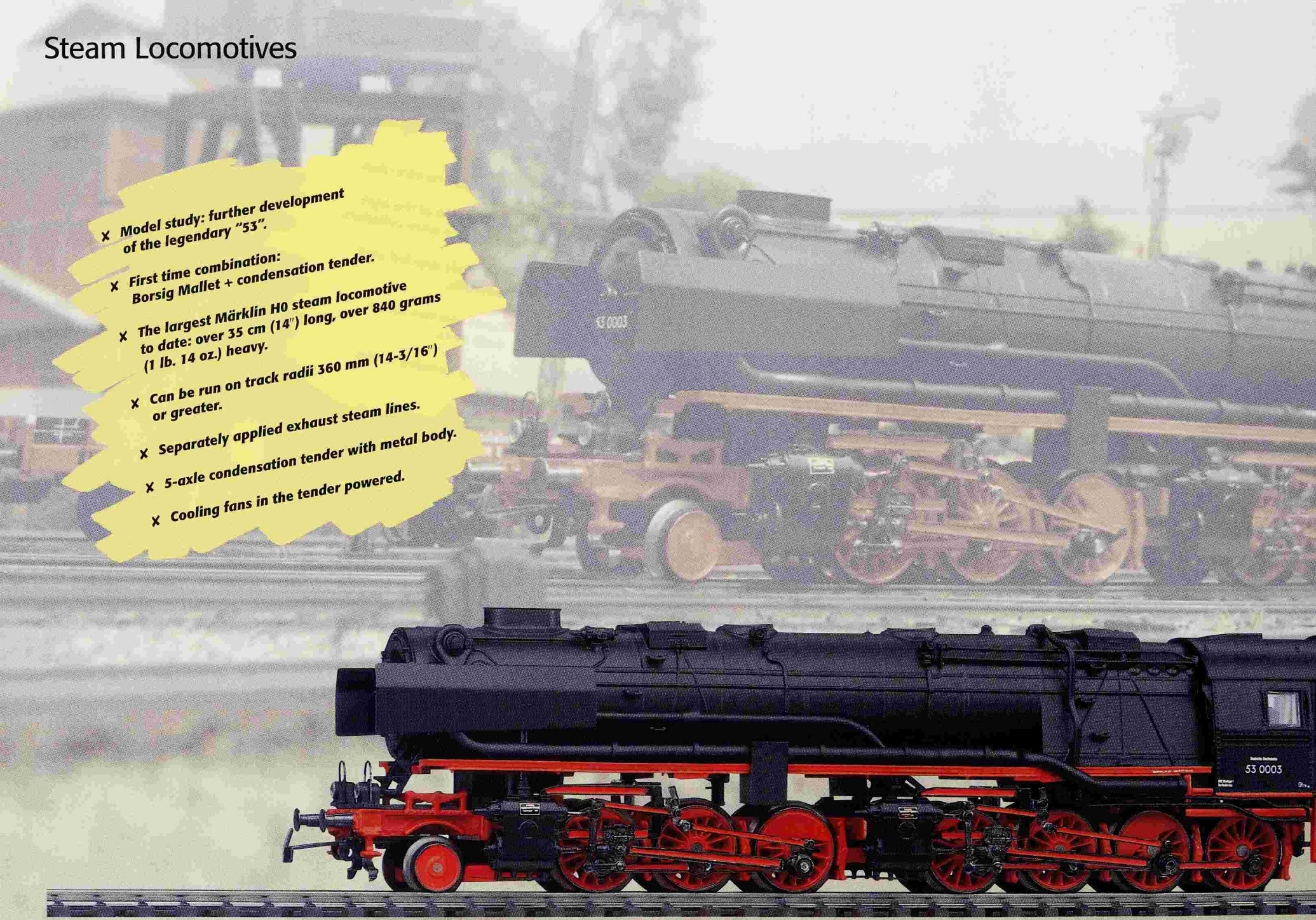
34962 Heavy Tank Locomotive.
German State Railroad Company (DRG), Bavarian Management Group, class Gt 2 x 4/4. With DELTA electronic circuit. 4 axles powered through side rods. 4 traction tires. Driving wheels divided into 2 coupled groups enabling unit to negotiate sharp curves. Numerous separately applied details. Length over buffers 20.3 cm (8").

37962 Same as 34962, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled.

- **Heavy metal construction.**
- **Reproduction of the high and low pressure cylinders.**
- **Separately applied wire handrails.**
- **Guide mechanism on both ends.**
- **Richly detailed model.**



- **Model study: further development of the legendary "53".**
- **First time combination: Borsig Mallet + condensation tender.**
- **The largest Märklin H0 steam locomotive to date: over 35 cm (14″) long, over 840 grams (1 lb. 14 oz.) heavy.**
- **Can be run on track radii 360 mm (14-3/16″) or greater.**
- **Separately applied exhaust steam lines.**
- **5-axle condensation tender with metal body.**
- **Cooling fans in the tender powered.**



After a short bidding process the German State Railroad gave out contracts in 1943 for the development of one of the last and for the times even utopian projects: a super heavy duty, fast freight locomotive for long distance operation over difficult terrain. The design put forward by Borsig envisioned a Mallet type articulated locomotive with 4 cylinders. With an output of almost 3,000 horsepower and an axle load of under 20 metric tons, it would have reached speeds of 80 km/h (50 mph) forward and reverse, even on substandard roadbed, and could have pulled a train 1,700 metric tons up grades as steep as 8 ‰ at 20 km/h (approx. 13 mph), even on curves with a radius as small as 360 meters (1,181 feet). Borsig's engineers were unable to prove these theoretical output figures; a working prototype was never finished.

At the end of 1943 at least the running gear, the frame and the boiler were supposed to have been built for the first giant locomotive (see the Märklin catalog for 1988/89, page 12/13), the large tender was, however, was still totally lacking. Surely the construction of such a prototype had to assume a lower priority behind the ongoing production of locomotives. At this time the heavy class 42 locomotives and chiefly the versatile class 52 locomotives were practically the only units still being built in Germany in any quantities. In fact, Borsig had suffered so much war damage in Berlin, that regular production was no longer possible – in 1944 just 2 Borsig locomotives were built to completion. The orders in process were finally moved for the most part to Henschel in Kassel, as well as much still usable machinery and material.

This created new possibilities for the project for this large Mallet locomotive. In place of the planned high-capacity tender, the immense requirements for water produced by the locomotive's 4 cylinder could have been covered by the existing Henschel type 3'2'T16 condensation tender. In addition, the condensation process would have enabled a synthesis of high power output and relative economy with this super large locomotive. However, the "53" was not converted into a condensation locomotive; there is no evidence of the corresponding design changes in this secret project. Presumably any further work and thought on the project were finally stopped, when there were no more 5-axle tenders available after the complete delivery of the first series of class 52 locomotives, and when the subsequent locomotives built were equipped with type 2'2'T13,5 tenders that were too small for the Borsig locomotive. So, it remained just an idea, this vision of the largest German steam locomotive, that is now being brought to life at least as an H0 model after a pause in development of 55 years.

N NEM II

33021 Freight Locomotive with Condensation Tender.
Mallet articulated locomotive from a design by Borsig, planned as the class 53 on the German State Railroad Company. Further development of a long-distance version with exhaust steam recovery. With DELTA electronic circuit. 4 axles powered. 4 traction tires. Driving wheels divided into 2 groups enabling unit to negotiate sharp curves. Coupler hook on the front. Spacing between locomotive and tender adjustable. Cooling fans in the tender powered with a separate motor. Can be retrofitted with 2 each 7226 smoke generators (conventional operation) or Seuthe No. 11 (DELTA/Digital operation). Length over buffers 35.5 cm (14″).

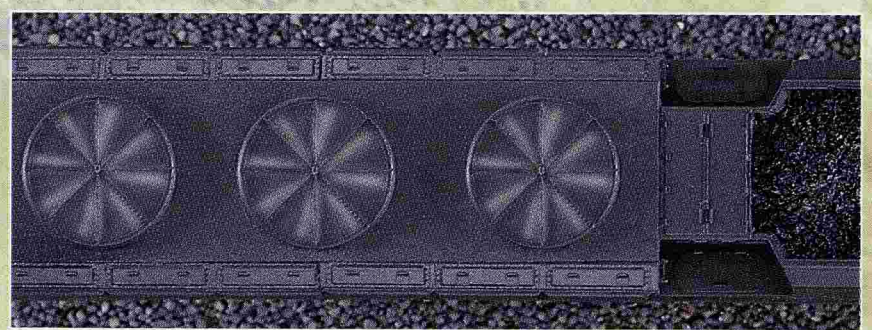
fx

37021 Same as 33021, but with digital decoder and controlled, high-efficiency propulsion. **Can be retrofitted with 2 each 7226 smoke generators, digitally controlled (with 6021 Control Unit). Cooling fans digitally controlled (with 6021 Control Unit). Dual headlights digitally controlled.** The cooling fans and the headlights will work with conventional operation.

This model is being offered for two-rail DC systems by TRIX (T22530).

Important: This model cannot be turned on the 7286 turntable or stored in the 7288 locomotive shed.





Steam Locomotives

The class 44 was produced from 1926 to 1949 and is thereby the one standard design locomotive built over the longest period of time. A total of over 2,000 units were built. In Germany the legendary 44's formed the backbone of heavy freight motive power for many years.

In addition, they were used in several European countries. A class 44 locomotive with tender and ready for service weighed a mighty 185 metric tons (189.63 tons). The technically maintenance-intensive three-cylinder running gear produced 2,000 horsepower at the rails.





34880 Freight Locomotive with Tender.
German Federal Railroad class 044. With DELTA electronic circuit. 5 axles powered. 4 traction tires. Driving wheels divided into 2 coupled groups enabling unit to negotiate sharp curves. Adjustable close coupling between locomotive and tender. Standard coupler pocket at the front, close coupler with guide mechanism on the tender. Length over buffers 26.0 cm (10-1/4″). Equipped for installation of 7226 smoke generator (conventional operation) or Seuthe no. 11 smoke generator (DELTA/Digital operation).

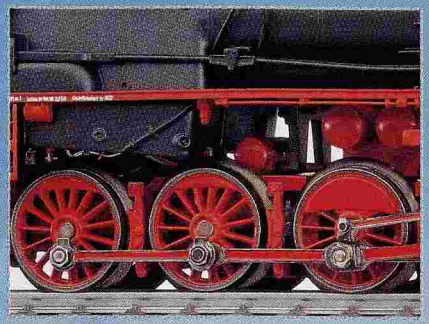


37880 Same as 34880, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled. Equipped for installation of smoke generator (Seuthe no. 11).



07460 The Märklin Locomotive Book "Dampflokomotiven" ("Steam Locomotives") by Thomas Hornung and Thomas Rietig.
The theme of this book is Märklin H0 steam locomotives. Extensive information is given about the prototype for each model in addition to the latter's technical features. Must reading for anyone who wants to know more about his models. Contents 128 pages with numerous color photographs. Format 21 x 29.7 cm (8-1/4″ x 11-11/16″). German text only.

The classic work horse for heavy freight trains in the 50s and 60s was without a doubt the class 44. These legendary machines mastered the great flows of freight in the expanding economy of the so-called Economic Miracle period. This was the high point and the shining moment for the 2,000 hp, 185 metric ton heavy Jumbos, as the class 44 locomotives were affectionately called.



34884 Freight Locomotive with Tender. German Federal Railroad class 44. With DELTA electronic circuit. 5 axles powered. 4 traction tires. Running boards with sloping front. Articulated frame to enable unit to negotiate sharp curves. Close coupling between locomotive and tender. Standard coupler pocket on the front, close coupler with guide mechanism on the tender. Length over buffers 26.0 cm (10-1/4″). Equipped for installation of 7226 smoke generator (conventional operation) or Seuthe no. 11 smoke generator (DELTA/Digital operation).

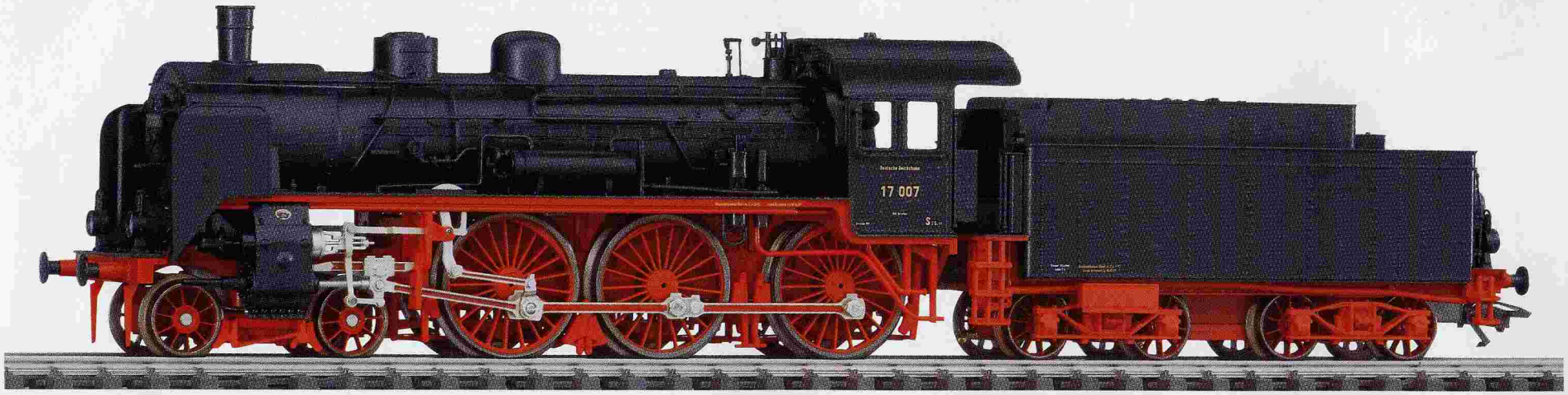
37884 Same as 34884, but with digital decoder and controlled, high-efficiency propulsion. Equipped for installation of 7226 smoke generator. **Headlights digitally controlled. Smoke generator digitally controlled with the 6021 Control Unit.** The headlights and smoke generator will work in conventional operation.

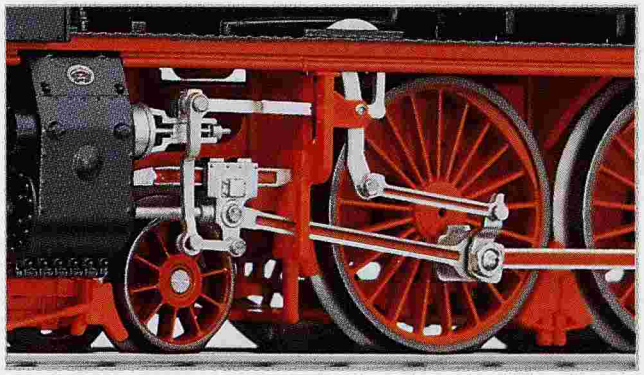
This model is being offered for two-rail DC systems by TRIX (T22533).

Steam Locomotives

75 Years of the DRG

The founding of the German State Railroad Company (DRG) in 1924 marked the end of the German provincial railroad diversity. The rail network had been slowly growing together anyway and now came under centralized management. Proven provincial railroad locomotives and cars were taken into the new system, and the numerous subclasses were retired. New designs could now be planned for all of Germany, and a "Standardization Office" worked towards standards and a type of modular system. This was the origins of the so-called standard design classes. The 1920s and 1930s were the heydays of the DRG. The airplane was still no competition with respect to infrastructure and comfort – people traveled by train. Comfortable, deluxe trains linked the European metropolitan areas. Record-breaking, streamlined steam locomotives and powered railcars, the first diesel locomotives, powerful electric locomotives and interesting, experimental locomotives and cars characterized the image of the railroad as a leader in technology. In 1937 came the end of the DRG. Without notice it became the German State Railroad (DR), lost its formal independence shortly thereafter and by law came under the responsibility of the state. After the war the GDR (East Germany) continued the name German State Railroad (DR) up to the reunification of West and East Germany.





After 1924 the German State Railroad Company brought all express locomotives with a 4-6-0 wheel arrangement from different provincial railroads into the class 17. The well known and beautiful Prussian S 10 and further developments of it, the S 10.1 and S 10.2, represented by far the largest number of these locomotives. From that time on they were painted black and red and had smoke deflectors; at first they were used in quality express train service as before. In the 30s they had to make way increasingly for more modern locomotives. The once proud racers were used less and less in scheduled service at the front of fast and standard passenger trains; by the end of the war many had already been retired. Few of the class 17 locomotives came to the DB; in the GDR they were still to be seen in large numbers up to 1960.

N NEM II

33190 Express Locomotive with Tender.
German State Railroad Company (DRG) class 17.0. High-efficiency Faulhaber motor system. DELTA electronic circuit. 3 axles powered. 2 traction tires. Permanent close coupling between locomotive and tender. Length over buffers 24.0 cm (9-7/16").

37190 Same as 33190, but with digital decoder and controlled, high-efficiency propulsion. Headlights digitally controlled.

This model is being offered by TRIX (T22504) for two-rail DC systems.

- ***Technically reworked with new details.***
- ***Faulhaber motor with flywheel.***
- ***Strengthened mechanism: spur gears and side rods.***
- ***Optimal weight distribution for high tractive effort.***
- ***Metal locomotive and tender.***
- ***Digital version:***
  - ***controlled, high-efficiency propulsion***
  - ***headlights can be turned on/off***



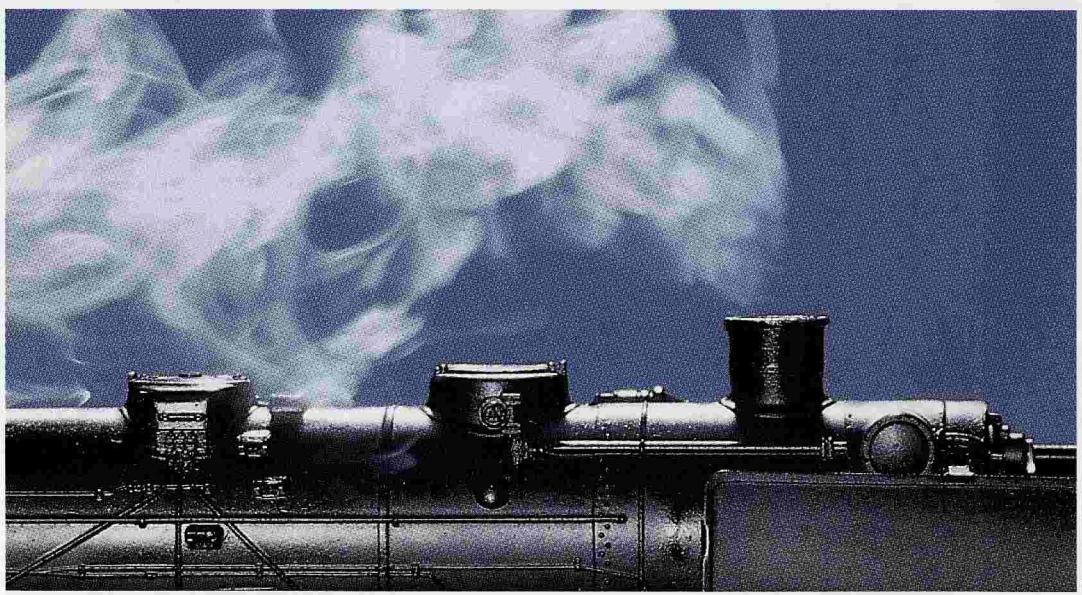
Steam Locomotives

33951 Express Locomotive with Tender.
German State Railroad Company (DRG) class 03. Wagner smoke deflectors. Painted boiler rings. Riveted style tender. With DELTA electronic circuit. 3 axles powered. 2 traction tires. Length over buffers 27.7 cm (10-7/8″). Equipped for installation of 7226 smoke generator (conventional operation) or Seuthe no. 11 smoke generator (DELTA/Digital operation).

37951 Same as 33951, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled. Equipped for installation of Seuthe no. 11 smoke generator.

The appropriate express train passenger car set (Märklin model 42751) for the DRG class 03 can be found on page 145.





Genuine Steam Locomotive Action

7226 Smoke Generator Kit.
Consists of smoke generator insert replacement smoke tube, cleaning wire, tweezers and an ampule of smoke fluid.

The Märklin 7226 smoke generator kit (for 3085, 33911, 33951, 3415, 34880, 34884, 37884 and 37911), the Seuthe no. 20 smoke generator kit (for 33181, 33184, 34080, 34550, 37080, 37184 and 37550) and the Seuthe no. 11 smoke generator kit (for 33911, 33951, 34880, 34884, 37880 and 37951) and no. 24 (for 33181, 33184, 34080, 34550 and 37181) bring genuine steam locomotive action to a model railroad layout. All of these smoke generators can be refilled with the Märklin 0241 or 02420 smoke fluid.

Many Märklin steam locomotives come from the factory already equipped for installation of the smoke generator which is quite easy to install: Simply insert the smoke generator into the smoke stack from the top or from underneath, put in some smoke fluid, and your locomotive is ready to belch smoke like the real thing. When the track current is turned on, the smoke fluid heats up and is expelled at short intervals as clouds of smoke. Your locomotive is now accompanied by an amazingly realistic stream of smoke.

02420 Smoke Fluid.
Large 50 milliliter (1.67 oz.) bottle for refilling all smoke generators.

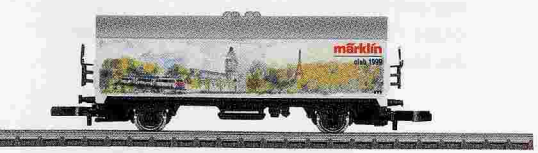
Märklin Clubs ...

... can be found in the French speaking part of Switzerland, France, Belgium, the Netherlands, Great Britain, Sweden, Spain, Italy, Greece, the USA, Canada, Australia, New Zealand, Japan, Indonesia, Malaysia, and Singapore.

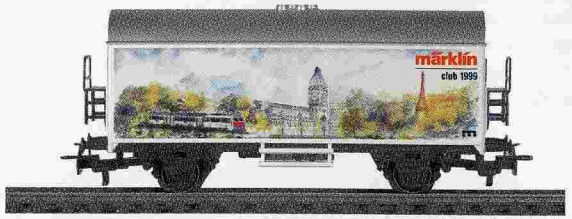
They are very popular because of exclusive club services such as:

- the "Insider" club magazine. It is published 6 times a year in an **English, French and Dutch edition,** and has articles on all sorts of useful subjects about Märklin.
- the mailing of informational materials and brochures about Märklin products.
- the ability to order the annual Märklin Club car in H0 and Z at an exclusive club price.
- the option to order the "Club Edition", which is reserved exclusively for club members.





Märklin Z Club Car



Märklin H0 Club Car

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c/o Nathan's Trains N Toys
P.O. Box 2416 Chermside Centre
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E-mail trainsnt@tm.net.my
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Please contact your local Märklin Club for more information.

Insider Model for 1999

The legendary class 10 express locomotive was placed into service in 1957. At 3,000 hp it was the most powerful German express steam locomotive. It reached its maximum speed of 140 km/h (87.5 mph) even with a train of 600 metric tons. As delivered in 1957 the 10 001, the prototype of our Märklin model, was coal fired with supplemental oil firing for peak performance. In everyday service these units were outstanding, even with daily runs of over 1,000 kilometers (625 miles). The general changes taking place in motive power on the railroad at that time resulted in only two of this class being built.

Please note the information on the Märklin Insider Club on page 65. Additional Insider models for 1999 in Z Gauge, in 1 Gauge, and in H0 Gauge can be found on pages 315, 448, and 112/113 respectively.



34080 Express Steam Locomotive with Tender.
German Federal Railroad class 10. With DELTA electronic circuit. Built in running gear lights. 3 axles powered. 2 traction tires. Metal tender. Close coupling between locomotive and tender. Length over buffers 30.5 cm (12"). Ready for installation of Seuthe no. 20 smoke generator (conventional operation) or Seuthe no. 24 smoke generator (DELTA/Digital operation).

37080 Same as 34080, but with digital decoder and controlled, high-efficiency propulsion. Built in running gear lights, whistle and steam locomotive sound effects. Ready for installation of Seuthe no. 20 smoke generator. **Headlights digitally controlled. Smoke generator, running gear lights, whistle, and steam locomotive sound effects can be digitally controlled with the 6021 Control Unit.** The steam locomotive sound effects are synchronized with the locomotive's driving wheels by means of a contact generator to pick up the rpm of the latter. The headlights and the smoke generator will work in conventional operation.

The 34080 and 37080 express steam locomotives are being produced in a one-time series only for Insider members and will be delivered starting in the 1st quarter of 2000.

The appropriate express train passenger car set (Märklin model 42941) for the class 10 express steam locomotive can be found on page 155.



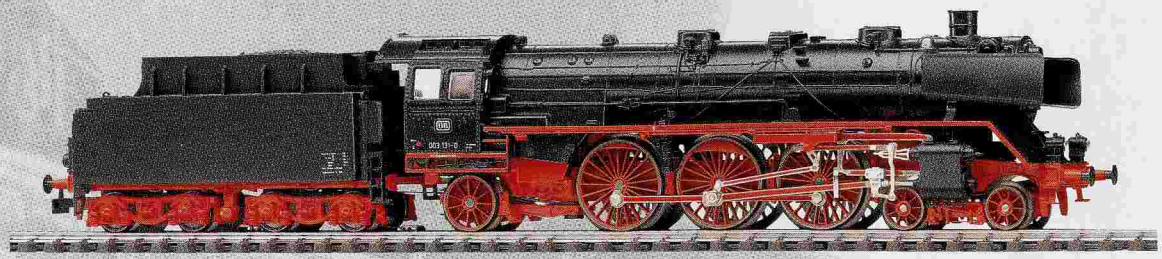
- ✗ *Metal frame, boiler and tender.*
- ✗ *Close coupling between locomotive and tender.*
- ✗ *Digital version:*
  - *with steam locomotive sound effects and multi-tone whistle*
  - *controlled, high-efficiency propulsion*
  - *running gear lights*
- ✗ *Buffer plate warning striping.*

The German State Railroad Company was in need of a fast express locomotive for speeds up to 150 km/h (94 mph) on the many routes where the track and roadbed only allowed an axle weight of 18 metric tons. A three-cylinder design based on the proven 03 was planned as a help in this area. In 1939 Borsig in Berlin presented the first two prototypes of the 150 km/h (94 mph) maximum speed 03.10 with its striking streamlining. After good results with the two test units the German State Railroad Company wanted to purchase another 138 of the fast 03.10. Borsig in Berlin, Krupp in Essen and Krauss-Maffei in Munich were only able to deliver 58 of this class by 1941.



33911 Streamlined Express Locomotive with Tender. German State Railroad Company (DRG) class 03.10. With DELTA electronic circuit. 3 axles powered. 2 traction tires. Length over buffers 27.4 cm (10-13/16″). Equipped for installation of 7226 (conventional operation) smoke generator or Seuthe no. 11 (DELTA/Digital operation) smoke generator.

37911 Same as 33911, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled. Equipped for installation of 7226 smoke generator. **Headlights digitally controlled. Smoke generator (when installed) can be turned on digitally with the 6021 Control Unit.** The headlights and the smoke generator will work in conventional operation.



With its large driving wheels and long boiler, this model of the German Federal Railroad class 003 reproduces the classic German express locomotive. This locomotive, with a tender, could be found at the front of express trains – sometimes on less than ideal track. With its maximum speed of 130 km/h (81 mph), it shortened travel times between the large cities.

3085 Express Locomotive with Tender. German Federal Railroad class 003. Reverse unit. 3 axles powered. 2 traction tires. RELEX coupler on tender. Length over buffers 27.7 cm (10-7/8″). Equipped for installation of 7226 smoke generator.

http://www.maerklin.de

märklin

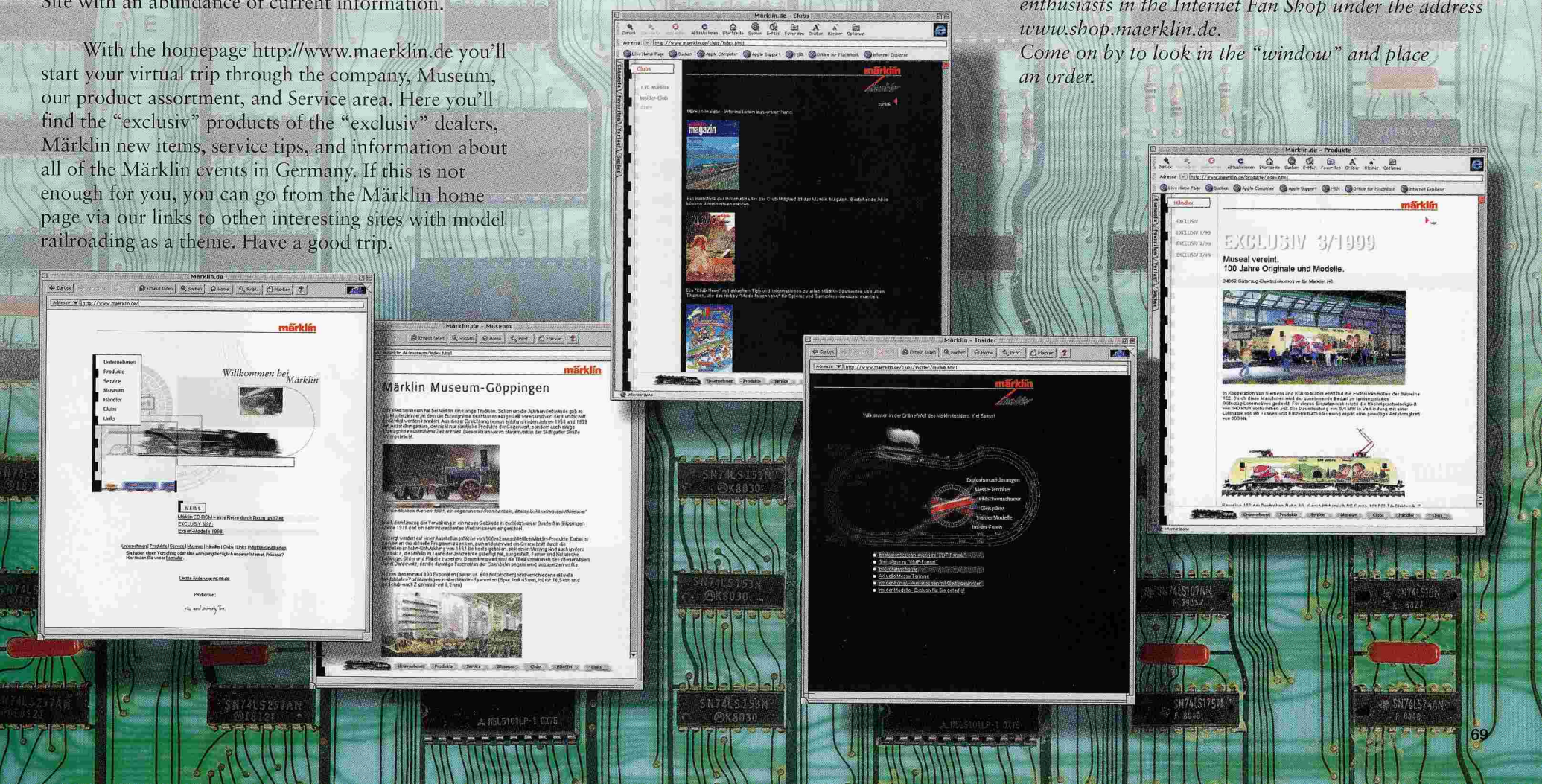
The densest and fastest "railroad network" in the world is the Internet. Because here a constantly growing number of railroad companies, tour operators, railroad and model railroad manufacturers, specialty shops, museums, clubs, and enthusiasts exchange offerings, information and experiences. With the click of a mouse you can travel through the worlds of current and historic railroads and model railroads. It's clear that Märklin had to have a presence in this field, and for the last 3 years we have offered the Märklin Site with an abundance of current information.

With the homepage http://www.maerklin.de you'll start your virtual trip through the company, Museum, our product assortment, and Service area. Here you'll find the "exclusiv" products of the "exclusiv" dealers, Märklin new items, service tips, and information about all of the Märklin events in Germany. If this is not enough for you, you can go from the Märklin home page via our links to other interesting sites with model railroading as a theme. Have a good trip.

As a Märklin Insider you also receive an extra access. After entering your name and membership number, you can make use of exclusive information and product offerings for Insiders or take part in promotions. You will have access to the exploded diagrams and parts lists for almost all of the Märklin locomotives and access to new, previously unpublished track plans. Finally, you can download Märklin screen savers for your computer.

If you would like to take advantage of these benefits, simply become an Insider Club member and apply through the Internet or with the application form. (Note: English speakers can become members of the Märklin Club of North America and receive almost all of the same benefits at "http://www.marklin.com".) The members of the student club in Germany, 1.FC Märklin, also have an exclusive Club entry on the Internet.

You'll find many interesting items for Märklin enthusiasts in the Internet Fan Shop under the address www.shop.maerklin.de.
Come on by to look in the "window" and place an order.



Diesel Locomotives

Many companies, which have their own trackage, use the DHG 500 industrial locomotive to distribute cars to those locations where they are to be loaded or unloaded. In addition, they are also used to assemble trains for the transfer point where these trains are picked up by the railroad.

HOBBY III – V

3078 Diesel Locomotive.
Henschel class DHG 500 industrial locomotive. Reverse unit. 3 axles powered. 1 traction tire. Coupler hooks. Length over buffers 11.2 cm (4-7/16″).





HOBBY III – V

3088 Diesel Locomotive.
Henschel class DHG 700 C industrial locomotive. Reverse unit. 3 axles powered. 1 traction tire. Coupler hooks. Length over buffers 11.2 cm (4-7/16″).

The DHG 700 is a modern industrial locomotive in the same manner as the companies that employ them on their own tracks. With appropriate equipment they can also be controlled remotely in the prototype. They are designed using the unit construction system.This allows easy interchangeability of the individual component groups as needed or during repairs.

HOBBY IV

3072 General Purpose Diesel Hydraulic Locomotive.
German Federal Railroad class 212. Reverse unit. Metal frame. 2 axles powered. 4 traction tires. Prototypically scale narrow hoods. RELEX couplers. Length over buffers 14.1 cm (5-9/16″).

The class 212 still runs in the classic scarlet red paint scheme on the German Federal Railroad. It goes particularly well with the 4317-4319 three-axle rebuilt cars (see page 152) or the 4131-4133 four-axle rebuilt cars (see page 153) or the 4256 and 4257 Silberlinge (“Silver Coins”) cars (see page 158).



Prototypical route protection. All of the signals can be found on pages 268/269.



HOBBY V

3131 Diesel Hydraulic Switch Engine.
German Federal Railroad class 361. Reverse unit. 3 axles powered. 1 traction tire. TELEX couplers for remote control uncoupling of unit from cars anywhere on a layout. Length over buffers 12.0 cm (4-3/4″).

A 12 cylinder Maybach diesel motor powers these switch engines which have a maximum speed of 60 km/h (approx. 38 mph). They have been designated as the class 360/361 since 1987 which ranks them as small locomotives.



The signal light for the remote control indicates the function of the TELEX couplers on the model.



V

34641 Diesel Hydraulic Switch Engine.
German Railroad, Inc. class 365. With DELTA electronic circuit. 3 axles powered. 2 traction tires. TELEX couplers for remote control uncoupling of unit from cars anywhere on a layout. Length over buffers 12.0 cm (4-3/4″).

In 1958 the German Federal Railroad (DB) first placed the V 100 general purpose diesel hydraulic locomotive into service. These units had a power rating of 1,100 horsepower. Starting in 1962 a more powerful version with 1,350 horsepower was delivered. These locomotives have a length over the buffers of 12.3 meters (40′ 4-7/16″) and reach a maximum speed of 100 km/h (62.5 mph). The first production series, the V 100.10, has been designated the class 211 since 1968, and the second series, the V 100.20, is the class 212.



NEM V

33723 General Purpose Diesel Hydraulic Locomotive.
German Railroad, Inc. class 212. With DELTA electronic circuit. Metal frame. 2 axles powered. 4 traction tires. Length over buffers 14.1 cm (5-9/16″).

Diesel Locomotive Set

When the German State Railroad Company was founded in 1924 the building of locomotives with internal combustion motors was still in its infancy. There were of course powerful motors available from the shipbuilding industry; the problem was how to transmit the requisite high levels of power to several driving axles. For a long time only small locomotives and relatively lightweight powered railcars were successful with distillate or diesel propulsion in any numbers. Only three spectacular development projects for larger diesel locomotives were carried out in Germany by World War II.

In 1927 the Esslingen Machine Company adopted a concept from the Prussian State Railroad and developed it further. With the V 3201 diesel pneumatic locomotive the running gear and method of power transmission were taken from a steam locomotive. The cylinders were driven with compressed air generated by an air compressor. This in turn was powered by a MAN diesel motor with 1,000 hp. whose exhaust acted to condense the compressed air. After tests in 1929 the locomotive was used on an experimental basis in South Germany as the V 120 001 for almost five years. The project was halted since there was no advantage in operation and costs over that for a steam locomotive.

In 1934/1935 Krauss-Maffei developed a locomotive that combined modern automobile technology with classic railroad mechanics. The V 16 101 had a diesel motor with 1,400 hp (also from MAN) that powered a jackshaft through a hydraulic transmission. As with older electric locomotives this was connected to the driving axles by means of side rods. The locomotive was rushed to completion for the German railroad anniversary and was premiered in 1937 at the Paris International Exhibition. When the locomotive was ready for mass production after several improvements and was classified as the V 140, the rationing of fuel in 1939 and a bombing raid ended the project for the time being. After the war the V 140 001 was overhauled again and used in regular service up to 1952. Since then it has been preserved as a museum piece.

Starting in 1939 Krupp built a locomotive based on an American prototype with a diesel electric propulsion system. Designated D 311, the practical result of this project was an electric locomotive with its own power plant: a 940 hp diesel motor (again from MAN) permanently coupled to a generator that functioned as the actual propulsion system by supplying power to electric axle-suspended motors on all four axles. Twelve of these sturdy, relatively expensive locomotives were built and used in double unit operation for heavy war material. Half of the units considered as pilot models were destroyed. Two double unit locomotives were overhauled in 1952 and updated with more powerful motors. They were used by the DB in regular service for almost 20 years.

None of these three "forefathers" served after the war as the basis for other designs. On the DB a whole new generation of economical diesel locomotives was developed with hydraulic cardan drive transmissions. The DR had similar designs but also bought Russian-design diesel electric locomotives.



N NEM NEM II

37203 "Diesel Forefathers" Locomotive Set.
3 German State Railroad Company (DRG) diesel locomotives from the 30s. All three models with digital decoders and controlled high-efficiency propulsion. Dual headlights that change over with the direction of travel, digitally controlled.

V 120 (V 3201) compressed air diesel locomotive.
3 axles powered. 2 traction tires. Length over buffers 18.5 cm (7-5/16″).

V 140 (V 16) diesel hydraulic locomotive.
3 axles powered. 2 traction tires. Dual red marker lights. Length over buffers 16.5 cm (6-1/2″).

V 188 (D 311) double unit diesel locomotive.
2 motors. 4 axles powered. 8 traction tires. Triple headlights and dual red marker lights **separately controlled digitally with 6021 Control Unit.** Length over buffers 25.8 cm (10-3/16″).

The locomotives in the 37203 set are being produced in a one-time series only in 1999 on the occasion of the founding of the German State Railroad Company 75 years ago.

The V 140 (V 16) locomotive is being offered for two-rail DC systems by Trix (T22449).



Diesel Locomotives

This was a basically new locomotive and was placed into service in July of 1935 after just an eight month building period. The V 140 was the first large diesel locomotive with hydraulic power transmission. Krauss-Maffei, the German State Railroad Central Office in Munich and the firms of BBC, MAN and Voith all participated in the development and production of this locomotive. The diesel motor developed 1,400 horsepower at 700 rpm. The Voith fluid transmission with a torque converter and two couplings transmitted this power to the jackshaft. This locomotive was used until 1953 in the Frankfurt area; since 1970 it has been in the German Museum in Munich.

34210 Diesel Hydraulic Locomotive.
German Federal Railroad class V 140. With DELTA electronic circuit. 3 axles powered. 2 traction tires. Length over buffers 16.6 cm (6-1/2″).

37210 Same as 34210, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled.

This model is being offered by Trix (T22448) for two-rail DC systems.





33803 Diesel Hydraulic Locomotive.
German Federal Railroad class V 200. With DELTA electronic circuit. 2 axles powered. 4 traction tires. Engineer's cabs and engine room with interior detailing. **Built-in diesel locomotive sound effects circuit.** Length over buffers 21.0 cm (8-1/4″).

37803 Same as 33803, but with digital decoder and controlled high-efficiency propulsion. **Headlights digitally controlled. Sound effects circuit with different functions can be turned on digitally with the 6021 Control Unit.** The headlights and sound system will work in conventional operation.



N

07461 The Märklin Locomotive Book "Diesel- und E-Lokomotiven" ("Diesel and Electric Locomotives") by Thomas Hornung and Thomas Rietig.
In this 2nd volume the well-known and popular comparison of the prototype and the Märklin H0 model taken from the Märklin locomotive book "Dampflokomotiven" ("Steam Locomotives", item no. 07460) is expanded to the areas of diesel and electric locomotives. Interesting reading for any Märklin enthusiast who would like to know more about his models. 128 pages with many color photos. Format 29.7 cm x 21 cm (11-11/16″ x 8-1/4″). German text only.

30747 General Purpose Diesel Hydraulic Locomotive.
German Federal Railroad class 218. Reverse unit. Metal frame. 2 axles powered. 4 traction tires. RELEX couplers. Length over buffers 18.2 cm (7-13/16″).



In 1993 the Swiss Federal Railways (SBB) took possession from the SERSA Construction Company of two almost new diesel locomotives that were listed on the motive power roster as the class Am 842. These units were developed as the class G 1204 from the "parts box" of the Machinery Construction Company, Inc. of Kiel, Germany (MaK, currently part of Siemens Rail Vehicle Technology). In their basic superstructure and design they are closely related to the DE 1002 widely used in industry and on private railroads or to the more powerful and lengthened class 6400 of the Dutch State Railways. The Am 842 has many components in common with these diesel electric types, but is powered diesel hydraulically. In place of the generator and the electric traction motors, a hydraulic transmission sits in the center of the locomotive and powers the trucks by means of cardan shafts. The motor has an output of 1,120 kilowatts (approx. 1,502 hp), and the 80 metric ton locomotive has a maximum speed of 80 km/h (50 mph). With these kinds of specifications the Am 842 has replaced the Am 4/4 (ex V 200) just recently retired, whose higher maximum speed is not required on non-electrified routes in Switzerland.

This model is being offered for two-rail DC systems by Trix (T22588).

The 33642 and 37642 locomotives are being produced in a one-time series only in 1999.



N NEM V

33642 Diesel Hydraulic Locomotive.
Swiss Federal Railways (SBB) **class Am 842 000.** With DELTA electronic circuit. High-efficiency motor with flywheel. 4 axles powered. 4 traction tires. Headlights with maintenance-free LEDs. Separately applied metal side and end handrails. Length over buffers 14.5 cm (5-11/16″).

37642 Same as 33642, but with digital decoder and adjustable, high-efficiency propulsion. Headlights digitally controlled.
Class Am 842 001.



IV

3374 General Purpose Diesel Hydraulic Locomotive.
German Federal Railroad class 216. With DELTA electronic circuit. Metal frame. 2 axles powered. 4 traction tires Length over buffers 18.2 cm (7-13/16″).



V

33743 General Purpose Diesel Hydraulic Locomotive.
German Railroad, Inc. class 216. With DELTA electronic circuit. Metal frame. 2 axles powered. 4 traction tires. Length over buffers 18.2 cm (7-13/16″).

The members of this family of locomotives with their characteristic end shape are still among the most widely used diesel locomotives on the German Railroad, Inc.

Diesel Locomotives

34664 Double Unit Diesel Electric Locomotives.
Belgian State Railways (SNCB/NMBS) class 202 (52) and 203 (53). Original versions with 2 headlights. 1 powered locomotive with DELTA electronic circuit. 1 non-powered locomotive permanently coupled to the first unit, **with permanent diesel motor sound effects.** 3 axles powered. 4 traction tires. Separately applied air vents for the dynamic brake. Length over buffers 41.5 cm (16-5/16″).

The 34664 double unit diesel electric locomotive is being produced in a one-time series only in 1999.



The Dutch State Railways have ordered a totally new diesel locomotive from the Kiel Machine Company (MaK) for the modernization of non-electrified motive power. It is based on the DE 1002 in use on several privately owned railroads in Germany and makes use of electrical components from the development of the class 120 electric locomotive.

The almost 1,200 kilowatt (approximately 1,609 horsepower) output required of the electronically controlled, three-phase asynchronous motors demanded a larger motor and fuel tank. This made the locomotive over 1.5 meters (4 feet 11-1/16″) longer. The exhaust was installed off-center for better visibility down the track. Many other design detail changes were necessary, until the NS standard locomotive class 6400 resulted from the DE 1002.

At present 120 units of this class are in use, most of them in the NS classic gray/yellow paint scheme. After the freight service in the Netherlands was privatized and separated into groups, the last units were painted in the red color scheme for NS Cargo.



33641 Diesel Electric Locomotive.
Dutch State Railways class 6400 / freight traffic area (NS Cargo). With DELTA electronic circuit. 2 axles powered. 4 traction tires. Special motor with flywheel. Metal side rails and end platforms separately applied. Length over buffers 16.5 cm (6-1/2″).

37641 Same as 33641, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled.

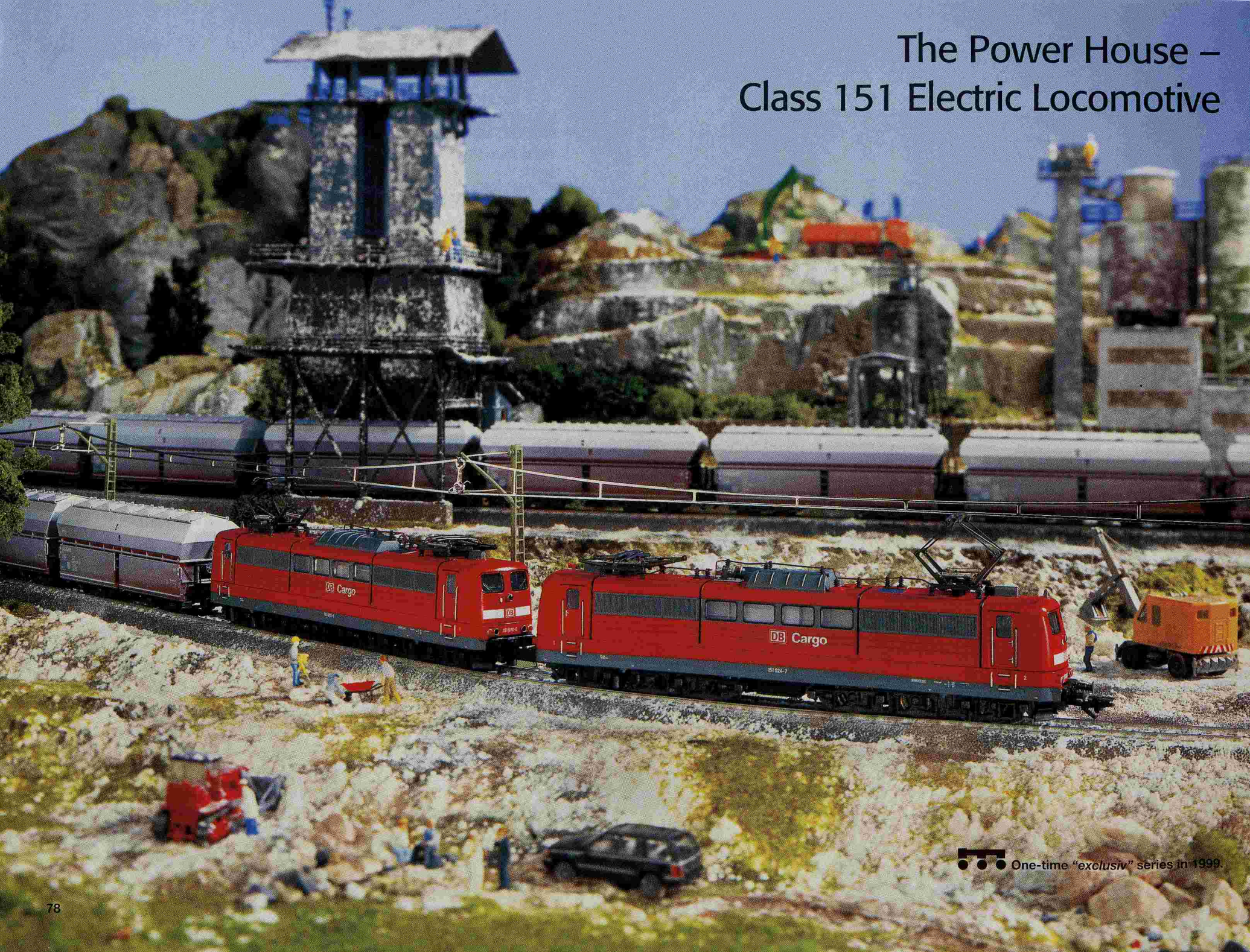
This model is being offered by Trix (T22545) for two-rail DC systems.



33622 Diesel Electric Locomotive.
Atchison, Topeka & Santa Fe Railway (AT & SF) General Motors EMD type F 7. With DELTA electronic circuit. 2 axles powered. 4 traction tires. Lighted number boards. Connections for the headlight and numberboard lights of a non-powered unit coupled to this unit. Coupler hooks with preuncoupler, can be replaced with standard coupler pockets included with unit. Length 17.5 cm (6-7/8″).

37622 Diesel Electric Locomotive.
Atchison, Topeka & Santa Fe Railway (AT & SF) General Motors EMD type F 7. Double unit locomotive consisting of an A and B unit. With digital decoder and controlled high-efficiency propulsion. 2 axles powered. 4 traction tires. Headlights and lighted number boards digitally controlled. Built-in sound generator. **Sound generator with diesel locomotive sound effects, horn and dynamic brake can be turned on digitally with the 6021 Control Unit.** The headlights and the sound effects will work in conventional operation. Connections for the headlight and numberboard lights of a non-powered unit coupled to this unit. Fixed drawbar between both locomotive units. Coupler hooks with preuncoupler, can be replaced with standard coupler pockets included with unit. Length 35.0 cm (13-3/4″).

The Power House – Class 151 Electric Locomotive



One-time *"exclusiv"* series in 1999.

The unique "exclusiv" series for 1999 can be be found on the following pages:

märklin

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Märklin will produce one-time series in the future, too.

New, special production items are presented in detail in the "EXCLUSIV" brochures. These brochures are available free of charge at your Märklin dealer.

One-time *"exclusiv"* series in 1999.

Electric Locomotives

34060 Electric Locomotive.
Royal Bavarian State Railroad (K.Bay.Sts.B.) class EP 3/6. With DELTA electronic circuit. 3 axles and jackshaft powered. 2 traction tires. Asymmetrically arranged, older design pantographs. Reproduction of steam heater boiler. Length over buffers 14.3 cm (5-5/8″). Equipped for installation of Seuthe no. 20 smoke generator (conventional operation) or Seuthe no. 24 smoke generator (Delta/Digital operation).



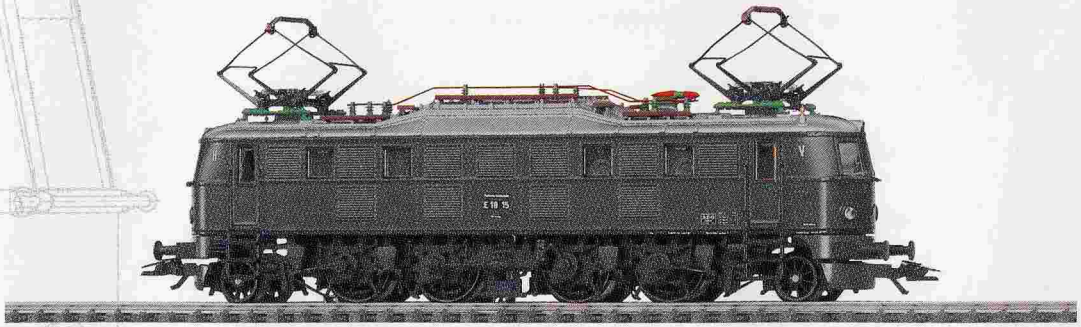
This model is being offered for two-rail DC systems by TRIX (T22557).

37060 Same as 34060, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled. Equipped for installation of smoke generator (Seuthe no. 20).

33681 Electric Locomotive.
German State Railroad Company (DRG) class E 18. With DELTA electronic circuit. 2 axles powered. 4 traction tires. Engineer's cabs and engine room with interior details. Imprinted buffer rings. Movable front skirting can be fixed in place for static display. Quill drive driving wheels.
Length over buffers 19.5 cm (7-11/16″).

37681 Same as 33681, but with digital decoder and controlled, high-efficiency propulsion. Headlights digitally controlled.

The 33681 and 37681 models are being produced in a one-time series only in 1999 on the occasion of the 75th anniversary of the German State Railroad Company DRG).



In 1935 the German State Railroad Company placed into service the class E 18 developed and built by AEG. This electric locomotive turned in excellent results in heavy express train service. At the world exhibition in Paris this innovative machine was awarded the highest possible prize, the Grand Prix. Even today the E 18 still rates as one of the most successful developments of the German locomotive builders.

The appropriate express train passenger cars (Märklin models 43211, 43231, and 43261) for the E 18 electric locomotive can be found on page 149.

The abundance of water power from the mountains caused the railroads in Bavaria to develop electric locomotives very early on. The German State Railroad Company's procurement program for the Bavarian Management Group was responsible for placing the EP 5 into service. This 140 metric ton locomotive was assigned to heavy passenger traffic. It reached a maximum speed of 90 km/h (56 mph) with its 4 traction motors. It was designated as the E 52 by the DRG.

This model is being offered by Trix (T22462) for two-rail DC systems.

33661 Electric Locomotive.
German State Railroad Company (DRG) class E 52. With DELTA electronic circuit. 2 axles powered. 4 traction tires. Engine room with interior details. Length over buffers 19.8 cm (7/13/16").

37661 Same as 33661, but with digital decoder and controlled high-efficiency propulsion. Built-in air horn. **Headlights digitally controlled. Air horn can be turned on digitally with the 6021 Control Unit.** The headlights will work in conventional operation.

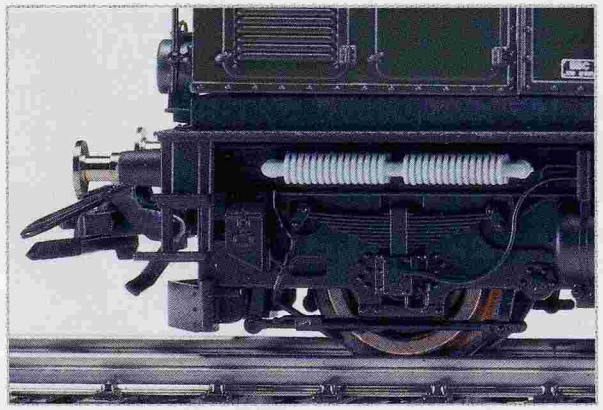
- ***Reproduction of the engine room.***
- ***Version with gangway doors.***
- ***Older design pantographs.***



90 Years – and still working.

In 1909 the LAG 2 locomotive was placed into service by the Local Railroad, Inc. for the route Murnau – Oberammergau. It was given the official name of "Pauline". Its effectiveness was proven with the marked increase in passenger traffic during the Passion Plays in 1910. It was classified as the E 69 by the German State Railroad Company. Aside from a short intermediate period in Heidelberg, the E 65 02 was always used on its original Bavarian route. On June 27, 1982 it was retired from active service as the oldest still active DB locomotive. Since then it has been stationed at the Garmisch maintenance facility as an operational museum locomotive.





34475 Electric Locomotive.
German Federal Railroad class E 69. With DELTA electronic circuit. 2 axles powered. 1 traction tire. Engineer's cabs with interior details. Separately applied handrails. Length over buffers 8.5 cm (3-3/8").

37475 Same as 34475, but with digital decoder and controlled, high-efficiency propulsion. Headlights digitally controlled.

This model is being offered by TRIX (T22551) for two-rail DC systems.

Our model is a completely new design with the frame and body made of finely detailed diecast metal. The small dimensions on this locomotive presented a special challenge to our product development people. Yet they were successful in arranging the motor and circuit board so that even the interior details could be reproduced.

- ***Engineer's cab and interior details.***
- ***Metal frame and body.***
- ***Motor with flywheel.***
- ***Close couplers with guide mechanism.***
- ***Can operated off of catenary also.***



Electric Locomotives

In 1966/67 the DB ordered for the first time nine locomotives for cross border traffic in the heart of Europe that could be used with the catenary systems of neighboring railroads.

The dual frequency class E 310 locomotives (later 181) have two different designs of single arm pantographs and can be operated with alternating current at
- 15,000 volts with 16 2/3 hertz in Germany,
- 25,000 volts with 50 hertz in France and Luxembourg.

The class E 410 (later 184) four system locomotives have four different designs of pantographs and can also be operated with direct current at
- 3,000 volts in Belgium,
- 1,500 volts in France

and the Netherlands.

The traction current is processed by transformers and either rectifiers (BBC design) or thyristor-controlled alternators (AEG design), and four standard design mixed current traction motors are used. The locomotives are all equipped with the running gear (Krupp) and have the same performance at 4,240 kilowatts (5,686 horsepower) and 150 km/h (94 mph) as the E 10 / 110 "domestic locomotive". A step-less speed control enables both designs to efficiently haul express trains as well as heavier freight trains.



The four system locomotives were originally stationed in Cologne, the dual frequency locomotives in Saarbrücken. Around 1980 the class 184 was transferred to Saarbrücken in favor of the Belgian class 16 and was used there only as a dual frequency locomotive; the direct current pantographs were no longer needed and were removed.



34310 Four System Electric Locomotive.
German Federal Railroad class 184 (E 410). With DELTA electronic circuit. 2 axles powered. 4 traction tires. Engineer's cabs with interior details. 4 different design pantographs. Length over buffers 19.5 cm (7-11/16").



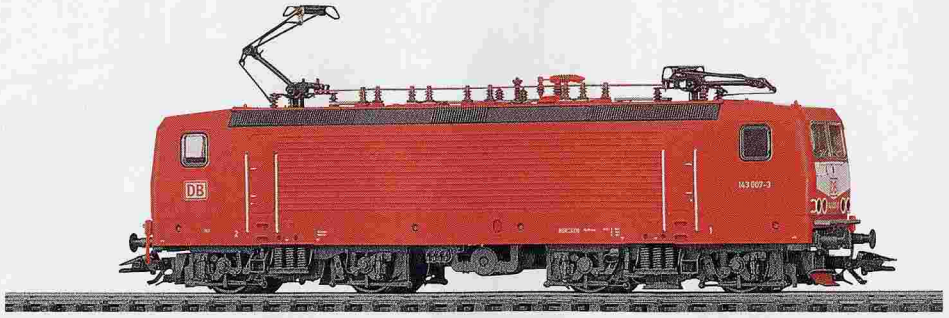
37310 Same as 34310, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled.



34431 Electric Locomotive.
German Railroad, Inc. class 143. With DELTA electronic circuit. 2 axles powered. 4 traction tires. Engineer's cabs with interior detailing. Length over buffers 19.1 cm (7-1/2").



37430 Same as 34431, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled.



The class 143 is the appropriate electric locomotive for the German Railroad, Inc. bilevel cars (Märklin models 43581-43586, see pages 162–163).





30331 Electric Locomotive.
German Railroad, Inc. class 110 in current color scheme. Version with streamlined cab. Reverse unit. 2 axles powered. 4 traction tires. Coupler hooks. Length over buffers 19.1 cm (7-1/2").

The last production series of the "normal" E 10 express locomotive was built in 1962/63 in the same streamlined design as the faster "Rheingold" E 10.12 units. For this reason you can still see class 110 locomotives in the "pants crease" look on the DB, Inc. They have undergone the same changes as their boxy looking sisters: standard design vents, shortened rain gutters, and removal of the front skirting. The new red paint scheme with the white ends and the modern logo is being applied to these units.

37432 Double Unit Electric Freight Locomotive.
2 German Railroad, Inc., DB Cargo Business Area, class 151 locomotives. 1 locomotive with a digital decoder and controlled, high-efficiency propulsion and 1 non-powered locomotive, permanently coupled together. 3 axles powered. 4 traction tires. Built-in sound effects module with air horn and brake squealing. **Headlights digitally controlled. Air horn and brake squealing can be turned on / off digitally with 6021 Control Unit.** The headlights will work in conventional operation. Total length over buffers. 44.9 cm (19-1/2").

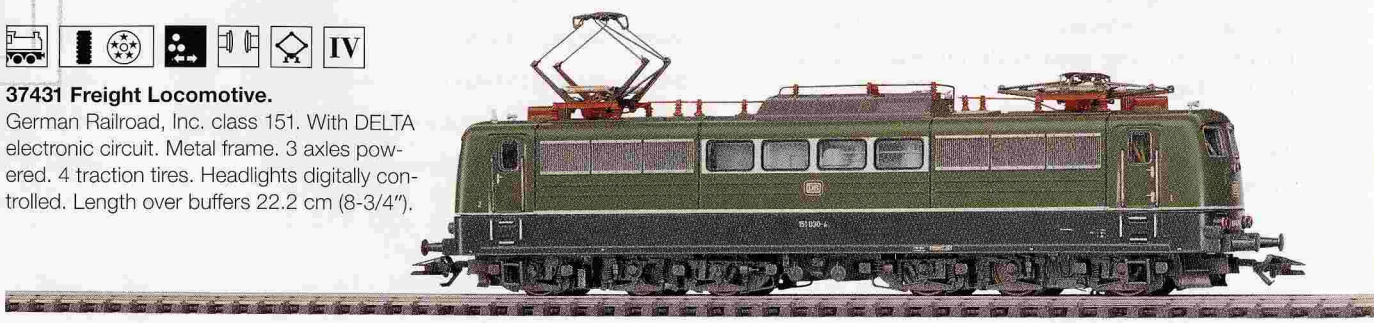
Both locomotives in a special version. Not available separately.

Special one-time series in 1999.
Delivery starting the 4th quarter of 1999.



At the start of the 1970s the German Federal Railroad (DB) needed new locomotives for heavy freight service. Beginning in 1973 the six-axle class 151 was placed into service. A total of 170 locomotives were delivered. They are 19.49 meters long (approx. 64 feet), weigh 118 tons, and are 120 km/h (75 mph) fast. This class is a further development of the class 150; the choice of a motor for the 6 traction motors reached back to the types that had been proven with the classes 110 and 140. The class 151 was built by Krupp in Essen and by Krauss-Maffei in Munich.

37431 Freight Locomotive.
German Railroad, Inc. class 151. With DELTA electronic circuit. Metal frame. 3 axles powered. 4 traction tires. Headlights digitally controlled. Length over buffers 22.2 cm (8-3/4").



H0 Synergies

TRIX

märklin

You always hear of synergies when two firms merge together. The advantages of technological cooperation and meaningful, mutual complementary working relationships are explained to the public in terms of synergies that in the final analysis strengthen the firm.

Seldom are these reasons so applicable as with Märklin and Trix, who have been working together since 1997 under the umbrella of Märklin Holding. Development, manufacturing and distribution resources are used in common based on an overlapping company and marketing strategy. The Trix brand name remains independent in the process. This cooperation enables both brand names to maintain a broad variety of products despite rising costs.

Trix is further expanding its recognized marketing position as a 2-rail DC specialist. In the scales N (Minitrix) and H0 (Trix H0, Express) Trix is developing and manufacturing high quality models of locomotives and cars as well as the Selectrix digital system. Another specialty is the Fine Art collection – limited run models in N and H0 Gauge done in very finely detailed brass. Trix is also taking on the distribution of Märklin models for the two-rail DC system, such as locomotives with metal construction, the model of the current ICE 3 prototype, or special car models. Märklin in return is offering models developed by Trix for the 3-rail AC system.

The list nearby shows you the articles currently offered as a result of this cooperation.

These models are being offered by Trix for two-rail DC systems:

Märklin Item No.	Description	Trix Item No.
28573	Württemberg train from around 1859	21224
28703	SJ 1930s historic passenger train	21264
33021	DR class 53 freight locomotive with condensation tender	22530
33184	DRG class 18.4 express locomotive with tender	22513
33190	DRG class 17.0 express locomotive with tender	22504
33231	SNCB/NMBS class 122 (22) electric locomotive	22596
3356	SBB class Be 6/8[II] "Crocodile" freight locomotive	22584
33593	SBB class Ae 8/14 double electric locomotive	22587
33641	NS Cargo class 6400 diesel electric locomotive	22545
33642	SBB class Am 842 000 diesel hydraulic locomotive	22588
33661	DRG class E 52 electric locomotive	22462
33712	DB, Inc. class 402 ICE 2 powered railcar train	22554
34060	K.Bay.Sts.B. class EP 3/6 electric locomotive	22557
34090	DB, Inc. "CargoSprinter" freight powered railcar train	22543
34210	DB class V 140 diesel hydraulic locomotive	22448
34350	DB, Inc. class 152 electric freight locomotive	22558
34352	DB, Inc. class 152 electric freight locomotive	22716
34374	DB, Inc. class 101 electric locomotive	22549
34475	DB class E 69 electric locomotive	22551
34550	DB class 55 freight locomotive with tender	22532
34780	DB, Inc. class 406 ICE 3 powered railcar train	22560
34884	DB class 44 freight locomotive with tender	22533

Märklin Item No.	Description	Trix Item No.
37203	DRG "Diesel Forefathers" locomotive set	
	Class V 120 diesel locomotive	22511
	Class V 140 diesel locomotive	22449
	Class V 188 diesel locomotive	–
42168	SBB Mark IV "Push/Pull Train" car set	23390
4228	DRG "Rheingold" car set	21214
43201	DRG 1st and 2nd class express train passenger car	23349
43221	DRG 3rd class express train passenger car	23348
43241	DRG "Mitropa 1215" dining car	23350
43251	DRG "Mitropa 22079" sleeping car	23351
43300	DB, Inc. 2nd class InterRegio cab control car	23374
43702	DB, Inc. ICE 2 1st class open seating coach	23364
43707	DB, Inc. ICE 3 1st class intermediate coach	23380
43712	DB, Inc. ICE 2 2nd class open seating coach	23365
43722	DB, Inc. ICE 2 open seating coach with special compartment	23366
43727	DB, Inc. ICE 3 2nd class intermediate coach	23381
43732	DB, Inc. ICE 2 "Bord Restaurant" dining car	23367
46034	DB "Coal Transport" car set	23932
46280	K.Bay.Sts.B. flat car	23914
46573	Württemberg car set from around 1859	21225
46600	K.Bay.Sts.B. "Gas Cars" car set	23915
47713	DB stake car loaded with gas pipe	23961
48450	DB, Inc. bulk freight dump car	23940
48451	DB, Inc. bulk freight dump car set	23962

The class 101 locomotives starting with the sequential number 004 are already being painted in the German Railroad, Inc.'s new paint scheme. The locomotive body is painted "traffic red" and the roof fairing and frame skirting are done in basalt gray. A another visible feature are the changed roof vents.

34374 Electric Locomotive.
German Railroad, Inc. class 101. With DELTA electronic circuit. 2 axles powered. 4 traction tires. Movable reproduction of the mechanical gear for steering the trucks. Engineer's cabs with interior details. Separately applied handrails. High speed pantographs. Separately applied roof fairing. Length over buffers 21.9 cm (8-5/8").



37374 Same as 34373, but with digital decoder and controlled, high-efficiency propulsion. Built-in long distance headlights. Standard headlights digitally controlled. Long distance headlights front and rear can be turned on with the 6021 Control Unit. The standard headlights will work in conventional operation.

This model is being offered for two-rail DC systems by TRIX (T22549).

34350 Electric Freight Locomotive.
German Railroad, Inc., DB Cargo Business Area, class 152. With DELTA electronic circuit. 2 axles powered. 4 traction tires. Engineer's cabs with interior details. Reproduction of outboard disc brake shoes. Length over buffers 22.5 cm (8-7/8").

37350 Same as 34350, but with digital decoder and controlled high-efficiency propulsion. Built-in long distance headlights and air horn. **Headlights digitally controlled. Long distance headlights front and rear and air horn can be turned on digitally with the 6021 Control Unit.** The standard headlights will work in conventional operation.



Reproduction of the outboard mounted disc brakes.

This model is being offered by Trix (T22558) for 2-rail DC systems.



White triple headlights.



White triple headlights and long distance headlights.



Art with Pulling Power and Appeal

The idea came from Switzerland: In 1994 the SBB made a part of their class 460 electric locomotives available for advertising purposes. Märklin didn't need to hear that twice and created the first work of art on rails with the so-called "Fireman's Locomotive". This Märklin locomotive in a scale of 1:1 was an immense success, and there soon followed other Märklin art themes with the Alpine Procession, metal construction sets, and a birthday locomotive for the 150th anniversary of the railroad in Switzerland. The last two were SOB class Re 4/4^{IV} locomotives.

Art Locomotives on the DB

The appeal of such art meets with good will at the German Railroad, Inc., too. Hence it was once again Märklin locomotives that were the first art locomotive originals to run on German track. The first project was in 1996, a benefit for the 50th anniversary of Unicef, the United Nations charitable organization for children. The 12X experimental locomotive in the Unicef look was unveiled in the presence of prominent Unicef officials. The associated sale of the models of this locomotive as well as the auction of autographed models brought in 401,000 German marks that Märklin was able to turn over to Unicef as the largest single donation in 1996.

In November of 1996 the Christmas locomotive appeared, class 120, treated romantically and ironically by the British artist, Nicholas Price. In May of 1997 a class 120 with the railroad vision of the photographic artist, Teun Hocks, was unveiled at the Model Railroad Meet in Göppingen. In 1998 followed the Starlight Locomotive that Märklin dedicated to the 10th anniversary of the stage production of the musical Starlight Express in Bochum, Germany. The newest Märklin art locomotive was unveiled at the 1999 Model Railroad Meet in Göppingen.

It celebrates the 100th anniversaries of two unique museums, namely the German Transportation Museum in Nürnberg (DB Museum) and the Märklin Museum in Göppingen.

The Märklin art locomotives are available as models both in H0 and Z (from Trix in 2-rail DC for H0 and Minitrix). Special know-how is required to transfer the art of the originals on to the smaller scale with sharp contours and colors true to the original. Over 50 imprinting steps are required on some models, and the soft imprinting pads must fit the shape of the locomotive body, but they must also work perfectly. This requires a fine touch and a great deal of experience.



The class 152 electric locomotive was developed as a joint project of Siemens and Krauss-Maffei. These units are being used to cover the increasing demand for powerful freight locomotives. The maximum speed 140 km/h (88 mph) is quite sufficient for these units. The continuous power rating of 6.4 megawatts (approx. 8,582 horsepower) with a weight of 86 metric tons and single-axle steering results in a massive tractive effort of 67,440 pounds.

34352 Electric Freight Locomotive.
German Railroad, Inc. (DB AG), DB Cargo Business Area, class 152. With DELTA electronic circuit. 2 axles powered. 2 traction tires. Engineer's cabs with interior details. Separately applied handrails. Reproduction of the outboard mounted disc brake shoes. Length over buffers 22.5 cm (8-7/8").

37352 Same as 34352, but with digital decoder and controlled, high-efficiency propulsion. Built-in long distance headlights and air horn. **Headlights digitally controlled. Long distance headlights front and rear, and air horn can be turned on digitally with the 6021 Control Unit.** The standard headlights will work in conventional operation.

Special one-time series in 1999.
Already delivered to the dealers.

This model is being offered for two-rail DC systems by TRIX (T22716).

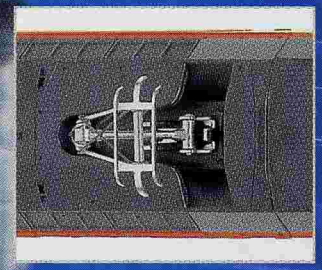



FIEGE
wocoshi
DB Cargo
DB Cargo
DB Cargo
Wir fahren für Volksw

The diecast body is polished and then cleaned by hand in a very extensive, multi-step process. The ribs on the sides of the locomotive, the depressions for the handrails, and the openings for the windows in particular require special handling. Using a galvanizing process, first a layer of copper, then a layer of nickel, and finally the actual chrome layer are applied. The colors for painting and imprinting are produced following a special formula and are burned into place in 4 steps. These valuable models must be handled with gloves during the entire production process in order to protect them.

34636 Electric Locomotive.
Swiss Federal Railways (SBB) class 460. Chrome plated body. With DELTA electronic circuit. 2 axles powered. 4 traction tires. Engineer's cabs with interior details. Prototypical horns. Length over buffers 21.3 cm (8-3/8").

The 34636 locomotive is being produced in a one-time series only in 1999.



446500 Narrow wiper
for SBB pantograph.
Suitable for display models.

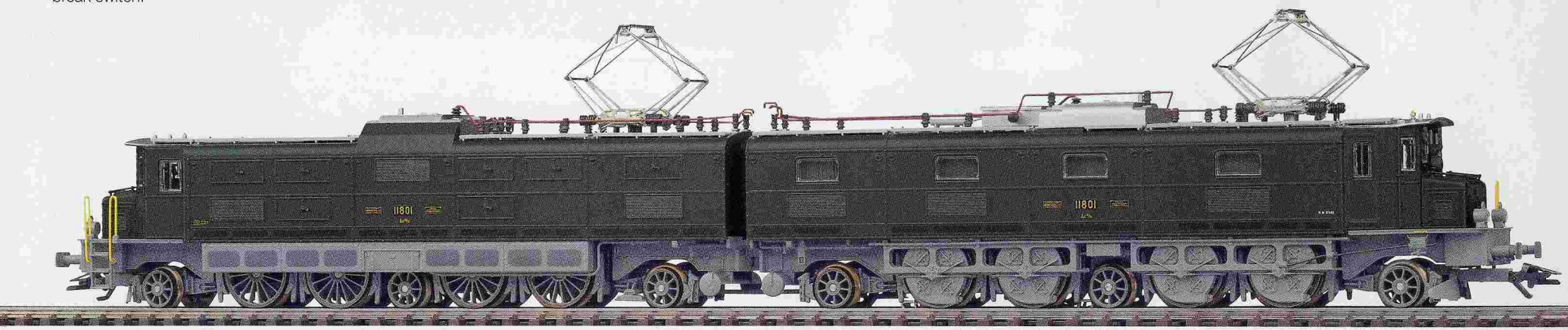
Traveling over the Gotthard.

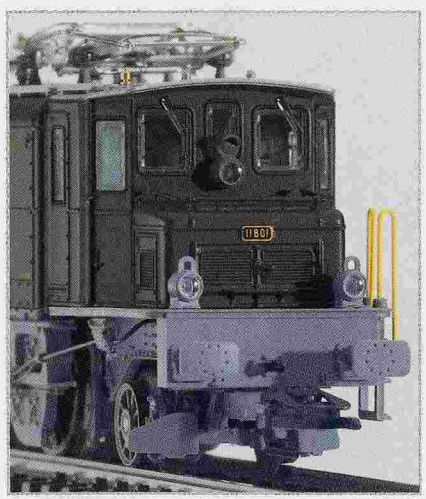
The special requirements of the steep grades on the Gotthard route led to the construction of the Ae 8/14 double electric locomotive in the 30s. With a service weight of 240 metric tons and 8 traction motors, this monumental machine had a starting tractive effort of 50 metric tons. The hourly output of 7,500 hp was transmitted by the proven Buchli drive system from the Ae 4/7. The Märklin model 33593/37593 prototypically reproduces the 11801 as it looked from 1961 to 1971. These changes are particularly visible in the two pantographs, the headlights, and the pneumatically operated quick break switch.

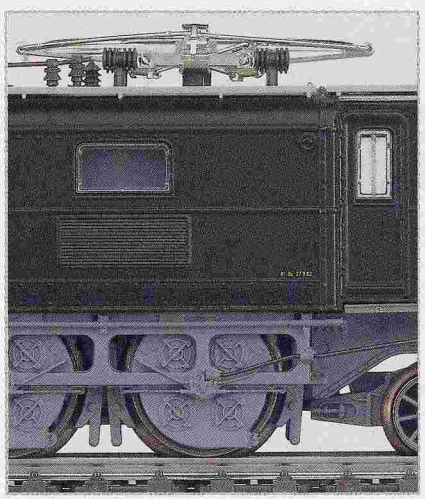
33593 Ae 8/14 Double Electric Locomotive.
Swiss Federal Railways (SBB) class Ae 8/14. Version 11801 with 2 pantographs. With DELTA electronic circuit. 2 motors. 4 axles powered. 8 traction tires. Permanent drawbar between the locomotive halves. Swiss design pneumatically operated quick break switch. Engineer's cabs with interior details. Length over buffers 39.1 cm (15-3/8").

37593 Same as 33593, but with digital decoder and controlled, high-efficiency propulsion. Headlights digitally controlled.

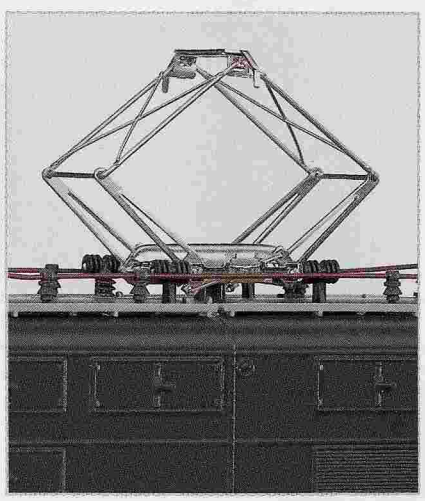
This model is being offered by TRIX (T22587) for two-rail DC systems.











The appropriate car set (Märklin model 42383) for the Ae 8/14 double electric locomotive can be found on page 172.

- ***Metal body and frame***
- ***2 motors***
- ***Changes compared to the earlier model (current museum version, Era V):***
  - ***version as it was from 1961 to 1971***
  - ***prototypically correct with only 2 pantographs with diagonal braces***
  - ***side mounted support insulators***
  - ***new, pneumatically operated quick break switch with air tank***
  - ***differen roof walks***
  - ***version without sand boxes***
  - ***new headlights***
- ***Digital version:***
  - ***controlled, high-efficiency propulsion***
  - ***headlights can be turned on/off***

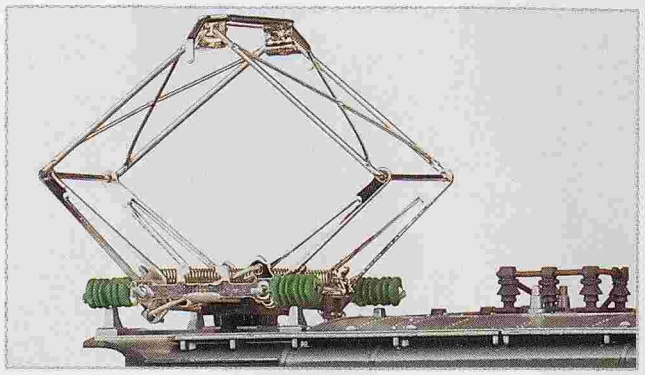


Electric Locomotives

3356 "Crocodile" Freight Locomotive.
Swiss Federal Railways (SBB) class Be 6/8III. Road number 13305. With DELTA electronic circuit. 3 axles powered. 4 traction tires. Driving wheels divided into two coupled groups enabling the locomotive to negotiate sharp curves. Length over buffers 23.0 cm (9-1/8″).

3756 Same as 3356, but with digital decoder and controlled high-efficiency propulsion. Headlights digitally controlled.

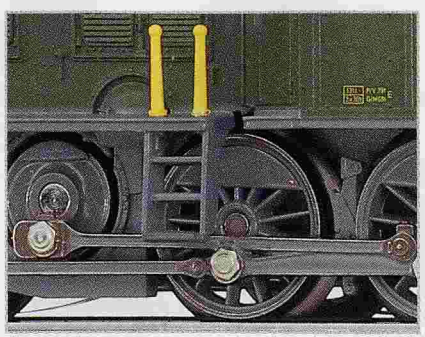
This model is being offered by Trix (T22584) for two-rail DC systems.

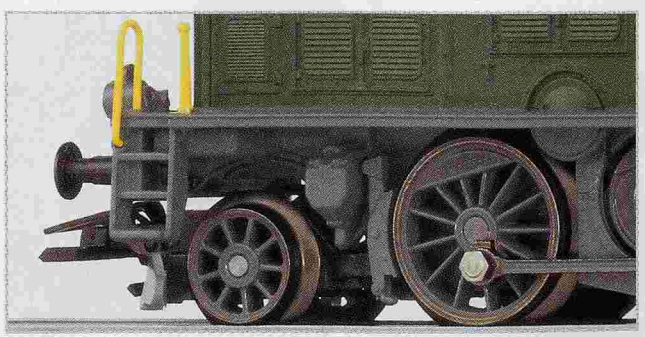












33231 Electric Locomotive.
Belgian State Railways (SNCB/NMBS) class 122 (22). Original version. With DELTA electronic circuit. 2 axles powered. 4 traction tires. Engineer's cabs with interior details. Length over buffers 20.7 cm (8-1/8").

The 33231 and 37231 locomotives are being produced in a one-time series only in 1999.

This model is being offered for two-rail DC systems by Trix (T22596).

37231 Same as 33231, but with digital decoder and controlled, high-efficiency propulsion. Headlights digitally controlled and will work in conventional operation. **Horn sound effects digitally controlled with 6021 Control Unit.**

The class 22 general purpose locomotives were placed into service on the Belgian State Railways (SNCB/NMBS) starting in 1953; at that time they were still classified as 122. These 50 locomotives now are among the oldest locomotives in Belgium, and they have been reliable and indestructible. The sturdy basic design was continued until 1961 on the successor classes 23 (123) and 25 (125), Changes involved design details such as the side vents or the brake equipment – and thereby the total weight between 84 and 93 metric tons. The output of 1,740 kilowatts (approx. 2,333 hp) and the maximum permissible speed of 130 km/h (81 mph) are the same on all of the locomotives in the "family". These locomotives have been updated several times, in the headlights and the heating equipment, for example. Many of the locomotives have been equipped for multi-unit operation, and 8 units (class 25.2) were equipped for both the Belgian current system (3,000 volts DC) and the Dutch system (1,500 volts DC). Of primary interest is the fact that these locomotives have been painted and repainted in numerous different, simple as well as decorative paint schemes. All 155 units of these classes are still on the SNCB roster.



Electric Locomotives



34587 Electric Locomotive.
Austrian Federal Railways (ÖBB) class 1141. Updated converted version with 3rd headlight. With DELTA electronic circuit. 2 axles powered. 4 traction tires. Length over buffers 17.5 cm (6-7/8″).

The 34587 electric locomotive is being produced in a one-time series only in 1999.



The 33411 electric locomotive is being produced in a one-time series only in 1999.

33411 Electric Locomotive.
Swedish State Railways (SJ) class Rc3. Current version. With DELTA electronic circuit. 2 axles powered. 4 traction tires. Separately applied pilots with integrated standard coupler pocket. Separately applied supplemental vents on the roof. Single-arm pantographs. Length over buffers 17.5 cm (6-7/8″).

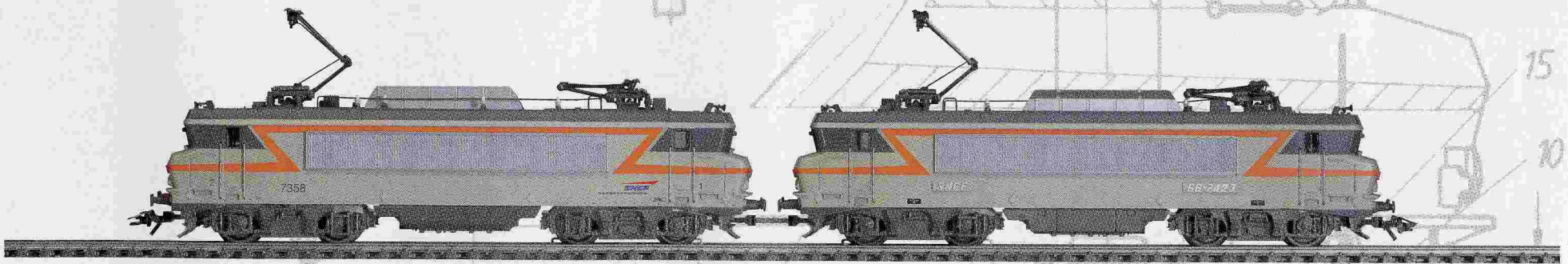






The 37261 electric locomotive is being produced in a one-time series only in 1999.

37261 Electric Locomotive.
Dutch State Railways (NS) class 1700. With digital decoder and controlled, high-efficiency propulsion. 2 axles powered. 4 traction tires. Headlights digitally controlled. **Sound effects generator with horn sounds digitally controlled with 6021 Control Unit.** Length over buffers 20.4 cm (8-1/16").



33252 Double Unit Electric Locomotives.
French State Railways (SNCF) class BB 7 200. 1 powered locomotive with DELTA electronic circuit. 1 non-powered locomotive permanently coupled to the first unit. 2 axles powered. 4 traction tires. Electrical connections between the locomotives for headlights that change over with the direction of travel. Length over buffers 41.3 cm (16-1/4").

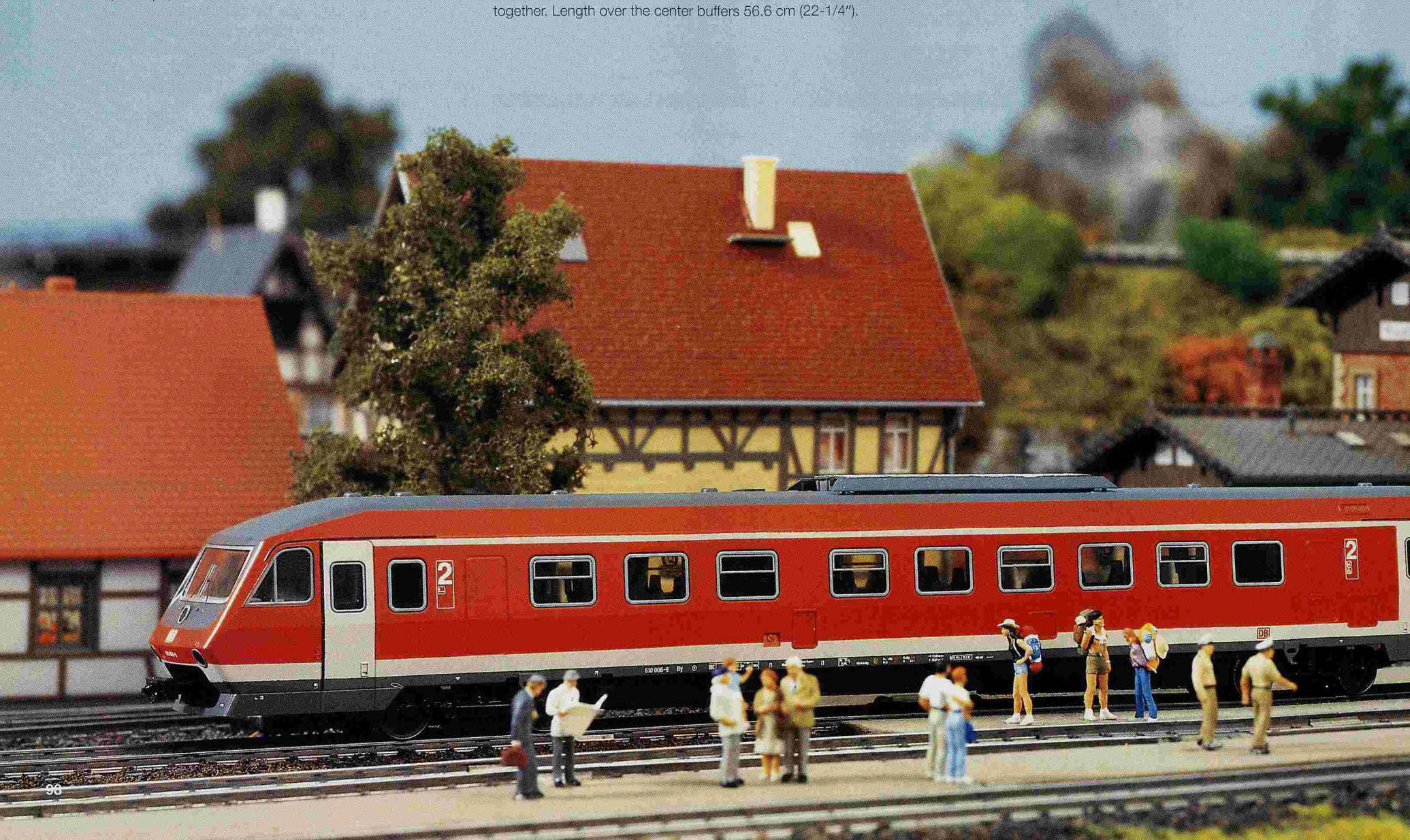
The 33252 double unit electric locomotives are being produced in a one-time series only in 1999.

Powered Railcars

The German Federal Railroad placed the first ten powered railcar trains of the new class 610 into service in 1991 in an effort to shorten travel times on routes that had not yet been upgraded. On curves the car body is tilted 8 degrees by the track curve dependent control mechanism, thus allowing 30% faster speeds than with conventional powered railcars and locomotives. The maximum speed allowed is 160 km/h (100 mph).

34761 Diesel Powered Railcar Train.
German Railroad, Inc. class 610. Automatic car body tilt mechanism that reacts to track curves. With DELTA electronic circuit. 2 axles powered. 2 traction tires. Special close coupled connections between the cars. Detailed reproductions of Scharfenberg couplers at the ends of the train. By exchanging these for the standard coupler pockets included with the train, several trains can be coupled together. Length over the center buffers 56.6 cm (22-1/4″).

37761 Same as 34761, but with digital decoder and controlled high-efficiency propulsion. **Headlights digitally controlled. The interior lights can be turned on digitally with the 6021 Control Unit.** The headlights and interior lights will work in conventional operation.



This model is a cooperative project with the Fleischmann Company, Nürnberg, Germany.

Automatic track curve dependent car body tilt.







Powered Railcars

Combining the advantages of the railroad with the flexibility of trucks was the basic idea of this powered freight railcar train from the Windhoff Company in Rheine, Germany. This 91 meter (298 feet 6 inches) train has a powered end unit with an engineer's cab at each end and three non-powered intermediate cars in between. These units can be loaded with flatbed trucks with tarps as well as with different types of containers. With this the CargoSprinter closes a gap in the rail service being offered and creates greater flexibility and customer proximity. At the same time, there is no longer a need for the time-consuming switching maneuvers for locomotive hauled trains. Each of the end cars is powered by two six-cylinder diesel motors mounted below the floor that are rated for a maximum speed of 120 km/h (75 mph).

34090 Powered Freight Railcar Train.
German Railroad, Inc., DB Cargo Business Area "Cargo-Sprinter" class Sggoorrss 700. 5 part unit. 1 powered end car. 3 intermediate cars. 1 non-powered end car. With DELTA electronic circuit. 2 axles powered. 2 traction tires. Engineer's cabs with interior details on the end cars. Direction-dependent current pickup through the end car at the front of the train. Continuous electrical connections through the whole powered railcar train. Loaded with different versions of containers and flatbed trailers with tarps. Flatbed trailers with folding side supports. Train length 104.3 cm (41-1/16").

37090 Same as 34090, but with digital decoder and controlled high-efficiency propulsion.

All cars in special version. Not available separately.

This model is being offered by Trix (T22543) for 2-rail DC systems.





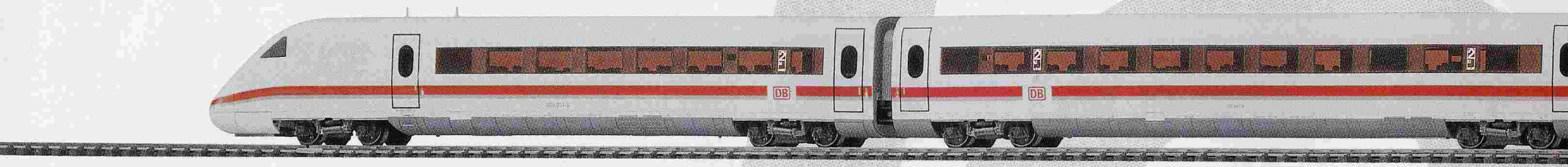

DB Cargo
Mehl Grieß
stern
Schönbuch Bräu
Merziger
schamel
MEERRETTICH
FAMILIENTRADITION SEIT 1846
SCHMECK' DAS GEHEIMNIS DES ORIGINALS
FIEGE
3025
wocoshi
Cargo

ICE 2 Powered Railcar Train

33712 ICE 2 Powered Railcar Train.
German Railroad, Inc. class 402 high speed Intercity Express Train. With DELTA electronic circuit. 1 powered end car with motor. 1 type 805.3 open seating car, 1st class. 1 type 806.6 open seating car, 2nd class. 1 type 808 cab control car. Engineer's cabs in powered end car and cab control car with interior detailing. 2 axles powered. 4 traction tires. Direction-dependent current pickup through the end car at the front of the train. Removable nose cover plates. Special close couplings with guide mechanism. Interior lighting powered by the continuous electrical connections through the entire train. Train length 102.7 cm (40-7/16").

37712 Same as 33712, but with digital decoder and controlled high-efficiency propulsion. Headlights and interior lighting digitally controlled.

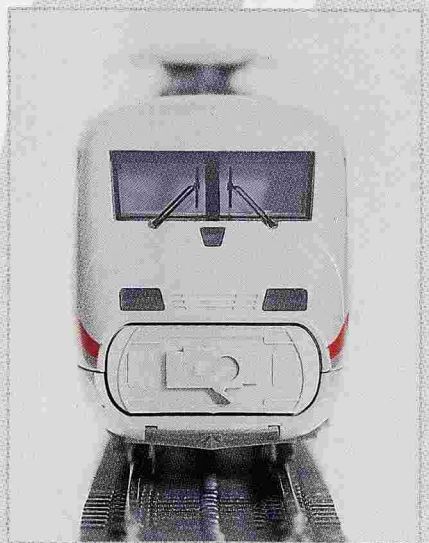
This model is being offered for two-rail DC systems by TRIX (T22554).



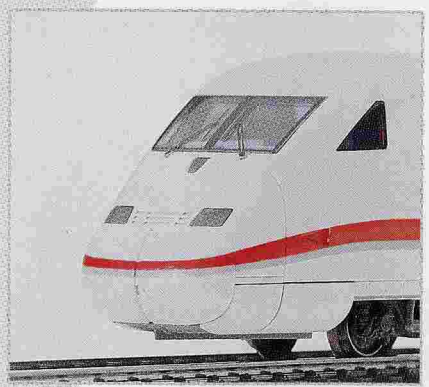
- ✕ Interior lighting already built in.
- ✕ Removable nose cover.
- ✕ Reproduction of the Scharfenberg coupling.
- ✕ Detailed front spoiler.
- ✕ Engineer's cabs with interior details.



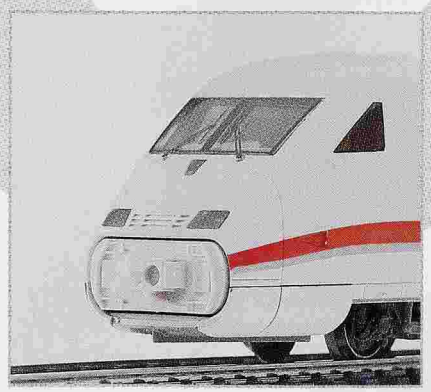
Front view of the ICE 2 powered end unit with closed nose plates.



Front view of the ICE 2 powered end unit with open nose plates.



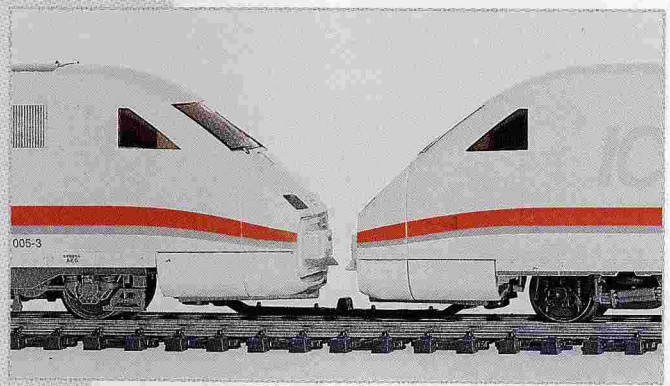
Front view of the ICE 2 cab control car with closed nose plates.



Front view of the ICE 2 cab control car with open nose plates.

The current pickup for the motor on the ICE 2 high-speed train is direction-dependent and takes place at the end car (powered end car or control car) that is at the front of the train. The interior lighting is supplied with power from the continuous electrical connections in the train from the end car (powered end car or control car) that is at the rear of the train. When two half trains are coupled together as in the prototype, this pickup shoe changeover feature is extended through the whole train.





ICE 2 powered end unit and ICE 2 cab control car coupled together as a half train.

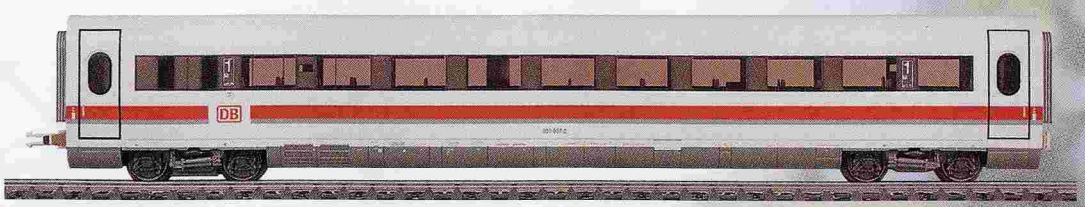
40712 ICE 2 Powered Railcar Train.
ICE 2 high-speed train. German Railroad, Inc. class 402. Non-powered half train unit as a prototypical addition to the 33712/37712 ICE 2 powered railcar train. Different road numbers. One non-powered end car. 1 type 808 control car. Engineer's cabs in model powered end car and control car with interior detailing. Removable nose cover plates. Special close couplings with guide mechanism. Train length 49.7 cm (19-9/16")

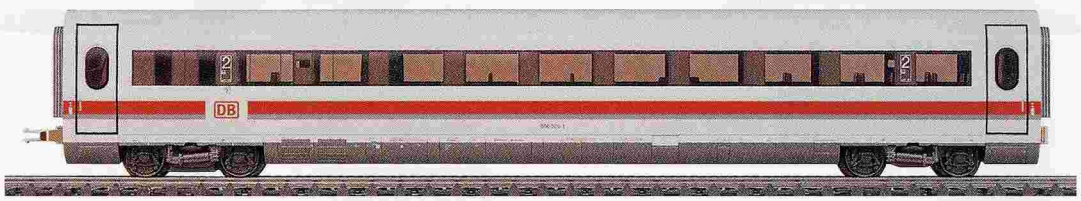


Powered Railcar Trains

43702 ICE 2 Open Seating Car.
German Railroad, Inc. type Apmz 805.0. 1st class. Intermediate car to supplement the 33712/37712 and 40712 ICE 2 powered railcar train. Special close couplings with guide mechanism. Interior lighting powered by the continuous electrical connections through the entire train. Length 26.4 cm (10-3/8″).

This model is being offered by Trix (T23364) for two-rail DC systems.



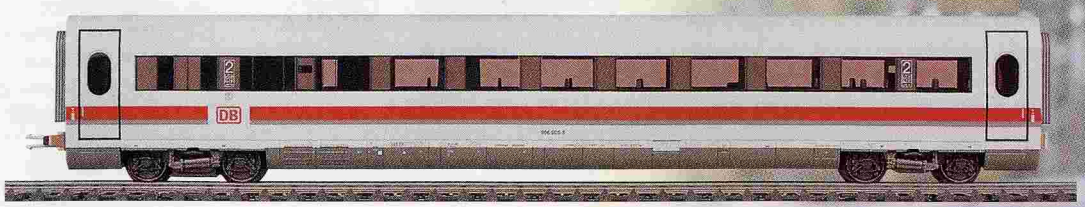


43712 ICE 2 Open Seating Car.
German Railroad, Inc. type Bpmz 806.3. 2nd class. Intermediate car to supplement the 33712/37712 and 40712 ICE 2 powered railcar train. Special close couplings with guide mechanism. Interior lighting powered by the continuous electrical connections through the entire train. Length 26.4 cm (10-3/8″).

This model is being offered by Trix (T23365) for two-rail DC systems.

43722 ICE 2 Open Seating Car with Special Compartment.
German Railroad, Inc. type Bpmz 806.0. 2nd class. Intermediate car to supplement the 33712/37712 and 40712 ICE 2 powered railcar train. Special close couplings with guide mechanism. Interior lighting powered by the continuous electrical connections through the entire train. Length 26.4 cm (10-3/8″).

This model is being offered by Trix (T23366) for two-rail DC systems.





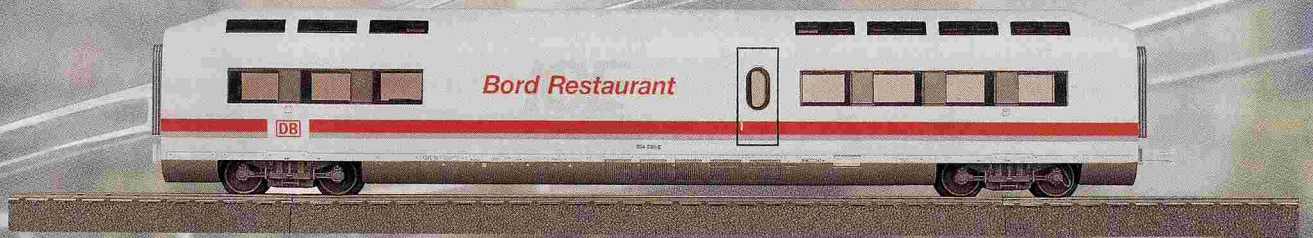
43732 ICE 2 "Bord Restaurant" Dining Car.
German Railroad, Inc. type Wsmz 807.0. Intermediate car to supplement the 33712/37712 and 40712 ICE 2 railcar train. Special close couplings with guide mechanism. Interior lighting powered by the continuous electrical connections through the entire train. Length 26.4 cm (10-3/8″).

This model is being offered by Trix (T23367) for two-rail DC systems.



V

43741 Open Seating Coach for ICE Starter Sets.
Intermediate car for the ICE powered railcar train in the HOBBY or DELTA version (from the 29761, 29765 and 29865 starter sets). Not suitable for the 33701, 33712, 37701, and 40712 ICE trains. Special close couplers with guide mechanisms. Length 26.4 cm (10-3/8″).

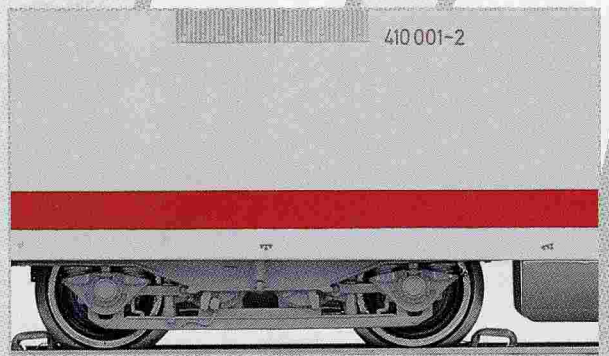


V

43742 "Bord Restaurant" Dining Car for ICE Starter Sets.
Intermediate car for the ICE powered railcar train in the HOBBY or DELTA version (from the 29761, 29765 and 29865 starter sets). Not suitable for the 33701, 33712, 37701, and 40712 ICE trains. Special close couplings with guide mechanism. Length 26.4 cm (10-3/8″).

On the trail of the ICE

With the introduction of high-speed service the ICE became the symbol of the "new" railroad that was focusing on the market and its customers. The story of the ICE is a current example of how technical progress and successful marketing alter a train concept – and of how Märklin remains on the trail of the prototype with current models.
The ICExperimental with two powered end cars and three intermediate cars as test or measurement cars remains a one of a kind. It served as the "guinea pig" for development and testing. On May 1, 1988 it set a speed record of 406.9 km/h (254.31 mph) on the newly built route from Hannover to Würzburg that held for 18 months.



Class 410 InterCityExperimental



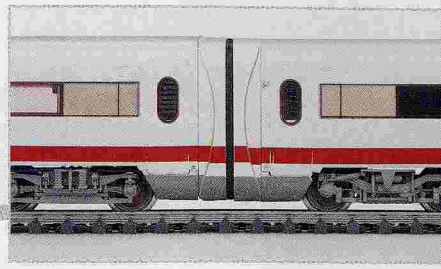
Class 401 ICE 1 InterCityExpress

With the class 401 the DB introduced regularly scheduled high-speed service in 1991. Compared to the prototype the ICE 1 had a number of striking changes, such as the front nosepiece. The wind deflector strips on the car diaphragms were also removed, because they had not proven themselves in operation. A total of 41 sets were delivered each set consisting of two powered end cars, 11 coaches and a dining car with a raised roof. The ICE 1 has carried the German Railroad, Inc.'s new logo since January 1, 1994.

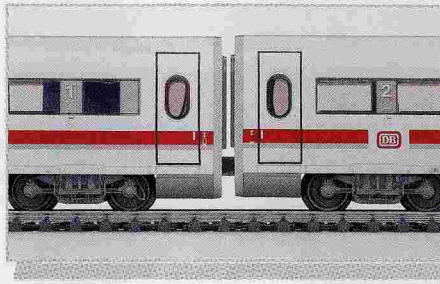
The class 402 ICE 2 entered service starting in June of 1997. It is powered by only one powered end car; a cab control car is at the other end of the train. With six intermediate cars, the ICE 2 is shorter and lighter then its predecessor, which means that two trains can be run together by means of automatic couplers. They start their trip in Berlin, for example, as a single complete train and can be separated in Hannover in order to continue their run to different destinations. This train concept can be adapted with greater flexibility to the passenger loads. A total of 44 half trains have been ordered of the 280 km/h (175 mph) fast ICE 2.



Class 402 ICE 2 InterCityExpress



The full width diaphragms on the InterCityExperimental give a seamless look to the train, even on curves. This means the train encounters very little air resistance at speed.



An air pressure wave is created when two trains meet or when entering a tunnel, and the cars and end units in the train have to be pressurized against this. This pressurization material has been set inwards here.



The wind deflectors were removed by the German Railroad, Inc.



The car diaphragms on the ICE 2 are the same as those on its predecessor.

The successor generation ICE 3, class 403/406, is a departure from the powered end cars; instead, the entire propulsion system is distributed under the car floors of this eight-unit train. Both trucks for every other car are powered. A cab control car is at both ends of the train. The advantage of the powered rail-car train concept is the improved weight distribution with a more favorable power to weight ratio: With the same power consumption the ICE 3 accelerates faster (up to 330 km/h (206.25 mph)) and masters steeper grades with a constant speed. The ICE 3 will be placed into operation in 1999 and will be used in the year 2000 at the Expo in Hannover.



Front view of the InterCityExperimental



Front view of the ICE 1

The DB, Inc.'s Research and Technology Center (FTZ) is operating the ICE-S as a test vehicle. It consists of two powered end cars from the ICE 2 and three intermediate cars with the new technology from the ICE 3. Intermediate cars 1 and 3 are power converter cars with powered trucks, and intermediate car 2 contains transformers and new eddy current brakes. Different roof fairings for the pantographs have been installed on an experimental basis in order to reduce the noise at high speeds. The side band changing from red to yellow symbolizes sine waves towards the middle.



Automatic couplers enable quick uncoupling and coupling of the ICE 2 train halves.

Photo: Siemens SFT



Front view of the ICE 2

Photo: Siemens SFT



Front view of the ICE 3

Photo: SPEEDWAVE



The dining car has this characteristic raised area to accommodate all of the necessary equipment.



A different layout for the galley makes the dining car on the ICE 2 look very similar to a coach from the outside.

ICE 3 Powered Railcar Train

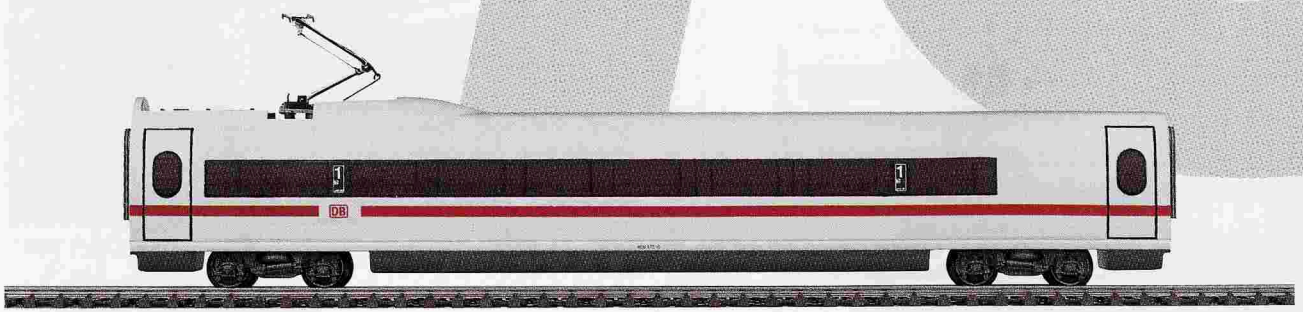
At the end of October 1998 the third ICE generation, the ICE 3, was presented to the public for the first time at the Eurailspeed in Berlin. This new ICE is being presented with a whole series of technological refinements and is contributing to the further shortening of travel times. With the ICE 3 the variety of locomotives and cars on the German Railroad, Inc. system is being expanded by one with a very striking appearance. The ICE 3's appearance more than anything else attracts attention with its streamlined front part that sets new standards with its aerodynamic shape. The most striking technical change is of course the propulsion concept. Whereas the propulsion for the ICE 1 and ICE 2 was located in the two end powered cars, in the new generation ICE 3 the entire propulsion system is now distributed under the car bodies. In general, the ICE 3 will be operated as an eight car train. Some of the trains are equipped for the German Railroad, Inc.'s power system and are designated as the class 403. The rest are equipped as four-system trains for cross border use in Europe. These powered railcar trains are designated



34780 ICE 3 Powered Railcar Train.
ICE 3 high-speed train. German Railroad, Inc. class 406. With DELTA electronic circuit. 1 type 406.0 end car, 1st class. 1 type 406.3 dining car intermediate car with motor and drive gear. Both trucks powered. 4 traction tires. 1 type 406.5 end car, 2nd class. Engineer's cabs in the end cars with interior details. Direction-dependent power pickup in the end car at the front of the train. Special close couplers with guide mechanism. Interior lighting is supplied with power by means of a continuous electrical connection through the entire train. Train length 86.3 cm (34″).

37780 Same as 34780, but with digital decoder and controlled, high-efficiency propulsion. Built-in long distance headlights. Standard headlights digitally controlled. **Interior lighting, long distance headlights front and rear digitally controlled with the 6021 Control Unit.** The standard headlights and the interior lighting will work in conventional operation.

This model is being offered for two-rail DC systems by TRIX (T22560).



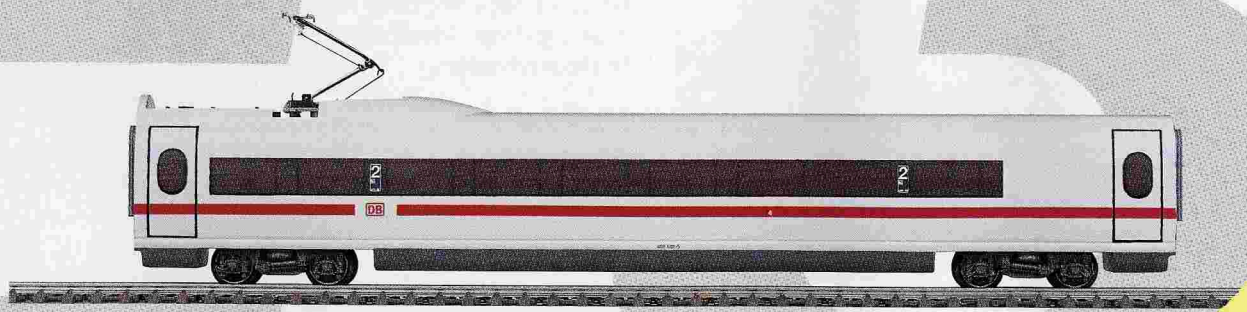
43707 ICE 3 Intermediate Car.
German Railroad, Inc. type 406.1 transformer car. 1st class. Intermediate car as supplement to the 34780/37780 ICE trains. Special close couplers with guide mechanism. Interior lighting powered by means of continuous electrical connection through the entire train. Length 27.9 cm (11″).

This model is being offered for two-rail DC systems by TRIX (T23380).

as the class 406 and are intended chiefly for international routings. The interiors of the trains will also attract attention with their functional, appealing ambiance. Particularly attractive is the passenger area directly behind the engineer that allows a direct view into the cockpit and down the tracks. In 1999 these trains will be placed into service and in the year 2000 the first trains are to be used for the Expo in Hannover.

The special features of the end cars in the Märklin models can be reproduced true to the prototype by motorizing the dining car.





N V

43727 ICE 3 Intermediate Car.
German Railroad, Inc. type 406.6 transformer car. 2nd class. Intermediate car as supplement to the 34780/37780 ICE trains. Special close couplers with guide mechanism. Interior lighting powered by means of continuous electrical connection through the entire train. Length 27.9 cm (11").

This model is being offered for two-rail DC systems by TRIX (T23381).

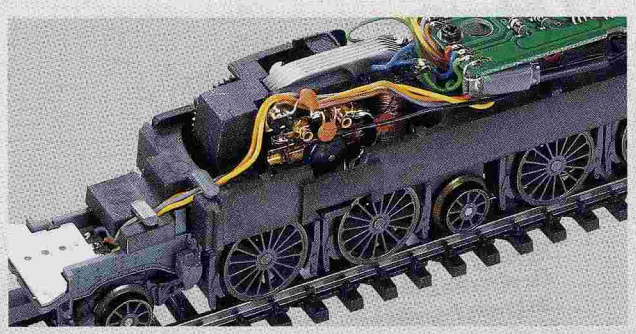
- ***Completely new tooling.***
- ***Direction-dependent power pickup in the end car at the front of the train (pickup shoe changeover).***
- ***Comes from the factory with Interior lighting.***
- ***Prototypical reproduction of the engineer's cabs, open view into the cockpit.***
- ***All cars have a scale 1:87 length.***
- ***Motor with flywheel.***
- ***Silky smooth running.***
- ***Digital version with controlled, high-efficiency propulsion and multi-function decoder:***
  - ***function: headlight changeover at the ends of the train and interior lighting for the entire train***
  - ***f2: direction-dependent, long distance headlights***
  - ***f4: direct control***
- ***All intermediate cars are prototypically correct with pantographs, Bord Restaurant dining car can be switched to catenary operation.***

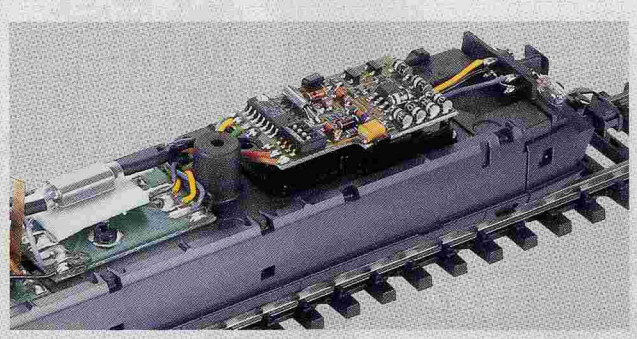
Continuous Power Management.

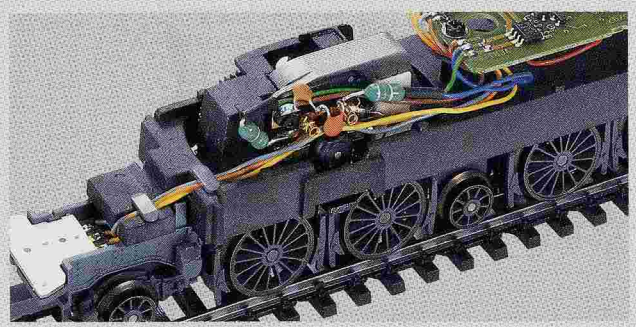
The propulsion of a locomotive consists of the interplay of many components such as electronic circuits, the motor, gear drive, the wheels, traction tires, and current conduction. The propulsion achieves good performance levels and a high degree of durability only when everything is carefully coordinated with each other.

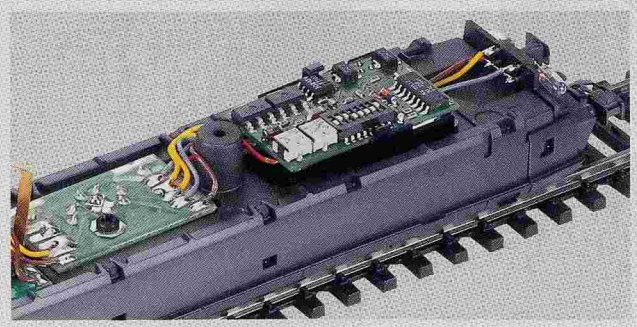


Durability and reliability
Countless models in use for many decades prove how robust and reliable Märklin motors are. The sturdy construction with few moving parts and a powerful rpm level are the best requirement for this. The installation of the motor transverse to the direction of travel for the locomotive allows the use of a gear reduction system with spur gears. Its advantage compared to worm gears is power transmission almost free of any power loss without the mechanism locking up on its own. When there is an interruption in current conduction due to dirty track, the locomotive does not immediately begin to stutter down the track, and on an area of track without power the locomotive does not come to an abrupt halt; it has a realistic coasting effect. Metal construction increases the durability of the mechanism.









Electronics are taking control
As with modern automobiles and locomotives, electronics are increasingly taking over the management of the propulsion system in model railroad operations. This has made the earlier electromechanical reverse unit passé thanks to the electronic reverse unit. The DELTA electronic circuit built into 3300 and 3400 series Märklin H0 locomotives at the factory understands both analog and digital signals. The locomotives will run in conventional operation just as well as on DELTA and digital layouts.

The high-efficiency propulsion system's superior operating characteristics
Locomotives with high-efficiency propulsion and a digital decoder can also run on conventional layouts. At the same time they offer the model railroader additional advantages:

The motor's satin smooth running allows slow switching, the maximum speed is adjustable on the locomotive as is the acceleration behavior. On ascending and descending grades the speed remains constant within a certain range. And on newer models with special function decoders the headlights remain on during conventional operation.

Expanded monitoring and control functions with Märklin Digital

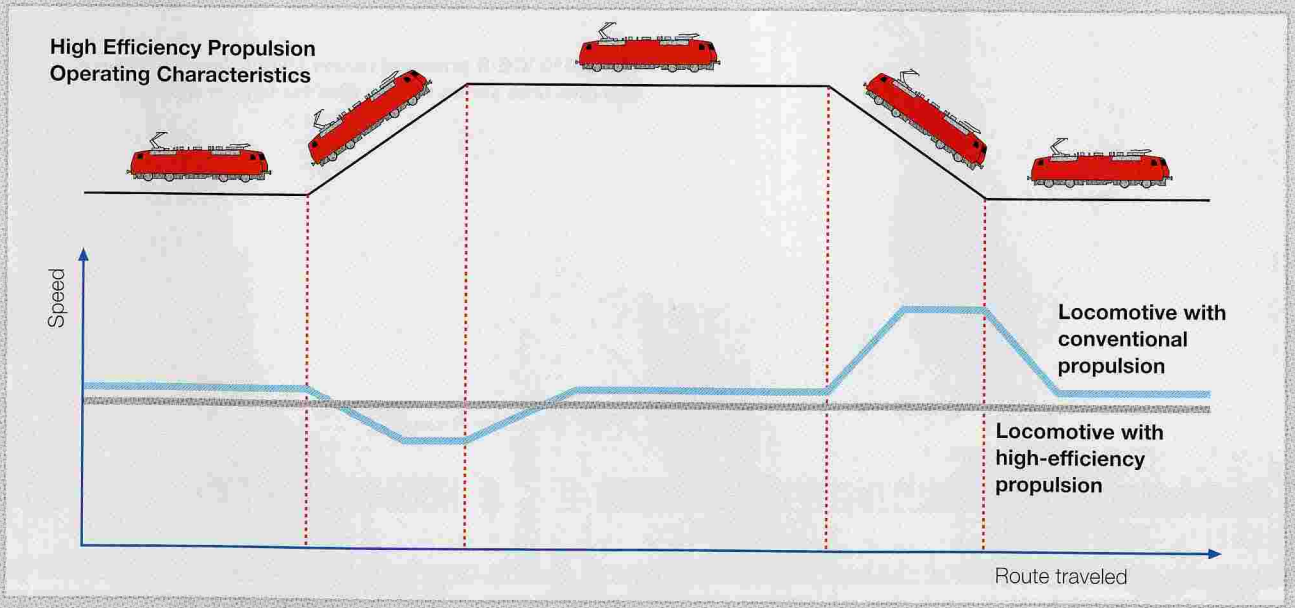
Of course, the high-efficiency propulsion offers still more on digital layouts. In addition to the maximum speed, the locomotive's acceleration and braking behavior can be set which will cause the load compensation feature on ascending and descending grades to be even more effective. The propulsion system can be controlled with a fine touch because the entire control range of the locomotive controller is always available for use.
In digital operation each locomotive with high-efficiency propulsion can be addressed and controlled individually. Depending on the model, auxiliary functions such as headlights, smoke generator, sound effects, TELEX couplers or other functions can be switched on and off by remote control.

Reliable current conduction and high tractive effort

You have already read about the requirements and advantages of reliable current conduction through the three-rail track on pages 20-23 on the Märklin H0 system. This broad electrical contact area through a large number of wheels makes it possible to equip the locomotives with traction tires in order to translate the high motor power output into tractive effort on the track.

Everything is easily accessible

An additional requirement for high levels of durability is regular servicing. A drop of oil now and then and new brushes – that is practically everything. The motors are easily accessible for this, and parts on the motor are easy to swap out.



Easy to retrofit and here for the future

Many older Märklin H0 locomotives can be retrofitted by your authorized Märklin dealer with a DELTA electronic circuit or with a digital decoder for multi-train operation. Locomotives with drum-style commutator motors can in most cases also be equipped with the digitally controlled high-efficiency propulsion system. This open principle guarantees that in the future your models can be kept up-to-date with the level of technology available at that time.

New: The Märklin C-Sine Motor

A totally new motor concept is currently being tested in the field. The C-Sine motor works according to the principle of three-phase current. With its nine windings the stator produces a rotating magnetic field that "brings" the 12-pole permanent magnet rotor along with it. The C-Sine motor does not require brushes and therefore requires no maintenance. It is so compact that it can fit on a truck, and it powers the axles through a spur gear drive that is very low in drag and resistance. It sets itself in motion smooth as silk and with very little current. It produces very high torque over the entire speed range. In principle the C-Sine motor is suitable for all types of operation, and in digital operation the digital decoder's additional, adjustable functions can be used with it. Also, a digital switching speed range can be switched on that spreads the locomotive controller's entire control range over the slow speed range.



ICE-S Powered Railcar Train

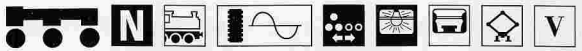
After the successes of the ICE 1 and ICE 2, the DB, Inc. is taking a totally new path with the third generation of these classic high speed trains. The ICE-S exists as a development and test concept on the way to the ICE 3. The unusual abbreviation "S" stands for fast running and is part of the name for a five-car train consisting of two ICE 2 end cars and three intermediate cars built by the joint effort of Siemens and Adtranz.

The ICE-S is visually striking chiefly because of the unusual striping that, compared to the previous ICE trains, runs from the well know shade of red to a glowing yellow, with a sine wave in the area of the middle intermediate car.

The really new features are in the intermediate cars that are also derived from the ICE 2 family. Intermediate car 1 and intermediate car 3 are so-called power converter cars that are mounted on powered trucks. These 8 traction motors each have an output of 500 kilowatts (671 horsepower). Intermediate car 2 with the striking sine wave is by contrast a non-powered transformer car, whose trucks are equipped with a new type of eddy current brakes.

The pantographs are other striking differences from the regular ICE cars. The pantograph auf intermediate car 3 is just a "dummy" with no electrical function that is used for acoustic experiments. The whistling noises of the pantograhs are supposed to be minimized with different shapes and arrangements of the spoiler and the fairing pieces.

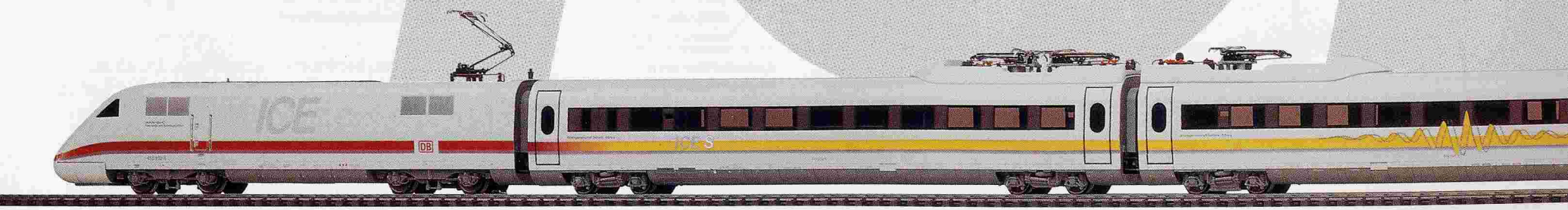
The ICE-S is a mighty power horse with a total output of 13.6 megawatts (corresponding to 18,600 horsepower), divided into 8 x 500 kilowatts in the intermediate cars and 2 x 4.8 megawatts in the end cars. This train is being used under the direction of the German Railroad's new Research and Technology Center (FTZ). An extensive series of experiments over an 18 month period will be employed to test and prove the feasibility of the innovations.

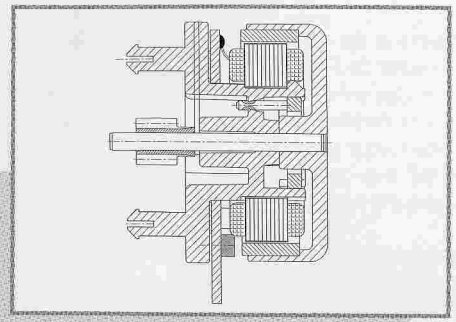


39710 ICE-S Powered Railcar Train.
German Railroad, Inc. class 410 ICE-S high speed train. Mit digital decoder und C Sine motor. Type 410 102 end car motorized. 2 axles powered. 4 traction tires. Type 410 202 intermediate car. Type 410 801 intermediate car. Type 410 201 intermediate car. Type 410 101 end car not motorized. Engineer's cabs in both end cars with interior details. Direction-dependent current pickup through the end car at the front of the train. Special close couplings with guide mechanism. Interior lighting powered by the continuous electrical connections through the entire train. Headlights and interior lighting digitally controlled. Low speed range with reduced maximum speed and acceleration and braking delay turned off can be controlled digitally with the 6021 Control Unit. The headlights and the interior lighting will work in conventional operation. Train length 123.5 cm (48-5/8").

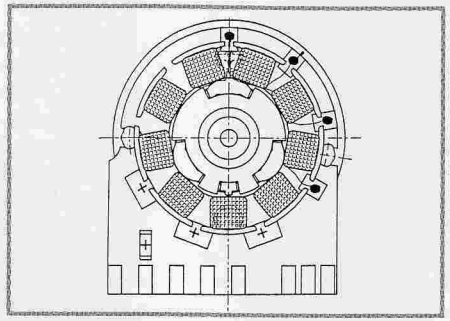
The low speed range can be activated from the f4 function button in digital operation with the 6021 Control Unit 6021. When you do this, the values set for the acceleration and braking delay are overridden. At the same time the maximum speed is reduced considerably. Despite this the full control range with all speed levels is still available for the control of this train. This makes it possible to have very precise movements of the train, especially in switching operations.

The 39710 ICE-S powered railcar train is being produced in a one-time series only in 1999 for Insider members.

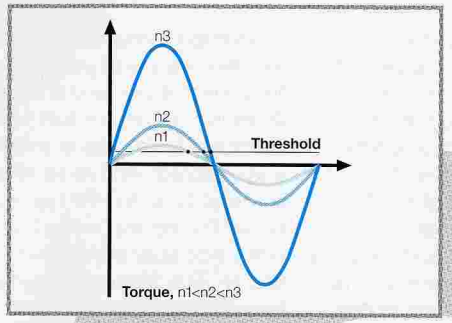




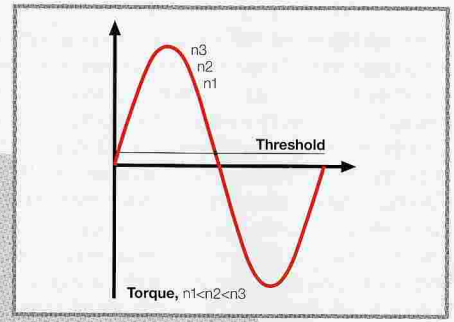
The stator is surrounded by a twelve pole rotor: Only the rotor is visible when the motor is installed.



The windings are seated on the stator with its nine slots. The rotor has no brushes.

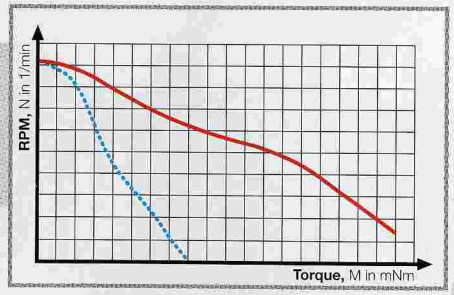


Control signal from the windings.
The signal strength varies with the motor's torque.



Control signal from the Hall sensors.
The signal strength is constantly high, independent of the motor's torque.

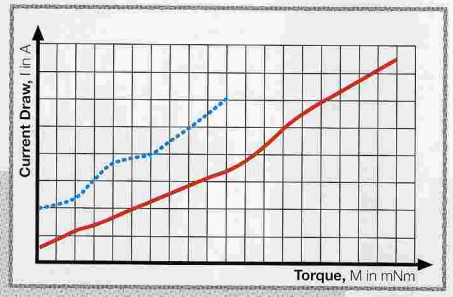
Torque



Comparsion: C Sine motor with conventional motor.

Result: Extremly high torque, therefore very high tractive effort.

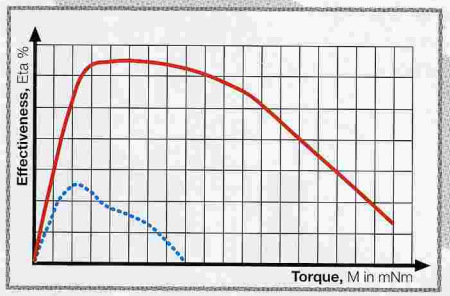
Current Draw



Comparsion: C Sine motor with conventional motor.

Result: Demonstrably lower current draw.

Effectiveness



Comparsion: C Sine motor with conventional motor.

Result: The effectiveness is demonstrably above the previously achievable values.

Highlights of the "C Sine Motor"

- This motor is maintenance-free, since it doesn't need brushes.
- Outstanding control with increases in the load.
- Excellent slow speed characteristics.
- Very good coasting characteristics.
- Can be used in conventional and digital operation.
- Switching speed can be turned on digitally.

C Sine Motor
Conventional motor



Trains

In the middle of the 19th century the Industrial Revolution was introduced into Württemberg which had been previously backward: the state invested many millions of Gulden in the railroad in order to create the necessary modern infrastructure. One of the main axes was the route soon completed from Stuttgart to Ulm on which the aspiring city of Göppingen was situated. The tinsmith Theodor Friedrich Märklin settled here as a master of his craft and in 1859 he opened his own factory for fine metal toys. The railroad was not only important for obtaining materials and shipping finished goods for this, it was also important for the distribution concept developed by Märklin's wife Caroline who liked to travel: cooperation with dealers committed to the his products and personal service to the dealers on the spot.

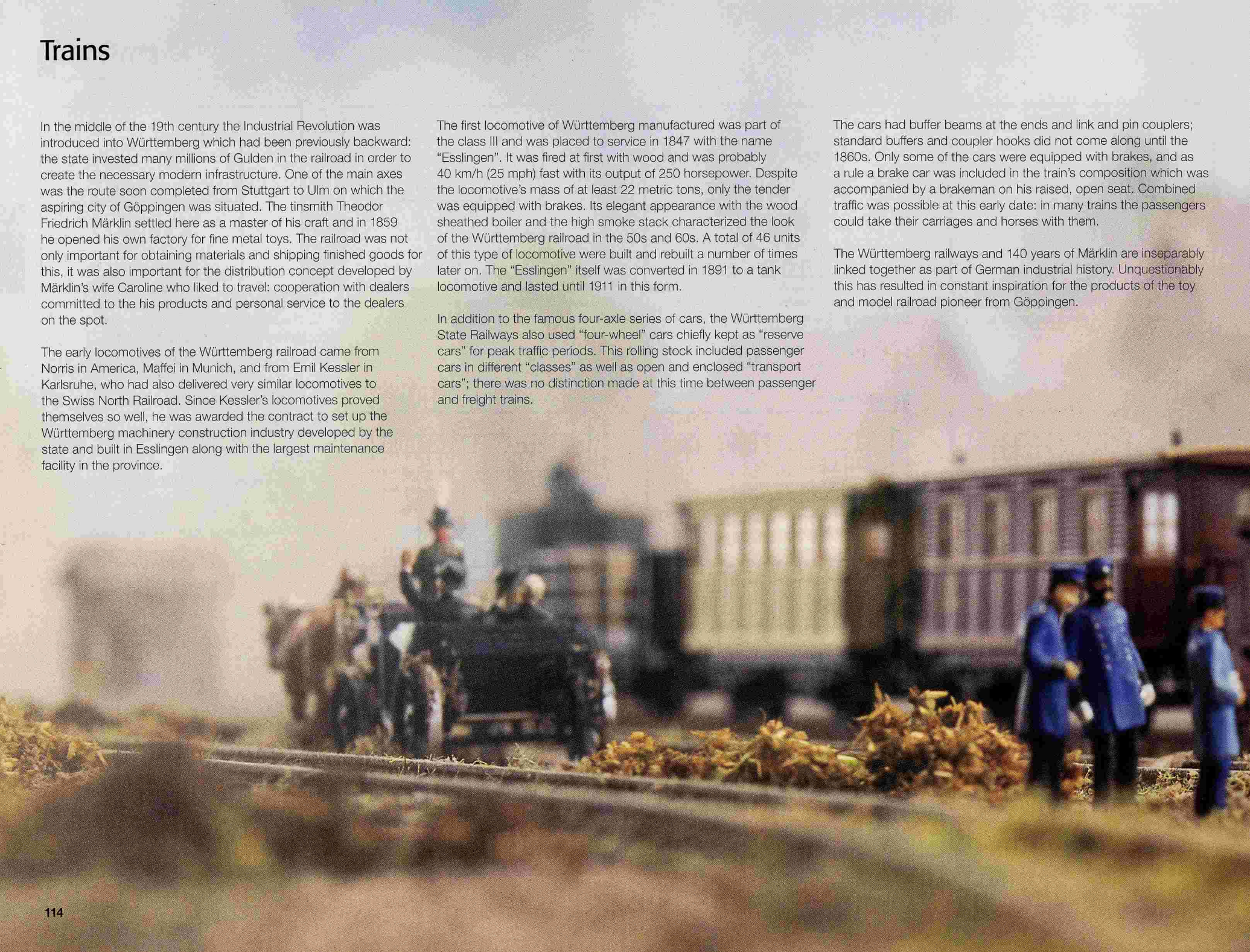
The early locomotives of the Württemberg railroad came from Norris in America, Maffei in Munich, and from Emil Kessler in Karlsruhe, who had also delivered very similar locomotives to the Swiss North Railroad. Since Kessler's locomotives proved themselves so well, he was awarded the contract to set up the Württemberg machinery construction industry developed by the state and built in Esslingen along with the largest maintenance facility in the province.

The first locomotive of Württemberg manufactured was part of the class III and was placed to service in 1847 with the name "Esslingen". It was fired at first with wood and was probably 40 km/h (25 mph) fast with its output of 250 horsepower. Despite the locomotive's mass of at least 22 metric tons, only the tender was equipped with brakes. Its elegant appearance with the wood sheathed boiler and the high smoke stack characterized the look of the Württemberg railroad in the 50s and 60s. A total of 46 units of this type of locomotive were built and rebuilt a number of times later on. The "Esslingen" itself was converted in 1891 to a tank locomotive and lasted until 1911 in this form.

In addition to the famous four-axle series of cars, the Württemberg State Railways also used "four-wheel" cars chiefly kept as "reserve cars" for peak traffic periods. This rolling stock included passenger cars in different "classes" as well as open and enclosed "transport cars"; there was no distinction made at this time between passenger and freight trains.

The cars had buffer beams at the ends and link and pin couplers; standard buffers and coupler hooks did not come along until the 1860s. Only some of the cars were equipped with brakes, and as a rule a brake car was included in the train's composition which was accompanied by a brakeman on his raised, open seat. Combined traffic was possible at this early date: in many trains the passengers could take their carriages and horses with them.

The Württemberg railways and 140 years of Märklin are inseparably linked together as part of German industrial history. Unquestionably this has resulted in constant inspiration for the products of the toy and model railroad pioneer from Göppingen.







28573 Württemberg Train Around 1859.
Class III "Esslingen" steam locomotive with 4 Württemberg State Railways "reserve cars".

Locomotive in its original version. Universal electronic circuit for operation with a transformer, with DELTA multi-train control, or in the Märklin Digital system (Motorola format). 2 axles powered, with traction tires. Miniature, high-efficiency Faulhaber motor in the firebox. Three free-standing lanterns on the locomotive and 2 of the same on the tender, with maintenance-free LEDs, headlights change over with the direction of travel. Permanent coupling between the locomotive and tender. Prototypical link and pin coupler without buffers on the tender. Detailed engineer's foot plate area. Numerous, separately applied details. Tender with load of wood for fuel. Locomotive engineer and fireman.

1 each 2nd class passenger car without brakes. 1 each 3rd class passenger car without brakes. 1 open freight car with open frame walls and brakes. 1 baggage car with brake car equipment. Metal car frames. Wheels with fine, double spokes. Link and pin couplers with removable drawbars. Detailed end platforms and roof supports. Separately applied brakeman's seat and brakeman. Freight load. Train length 46.0 cm (18-1/8″).

26573 Same as 28573, but with digital decoder with adjustable maximum speed and acceleration/braking delay. Headlights digitally controlled.

Locomotive and cars in special version, not available separately.

The 28573 and 26573 train sets are being produced in a one-time series for the annivesary "140 years of Märklin". Delivery is planned for the end of 1999 / beginning of 2000.

These models are being offered by Trix for two-rail DC systems.
(T21224) Württemberg Train Around 1859
(T21225) Württemberg Car Set Around 1859



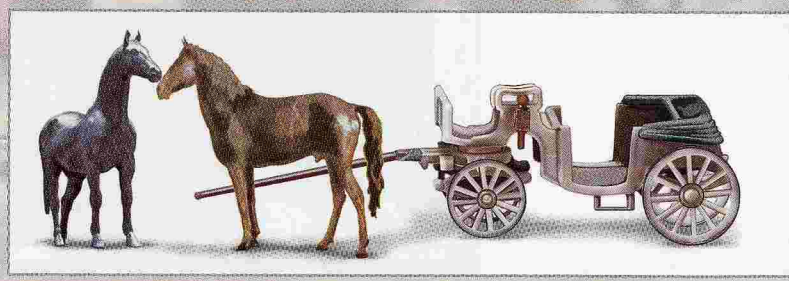




N I

46573 Württemberger Car Set around 1859.
To add on to the Württemberg old-timer train. 1 equipage transport car with historic carriage. 1 horse transport car with doors on the ends that can be opened. 3 horse boxes and 2 horses. Metal car floors. Wheels with fine double spokes. Link and pin couplers with removable drawbars. Total length 14.0 cm (5-1/2").

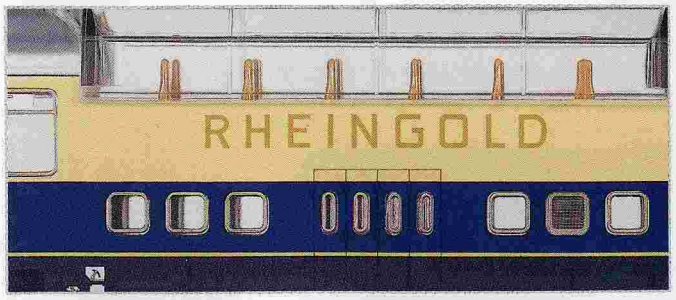
Delivery planned for the middle of 2000.



HOBBY 7320 7322 III

28503 German Federal Railroad "Rheingold" Express Train from around 1962.
1 class E 10.12 electric locomotive. Reverse unit. 2 axles powered.
4 traction tires. Coupler hooks. 1 compartment car. 1 open seating car.
1 vista dome car. RELEX couplers. Train length 92.5 cm (36-3/8").

Locomotive and cars in special version. Not available separately.

















The 28524 express train is being produced in a one-time series only in 1999.

N NEM NEM 7830 IV

28524 Danish State Railways (DSB) Express Train.
Class MY 1100 diesel electric locomotive. With DELTA electronic circuit. 3 axles powered. 4 traction tires. Pilots with integrated coupler pocket. 2 type Bcm 2nd class slumber coaches. 1 Royal Danish Postal System express train mail car. Train length 101.5 cm (39-15/16″).

Locomotive and cars in a special version. Not available separately.



28703 Historic 1930s Passenger Train.
Swedish State Railways (SJ) class Sa tank locomotive. With DELTA electronic circuit. 3 axles powered. 2 traction tires. Current-conducting coupler pocket for car lighting. 1 type C3d 3rd class passenger car. 1 type CD3 3rd class passenger car with mail compartment. 1 type F5 baggage car. **All cars have metal frames and genuine wood outer walls.** Etched metal end platforms. Many separately applied details. Interior lighting through current-conducting couplers from the locomotive. Train length 64.0 cm (25-3/16″).

Locomotive and cars in a special version.
Not available separately.

The 28703 passenger train is being produced in a one-time series only in 1999.

This model is being offered for two-rail DC systems by Trix (T21264).

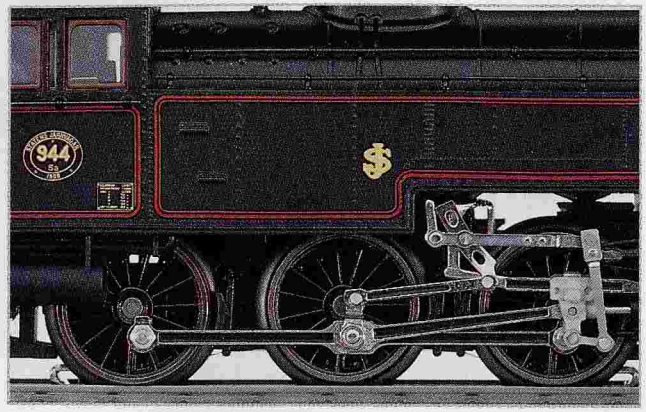
- ***Locomotive with a metal body.***
- ***Cars with metal frames and external walls of real wood.***
- ***Numerous, fine details on the locomotive and cars.***
- ***Authentic SJ version around 1939.***
- ***Car lighting powered from the locomotive.***





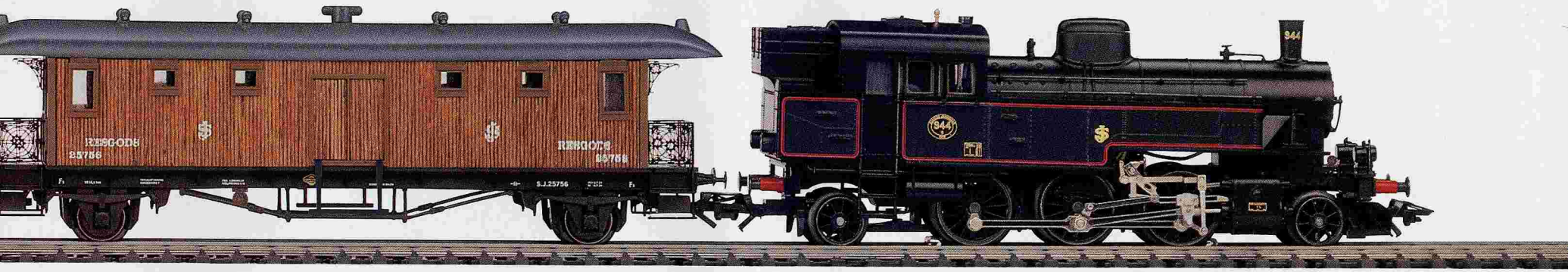












Between 1908 and 1916 46 class Sa tank locomotives were built by locomotive builders in Motala, Falun, and by NOHAB, originally as the class S. This type of locomotive had a symmetrical wheel arrangement and could be operated at 80 km/h (50 mph) in both directions. With a total weight between 60 and 63 metric tons and an axle load of only 14 metric tons it was quite maneuverable. It gave particularly good results in passenger service with many stops on shorter main lines and in commuter service in the areas approaching the major cities. With the increase in electrification many units were sold starting as early as 1930 to privately owned railroads; they came back to the SJ after these lines were nationalized in 1942, the sole exception being the locomotives on the TGOJ. These locomotives were operated in regular service up to 1964 under the old class designation S. The last of these units was not retired until 1973. A number of locomotives escaped the cutting torch and were "saved" by museum railroads. They have been restored to authentic condition for different eras and some are even operational.

Light-weight, two-axle passenger cars with a 9 meter (29 ft. 6-5/16 in.) wheelbase and steerable axles were built between 1911 and 1930 for the SJ and for several private Swedish railroads. These cars were inexpensive to build and became the standard for short mainlines and for branchlines. The main focus here was on stability rather than on comfort; most of the cars had only 3rd class seating. The original sheet metal sheathing on the outer walls tended to rust very badly in the Swedish climate and was replaced over the course of the series by external walls of teak wood that were resistant to water condensation. Existing cars were also retrofitted with these walls. Even before 1940 almost all of the cars belonged to the SJ which used these already nostalgically striking coaches well into the 1960s. Several cars have been preserved on museum railroads.

Another railroad development took place at the time of these typical passenger trains with the Sa locomotive and the type C3d, CD3 and F5 passenger cars. Märklin has been officially represented in Sweden with a proven partnership for 60 years.

Train Set

One of the most famous American luxury trains is celebrating its 50th birthday. In 1949 the "California Zephyr" (insiders just say "CZ") was placed into service as a joint project of the Chicago, Burlington & Quincy, Denver & Rio Grande Western, and Western Pacific Railroads. The route led from Chicago on Lake Michigan via Denver, Colorado and Salt Lake City, Utah to Oakland in California through the marvelous landscapes of the USA. The attractive panorama was an essential part of the concept. Several vista domes were always part of the train's consist, including a dome observation at the end. The "CZ" was the first of the so-called "Domeliners".

The railroads participating in the operation of the train provided locomotives and rolling stock in proportion to their share of the route. The train was usually composed of a mix of cars lettered for CB&Q, D&RGW or WP; all of the cars were similar in design. Up to 1975 the entire pool of cars for the "CZ" totaled 77 units that bore individual names from "Silver Antelope" to "Silver Valley". The locomotives came chiefly from the Electro-Motive Division of General Motors and were generally operated in multiples of three.

A large part of the original cars were acquired by Amtrak in the 70s, which still operates the route of the "California Zephyr". Today modern, standard design rolling stock is used of course; service and comfort are a matter of course and no longer the domain of the great name trains.



26600 "California Zephyr" Express Passenger Train.
Three unit EMD F 7 diesel locomotive with 6 streamliner passenger cars for the Western Pacific, Chicago, Burlington & Quincy, and the Denver & Rio Grande Western.

Locomotive is one A unit and 2 B units. With digital decoder and controlled, high-efficiency propulsion. 2 motors. 4 axles powered. 8 traction tires. Headlights and lighted number boards digitally controlled. **Sound effects generator with diesel locomotive operating sounds, horn and dynamic brake digitally controlled with 6021 Control Unit.** The headlights and the operating sounds will work in conventional operation. Permanent drawbars between the three locomotives. Prototypical coupler at the front (non-working), coupler hook at the rear.

1 baggage car "Silver Light"
1 sleeping car "Silver Valley"
1 dining car "Silver Banquet"
2 vista dome cars "Silver Ranch", "Silver Dollar"
1 dome observation car "Silver Sky".

All cars with aluminum superstructures and separately applied details. Interior lighting by means of current-conducting couplers. Observation car with pickup shoe and digital decoder. Interior lighting digitally controlled, also will work in conventional operation. **Marker lights and lighted drumhead sign can be turned on with 6021 Control Unit.** Train length 205 cm (80-11/16").

Locomotive and cars in special version. Not available separately.

The 26600 "California Zephyr" express train is being produced in a one-time series only in 1999.



Train Set

50 Years of the DB

It was a difficult beginning for the new established German Federal Railroad: Everything after the war that could run was put into operation again to provide at least the most necessary transportation services. And yet the young DB soon became the backbone of the economic miracle. Locomotives and rolling stock were modernized with massive rebuilding and new construction programs. The modern diesel and electric locomotives above all brought about massive savings in energy. The elegant TEE and FD trains became symbols for the dynamic character of the DB.

At the same time however airplanes, trucks and the automobile developed into serious competition. The railroad today must constantly hold its own in all areas – passenger and freight service, commuter and long distance service. The DB, Inc. is putting itself on the path to the future with a fundamental restructuring and attractive offerings such as the ICE.

28508 "Commuter Service" Train Set.
Set consists of 1 steam locomotive and 3 different commuter cars.

German Federal Railroad class 86 tank locomotive. With DELTA electronic circuit. 4 axles powered. 2 traction tires. Painted boiler bands.

2 German Federal Railroad type 885 commuter cars. With different car numbers. 2nd class. Light traces of rust on the roofs. German Federal Railroad type Byg 516 commuter car. 1st class. Light traces of rust on the roofs. Train length 69.3 cm (27-5/16″).

Locomotive and cars in a special version. Not available separately.

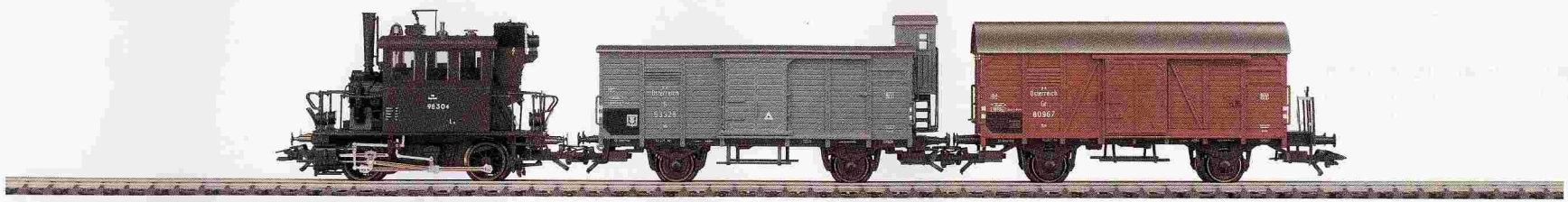
226508 Same as 28508, but with digital decoder and controlled, high-efficiency propulsion. Headlights digitally controlled. Headlights will work in conventional operation.

The 26508 and 28508 trains sets are being produced in a one-time series only in 1999.

N NEM NEM III

28971 Austrian Federal Railways Oldtimer Short Train. Austrian Federal Railways (BBÖ/ÖBB) class 688.01 tank locomotive. With DELTA electronic circuit. Special miniature motor. 2 axles and jackshaft powered. 1 traction tire. Different buffers front and reaar. 1 type G10 boxcar with brakeman's cab. 1 type Gr 20 boxcar with brakeman's platform. Both cars have sliding doors that can be opened. Train length 30.5 cm (12″).

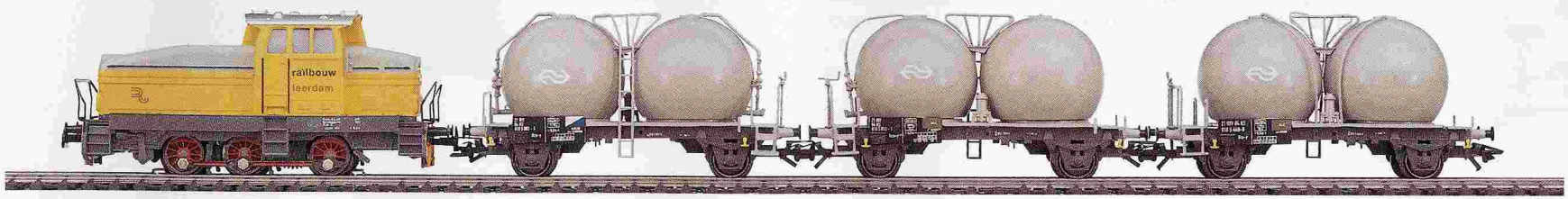
Locomotive and cars in a special version. Not available separately.



The 28971 oldtimer short train is being produced in a one-time series only in 1999.

Locomotive with spoked wheels

3 car types with different details



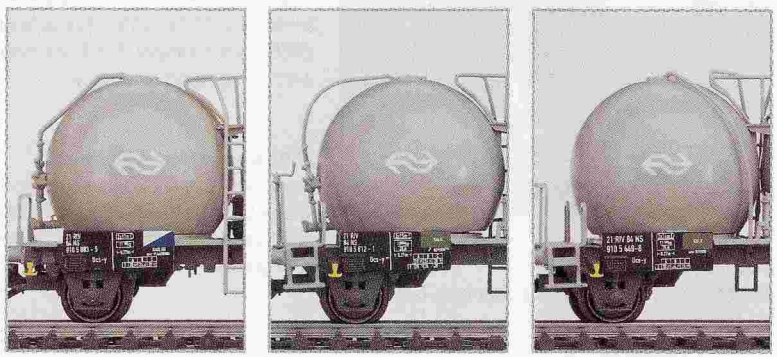
The 28452 construction train with cement silo container cars is being produced in a one-time series only in 1999.



N NEM IV

28452 Dutch Construction Train with Cement Silo Container Cars. Railbouw Leerdam Company class DH 360 diesel locomotive. With DELTA electronic circuit. Spoked wheels with side rods. 3 axles powered. 2 traction tires. Coupler hooks. 3 different silo container cars with spherically shaped containers ("Bollen cars"). Dutch State Railways (NS) type Ucs 3810/28 cubic meters (approx. 989 cubic ft.), type Ucs 3820/30 cubic meters (approx. 1,059 cubic ft.), type Ucs 3830/34 cubic meters (approx. 1,200 cubic ft.). Piping, platforms and fittings are separately applied details. Train length 42.0 cm (16-9/16″).

All locomotives and cars in a special version. Not available separately.



Spare Parts for Locomotives



7207 Scheren Pantograph.
Type SBS 10 for older design locomotives. Interchangeable with 7218.



7203 Close Couplers.
Contents: 50 no. 70 1630 close coupler heads. For installation on cars with standard coupler pockets (NEM 362) and guide mechanisms. Compatible with standard couplers (NEM 360).



7205 Close Couplers for Locomotives/Cars without Guide Mechanisms.
Interchangeable with the standard Märklin plastic coupler. 10 couplers for locomotives (for 70 1560 and 70 4120) and 40 couplers for cars. Decreased coupler play on cars being pulled.



7247 Single-Arm Pantograph.
Type SBS 65 for modern locomotives. Interchangeable with 7218.



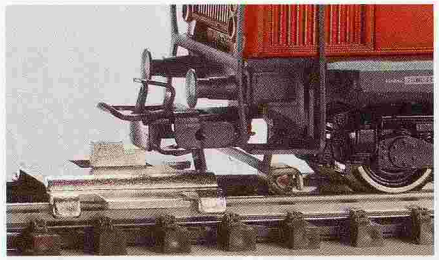
72060 RELEX Couplers.
Contents 10 RELEX coupler heads. Can be used on locomotives and cars with standard coupler pockets (NEM 362).





0733 Service Manual H0.
Function, care and maintenance of locomotives. Useful tools and how to use them. Troubleshooting locomotives and layouts. Tips on the Digital system. Extensive spare parts tables. Contents 72 pages. Format 22 x 26.4 cm (8-5/8″ x 10-3/8″).

70900 Tool Set.
Suitable for maintenance work on H0 and mini-club models. Contents: 1 each PH 00, PH 0 and PH 1 Philips screwdrivers. 1 each 2.0 mm and 3.0 mm flat blade screwdrivers. 1 each 2.5 mm, 3.0 mm and 3.5 mm nut drivers. 1 tweezers and 1 compression tweezers.



7001 Coupler Gauge.
For checking and adjusting couplers. Can be placed on track.

7556 Locomotive Magnets.
6 pieces. 10 x 5 x 1.5 mm (approx. 25/64″ x 3/16″ x 1/16″). For activating 7555 reed contacts. For locomotives with little ground clearance.

7557 Locomotive Magnets.
3 pieces. 13 x 7 x 2.5 mm (approx. 1/2″ x 9/32″ x 3/32″). For activating 7555 reed contacts. For locomotives with greater ground clearance.

7194 Reverse Unit Springs.
Package of 5 springs for reverse units in all conventional locomotives.

7149 Oiler with Narrow Applicator Opening.
Contains 10 ml special oil for lubricating locomotives and cars.

7224 Rerailer.
Facilitates placing multi-axle locomotives/cars on the track. Length 30.0 cm (11-1/16″). Height 2.5 cm (1″).

7226 Smoke Generator Kit.
Consists of smoke generator insert (for locomotives 33021/37021, 34880, 34884, 33951 and 34080), replacement smoke tube, cleaning wire, tweezers, and a container of smoke fluid.

02420 Smoke Fluid.
Large 50 milliliter bottle for filling all smoke generators.

DELTA



6603 DELTA Module.
Electronic component for converting conventional Märklin H0 locomotives to the DELTA multi-train control system. Suitable for locomotives with the Märklin standard motors (flat commutator motor or drum commutator motor). Locomotive can be operated with conventional transformer, DELTA Control, DELTA Station or Märklin Digital. Coding switches for setting the mode of operation and the address for multi-train operation. Electronic direction reversing. Locomotive headlights turned on when the unit is in motion and change over with the direction of travel. Dimensions 36 x 21 x 4 mm (1-7/16″ x 13/16″ x 3/16″).

The manufacturer warranty is covered only when the DELTA modules are installed by an authorized Märklin dealer.

DELTA



66031 DELTA Module with Auxiliary Function.
Electronic component for converting conventional Märklin H0 locomotives to the DELTA multi-train control system. Suitable for locomotives with the Märklin standard motors (flat commutator motor or drum commutator motor), specially for locomotives with Märklin TELEX couplers. Locomotive can be operated with conventional transformer, DELTA Control, DELTA Station or Märklin Digital. Coding switches for setting the mode of operation and the address for multi-train operation. Electronic direction reversing. Auxiliary function (example: TELEX couplers) can be turned on and off when the direction is changed twice. Locomotive headlights turned on when the unit is in motion and change over with the direction of travel.







60901 High-Efficiency Propulsion Set.
Consists of locomotive decoder and high-efficiency motor as well as installation hardware for converting most Märklin H0 locomotives with drum commutator motors to the current high-efficiency propulsion system. The electronic circuit has a total of 4 controllable functions. The "function" output is intended for the locomotive's headlights. The "f1" and "f2" outputs can be used for other functions such as TELEX couplers or a smoke unit. The "f4" function allows you to turn the controlled motor functions off for easier switching of cars. The "f1", "f2" and "f4" functions can be controlled only with the Control Unit (6021), a Control 80 f locomotive controller connected to this central unit, or the Interface. The electronic circuit in this set allows you to adjust maximum speed as well as acceleration and braking delay. Controlled motor functions under different load condition such as on ascending and descending grades. Can be coded for 80 different locomotive addresses. The "function" and "f1" functions are turned on when the locomotive is operated conventionally with AC power. Decoder dimensions 36 x 21 x 9 mm (1-3/8″ x 13/16″ x 3/8″).

The manufacturer warranty is covered only when the 60901 and 60902 high-efficiency decoder, and the 60960 function decoder are installed by an authorized Märklin dealer.

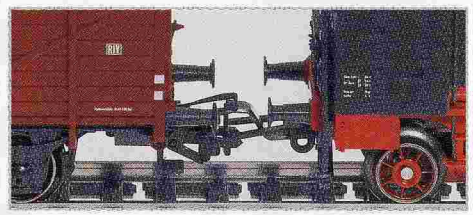


60902 High-Efficiency Electronic Circuit.
High-efficiency decoder for converting Märklin H0 locomotives with built-in 6090 high-efficiency propulsion to the new version with more functions. The electronic circuit has a total of 4 controllable functions. The "function" output is intended for the locomotive's headlights. The "f1" and "f2" outputs can be used for other functions such as TELEX couplers or a smoke unit. The "f4" function allows you to turn the controlled motor functions off for easier switching of cars. The "f1", "f2" and "f4" functions can be controlled only with the Control Unit (6021), a Control 80 f locomotive controller connected to this central unit, or the Interface. The electronic circuit in this set allows you to adjust maximum speed as well as acceleration and braking delay. Controlled motor functions under different load condition such as on ascending and descending grades. Can be coded for 80 different locomotive addresses. The "function" and "f1" functions are turned on when the locomotive is operated conventionally with AC power. Decoder dimensions 36 x 21 x 9 mm (1-3/8″ x 13/16″ x 3/8″).

When sufficient space is available, any Märklin digital locomotive or any locomotive with a built-in DELTA module can be equipped with additional controllable functions such as a smoke unit or TELEX couplers (where the locomotive already has these couplers). On passenger cars interior lighting can be a controllable function.

60960 c 96 Function Decoder.
Decoder for controlling up to 4 auxiliary functions (f1 to f4) from the Control Unit (6021), a Control 80 f locomotive controller connected to this central unit, or the Interface. This function decoder can either be installed in locomotives along with a locomotive decoder or by itself in cars. Can be coded for 80 different addresses.











Spare Parts for Locomotives

This table contains the most important spare parts for each locomotive.

The numbers for these parts refer to currently produced models. On older units there may be slight differences in parts. In these instances the parts numbers are to be taken from the instruction sheets that come with the unit.

The instructions for each model show how to install pickup shoes, traction tires, light bulbs and other spare parts.

Catalog Number	Catalog Number	Catalog Number	Traction Tires	Pickup Shoe	Panto-graph	Light Bulb		Brushes	Reverse Unit	Coupler front	Coupler rear	Conversion
3000			7154	7185	–	61 0040	–	60 1460	20 8240	39 9740	39 9740	① ②
3003			7153	7185	–	61 0040	–	60 0300	20 8240	20 2140	70 1540	① ②
30032			7153	7185	–	61 0040	–	60 0300	20 8240	39 9740	20 2140	① ②
30321			7153	7185	–	60 0100	–	60 0300	22 9700	–	–	②
30331			7153	7164	25 8270	61 0040	–	60 1460	20 8240	39 9740	39 9740	① ② ⑤
3072			7154	7164	–	61 0040	–	60 1460	20 8240	39 9740	39 9740	① ②
30747			7154	7164	–	61 0040	–	60 1460	20 8240	70 1560	70 1560	① ②
3078			7154	7185	–	61 0040	–	60 1460	20 8240	39 9740	39 9740	① ②
3085			7152	7164	–	61 0040	–	60 1460	20 8240	–	39 9740	① ② ⑤
3087			7154	7185	–	–	–	60 0300	20 8240	20 0010	20 0010	① ②
3088			7154	7185	–	61 0040	–	60 1460	20 8240	39 9740	39 9740	① ②
3091			7152	7185	–	61 0040	–	60 0300	20 8240	22 4180	21 8420	① ②
3095			7153	7185	–	61 0040	–	60 0300	20 8240	22 5320	21 8420	① ②
3099			7152	7185	–	61 0040	–	60 0300	20 8240	22 4180	21 8420	① ②
3131			7153	7185	–	60 0100	–	60 0300	22 9700	–	–	① ②
	33021	**37021**	7153	20 6370	–	61 0040	61 0080	60 1460	–	21 8430	70 1630	④
	33041		7154	7185	–	61 0040	–	60 1460	–	70 1630	70 1630	④
	33071	**37071**	7153	7164	–	61 0040	61 0080	60 1460	–	70 1630	70 1630	① ② ⑤ ⑥
	33181	**37181**	7153	7185	–	61 0040	61 0080	60 1460	–	70 1630	70 1630	② ⑤ ⑥
	33184	**37184**	7153	7185	–	61 0040	61 0080	60 1460	–	70 1630	70 1630	② ⑤ ⑥
	33190	**37190**	7152	7164	–	–	–	–	–	28 2390	70 1630	④
	33231	**37231**	7153	20 6370	60 4262	–	–	60 1460	–	25 6410	70 1630	④
	33252		7153	7164	61 5390	61 0040	–	60 1460	–	70 1630	70 1630	② ⑤

Explanation of symbols for the column "Conversion"

① DELTA with 6603/66031
② Digital with 6080
③ Digital with 6081
⑤ Digital with 6090/60901
⑥ Digital with 60902

} Can be converted by your authorized Märklin dealer

④ Digital conversion only by Märklin

The 70 1630 close coupler is only available in packages of 50 pieces under the catalog number 7203 (see page 126).

Catalog Number	Catalog Number	Catalog Number	Traction Tires	Pickup Shoe	Panto-graph	Light Bulb		Brushes	Reverse Unit	Coupler front	Coupler rear	Conversion
	33411		7153	7164	60 1460	61 0040	–	60 1460	–	70 1630	70 1630	② ⑤
	3356	**3756**	7153	7164	25 9530	61 0040	61 0080	60 1460	–	70 1630	70 1630	② ⑤ ⑥
	33593	**37593**	7152	7164	60 3243	–	–	60 1460	–	70 1630	70 1630	④
	33622	**37622**	7154	7185	–	61 0040	61 0080	60 1460	–	21 5830	21 5860	④
	33641	**37641**	7154	20 9217	–	–	–	–	–	70 1630	70 1630	④
	33642	**37642**	7154	20 9217	–	–	–	–	–	70 1630	70 1630	④
	33661	**37661**	7153	7164	25 7830	61 0040	61 0040	60 1460	–	70 1630	70 1630	④
	33681	**37681**	7153	7164	60 3763	61 0040	61 0080	60 1460	–	70 1630	70 1630	② ⑤
	33712	**37712**	7154	20 6370	62 7640	61 0040	61 0040	–	–	–	–	④
	33723		7154	7164	–	61 0040	–	60 1460	–	70 1630	70 1630	② ⑤
	3374		7154	7164	–	61 0040	–	60 1460	–	26 3730	26 3730	② ⑤
	33743		7154	7164	–	61 0040	–	60 1460	–	26 3730	26 3730	② ⑤
	33803	**37803**	7154	20 6370	–	61 0040	61 0080	60 1460	–	70 1630	70 1630	④
	33911	**37911**	7152	7164	–	61 0040	61 0080	60 1460	–	70 1630	70 1630	① ② ⑤ ⑥
	33951	**37951**	7152	20 6370	–	61 0040	61 0080	60 1460	–	70 1630	70 1630	④
	33961		7153	7164	–	61 0040	–	60 0300	–	–	–	②
	34060	**37060**	7154	30 0101	–	–	–	–	–	70 1630	70 1630	④
	34080	**37080**	7152	20 6370	–	–	–	60 1460	–	–	70 1630	④
	34090	**37090**	7154	20 6370	–	–	–	–	–	20 6629	20 6629	④
	34131		7153	20 6370	–	61 0040	–	601460	–	70 1630	70 1630	–
	34210	**37210**	7153	7164	–	–	–	60 1460	–	70 1630	70 1630	④
	34310	**37310**	7153	7164	60 2287	61 0040	61 0080	60 1460	–	70 1630	70 1630	① ② ⑤ ⑥

Explanation of symbols for the column "Conversion"

① DELTA with 6603/66031
② Digital with 6080
③ Digital with 6081
⑤ Digital with 6090/60901
⑥ Digital with 60902

} Can be converted by your authorized Märklin dealer

④ Digital conversion only by Märklin

The 70 1630 close coupler is only available in packages of 50 pieces under the catalog number 7203 (see page 126).

Spare Parts for Locomotives

This table contains the most important spare parts for each locomotive.

The numbers for these parts refer to currently produced models. On older units there may be slight differences in parts. In these instances the parts numbers are to be taken from the instruction sheets that come with the unit.

The instructions for each model show how to install pickup shoes, traction tires, light bulbs and other spare parts.

Catalog Number	Catalog Number	Catalog Number	Traction Tires	Pickup Shoe	Panto-graph	Light Bulb	Light Bulb	Brushes	Reverse Unit	Coupler front	Coupler rear	Conversion
	34350	**37350**	7153	20 6370	60 1323	–	–	60 1460	–	70 1630	70 1630	④
	34352	**37352**	7153	20 6370	60 1323	–	–	60 1460	–	70 1630	70 1630	④
	34374	**37374**	7153	20 6370	60 1434	–	–	60 1460	–	70 1630	70 1630	④
	34431	**37430**	7153	7164	64 3760	61 0040	61 0080	60 1460	–	70 1630	70 1630	① ② ⑤ ⑥
	34475	**37475**	7154	7185	60 4097	–	–	–	–	70 1630	70 1630	④
	34550	**37550**	7153	20 6370	–	61 0040	61 0080	–	–	70 1630	70 1630	④
	34587		7153	7164	60 4127	61 0040	–	60 1460	–	70 1630	70 1630	② ⑤
	34636		7154	7164	64 4240	61 0040	–	60 1460	–	70 1630	70 1630	② ⑤ ⑥
	34641		7153	7185	–	61 0040	–	60 1460	–	–	–	④
	34664		7154	7164	–	61 0040	–	60 1460	–	70 1630	70 1630	② ⑤
	34761	**37761**	7154	7164	–	61 0040	61 0080	60 1460	–	70 1630	70 1630	④
	34780	**37780**	7154	20 6370	60 1434	61 0040	61 0080	–	–	–	–	④
	34880	**37880**	7153	20 6370	–	61 0040	61 0080	60 1460	–	70 1630	70 1630	④
	34884	**37884**	7153	20 6370	–	61 0040	61 0080	60 1460	–	70 1630	70 1630	④
	34962	**37962**	7153	20 6370	–	61 0040	61 0080	60 1460	–	70 1630	70 1630	② ⑤ ⑥
	34988		7152	7185	–	61 0040	–	60 0300	–	70 1630	70 1630	① ②
		37203										
		(V 120)	7153	7164	–	–	61 0080	60 1460	–	70 1630	70 1630	② ⑤
		(V 140)	7153	7164	–	–	–	60 1460	–	70 1630	70 1630	④
		(V 188)	7153	20 6370	–	–	–	60 1460	–	70 1630	70 1630	④
		37261	7153	7164	61 5390	–	61 0080	60 1460	–	70 1630	70 1630	–
		37431	7153	7164	21 5000	–	61 0080	60 1460	–	26 3730	26 3730	–
		37432	7153	7164	25 8270	–	61 0080	60 1460	–	26 3730	26 3730	–

Explanation of symbols for the column "Conversion"

① DELTA with 6603/66031
② Digital with 6080
③ Digital with 6081
⑤ Digital with 6090/60901
⑥ Digital with 60902

} Can be converted by your authorized Märklin dealer

④ Digital conversion only by Märklin

The 70 1630 close coupler is only available in packages of 50 pieces under the catalog number 7203 (see page 126).

100 Years: A special type of Museum.

märklin
museum

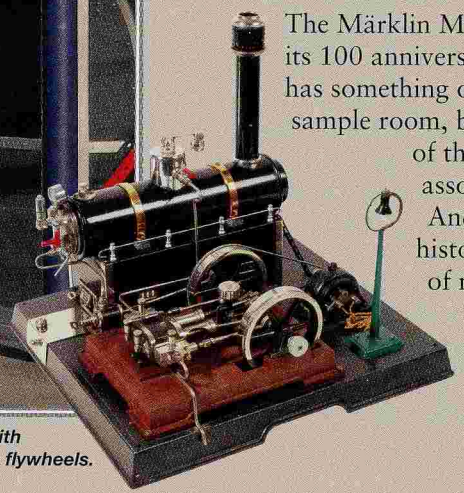


It began in the sample room, in which Märklin presented its available products. Here dealers could examine the toys in their original condition and make selections. This was very important at that time, because the catalogs with their simple black and white illustrations could not fully depict the toys in all of their beauty. Over time the Märklin Museum accessible to everyone developed out of the sample room intended only for dealers.



The voltage could be regulated with a carbon filament lamp resistance regulator.

The Märklin Museum is therefore celebrating its 100 anniversary in the year 2000. It still has something of the original tradition of the sample room, because even today large parts of the current Märklin and Trix assortments are presented here. And it shows the 140 year old history of the firm in the form of numerous historic models that will enthrall collectors, connoisseurs and railroad enthusiasts.



Model of a live steam engine from the 1930s with high and low pressure cylinders and 2 massive flywheels.



The display and demonstration layouts, such as a small Maxi outdoor layout and different H0 layouts, form the center of our museum. C Track and the Digital system are available to try out. And in our movie theater you can see the current new items in action.

Another attraction is the Museum Shop. Here you will find models that are available only in the Museum in a one-time series every year (as long as supplies last). These museum models are a real secret tip for many collectors, in any event an enduring souvenir of the visit at Märklin and something to enrich any model railroad layout. Besides the exclusive models in all gauges there is an attractive Märklin Leisure and Gift Collection as well as take-alongs, books and videos.



The TK 1021 was a windup steam locomotive produced from 1926 to 1929.

American beer car 2960/0, made from 1910 to 1929.



With its many themes, the display and demonstration layouts as well as the Museum Shop, t he Märklin Museum is an outing for the whole family and always a reason to come to Göppingen.



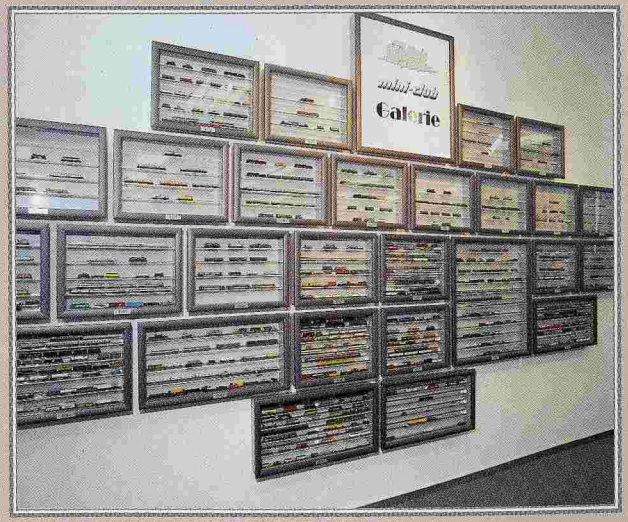
The CCS 66/12921 "Crocodile" was available from 1933 to 1937.



You are cordially welcome at Holzheimer Straße 8. Simply follow the signs "Märklin-Museum" in Göppingen.

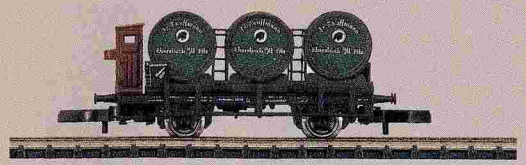


Hours of operation:
Monday to Friday from 9:00 AM to 4:00 PM.
Saturdays from 9:00 AM to 2:00 PM
(except holidays).



I

Märklin Z Museum Car Set for 1999.
Barrel car with brakeman's cab. Privately owned by Fr. Kauffmann Company, Ebersbach a.d. Fils, Germany. Used on the Royal Württemberg State Railways (K.W.St.E.). Cylindrical barrels made of real wood. Separately appllied ladders. Barrels individually imprinted. Length over buffers 40 mm (1-9/16″). 1 Benz flatbed truck loaded with 3 barrels made of real wood. Length 30 mm (1-3/16″).





An appropriate package in the form of a tin decorated with an historical theme about the Fr. Kauffmann Company rounds out this museum car set.







NEM II

Märklin H0 Museum Car Set for 1999.
German State Railroad Company (DRG) type Gi boxcar painted and lettered for the Württemberg Landessparkasse of Stuttgart, Göppingen branch. Brakeman's platforms at both ends. Separately applied roof vents. Length over buffers 10.6 cm (4-3/16″). 1 Württemberg Landessparkasse Benz armored truck with separately applied roof vent. Length 7.0 cm (2-3/4″).
DC wheel set 70 0630

I

58541 Märklin 1 Museum Car for 1999.
Special, privately owned car for transporting liquid food products (wine, grape juice), used on the Royal Württemberg State Railways (K.W.St.E.). Barrels made of turned wood. Minimum radius for operation is 600 mm (23-5/8″). Length over buffers 27.5 cm (10-13/16″).



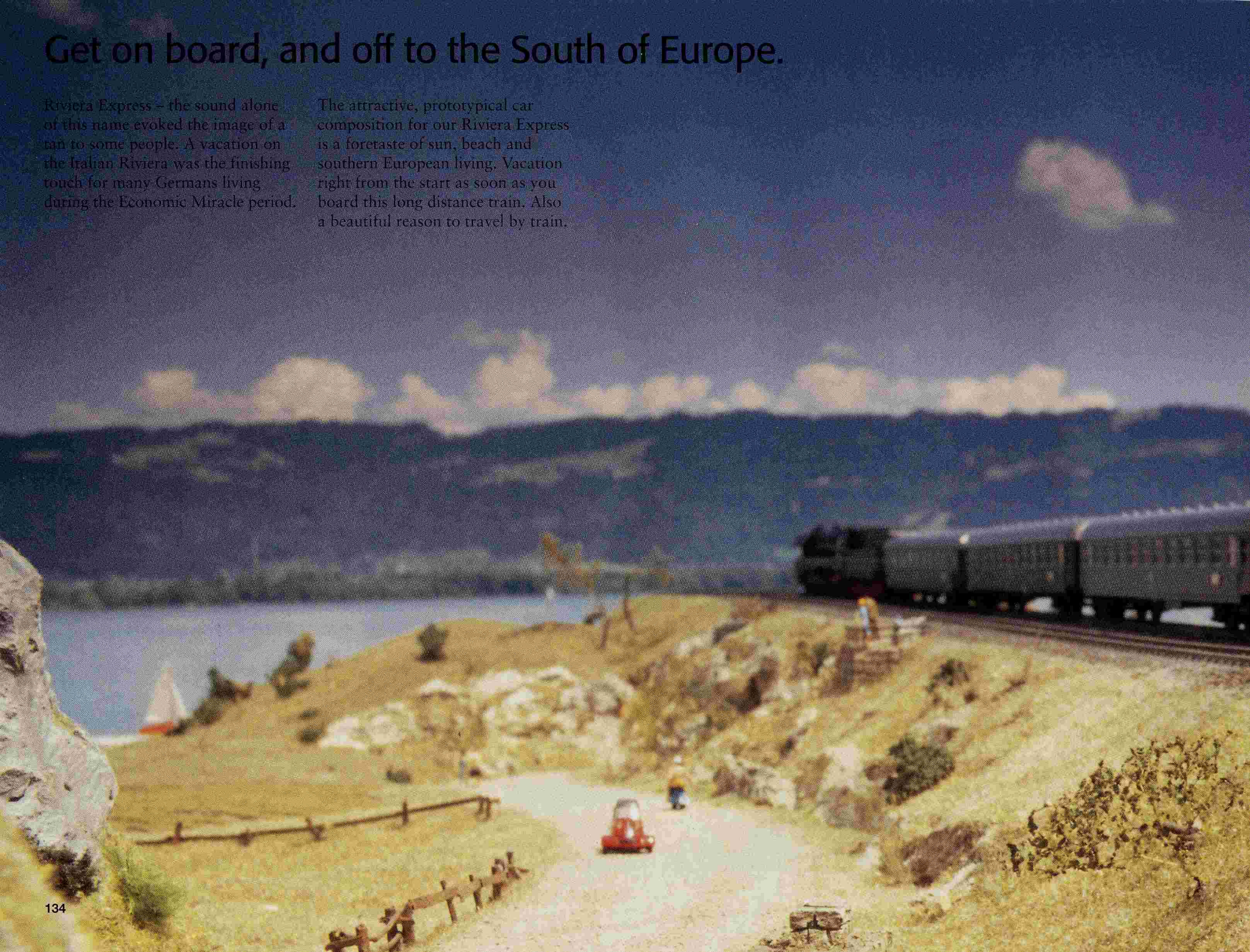
1999 Maxi Museum Car.
Two-axle passenger car painted as a circus car and lettered "Circus Maximale". Doors on the ends that can be opened. Removable roof. Minimum radius for operation is 600 mm (23-5/8″). Length over buffers 27.5 cm (10-13/16″). Clown figure included.



Get on board, and off to the South of Europe.

Riviera Express – the sound alone of this name evoked the image of a tan to some people. A vacation on the Italian Riviera was the finishing touch for many Germans living during the Economic Miracle period.

The attractive, prototypical car composition for our Riviera Express is a foretaste of sun, beach and southern European living. Vacation right from the start as soon as you board this long distance train. Also a beautiful reason to travel by train.



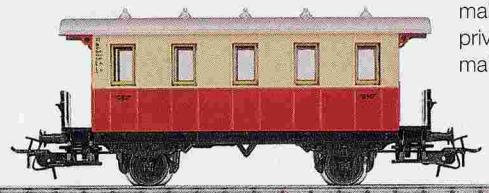


Passenger Cars

Cars of Privately Owned Railroads

HOBBY
7323
I – V

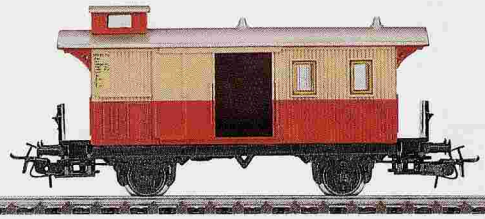
4107 Passenger Car.
RELEX couplers. Length over buffers 11.0 cm (4-3/8″).
DC wheel set 70 0600



Thanks to their fresh paint scheme the models of a privately owned passenger car and a baggage car with conductor's compartment are marvelously suitable for use in making up a museum train or a private rail connection at the big main lines.

HOBBY
7323
I – V

4108 Baggage Car.
With cupola for conductor. RELEX couplers. Length over buffers 11.0 cm (4-3/8″).
DC wheel set 70 0600

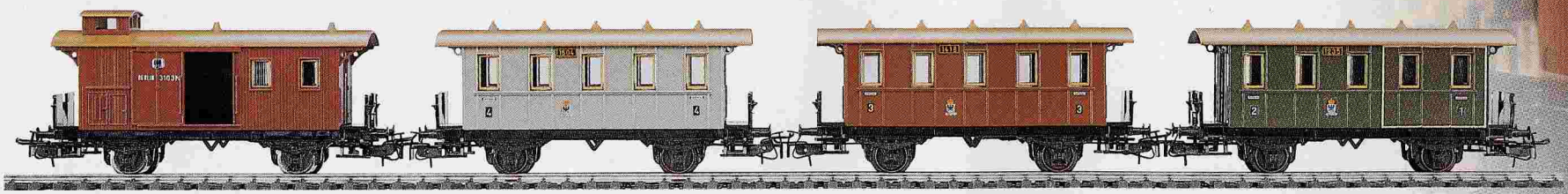


Royal Prussian Railroad Administration (KPEV)

HOBBY
7323
I

4035 "Prussian Passenger Car" Car Set.
Set consists of 4 passenger cars: 1 passenger car 1st/2nd class, 1 passenger car 3rd class, 1 passenger car 4th class and 1 baggage car with cupola for conductor's compartment. RELEX couplers. Total length 45.0 cm (17-3/4″).
DC wheel set 70 0600

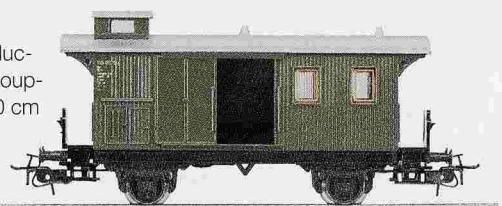
All cars in special version.
Not available separately.



German Federal Railroad (DB)

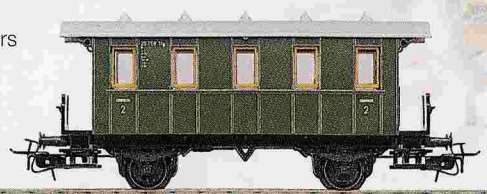
HOBBY
7323
I – V

4038 Baggage Car.
With superstructure for conductor's compartment. RELEX couplers. Length over buffers 11.0 cm (4-3/8″).
DC wheel set 70 0600



HOBBY
7323
I – V

4039 Passenger Car.
Type Bi. 2nd class.
RELEX couplers.
Length over buffers 11.0 cm (4-3/8″).
DC wheel set 70 0600




Berlin
2401

24 cm (9-1/2") Express Train Passenger Cars

Tinplate in a perfect finish.
The classic Märklin cars made of sheet metal get their typical character from the very special method of manufacturing used to produce them. In the beginning of the process are extensively imprinted sheets of steel that already have the complete color scheme for each car. Powerful machines and special tools are used with many steps to cut the cars' components from the sheet metal, and then stamp, curve, fold and emboss these parts. These parts are supplemented with additional details and assembled by hand by talented workers using ingenious jigs.

German Federal Railroad (DB)

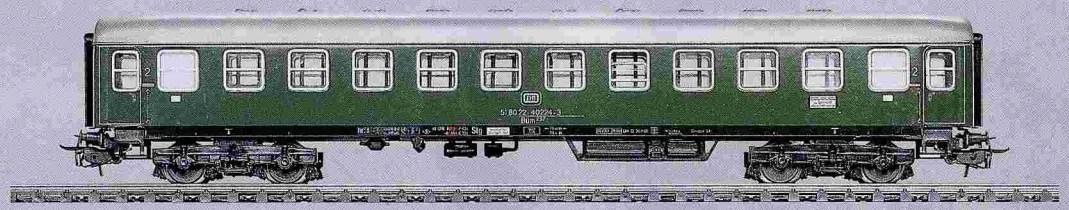
At 24 cm (9-1/2") *the express passenger cars in the HOBBY program are especially well suited for operation on layouts where space does not permit long station platforms. This allows operation of interesting trains with many cars*



In the German Federal Railroad prototype the elegant cobalt blue color among the otherwise green express coach rolling stock indicated the 1st class compartments.

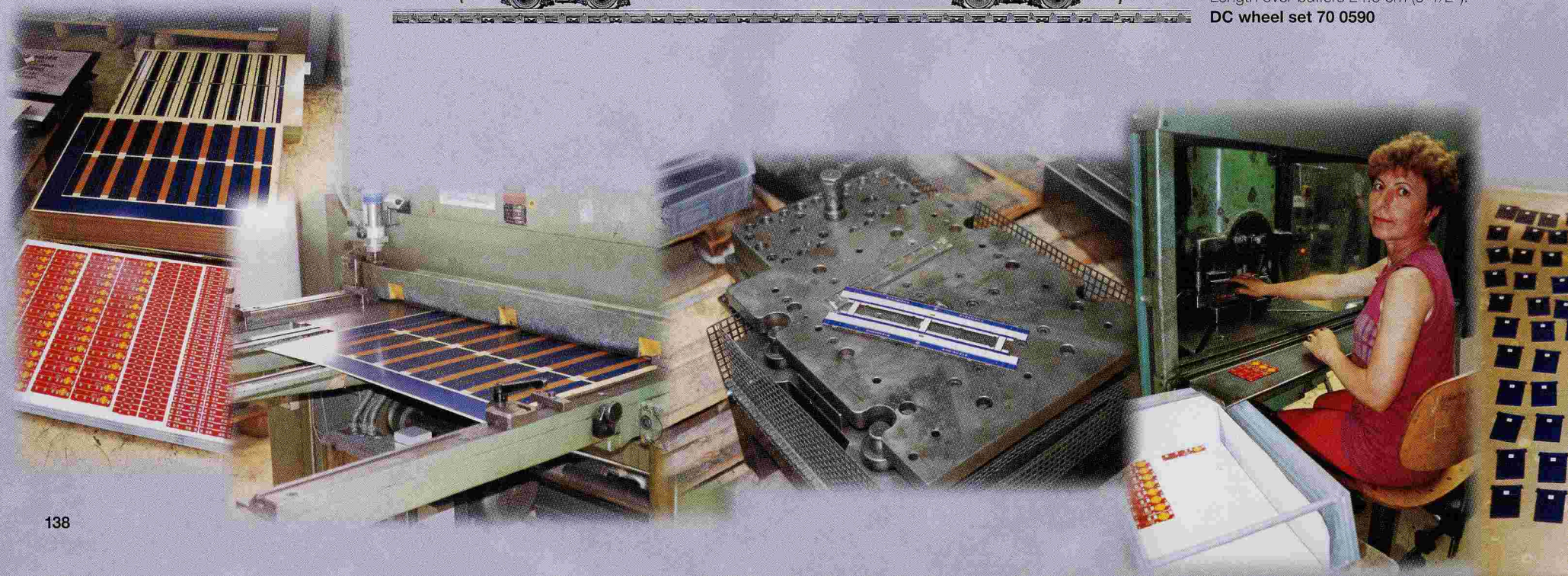
HOBBY 7077 IV

4051 Express Train Passenger Car.
Type Aüm 202. 1st class. RELEX couplers.
Length over buffers 24.0 cm (9-1/2").
DC wheel set 70 0590



HOBBY 7077 IV

4052 Express Train PassengerCar.
Type Büm 232. 2nd class. RELEX couplers.
Length over buffers 24.0 cm (9-1/2").
DC wheel set 70 0590



German Federal Railroad (DB)



The type Avüm 111 cream/red 1st class cars were formerly run in Trans-Europe-Express trains and are operated today in Intercity and EuroCity trains.



HOBBY 7320 IV

4085 TEE/IC Compartment Car.
Type Avüm 111. 1st class. RELEX couplers. Length over buffers 24.0 cm (9-1/2″).
DC wheel set 70 0590

HOBBY oo IV

4089 TEE/IC Compartment Car.
Same as 4085 but with marker lights. Maintenance-free LED's.
DC wheel set 70 0590



HOBBY 7322 IV

4090 TEE Vista Dome Car.
Type ADüm 101. 1st class. RELEX couplers. Length over buffers 24.0 cm (9-1/2″).
DC wheel set 70 0590

The German Federal Railroad used the type ADüm vista dome cars in the deluxe trains on the Rhine route. These cars were later sold on account of their high maintenance costs and belonged for a time to the Swiss travel agency "Mittelthurgau".

German Sleeping Car and Dining Car Company (DSG)

The German Sleeping and Dining Car Company (DSG) type WRümh dining car was operated in the TEE trains as well as the first Intercity trains which were reserved for 1st class only. The DSG symbol was later removed. Since then this company has acquired a new name: It now is called Deutsche Service-Gesellschaft der Bahn mbH (German Service Company of the Railroad, Ltd.).

HOBBY 7320 IV

4087 TEE/IC Dining Car.
Type WRümh 132. RELEX couplers. Length over buffers 24.0 cm (9-1/2″).
DC wheel set 70 0590





24 cm (9-1/2″) Express Train Passenger Cars

German Federal Railroad (DB)

HOBBY 7077 IV

4044 Express Train Baggage Car.
Type Dyl 961. RELEX couplers.
Length 24.0 cm (9-1/2″).
DC wheel set 70 0600





HOBBY 7077 IV

4111 Express Train Passenger Car.
Type Aüm 202. 1st class. RELEX couplers.
Length 24.0 cm (9-1/2″).
DC wheel set 70 0590

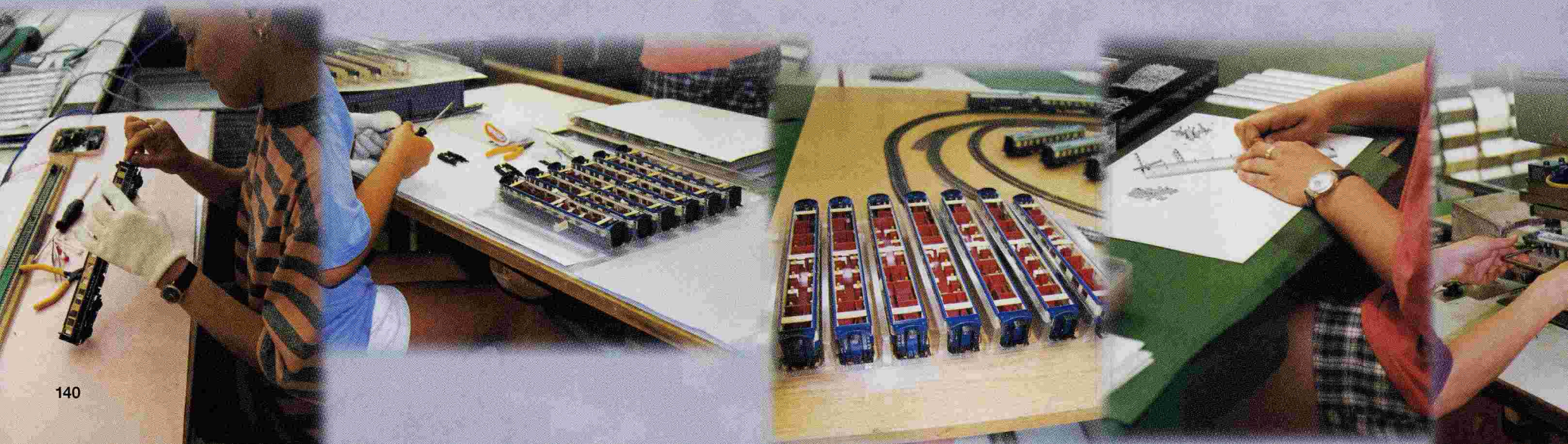
You can spot 1st class cars on the German Federal Railroad by the yellow line above the windows.

HOBBY 7077 IV

4112 Express Train Passenger Car.
Type Büm 232. 2nd class RELEX couplers. Length over buffers 24.0 cm (9-1/2″).**DC wheel set 70 0590**



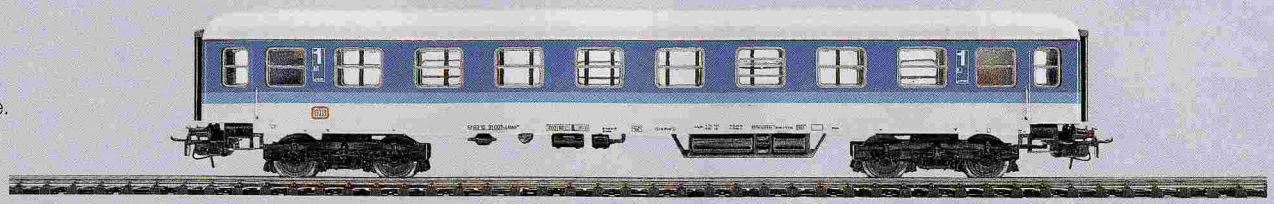
The right steam locomotive for these passenger cars (Märklin-Modell 3085) can be found on page 68.



German Federal Railroad (DB)

HOBBY 7077 V

4027 InterRegio Coach.
Type Aim 260 in new color scheme. 1st class. RELEX couplers. Length over buffers 24.0 cm (9-1/2″).
DC wheel set 70 0590



See fold-out page at end of catalog for explanation of drawings.

HOBBY 7077 V

4032 InterRegio Coach.
Type Bim 263 in new color scheme. 2nd class. RELEX couplers. Length over buffers 24.0 cm (9-1/2″).
DC wheel set 70 0590

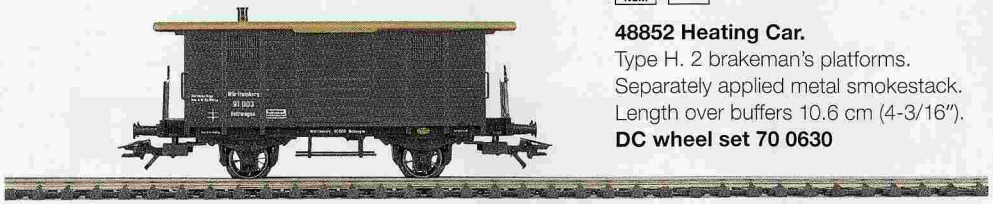




Open Platform Cars

Express Train Open Platform Cars for the Royal Württemberg State Railways (K.W.St.E.)

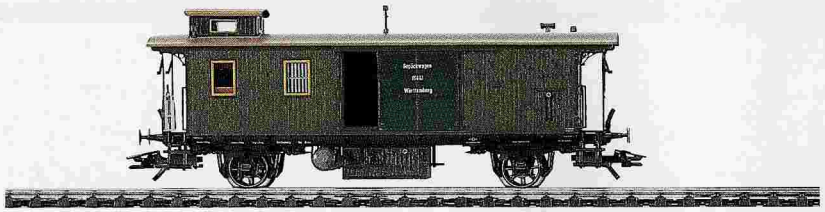
Adapted from American prototypes of Pullman open seating coaches, the Württemberg open platform cars were something quite special in German railroading: Instead of individual compartments, they offered a single large open seating area with an aisle. These popular cars lasted well into the German State Railroad period, despite their singular design. And finally, it is not farfetched to consider this transportation concept with the open seating area and an aisle down the middle of the car as the prototype for the modern InterCity open seating coach.



NEM I

48852 Heating Car.
Type H. 2 brakeman's platforms. Separately applied metal smokestack. Length over buffers 10.6 cm (4-3/16″).
DC wheel set 70 0630

The steam heat for passenger cars was supplied with fresh steam from a line coming back from the locomotive. In the winter this was often inadequate for the passengers. For that reason so-called heating cars were included in the consists of express trains to relieve the locomotive of that task and to improve the heating efficiency. Externally these cars could be recognized by their smokestack.



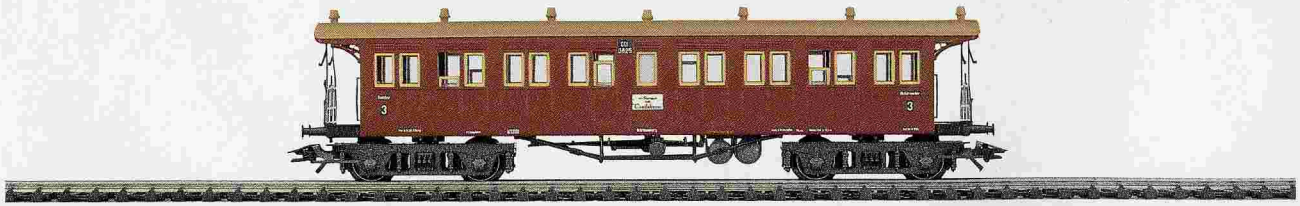
NEM I

4212 Baggage Car.
Type Gep (Pwi Wü 09) with service area and pet compartment. Glassed in cupola. Sliding doors that can be opened. Length over buffers 13.0 cm (5-1/8″).
DC wheel set 70 0630

NEM 7333 I

42101 Coach.
Type BCCi. 2nd and 3rd class. Separately applied metal roof vents. Etched metal end platforms and roof supports. Folding footplates. Length over buffers 19.1 cm (7-1/2″).
DC wheel set 70 0630



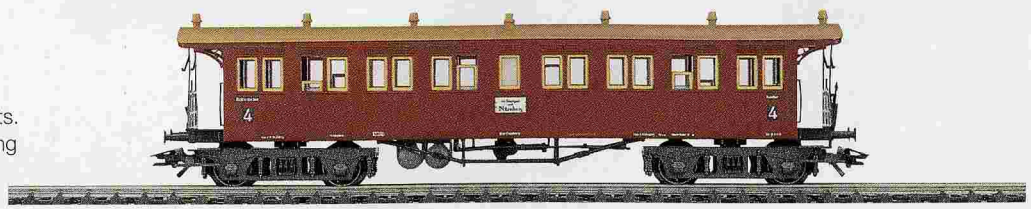


NEM 7333 I

42131 Coach.
Type CCi. 3rd class. Separately applied metal roof vents. Etched metal end platforms and roof supports. Folding footplates. Length over buffers 18.3 cm (7-3/16″).
DC wheel set 70 0630

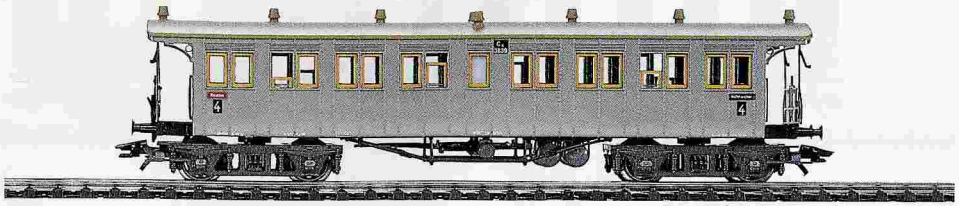
NEM 7333 I

42141 Coach.
Type C⁴. 4th class. Separately applied metal roof vents. Etched metal end platforms and roof supports. Folding footplates. Length over buffers 18.3 cm (7-3/16″).
DC wheel set 70 0630



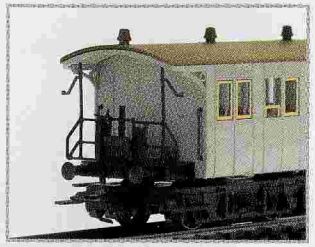
The Royal Württemberg State Railways class T 18 tank locomotive (Märklin models 33071/37071) goes well with the Württemberg open platform cars and can be found on page 56.

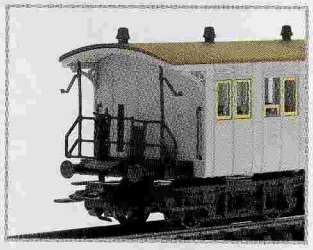
Express Train Open Platform Cars for the Royal Württemberg State Railways (K.W.St.E.)



NEM 7333 I

4214 Coach.
Type C⁴ (C4id Wü 99). 4th class.
Length over buffers 18.3 cm (7-3/16″).
DC wheel set 70 0630

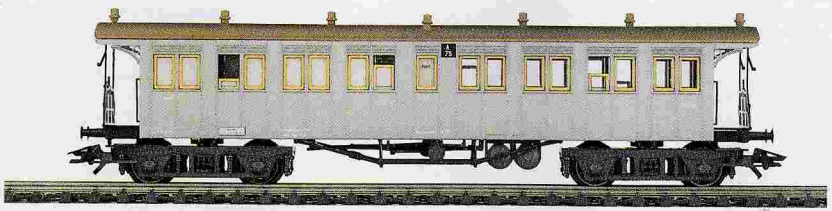




N NEM 7333 I

42142 Physician's Coach.
Royal Württemberg State Railways (K.W.St.E.) type A 75. Separately applied metal roof vents. Etched metal platform railings and roof supports. Hinged foot plates. Length over buffers 18.3 cm (7-3/16″).
DC wheel set 70 0630

The K.W.St.E. made use of this physician's coach in order to be able to give help for railroad accidents as quickly and effectively as possible right at the location of the accident. It is in a way the forerunner of today's emergency services trains.

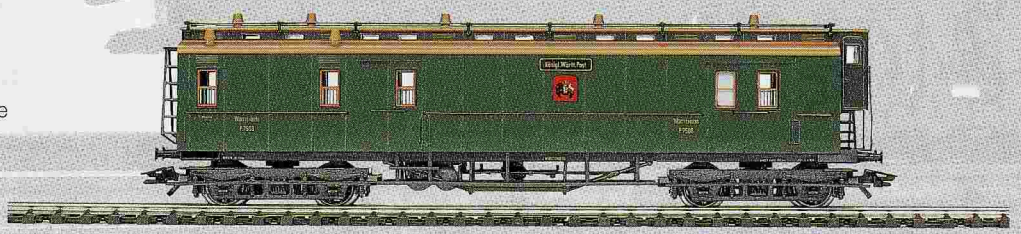


Royal Württemberg Postal System

Cars such as this one actually made it possible for the postal system to master relatively quickly the constant increase in mail. Letters and cards to delivery post offices were sorted in it during the trip. These cars had a destination mailbox on their sides.

NEM 7333 I

4229 Express Train Mail Car.
Type P (Post 4). Running boards the entire length of the car. Numerous separately applied details. Length over buffers 19.1 cm (7-1/2″).
DC wheel set 70 0630



Express Train Passenger Cars

Royal Bavarian State Railroad (K.Bay.St.B.)

Most of the passenger cars can be equipped with interior lighting. Please see pages 178/179 for this.



41351 Express Train Passenger Car.
Type CCü. 3rd class. Length over buffers 22.1 cm (8-11/16″).
DC wheel set 70 0630



41361 Express Train Passenger Car.
Type ABCCü. 1st/2nd/3rd class. Length over buffers 23.2 cm (9-1/8″).
DC wheel set 70 0630

The Royal Bavarian State Railways class S 3/6 express locomotive (Märklin models 33181/37181, see page 56) is the appropriate addition to these Bavarian express train passenger cars.



41371 Express Train Baggage Car.
Type PPü. Length over buffers 20.0 cm (7-7/8″).
DC wheel set 70 0630

Car Set

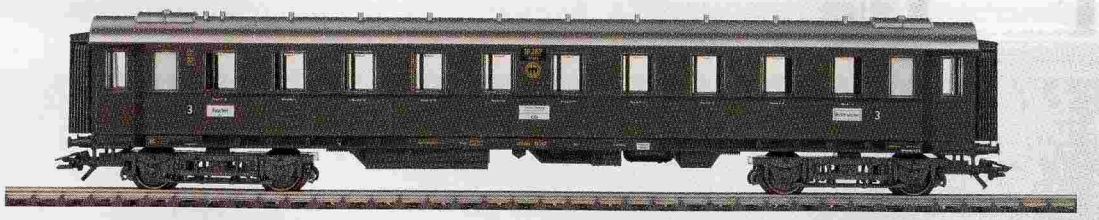
märklin HO

German State Railroad Company (DRG) Express Train Passenger Cars



The DRG class 03 express locomotive (Märklin model 33951/37951, see page 64) is the appropriate unit for the 42751 car set.





NEM 7335 II

42751 "German State Railroad Company Express Train Passenger Car" Car Set.
Set consists of 4 different express train passenger cars. 1 type B4i passenger car, 2nd class. 2 type C4ü passenger cars, 3rd class. 1 type Pw4ü baggage car. Total length over buffers 97.5 cm (38-3/8").
DC wheel set 70 0580

All cars in special version.
Not available separately.



Car Set

German State Railroad Company (DRG)
Long Distance Express Train Passenger Cars

The fabled Nibelungen treasure was the symbol for one of Europe's most famous luxury trains. The first "Rheingold" set off on its international trip over the 662 kilometer (414 miles) route from Amsterdam/Hook of Holland to Basle on May 15, 1928. It was pulled by a Bavarian S 3/6 Pacific locomotive.The salon cars painted in cream and violet were patterned after the prototype of the famous American Pullman parlor cars and offered luxurious open seating accomodations with or without a galley. Two cars were always served from one galley. The interiors came from the designs of famous artists and achitects. Technically these cars were the most advanced that the railroad had to offer at that time. At a length of 23.5 meters (77 feet) they were longer than any German passenger car built up to that time.There was a total of 26 cars built and at a weight of 50 to 57.2 tons they were considerably heavier than normal express passenger cars. Their trucks were a special design. There were also 3 baggage cars, all in violet and 19.68 meters (64 feet) long. The train ran with 1st and 2nd class cars.

In the fall of 1939 the "Rheingold" disappeared from the schedules. In 1951 the German Federal Railroad brought the tradition back to life. For three decades this train served as the flagship for the German Federal Railroad. With the start of the summer schedule for 1987 the "Rheingold" disappeared from German rails.





These "Rheingold" cars reproduce the train as it was in the 1930s. One of the most beautiful locomotives in use at that time, the DRG class 18.4, is available as 33184/37184, a suitable model to go with this train. Please see page 56.



4228 "Rheingold" Car Set.
5 long distance express train passenger cars: 1 type SA4ü-28 salon car, 1st class. 1 type SA4ük-28 salon car with galley, 1st class. 1 type SB4ü-28 salon car, 2nd class. 1 type SB4ük-28 salon car with galley, 2nd class. 1 type SPw4ü-28 baggage car. Interiors with lighted table lamps. Lighting with maintenance-free LEDs. Constant, current-conducting connection between the cars by means of special plug-in, fixed close couplers. Baggage car with 4 sliding doors that can be opened. Total length over buffers 131.0 cm (51-9/16").
DC wheel set 70 0600

All cars in special version.
Not available separately.



These models are offered by Trix (T21214) for two-rail DC systems.







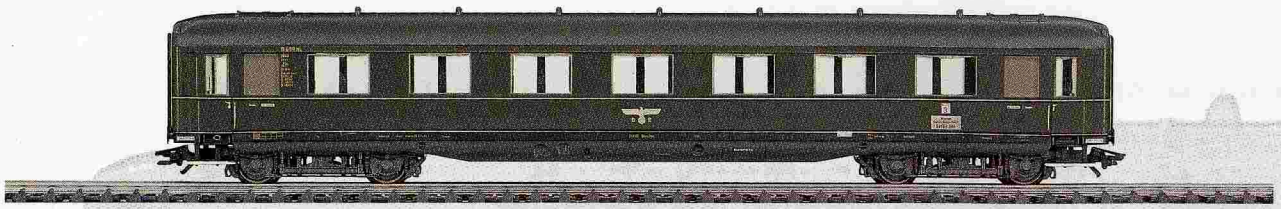


See fold-out page at end of catalog for explanation of drawings.



Schürzenwagen / Skirted Passenger Cars

German State Railroad Company (DRG) Express Train Passenger Cars



NEM 73150 II

43201 Express Train Passenger Car.
Type AB4ü. 1st and 2nd class. Prototypical roof arrangement. Ready for installation of current-conducting couplers. Length over buffers 25.1 cm (9-7/16″).
DC wheel set 70 0580

This model is being offered by Trix (T23349) for 2-rail DC systems

NEM 73150 II

43221 Express Train Passenger Car.
Type C4ü. 3rd class. Prototypical roof arrangement. Ready for installation of current-conducting couplers. Length over buffers 24.4 cm (9-5/8″).
DC wheel set 70 0580

This model is being offered by Trix (T23348) for 2-rail DC systems.





NEM 73155 II

43241 Dining Car.
Type WR4ü, Mitropa 1215, used on the German State Railroad Company (DRG). Prototypical roof arrangement. Ready for installation of current-conducting couplers. Length over buffers 27.0 cm (10-5/8″).
DC wheel set 70 0580

This model is being offered by Trix (T23350) for 2-rail DC systems.

NEM 73155 II

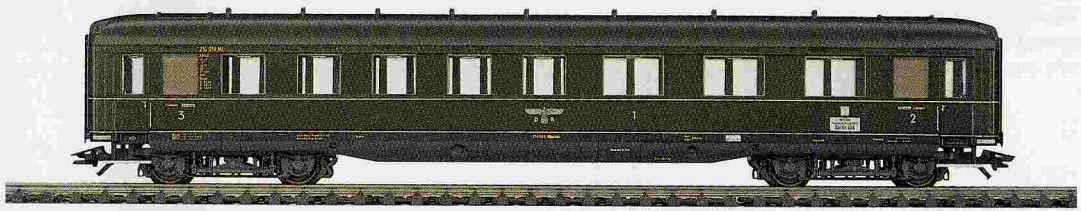
43251 Sleeping Car.
Type WL4ü, Mitropa 22079, used on the German State Railroad Company (DRG). Prototypical roof arrangement. Ready for installation of current-conducting couplers. Length over buffers 27.0 cm (10-5/8″).
DC wheel set 70 0580

This model is being offered by Trix (T23351) for 2-rail DC systems.





43211 Express Train Passenger Car.
German State Railroad Company (DRG) type BC4ü. 2nd and 3rd class. Prototypical roof details. Ready for installation of current-conducting couplers. Length over buffers 24.4 cm (9-5/8″).
DC wheel set 70 0580



43231 Express Train Passenger Car.
German State Railroad Company (DRG) type ABC4ü. 1st, 2nd and 3rd class. Prototypical roof details. Ready for installation of current-conducting couplers. Length over buffers 24.4 cm (9-5/8″).
DC wheel set 70 0580



43261 Mail Car.
German State Postal System type Post4ü, used on the German State Railroad Company (DRG). Prototypical roof details with skylights. Ready for installation of current-conducting couplers. Length over buffers 26.3 cm (10-3/8″).
DC wheel set 70 0580

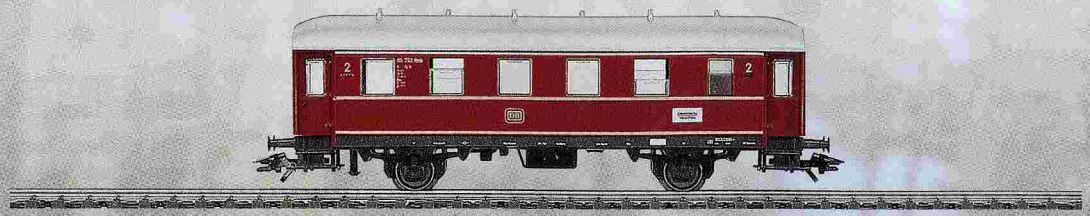
These DRG express train passenger cars go well with the class E 18 electric locomotive (Märklin models 33681/37681, see page 80).

Standard Design Branch Line Cars

German Federal Railroad (DB) Branchline Cars

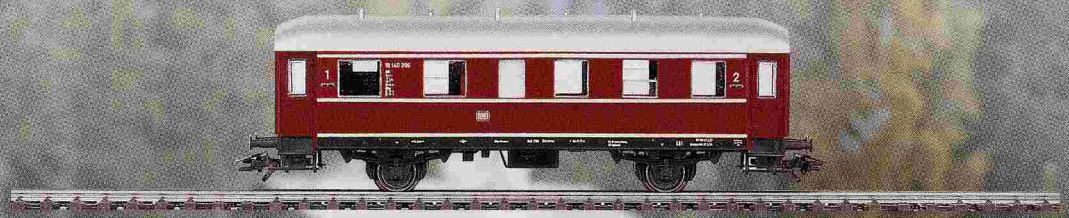
At the time they were ordered, a number of standard design branch line cars were planned as trailer units for powered railcars. These cars were all equipped with their own heating and railcar paint scheme. Towards the end of the 1950s, when the older storage battery-powered railcars were being retired, a number of the trailer cars used with them were brought back into the passenger car pool.

The class 86 tank locomotive is the appropriate unit for the DB branch line cars and can be found on page 49.



NEM III

4335 Passenger Car.
Type Bie standard design branch line car. 2nd class. Length over buffers 14.9 cm (5-7/8″).
DC wheel set 70 0580



NEM III

43351 Passenger Car.
Type ABie-34 standard design branch line car. 1st and 2nd class. Length over buffers 14.9 cm (5-7/8″).
DC wheel set 70 0580

Passenger Cars

märklin HO

**"Donnerbüchsen ("Thunder Boxes") –
German Federal Railroad (DB) Standard Design Cars**

The prototypes for the two-axle cars for normal passenger trains originally had wood roofs and interior walls. Later they were built entirely of steel. The class 29 was built right from the start entirely of metal. By today's standards these cars were very noisy and rumbled a great deal. A popular nickname for them as a result was "Thunderboxes". On the German Federal Railroad they were indispensable in the postwar period for commuter and branch line traffic.

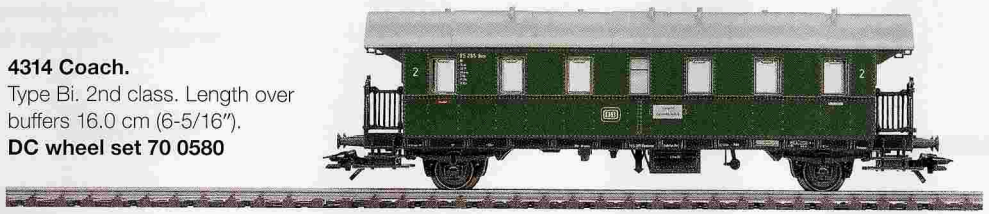


NEM 7318 III

4313 Coach.
Type ABi. 1st and 2nd class.
Length over buffers
16.0 cm (6-5/16").
DC wheel set 70 0580

NEM 7318 III

4314 Coach.
Type Bi. 2nd class. Length over buffers 16.0 cm (6-5/16").
DC wheel set 70 0580



NEM 7318 III

4315 Baggage Car.
Type Pwi. 4 sliding doors that open. Side running boards. Length over buffers 16.0 cm (6-5/16").
DC wheel set 70 0580



oo NEM III

4316 Baggage Car.
Same as 4315, but with marker lights. Maintenance-free LED's.
DC wheel set 70 0580







The DB class 24 passenger locomotive with a tender (Märklin model 3003) is an appropriate unit for the "Thunder Box" cars and can be found on page 52.

Passengers Cars

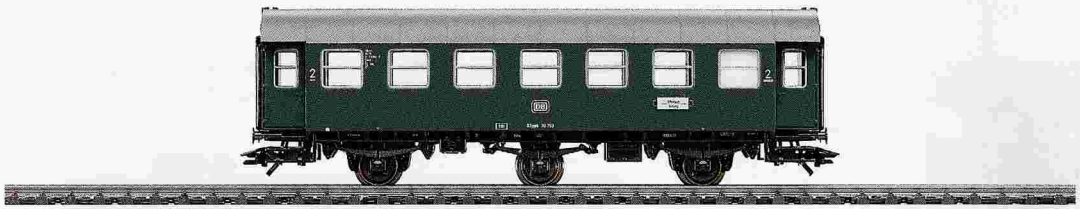
Three-Axle Rebuilt Cars of the German Federal Railroad (DB)

After World War II the German Federal Railroad decided on an extensive investment in a rebuilding program, in order to turn existing large numbers of German State Railroad cars, which were often in damaged condition, into modern material at the lowest possible cost. These new cars were always operated in pairs in passenger trains for commuter and suburban traffic.

NEM 7317 III

4317 Passenger Car.
Type AB3ygeb 756. 1st and 2nd class.
Length over buffers 15.2 cm (6″).
DC wheel set
2 x 70 0580
1 x 40 6240





NEM 7317 III

4318 Passenger Car.
Type B3ygeb 761. 2nd class.
Length over buffers 15.2 cm (6″).
DC wheel set
2 x 70 0580
1 x 40 6240

Perfect layout atmosphere with different lights. Turn to page 282.



NEM 7317 III

4319 Passenger Car with Baggage Compartment.
Type BD3yg 766. 2nd class.
Length over buffers 15.2 cm (6″).
DC wheel set
2 x 70 0580
1 x 40 6240

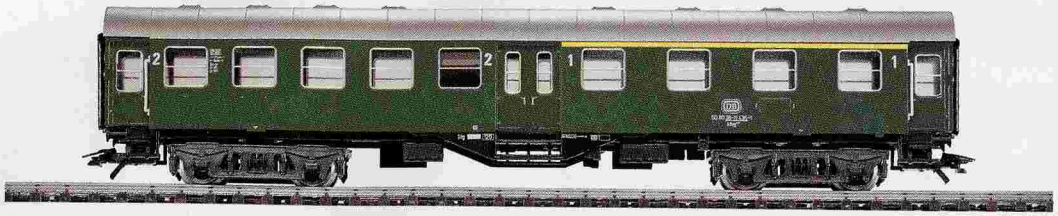




The rebuilt cars are always used on the DB as permanently coupled pairs of cars. Such a prototypical composition can be equipped with the 7317 lighting kit.

Four-axle Rebuilt Cars of the German Federal Railroad (DB)

A total of 1,821 cars were rebuilt in the late 1950s, and part of this program was that the car frames were altered to a standard length of 19.45 meters (63' 10-1/8"). The introduction of weather tight diaphragms between cars was an important detail for quicker distribution of passengers during station stops. In addition, all classes were equipped with upholstered seats for the first time. Like the three-axle rebuilt cars, the four-axle versions were built using old German State Railroad and provincial railroad cars.



NEM 7329 IV

4131 Coach.
Type AByg 503. 1st and 2nd class. Length over buffers 22.4 cm (8-3/4").
DC wheel set 70 0580

NEM 7329 IV

4132 Coach.
Type Bgy 515. 2nd class. Length over buffers 22.4 cm (8-3/4").
DC wheel set 70 0580





NEM 7329 IV

4133 Coach with Baggage Compartment.
Type BDyg 533. 2nd class. Length over buffers 22.4 cm (8-3/4").
DC wheel set 70 0580

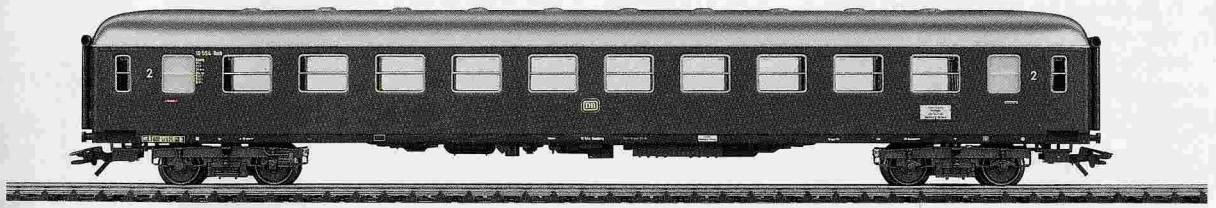
The DB class 212 general purpose diesel hydraulic locomotive (Märklin model 3072) is an appropriate unit for rebuilt cars and can be found on page 70.


Gelato
Gelato
Gelato
10 001

Car Set



The route for the D 167 "Riviera Express" took passengers from Hamburg-Altona to Ventimiglia on the Italian Riviera and back. The class 10 was used for motive power to keep the travel times as short as possible on the very well constructed line between Hannover and Frankfurt. Here it was able to demonstrate its abilities to the fullest. An oil standpipe just for this locomotive was installed on the station platform at the intermediate stop in Bebra to allow refueling in the shortest possible time.







N NEM 7359 7330 7380 73155 73150 III

42941 "Riviera Express" Car Set.
Set consists of 5 different German Federal Railroad and Italian State Railways (FS) express train passenger cars. 1 each 1st class passenger car, 1 each 2nd class passenger car, 1 each FS 2nd class passenger car, 1 dining car, 1 baggage car. Total length over buffers 135.8 cm (53-7/16").
DC wheel set 70 0580

All cars in special version.
Not available separately.



The class 10 express steam locomotive (Märklin models 34080/37080) goes well with this car set and can be found on page 66.

The 42941 car set is being produced in a one-time series only in 1999.

“Schürzenwagen” / Skirted Cars

German Federal Railroad (DB)

Regular production of the streamlined express train passenger cars began in 1939. These cars entered railroad history as the “Schürzenwagen” (“skirted cars”) due to the side fairings that extended below the cars’ bottom framework and over the buffer beams. The use of modern welding technology allowed a considerable reduction in the weight of the cars. The combination of their very modern design and equipment made the skirted cars popular with both passengers and crew members right up through the beginning of the 1980s.

All cars are ready for installation of 7319 current-conducting couplers.



NEM 73150 IV

43200 Express Train Passenger Car.
Type Aüe 310. 1st class. Length over buffers 25.1 cm (9-7/8″).
DC wheel set 70 0580

NEM 73150 IV

43210 Express Train Passenger Car.
Type ABüe 334. 1st and 2nd class. Length over buffers 24.4 cm (9-39/64″).
DC wheel set 70 0580



German Federal Railroad (DB)

The German Federal Railroad class V 200 diesel hydraulic locomotive (Märklin models 33803/37803) is the appropriate unit for the "Schürzenwagen" passenger cars and can be found on page 74.

NEM 73150 IV

43220 Express Train Passenger Car.
Type Büe 366. 2nd class. Length over buffers 24.4 cm (9-39/64").
DC wheel set 70 0580



All cars are ready for installation of 7319 current-conducting couplers.



NEM 73150 IV

43240 Dining Car.
Type WRüge 152. Length over buffers 27.0 cm (10-5/8").
DC wheel set 70 0580

NEM 73155 IV

43250 Sleeping Car.
Type WLüg(e). Length over buffers 27.0 cm (10-5/8").
DC wheel set 70 0580





German Federal Postal System

NEM 73155 IV

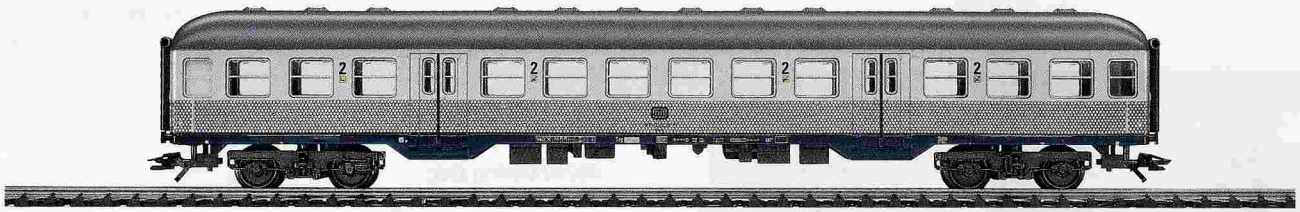
43260 Mail Car.
Type Poste-b/21. Length over buffers 26.3 cm (10-3/8").
DC wheel set 70 0580

"Silberlinge"

The unpainted exterior skin of stainless steel with the peacock's eye pattern under the windows gave the German Federal Railroad commuter cars, which replaced older rolling stock starting in 1960, the name "Silberlinge" ("Silver Coins").

In the prototype a large number of 2nd class cars were equipped with baggage and driver compartments at one end which were later expanded to a complete engineer's cab with destination signs. Thanks to the driver's compartments, these cars can be used in push/pull service with locomotives equipped for this type of operation. This saves the time required to turn locomotives at the end stations. On main lines and branchlines, trains of Silberlinge often run with class 111, 140, 141, 212 or 216 locomotives. The modern, three-phase class 120 locomotive also occasionally pulls a push/pull train.

Recently the Silberlinge are being replaced more and more on lightly traveled routes with the new class 628 railcars. In urban areas, however, they are still often seen even in S-Bahn traffic, in the Rhine-Main area or in the greater Hamburg area, for example.

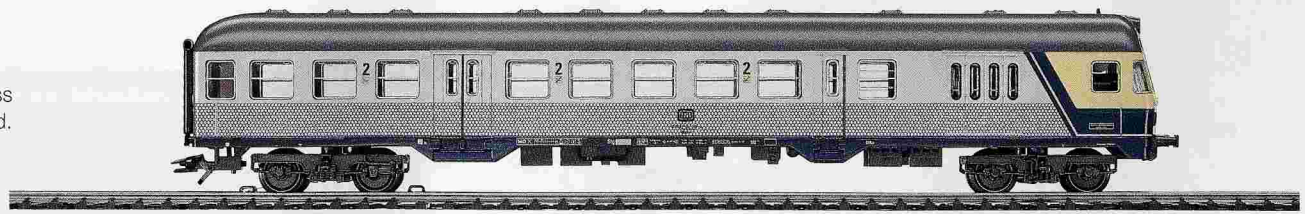


NEM 7330 IV

4256 Commuter Car.
German Federal Railroad (DB) type Bnb 719.
2nd class. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580

NEM 7330 IV

4257 Commuter Car with Control Cab.
German Federal Railroad (DB) type BDn 735. 2nd class with baggage compartment. Lighted destination board. Lighted destination sign on the end. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580



All cars have adjustable buffers and are ready for installation of 7319 current-conducting couplers.



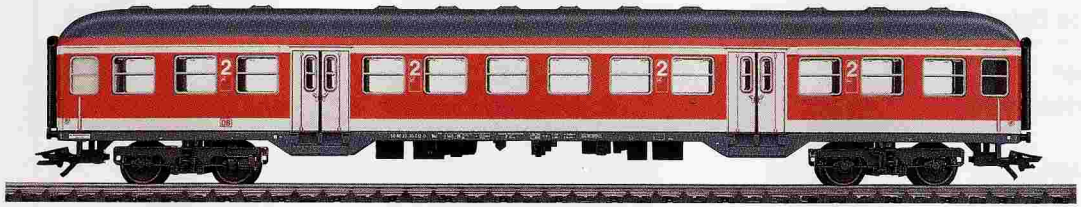
When operated control car first, triple white headlights shine.



When operated control car last, dual red marker lights shine.

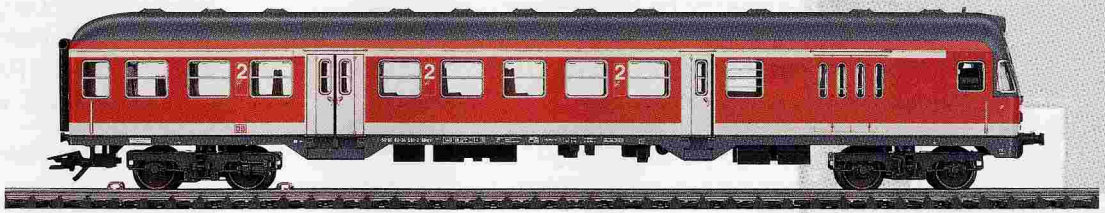
42551 Commuter Car.
German Railroad, Inc. type ABn. Regionalbahn color scheme. 1st and 2nd class. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580





42561 Commuter Car.
German Railroad, Inc. type Bnz. Regionalbahn color scheme. 2nd class. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580

42571 Commuter Car with Control Cab.
German Railroad, Inc. type BDnrzf. Regionalbahn color scheme. 2nd class with baggage compartment. Lighted destination board. Length over buffers 26.4 cm (10-3/8″).



All cars have adjustable buffers and are ready for installation of 7319 current-conducting couplers.



When operated control car first, triple white headlights shine.



When operated control car last, dual red marker lights shine.

Railroads and Eras

On these pages anyone wanting more information will find an overview of historical eras and emblems of historic and current European railroad companies. The pictograms described here can also be found next to the models in this catalog, so that you can assemble prototypical trains from a particular era. The division of the eras follows the NEM standards, but in the earlier eras the cutoffs are not always very clear. In the prototype the features of different eras often overlap.

The Railroads

Country	Abbreviation	Original Name	Railroad
A	ÖBB	Österreichische Bundesbahnen	Austrian Federal Railways
B	SNCB	Société Nationale des Chemins de fer Belges	Belgian State Railways
	NMBS	Nationale Maatschappij van de Belgische Spoorwegen	Belgian State Railways
CH	SBB	Schweizerische Bundesbahnen	Swiss Federal Railways
	CFF	Chemins de fer Fédéraux Suisses	Swiss Federal Railways
	FFS	Ferrovie Federali Svizzere	Swiss Federal Railways
	BLS	Bern-Lötschberg-Simplon-Bahn	Bern Lötschberg Simplon Railroad
	SOB	Südostbahn	Southeast Railroad
D	KPEV	Königlich Preußische Eisenbahn-Verwaltung	Royal Prussian State Railroad Administration
	K.Bay.Sts.B.	Königlich Bayerische Staatsbahn	Royal Bavarian State Railroad
	K.W.St.E.	Königlich Württembergische Staatseisenbahnen	Royal Württemberg State Railways
	DRG	Deutsche Reichsbahn-Gesellschaft (1929–1945)	German State Railroad Company (1929–1945)
	DB	Deutsche Bundesbahn (1945–1994)	German Federal Railroad (1945–1994)
	DB	Deutsche Bahn AG (ab 1994)	German Railroad, Inc. (starting in 1994)
DDR	DR	Deutsche Reichsbahn (1945–1994)	German State Railroad (1945–1994)
DK	DSB	Danske Statsbaner	Danish State Railways
F	SNCF	Société Nationale des Chemins de fer Français	French State Railways
I	FS	Ferrovie dello Stato Italiane	Italian State Railways
L	CFL	Société Nationale des Chemins de fer Luxembourgeois	Luxembourg State Railways
NL	NS	Nederlandse Spoorwegen	Dutch State Railways
N	NSB	Norges Statsbaner	Norwegian State Railways
S	SJ	Statens Järnvägar	Swedish State Railways
UdSSR	SŽD	Sovjetskije Železnyje Dorogi	Soviet Railways

I

Era I
1835 to about 1925



Provincial and privately owned railroads with in some cases extensive route networks came into being in the beginning phase of railroading. Era I is characterized by a multitude of car and locomotive types, colors and lettering.

II

Era II
1925 to 1945



The large national state railroads were established in Europe. In Germany the provincial and privately owned railroads were merged in 1920 into the German State Railroad Company (DRG). Standard designs cut down on the multiplicity of car and locomotive types.

III

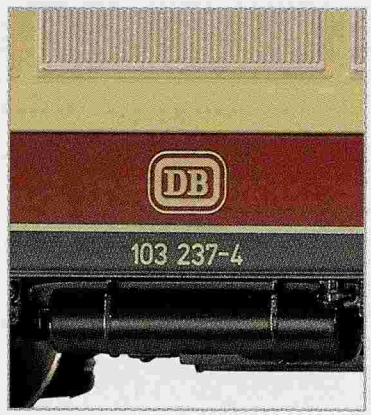
Era III
1945 to 1970



The 1950s and 1960s were characterized by rebuilding and economic growth. The young German Federal Railroad (DB) grew quickly; steam locomotives had to make way for more powerful and more efficient diesel and electric locomotives. The German State Railroad (DR) in the German Democratic Republic of that period developed parallel to the DB.

IV

Era IV
1970 to 1990



The beginning of this era was marked by the European wide standardized computer UIC lettering system for all cars and locomotives. This process took place over several years, so that you could still see cars with the old and new lettering next to one another.

V

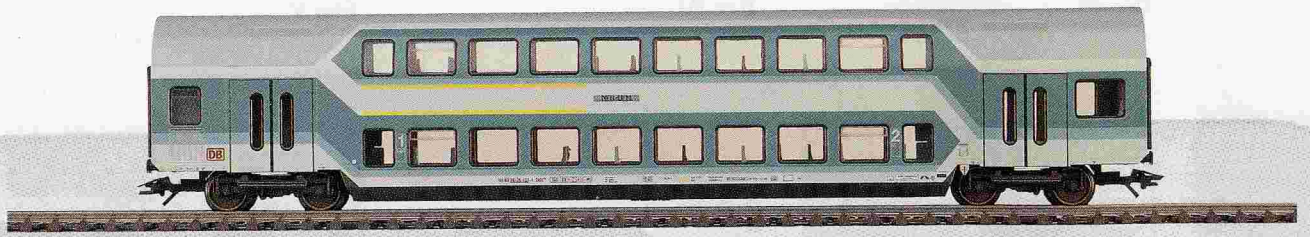
Era V
1990 to the present



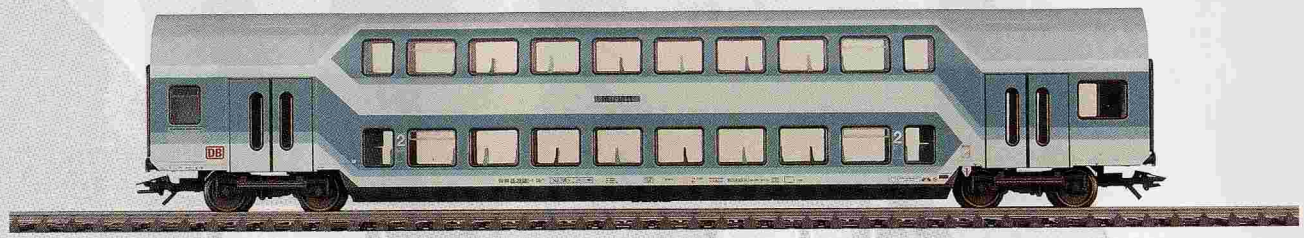
New color schemes signaled the “new era” of modern railroading; at the same time almost all of Europe began to think in terms of basically new railroad structures that are being realized today.
After the unification of Germany the German State Railroad (DR) and the German Federal Railroad (DB) were merged in steps into the German Railroad, Inc. The new logo for the German Railroad, Inc. has been in use since 1994. This era has also been marked by the juxtaposition of different color and logo variations.

Bilevel Cars

German Railroad, Inc. (DB) Bilevel Cars



43581 Bilevel Car.
Type DABz 756, 1st and 2nd class. Ready for installation of current-conducting couplers. Length over buffers 26.8 cm (10-9/16″).
DC wheel set 70 0580



43582 Bilevel Car.
Type DBz 751, 2nd class. Ready for installation of current-conducting couplers. Length over buffers 26.8 cm (10-9/16″).
DC wheel set 70 0580



43583 Bilevel Cab Control Car.
Type DBbzf 761, 2nd class. Detailed buffer beam with separately applied front cowling. Lighted destination board. Engineer's cab with interior details. Ready for installation of current-conducting couplers. Length over buffers 27.3 cm (10-3/4″).
DC wheel set 70 0580



When operated control car first, triple white headlights shine.



When operated control car last, dual red marker lights shine.

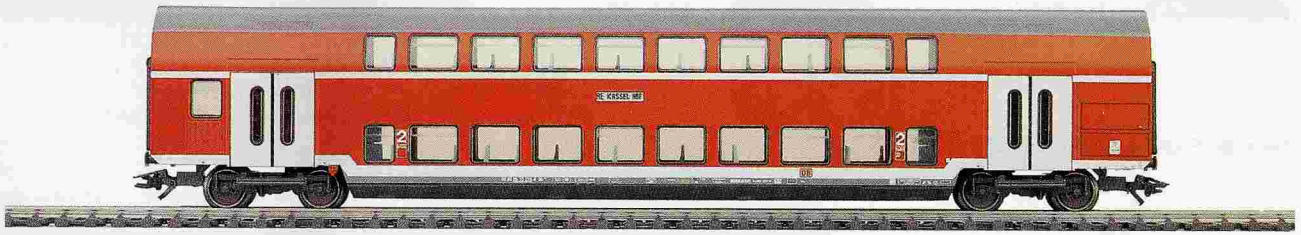
See fold-out page at end of catalog for explanation of drawings.

German Railroad, Inc. (DB) Bilevel Cars



NEM 73140 V

43584 Bilevel Car.
Type DABz 756 bilevel car, 1st and 2nd class. Ready for installation of current-conducting couplers. Length over buffers 26.8 cm (10-9/16").
DC wheel set 70 0580



NEM 73140 V

43585 Bilevel Car.
Type DBz 751, 2nd class. Ready for installation of current-conducting couplers. Length over buffers 26.8 cm (10-9/16").
DC wheel set 70 0580



NEM 73140 V

43586 Bilevel Cab Control Car.
Type DBbzf 761, 2nd class. Detailed buffer beam with separately applied front cowling. Lighted destination board. Engineer's cab with interior detailing. Ready for installation of current-conducting couplers. Length over buffers 27.3 cm (10-3/4").
DC wheel set 70 0580



When operated control car first, triple white headlights shine.



When operated control car last, dual red marker lights shine.

The German Railroad, Inc. class 143 electric locomotive (Märklin models 34431/37430) is the appropriate unit for the bilevel cars and can be found on page 84.

InterRegio Cars

German Railroad, Inc. (DB)



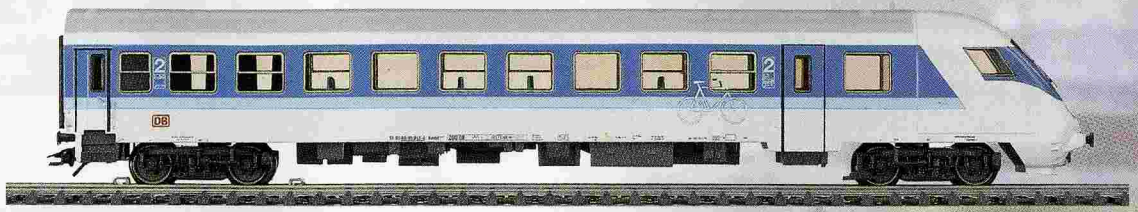
When operated control car first, triple white headlights shine.



When operated control car last, dual red marker lights shine.

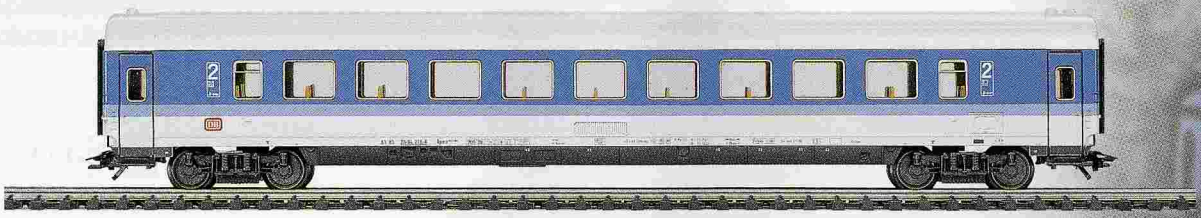
43300 InterRegio Cab Control Car.
Type Bimdzf 269.0, 2nd class with engineer's cab for push-pull operation. Engineer's cab with interior detailing. Detailed buffer beam. Separately applied front cowling. Ready for installation of 7319 current-conducting couplers. Length over buffers 27.5 cm (10-13/16″).

This model is being offered by Trix (T23374) for two-rail DC systems.



All cars have adjustable buffers and are ready for installation of 7319 current-conducting couplers.

German Federal Railroad (DB)



4327 FD/InterRegio Coach.
Type Bpmz 293.2. 2nd class. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580

On the German Railroad, Inc., the InterRegio trains operate in push/pull service with the IR cab control car (Märklin model 43300) and the class 101 electric locomotive (Märklin models 34374/37374, see page 87).



4384 InterRegio Coach.
Type ARbuimz 262 Bistro Cafe. Interior details. Length over buffers 27.0 cm (10-5/8″).
DC wheel set 70 0580



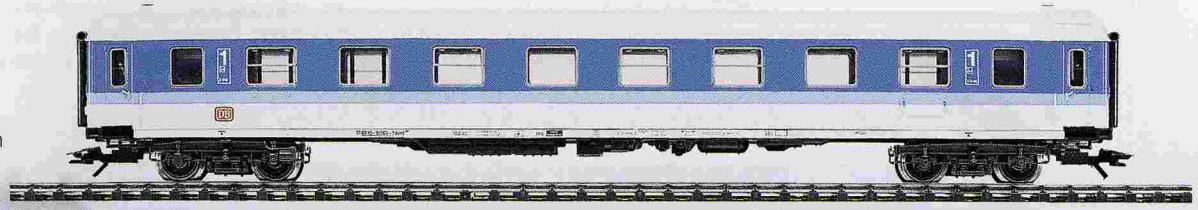
Most of the passenger cars can be equipped with interior lighting. Please see pages 178/179 for this.

German Federal Railroad (DB)

This 1st class car is operated in the InterRegio trains. Apart from a new color scheme, these cars also have a completely new interior design which features friendlier colors and compartments with a more relaxed space configuration.

NEM 7330 V

4281 InterRegio Car.
Type Aim 260. 1st class. Length over buffers 27.0 cm (10-3/8").
DC wheel set 70 0580



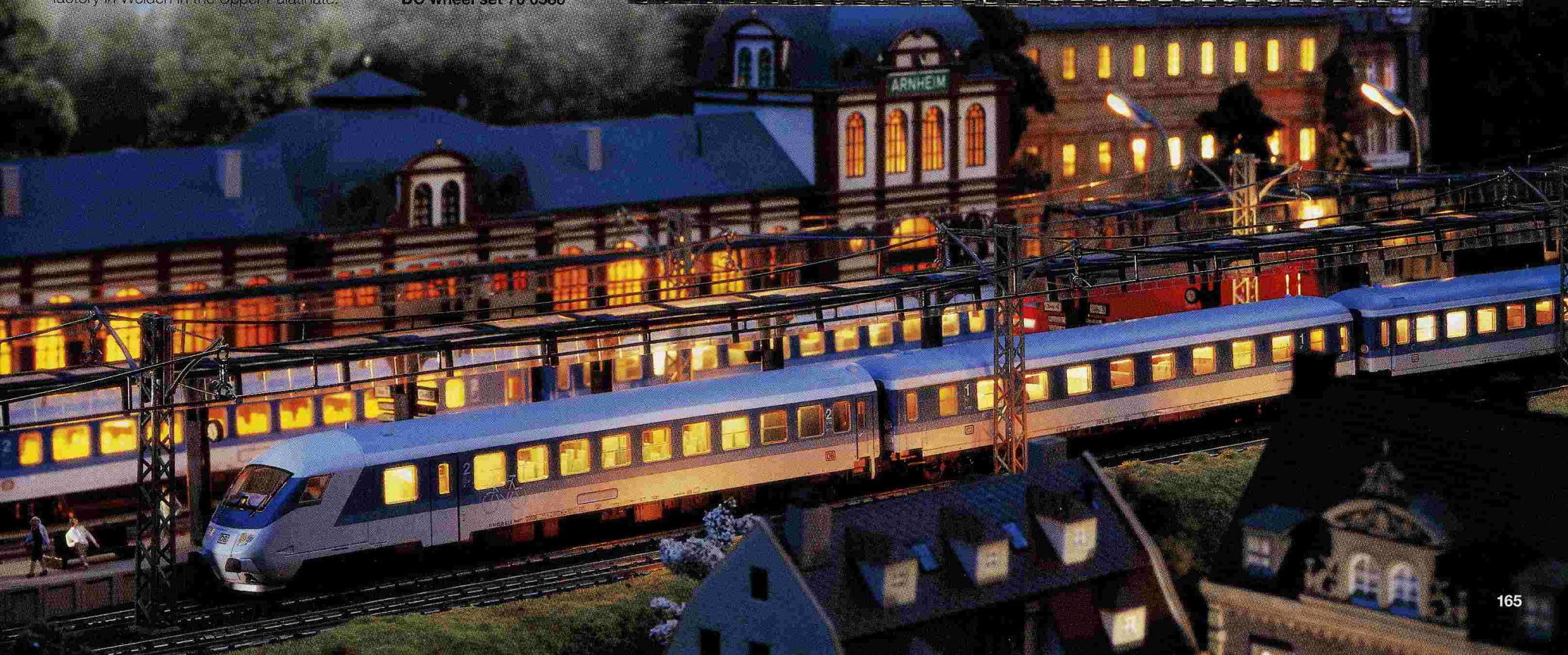
All cars have adjustable buffers and are ready for installation of 7319 current-conducting couplers.

The interior of the 2nd class InterRegio Bim 263 coach is a mix of individual compartments and an open seating concept. Some of the cars are being rebuilt from older express coaches at a newly constructed car building factory in Weiden in the Upper Palatinate.

NEM 7330 V

4282 InterRegio Car.
Type Bim 263. 2nd class. Length over buffers 27.0 cm (10-3/8").
DC wheel set 70 0580





InterCity Cars

German Railroad, Inc. (DB)

43301 InterCity Cab Control Car.
Type Bmdzf 269.2, 2nd class with engineer's cab for push-pull operation. Engineer's cab with interior detailing. Detailed buffer beam. Separately applied front cowling. Ready for installation of 7319 current-conducting couplers. Length over buffers 27.5 cm (10-13/16″).





When operated control car first, triple white headlights shine.



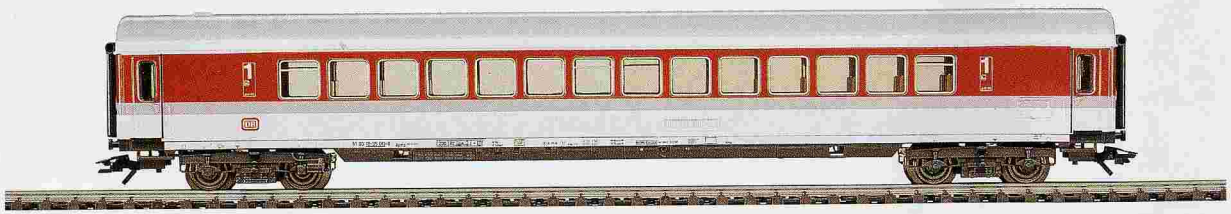
When operated control car last, dual red marker lights shine.

German Federal Railroad (DB)

The German Federal Class 2nd class Bpmz 293.3 coaches also have pressure-tight windows, doors and vestibules.This means passengers do not have to suffer from buzzing in their ears in tunnels or when trains meet.



4227 InterCity Open Seating Car.
Type Bpmz 293.2, 2nd class. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580



4286 InterCity Open Seating Car.
Type Apmz 121, 1st class. Length over buffers 27.0 cm (10-5/8″).
DC wheel set 70 0580

All cars have adjustable buffers and are ready for installation of 7319 current-conducting couplers.

The InterCity is a product of recognized excellence on the German Federal Railroad. The trains in these colors denote speed and a high level of comfort.



4285 InterCity Open Seating Car.
Type Avmz 111, 1st class. Length over buffers 27.0 cm (10-5/8″).
DC wheel set 70 0580

Exhibition Cars

märklin HO

42902 "Information Car" Car Set.
Set consists of 2 German Railroad, Inc./DB Cargo information cars. With different car numbers. Traffic red paint scheme. Total length over buffers 54.2 cm (21-5/16").
DC wheel set 70 0580

The German Railroad's freight traffic area has two windowless express train coaches in traffic red and lettered for DB Cargo. What is concealed inside these cars is not recognizable to outsiders. These cars serve to provide information to employees of the railroad about planned internal changes and new procedures.

Both cars in special version.
Not available separately.



43841 "40 + 10. Fifty Years of German History" Theme Car.
German Railroad, Inc. type Arkimbz 262.4. Like the prototype, the car's sides are decorated differently. 1st class. Length over buffers 27.0 cm (10-5/8").
DC wheel set 70 0580

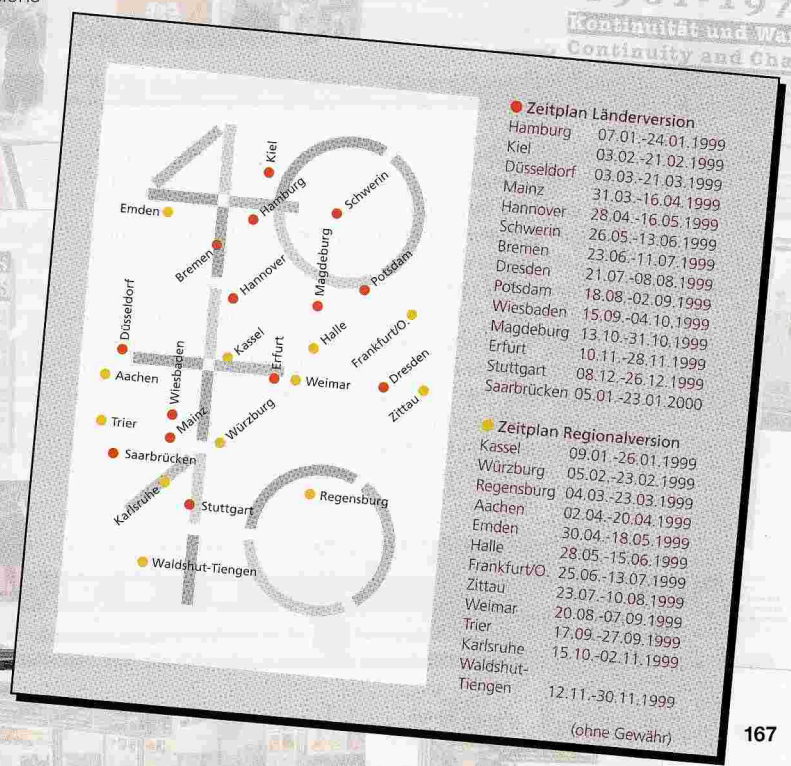
Special one-time series in 1999.
Already delivered to the dealers.

On March 31, 1999 the German Railroad, Inc. and the Federal Republic of Germany's National History Museum presented the "40 + 10. Fifty Years of German History" theme car in Berlin. The Museum for Contemporary History is using this InterRegio Bistro car for its traveling exhibit "40 + 10", that is being shown in two versions in 26 cities in Germany during this anniversary year.

The exhibits in the IR Bistro car decorated specifically for this purpose focus on aspects of politics and everyday life. Among the exhibits is a proclamation by the occupying powers and a CARE package from the postwar period, the 2 + 4 Treaty and an aid package from the 1990s. In addition, passengers have the opportunity to become informed about the exciting and user-friendly permanent exhibit in Bonn by looking at the "Experience History. Germany Since 1945." CD-ROM made available by the Museum on a personal computer specially installed for this purpose.

The"40 + 10" theme car has been in operation since Easter of this year and will continue to run until the end of the year on different InterRegio routes all over Germany.





Zeitplan Länderversion

Hamburg	07.01.-24.01.1999
Kiel	03.02.-21.02.1999
Düsseldorf	03.03.-21.03.1999
Mainz	31.03.-16.04.1999
Hannover	28.04.-16.05.1999
Schwerin	26.05.-13.06.1999
Bremen	23.06.-11.07.1999
Dresden	21.07.-08.08.1999
Potsdam	18.08.-02.09.1999
Wiesbaden	15.09.-04.10.1999
Magdeburg	13.10.-31.10.1999
Erfurt	10.11.-28.11.1999
Stuttgart	08.12.-26.12.1999
Saarbrücken	05.01.-23.01.2000

Zeitplan Regionalversion

Kassel	09.01.-26.01.1999
Würzburg	05.02.-23.02.1999
Regensburg	04.03.-23.03.1999
Aachen	02.04.-20.04.1999
Emden	30.04.-18.05.1999
Halle	28.05.-15.06.1999
Frankfurt/O.	25.06.-13.07.1999
Zittau	23.07.-10.08.1999
Weimar	20.08.-07.09.1999
Trier	17.09.-27.09.1999
Karlsruhe	15.10.-02.11.1999
Waldshut-Tiengen	12.11.-30.11.1999

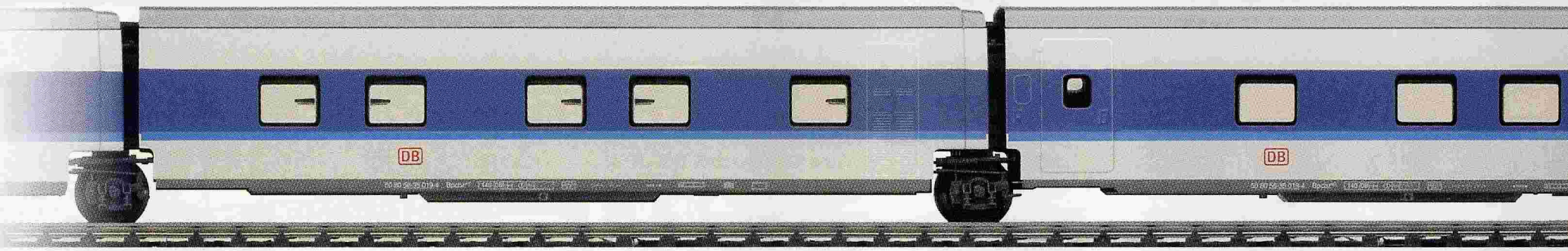
(ohne Gewähr)

Car Sets

Hotel On Wheels

The name **Talgo** is a registered trademark of the company Patentes Talgo, S.A. in Spain that was founded in 1942. It stands for a concept that has been perfected up to the present time: Short, light weight cars of a unit train are mounted on single-axle trucks with separately controllable wheels. This principle offers considerable advantages compared to cars with conventional trucks: less weight for the train, less use of material and energy, high speed and acceleration as well as reduced wear on the track, cars, and locomotives.





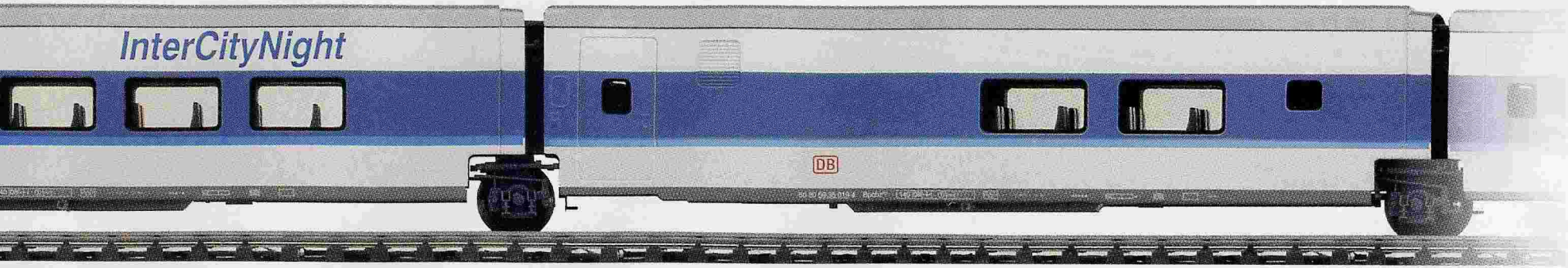
A part of the success of this concept has been acceptance by passengers for more than 40 years. They were won over and kept by a high level of comfort and reliability. A special maintenance system carried out by Talgo itself following airline practice is a requirement for maintaining this loyalty.

Four generations of Talgo trains have been in use in Spain, since 1968 with provisions for changing track gauge for international traffic. The TEE "Catalán Talgo" reached a record speed of 222 km/h (139 mph) in 1972. The latest train is the "Talgo Pendular" that has been tested in Germany at 291 km/h (182 mph) and has even reached 500 km/h (313 mph) on a test bed.

From the current Talgo technology, the German Railroad, Inc. has developed the "Intercity Night" concept with comfortable, fast hotel trains and has ordered 112 cars from the Talgo Company. These were built in 1994 with small changes in design and with the participation of German firms. In 1999 the rolling stock has been increased by an additional 48 cars. There are up to seven trains in operation, and they offer the highest level of hotel comfort: roomy compartments, shower-style bathroom with an enclosed system, telephone with service call, keys with personal code, and – heavenly quiet on board. The Hotel Service also includes the extensive preparation time at the station before and after the trip. The Talgo Company has its own repair shop in Berlin for maintenance, and it is run with the same modern logistics and technology as the ICE maintenance facilities.

Despite the name, the Intercity Night is painted in the InterRegio colors. On some of the trains the "hotel guest" can also take his car with him: An auto transport car is part of the train.



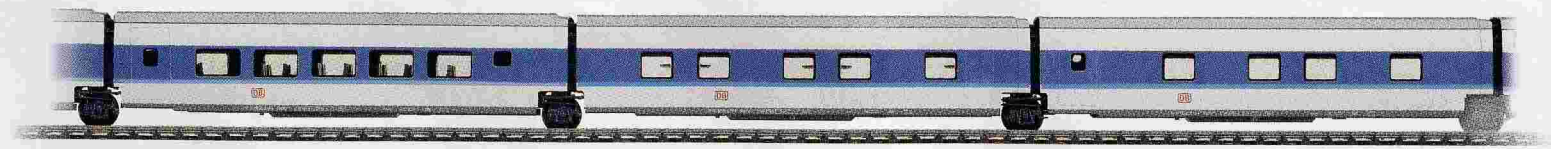




NEM V

41771 Intercity Night Car Set.
German Railroad, Inc. (DB AG) Talgo design hotel train. Basic set with 6 cars: 2 end cars (machinery cars 1 and 2), 2 Comfort sleeping cars, 1 bistro car with (reception desk) and 1 dining car (lounge). Articulated mount for the axles with snap-in special couplings between the cars. Total length over buffers 88.5 cm (34-13/16″). Can be lengthened with the 41772 car set.
DC wheel set 70 0580

All cars in special version. Not available separately.



V

41772 Intercity Night Car Set.
Extension set with 3 cars: 2 Comfort sleeping cars (Hotel cars) and 1 Comfort slumber coach (Sleeper).

Lengthens the train by 45.2 cm (17-13/16″). Can be used in multiples in the train.
DC wheel set 70 0580

All cars in special version. Not available separately.

The 41771 InterCity Night basic set can be lengthened prototypically with multiples of the 41772 extension set.

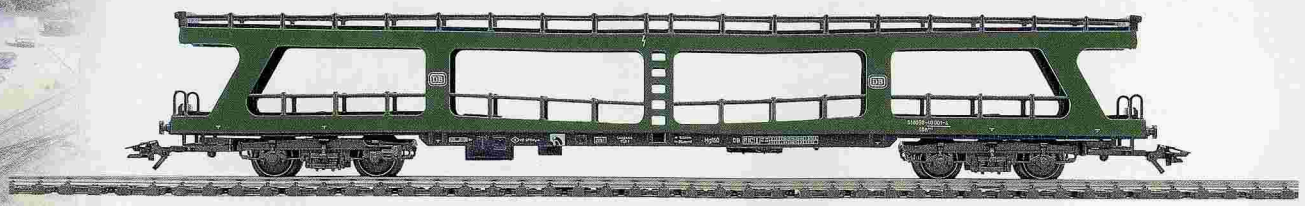




Special Design Cars for Passenger Trains

märklin HO

German Federal Railroad (DB)



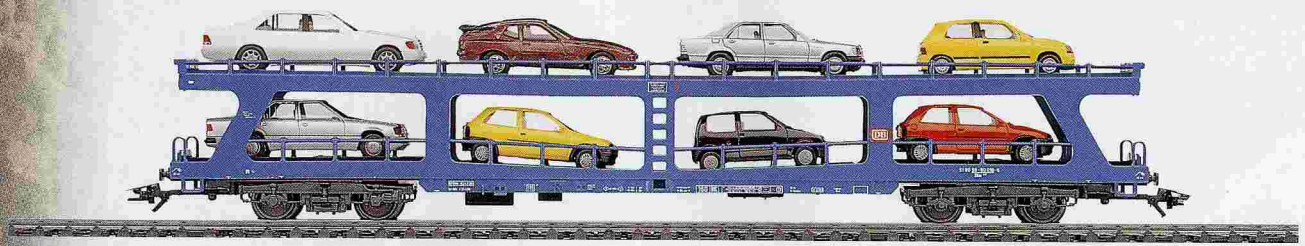
IV

4084 Passenger Train Auto Transport Car.
Type DDm 915. Without autos. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580



V

4234 Passenger Train Auto Transport Car.
Type DDm 915. Loaded with 8 autos. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580



V

4233 Passenger Train Auto Transport Car.
Type DDm 915 in new color scheme. Loaded with 8 autos. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580

On the German Railroad, Inc. the auto transport cars are also pulled by the class 101 electric locomotive (Märklin models 34374/37374, see page 87).

The autos are safeguarded with chock blocks.





German Railroad, Inc. (DB)

V

42341 Passenger Train Auto Transport Train.
Type DDm 915. Current version for "DB AutoZug" ("DB Auto Train"). Loaded with 8 late model automobiles. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580

The entire logistics for the DB's passenger train auto transport is now being handled by the subsidiary firm of DB AutoZug. The improvements in the further development of the system of "auto on the passenger train" shows up in the red paint scheme for the cars that matches the DB Inc.'s newest InterCity color concept.

Car Set



42383 Swiss Old-Timer Passenger Train Car Set.
Three older design express train passenger cars of the Swiss Federal Railways (SBB). 1 type B4ü coach (former type AB4ü), 2nd class open seating with large windows, 1 type B4ü (former type C4ü), 2nd class with compartments and small windows. 1 type D4ü (former F4ü) baggage car, BLS design. These cars go with older SBB locomotives such as the Ae 8/14 (item no. 33593/37593). Total length over buffers 68.0 cm (26-3/4″).
DC wheel set 70 0580

All cars in special version. Not available separately.

Additional SBB type 4ü cars are being readied.

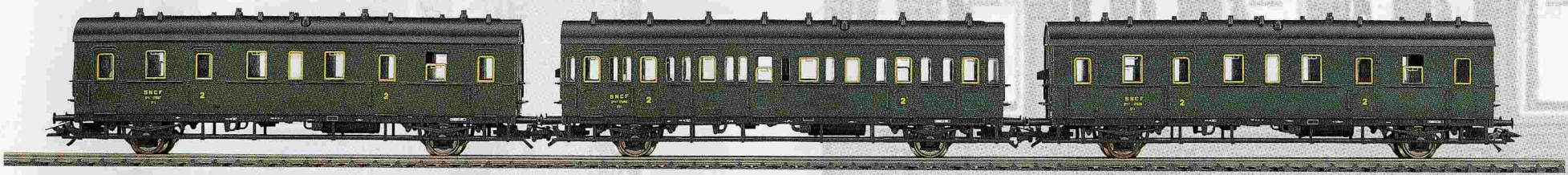
The two unit electric locomotive (Märklin model 33593/37593) on page 92 goes well with this car set.

International Passenger Cars

N NEM III

43972 French Branch Line Car Set.
Three French State Railways (SNCF) oldtimer passenger cars of German design. 1 each type B8t, B8tf, and B61/2 t. 2nd class. Complements the class 040 TC locomotive (item no. 34131). Total length over buffers 48.2 cm (19″).
DC wheel set Trix 66691

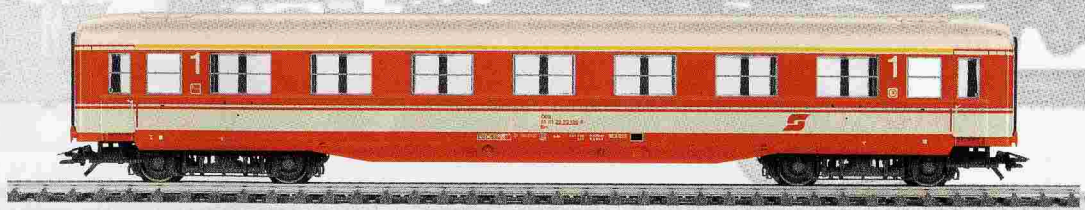
The 43972 car set is being produced in a one-time series only in 1999.



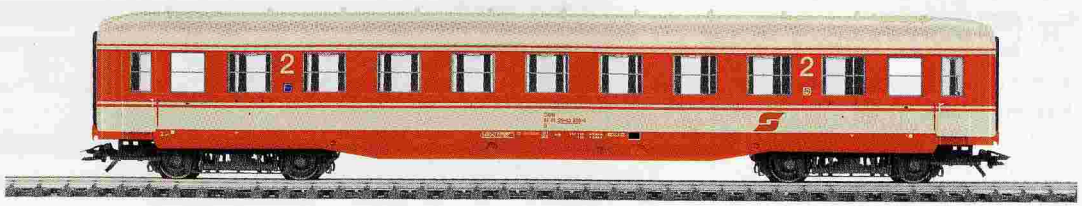
N NEM 73150 IV

43206 Express Train Passenger Car.
Austrian Federal Railways (ÖBB) type A. Jaffa color scheme. 1st class. Equipped for installation of current-conducting couplers. Length over buffers 25.1 cm (9-7/8″).
DC wheel set 70 0580

The 43206 express train coach is being produced in a one-time series only in 1999.



The 43226 express train coach is being produced in a one-time series only in 1999.



N NEM 73150 IV

43226 Express Train Passenger Car.
Austrian Federal Railways (ÖBB) type B. Jaffa color scheme. 2nd class. Equipped for installation of current-conducting couplers. Length over buffers 24.4 cm (9-5/8″).
DC wheel set 70 0580

EuroCity Cars

Swiss Federal Railways (SBB)

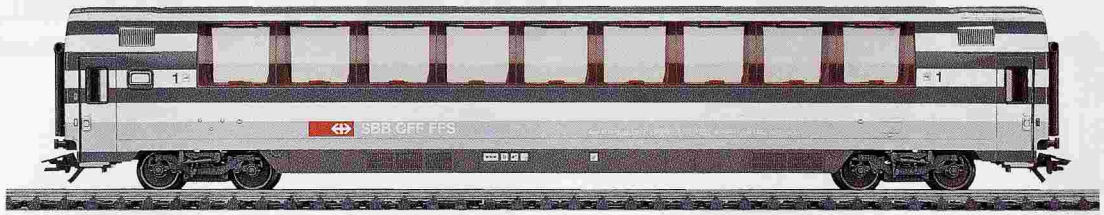


A 4 year contract has been signed by the SBB and the German MITROPA, Inc. to reorganize the dining service in Swiss trains along more efficient lines. Since March of 1997 the former dining cars (among others) for the Buffet Suisse, Inc. and the Glacier Express are being operated by the new subsidiary MITROPA Suisse in Basle, Switzerland. This international cooperation is not new: MITROPA received similar contracts as early as 1928 from the Bernina Railroad and the Rhaetische Railroad.

NEM 7330 V

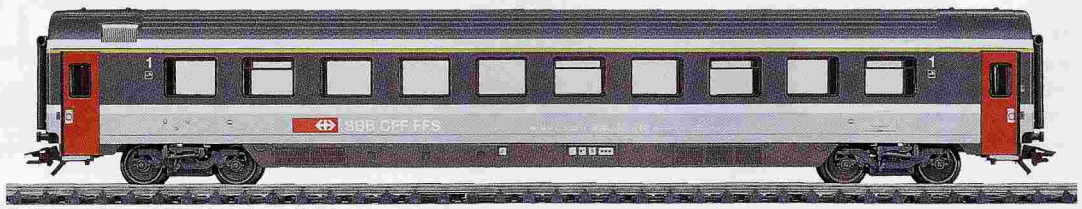
42171 Euro-City Dining Car.
SBB type Mark IV WR. operated by MITROPA, Inc. Working pantograph. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580

Both cars have adjustable buffers and are equipped for installation of 7319 current-conducting couplers.



NEM 7316 V

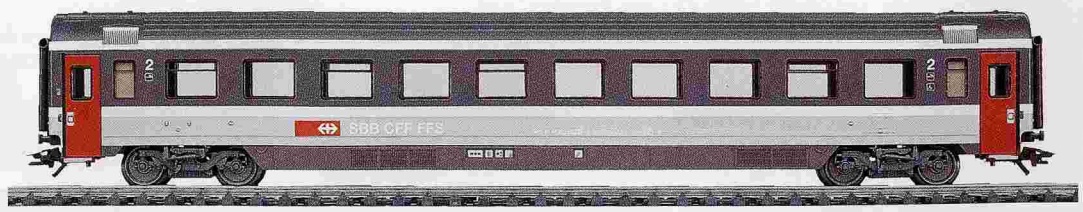
4365 EuroCity Panorama Car.
Type Apm. 1st class. Length over buffers 26.7 cm (10-1/2″).
DC wheel set 70 0580



NEM 7330 V

4368 EuroCity Express Train Passenger Car.
Type Apm. 1st class. Length over buffers 26.7 cm (10-1/2″).
DC wheel set 70 0580

With the EuroCity cars the Swiss Federal Railways have placed into service a totally new group of rolling stock for international passenger traffic. In addition to the new open seating cars in 1st and 2nd class with their very modern interiors, there are the so-called Panorama cars which were built on the same basic design. These cars have almost continuous side windows that are curved into the raised roofline, and they offer an incomparable view of the landscape on both sides of the track.



NEM 7330 V

4369 EuroCity Express Train Passenger Car.
Type Bpm. 2nd class.Length over buffers 26.7 cm (10-1/2″).
DC wheel set 70 0580

Car Set

märklin
HO

42168 Swiss "Push/Pull Train" Car Set.
Four current Mark IV express passenger cars of the Swiss Federal Railways (SBB). 1 type A open seating car, 1st class. 1 type B open seating car, 2nd class. 1 type WR dining car, newer Mark IV design, with roof pantograph and galley doors. 1 type Bt cab control car, Euro City design, 2nd class with engineer's cab and headlights. All cars in push/pull version. Total length over buffers 106.5 cm (41-15/16").

All cars in special version. Not available separately.

The 42168 car set is being produced in a one-time series only in 1999.

This car set is being offered for two-rail DC systems by TRIX (T23390).

The striking styling of the class 460 is already a part of the everyday scene in Switzerland. Until now there was no complement for the other end of the train, when the class 460 was at the front of fast IC push/pull trains. This problem has been solved visually with the new cab control car. Since the locomotive engineer's cabs on the class 460 are special components, they have simply been modified and mounted on the cab control car.



Express Train Passenger Cars



4264 InterCity Coach.
Dutch State Railways (NS) type A IC. 1st class. Different car number. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580



4265 InterCity Coach.
Dutch State Railways (NS) type B IC. 2nd class. Different car number. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580



43771 Express Train Passenger Cars.
Swedish State Railways (SJ) type AB 3. 1st and 2nd class. Length over buffers 24.4 cm (9-5/8″).
DC wheel set 70 0580

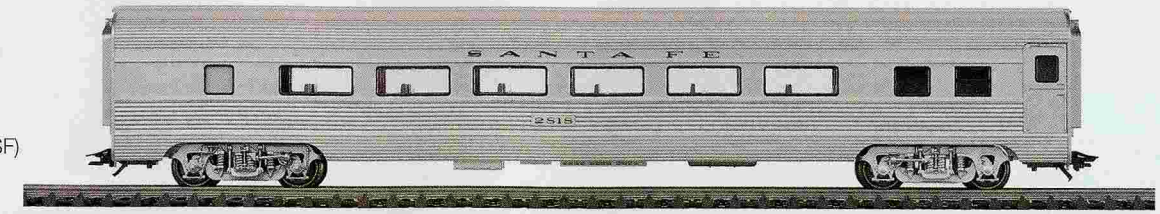


4352 Eurofima Express Train Coach.
Belgian State Railways (SNCB/NMBS) type B11. 2nd class. With new car number. Length over buffers 26.4 cm (10-3/8″).
DC wheel set 70 0580

See fold-out page at end of catalog for explanation of drawings.

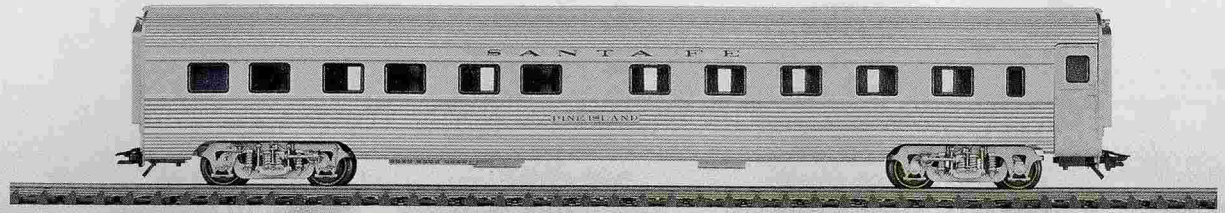
Streamliners

märklin HO

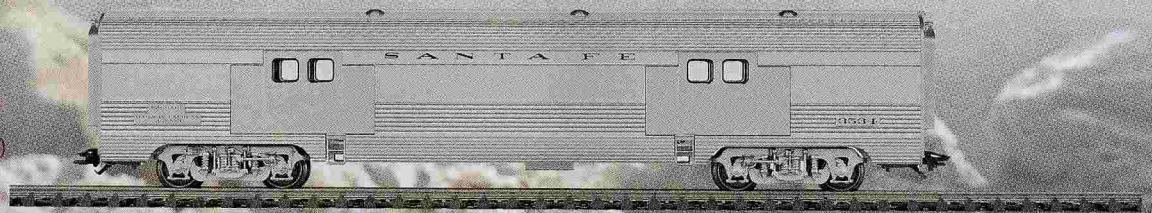


43601 Coach.
Atchison, Topeka & Santa Fe Railway (AT & SF) coach. Extruded aluminum body.
Length 26.0 cm (10-1/4″).

The appropriate motive power for the streamliner passenger cars is the AT & SF diesel electric locomotive as a single or multi unit (Märklin models 33622/37622, see page 77).



43602 Sleeper.
Atchison, Topeka & Santa Fe Railway (AT & SF) sleeping car. Extruded aluminum body.
Length 26.0 cm (10-1/4″).



43603 Baggage Car.
Atchison, Topeka & Santa Fe Railway (AT & SF) baggage car. Extruded aluminum body.
Length 22.5 cm (8-7/8″).

Car Lighting

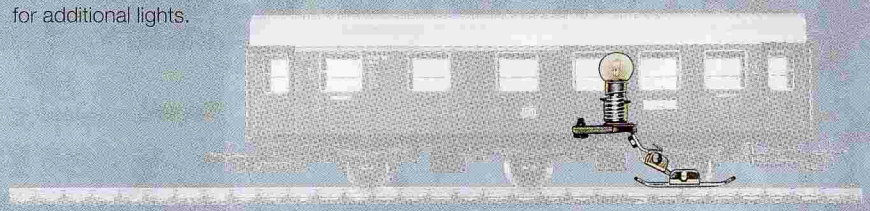
7323



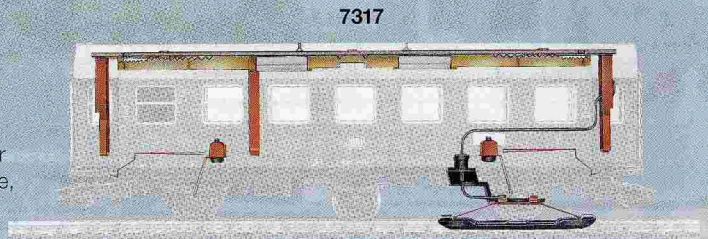
7323 Lighting Kit.
For cars 4035, 4038, 4039, 4107 and 4108. Consists of pickup shoe with light socket and light bulb.

7074 Lighting Kit.
For 4067, 4079 and 4080 cars. Consists of pickup shoe with lamp socket and light bulb. Connecting socket for additional lights.

7074

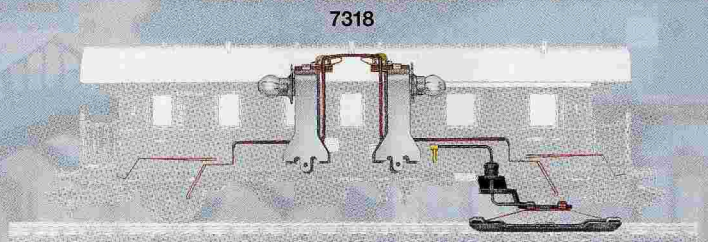


7317



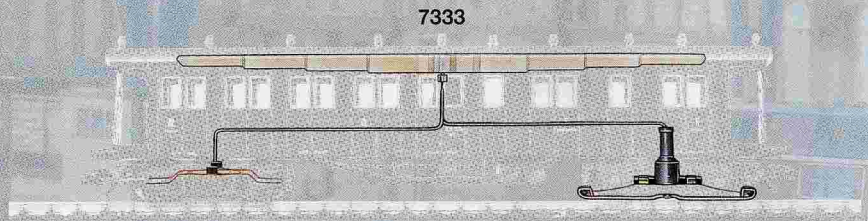
7317 Lighting Kit.
For cars 4317–4319. Installation kit for 1 pair of cars. Consists of pickup shoe, current-conducting close coupler, 2 light diffusers and 4 light bulbs.

7318



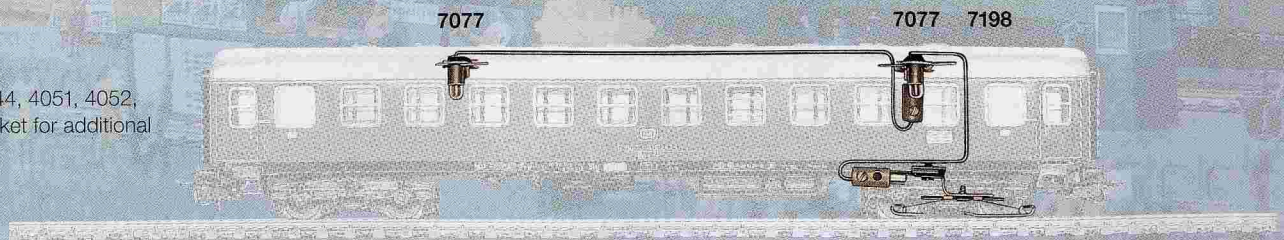
7318 Lighting Kit.
For the "Donnerbüchsen" passenger cars 4100-4102 (without close couplers) and 4313-4315 (with close couplers). Consists of pickup shoe, current-conducting close coupler, 2 light sockets and 2 light bulbs.

7333



7333 Lighting Kit.
For cars 42101, 42131, 4214, 42141, 42142 and 4229. Consists of pickup shoe, light diffuser, lamp socket and light bulb.

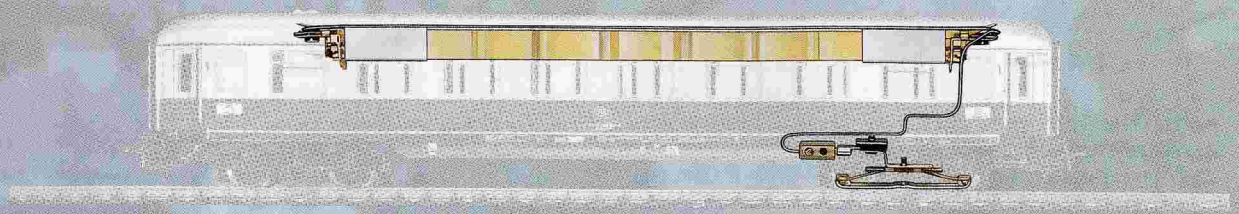
7077 7077 7198



7077 Lighting Kit.
For cars 4026, 4027, 4032, 4044, 4051, 4052, 4111 and 4112. Connecting socket for additional lights. With light bulb.

7198 Pickup Shoe.
For 7077 lighting kit.

7320



7320 Lighting Kit.
For cars 4085 and 4087. Consists of pickup shoe, light diffuser, 2 lamp sockets, and 2 light bulbs.

7322 Lighting Kit.
Same as 7320, but without light diffuser. For 4090 car.

7329



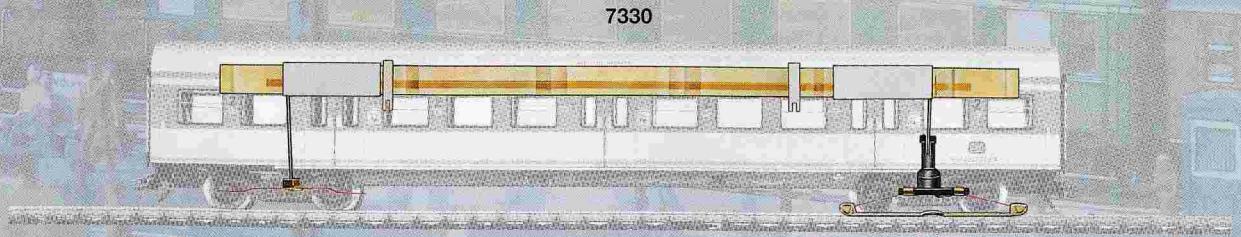
7329 Lighting Kit.
For cars 4131, 4132 and 4133. Consists of pickup shoe, adjustable light diffuser, 2 light sockets and 2 light bulbs.

7330 Lighting Kit.
For cars 42168, 42171, 4227, 4255–4257, 42551–42571, 4264, 4265, 4282, 4285, 4286, 4327, 4368, 4369 and 4384. Consists of pickup shoe, light diffuser with lamp sockets and 2 light bulbs. Can be used with 7319 current-conducting close coupler.

7335 Lighting Kit.
Same as 7330, but for shorter express train passenger cars. For cars 41351, 41361, 42383 and 42751.

7316 Lighting Kit.
For the 4365 car and the panorama cars from the 4367 car set. Consists of pickup shoe, light diffuser with light sockets and 2 light bulbs. Can be used with 7319 current-conducting close coupler.

7330



73150 Lighting Kit.
For cars 43200, 43201, 43206, 43210, 43211, 43221, 43226, 43231, 43240, 43300, 43301, 43601 and 43602. Consists of pickup shoe, light diffuser with lamp sockets, 2 light bulbs, and current-conducting close coupler.

73155 Lighting Kit.
For cars 43241, 43250, 43251, 43260 and 43261. Consists of pickup shoe, light diffuser with lamp sockets, 2 light bulbs, and current-conducting close coupler.

73140 Lighting Kit.
For cars 43581-43586. Consists of pickup shoe, circuit board with 10 light bulbs and current-conducting coupler.

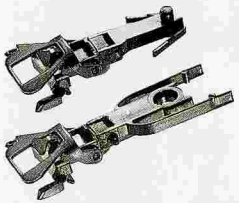
Spare Parts for Cars



72060 RELEX Couplers.
Contents 10 RELEX coupler heads. Can be used on locomotives and cars with standard coupler pockets (NEM 362).



7203 Close Couplers.
Contents: 50 no. 70 1630 close coupler heads. For installation on cars with standard coupler pockets (NEM 362) and guide mechanisms. Compatible with standard couplers (NEM 360).



7205 Close Couplers for Locomotives/ Cars without Guide Mechanisms.
Interchangeable with the standard Märklin plastic coupler. 10 couplers for locomotives and 40 couplers for cars (for 70 1570 and 70 1580). Decreased coupler play on cars being pulled.



0226 Set of Figures.
To add to passenger cars. 10 seated passengers. All figures hand painted in several colors.



7319 Current-Conducting Close Couplers.
Retrofit kit for all modern 26.4 cm (10-3/8″), and 27.0 cm (10-5/8″) long Märklin H0 cars with guide mechanisms. Contents: 10 special, rigid drawbars, can be inserted into standard coupler pockets. 20 contact elements for hookup to the 7330 lighting kit. Coupling jig for installing the drawbars. Complete installation instructions. Only one pickup shoe is required for each composition of lighted cars with the current-conducting close couplers.

7001 Coupler Gauge.
For checking and adjusting couplers. Can be placed on track.

7558 Car Magnet.
2 pieces 10 x 10 x 3 mm (approx. 3/8″ x 3/8″ x 1/8″). For activating 7555 switching contact. For passenger and freight cars.

7149 Oiler with Narrow Applicator Opening.
Contains 10 ml (0.0338 oz.) special oil for lubricating locomotives and cars.

7224 Rerailer.
Facilitates placing multi-axle locomotives/cars on the track. Length 30.0 cm (11-1/16″). Height 2.5 cm (1″).

Couplers and DC wheel sets for passeenger cars

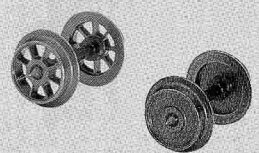
Item No.	Coupler	DC wheel set	Item No.	Coupler	DC wheel set
4027	30 3390*	70 0590	**42142**	70 1630	70 0630
4032	30 3390*	70 0590	**42168**	70 1630	70 0580
4035	32 5400	70 0600	**42171**	70 1630	70 0580
4038	32 5400	70 0600	**4227**	70 1630	70 0580
4039	32 5400	70 0600	**4228**	70 1630	70 0600
4044	32 5400	70 0600	**4229**	70 1630	70 0630
4051	30 3390*	70 0590	**4233**	27 2910	70 0580
4052	30 3390*	70 0590	**4234**	27 2910	70 0580
4084	27 2910	70 0580	**42341**	27 2910	70 0580
4085	30 3390*	70 0590	**42383**	70 1630	70 0580
4087	30 3390*	70 0590	**42551**	70 1630	70 0580
4089	30 3390*	70 0590	**4256**	70 1630	70 0580
4090	30 3390*	70 0590	**42561**	70 1630	70 0580
4107	32 5400	70 0600	**4257**	70 1630	70 0580
4108	32 5400	70 0600	**42571**	70 1630	70 0580
4111	30 3390*	70 0590	**4264**	70 1630	70 0580
4112	30 3390*	70 0590	**4265**	70 1630	70 0580
4131	70 1630	70 0580	**42751**	70 1630	70 0580
4132	70 1630	70 0580	**4281**	70 1630	70 0580
4133	70 1630	70 0580	**4282**	70 1630	70 0580
41351	70 1630	70 0630	**4285**	70 1630	70 0580
41361	70 1630	70 0630	**4286**	70 1630	70 0580
41371	70 1630	70 0630	**42902**	70 1630	70 0580
41771	70 1630	70 0580	**42941**	70 1630	70 0580
41772	–	70 0580	**4313**	70 1630	70 0580
42101	70 1630	70 0630	**4314**	70 1630	70 0580
42131	70 1630	70 0630	**4315**	70 1630	70 0580
4214	70 1630	70 0630	**4316**	70 1630	70 0580
42141	70 1630	70 0630	**4317**	70 1630	70 0580

* truck with coupler

Train Operations Just Like The Prototype – With Every System

Whether you operate with alternating or direct current: From now on the question about which system is no longer relevant when talking about an H0 model railroad layout. Märklin offers appropriate wheel sets for both systems for passenger and freight cars. Direct current (2-rail) wheel sets are available for the overwhelming majority of the Märklin H0 cars, so that Märklin cars can be run with no problem on layouts with equipment of other makes. You will find the item number for the correct 2-rail wheel set at the end of the description for each car in this catalog.

The full-service Märklin dealer is offering his 2-rail customers an attractive, "labor-saving" offer as a special service: When you buy a Märklin H0 car, the Märklin 3-rail wheel sets put on at the factory can be exchanged for 2-rail wheel sets at your request. This means that the decision to buy a Märklin H0 car is no longer a question of the system, but rather of the quality.



Couplers and DC wheel sets for freight cars

Item No.	Coupler	DC wheel set
(4317)	–	40 6240
4318	70 1630	70 0580
(4318)	–	40 6240
4319	70 1630	70 0580
(4319)	–	40 6240
43200	70 1630	70 0580
43201	70 1630	70 0580
43206	70 1630	70 0580
43210	70 1630	70 0580
43211	70 1630	70 0580
43220	70 1630	70 0580
43221	70 1630	70 0580
43226	70 1630	70 0580
43231	70 1630	70 0580
43240	70 1630	70 0580
43241	70 1630	70 0580
43250	70 1630	70 0580
43251	70 1630	70 0580
43260	70 1630	70 0580
43261	70 1630	70 0580
4327	70 1630	70 0580
43300	70 1630	70 0580
43301	70 1630	70 0580
4335	70 1630	70 0580
43351	70 1630	70 0580
4352	70 1630	70 0580
43581	70 1630	70 0580
43582	70 1630	70 0580
43583	70 1630	70 0580
43584	70 1630	70 0580
43585	70 1630	70 0580
43586	70 1630	70 0580
43601	70 1630	70 0580
43602	70 1630	70 0580
43603	70 1630	70 0580
4365	70 1630	70 0580
4368	70 1630	70 0580
4369	70 1630	70 0580
43771	70 1630	70 0580
4384	70 1630	70 0580
43841	70 1630	70 0580
43972	70 1630	60 1151
4410	70 1570	70 0580
4411	70 1570	70 0580
4413	70 1570	70 0580
4415	70 1570	70 0580
4416	70 1570	70 0580
4417	70 1570	70 0580
44173	70 1570	70 0580
44174	70 1570	70 0580
44175	70 1570	70 0580
44177	70 1570	70 0580
44178	70 1570	70 0580
4421	70 1570	70 0580
4423	70 1570	70 0580
4424	70 1570	70 0580
44265	70 1570	70 0580
4430	70 1570	70 0580
4431	70 1570	70 0580
4432	70 1570	70 0580
4439	70 1570	70 0580
4440	70 1570	70 0580
4441	70 1570	70 0580
4442	70 1570	70 0580
4459	70 1570	70 0580
4471	70 1570	70 0580
4473	70 1570	70 0580
4474	70 1570	70 0580
4485	70 1570	70 0580
46034	70 1630	70 0580
4610	70 1540	70 0500
4612	70 1540	70 0500
4613	70 1540	70 0500
46150	70 1630	60 1152
4617	70 1540	70 0530
4618	70 1540	70 0530
4624	70 1630	70 0580
4626	70 1630	70 0280
46262	70 1630	70 0580
46274	70 1570	70 0580
46280	70 1630	20 6852
46281	70 1630	20 6852
4631	70 1630	70 0600
4635	70 1630	70 0600
46424	17 1630	60 1151
4644	70 1630	70 0270
46581	70 1630	70 0580
46600	70 1630	–
4661	70 1630	70 0580
46613	70 1630	70 0580
4663	32 3990	70 0270
4671	70 1540	70 0530
46741	70 1630	70 0580
46743	70 1630	70 0630
46751	70 1630	70 0580
4694	70 1630	70 0580
46942	70 1630	70 0580
46951	70 1630	70 0270
4699	70 1630	70 0580
4712	70 1630	70 0580
47200	70 1630	70 0580
47205	70 1630	70 0580
47206	70 1630	70 0580
4740	36 3660	43 2950
47403	–	43 2950
4741	–	43 2950
47423	–	43 2950
4754	70 1630	70 0580
4756	70 1630	70 0580
4757	70 1630	70 0580
4768	70 1630	70 0580
4771	70 1630	70 0580
47711	70 1630	70 0580
47713	70 1630	70 0580
47714	70 1630	70 0580
47715	70 1630	70 0580
47721	70 1630	70 0580
47741	–	70 0600
4777	–	70 0600
47785	–	70 0600
47884	70 1630	70 0580
47885	70 1630	70 0580
47895	70 1630	70 0580
47896	70 1630	70 0580
48012	70 1630	70 0580
48020	70 1630	70 0580
48030	70 1630	70 0580
48031	70 1630	70 0580
48033	70 1630	70 0580
48040	70 1630	70 0580
48045	70 1630	70 0580
48046	70 1630	70 0580
48281	70 1630	70 0630
48445	70 1630	70 0580
48450	70 1630	70 0580
48451	70 1630	70 0580
4853	70 1630	70 0580
48541	70 1630	60 1151
4866	70 1630	70 0580
48664	70 1630	70 0580
4867	70 1630	70 0580
48674	70 1630	70 0580
(48674)	–	70 0630
48784	70 1630	70 0580
4888	70 1630	70 0580
48881	70 1630	70 0580
48940	70 1630	70 0580
48941	70 1630	70 0580
48942	70 1630	70 0580
49940	70 1630	70 0580
49950	70 1630	70 0580
49960	70 1630	–

The 70 1630 close coupler is only available in a package of 50 pieces under item number 7203 (see page 180).

* truck with coupler

Contemporary History in H0.

Anyone who devotes himself as a model railroader to an era or a particular theme is more precise about it than most and pays attention to lettering, equipment and other details that assign a model to a particular time and railroad. In addition to train and car sets you'll also find with Märklin H0 the locomotives to go with them. However, even the broadest assortment cannot keep cars from all eras constantly on hand. We therefore change the focal points and model variations from year to year.



III



42941 34080

III



42383 42383 33593

IV



48664 48664 48664 48664 48664 34310

IV



43206 43206 43226 43226 43226 43226 34587

IV



4777 47780 47741 4864 47785 37622

IV



47711 46191 4768 46942 4756 4756 48481 4853 47713 37431

V



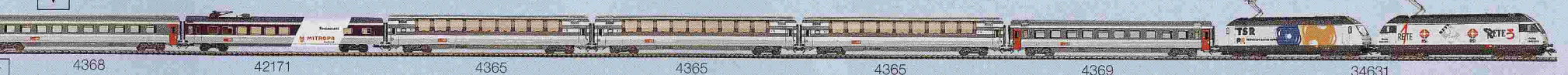
43300 4327 4282 4282 4384 4281 33743

V



42902 4754 48012 48034 47200 48031 48031 33723

V



4368 42171 4365 4365 4365 4369 34631

V



41771 41772 41772 34374

V



43586 43584 43585 43585 34431

V



48046 48045 34350

V



40712 43732 43712 40712 33712

Ideas wanted.

With freight transportation the forwarders are concerned about deadlines and costs, residents worry about free access at grade crossings, the general community thinks about safety and the environment. Cargo Sprinter and Kombi Rail are new concepts that are making transporting freight by rail more attractive, because it's faster, more flexible and more economical. And more and more firms are buying or leasing cars tailored specially to their transportation needs in order to accelerate the transfer of freight and to increase the volume of freight shipped. Ideas wanted – and with Märklin H0 already a model.




Marantec

Provincial Railroad Freight Cars

The many different designs for freight cars are a big factor in determining the look of railroading. The development of industry and the different transportation jobs are reflected in the different classes of freight cars. The two-axle gondola and boxcar dominated the scene on the German provincial railroads. In addition, there were also the refrigerator cars that were often used by privately owned companies in the railroads' rolling stock pool.

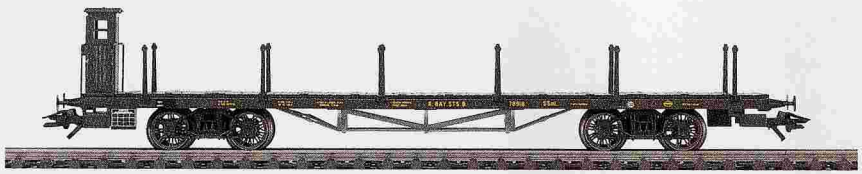


N NEM I

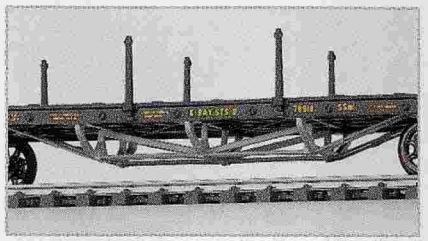
48281 Beer Car.
Royal Württemberg State Railways (K.W.St.E.) type H 3572. Brakeman's platforms at both ends of the car. Separately applied ice hatches on the roof. Length over buffers 10.6 cm (4-3/16″).
DC wheel set 70 0630

N NEM I

46280 Flat Car.
Royal Bavarian State Railroad (K.Bay.Sts.B.) type SSml. With brakeman's cab. Removable stakes. Fine reproduction of archbar trucks. Double spoked wheels. Length over buffers 19.6 cm (7-11/16″).
DC wheel set 20 6852



This model is being offered for two-rail DC systems by TRIX (T23914).





N NEM I

46281 Flat Car.
Royal Bavarian State Railroad (K.Bay.Sts.B.) type SSml. Loaded with 2 overseas machinery crates made of real wood. With brakeman's cab. Removable stakes. Filigree reproduction of the arch bar trucks. Double spoked wheels. Length over buffers 19.6 cm (7-11/16″).
DC wheel set 20 6852

Special one-time series in 1999.
Delivery starting the 4th quarter of 1999.

Grand Ducal Mecklenburg Friedrich-Franz Railroad

NEM I

46150 Meat Transport Car.
Type Gmml. With brakeman's cab. Sliding doors that can be opened. Separately applied steps the length of the car. Length over buffers 13.3 cm (5-1/4″).
DC wheel set 70 0580



See fold-out page at end of catalog for explanation of drawings.





During the provincial railroad period the lighting for locomotives, passenger and maintenance cars as well as station lighting was operated chiefly with gas. Supplies of this fuel were transported to the stations and maintenance facilities with so-called gas cars. The Bavarian gas cars gave such excellent results in operation that they remained in service for decades.

N NEM I

46600 "Gas Cars" Car Set.
Set consists of 3 Royal Bavarian State Railroad (K.Bay.Sts.B.) gas transport cars. With brakeman's platform. Different car number for each car. See-through frame. Fine reproduction of the gas tanks and fittings. Total length over buffers 30.6 cm (12-1/16″).
DC wheel set 60 1151

All cars in special version. Not available separately.

This model is being offered for two-rail DC systems by TRIX (T23915).

The 46600 car set is being produced in a one-time series only in 1999.

Royal Württemberg State Railways (K.W.St.E.)



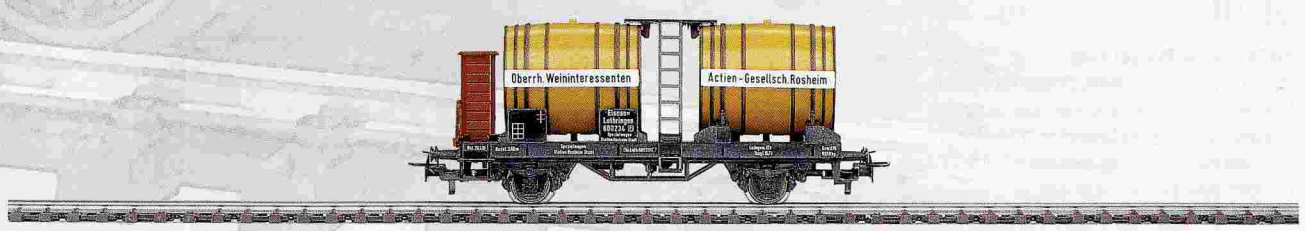
NEM I

46743 Wine Barrel Car.
Privately owned car, used on the Royal Württemberg State Railways (K.W.St.E.). With brakeman's cab. Real wood barrels. Separately applied lettering board. Length over buffers 10.1 cm (4″).
DC wheel set 70 0630

Imperial Railways of Alsace-Lorraine

I

4432 Wine Barrel Car.
Privately owned car. Used on the Imperial Railways of Alsace-Lorraine. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



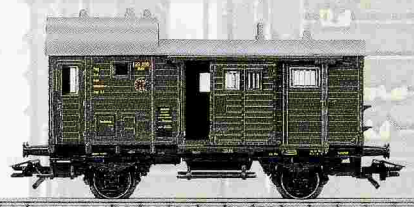
State Railroad Freight Cars

German State Railroad Company (DRG)



NEM II

46951 Boxcar.
Type Gk auxiliary refrigerator car. Special car for the transport of ocean fish. With brakeman's cab. Sliding doors that can be opened. Length over buffers 11.0 cm (4-5/16″).
DC wheel set 70 0270



NEM II

4699 Freight Train Baggage Car.
Type Pwg. Sliding doors that can be opened. Length over buffers 9.8 cm (3-7/8″).
DC wheel set 70 0580



NEM II

4888 Livestock Car.
Interchange design type V "Altona". Sliding doors that can be opened. Length over buffers 10.5 cm (4-1/8″).
DC wheelset 70 0580

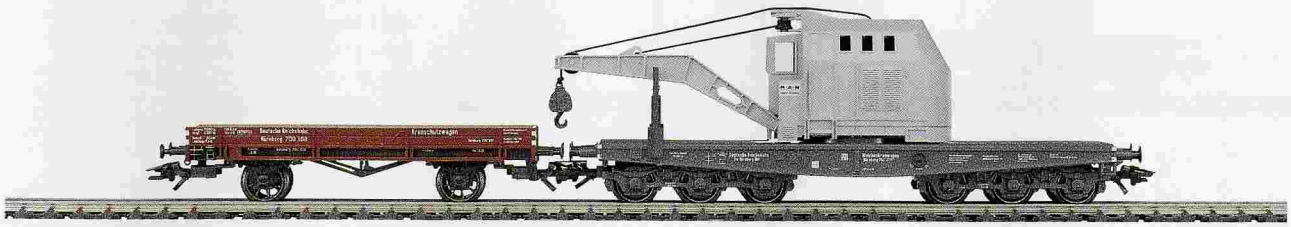


NEM II

46741 Wine Barrel Car.
"Mainz" barrel car. With brakeman's cab. Barrels made of real wood. Separately applied destination board and platform with walkway. Barrels individually imprinted. Length over buffers 10.1 cm (4″).
DC wheel set 70 0580

German State Railroad Company (DRG)

In 1935 the firm Maschinenfabrik Augsburg-Nürnberg (MAN) delivered the "Nürnberg" turnout crane car to the German State Railroad Company. This special crane enabled the rebuilding of turnouts during ongoing railroad operations. With a short boom there was no need for a counterweight that would hang over the adjacent track on a two track line. This allowed train movements on the latter track to continue uninterrupted.









NEM II

48674 Turnout Crane Car Set.
Set consists of 1 crane car and 1 crane auxiliary car. "Nürnberg" turnout crane car. With rotating crane cab and adjustable boom. Crane hook can be raised and lowered with hand crank. Detailed reproduction of the car floor. Metal side sills. "Nürnberg" crane auxiliary car. Total length over buffers 26.1 cm (10-1/4″).
DC wheel set 70 0580 for crane car
DC wheel set 70 0630 for auxiliary car

Both cars in a special version. Not available separately.

N NEM II

46751 "Olex" Tank Car Set.
Set consists of 3 German Petroleum Sales, Inc. tank cars, used on the German State Railroad Company (DRG), and 1 tank truck.

Each tank car has a different paint scheme. With brakeman's cab. Separately applied tank platform and ladders. Total length over buffers 30.7 cm (12-1/16″).

Büssing type 650 tank truck lettered for "Olex". Metal frame and superstructure. Rear axle with double tires. Trilux rims on the front axle. Length 9.8 cm (3-7/8″).
DC wheel set 70 0580

All cars in special version. Not available separately.

Special one-time series in 1999.
Already delivered to the dealers.

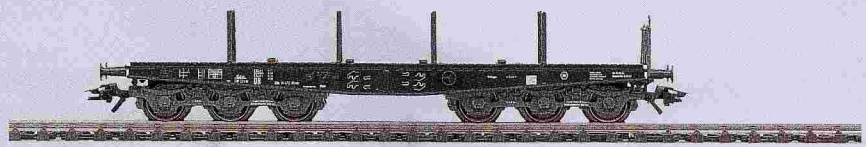
State Railroad Freight Cars

German State Railroad Company (DRG)

In 1942 rolling stock for the heaviest of loads was built parallel to the class 52 locomotives as part of the immense procurement program brought about by military requirements. One result was the six-axle flat car, later classified by the DB as SSym 46. This car had an empty weight of approximately 21.6 metric tons and a loaded weight of up to 80 metric tons and could be operated at a maximum speed of 80 km/h (approx. 50 mph).

After the war this car class was used, among other things, for transporting dredging equipment and large construction machines as well as for logs, steel products, concrete component parts and many other heavy, one-piece loads.

The Mallet design freight locomotives go well with the DRG freight cars (Märklin models 33021/37021, see page 58).



NEM II

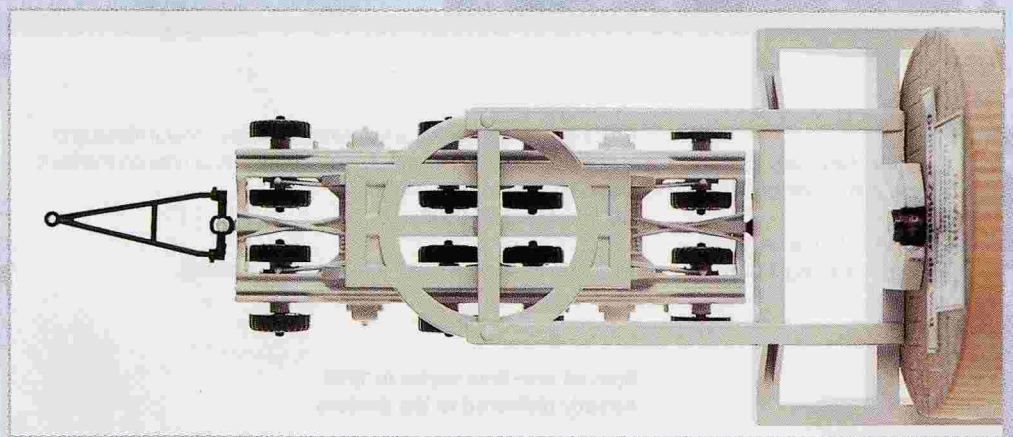
4867 Heavy Duty Flat Car.
Type SSym "Köln". Heavy duty trucks.
Length over buffers 15.2 cm (6").
DC wheelset 70 0580

The Kaelble Company of Backnang, Germany introduced an extraordinary vehicle in 1937. The type Z6R3A, known as "Kaelble Jumbo", was the largest diesel truck in the world at that time. This 14.5 ton truck was provided with an additional 6.5 tons of ballast to enable it to pull loads of 200 tons. The maximum speed with a load in tow was, however, only 20 km/h (approx. 13 mph). The motor developed 200 hp at 1,200 rpm. This vehicle was destroyed in an air attack.

NEM II

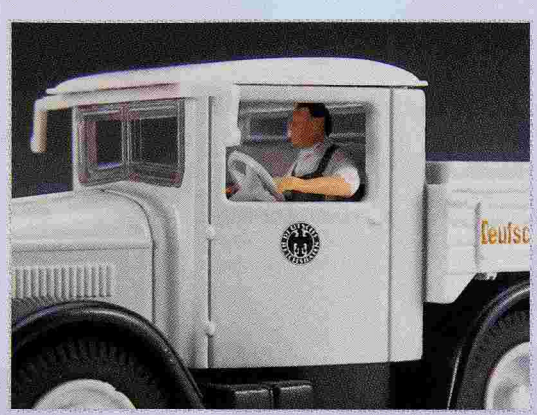
4866 Heavy Duty Flat Car.
Type SSym "Köln". Metal side sills.
Length over buffers 15.2 cm (6").
Loaded with a Kaelble Jumbo heavy duty truck. Metal superstructure.
Numerous, separately applied details.
DC wheel set 70 0580











So-called machine glazing cylinders are used in the manufacture of paper to roll and glaze the still wet paper mass. Better, more consistent paper quality is achieved with larger diameter and heavier cylinders. The sensitive surface of the cylinders must be protected with wood lagging during transport. This was particularly important for overseas transport. These cylinders were exported all over the world.

The combination of the Kaelble Jumbo with its 200 horsepower and the Kaelble 70 021 as a helper unit with its 65 horsepower resulted in immense tractive effort for the conditions of that time. The 32 wheels of the road rollers distributed the large weight of the paper glazing cylinders equally. This meant that damages to the roads could be avoided to a large extent.

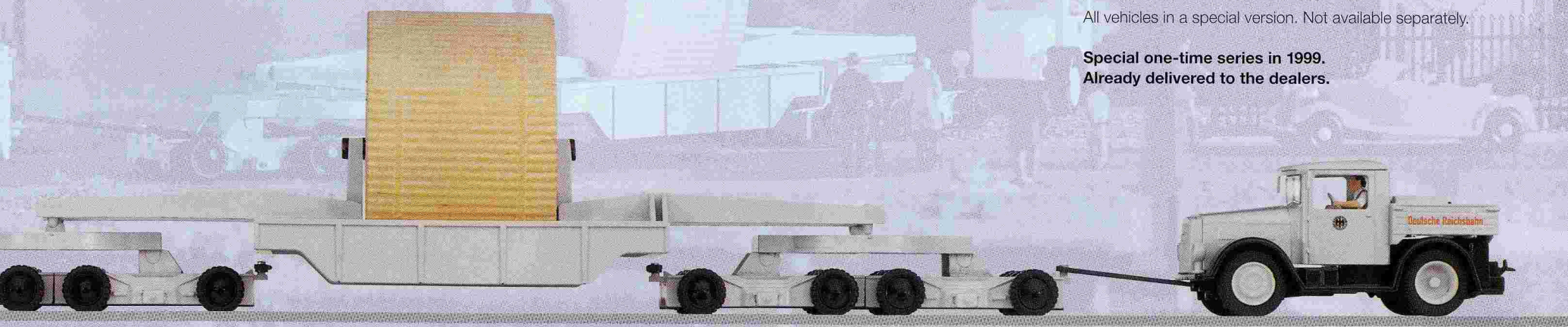
The operation of these units was usually quite spectacular. The planned route was carefully examined. Street lights, telegraph poles, or bridge railings had to be removed sometimes. On particularly narrow streets where driving these units was quite difficult the required path was marked on the surface of the street or road with chalk. The driver then had to follow just these lines.

N II

46824 "Paper Glazing Cylinders" Heavy Freight Set.
Set consists of 2 different German State Railroad Company (DRG) tractors and 1 heavy duty roller bed with load. "Kaelble Jumbo" Z6R3A tractor. Metal frame and body. With figure of driver. Drawbar hitch on which to hang the drawbars. Heavy duty transport bed with 2 trucks each on 2 coupled Culemeyer design street rollers. Sixteen axle version. Metal transport bed and street rollers. Load of paper glazing cylinders embossed with wood lagging.
Kaelble DR-70 021 helper unit. Metal frame and body. With figure of driver. With a spare wheel on its flatbed. With pin on the front on which to hang the drawbars. Total length 40.0 cm (15-3/4").

All vehicles in a special version. Not available separately.

Special one-time series in 1999.
Already delivered to the dealers.



Freight Cars

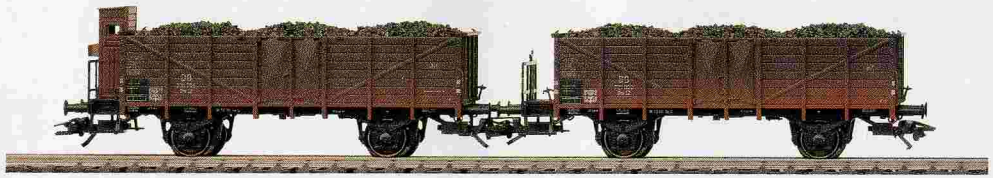
46034 "Coal Transport" Car Set.
Set consists of 5 different German Federal Railroad freight cars. 1 type Om 12 gondola with brakeman's cab. 1 type Om 12 gondola with brakeman's platform. 1 type Omm 55 gondola with truss rods. 1 type Omm 52 gondola. 1 type Omm 37 gondola with truss rods. Car bodies are weathered. Loaded with real, scale sized coal. Total length over buffers 57.9 cm (22-13/16").
DC wheel set 70 0580

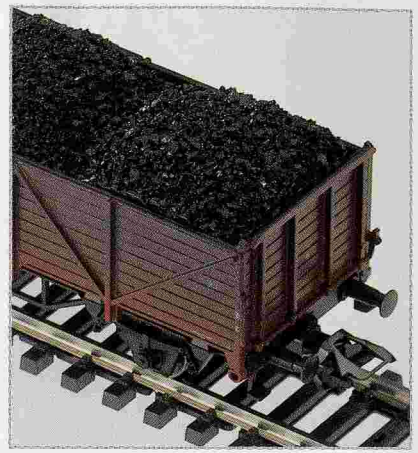
All cars in special version. Not available separately.

Special one-time series in 1999.
Already delivered to the dealers.

These models are being offered for two-rail DC systems by TRIX (T23932).











48784 "G 10 Boxcar" Car Set.
Set consists of 3 different German Federal Railroad boxcars. Type G 10 with brakeman's cab. Type G 10 with brakeman's cab removed. Type G 10 without brakeman's cab. All cars have sliding doors that can be opened. Total length over buffers 33.2 cm (13-1/16").
DC wheel set 2 x 70 0580
4 x 70 0270

All cars in special version. Not available separately.

The 48784 car set is being produced in a one-time series only in 1999.

A Märklin plant location celebrates its city.

märklin
H0

In 1349 the small settlement of Sonneberg on the southern slopes of the Thuringian Forest was granted a town charter by its count. After repeated destruction by fires, pillaging, and environmental catastrophes Sonneberg developed at the start of the 19th century into a toy manufacturing center. A newly developed raw material, paper maché, made it possible to produce a wide variety of designs for toys with a high degree of durability. Gaining a link to the postal system (1808) and the railroad (1858) accelerated the economic development of the town. In 1883 Sonneberg established an industrial training school that served as an impetus for the production of toys. In 1913 Sonneberg became the "World Toy City" and today is the site of the German Toy Museum.

When Märklin was searching for a new location for a plant after the reunification of West and East Germany, Sonneberg was the first preference. After 12 months of preparation work production began in 1992, initially of H0 cars, then Z cars, and finally the decision to produce C Track came to Sonneberg. Today Sonneberg has over 300 Märklin employees. Märklin-Sonneberg has become an important business factor for the region – and for Märklin a reliable partner in its production complex.
We are celebrating the 650th anniversary of the city of Sonneberg with a DRG car set, produced in Sonneberg of course with the customary quality and love of detail.

N NEM II

47895 "650 Years of Sonneberg" Car Set.
Set consists of 5 different German State Railroad Company (DRG) freight cars and 1 furniture wagon. 1 boxcar. Sliding doors that can be opened. 1 tank car with brakeman's cab. 1 refrigerator car. Brakeman's platform on both ends. 1 gondola with brakeman's cab. Loaded with scale sized stone chips. 1 low side car with brakeman's cab. Loaded with a furniture wagon. Total length over buffers 55.4 cm (21-13/16").
DC wheel set 70 0580

All cars in special version. Not available separately.

The 47895 car set is being produced in a one-time series only in 1999.



Boxcars

German Federal Railroad (DB)



HOBBY IV

4410 Boxcar.
Type Gs 210. RELEX couplers.
Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580





HOBBY ● IV

4411 Boxcar.
Type Gs-uv 213. With pickup shoe and lighted marker lantern. RELEX couplers.
Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580

These two-axle boxcars were acquired for the railroads in Saarland starting in 1955. The side walls were made of spruce and fir wood. The four ventilation openings on the sides were equipped with hatches of galvanized sheet steel.

N NEM III

46274 Boxcar.
Saar Railroad type 54, used on the German Federal Railroad. Vent hatches picked out in different color. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580





N NEM III

48881 Livestock Car.
German Federal Railroad type V 23. Sliding doors that can be opened. Length over buffers 10.5 cm (4-1/8″). Figures of sheep and chickens included.
DC wheel set 70 0580



Giving and helping.

Many people want to also help the needy with their gift as well as give personal joy. For that reason our birthday car has developed into a still young but successful tradition. With a different theme every year, it is a good idea for a gift, and the donation of a part of its sales helps needy children. After the cars for UNICEF and the Muscular Dystrophy, this year we are dedicating this year's car to the SOS Children's Village Association.

The SOS Children's Village Association assumes responsibility for the future of children and youth. A basic principle of all SOS services is to foster living together in a community. In Germany the SOS Children's Village Association maintains in addition to 14 SOS Children's Villages other youth aid services, counseling centers, centers for mothers, education and job training services for socially disadvantaged youth as well as village communities for mentally retarded people. Just under 14,000 children, youth and young adults are cared for on a partial or continuous basis, counseled or educated.

The donation of DM 3.00 from the sale of each birthday car this year goes to the SOS Children's Village Association.

N

44265 Birthday Car.
Special car lettered for SOS Kinderdorf e.V. RELEX couplers. Different design on both sides of the car. Length over buffers 11.5 cm (4-1/2").
DC wheel set 70 0580

The 44265 Birthday car is being produced in a one-time series only in 1999.

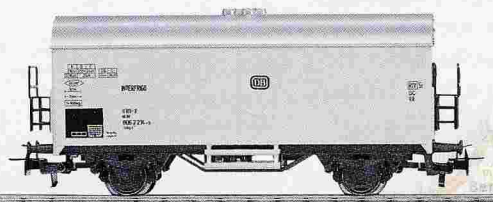


Refrigerator Cars

German Federal Railroad (DB)

HOBBY IV V

4415 Refrigerator Car.
Type Ichqs-u 377. RELEX couplers.
Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



HOBBY V

44173 Refrigerator Car.
Privately owned by Distelhäuser Brewery, Ernst Bauer, Inc., Distelhausen, Germany. RELEX couplers.
Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580





HOBBY V

4439 Beer Car.
Privately owned car of the "Stuttgarter Hofbräu" Brewery. RELEX couplers.
Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580

HOBBY V

4485 Refrigerator Car.
Privately owned car with advertising for "Bärenmarke". RELEX couplers.
Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



HOBBY V

44175 Beer Car.
Privately owned by Baden State Brewery Rothaus, Inc., Rothaus/Schwarzwald, Germany. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



See fold-out page at end of catalog for explanation of drawings.

German Federal Railroad (DB)

HOBBY N V

44178 Beer Car.
Privately owned by Küppers Kölsch Brewery, Cologne, Germany. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



HOBBY N V

44177 Refrigerator Car.
Privately owned by DANONE, Inc., Munich, Germany. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



HOBBY V

44174 Refrigerator Car.
Privately owned by HARIBO, Inc., Bonn, Germany. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



HOBBY V

4417 Beer Car.
Privately owned by Warsteiner Brewery, Warstein, Germany. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



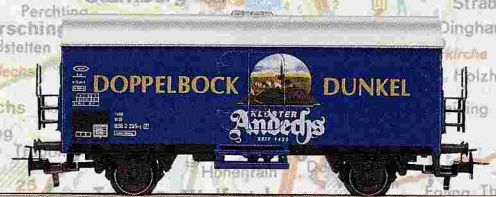
HOBBY V

4416 Beer Car.
Privately owned by Veltins Brewery, Meschede, Germany. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



HOBBY V

4421 Beer Car.
Privately owned car for Kloster-brauerei Andechs, Andechs, Germany. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



Dump Cars

German Federal Railroad (DB)



HOBBY III IV

4413 Dump Car.
Bucket can be tipped to both sides and locked in center position. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580

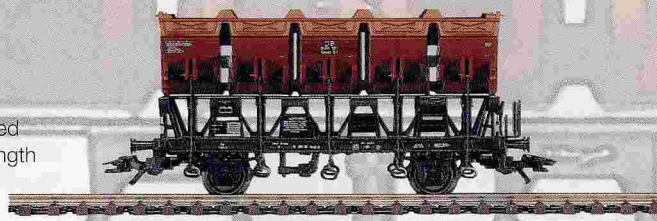


HOBBY IV

4610 Talbot Design Ballast Car.
Maintenance car. Unloading hatches can be opened with hand levers. RELEX couplers. Length over buffers 9.5 cm (3-3/4″).
DC wheel set 70 0500

NEM III

4635 Dump Car.
Type F-z 120. Buckets can be tipped after releasing the middle latch. Length over buffers 10.5 cm (4-1/8″).
DC wheel set 70 0600



HOBBY IV

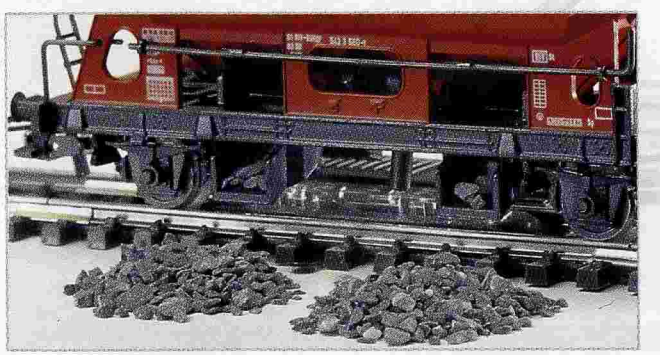
4431 Gondola.
Type El-u 061. With removable coal load insert. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580

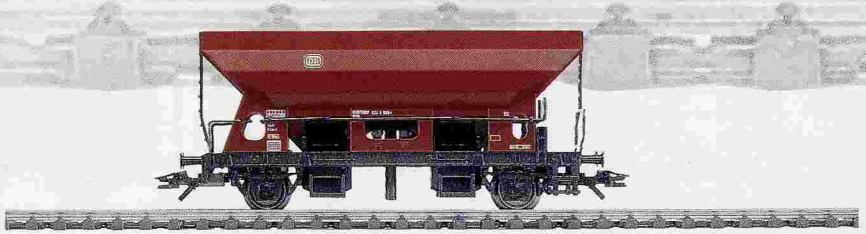


HOBBY IV

4430 Gondola.
Type El-u 061. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



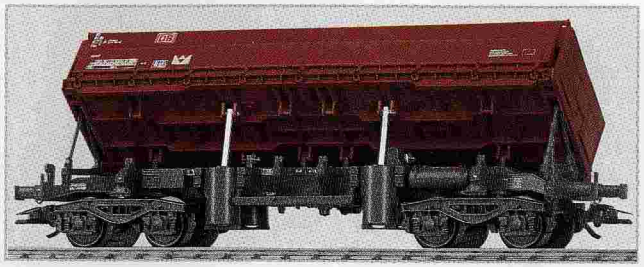




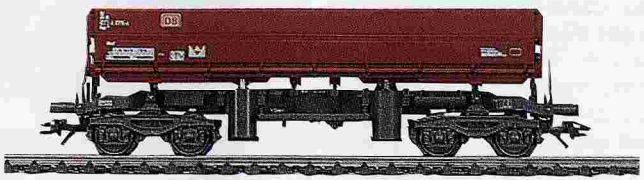
NEM IV

4631 Side Dump Car.
Type Fc 090. Unloading hatches can be opened with hand lever or by remote control with uncoupler track. Length over buffers 11.2 cm (4-3/8″).
DC wheel set 70 0600

The Blankenburg Research and Development Facility (FEW) recognized early on the need for railroad bulk material cars that were required for the transport of construction materials to modernize the infrastructure in reunited Germany. In 1993 a new design for an efficient side unloader was presented as a prototype, and the German Railroad, Inc. started buying it in 1994 as a series.



The rational design – large loading capacity of 59 metric tons, the ability to dump on both sides, built-in pneumatic cylinders and automatic control of the unloading hatches – makes this and similar new cars attractive for consideration in the further modernization of the DB, Inc.'s rolling stock. The side dump cars are often used today in unit trains.





48450 Bulk Material Dump Car.
DB, Inc. type Fans 126 side dumper. Hopper mounted on guides and can be tipped to both sides. Movable pneumatic air cylinder and pneumatic ram. 2 unloading hatches on each side of the car that can be opened. Length over buffers 14.0 cm (5-1/2").
DC wheel set 70 0580

This model is being offered for two-rail DC systems by TRIX (T23940).

Since 1994 the DB, Inc. has purchased 250 type Fans 126 bulk material dump cars. They are usually mostly for excavation work and for transporting materials for the large construction sites in and around. The hoppers on these cars can be dumped to both sides by means of pneumatic air cylinders and a guide mechanism in the end walls of the cars. The pneumatic unloading equipment can be remote controlled by means of pneumatic air lines and thereby enables very short standing times for the materials being transported. A single car was presented in 1995 in the DB Cargo's red paint scheme.



48451 Bulk Material Dump Car Set.
3 DB, Inc. type Fans 126 side dumper. 2 cars with handbrakes and end platforms. 1 car in the red paint scheme for DB Cargo. Hopper mounted on guides and can be tipped to both sides. Movable pneumatic air cylinder and pneumatic ram. 2 unloading hatches on each side of each car that can be opened. Total length over buffers 42.4 cm (16-11/16").
DC wheel set 70 0580

All cars in special version. Not available separately.

Special one-time series in 1999.
Already delivered to the dealers.

This model is being offered for two-rail DC systems by TRIX (T23962).



Special Design Freight Cars

German Federal Railroad (DB)



NEM IV

4624 High Capacity Hopper Car.
Type Fals 176. Length over buffers 13.3 cm (5-1/4″).
DC wheel set 70 0580

NEM IV

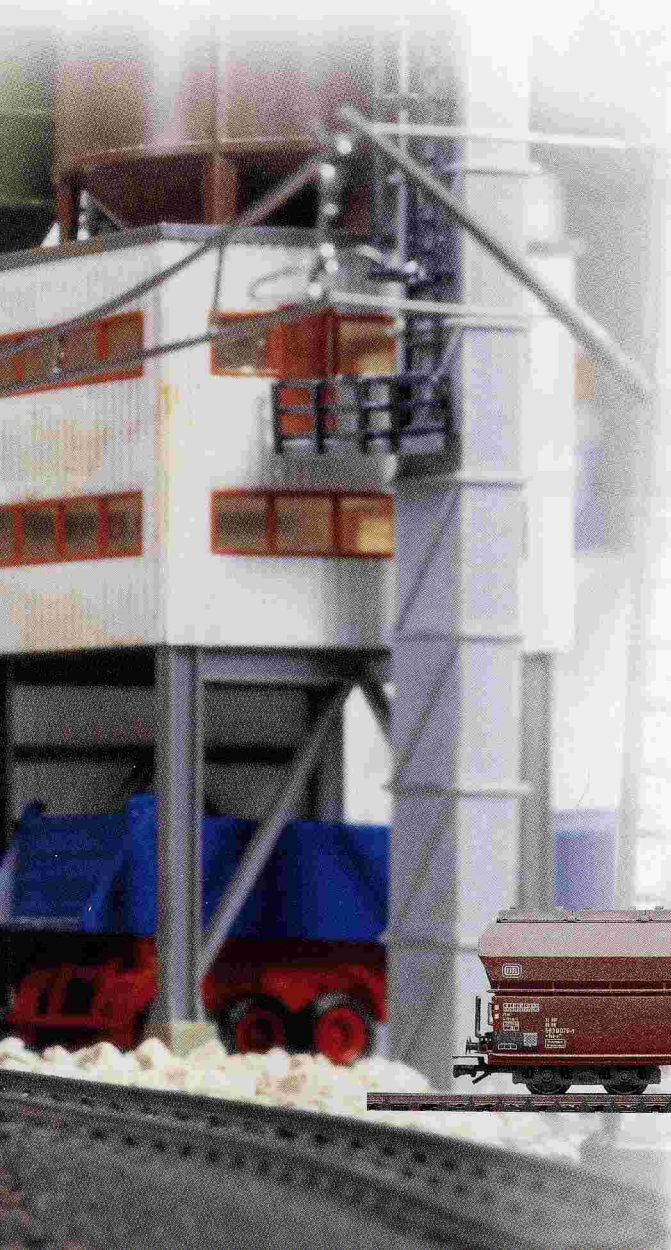
4626 High Capacity Hopper Car with Hinged Roof Hatches.
Type Tad-u 961. All hatches can be opened. Length over buffers 13.3 cm (5-1/4″).
DC wheel set 70 0280



Car Set

märklin HO

German Federal Railroad (DB)



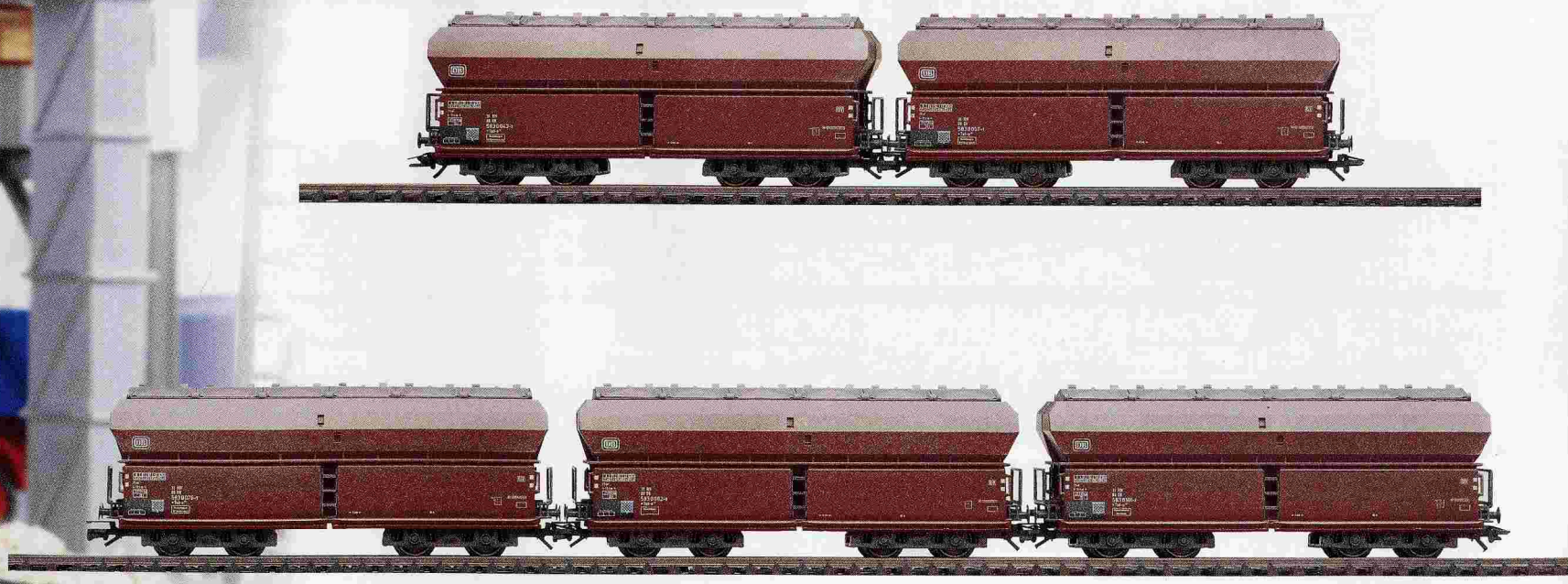
Limestone is a freight load for the railroad that is rich in tradition. This type of transport began as early as 1873 on the Anger Valley Railroad between Wülfrath and Ratingen on the southern edge of the Ruhr area. After successful test bores, August Thyssen came upon an extensive deposit of limestone, and wanted to mine it and transport it to the Ruhr area at a favorable cost. He was the main initiator of the extension of this route starting in 1897. After a varied history, this line now serves the largest European limestone quarry in Wülfrath-Rohdenhaus.

NEM IV

46262 "Limestone Transport" Car Set.
Set consists of 5 type Tad-u 961 hopper cars with hinged roof hatches. Each car with a different car number. Weathered appearance. All hatches can be opened. Total length over buffers 67.7 cm (26-5/8").
DC wheel set 70 0580

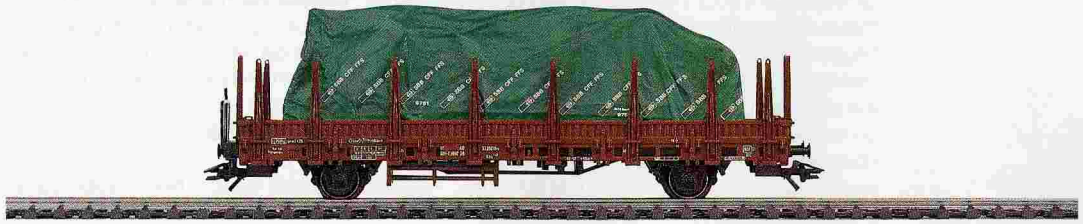
All cars in special version. Not available separately.

The German Federal Railroad class 184 (E 410) four system electric locomotive (Märklin models 34310/37310) is an appropriate unit for the "Limestone Transport" car set and can be found on page 84.



Stake Cars and Flat Cars

German Federal Railroad (DB)



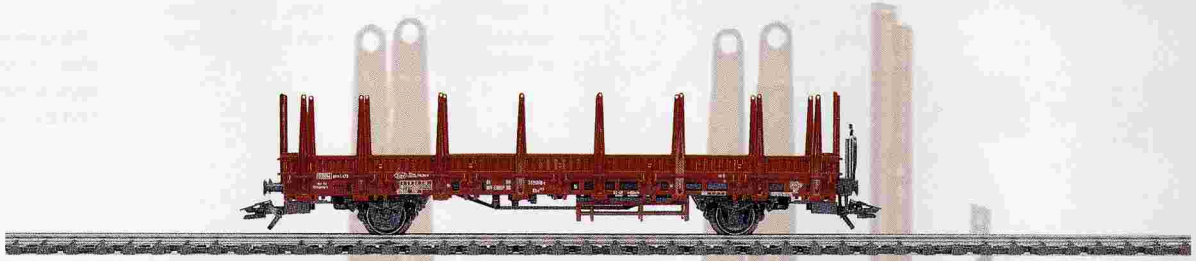
NEM IV

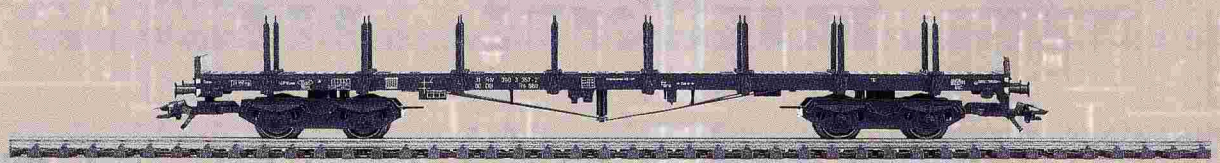
46942 Stake Car.
Type Kbs 443. Tarp for covering the load. Tarp and stakes removable. Length over buffers 15.7 cm (6-3/16″).
DC wheel set 70 0580



NEM IV

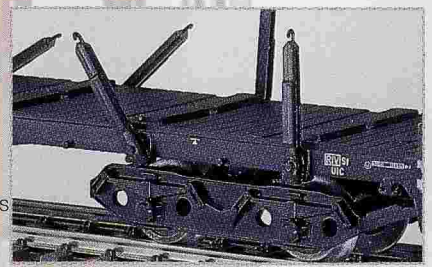
4694 Stake Car.
Type Kbs 443. Removable stakes. Length over buffers 15.7 cm (6-3/16″).
DC wheel set 70 0580





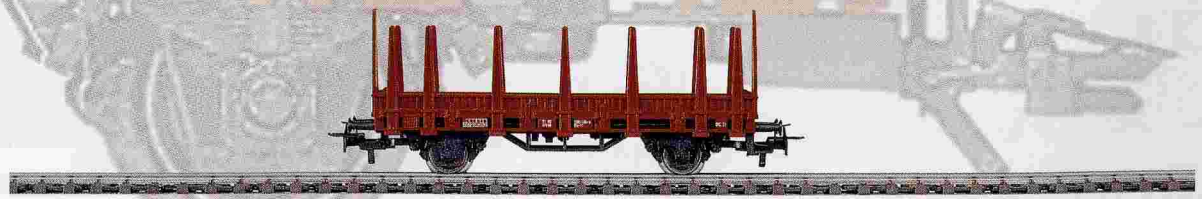
NEM IV

4663 Flat Car.
Type Rs 680. Stakes can be folded down. Length over buffers 22.7 cm (9″).
DC wheel set 70 0270



HOBBY IV

4459 Stake Car.
Type Kbs. 18 fixed stakes. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



See fold-out page at end of catalog for explanation of drawings.

German Federal Railroad (DB)

4771 Stake Car.
Type Snps 719. Finely detailed, fixed double stakes with tiedown levers. Load surface in different color. Length over buffers 23.9 cm (9-3/8″).
DC wheel set 70 0580





With the increase in speeds for freight trains the need arose at the end of the 1970s for modern cars for the transport of pipe, logs and lumber. The type Snps 719 has 16 fixed stakes with tiedown equipment, each of which can be operated by hand. Its load weight is 39–63 metric tons according to its route class, its maximum speed 90–100 km/h or approximately 56–83 mph (120 km/h or 75 mph unloaded).

The class 212 (Märklin model 33723) is an appropriate diesel locomotive and the class 151 (Märklin model 37431) is an appropriate electric locomotive to go with the heavy duty flat cars and stake cars, and they can be found on pages 71 and 85 respectively.



47711 Stake Car.
Type Snps 719. Loaded with real wood. Finely detailed, fixed double stakes with tiedown levers. Load surface in different color. With brake wheel. Length over buffers 23.9 cm (9-7/16″).
DC wheel set 70 0580



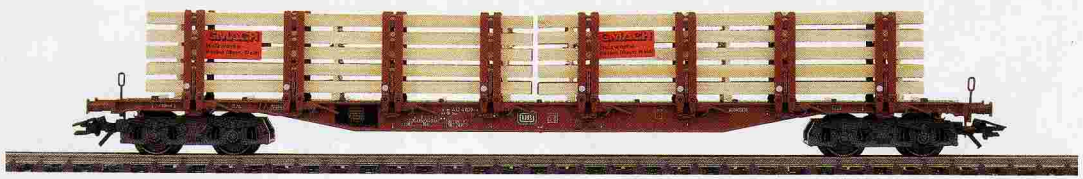
47713 Stake Car.
Type Snps 719. Loaded with gas pipe on wooden beams. Finely detailed, fixed double stakes with tiedown levers. Load surface in different color. Length over buffers 23.9 cm (9-3/8″).
DC wheel set 70 0580

This model is being offered by Trix (T23961) for 2-rail DC systems.

N

47714 Stake Car.
German Federal Railroad type Snps 719. Loaded with 2 stacks of lumber. Finely detailed, fixed double stakes with tiedown levers. Load surface in different color. Length over buffers 23.9 cm (9-3/8″).
DC wheel set 70 0580

Special one-time series in 1999.
Already delivered to the dealers.



Flat Cars

German Federal Railroad (DB)

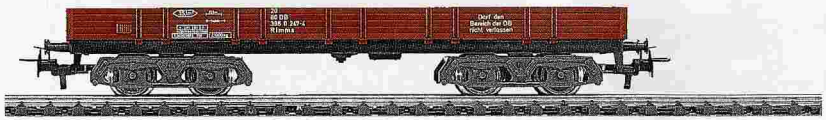
HOBBY IV

4423 Low Side Car.
Type Kklm 505. RELEX couplers.
Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



HOBBY IV

4473 Low Side Car.
Type Rlmms. RELEX couplers.
Length over buffers 16.0 cm (6-5/16″).
DC wheel set 70 0580



HOBBY IV

4474 Low Side Car.
Type Rlmms. Loaded with a bulldozer and a skip loader. RELEX couplers.
Length over buffers 16.0 cm (6-5/16″).
DC wheel set 70 0580



HOBBY IV

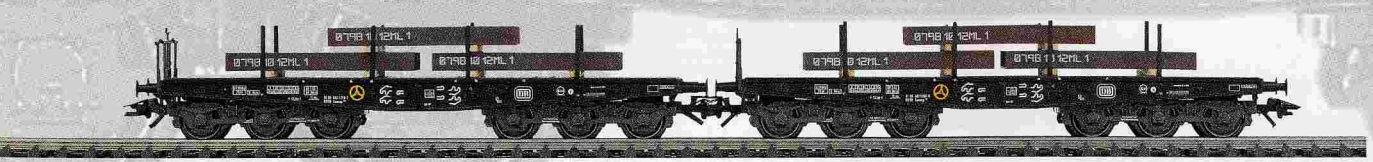
4424 Low Side Car.
Type Kklm 505. Loaded with a bulldozer. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



NEM IV

48664 "Steel Slabs" Heavy Duty Car Set.
Set consists of 2 type Sammp heavy duty flat cars with different car numbers. Each loaded with 3 removable slabs of metal. Batch numbers printed on the slabs. Total length over buffers 30.6 cm (12-1/16″).
DC wheel set 70 0580

Both cars in special version. Not available separately.



märklin HO



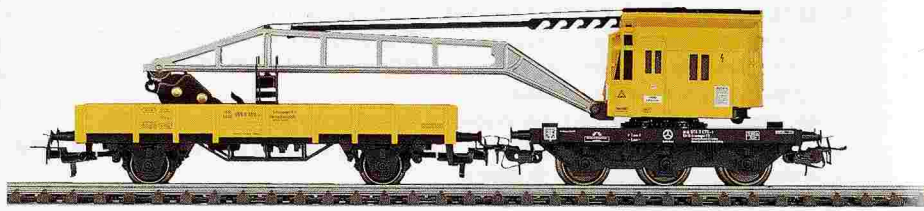
German Federal Railroad (DB)

HOBBY IV V

4471 Low Side Car.
Maintenance car. Suitable for use with the 4671 crane car. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580

HOBBY IV V

4671 Crane Car.
With rotating crane, movable boom and boom support. Crane hook can be raised and lowered with hand crank. RELEX couplers. Length over buffers 8.3 cm (3-1/4″).
DC wheel set 70 0530





HOBBY III

4617 Depressed Center Flat Car.
Type SSI 53. Loaded with a removable, industrial size transformer. RELEX couplers. Length over buffers 25.0 cm (7-7/8″).
DC wheel set 70 0530

HOBBY III

4618 Depressed Center Flat Car.
Type SSI 53. Loaded with a removable, overseas crate. RELEX couplers. Length over buffers 25.0 cm (7-7/8″).
DC wheel set 70 0530



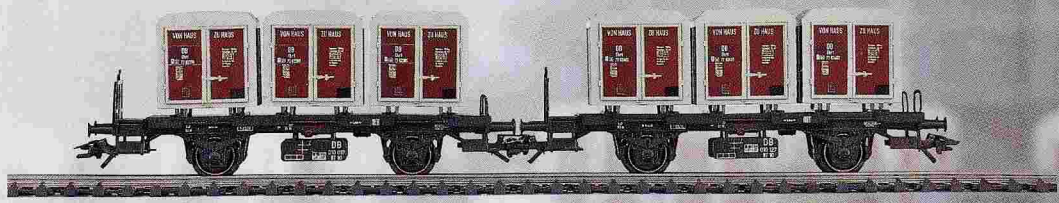
Flat Cars

German Federal Railroad (DB)

NEM III

48940 "Container Transport Flat Cars" Car Set.
Set consists of 2 type Bt 10 flat cars for transporting containers. Cars have different car numbers. Separately applied lettering boards. Loaded with 3 each removable "Von Haus zu Haus" medium size containers.
Total length over buffers 22.8 cm (9″).
DC wheel set 70 0580

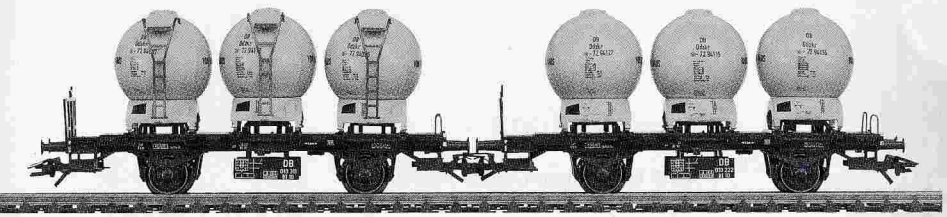
Both cars in special version.
Not available separately.

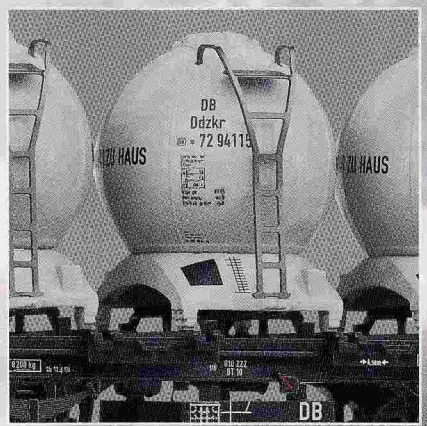


N NEM III

48942 "Container Transport Car" Car Set.
Set consists of 2 German Federal Railroad type Bt 10 container transport cars. Cars have different car numbers. Separately applied destination boards. Each car loaded with 3 removable spherical containers. Separately applied metal ladders. Spherical containers with different container numbers.
Total length over buffers 22.8 cm (9″).
DC wheel set 70 0580

Special one-time series in 1999.
Delivery starting the 4th quarter of 1999.





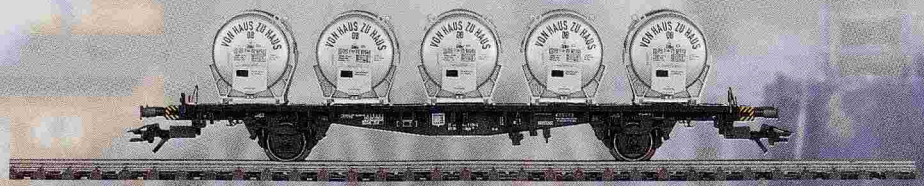
N NEM IV

48941 "Container Cars" Car Set.
Set consists of 2 German Federal Railroad type Bt 10 flat cars for containers. With different car numbers. Separately applied data boards. Each loaded with 3 removable tank containers.
Total length over buffers 22.8 cm (9″).
DC wheel set 70 0580

Both cars in special version.
Not available separately.

NEM IV

4853 Flat Car.
Type Lgjs. Loaded with 5 removable tank containers. Length over buffers 17.0 cm (6-11/16″).
DC wheel set 70 0580







NEM IV

4768 Container Car.
Type Lgjs 573 flat car. Loaded with 2 removable 20 ft. containers. Length over buffers 17.0 cm (6-11/16″).
DC wheel set 70 0580

Special Design Freight Cars

German Federal Railroad (DB)

HOBBY IV

4613 Auto Transport Car.
Type Laae 540. Loaded with 4 VW Beetles. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0500



HOBBY IV

4612 Auto Transport Car.
Type Laae 540. Without automobile load. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0500

Two of the 4612 or 4613 auto transport cars make up a prototypical double unit.

NEM IV

4712 Double Auto Transport Car.
Type Laekks 553. Both upper decks can be lowered at the car ends. Upper and lower access with two movable loading gates. Chock blocks for model autos included. Close-coupled, special connection with standard coupler pockets between the car halves. Length over buffers 31.0 cm (12-1/4″).
DC wheel set 70 0580





German Railroad, Inc. (DB)

N NEM V

47200 Car for Transporting Coils of Rolled Sheet Steel.
German Railroad, Inc., DB Cargo Business Area, type Shimmns 718. Model with closed tarp cover. Length over buffers 13.8 cm (5-7/16″).
DC wheel set 70 0580



Silo Container Cars

märklin HO

German Federal Railroad (DB)



N NEM III

47896 "Henkel" Car Set.
Set consists of 3 different powdered freight silo cars lettered for Henkel KgaA, Düsseldorf, Germany, used on the German Federal Railroad. Each car different from the others and with different car number. Metal ladders and catwalk. Filigree reproduction of the asymmetrical car frame. Total length over buffers 39.1 cm (15-3/8″).
DC wheel set 6 x 70 0580
3 x 57 9290

All cars in special version.
Not available separately.

Special one-time series in 1999.
Already delivered to the dealers.



N NEM III

46613 Silo Container Car.
German Federal Railroad type Kds 54. With brakeman's platform. Metal ladders and brakeman's platform. Length over buffers 10.0 cm (3-15/16″).
DC wheel set 70 0580



NEM III

46581 Powdered Coal Transport Car.
Privately owned car, used on the German Federal Railroad. With brakeman's platform. Metal ladders and platform. Length over buffers 10.0 cm (3-15/16″).
DC wheel set 70 0580

NEM IV

4661 Silo Container Car.
Type Ucs 908. Metal ladders and brakeman's platform. Length over buffers 10.0 cm (4″).
DC wheel set 70 0580



Tank Cars

German Federal Railroad (DB)

HOBBY IV V

4440 Petroleum Oil Tank Car.
Privately owned by Aral, Inc. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580





HOBBY IV V

4441 Petroleum Oil Tank Car.
Privately owned by Esso, Inc. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580



HOBBY IV V

4442 Petroleum Oil Tank Car.
Privately owned by German Shell, Inc. RELEX couplers. Length over buffers 11.5 cm (4-1/2″).
DC wheel set 70 0580

NEM IV V

4644 Petroleum Oil Tank Car.
Privately owned by German BP, Inc. Length over buffers 10.0 cm (4″).
DC wheel set 70 0270





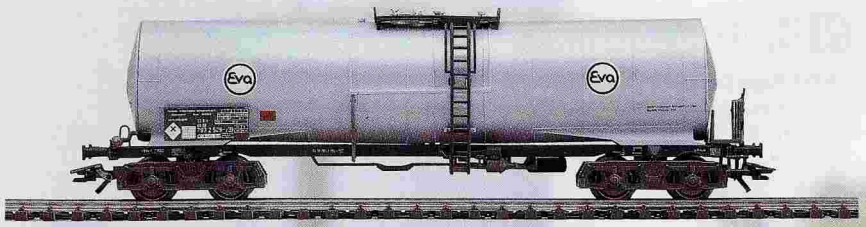
N NEM V

46424 Tank Car.
Privately owned by Henkel KGaA, Düsseldorf, Germany. Separately applied brakeman's platform and catwalk with ladders. Filigree reproduction of the see-through car frame. Length over buffers 10.0 cm (3-15/16″).
DC wheel set 60 1151

The 46424 tank car is being produced in a one-time series only in 1999.



German Federal Railroad (DB)



NEM IV V

4757 Chemical Tank Car.
Privately owned by EVA, Company. Prototypical funnel-flow tank. Detailed, open frame. Numerous, separately applied details. Length over buffers 18.0 cm (7″).
DC wheel set 70 0580

NEM IV V

4754 Oil Tank Car.
Privately owned by ESSO, Inc. Detailed, open frame. Numerous, separately applied details. Length over buffers 18.0 cm (7″).
DC wheel set 70 0580



NEM IV V

4756 Oil Tank Car.
Privately owned by German Shell, Inc. Detailed, open frame. Numerous, separately applied details. Length over buffers 18.0 cm (7″).
DC wheel set 70 0580



The German Federal Railroad class 143 electric locomotive (Märklin models 34431/37340, see page 84) is an appropriate unit for the gas tank cars.



Freight Cars

German Federal Railroad (DB)



N NEM IV V

48033 High Capacity Sliding Wall Boxcar.
Type Habis 8, used on the German Federal Railroad (DB). Privately owned by RAILSHIP, Inc., Lübeck-Travemünde, Germany. Adjustable buffers and trucks. Length over buffers 26.7 cm (10-1/2″).
DC wheel set 70 0580

German Railroad, Inc. (DB)

NEM V

48012 Sliding Wall Boxcar.
Type Hbbins. Separately applied steps. Length over buffers 17.8 cm (7″).
DC wheel set 70 0580



On the German Railroad, Inc., the class 212 general purpose diesel hydraulic locomotive (Märklin model 33723, see page 71) is used to switch the high-capacity sliding wall boxcars



NEM V

48030 High-Capacity Sliding Wall Boxcar.
Privately owned type Habins 12, used on the German Railroad, Inc. Adjustable buffers and trucks. Length over buffers 26.7 cm (10-1/2″).
DC wheel set 70 0580

The Volkswagen Company's percentage of raw materials transported long distance by rail is increasing from year to year. Audi, for example, is using the railroad more and more under the slogan "Priority for the rails". This enables the preparation of individual supplier parts or complete assemblies using modern "just-in-time" concepts. Thus, 600,000 tons of material are transported by car yearly and in combination freight service, which amounts to almost 50% by rail.

NEM V

48031 High-Capacity Sliding Wall Boxcar.
Privately owned type Habins 12, used on the German Railroad, Inc. Adjustable buffers and trucks. Length over buffers 26.7 cm (10-1/2″).
DC wheel set 70 0580




DB
101 008-1
DB Cargo
TU

Special Design Freight Cars

The transport of commercial vehicles by rail is increasing more and more in importance. One of the latest transport systems is the KOMBIRAIL system. With this system each semi rig is mounted on two railroad trucks, the so-called Jacobs trucks. The individual railroad trucks in a train composition are connected together only through the truck trailers which must transmit all of the drawbar





48046 "KOMBIRAIL" Car Set.
Set consists of 5 different semi truck rigs, 2 end adapters and 4 center adapters, used on the German Railroad, Inc. Type Us 676 adapters. Special design semi truck rigs with retractable axles and king pins at the ends used on all trucks in this system. Main king pins compatible with Wiking truck tractors. Length over buffers 87.5 cm (34-7/16").
DC wheel set 70 0580

All vehicles in special version. Not available separately.



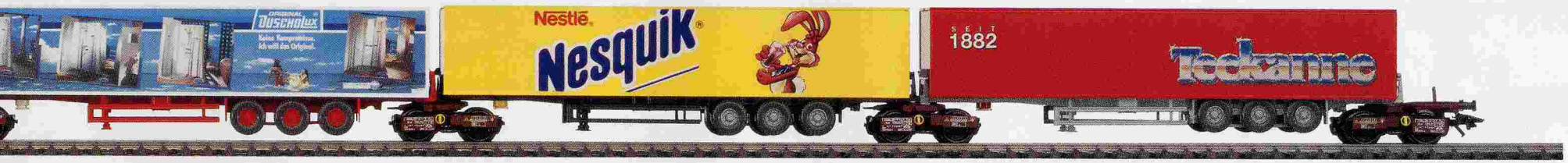
forces. The necessarily reinforced construction for the trailers diminishes the payload of the truck somewhat. The advantage compared to other systems is that the KOMBIRAIL system works equally well in both directions, because the Jacob trucks are self-stabilizing in both directions.



NEM V

48045 "KOMBIRAIL" Car Set.
Set consists of 5 different semi truck rigs, 2 end adapters and 4 center adapters, used on the German Railroad, Inc. Type Us 676 adapters. Special design semi truck rigs with retractable axles and king pins at the ends used on all trucks in this system. Main king pins compatible with Wiking truck tractors. Length over buffers 87.5 cm (34-7/16").
DC wheel set 70 0580

All vehicles in special version. Not available separately.





The German Railroad, Inc. class 152 modern electric locomotive (Märklin models 34350/ 37350) is an appropriate unit for the KOMBI-RAIL system and can be found on page 87.

NEM V

48040 KOMBIRAIL.
2 type Us 676 end adapters and 1 type Us 676 center adapter, used on the German Railroad, Inc. 2 special design semi truck rigs with retractable axles and king pins at the ends used on all trucks in this system. Main king pins compatible with Wiking truck tractors. Length over buffers 37.5 cm (14-3/4").
DC wheel set 70 0580



The “Rollende Landstraße” (“Rolling Road”)

German Federal Railroad (DB)

The slumber coaches for the “Rollende Landstraße”, in which the truck drivers can accompany their rigs, bear the colors of Kombiverkehr, Inc. Since this form of transport takes place mostly at night, a slumber coach is usually included in the train, in which the trucker can sleep to the destination station. This car is located directly behind the locomotive most of the time. The “Rollende Landstraße” trains carry complete trucks from the truck/trailer combination to semi truck/trailer rigs straight across Europe. This keeps the freeways free of traffic.

Next to West Germany, Switzerland and Austria with their Alpine through traffic are probably the most important transit countries in Europe. For this reason the Austrian Federal Railways and the Swiss Federal Railways (through the HUPAC Company) participate with the German Federal Railroad in the “Rollende Landstraße” concept for transport by rail between Germany and Italy.

Despite this cross border cooperation, the available capacity up till now has been sufficient for only a small part of the truck transit traffic.

IV V

4740 Depressed Floor Flat Car for Truck Transport.
Type Saadkms 690 for “Rollende Landstraße” Car Association. End car with 2 hinged and removable buffer beams. Chock blocks for trucks and special coupler for depressed floor flat cars included. 2 special close couplers for coupling to cars with standard couplers. Length over buffers 23.2 cm (9-1/8″).
DC wheel set 43 2950



IV V

4741 Depressed Floor Flat Car for Truck Transport.
Type Saadkms 690 for “Rollende Landstraße” Car Association. Intermediate car without buffer beams. Chock blocks for trucks and special coupler for depressed floor flat cars included. Length 21.4 cm (8-7/16″).
DC wheel set 43 2950

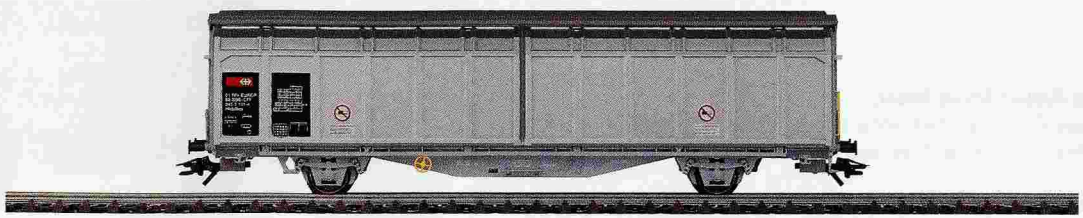




Swiss Federal Railways (SBB)

NEM V

48020 Sliding Wall Boxcar.
Type Hbbillns. Separately applied steps. Railroad data on both sides, German on one side and French on the other. Length over buffers 17.8 cm (7″).
DC wheel set 70 0580





N V

47403 Depressed Floor Flat Car for Truck Transport.
Swiss HUPAC type Saadkms "Rolling Road", used on the Swiss Federal Railways (SBB). End car with hinged and removable buffer beams and special close couplers for coupling to a locomotive or a crew car. 2 chock blocks for truck models and 1 special depressed floor special coupling. Length over buffers 23.2 cm (9-1/8″).
DC wheel set 43 2950

The 47403 depressed floor flat car is being produced in a one-time series only in 1999.

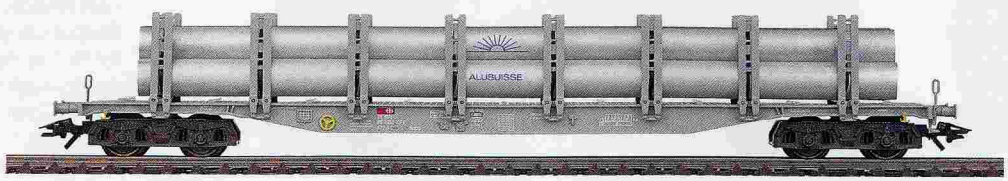
N V

47423 Depressed Floor Flat Car for Truck Transport.
Swiss HUPAC type Saadkms "Rolling Road", used on the Swiss Federal Railways (SBB). Intermediate car without buffer beams. Loaded with IVECO truck model lettered for Möbel Pfister Company. Chock blocks for truck and 1 special depressed floor special coupling. Length over buffers 21.4 cm (8-7/16″).
DC wheel set 43 2950

The 47423 depressed floor flat car is being produced in a one-time series only in 1999.



The class 151 electric locomotive (Märklin model 37431, see page 85) and the modern class 152 electric locomotive (Märklin models 34350/37350, see page 87) are both used to haul the "Rolling Road" trains.



N NEM V

47715 Stake Car.
Swiss Federal Railways (SBB) type Snps. Loaded with aluminum pipe on wood planks. Finely detailed, fixed double stakes with tensioning devices. Load area picked out in a different color. Length over buffers 23.9 cm (9-7/16″).
DC wheel set 70 0580

The 47715 stake car is being produced in a one-time series only in 1999.

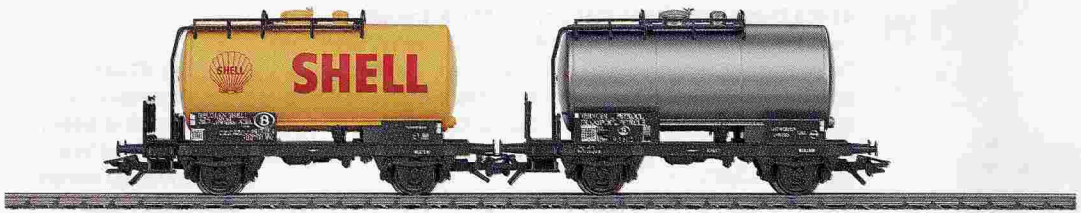
Freight Cars

N NEM V

47206 Car for Coils of Rolled Sheet Steel.
Austrian Federal Railways (ÖBB) type Shimmns. STEEL paint scheme. Model with closed tarp cover. Total length over buffers 13.8 cm (5-7/16″).
DC wheel set 70 0580



The 47206 transport car is being produced in a one-time series only in 1999.



N NEM III

48541 Tank Car Set.
Two older design Belgian State Railways (SNCB/NMBS) petroleum oil tank cars. 1 car owned by the railroad. 1 car privately owned by Belgian Shell Company. With catwalk and brakeman's platform. Total length over buffers 20.1 cm (7-15/16″).
DC wheel set 60 1151

The 48541 tank car set is being produced in a one-time series only in 1999.

N NEM V

47205 Car Set for Coils of Rolled Sheet Steel.
Two Belgian State Railways (SNCB/NMBS) type Shimmns 3614 D6 and 3614 D7. SNCB Cargo paint scheme. Model with closed tarp cover. Total length over buffers 27.7 cm (10-7/8″).
DC wheel set 70 0580

The 47205 car set is being produced in a one-time series only in 1999.



The 47885 car set is being produced in a one-time series only in 1999.



N NEM IV V

47885 Car Set for Nitrogen Transport.
Two gas tank cars, used on the French State Railways (SNCF). Stainless steel cars with heat shields, lettered for Simotra Company. Special car with dome and platform lettered for Rhône-Poulenc Company. Detailed, see-through car frame. French design trucks. Total length over buffers 36.1 cm (14-3/16″).
DC wheel set 70 0580

N NEM IV V

48445 Ore Transport Car.
Privately owned by ARBED Company, used on the Luxembourg Railways (CFL) as the type Fal. 2 end platforms. Weathered model. Loaded with real iron ore. Length over buffers 12.7 cm (5″).
DC wheel set 70 0580



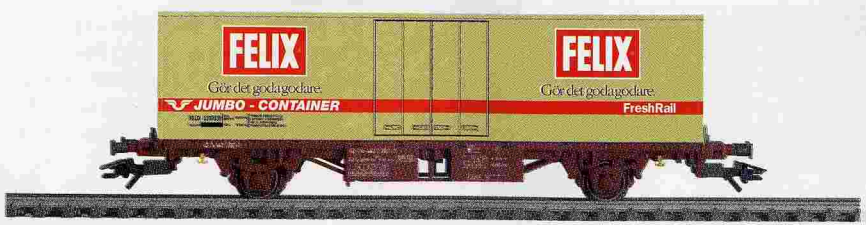
The 48445 ore transport car is being produced in a one-time series only in 1999.



N NEM IV V

47884 Car Set for Mail and Less-Than-Car-Load Freight.
Two Danish State Railways (DSB) type Hbis sliding wall boxcars. Fixed side walls with repaired areas picked out in another color. Total length over buffers 32.5 cm (12-13/16″).
DC wheel set 70 0580

The 47884 car set is being produced in a one-time series only in 1999.



N NEM IV V

47721 High Capacity Container Car.
Swedish State Railways (SJ) type Lgjs 861. Loaded with jumbo container lettered for FELIX Foodstuffs Company. Length over buffers 17.0 cm (6-11/16″).
DC wheel set 70 0580

The 47721 high capacity container car is being produced in a one-time series only in 1999.

Freight Cars

American Freight Cars

The privately owned railroads in the USA recognized much sooner than their state-owned European counterparts the immense amount of advertising space rolling day and night through the states in the form of their freight cars. Hence, the colorful variety of company colors for the individual railroads.

For the most part the cars can be used freely from coast to coast, as in Europe. Otherwise, frequent freight transfers would make transport times so long, that the railroads would not have a chance against trucks.

An exception to this were cabooses; they made up a colorful end to the often mile-long trains in the symbols (also borne by the locomotive) of their respective companies.

III IV

4777 Caboose.
Atchison Topeka and Santa Fe Railroad. Separately applied ladders and roofwalk. RELEX couplers. Length 12.5 cm (5″).
DC wheel set 70 0600





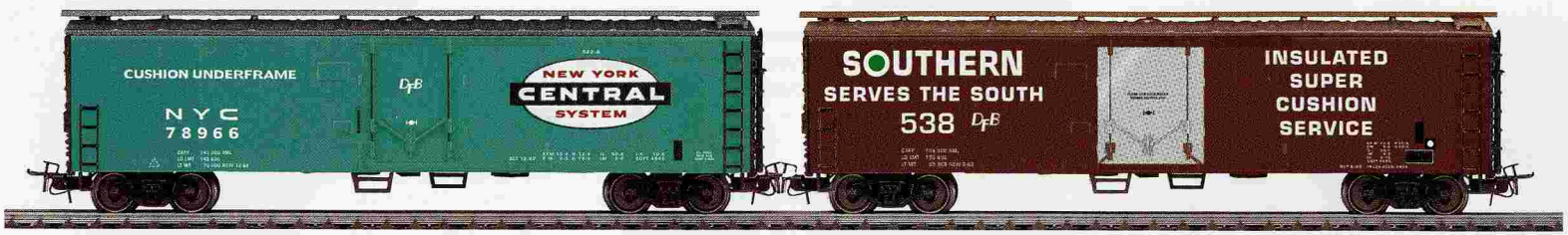
N III

47741 Car Set for Transporting Anthracite Coal.
3 American design gondolas lettered for the Erie, Lackawanna, and Erie-Lackawanna Railroads. Load inserts with real anthracite coal. RELEX couplers. Total length 51.0 cm (20-1/16″).
DC wheel set 70 0600



III IV

47785 "Insulated Design Boxcars" Car Set.
Set consists of 2 different boxcars. 1 New York Central System Railroad plug door boxcar. 1 Southern Railway plug door boxcar. Separately applied ladders, roof walk and door hardware. RELEX couplers. Total length 37.7 cm (14-13/16″).
DC wheel set 70 0600



Digital Measurement Car

49960 Standard Design Measurement Car with Digital Functions.
German Federal Railroad (DB) class 313. With special version digital decoder. Measurement equipment and large LED display in the window band. Measurements and display can be controlled during digital operation with the function buttons f1 to f4 on the 6036 Control 80 f or 6021 Control Unit. Routes traveled, travel times, and speeds as well as the total operating time can be measured and displayed. Display can be in model or prototype units. Actual speed is displayed as km/h during conventional operation. Marker lights can be turned on during digital operation. Length over buffers 27.0 cm (10-5/8″).

Special one-time series.
Already delivered to the dealers.





Speed display



Stop watch



Route traveled



Hours in operation counter

Without measurement cars there would be no progress on the rails. The class 313 standard design measurement car is among the latest measurement cars on the DB, Inc.; the former German Federal Railroad had a total of eight such cars built for technical testing of equipment while it was running and for measuring parasitic current. These cars are air conditioned and correspond in their dimensions to the UIC type X cars; they measure 26.40 meters over the buffers (86′ 7-3/8″). At 63 metric tons they weigh considerably more than cars used in normal passenger service. The cars are equipped with disc brake Minden Deutz heavy weight design trucks for tests up to 300 km/h (188 mph). Auxiliary engineer's cabs on the car ends and triple headlights enable measurement trains to be pushed on a route. When doing measurements under catenary, the car can also power the locomotive coupled to it from the catenary with the former's pantograph by means of a roof conductor and a special separation piece.

“Goliath” On Rails

The Prototype

The largest German railroad crane is called “Goliath”, was built in 1977 by Krupp and has been stationed in Dortmund, Hannover and Würzburg. It is used in the construction of bridges and other engineering works, for rerailing derailed locomotives and cars, and for handling heavy loads. It can lift 150 metric tons within a working radius of up to 8 meters (approx. 26 feet) and can lift 32 metric tons within a radius of 18.5 meters (approx. 61 feet).

For the operation of the crane support arms on the car frame are swung out to a base 7 by 7 meters (approx. 23 by 23 feet) and are leveled into place with hydraulic cylinders onto stacks of ties.

Then, the counterweights on the transport car are brought up to be mounted on the crane’s superstructure. The latter is mounted on a crown gear and can rotate. It is powered by a hydraulic system and a mechanical gear drive with diesel motor; the winches for raising and lowering the boom and the crane hooks are also powered in this way. The cables for the crane are routed through a multi-step block and tackle that distributes the cables’ load, reduces the necessary rpm in the crane’s power system and enables precise work.

In the transport position the boom can be swung to the side, and despite its length it still fits within the loading gauge on curves. The set of equipment available for work consists at a minimum of the crane car, the counterweight car, and the boom support car that are coupled together in a working consist. As a rule a car for transporting cable, a repair and tool car as well as a crew car are also included in the train transporting the crane car. The maximum transport speed of 100 km/h (62 mph) and a permanent work crew that includes specialists ensure that this railroad crane is ready to go in a short time.

The Functions

Modern digital technology and precise, fine mechanics make it possible: You have complete freedom to operate the scale H0 model of the 150 metric ton crane with electrically powered functions by remote control from the 6021 digital central unit. A miniature, high-efficiency motor with special gearing is integrated into the chassis and rotates the crane superstructure that is mounted on a crown gear like the prototype. Two other miniature motors are built into the crane superstructure, and they power the cable winches to raise the boom and the main hook. Both cables guides are detailed with genuine block and tackle installations like the prototype. A single decoder in the car frame controls these three drive systems, the direction and the speed of the movements. The 6021 digital central unit becomes a real crane operator’s cab enabling you to control the crane at any spot on the layout where the railroad crane is set up.



Operator’s cab with prototypical rotational drive.

The procedure for putting the crane into operation is much the same as that for the prototype; even the preparations give you something of the real life experience. First, a suitable spot for the crane to be set up is determined, catenary or signals are removed as required, and the crane is moved into position. Then the side support arms are swung out and positioned with spindle levelers over stacks of ties. The counterweights are brought up on their transport car and are mounted on the back wall of the crane. Using digital function f2 and the speed control knob on the 6021, the boom is carefully raised and the crane hook is made ready for operation.



Counterweights mounted on the crane superstructure.



Support arms swung out into position – crane in working position.

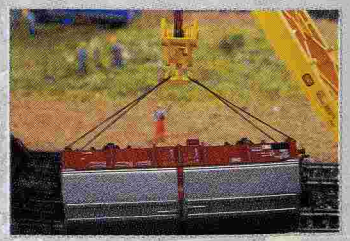
After the auxiliary car is uncoupled, the digital system takes over the control of the crane. Functions f1, f2 and f3 on the Control Unit are used to select respectively the mechanism to rotate the crane superstructure, raise the boom, raise the main hook. The movement itself and the direction are controlled with a fine touch using the speed control knob on the Control Unit – a very simple way to operate the crane.

The height of the boom is determined by more than the location of the load and where it must be moved to; the weight of the load also plays a role here. Lighter loads can be moved with the boom positioned lower; rerailing a locomotive must be done with the boom raised quite high and close to the area of support. The model load is readied with cables and is hung on the main hook. The cleverly arranged tackle lines enable the small motors in the crane to develop considerable power when lifting the load. The crane superstructure can be turned at any time and far as desired.



Auxiliary boom with deflection pulleys.

Operating a digitally controlled model railroad layout takes on new dimensions with these technical possibilities. The digitally controlled “Goliath” railroad crane is more than an impressive super model; it reproduces the action and atmosphere of the prototype to perfection in H0 scale.



Metal main hook with pulleys.

Digital Crane Car

märklin HO

49950 Railroad Crane Set with Digital Functions.
German Federal Railroad "Goliath" 150 metric ton crane, boom support car and counterweight car.

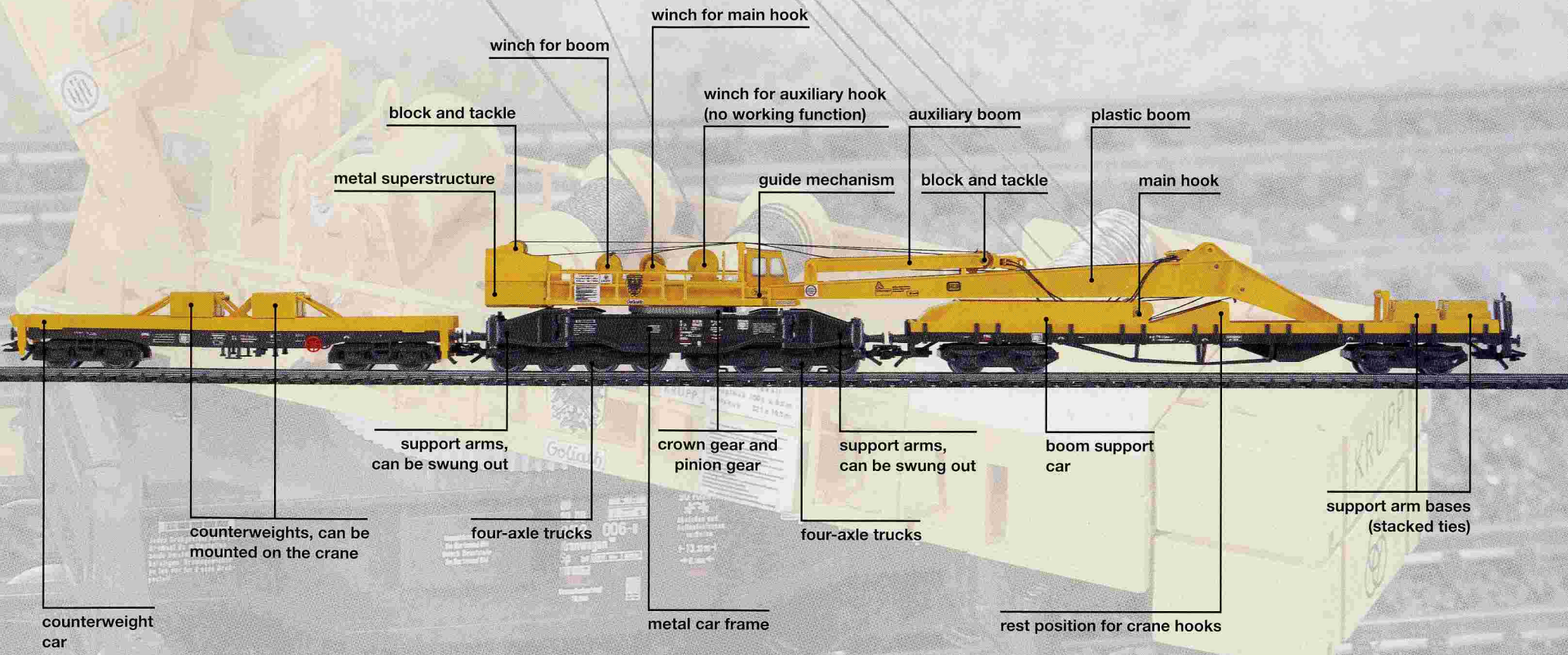
Crane car with 8-axle metal frame and superstructure. Metal counter weights that can be mounted on the crane. Electrical pickup, 3 motors and special version digital decoder for remote control with the 6021 Control Unit. Superstructure with boom can be rotated on prototypical crown gear. Boom can be raised and lowered by means of pulley and double block and tackle. Metal main hook can be raised and lowered by means of pulley and double block and tackle. 4 support arms can be swung out manually and can be fixed in place on the bases included with the crane set by means of spindle levelers. Maximum length of the superstructure with boom and counterweights is 34 cm (13-3/8″). Maximum working radius of the hook is 21 cm (8-1/4″). Crane boom swings to the side prototypically on curves during transport.

Crane boom car supports the boom and provides a rest position for the crane hooks and the support bases (stacked ties).

Counterweight car with special equipment for the transport and installation of the counterweights.

Total length over buffers 55.0 cm (21-5/8″).

Production and delivery of the 49950 railroad crane set are planned for the second half of 1999.



Live on TV: A trip by camera over your model railroad layout.

Now you can experience in H0 with Märklin H0 what was previously reserved for the large Maxi scale: Run your model train as if you were the engineer, enjoy the view of the landscape on your layout from the vantage point of the model locomotive engineer's cab. You'll drive through tunnels and into stations, you'll have every corner, every turnout and signal in full view. You can operate the train by sight. And if you place the camera car at the end of the train or behind several flat cars, then you will enjoy the trip from other, attractive perspectives.

The Märklin Digital system provides constant power to the video camera and the sender, even when the train is standing still. The miniaturized camera features a high level of light sensitivity and delivers a consistently bright image despite changing light conditions during the train's run. The camera's high degree of image definition makes it possible to reproduce the small dimensions of an H0 layout in a large zone of sharp focus. The camera can be turned on and off with the function buttons. A video receiver transmits the image signal to any standard television.



N NEM IV V

49940 Construction Car with Built-in Video Camera and Sender.
Construction car converted from type WLüg(e) skirted passenger car with built-in video camera and sender. As delivered from the factory this car is only usable in digital operation. Video camera can be turned on by means of a digital function. The camera lens is located in the end of the car. Also included with the car are the receiver with a plug for household current and a connecting cable for a television or video recorder with Euro connector. Length over buffers 27.0 cm (10-5/8").



The distance between the sender and the receiver can be no greater than 30 meters (approx. 98 feet). Obstacles between the sender and receiver can shorten the maximum range.

This transmission system is approved for use in German, Belgium, the Netherlands, Luxembourg, Switzerland, and Austria. This system may not be used in other countries.

Application has been made for approval in several other countries. Please ask about the current status of this approval process before buying the system.





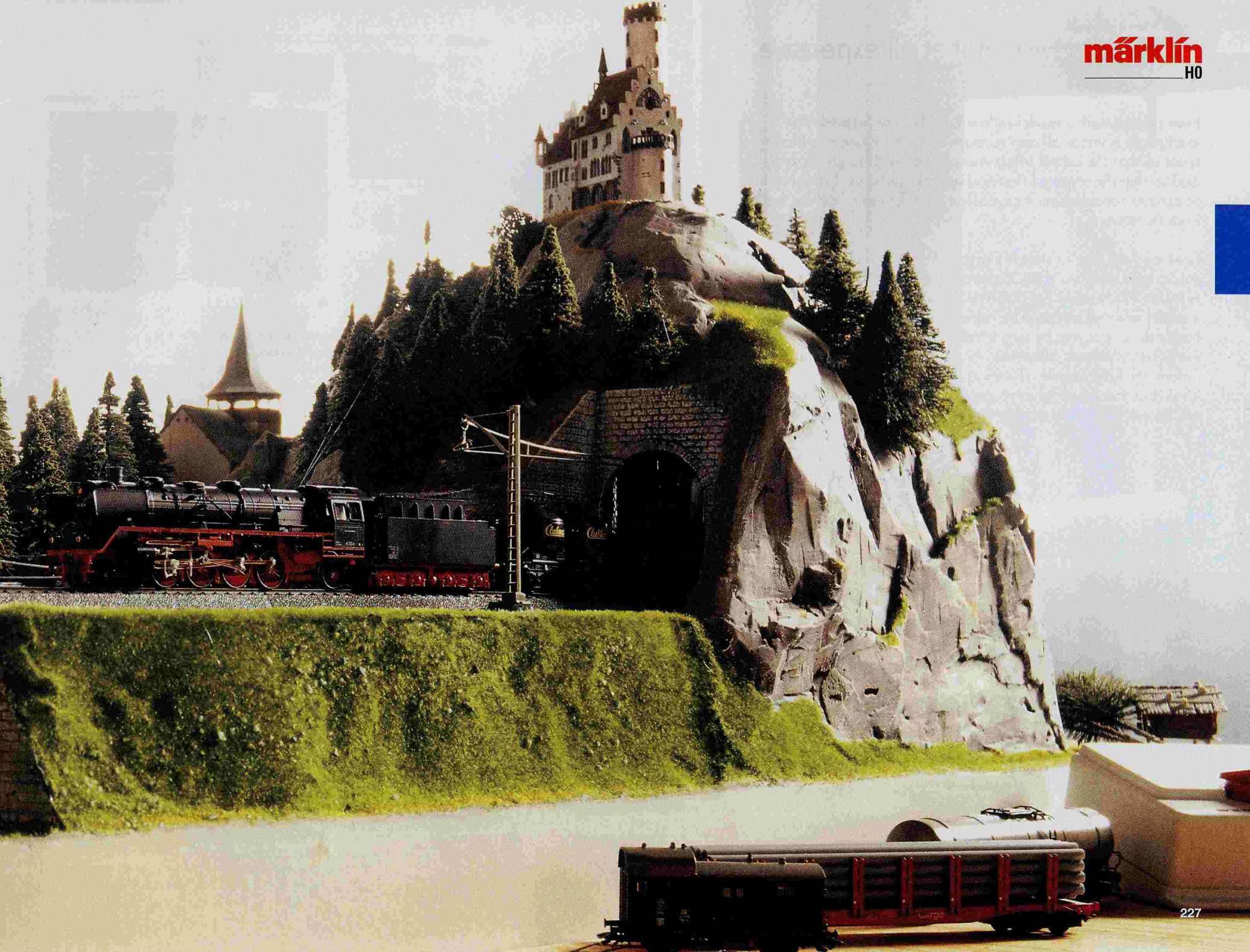


Building a Layout

The hobby in the hobby.

A second hobby after model railroading is layout building – the real attraction for many model railroaders. Here you can realize your ambitions as a historian in provincial railroad scenes correct for their era or as a city and scenery architect in your visions of the new era. From our side we contribute with a rich variety of accessories for the operational and visual aspects of the model railroad: C and K Track systems, catenary, bridges, signals and much more. It doesn't matter which time period your layout is situated in – the main thing is, you have the time.





Good advice, not at all expensive.

Even playing with a model railroad needs to be learned. For example, it is not at all easy to work out a main line in a limited space so that the layout offers enough variety through the years. And so that the required electrical and/or mechanical connections or options for subsequent expansion are taken into account right from the start.

Looking back you're always cleverer. The authors of our Märklin guides have also had these experiences and pass them on to you: valuable information for planning, building and operation of a model railroad layout. The videos and richly illustrated books show you step by step what you need to be aware of in the different phases. Naturally, you can do everything quite differently, for example, change track plans to suit your own ideas. But you know what you're doing here, you avoid mistakes, reach your goal more quickly and simply have more fun doing it.

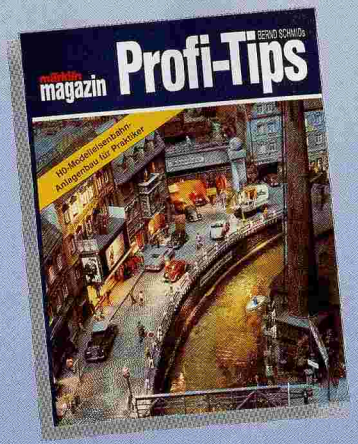


03301 Book "H0 for Beginners" by Thomas Hornung.
The new Märklin C Track is the theme of this book. The beginner is introduced to proven model railroad techniques step by step with illustrations. 128 pages. Format 21 x 29.7 cm (8-1/4″ x 11-11/16″). German text only.



N

07455 C Track Track Plan Book.
30 different H0 track plans are presented in detail with scenery suggestions and parts lists.
The layouts are planned primarily for the C Track system. All of the track plans are also presented as just track plans with parts lists for the K Track system. 160 pages in the format 29.7 cm x 21 cm (11-11/16″ x 8-1/4″). Only available from Märklin. German text only.



18600 BERND SCHMID's Profi-Tips – The book from the pioneer layout builder.
A "recipe collection" tailored for the user on the subject of layout building from the basics to super detailing. (German text only)



188987 Märklin Magazin – C Track Special.
This brochure explains the advantages and use of the C Track system, contains three different suggestions for building a beginner's layout, a layout for the somewhat experienced, and a layout for the experienced model railroader. The text will lead you step by step to a finished layout. 148 pages richly illustrated with color photos, detailed sketches, and track plans. Format 21.0 x 27.5 cm (8-1/4″ x 10-13/16″). German text only.



0329 Book "Planen • Bauen • Spielen" ("Planning • Building • Playing") by Bernd Schmid.
From the starter set to DELTA multi-train operation. 160 pages with numerous color photos, drawings and plans. Format 21 x 29.7 cm (8-1/4" x 11-11/16"), hardbound. German text only. ISBN 3-8043-0310-2.



07450 KOMBI – Step by step to a model railroad with K Track.
Introduction into the Märklin KOMBI starter program in H0 for K Track. The ease of using the K Track system is covered in this book as well as the basics for setting up and constructing a model railroad. Twenty track plans that for the most part have never been published are presented in this book. These are plans that can be built with the KOMBI track program. Format 21.0 x 29.7 cm (8-1/4" x 11-11/16"). German text only.

Additional planning aids and helpful books can be found on the following pages:

Page 60: *07460 Märklin locomotive book "Dampflokomotiven" ("Steam Locomotives")*

Page 74: *07461 Märklin locomotive book "Diesel- und E-Lokomotiven" ("Diesel and Electric Locomotives")*

Page 126: *0733 Service Manual for H0*

Page 235: *02409 Magnetic track planning kit for C Track*

Page 235: *02415 Track planning stencil for C Track*

Page 253: *0210 Track planning stencil for K Track*

Page 265: *0211 Catenary stencil*

Page 269: *0343 Märklin signal book for 7000 and 7100 signals*

Page 271: *0368 Märklin signal book for 7200 signals*

Page 284: *0716 Electrical Manual for H0*

Page 291: *0308 "Getting Started with Märklin Digital – the multi-train control system" (0308A in North America)*

03375 Book "Die schönsten H0-Schauanlagen" ("The Most Beautiful H0 Display Layouts") by Thomas Rietig.
Very large H0 display layouts are presented that are built in the Märklin workshops as well as by independent layout builders working on cotract. These dream layouts are admired by thousands of people at trade and consumer shows. Track plans and lists of parts as well as practical tips and tricks from the pros make it easier to reproduce a particular layout or to build your own design. The development of layout building and the technique of creating displays down to the present round out the contents of this book. Contents 160 pages, 300 color photographs. Format 21.0 x 29.7 cm (8-1/4" x 11-11/16"). Hardcover. German text only.



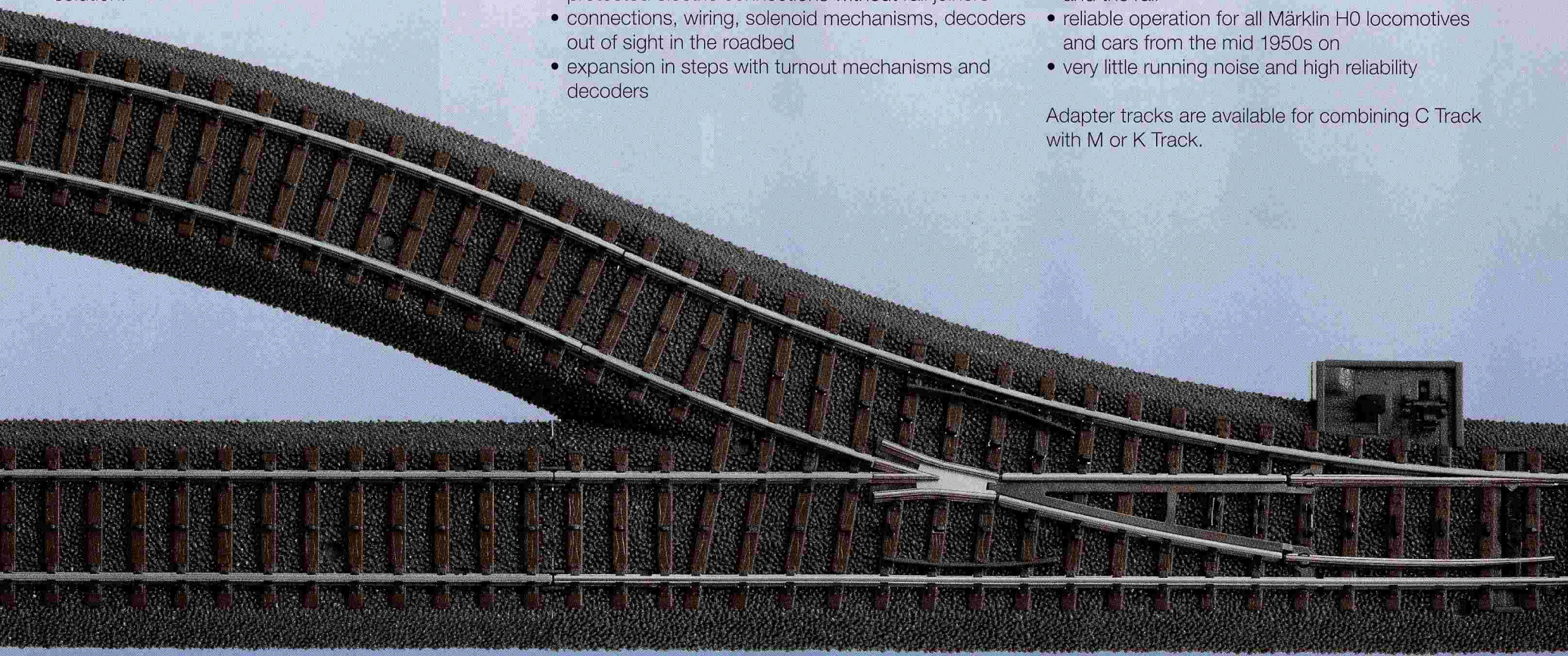
The Solution to an Impossible Task

C Track

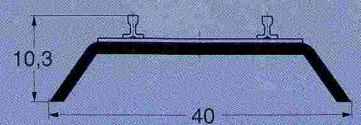
The new C Track is sturdy, electrically reliable and realistic in appearance. It will satisfy children as well as demanding adult model railroaders, which means we have succeeded in solving what most people would consider a problem with no solution. The details of this solution:

- reliable Märklin system with stud contact center conductor
- mechanically sturdy click connections for fast setup and takedown
- finely detailed, sturdy plastic roadbed
- protected electric connections without rail joiners
- connections, wiring, solenoid mechanisms, decoders out of sight in the roadbed
- expansion in steps with turnout mechanisms and decoders
- any track can serve as a feeder track
- optimal geometry requires fewer parts and adjustment sections
- adapter tracks to the M and K Track
- realistic appearance with low rail cross section
- solid rails with air space between the roadbed and the rail
- reliable operation for all Märklin H0 locomotives and cars from the mid 1950s on
- very little running noise and high reliability

Adapter tracks are available for combining C Track with M or K Track.



The track sections are 40 mm (1-9/16") wide. 40 mm (1-9/16") must therefore be subtracted in each instance from the indicated center-to-center spacings to produce clearance.



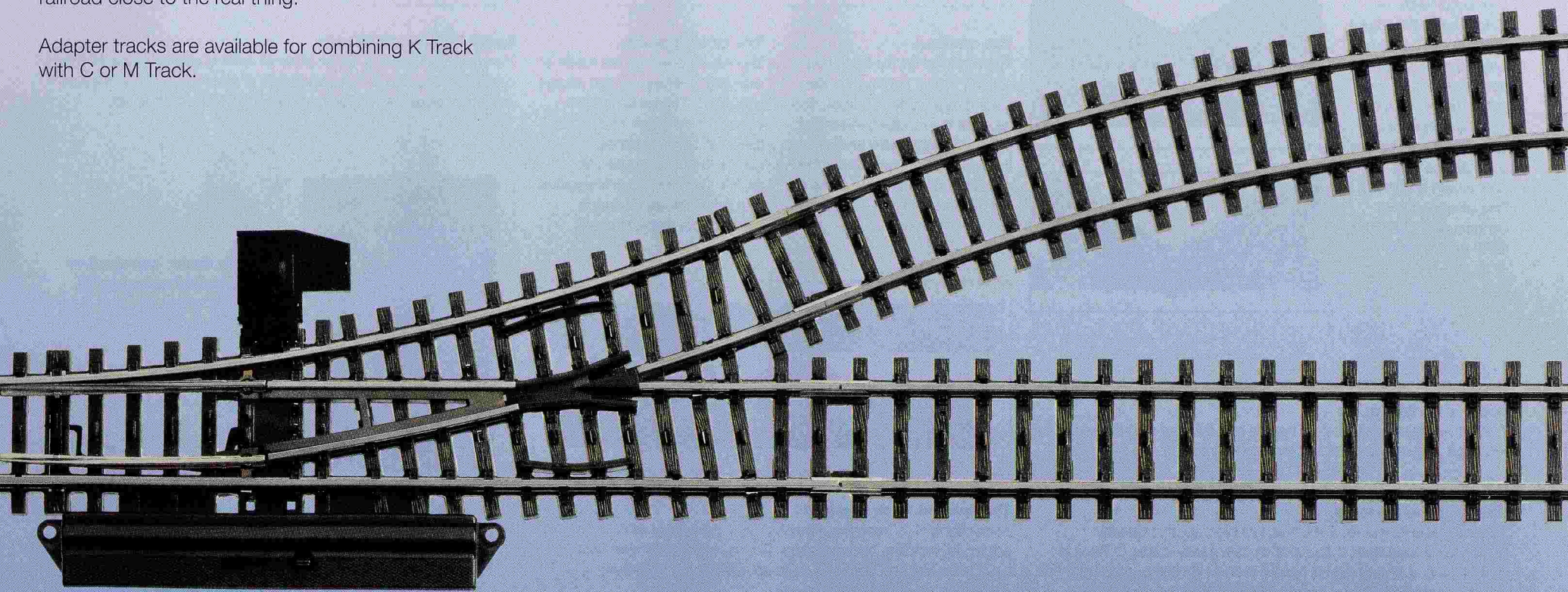
The 24922 adapter track (see page 239) is available for anyone wanting to combine C Track with K Track.

The 24951 adapter track (see page 239) enables you to combine C Track and M Track.

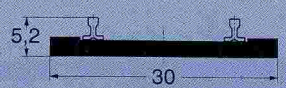
K Track

K track offers the demanding model railroader a multitude of possibilities for sweeping main lines and prototypical layout construction. Elegant routes, close parallel track spacing, and gentle curves can be achieved with five track radii, flex track, wide radius turnouts and crossings. The prototypical solid rails, finely detailed ties without roadbed and the ability to install turnout mechanisms below the baseboard offer all of the freedom in the world for creating a model railroad close to the real thing.

Adapter tracks are available for combining K Track with C or M Track.



The track pieces are 30 mm (1-3/16″) wide. For this reason 30 mm (1-3/16″) must be subtracted from the indicated track center-to-center distances to maintain a clear spacing.



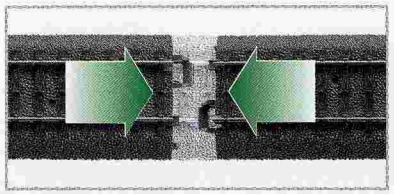
The 24922 adapter track (see page 239) enables you to combine K Track and C Track.

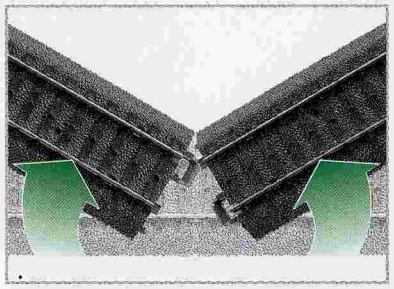
The 2291 adapter track (see page 252) is available for anyone wanting to combine K Track with M Track.

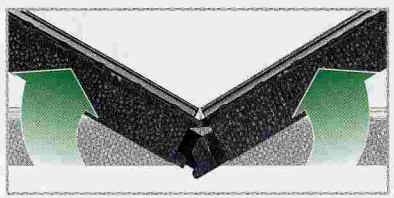
C Track: With a "Click" into the new millennium.

The track for building and playing.

The plug-in connection with the "Click".
The unique plug-in connection is the key feature of C Track: just a slight push with your hands – the mechanical and electrical connection is simultaneously made and safely locked in place. The locking connection with the "Click" holds the tracks together on the layout in a way that is reliable for operation and geometrically precise. To separate the tracks, simply bend them against one another; the lock connection is undone. This unique plug-in connection is patented (DBP 40 33 440).



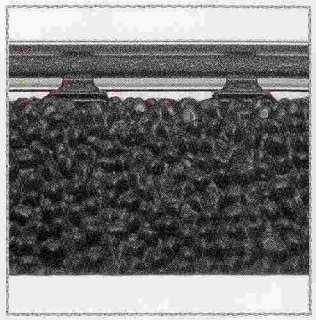




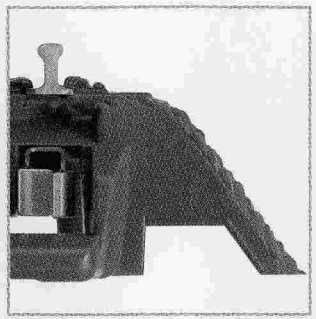
Setup in no time at all.
Even larger layouts can be set up in a few minutes with the ready-to-run track sections and the fast locking connection.

Sturdy and long-lasting.
The track and its roadbed are made of high quality materials designed to keep their shape and sustain heavy loads. C Track is durable and is almost indestructible even when it is put together and take apart constantly or subjected to the hardest operation.

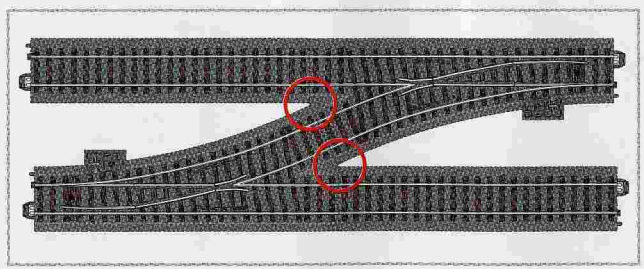
The track to meet most people's demands.



The roadbed.
The roadbed for the track has a striking ballast structure in the color of aged basalt ballast. The width of the roadbed (40 mm / 1-9/16") enables any and all track combinations without the necessity of cutting the slope of the roadbed.

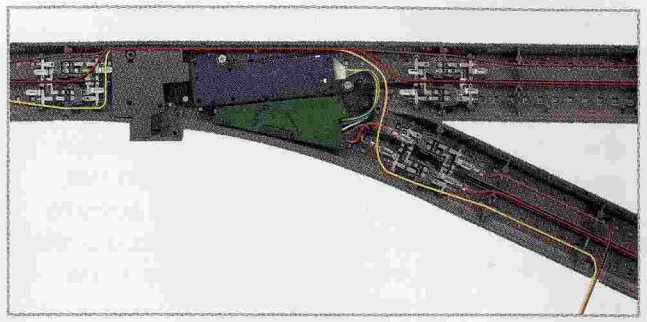


The striking profile.
The new profile rails are made of rust-free steel with a high degree of stability. The cross section with a profile height of 2.3 mm (3/32") (Code 90) almost corresponds to a scale rail profile. The rails are prototypically mounted with an air space beneath the web of the rail.

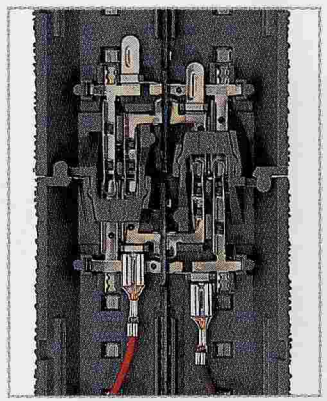


The finished track structure.
All sections of C Track are ready for installation; they require no additional handling or processing. The track structure does not have to be cut and above all does not have to be ballasted.

The track with "inner values".

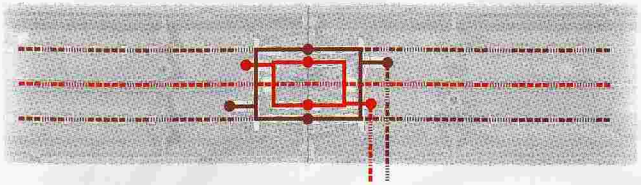


Space for all sorts of uses.
The roadbed for the C Track offers all sorts of useful space which has been prepared for the installation of electrical and mechanical components as well as for incorporation of a layout's wiring.

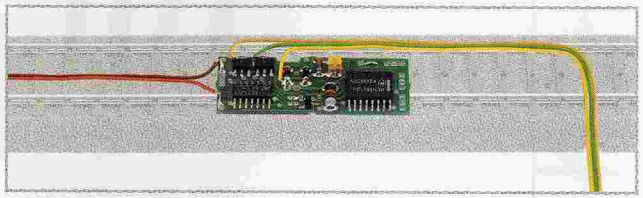


Track feeder connections instead of feeder tracks.
With C Track each track section can be used for feeder wire connections, instead of having additional feeder tracks. The feeder wire set with standard spade connectors can be plugged directly onto the contact lugs present at both ends of each track section.

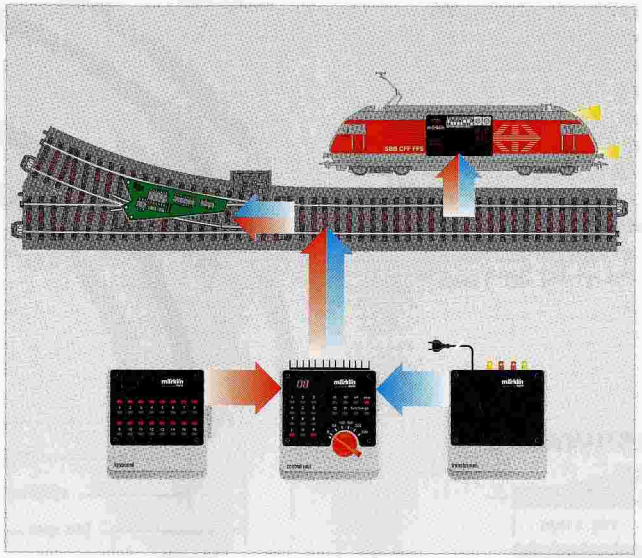
The track that conducts your data.



Requirements for digital operation.
The most important requirement for reliable operation of digital layouts was taken into consideration right from the start in the design of C Track: continuous, reliable contact for transmission of rapid digital data.

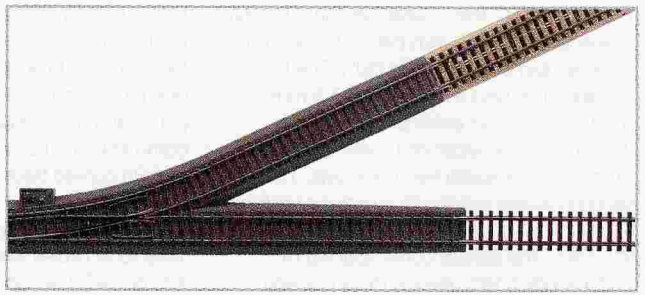


Digital decoders on the spot.
The small installation digital decoders for turnouts, signals and other digitally control accessories can be installed under the roadbed.



Power and data directly in the track.
C Track is perfectly designed for the way in which the Digital system functions: The electrical power and the digital data are constantly transmitted through the track.

The track that connects.



The Märklin H0 system.
The basic features of the Märklin system also apply to the new C Track program:

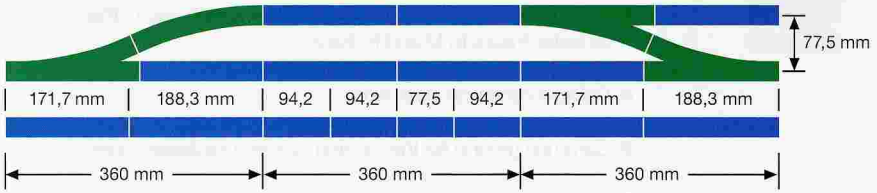
- Compatibility of the Märklin track systems with each other (adapter tracks to M and K Track)
- Reliable center rail operation
- Common ground for the running rails and for accessories
- Control with conventional Märklin transformers, in the DELTA multi-train control system or in the Märklin Digital system
- Compatibility of the wheel/rail geometry
- Any track pattern possible without extensive wiring (example: reverse loops and wyes)
- All Märklin H0 locomotives from the mid 1950s on can be used on C Track layouts (as long as they have the normal center rail ski-type pickup shoes).

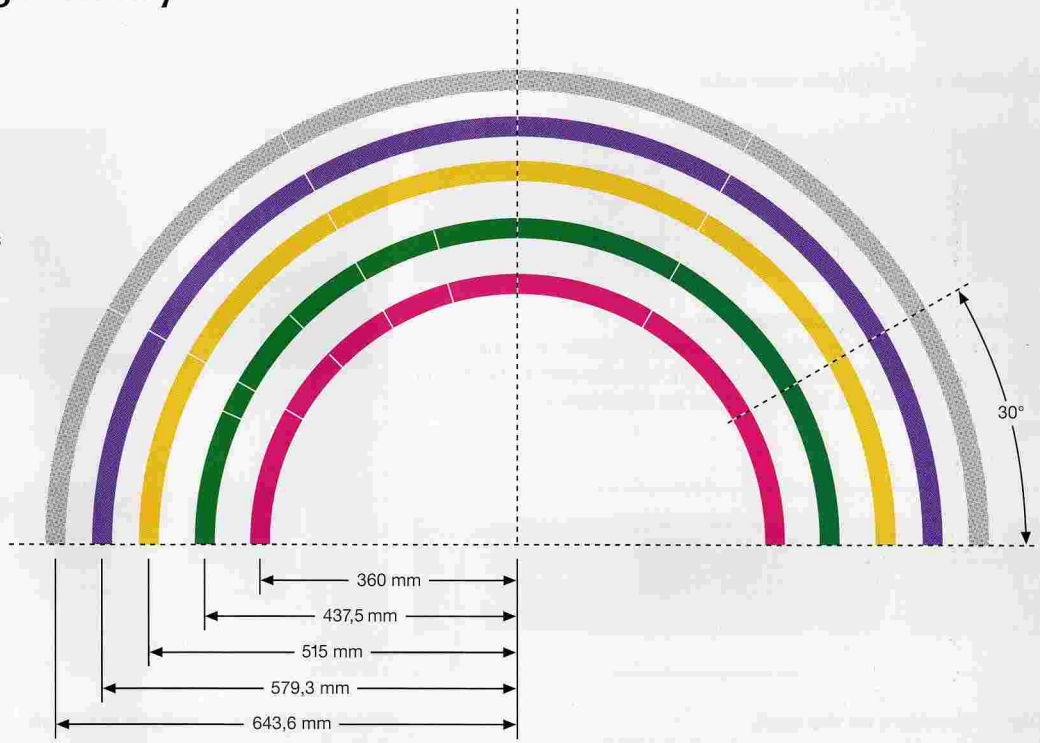


C Track – the track with easy to understand geometry.

The different C Track curves

The standard C Track curve has the customary radius for H0 of 360 mm (14-3/16″) and an external diameter of 76 cm (30″). The first parallel curve with a radius of 437.5 mm (17-1/4″) forms an external diameter of 91.5 cm (36″). A width of 1 meter allows you to set up a complete two-track oval. The second parallel curve with a radius of 515 mm (20-1/4″) has an external diameter of 107 cm (42-1/8″). The parallel curve spacing of 77.5 mm (3-1/16″) offers sufficient space for longer locomotives and cars to pass one another on these curves and enables you to set up signals or catenary masts. This curved track comes as 30° sections and 12 sections form a circle. In addition, there are half and quarter sections (15° and 7.5°). The tracks (24.3° and 5.7°) required for turnout combinations come from the R2 parallel curve. The outer R4 and R5 curved tracks with the radii 579.3 mm (22-13/16″) and 643.6 mm (25-5/16″) are made with a closer track spacing of 64.3 mm (2-9/16″). They form circles with an external diameter of 120 cm (47-1/4″) and 133 cm (52-3/8″) and come in 30° sections.

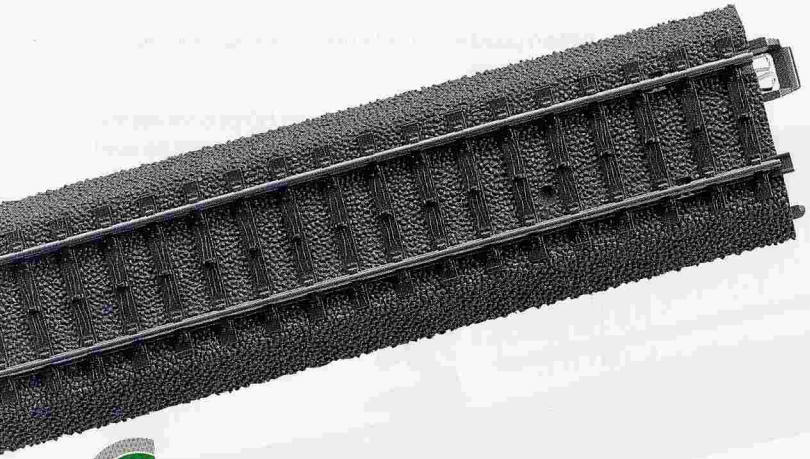




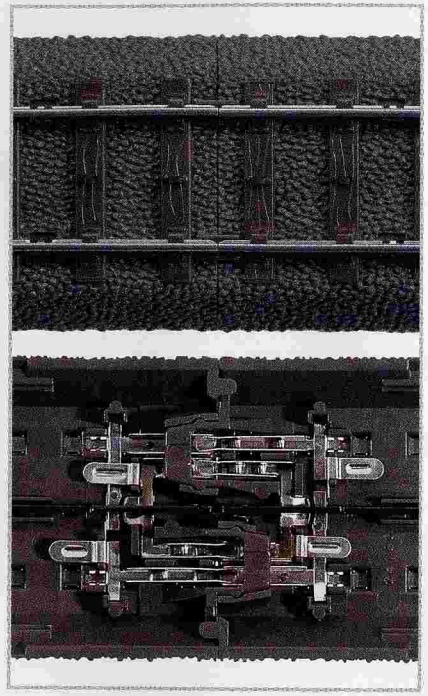
The basic track unit: 360 mm (14-3/16″).

A generous and at the same time space-saving basic track unit of 360 mm (14-3/16″) is used for building up track routes with the new C Track. This corresponds in length to a turnout combination and consists of the length of the turnout (188.3 mm / 7-13/32″) and the length of the complementary curve (171.7 mm / 6-3/4″). Both of these lengths are available as straight track sections.

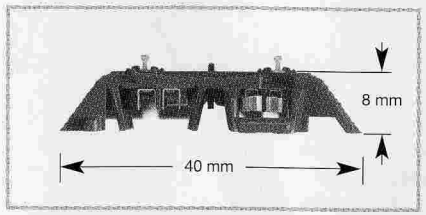
Two partial lengths are also offered: 94.2 mm / 3-3/4″ (1/2 of 188.3 mm) and 77.5 mm / 3-3/64″ (extends 94.2 mm to 171.7 mm). The function tracks (example: uncoupler track) are also 94.2 mm long. The second partial length corresponds exactly to the parallel track spacing (77.5 mm). The 236.1 mm (9-5/16″) long wide radius turnouts form combinations of 536.2 mm (21-1/8″) in length. There are other appropriate lengths for these combinations and for supplementing to the basic track unit of 360 mm (14-3/16″): 229.3 mm (9″), 70.8 mm (2-13/16″), and 64.3 mm (2-9/16″).



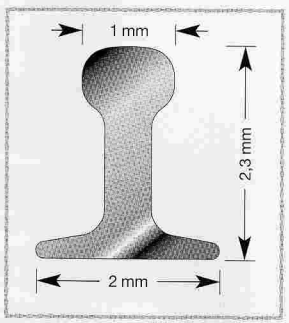




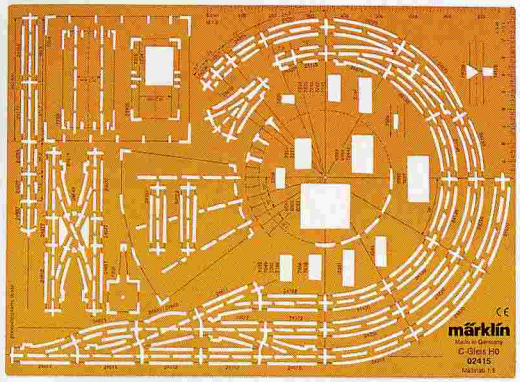
Good Connections.
The mechanical and electrical connections for the track sections cannot be seen from the outside. This results in a perfect, complete visual impression. Rail joiners are not needed. The snap-together connection locks the track sections to one another. This keeps the track geometry of a layout in precise alignment without the need to fasten the track down.



Ideal dimensions for track roadbed
The cross section of the track provides the proportions for a realistic track roadbed on a rail line. The full width remains preserved even at a turnout or crossing. There is sufficient space between the tracks for catenary or signals.

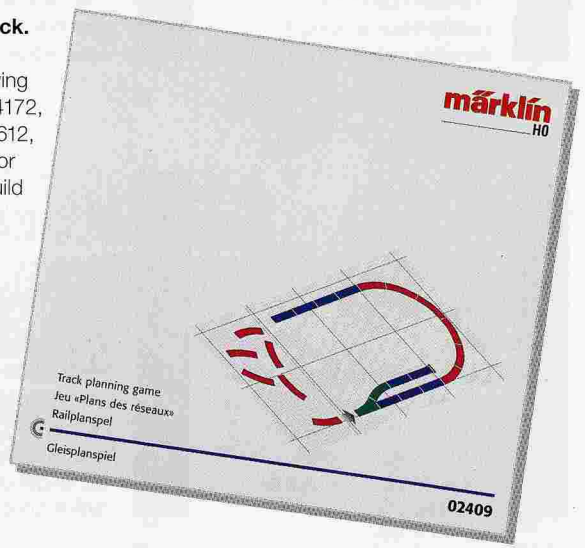


A realistic rail cross section
The rails – prototypally made of steel – are sturdy and wear resistant. The rail cross section is exact and fine, and gives the track a detailed appearance. The height of 2.3 mm (3/32") is designated internationally as Code 90.



02415 Track Planning Stencil for C Track.
Allows you to plan your own layouts for C Track. All track sections, turnouts, crossings and accessories are in a scale of 1:10 and can be transferred easily to paper with a sharp pencil (no. 3 lead recommended). Track layout planning can be done either from the center line of the track sections or from the space requirements for a layout. Extensive instructions included.

02409 Magnetic Track Planning Kit for C Track.
For planning and for miniaturized setup of model railroad layouts. Track planning kit with the following C Track pieces: 24077, 24094, 24115, 24130, 24172, 24188, 24206, 24215, 24224, 24230, 24611, 24612, 24640 (can also be used as 24620) and 24977 for Märklin H0 in a scale of 1:5. Enough pieces to build a medium size layout. The item numbers for the different track sections are printed on all of the pieces and the latter divided into 3 colors. The track sections are quick to lay out and will adhere magnetically to the enclosed base plate.



High C with a wide sweep.

With two larger radius curves and 12° wide radius turnouts the C Track system is now fulfilling the wishes of demanding model railroaders. You can now lay out main lines and station entrances with generous, sweeping tracks which gives a specially impressive effect with trains with long cars. Smart planners will use the wider radius curves on the visible part of the layout and track and turnouts with space saving standard curves in concealed areas.

In the best of circles…

… large radii for C Track.
With the new large radius curves there are now 5 radii for curves available in C Track. The inner curves R1, R2, and R3 allow you to have parallel tracks with a track spacing of 77.5 mm (3-1/16″), appropriate for the geometry of the 24° turnouts. The outer curves R3, R4, and R5 allow you to have up to three parallel tracks with a spacing of 64.3 mm (2-9/16″), corresponding to the geometry of the wide radius 12° turnouts. The division of 1/1 track = 1/12 circle = 30° is standard in all 5 radii.

For absolute "parade routes" the 12° complementary curve is naturally suitable to go with the wide radius turnouts with their 1,115 mm (43-7/8″) radius.



N

24530 Curved Track.
Radius R5 = 643.6 mm (25-5/16″). Curve 30°. Parallel curve to Radius R4 with a spacing of 64.3 mm (2-9/16″). 12 sections of track form a circle with an outer diameter of 133 cm (52-3/8″).



N

24430 Curved Track.
Radius R4 = 579.3 mm (22-13/16″). Curve 30°. Parallel curve to Radius R3 with a spacing of 64.3 mm (2-9/16″). 12 sections of track form a circle with an outer diameter of 120 cm (47-1/4″).



N

24064 Straight Track.
Length 64.3 mm (2-9/16″). Corresponds to the parallel track spacing for the wide radius turnouts.



N

24071 Straight Track.
Length 70.8 mm (2-13/16″). **Roadbed slope removable.** This track is used on both branches of the wide radius turnouts.



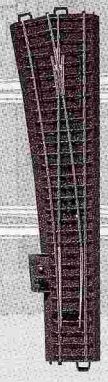
N

24229 Straight Track.
Length 229.3 mm (9″). Complements the length of the complementary curve on the wide radius turnouts.



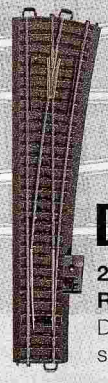
N

24236 Straight Track.
Length 236.1 mm (9-5/16″). Corresponds to the length of the wide radius turnouts.



N

24711 Left Hand Wide Radius Turnout.
Length 236.1 mm (9-5/16″). Branch track radius 1,114.6 mm (43-7/8″). Turnout curve 12.1°. 10° metal frog. 2 sections 24701 track required at the ends of the turnout, suitable roadbed slope piece included. With hand lever. Can be retrofitted with 74490 electric turnout motor, 74470 turnout lantern, and 74460 turnout decoder.



N

24712 Right Hand Wide Radius Turnout.
Dimensions and features same as 24711.



N

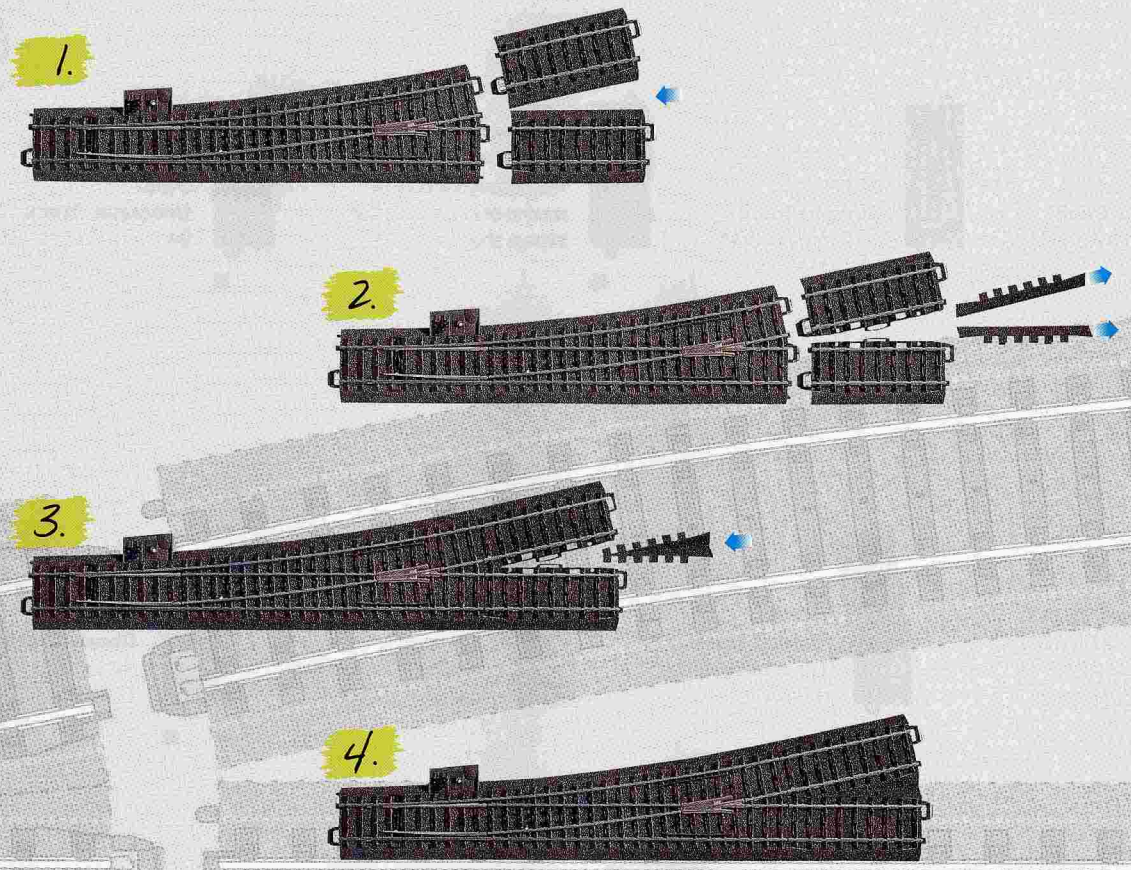
24912 Curved Track.
Radius 1,114.6 mm (43-7/8″). Curve 12.1°. Complementary curve for wide radius turnouts. Also suitable for use in constructing main lines.

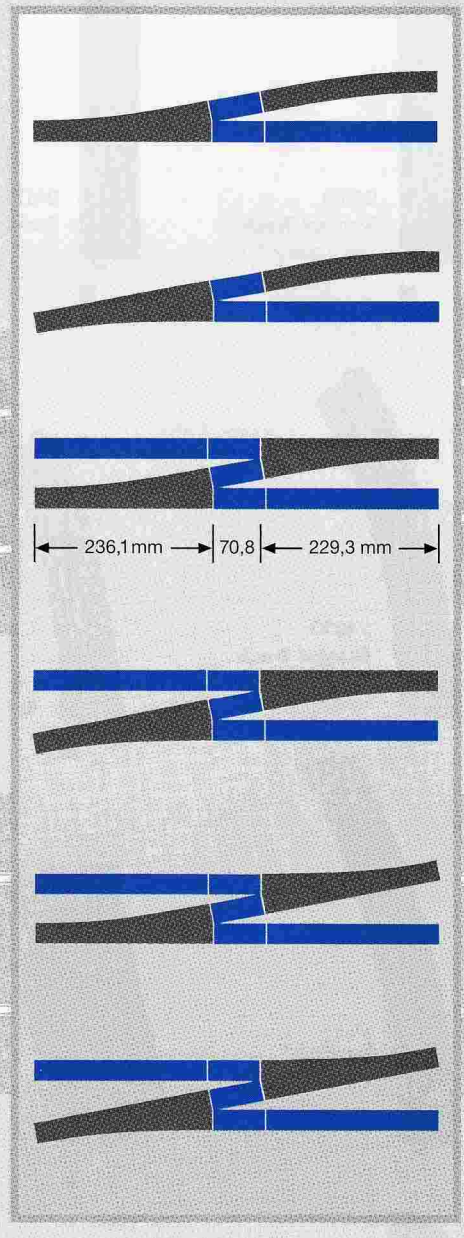
10° to 12° C...

märklin HO

Color Coding:

- Straight track and crossings
- Curved track and turnouts from Radius 1 (R1)
- Curved track and turnouts from Radius 2 (R2)
- Curved track from Radius 3 (R3)
- Curved track from Radius 4 (R4)
- Curved track from Radius 5 (R5)
- Curved track and turnouts from Radius 9 (R9)





... the wide radius turnouts for C Track.
The purposeful continued development of the C Track program is also giving the demanding model railroader a generous track geometry for a prototypical appearance. The specifics on the wide radius turnouts can be seen below:

- ✘ turnout length 236.1 mm (9-5/16″)
- ✘ branch track radius 1,114.6 mm (43-7/8″)
- ✘ turnout curve 12.1°
- ✘ frog angle 10°
- ✘ track spacing 64.3 mm (2-9/16″)

As with the compact 24° turnouts, the turnout ends in the 12° system are also symmetrical in their design; the connection dimensions are the same in every installation situation. Even with a narrow track spacing and an acute turnout angle it is still possible to have continuous roadbed on the turnout's branch. One section each of 24071 track with removable roadbed slope pieces are installed on the two ends of the turnout; the track bed does not have to be altered in any special way. The wide radius turnouts are equipped with hand levers and can be retrofitted with electric turnout motors, installation decoders and turnout lanterns.

C Track Overview



24188
Straight Track
188.3 mm / 7-13/32″



24172
Straight Track
171.7 mm / 6-3/4″



24094
Straight Track
94.2 mm / 3-3/4″



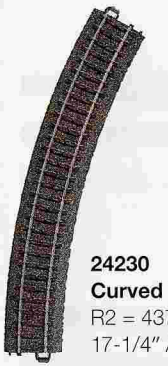
24994
Straight Circuit Track
Length 94.2 mm / 3-3/4″
Momentary contact by means of locomotive/car pickup shoe.



24997
Uncoupler Track
94.2 mm / 3-3/4″, electric



24077
Straight Track
77.5 mm / 3-3/64″



24230
Curved Track
R2 = 437.5 mm / 17-1/4″ / 30°



24224
Curved Track
R2 = 437.5 mm / 17-1/4″ / 24.3° (turnout branch)



24215
Curved Track
R2 = 437.5 mm / 17-1/4” / 15°



24294
Curved Circuit Track
R2 = 437.5 mm / 17-1/4 ″ / 15°.
Momentary contact by means of locomotive/ car pickup shoe.



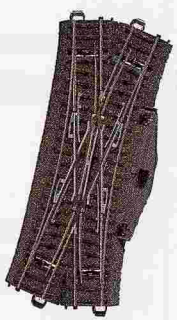
24207
Curved Track
R2 = 437.5 mm / 17-1/4″ / 7.5°



24206
Curved Track
R2 = 437.5 mm / 17-1/4″ / 5.7° (extends turnouts to 30°)

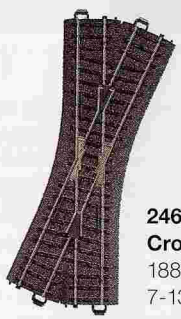


24330
Curved Track.
R3 = 515 mm / 20-1/4″ / 30°.

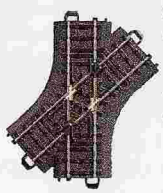


N

24624
Double Slip Switch
188.3 mm / 7-13/32″ / 24.3°.
Comes with electric mechanism and lighted turnout lantern.
Can be retrofitted with 74046 digital decoder.



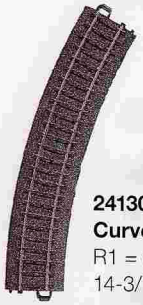
24640
Crossing
188.3 mm / 7-13/32″ / 24.3°



24649
Crossing
103.3 mm / 4-1/16″. 48.6°. For double crossovers or intersecting parallel routes.



24922
Adapter Track to K Track
180 mm / 7-3/32″



24130
Curved Track
R1 = 360 mm /
14-3/16" / 30°



24115
Curved Track
R1 = 360 mm /
14-3/16" / 15°

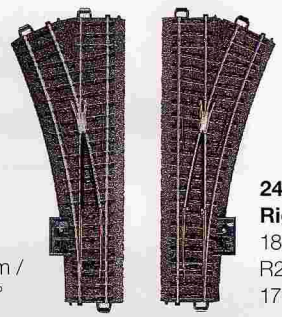


24194
Curved Circuit Track
R1 = 360 mm / 14-3/16" /
15°. Momentary contact
by means of locomotive/
car pickup shoe.



24107
Curved Track
R1 = 360 mm / 14-3/16" / 7.5°

The C Track extension program with sets of pre-programmed quantities of track (24902, 24903, 24904 and 24905) for step-by-step expansion of that first C Track layout can be found on pages 40/41.



24611
Left Turnout
188.3 mm /
7-13/32"
R2 = 437.5 mm /
17-1/4" / 24.3°

24612
Right Turnout
188.3 mm / 7-13/32"
R2 = 437.5 mm /
17-1/4" / 24.3°



24630
Three-Way Turnout.
Length 188.3 mm / 7-13/32" / 2 x 24.3°. Connection dimensions on both sides are the same as 24611 / 24612 turnouts. Asymmetrical frog area with offset switch rails. Two hand levers. Can be retrofitted with two 74490 electric mechanisms and two 74470 turnout lanterns. Digital operation possible with 6083 decoder.



24671 Left Curved Turnout.
24672 Right Curved Turnout.
Inner curve: R1 = 360 mm / 14-3/6" / 30°
Outer curve: 30° in the parallel curve spacing of 77.5 mm (3-1/16"). Sprung point rails. Metal frog and intermediate rails. Continuous contact in the entire turnout area. With manual hand lever. Can be retrofitted with 74490 turnout mechanism, 74460 digital decoder and 74470 turnout lanterns.



24951
Adapter Track
to M Track
180 mm / 7-3/32"



24977
Track End with
Bumper
77.5 mm + 5 mm /
3-3/64" + 3/16"



24978
Track End with
Bumper
77.5 mm + 5 mm /
3-3/64" + 3/16",
with lantern

A Good Outlook

The further development of this system will rely heavily on the experiences and wishes of our customers. This will require thorough research over a period of time, before the different design phases can be carried on into regular production. This will enable us to ensure that the new C Track is ready for the market, that it will perform well in the field and that it will hold up well over the years. We will keep you informed about the production and delivery of the individual new C Track elements.In the next few years the C Track program will be expanded further. In the next few years appropriate crossings for the wide radius turnout program are planned, among other things

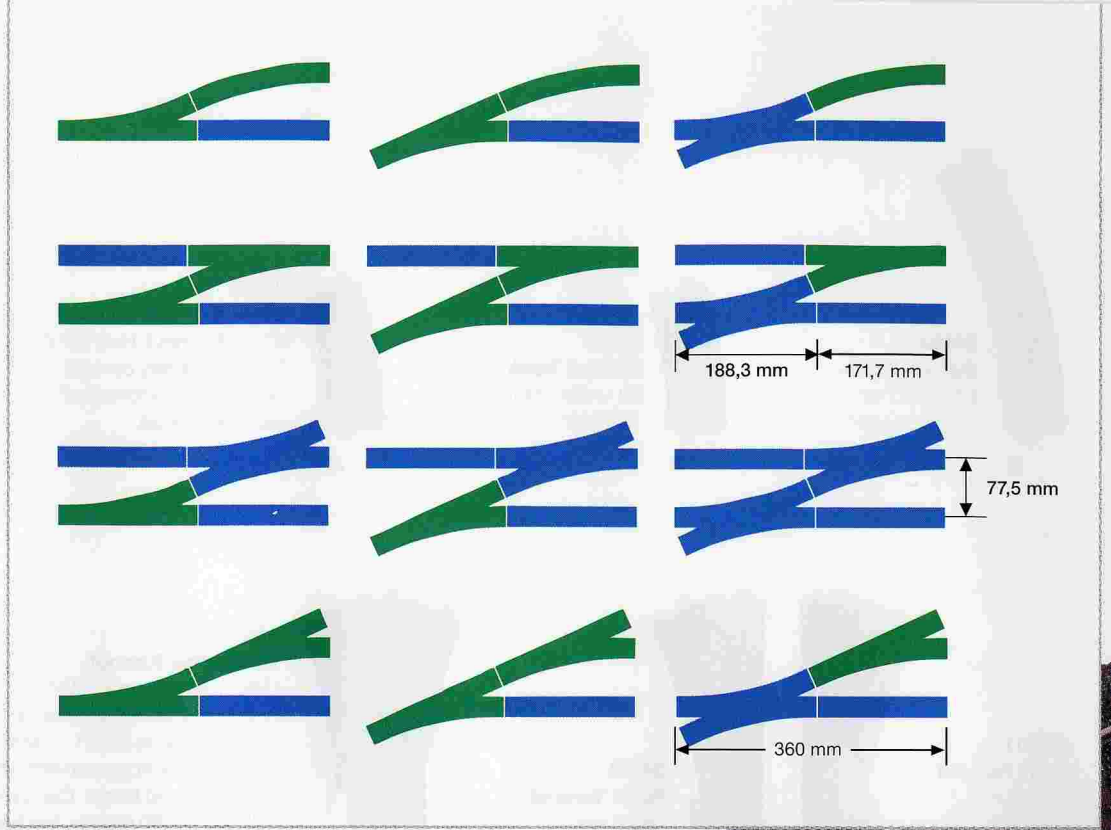
C Track – the track that sets turnouts.

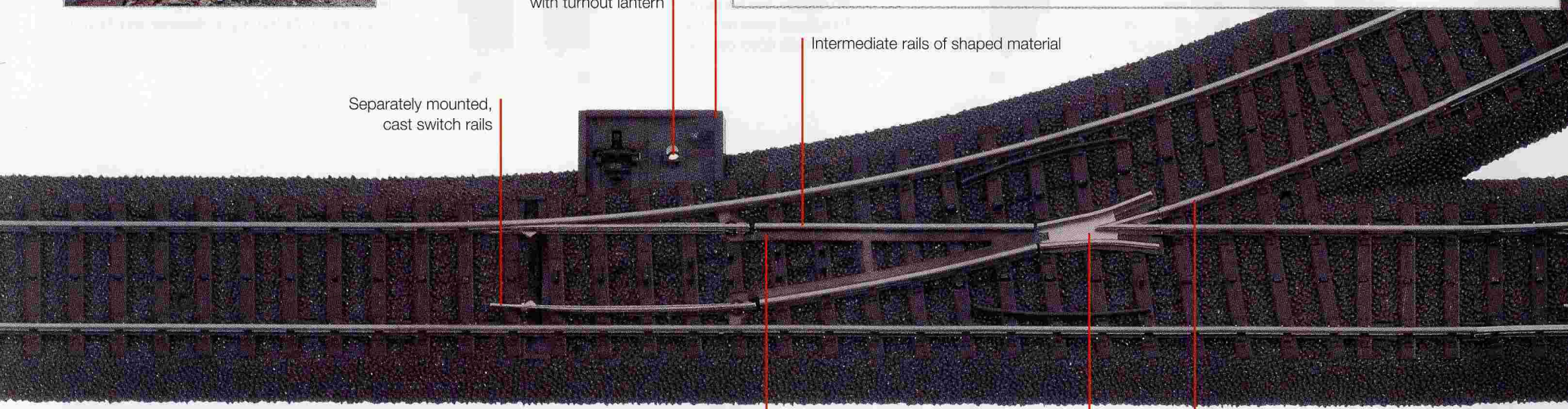
The geometry for turnouts and crossings. The turnouts and crossings in the C Track program all have the same length (188.3 mm), the same angle (24.3°) and the same connection dimensions with symmetrical legs. This allows you to install turnouts either straight or diagonal to a length of track or to exchange them with crossings or double slip turnouts without having to make changes to the rest of the track layout.

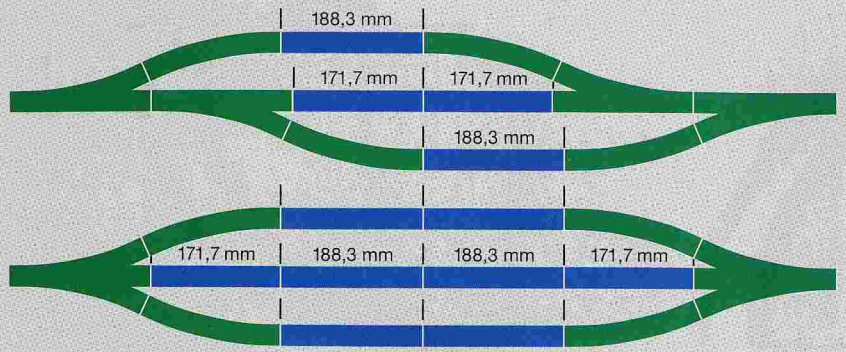
Right and left crossings are identical and do not require short adjustment sections on the diagonal side. This means a smaller number of track sections in comparison to M Track.

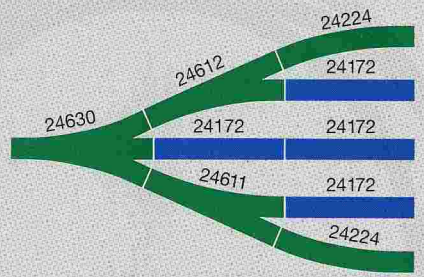
The length of the complementary curve is counterbalanced in all combinations with the same straight track (171.7 mm). Additional special adjustment sections are not needed.

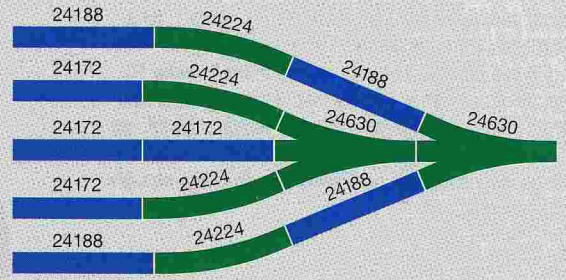












Three paths save space.
The three-way turnout combines a right and a left turnout in the space of a normal turnout. This saves space in yards and station areas. The connection dimensions for the three-way turnout are the same on both sides as a normal turnout; the layout of the branch tracks is however prototypically asymmetrical. The offset frogs and switch rails prevent joints at the same point of both sides of the track and guarantee a high level of operating reliability in all directions. Corresponding to the three-way turnouts design as a "double turnout", it is equipped with two independent hand levers that can be replaced by two 74490 electric turnout mechanisms and a pair of 74470 lanterns.

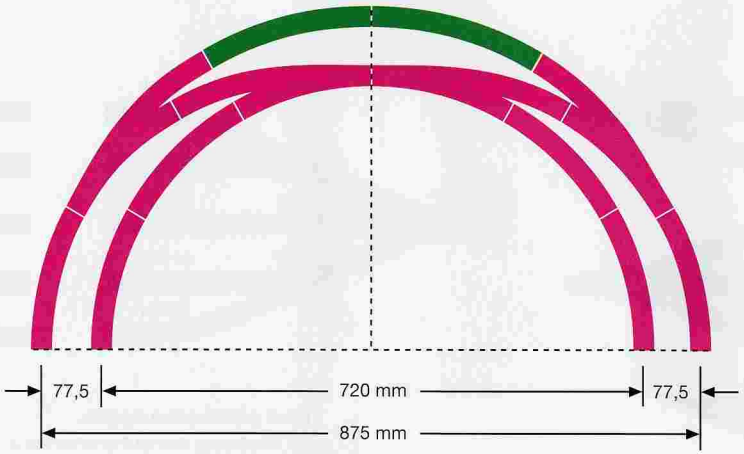
Connection dimensions same as simple turnouts

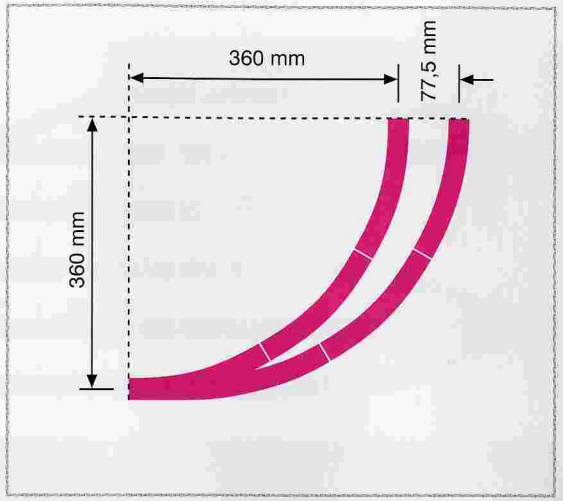
Asymmetrical arrangement of the frogs

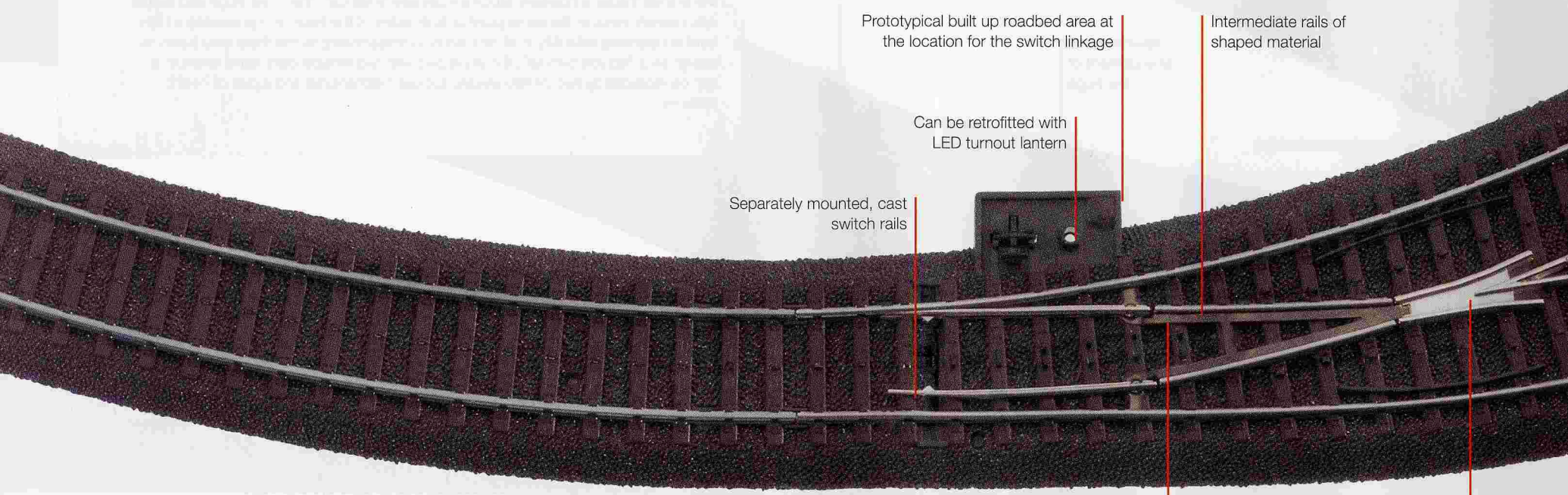
Offset arrangement of the switch rails

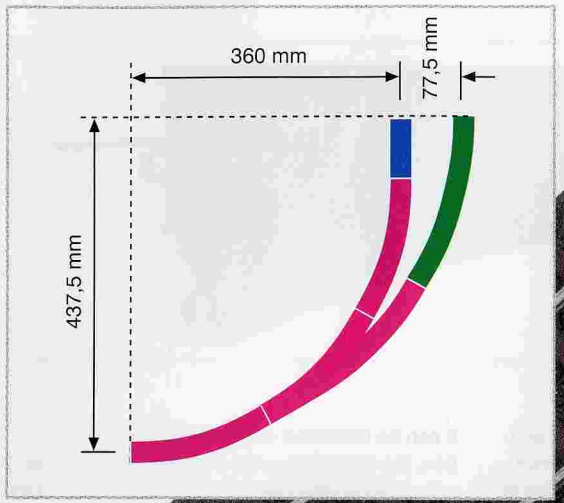
C Track – from one curve to another.

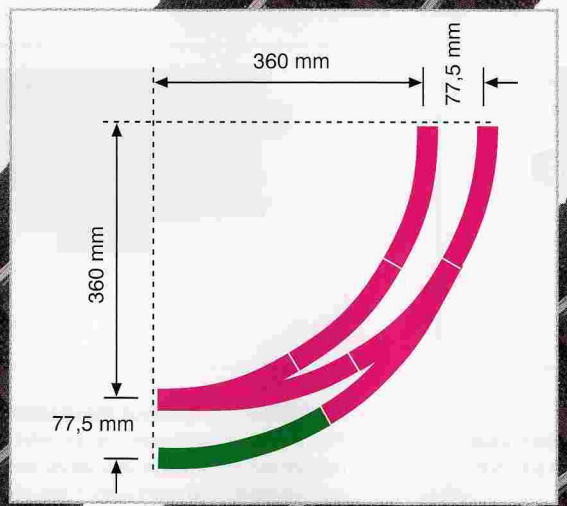
Curved turnouts with round geometry.
The curved turnouts consist of two offset 30° curved sections from Radius 1, and the main branch of the turnout is extended in length by 77.5 mm (3-1/16″). This means that the same turnout geometry can be used in the standard R1 curve and in the parallel R2 curve. Sidings with a parallel track spacing or cross-overs between the R1 and R2 curves are possible as simple combinations at 60°, i.e. at 1/6 of a circle. This saves space in curves and gains length in the straight areas of the layout.

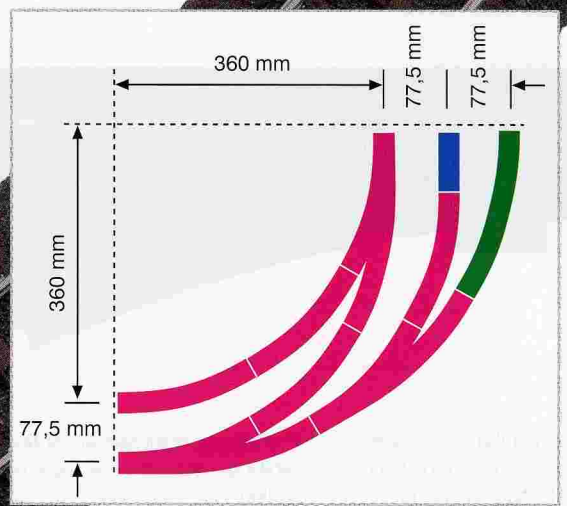




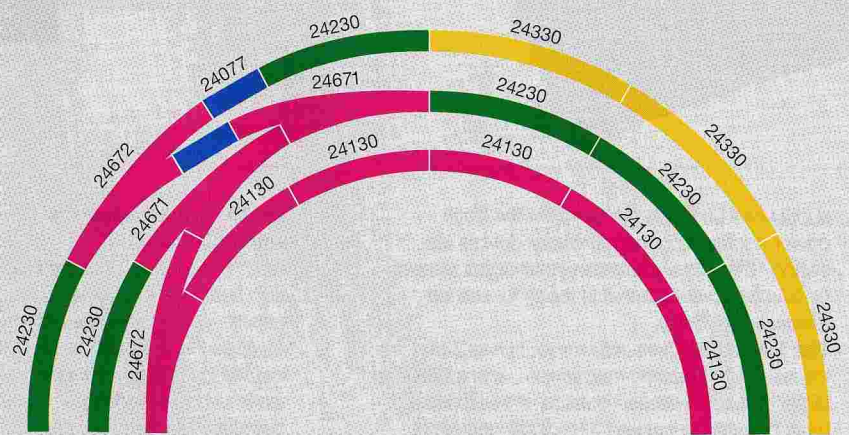






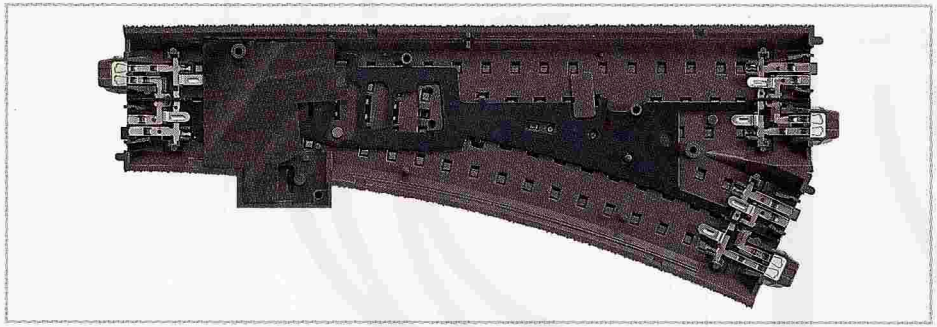


Turnout curve as a 30° section of a circle, radius 360 mm / 14-3/16″



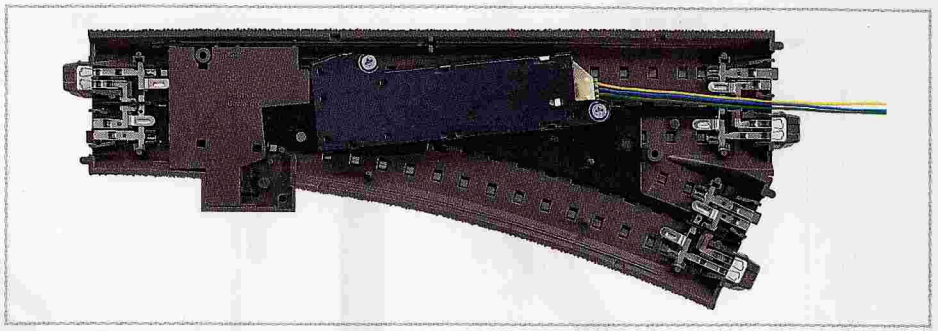
Curved turnouts in all curves.
Two or three track junctions to the 24330 large parallel curve can be made with the curved turnouts in the current program. The roadbed for the curved turnouts is appropriately cut back for this purpose. Since the full elasticity of the roadbed is reached when the 24077 track sections are inserted here, we recommend this combination only for track layouts that are screwed down in place.

C Track Accessories



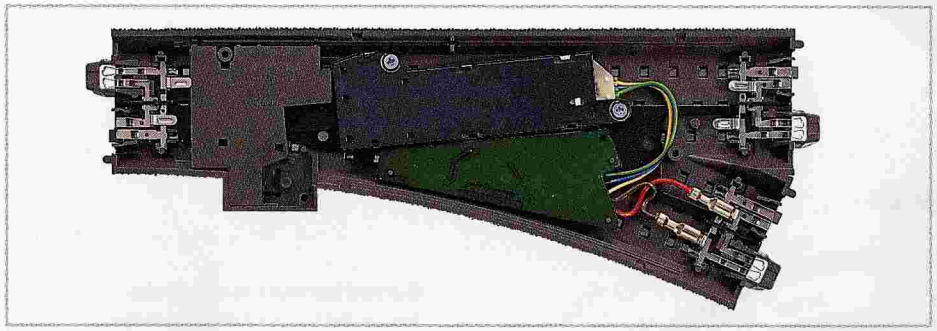
Practical mechanism.
The turnouts are equipped at the factory with a metal turnout lever for setting them by hand. A locking feature for the turnout setting is integrated into the turnout linkage mechanism.

The turnout point rails are spring loaded, thus allowing a train to travel "against" the turnout setting.

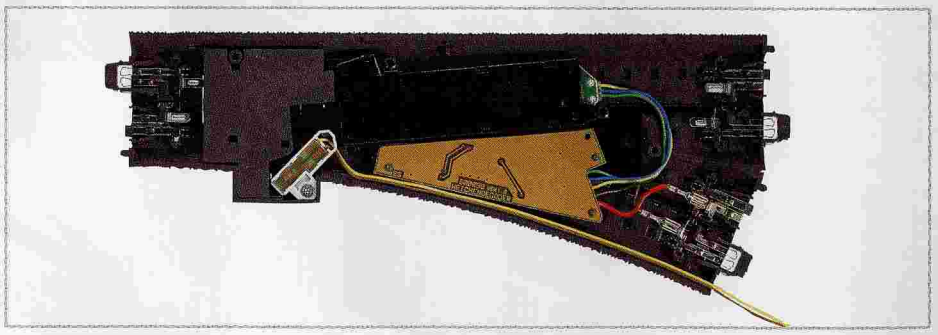


74490 Electric Turnout Mechanism.
This electric mechanism can be retrofitted and connected to turnouts very easily and without special tools. The mechanism sits concealed in the roadbed; below baseboard mounting is not necessary. It is sealed against dirt and has an end shutoff feature to protect against overloads.

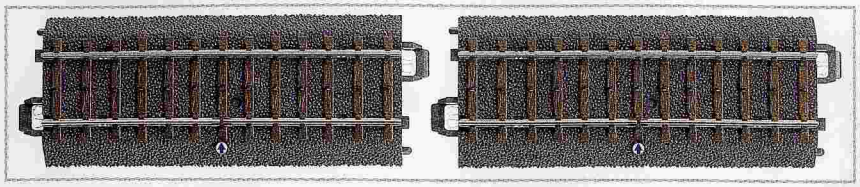
It can be controlled with the standard control box, the control box with a feedback feature, or with a digital decoder. The hand lever can remain on turnout.
Tip: A special mechanism is already built into the 24624 double slip switch.



74460 Digital Installation Decoder.
A digital decoder can be built into a turnout or double slip switch along with the electric mechanism or can be retrofitted. The decoder is easily connected to the mechanism with plug contacts and can have an individual address (addresses 1 to 256) set on it for each turnout. Special tools or special knowledge are not required for the installation of this decoder. The digital power supply can be taken directly from the track power contacts on the turnout or double slip switch. This gives you a complete digital turnout or double slip switch that is ready for use on temporary layouts.
Tip: The 24630 three-way turnout uses 2 of the no. 74490 electric mechanism, and a 6083 digital decoder installed outside of this turnout must be used to convert it to digital operation.



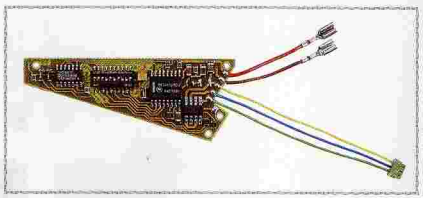
74470 Turnout Lanterns with LED Lighting.
All C Track turnouts and the double slip switch, with hand levers or electric mechanisms, conventionally or digitally controlled, can be equipped with lighted turnout lanterns. The installation is easy; the lighting insert will also work with the fixed lantern for the double slip switches. Maintenance-free miniature LEDs make it possible to keep the size of the lanterns to scale.
Tip: A permanent lantern with prototypical lighting is already built into the 24624 double slip switch.



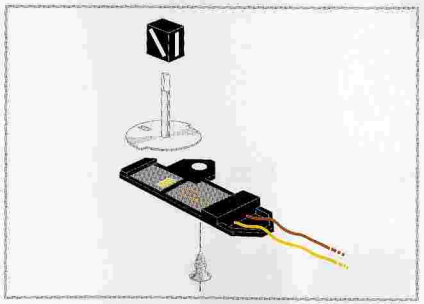
24995 Contact Track Set.
Two straight track sections, each 94.2 mm (3-3/4″). Continuous contact through wheel sets. With insulated section of rail for track occupation feedback when traversed by train. Can be extended with regular straight or curved track sections.



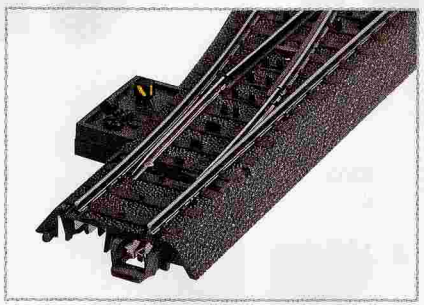
74490 Electric Turnout Mechanism.
Retrofit kit for C Track turnouts, double solenoid mechanism with end shutoff contacts. Can be operated with a control box or a digital decoder. Feedback signal possible with the 7271 control box.



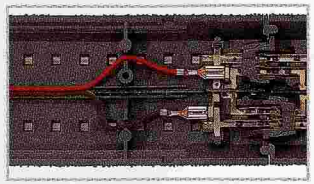
74460 Digital Installation Decoder.
Can be retrofitted to all C Track turnouts with an electric mechanism. Electrical connections are made with plug contacts. Address of 1 to 256 can be set with coding switches.



74470 Turnout Lantern Kit.
For retrofitting 2 C Track turnouts. Can be used for right, left or three-way turnouts. Can be used with a manual hand lever



and/or with the 74490 electric turnout mechanism. Lighting with maintenance-free LEDs.

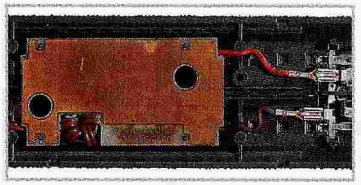


74040 Feeder Wire Set
with spade connectors for C Track. Two-conductor. Red and brown wires. Length 1 meter (39″).

74995 Spade Connectors.
Can be used for the contact fingers on C Track. Suitable for electrical connections from contact tracks, signals, and stub end sidings, for ground and for center conductor connections. For all existing Märklin wire from 0.19 sq. mm (0.0003 sq. in. or 0.02 in. dia.) to 0.75 sq. mm (0.001 sq. in. or 0.04 in. dia.). 1 package contains 20 spade connectors and instructions for attaching them to wire.

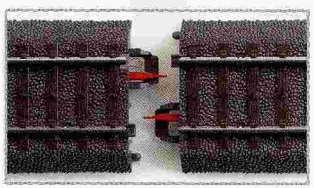
74999 Screwdriver
with cross point size 00 (Ph). For 74990 (C) and 7599 (K) track screws.

74990 Track Screws
for mounting C Track. 1,6 x 13 mm (1/16″ x 1/2″) with cross point head. Contents 200 pieces.



N 74046 Feeder Wire Set with Noise Suppressor and Overload Protection.
Circuit board with spade connectors for C Track, and with a red and brown feeder wire. One needed for each conventional track circuit. Not suitable for DELTA and Digital operation.

N 74042 Supplemental Feeder Wire Set.
Red and brown feeder wires with spade connectors at both ends, for C Track. Length 2 meters (78-3/4″).



74030 Center Rail Insulators
to separate power circuits or signal blocks. 8 pieces for 4 insulation points.

74043 Signal Hookup Kit for C Track.
Suitable for color light and semaphore/target signals. Contains insulators, wire and connectors for a signal block.

One 74046 feeder wire set should be installed in each **conventional track power circuit** to protect against possible radio and television interference caused by locomotives in operation. This feeder wire set also offers effective protection against overloads and short circuits, protection that responds very quickly, even with older transformers. The protective functions remain in effect when you use the 74042 Supplemental Feeder Wire Set for additional connections to the track in the same power circuit.No interference suppression equipment or protective circuits are required in the track when you use original Märklin DELTA System components and Märklin Digital System components. The 74046 feeder wire set must not be installed for DELTA or digital operation.

6083, 6084: Other digital decoders usable with C Track can be found on page 299.

The 74920 crossing gates with half gates for C Track and the 74930 addon set for the 74920 crossing gates can be found on page 277.

Information on hooking up color light and semaphore/target signals to C Track can be found on pages 268 and 270.

Catenary accessories for C Track can be found on pages 264 – 267.

Appropriate wire and plugs can be found on page 283.

M Track Overview

Straight Track / Function Tracks



5106
180 mm
(7-3/32″)



5111
180 mm

HOBBY

5131
180 mm
(7-3/32″)



5107
90 mm
(3-9/16″)



HOBBY

5112
90 mm
(3-9/16″)



5146
90 mm
(3-9/16″)



5129
70 mm
(2-3/4″)



5208
8 mm
(5/16″)



5108
45 mm
(1-3/4″)



5210
16 mm
(5/8″)



5109
33.5 mm
(1-5/16″)



5110
22.5 mm
(7/8″)

Industrial Curve
Radius 286 mm
(11-1/4″)



5120
1/1 = 45°

5100 Standard Curve
Radius 360 mm
(14-3/16″)



5100
1/1 = 30°



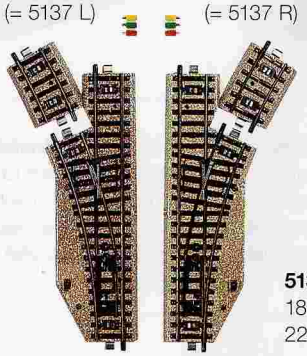
5101
1/2 = 15°



5147
1/2 = 15°



5102
1/4 = 7° 30'

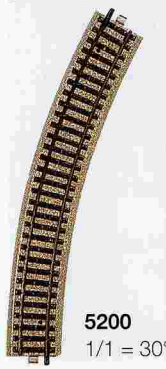


5138
(= 5137 L)

5139
(= 5137 R)

5137 (L+R)
180 mm (7-3/32″) /
22° 30'

5200 Parallel Curve
Radius 437.4 mm
(17-1/4″)



5200
1/1 = 30°



5206
24° 17'



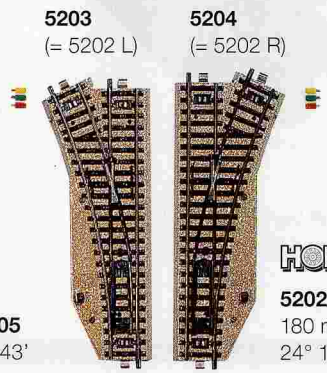
5201
1/2 = 15°



5213
1/2 = 15°



5205
5° 43'

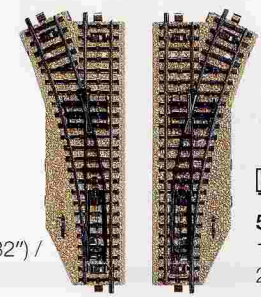


5203
(= 5202 L)

5204
(= 5202 R)

HOBBY

5202 (L+R)
180 mm (7-3/32″) /
24° 17'



5222
(= 5221 L)

5223
(= 5221 R)

HOBBY

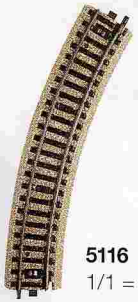
5221 (L+R)
180 mm (7-3/32″) /
24° 17'



5145
2 x 90 mm
(3-9/16″)



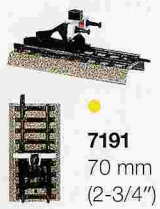
5115
180 mm
(7-3/32″)



5116
1/1 = 30°

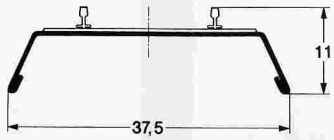


7190
70 mm
(2-3/4″)



7191
70 mm
(2-3/4″)

The special feature about M Track is the sturdy metal roadbed with the stamped ballast and the strong ties. M Track is ideal when layouts are changed often and rebuilt. This track is easy even for children to put together.



The track pieces are 37.5 mm (1-31/64″) wide. For this reason 37.5 mm (1-31/64″) must be subtracted from the indicated track center-to-center distances to maintain a clear spacing.

On straight track the length of the rails is measured. On curved track the radius out to the middle of the track bed and the angle of the curve are given.

5141
(= 5140 L)

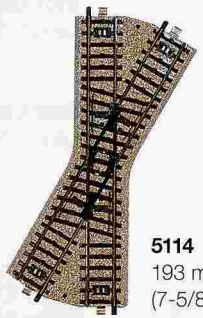


5142
(= 5140 R)

5140 (L+R)
30° / 30°
+ 77.4 mm
(3-1/16″)



5128
193 mm
(7-5/8″) / 30°



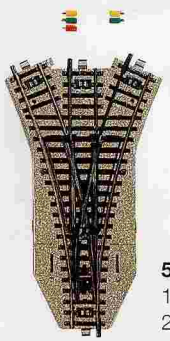
5114
193 mm
(7-5/8″) / 30°

Accessories for M track can be found on page 249

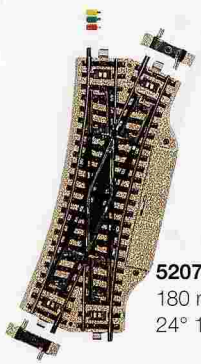
The 2291 adapter track is available for anyone wanting to combine M with K Track.



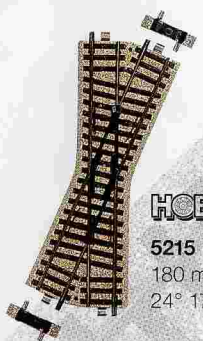
2291
180 mm
(7-3/32″)



5214
180 mm (7-3/32″) /
24° 17’



5207
180 mm (7-3/32″) /
24° 17’



5215
180 mm (7-3/32″) /
24° 17’



5211
98 mm (3-7/8″) /
48° 30’

The 24951 adapter track is available for anyone wanting to combine M Track with C Track.



24951
180 mm
(7-3/32″)

M Track / Straight and Curved Sections

Straight Track



5106 Straight Track.
Length 1/1 = 180 mm (7-3/32″) (standard length).

5107 Straight Track.
Length 1/2 = 90 mm (3-9/16″).

5129 Straight Track.
Length 70 mm (2-3/4″).

5108 Straight Track.
Length 1/4 = 45 mm (1-3/4″).

5109 Straight Track.
Length 3/16= 33.5 mm (1-5/16″).

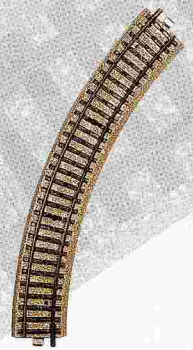
5110 Straight Track.
Length 1/8 = 22.5 mm (7/8″).

5210 Straight Track.
Length 16 mm (5/8″).

5208 Straight Track.
Length 8 mm (5/16″).

Curved Track

Industrial Curve
Radius 286 mm (11-1/4″)



5120 Curved Track.
Length 1/1 = 45°. Small radius for branchlines and industrial trackage.
Cannot be used for long locomotives and cars.

Standard Curve
Radius 360 mm (14-3/16″)

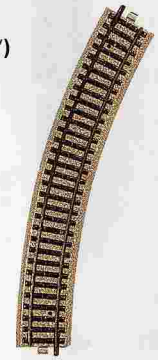


5100 Curved Track.
Length 1/1 = 30°.

5101 Curved Track.
Length 1/2 = 15°.

5102 Curved Track.
Length 1/4 = 7° 30′.

Parallel Curve
Radius 437.4 mm (17-1/4″)

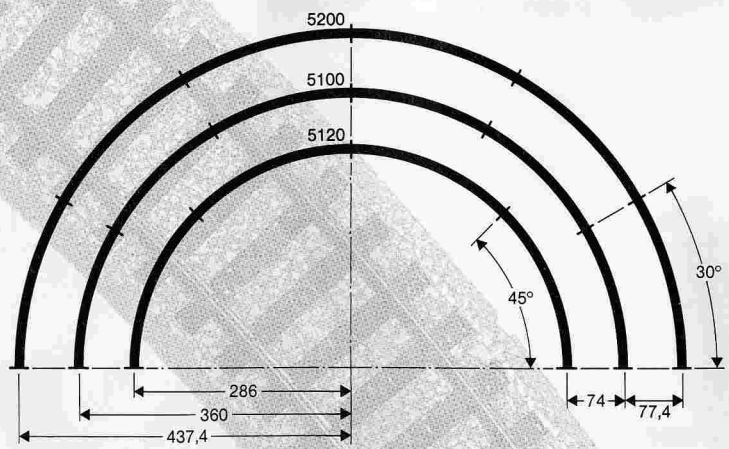


5200 Curved Track.
Length 1/1 = 30°.

5206 Curved Track.
Length 24° 17′. Complementary curve for 5202, 5221 turnouts and 5207, 5214 crossings.

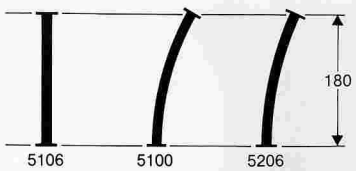
5201 Curved Track.
Length 1/2 = 15°.

5205 Curved Track.
Length 5° 43′. With 5206 makes up 5200 section.



5200 Circle = 12 sections
5100 Circle = 12 sections
5120 Circle = 8 sections

Comparison of M Track Lengths



Feeder Track
Feeder tracks conduct power to the center stud and from the running rails. Feeder tracks should be installed about every 2 meters (approx. 6-7 feet) on longer stretches of track to supply current to the track. A 5131 feeder track with interference suppression capacitor should be used in each track power circuit (not required in DELTA or digital operation).



5111 Straight Feeder Track.
Length 1/1 = 180 mm (7-3/32″). 2 feeder wires. Also for DELTA and Digital.

HOBBY

5131 Straight Feeder Track.
Length 1/1 = 180 mm (7-3/32″). 2 feeder wires. Built-in capacitor for interference suppression.



HOBBY

5112 Straight Uncoupler Track.
Has solenoid mechanism. Length 1/2 = 90 mm (3-9/16″). 2 wires for connections.



5146 Straight Circuit Track.
Length 1/2 = 90 mm (3-9/16″). Momentary contact with locomotive/car pickup shoe.

5147 Curved Circuit Track.
Length 1/2 = 15°. Radius 360 mm (14-3/16″). Momentary contact with locomotive/car pickup shoe.

5213 Curved Circuit Track.
Length 1/2 = 15°. Radius 437.4 mm (17-1/4″). Momentary contact with locomotive/car pickup shoe.



5145 Contact Track Set.
Length 2 x 1/2 = 90 mm (3-9/16″). Continuous contact through wheel sets. Has insulated rail section for track occupation feedback signal when train is passing over. Can be lengthened with the 5115 and 5116 contact track sections.

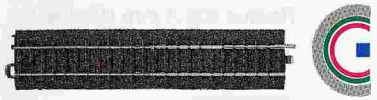
5115 Straight Contact Track.
Length 1/1 = 180 mm (7-3/32″). Extends contact areas for railroad grade crossings and 5145.

5116 Curved Contact Track.
Length 1/1 = 30°. Radius 360 mm (14-3/16″). Extends contact areas for railroad grade crossings and 5145.

Accessories for M Track



2291 Straight Adapter Track.
Length 1/1 = 180 mm (7-3/32″). Facilitates transition from M to K track.



24951 Straight Adapter Track.
Length 180 mm (7-3/32″). Enables the transition from M Track to C Track.



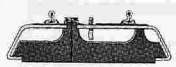
HOBBY

7190 Track Bumper.
Length 70 mm (2-3/4″).

7191 Track Bumper.
Length 70 mm (2-3/4″). With lighted lantern.



5113 Light Mast.
For 5112 uncoupler track. Height 85 mm (3-3/8″). Mast light goes on during uncoupling.



7171 Sound Deadening Strips.
Package of 50 strips and 50 wood screws 1.7 x 15 mm (approx. 1/16″ x 1/2″) for quieter train operation.

7299 Wood Screws.
200 screws 2 x 15 mm (approx. 5/32″ x 1/2″). For mounting M track.



5004 Third Rail Feeder Wire.
Length 750 mm (29-1/2″). Attaches to the third rail clip at the end of the track sections.



5022 Third Rail Insulator.
Is inserted between the third rail clips between the track sections to separate track circuits.





6073 Digital Turnout Decoder.
Suitable for installation in the M track turnouts 5128, 5137, 5140, 5202 and 5207.



7195 Number Sign Set.
12 bases. Signs for 1 – 24. For identifying turnouts and signals.



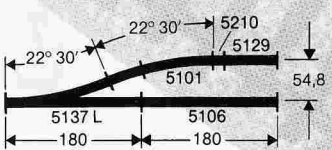
7555 Switching Contact.
Reed contact generator for installation in track. Activated by 7556 and 7557 magnets for locomotives (see page 126) and by 7558 magnet for passenger and freight cars (see page 180).

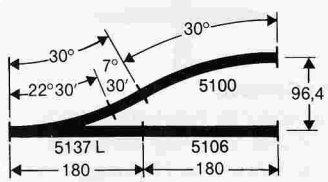
M Track / Turnouts and Crossings

Turnouts for 5100 Standard Curve
Radius 360 mm (14-3/16″)



5137 Pair of Turnouts.
5138 (5137 L) Left Turnout.
5139 (5137 R) Right Turnout.
Has solenoid mechanism. Length of straight side 180 mm (7-3/32″). Turnout branch 22° 30′. Can be extended to 30° with the 5102 track included with these turnouts. Lighted lanterns. 3 wires for connections.





Turnouts for 5200 Parallel Curve
Radius 437.4 mm (17-1/4″)



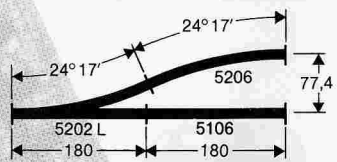
HOBBY

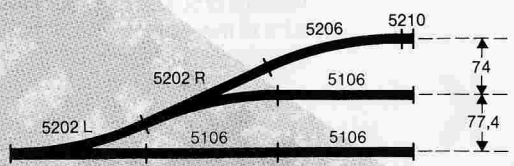
5202 Pair of Turnouts.
5203 (5202 L) Left Turnout.
5204 (5202 R) Right Turnout.
Has solenoid mechanism. Length of straight side 180 mm (7-3/32″). Turnout branch 24° 17′. Branch same as 5206. Lighted lanterns. 3 wires for connections.



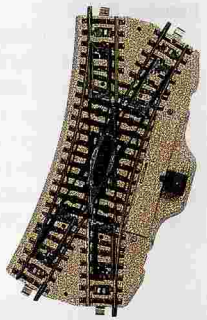
HOBBY

5221 Pair of Turnouts.
5222 (5221 L) Left Turnout.
5223 (5221 R) Right Turnout.
With hand levers. Length of straight side 180 mm (7-3/32″'). Turnout branch 24° 17′. Branch same as 5206.

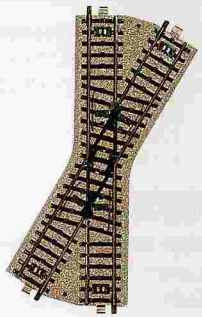




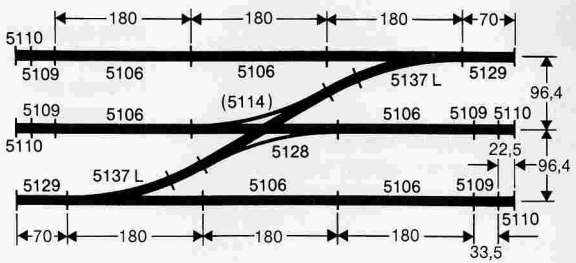
Crossings for 5100 Standard Curve
Radius 360 mm (14-3/16″)



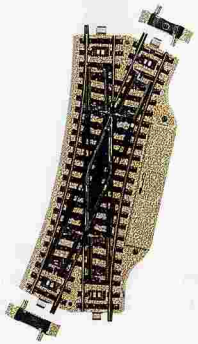
5128 Double Slip Switch.
Has solenoid mechanism. Crossing angle 30°. Curve same as 5100. Length of straight side 193 mm (7-5/8″). Additional hand lever. Lighted lantern with position indications that change. 3 wires for connections.



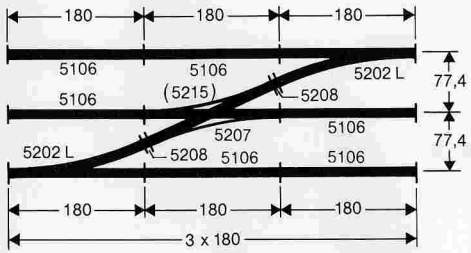
5114 Crossing.
Crossing angle 30°. Length of straight side 193 mm (7-5/8″). Dimensions same as 5128. The intersecting third rails are electrically separated.

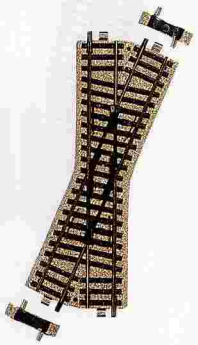


Crossings for 5200 Parallel Curve Radius 437.4 mm (17-1/4″)



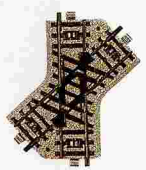
5207 Double Slip Switch.
Has solenoid mechanism. Crossing angle 24° 17′. Length of straight side 180 mm (7-3/32″). 3 wires for connections. Additional hand lever. 2 each 5208 adjustment sections included. Curve same as 5206.



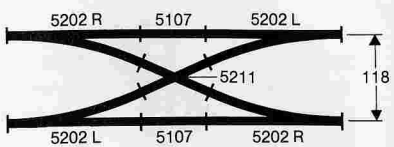


HOBBY

5215 Crossing.
Crossing angle 24° 17′. Length of straight side 180 mm (7-3/32″). Dimensions same as 5207. The intersecting third rails are electrically sparated. 2 each 5208 adjustment sections included.



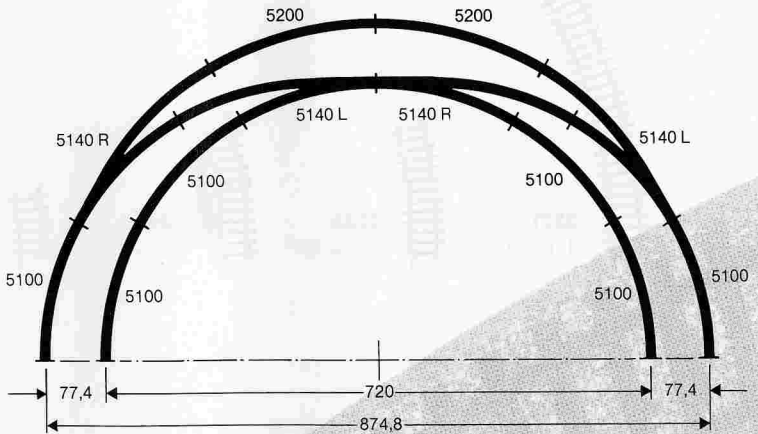
5211 Crossing.
Crossing angle 48° 30′. Length of straight side 98 mm (3-7/8″). For double track connections. The intersecting third rails are electrically separated.



5140 Pair of Curved Turnouts.
5141 (5140 L) Left Curved Turnout.
5142 (5140 R) Right Curved Turnout.
Has solenoid mechanism. Inner curve 30°. Outer curve 30° in the parallel curve spacing of 77.4 mm (3-1/16″). Length and radius of the inner curve are the same as 5100. Lighted lanterns. 3 wires for connections.



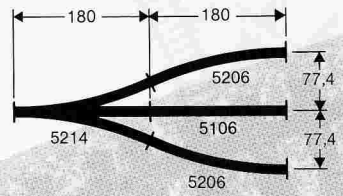
5140 Curved Turnouts



5214 Symmetrical Three-Way Turnout.
Has 2 solenoid mechanisms. Length of straight side 180 mm (7-3/32″). Turnout branches 2 x 24° 17′. Branch radius 437.4 mm (17-1/4″). Curve same as 5206. 2 additional hand levers. 5 wires for connections.

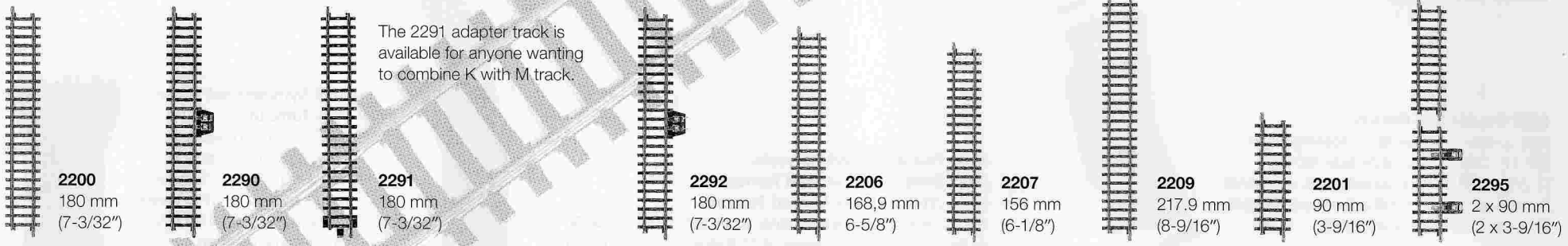


5214 Three-Way Turnout



K Track Overview

Straight Track / Function Tracks



2200
180 mm
(7-3/32″)

2290
180 mm
(7-3/32″)

2291
180 mm
(7-3/32″)

The 2291 adapter track is available for anyone wanting to combine K with M track.

2292
180 mm
(7-3/32″)

2206
168,9 mm
6-5/8″)

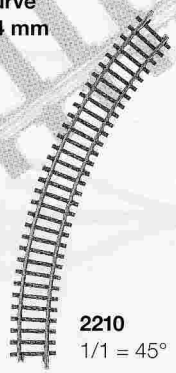
2207
156 mm
(6-1/8″)

2209
217.9 mm
(8-9/16″)

2201
90 mm
(3-9/16″)

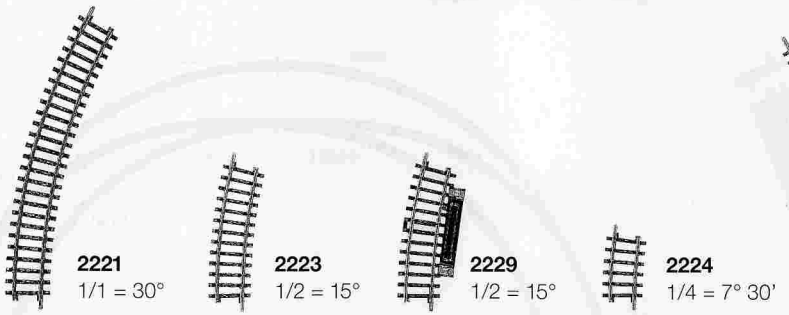
2295
2 x 90 mm
(2 x 3-9/16″)

Industrial Curve
Radius 295.4 mm
(11-5/8″)



2210
1/1 = 45°

Standard Curve I
Radius 360 mm
(14-3/16″)



2221
1/1 = 30°

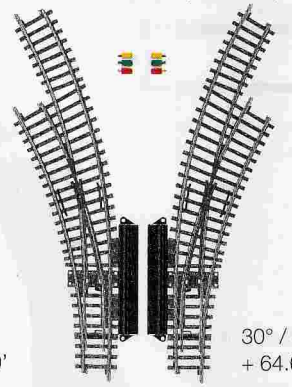
2223
1/2 = 15°

2229
1/2 = 15°

2224
1/4 = 7° 30'

2268
(= 2267 L)

2269
(= 2267 R)

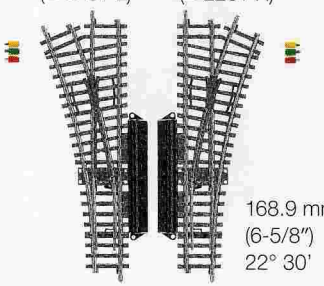


30° / 30°
+ 64.6 mm (2-1/2″)

Standard Curve II
Radius 424.6 mm
(16-3/4″)

2262
(= 2261 L)

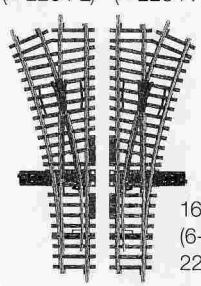
2263
(= 2261 R)



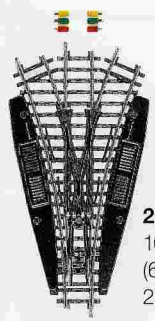
168.9 mm /
(6-5/8″)
22° 30'

2265
(= 2264 L)

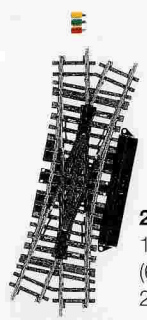
2266
(= 2264 R)



168.9 mm /
(6-5/8″)
22° 30'



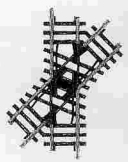
2270
168.9 mm /
(6-5/8″)
22° 30'



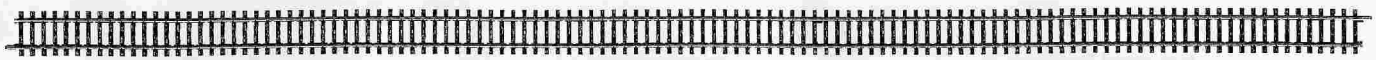
2260
168.9 mm /
(6-5/8″)
22° 30'



2259
168.9 mm /
(6-5/8″)
22° 30'



2258
90 mm
(3-9/16″) /
45°



2205
900 mm
(35-7/16″)



2297
90 mm
(3-9/16″)



2299
90 mm
(3-9/16″)



2202
45 mm
(1-3/4″)



2293
41.3 mm
(1-5/8″)



2208
35.1 mm
(1-3/8″)



2203
30 mm
1-3/16″)



2204
22.5 mm
(7/8″)



24922
180 mm / 7-3/32″
The 24922 adapter track is available for anyone wanting to combine K Track with C Track.

On straight track the length of the rails is measured. On curved track the radius out to the middle of the track bed and the angle of the curve are given.

Standard Curve II
Radius 424.6 mm
(16-3/4″)



2231
1/1 = 30°



2232
3/4 = 22° 30′



2233
1/2 = 15°



2239
1/2 = 15°

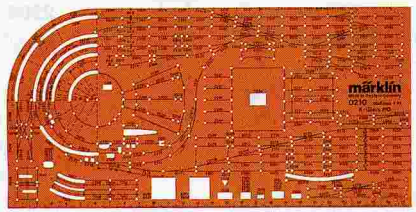


2234
1/4 = 7° 30′



2235
1/8 = 3° 45′

Accessories for K track can be found on page 259.



0210 Track Planning Stencil for K Track.
Allows you to plan your own layouts for 2200 series K track. All track sections on the stencil are in a scale of 1:10 and can be transferred easily to paper with a sharp pencil. Instructions included.

Large Curve I
Radius 553.9 mm
(21-13/16″)



2241
1/1 = 30°

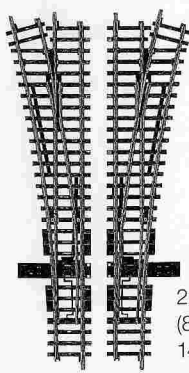
Large Curve II
Radius 618.5 mm
(24-3/8″)



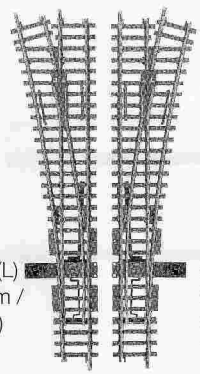
2251
1/1 = 30°

Wide Radius Turnouts
Radius 902.4 mm (35-1/2″)

2272
(= 2271 L)



2273
(= 2271 R)
225 mm /
(8-7/8″)
14° 26′

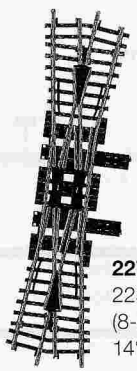


22715 (L)
225 mm /
(8-7/8″)
14° 26′

22716 (R)
225 mm /
(8-7/8″)
14° 26′



2274
14° 26′



2275
225 mm /
(8-7/8″)
14° 26′



2257
225 mm /
(8-7/8″)
14° 26′

K Track / Straight and Curved Sections

Straight Track
The K Track geometry starts with the grid of the standard straight length of 180 mm (7-3/32″). The partial length track sections are used to set up track patterns of any length, but are chiefly used for filling in odd lengths in combination with turnouts and crossings and to supplement the standard track grid.



2200 Straight Track.
Length 1/1 = 180 mm (7-3/32″) (standard length).

2206 Straight Track.
Length 168.9 mm (6-5/8″). Same in length as 2262, 2263, 2265 and 2266 turnouts.

2207 Straight Track.
Length 156 mm (6-1/8″).

2201 Straight Track.
Length 1/2 = 90 mm (3-9/16″).

2202 Straight Track.
Length 1/4 = 45 mm (1-3/4″).

2293 Straight Track.
Length 41.3 mm (1-5/8″).

2208 Straight Track.
Length 35.1 mm (1-3/8″).

2203 Straight Track.
Length 1/6 = 30 mm (1-3/16″).

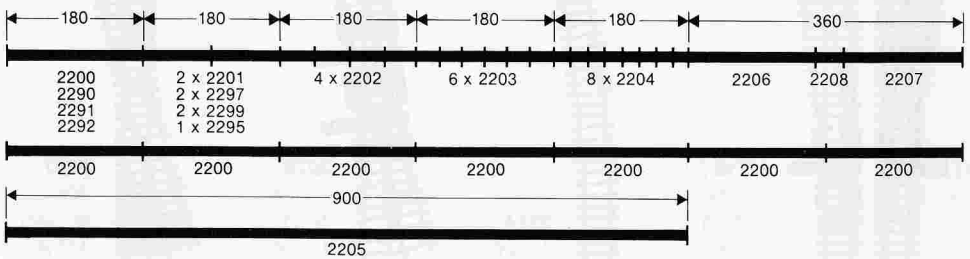
2204 Straight Track.
Length 1/8 = 22.5 mm (7/8″).

2209 Straight Track.
Length 217.9 mm (8-9/16″).

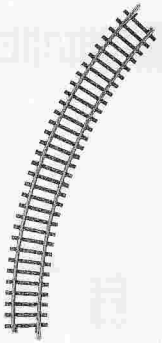
2205 Flex Track.
Length 5 x 1/1 = 900 mm (35-7/16″). Curves with different radii can be made with this track. It can be cut using a coping saw. The 7595 rail joiners and clips are installed at the cut ends.

7595 Rail Joiners and Third Rail Clips.
Contents: 10 pieces of each. For joints with other track when the 2205 flex track is cut.

Comparison of K Track Lengths



Curved Track



Industrial Curve Radius 295.4 mm (11-5/8″)

2210 Curved Track.
Length 1/1 = 45°. Small radius for branchlines and industrial trackage. Cannot be used for long locomotives and cars.



Standard Curve I Radius 360 mm (14-3/16″)

2221 Curved Track.
Length 1/1 = 30°.

2223 Curved Track.
Length 1/2 = 15°.

2224 Curved Track.
Length 1/4 = 7° 30′.



Standard Curve II Radius 424.6 mm (16-3/4″)

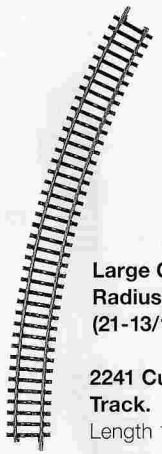
2231 Curved Track.
Length 1/1 = 30°.

2232 Curved Track.
Length 3/4 = 22° 30′.

2233 Curved Track.
Length 1/2 = 15°.

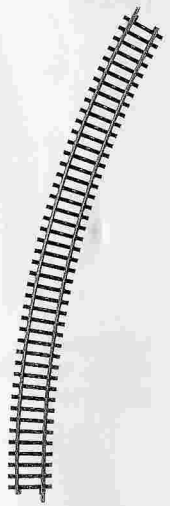
2234 Curved Track.
Length 1/4 = 7° 30′.

2235 Curved Track.
Length 1/8 = 3° 45′.



Large Curve I Radius 553.9 mm (21-13/16″)

2241 Curved Track.
Length 1/1 = 30°.



Large Curve II Radius 618.5 mm (24-3/8″)

2251 Curved Track.
Length 1/1 = 30°.



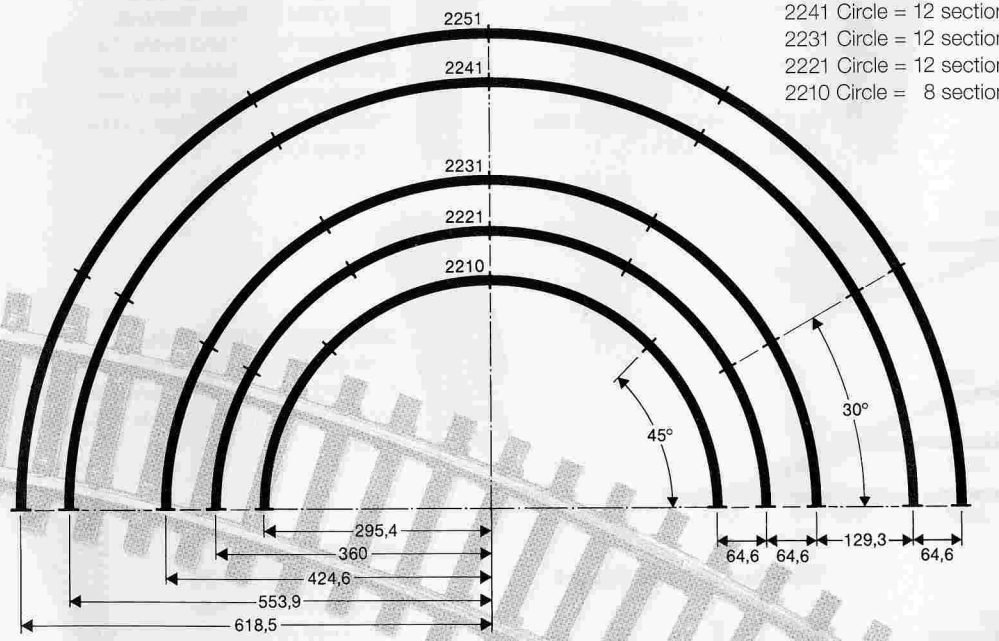
Wide Radius Turnouts Radius 902.4 mm (35-1/2″)

2274 Curved Track.
Length 14° 26′. Complementary curve for 2271 turnout.

The 5 Track Radii

In addition to the Standard Curve I with a radius of 360 mm (14-3/16″), there is also the larger Standard Curve II with a radius of 424.6 mm (16-3/4″). The catalog number for each track of a particular radius has the corresponding second digit for the Standard Curve I (22**2**1, 22**2**3, 22**2**4) or II (22**3**1, 22**3**2, 22**3**3, 22**3**4, 22**3**5). The Large Curve I 2241 with a radius of 553.9 mm (21-13/16″) and the Large Curve II 2251 with a radius of 618.5 mm (24-3/8″) are available for wide radius main lines. The Industrial Curve 2210 with a radius of 295.4 mm (11-5/8″) is intended for branchlines.

2251 Circle = 12 sections
2241 Circle = 12 sections
2231 Circle = 12 sections
2221 Circle = 12 sections
2210 Circle = 8 sections

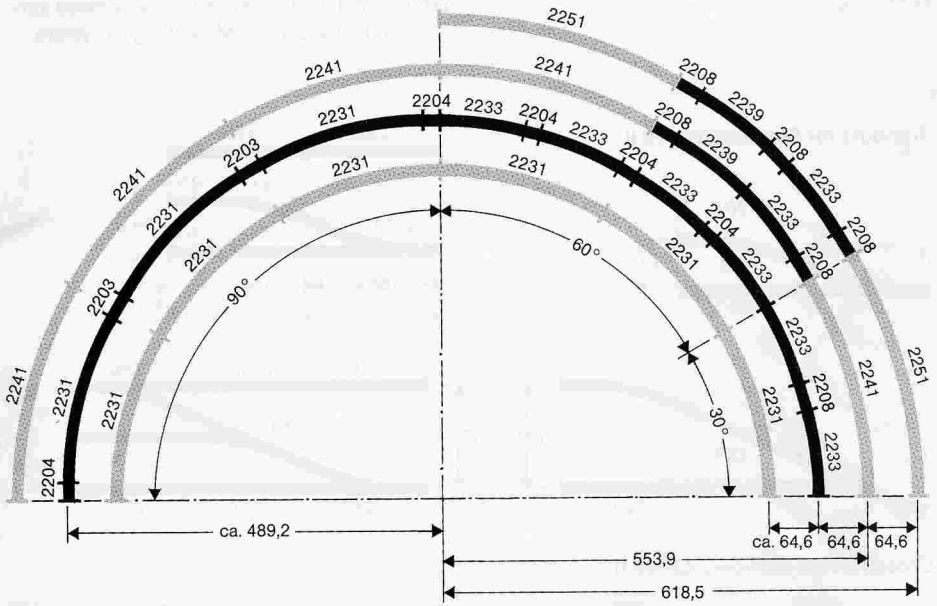


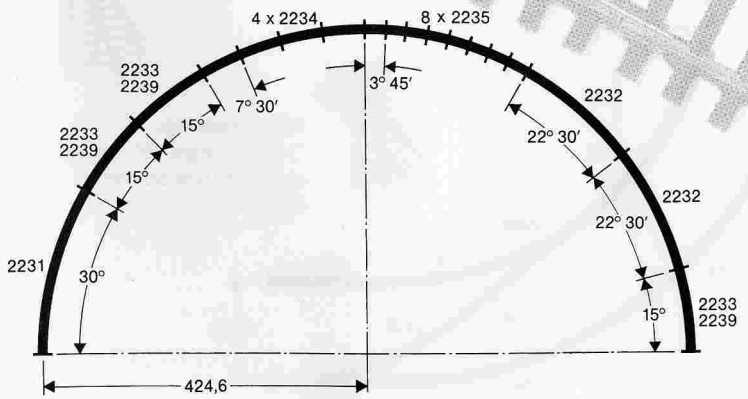
Tip: Medium size parallel curve.

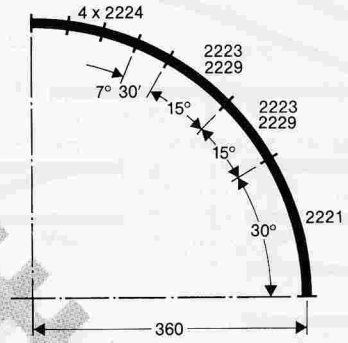
By combining existing track sections a curve between the Standard Curve II and the Large Curve I with a parallel track spacing of approximately 64.4 mm (2-1/2″) can be made.

Tip: Circuit tracks with Large Curve I and II.

The 2239 circuit track can also be installed in the Large Curve I and II by combining existing track sections.





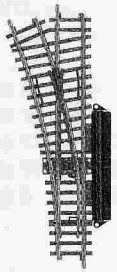


K Track / Turnouts and Crossings

Turnouts and Crossings
All of the turnouts shown are laid out for a standard parallel track spacing of 64.6 mm (2-1/2″). This short design saves space for yard tracks. All turnouts and crossings are interchangeable. They can be installed either straight or on the diagonal. The turnouts are equipped with sprung points and a train can thus run "against" a turnout setting.

The electric turnouts, the double slip switch, the three-way turnout and the curved turnouts have double solenoids for remote control. These turnouts can be operated with the 7271 or 7272 control boxes, 2229, 2239 or 2299 circuit tracks or the 7555 reed contact. The 7271 control box enables automatic feedback of the setting for the 2260, 2262, 263, 2268 and 2269 (new versions) turnouts and double slip switch. All of these turnouts can be used in the Märklin Digital system.

Standard Curve II
Radius 424.6 mm (16-3/4″)

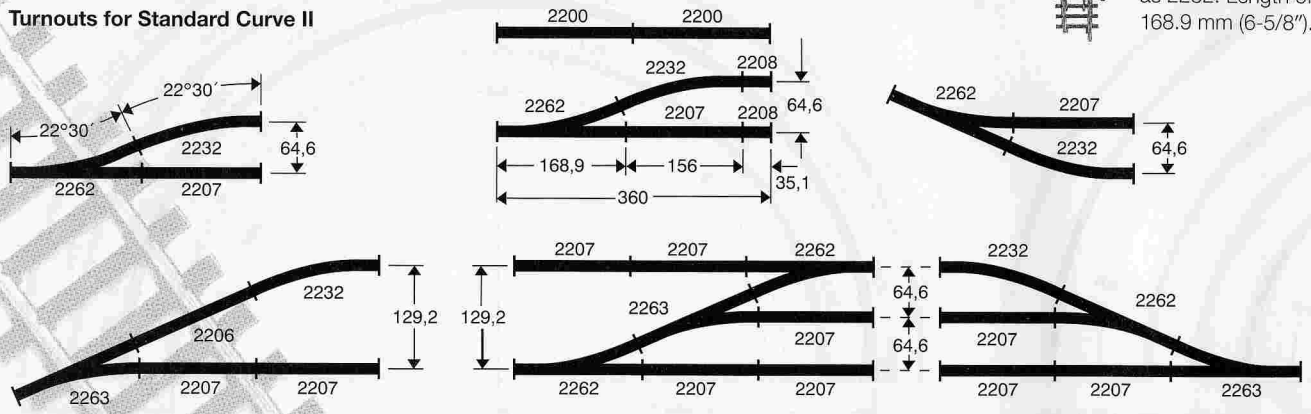


2262 (2261 L) **Left Turnout.**
2263 (2261 R) **Right Turnout.**
With detachable solenoid mechanism (7549). Turnout branch 22° 30′. Branch same as 2232. Length of straight side 168.9 mm (6-5/8″).



2265 (2264 L) **Left Turnout.**
2266 (2264 R) **Right Turnout.**
With detachable hand levers. Turnout branch 22° 30′. Branch same as 2232. Length of straight side 168.9 mm (6-5/8″). 7549 solenoid mechanism can be installed on these turnouts.

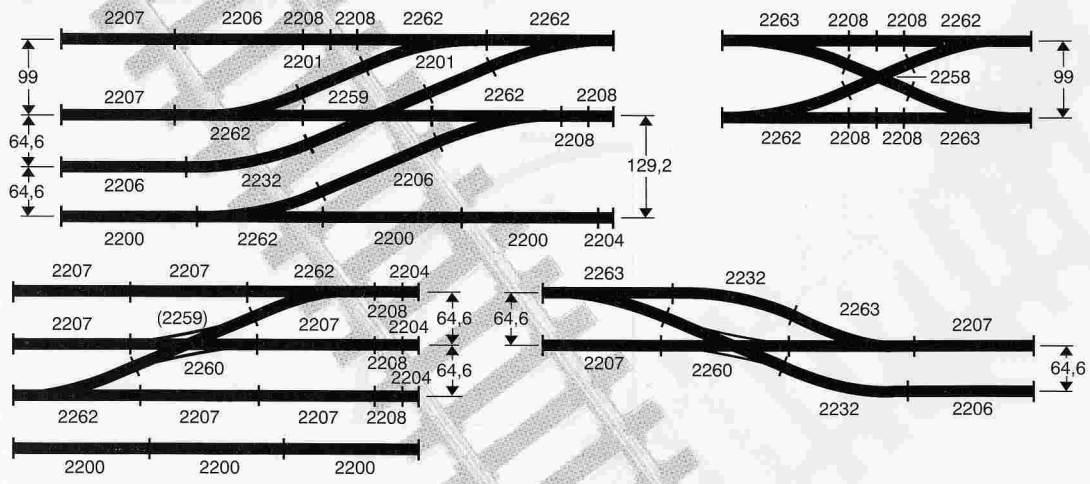
Turnouts for Standard Curve II



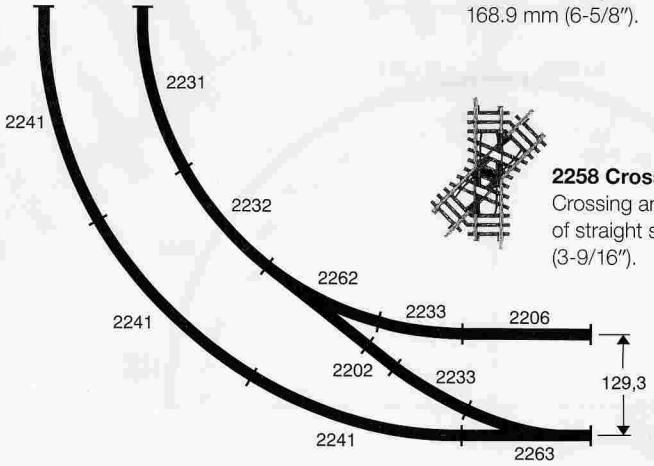


2260 Double Slip Switch.
With detachable solenoid mechanism (7549). Crossing angle 22° 30′. Curve same as 2232. Length of straight side 168.9 mm (6-5/8″).

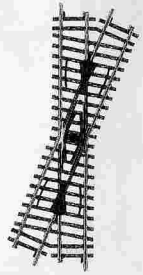
Crossings for Standard Curve II



Transition to Large Curve I



2259 Crossing.
Crossing angle 22° 30′. Length of straight side 168.9 mm (6-5/8″).



2258 Crossing.
Crossing angle 45°. Length of straight side 90 mm (3-9/16″).

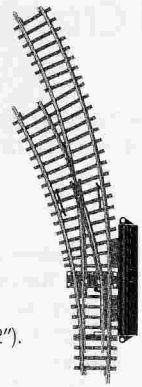
K Track / Curved Turnouts and Three-Way Turnout

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Curved Turnouts
Branches can be started on curves with the curved turnouts. This increases the usable area on straight track considerably. The curved tournouts facilitate a harmonious transition between the two Standard Curves (radius 360 mm / 14-3/16″ and 424.6 mm / 16-3/4″). The turnout angle of 30° permits installation in existing parallel curves without adjustment sections.

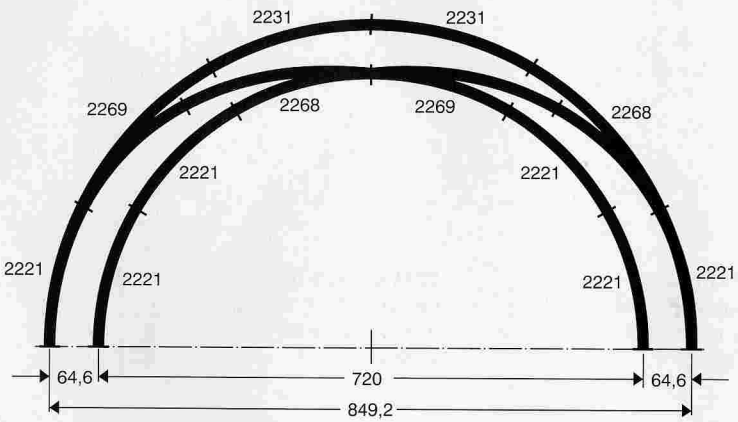
Standard Curve I
Radius 360 mm (14-3/16″)

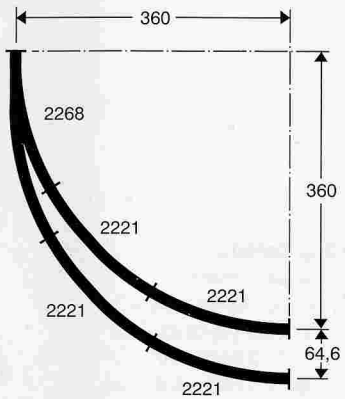
2268 (2267 L) **Left Curved Turnout.**
2269 (2267 R) **Right Curved Turnout.**
With detachable solenoid mechanism (7549). Inner curve 30°. Outer curve 30° in the parallel curve spacing of 64.6 mm (2-1/2″). Length and radius of the inner curve are the same as 2221.



Three-Way Turnout
The three-way turnout combines a right and left turnout in the space of a normal turnout. This saves space in yards and station areas. The three-way turnout has two double solenoids for remote control. Both branches are the same in length and radius as the 2262 and 2263 turnout. The three-way turnout can be used for direct entry into the 7288 locomotive shed.

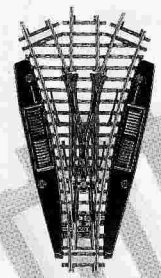
2268 and 2269 Curved Turnouts

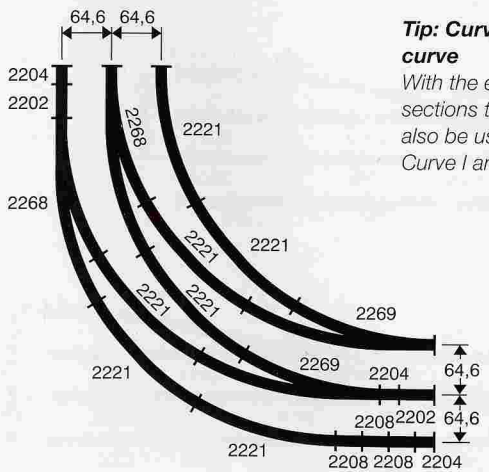




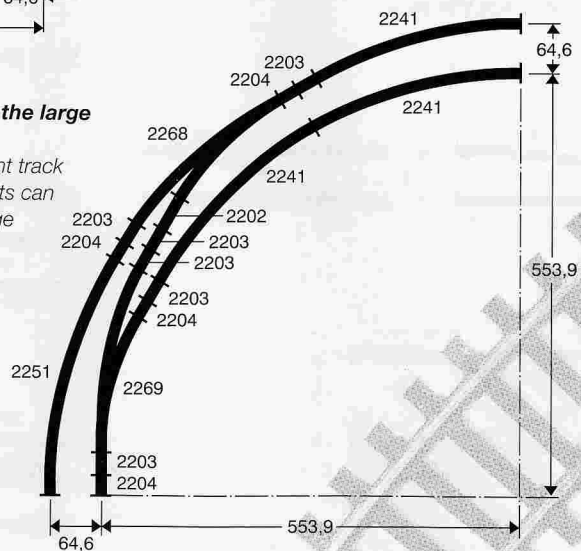
Standard Curve II
Radius 424.6 mm (16-3/4″)

2270 Symmetrical Three-Way Turnout.
Has 2 solenoid mechanisms. Length of straight side 168.9 mm (6-5/8″). Turnout branches 2 x 22° 30′. Branch radius 424.6 mm (16-3/4″). Curve same as 2232. 2 additional hand levers. 6 wires for connections.

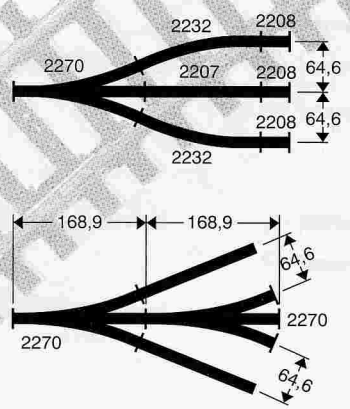




Tip: Curved turnouts on the large curve
With the existing adjustment track sections the curved turnouts can also be used between Large Curve I and Large Curve II.



2270 Three-Way Turnout



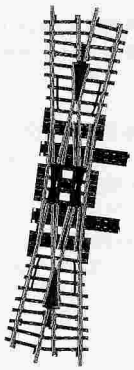
K Track / Wide Radius Turnouts and Crossings

Wide Radius Turnouts and Crossings
The wide radius turnouts and crossings with a turnout angle of 14° 26′ and a parallel track spacing starting at 57 mm (2-1/4″) make it possible to create the elegant, sweeping track configurations desired by demanding model railroaders. The hand lever on the turnouts and the double slip switch can be mounted on the left or right and can be replaced by the 7549 turnout mechanism. The 22715 and 22716 turnouts are conventional in design with guard rails; the 2272 and 2273 turnouts have a movable frog like the DB's high speed turnouts. The 2275 double slip switch offers 4 different paths with its turnout points which can be set separately.

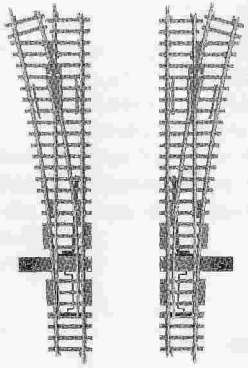


Wide Radius Turnouts and Crossings
Radius 902.4 mm (35-1/2″)

2272 (2271 L) **Left Turnout.**
2273 (2271 R) **Right Turnout.**
With detachable hand levers. Movable frog. Length of straight side 225 mm (8-7/8″). Turnout branch 14° 26′. Branch radius 902.4 mm (35-1/2″). 7549 solenoid mechanism can be installed on these turnouts.



2275 Double Slip Switch.
With 2 detachable hand levers. Crossing angle 14° 26′. Curve radius 902.4 mm (35-1/2″). Length of straight side 225 mm (8-7/8″). 2 each 7549 solenoid mechanism can be installed on this unit. Separate paths can be set.



22715 Left Turnout.
22716 Right Turnout.
With detachable hand levers. Fixed frog and guard rails. Length of straight side 225 mm (8-7/8″). Turnout branch 14° 26′. Branch radius 902.4 mm (35-1/2″). 7549 electric turnout mechanism can be installed on these turnouts.

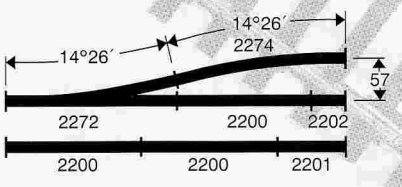


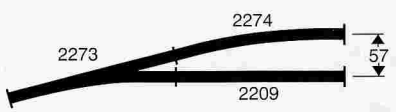
2257 Crossing.
Crossing angle 14° 26′. Track length 225 mm (8-7/8″).

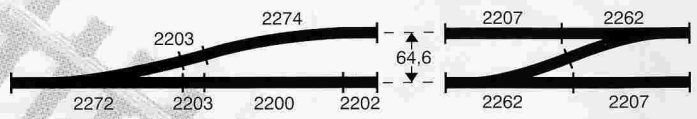


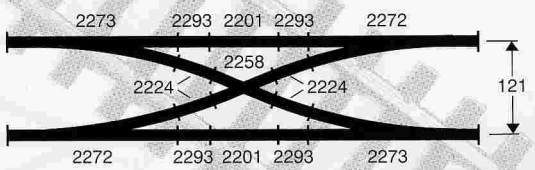
2274 Curved Track.
Length 14° 26′. Complementary curve for 2271 turnout.

2272 and 2273 Wide Radius Turnouts

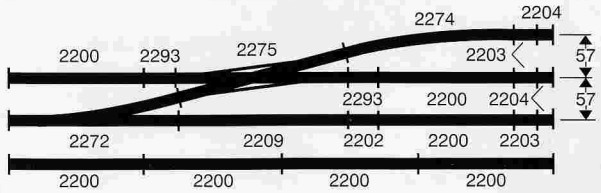


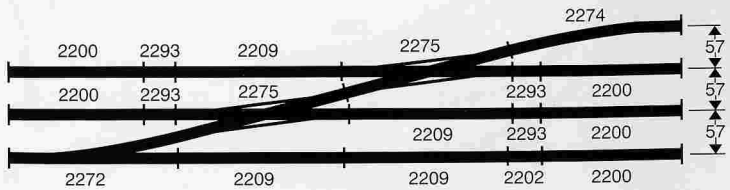






2275 Wide Radius Double Slip Switch or 2257 Crossing





K Track / Function Tracks and Accessories

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Feeder Track
Feeder tracks conduct power to the center stud and from the running rails. Feeder tracks or 7500 and 7504 feeder terminals should be installed about every 2 meters (approx. 6-7 feet) on longer stretches of track to supply current to the track. To prevent interference with radio and television reception a 2292 feeder track with interference suppression capacitor should be used in each track power circuit (not required in DELTA or digital operation).



2290 Straight Feeder Track.
Length 1/1 = 180 mm (7-3/32″). 2 feeder wires. Also for DELTA and Digital.

2292 Straight Feeder Track.
Length 1/1 = 180 mm (7-3/32″). 2 feeder wires. Built-in capacitor for interference suppression.

Uncoupler Track
Locomotives and cars with standard couplers and close couplers can be uncoupled from the train by remote control with the uncoupler track. The solenoid mechanism can be operated from the 7272 control box or with the hand lever.



2297 Straight Uncoupler Track.
Has solenoid mechanism. Length 1/2 = 90 mm (3-9/16″). 2 wires for connections.

Circuit Tracks
The circuit tracks (2229, 2239, 2299) enable automatic control of turnouts and signals by a train in operation. Activated by the pickup shoe on a locomotive or car, they can start different circuit switching functions independently in both directions of travel.

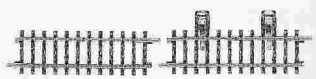


2299 Straight Circuit Track.
Length 1/2 = 90 mm (3-9/16″). Momentary contact with locomotive/car pickup shoe.

2229 Curved Circuit Track.
Length 1/2 = 15°. Radius 360 mm (14-3/16″). Momentary contact with locomotive/car pickup shoe.

2239 Curved Circuit Track.
Length 1/2 = 15°. Radius 424.6 mm (16-3/4″). Momentary contact with locomotive/car pickup shoe.

Contact Tracks
An isolated length of running rail receives contact by means of every locomotive/car that passes over it. The track occupation feedback signal made possible by this takes place through the wheel sets. The contact area can be lengthened with straight and curved track sections.



2295 Contact Track Set.
Length 2 x 1/2 = 90 mm (3-9/16″). Continuous contact through wheel sets. Has insulated rail section for track occupation feedback signal when train is passing over. Can be lengthened with the straight and curved track sections.

Accessories for K Track



24922 Straight Adapter Track.
Length 180 mm (7-3/32″). Enables the transition from K Track to C Track.



2291 Straight Adapter Track.
Length 1/1 = 180 mm (7-3/32″). Facilitates transition from K to M track.



7391 Track Bumper.
Length 38 mm (1-1/2″). Can be clipped onto the rails. Wood screw for mounting included.



7389 Track Bumper.
With lighted lantern. Maintenance-free LED. Length 38 mm (1-1/2″). Can be clipped onto the rails. Wood screw for mounting included.

7599 Wood Screws.
200 pieces 1.4 x 1.00 mm (approx. 1/16″ x 3/8″), Phillips head design, size 00. For mounting K track.

74999 Screwdriver.
With crosspoint size 00 (Ph). For 74990 (C) and 7599 (K) track screws.



7500 Ground Terminal Clip.
Can be installed anywhere on the layout under the rails.



7504 Third Rail Terminal Clip.
Is installed between the third rail clips at the ends of the track.



7522 Third Rail Insulator.
Is installed between the third rail clips between the track sections to separate track circuits.

7595 Rail Joiners and Third Rail Clips.
Contents: 10 pieces of each. For joints with other track when the 2205 flex track is cut.



7195 Number Sign Set.
12 bases. Signs for 1 – 24. For identifying turnouts and signals.

Switching Contacts
The contact generator can be installed at any spot in the track. The reed switch contained in the switching contacts generates and impulse when a train with a switching magnet passes over it. This makes it possible to distinguish among locomotives/cars.



7555 Switching Contact.
Reed contact generator for installation in track. Activated by locomotive/car magnet.

7556 Locomotive Magnet.
6 pieces. 10 x 5 x 1.5 mm (approx. 3/8″ x 3/16″ x 1/16″). For locomotives with little ground clearance.

7557 Locomotive Magnet.
3 pieces. 13 x 7 x 2.5 mm (approx. 1/2″ x 1/4″ x 3/32″). For locomotives with greater ground clearance.

7558 Car Magnet.
2 pieces. 10 x 10 x 3 mm (approx. 3/8″ x 3/8″ x 1/8″). For freight and passenger cars.

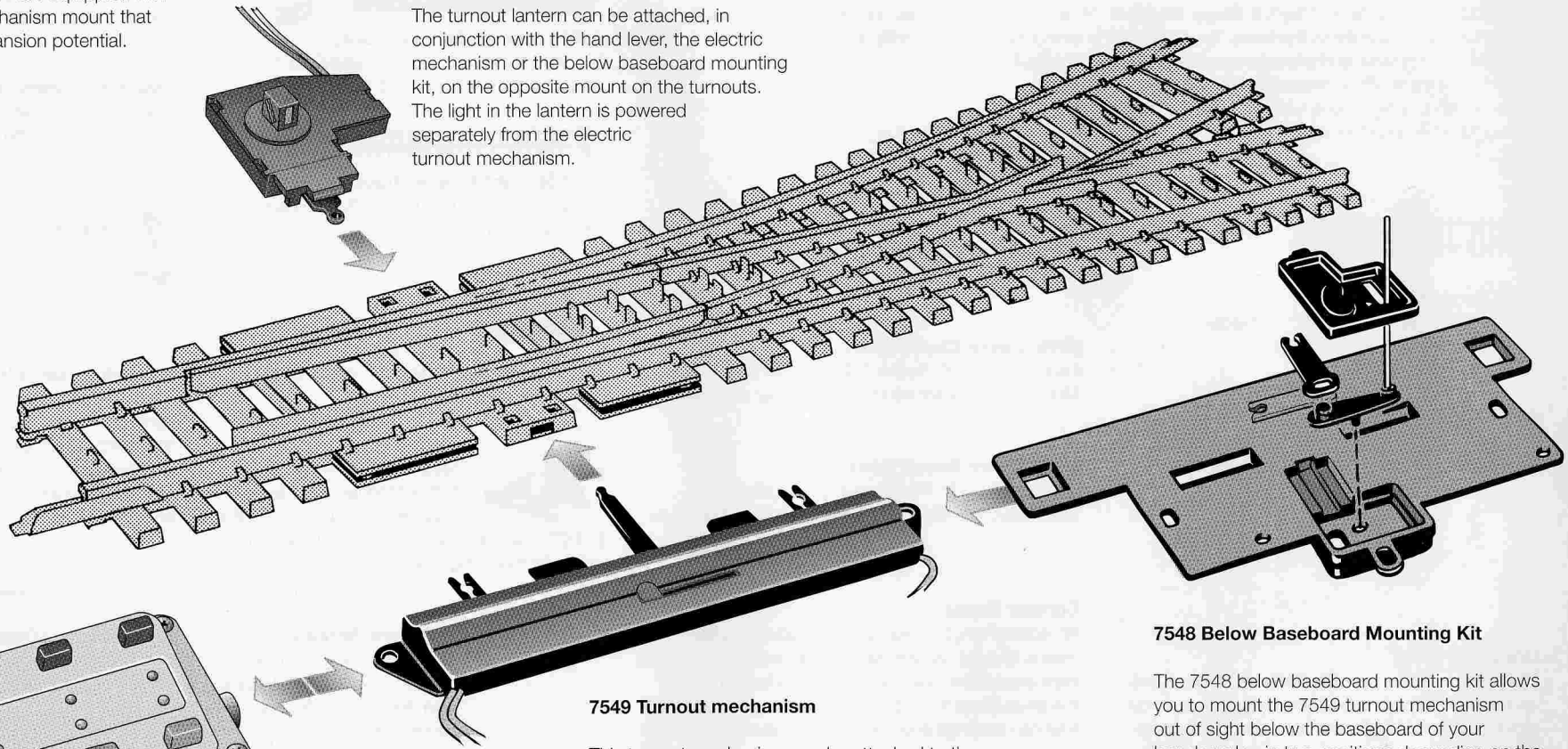
The intelligent concept: turnout control

Turnouts with detachable mechanism

The current K track turnouts – except the 2270 three-way turnout – are equipped with a standard turnout mechanism mount that forms the basis for expansion potential.

7547 Turnout Lantern Kit

The turnout lantern can be attached, in conjunction with the hand lever, the electric mechanism or the below baseboard mounting kit, on the opposite mount on the turnouts. The light in the lantern is powered separately from the electric turnout mechanism.



7548 Below Baseboard Mounting Kit

The 7548 below baseboard mounting kit allows you to mount the 7549 turnout mechanism out of sight below the baseboard of your benchwork – in two positions depending on the available space.

7549 Turnout mechanism

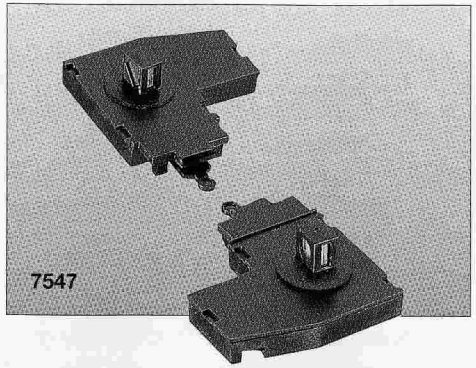
This turnout mechanism can be attached to the linkage on the turnouts on the side of the main track, and on either side of the 2272, 2273, 22715, 22716 turnouts and the 2260 and 2275 double slip switches. The mechanism is the same for left and right turnouts.

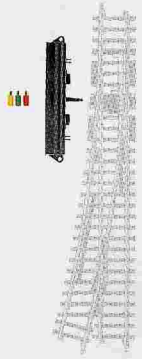
7271 Control Box with Feedback Function

The setting of the 7549 turnout mechanism (with end shutoff contact) is automatically indicated with a red or green LED on the 7271 control box. Additional connections are not required for this.

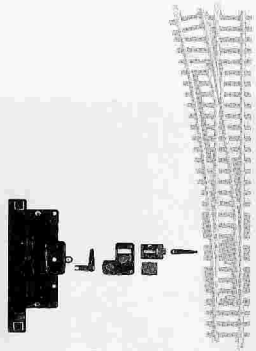


7547 Turnout Lantern Kit.
One each right and left turnout lantern for installation on turnouts with the detachable mechanism. Can be used with hand levers, 7549 turnout mechanism or 7548 below baseboard mounting kit with 7549. Lighting with maintenance-free LEDs.





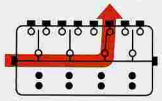
7549 Electric Turnout Mechanism.
For use with 2265 and 2266 turnouts (new version), 2272 and 2273 and the 2275 double slip switch as well as with the KOMBI extension program (see pages 42/43). Automatic end shutoff contact. Automatic feedback signal capability with the 7271 control box. Below baseboard mounting with 7548 kit.



7548 Below Baseboard Mounting Kit.
For mounting two 7549 turnout mechanisms. Can be adjusted for boards from 8 to 25 mm (approx. 5/16″ to 1″). Mounting template included.



7271 Control Box.
With 8 sockets for connecting 4 double solenoid accessories. Automatic feedback of the accessory setting with LEDs when used with 7549 (K) and 74490 (C) turnout mechanisms. Dimensions 80 mm x 40 mm (3-1/8″ x 1-9/16″).



Schematic of 7271
(Button 3 pushed)

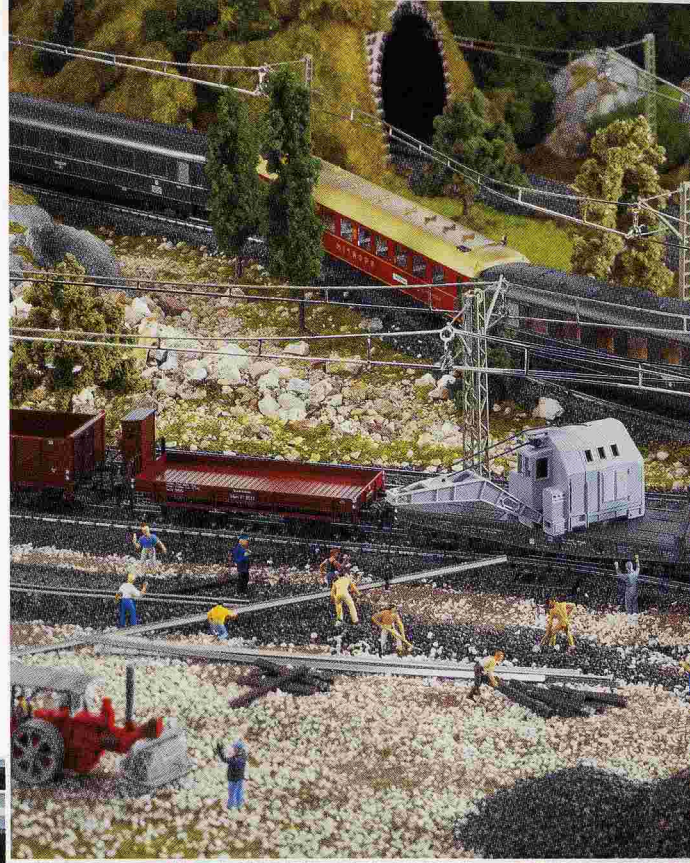
Catenary

The fourth dimension.

Catenary adds another dimension to your layout. Operating with catenary is much more realistic than when a locomotive's pantographs are stretching up into empty space. Electric locomotives "under the wire", the maze of wires in a station area, speeding past catenary masts brings into play more variety and visual reference points.

Märklin's catenary is a proven system – reliable in operation and trouble-free during setup. The masts are simply clipped to the track or screwed down, the wire sections are clipped on, and adjustment sections enable you to install catenary over any track layout. Even complicated track patterns can be "electrified"; you set up the Märklin catenary just as quickly as you did the track. The stability of the system will prove itself during train operations, too, because nothing will become bent or demands constant adjusting. With this sturdy design it makes no difference how often you set it up and take it down.

All Märklin electric locomotives are equipped with pantographs copied from the prototype. They glide with a springy up and down motion under the contact wire and thus reproduce in the model the real life experience.







Installation Tips for Catenary

Materials needed

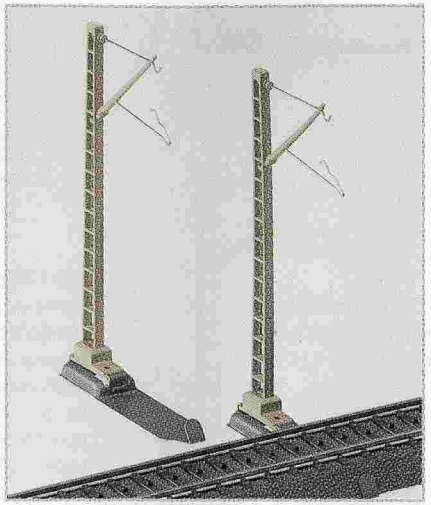
The catenary material needed is best determined by looking at the track plan for the layout. The graphics shown on page 281 give an idea of the required number of masts and wire sections. The 0211 catenary stencil should be used for exact planning.

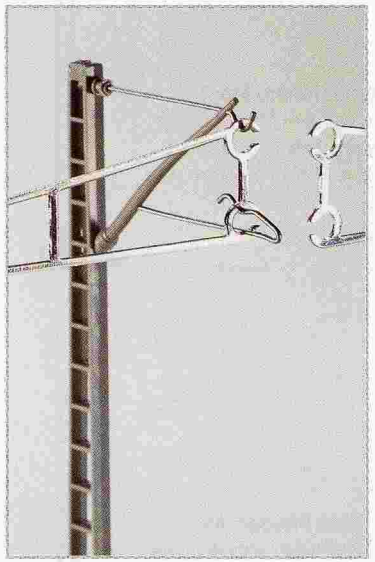
Planning process

The catenary setup is started at turnouts and crossings with the 7013 turnout wire section or the 7277 crossing piece. This will give the position of adjacent masts. Open stretches of track between the crossings or turnouts are hung with standard wire sections. The required wire length between the last mast on the open stretch of track and the next crossing or turnout can be fitted exactly with the telescoping 7014, 7015 and 7023 wire sections.

Setting up masts

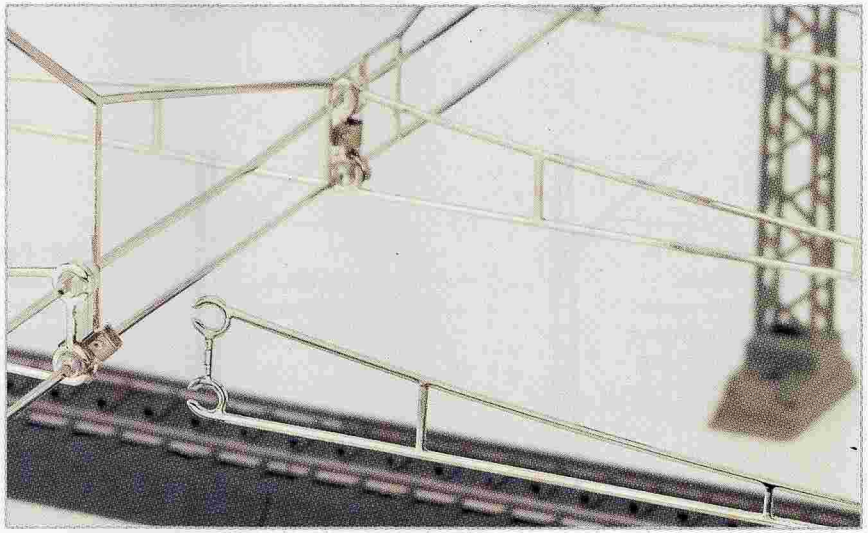
The masts on open stretches of track are simply clipped onto the track bed. They can be adjusted for side play on their base plates to correspond exactly to the position of the catenary wire sections.





Hanging catenary wire

Wire sections for curved track can be bent gently to follow the curve. The wire sections are first slipped over the hooks at the top of the masts and then snapped into place on the lower arm.



Cross spans

Multi-track areas with up to four tracks can be spanned prototypically with the 7021 tower masts and 7017 cross spans. The 7016 cross span can be used for up to six tracks. The 7525 catenary arm can be attached to the tower mast for single tracks outside of the cross span area.

The parallel wire sections are hung on the cross span with the 7006 wire insulator. They are thereby isolated from each other electrically.

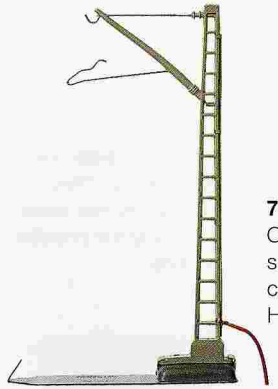
Catenary

Catenary for 24000 Series C Track





74100 Catenary Mast.
Basic element for setting up catenary over 24000 series C Track. Height 100 mm (4″).

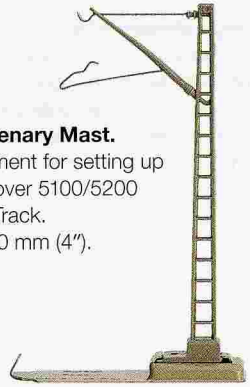


74120 Feeder Mast.
One wire to supply power and for signals. Instructions for setting up catenary.
Height 100 mm (4″).

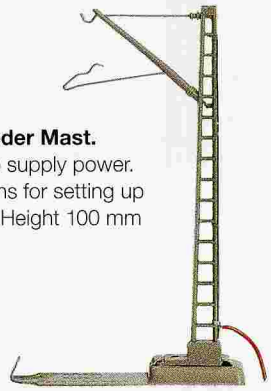
74109 Base for Catenary Masts.
20 pieces. Form and color appropriate for C Track. For replacing bases on M Track or K Track versions of the masts.



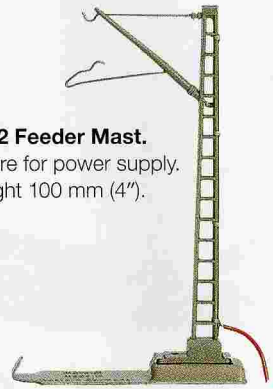
Catenary for 5100/5200 Series M Track



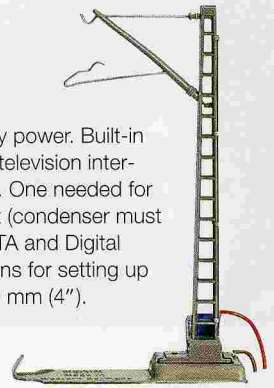
7009 Catenary Mast.
Basic element for setting up catenary over 5100/5200 series M Track.
Height 100 mm (4″).



7010 Feeder Mast.
2 wires to supply power. Instructions for setting up catenary. Height 100 mm (4″).



7012 Feeder Mast.
1 wire for power supply.
Height 100 mm (4″).



7201 Feeder Mast.
Three wires to supply power. Built-in condenser for radio/television interference suppression. One needed for each catenary circuit (condenser must be removed for DELTA and Digital operation). Instructions for setting up catenary. Height 100 mm (4″).

7005 Catenary Set.
For train control with 7000 series signals which are not set up by tower masts. Consists of 2 no. 7012 feeder masts, 2 no. 7022 insulated wire sections and 2 no. 7014 wire sections.

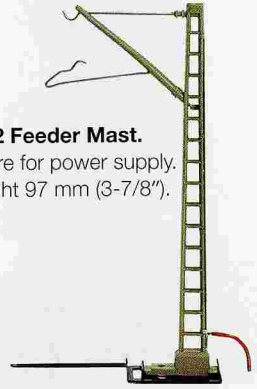
Catenary for 2200 Series K Track



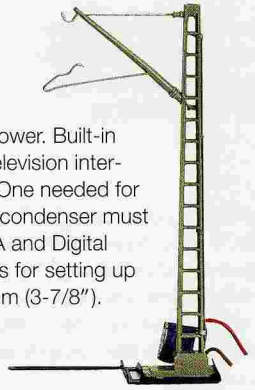
7509 Catenary Mast.
Basic element for setting up catenary over 2200 series K Track. Height 97 mm (3-7/8″).



7510 Feeder Mast.
2 wires to supply power. Instructions for setting up catenary. Height 97 mm (3-7/8″).



7512 Feeder Mast.
1 wire for power supply.
Height 97 mm (3-7/8″).

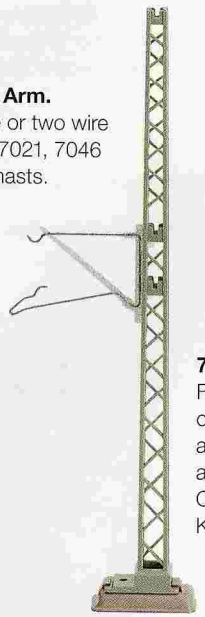


7501 Feeder Mast.
Two wires to supply power. Built-in condenser for radio/television interference suppression. One needed for each catenary circuit (condenser must be removed for DELTA and Digital operation). Instructions for setting up catenary. Height 97 mm (3-7/8″).

7505 Catenary Set.
For train control with 7200 series signals which are not set up by tower masts. Consists of 2 no. 7512 feeder masts, 2 no. 7022 insulated wire sections and 2 no. 7014 wire sections.

Catenary for all Track Systems

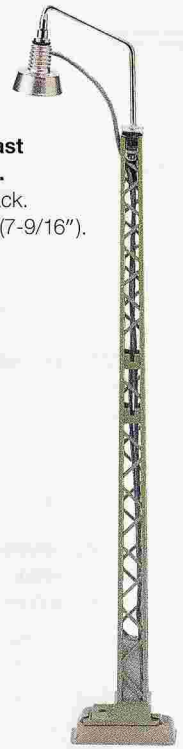
7525 Catenary Arm.
For hanging one or two wire sections on the 7021, 7046 or 7283 tower masts.



7021 Tower Mast.
For setting up 7016 or 7017 cross spans and the 7525 catenary arm. Height with M Track and C Track 157 mm (6-3/16″), with K Track 154 mm (6-1/16″).



7046 Tower Mast with Arc Lamp.
For M and C Track.
Height 192 mm (7-9/16″).



7283 Tower Mast with Lamp.
Height with M Track and C Track 173 mm (6-13/16″), with K Track 170 mm (6-3/4″).

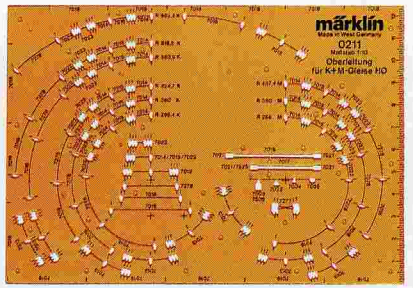






7511 Bridge Mast.
Can be clipped to the side of the plastic bridges and ramps. Height 97 mm (3-7/8″).





0211 Catenary Stencil.
For designing and drawing catenary plans. Can be used for K or M Track. All masts and wire sections on the stencil are in a scale of 1:10 for straight track and all curves. The distribution of wire sections and the position of catenary masts can be plotted on an existing track plan with a sharp pencil. Instructions included.

7003 Catenary Feeder Wire.
For hooking up signals located by tower masts and for supplying power anywhere on a layout. Length 600 mm (23-5/8″).



7004 Fastening Kit.
Consists of 5 bolts, 5 nuts and 5 washers. They are used in special situations where the normal push-in connection cannot provide a secure connection for the wires.



7006 Wire Insulator.
For insulation wire sections from cross spans. One required for each wire and cross span connection. 15 x 6 mm (approx. 19/32″x 15/64″).



Catenary

Catenary for all Track Systems



7019 Wire Section.
For straight track only.
Length 360 mm (14-3/16″).



7018 Wire Section.
For straight and curved track.
Length 270 mm (10-5/8″).



7278 Wire Section.
For straight and curved track.
Length 230 mm (9-1/16″).



7013 Wire Section.
For push-in connection,
expecially for turnouts.
Length 240 mm (9-1/2″).



7014 Wire Section.
Hollow section (for push-in connection). Length 115 mm (4-1/2″).



7015 Wire Section.
Solid section (for push-in connection). Length 115 mm (4-1/2″).



7023 Adjustment Section.
For push-in connection.
Length 100 mm (4″).

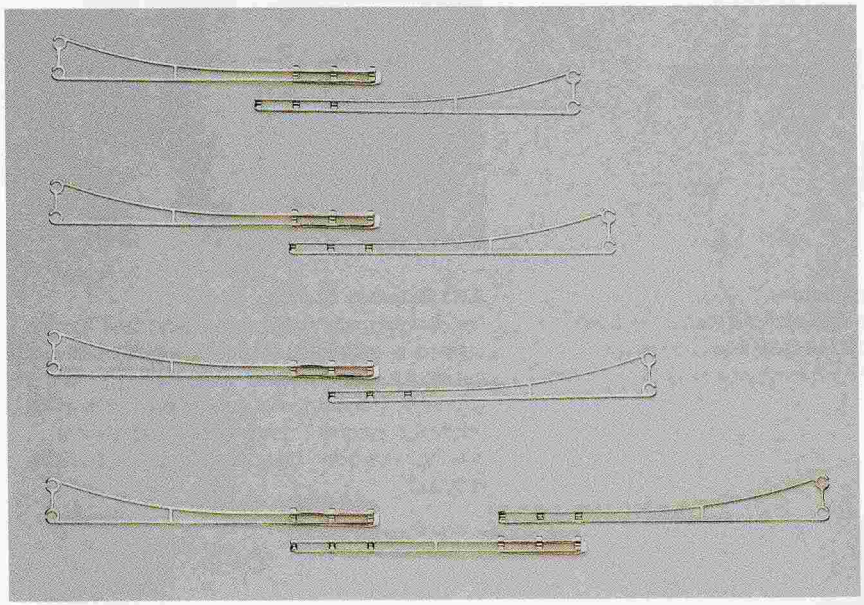


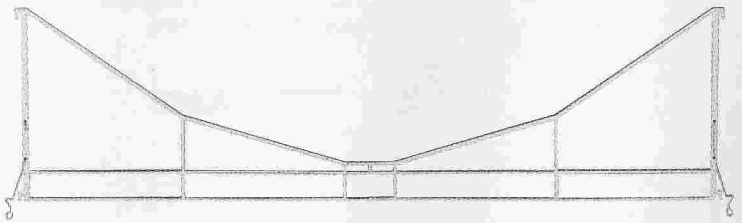
7022 Insulated Section.
Solid section for interrupting current flow (push-in connection). Length 115 mm (4-1/2″).

All wire sections are nickel plated



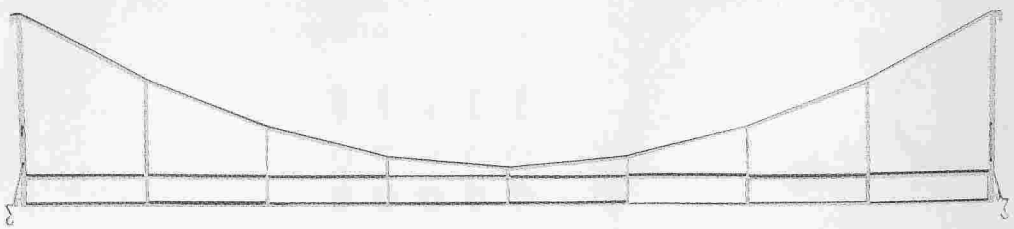
7277 Crossing Section.
For all crossings and double slip switches (except 2257 and 2275).





7017 Cross Span.
Connects to tower masts. Spans up to 4 tracks depending on track spacing.
Span width 280 mm (11″).

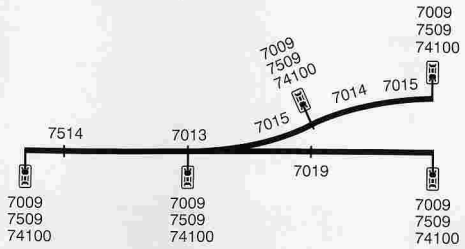
7016 Cross Span.
Connects to tower masts. Spans up to 6 tracks depending on track spacing.
Span width 390 mm (15-1/4″).



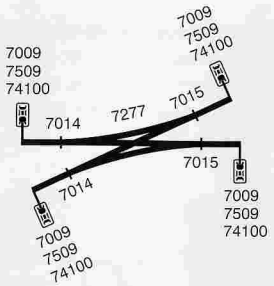
Catenary Geometry

märklin HO

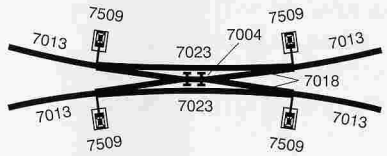
Turnouts
2262, 2263, 2265, 2266, 2272,
2273, 22715, 22716, 5137, 5140,
5202, 5221, 24611, 24612



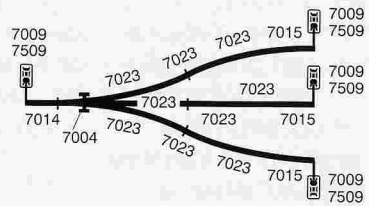
Crossings
2258, 2259, 2260
5114, 5128, 5207, 5211, 5215
24620, 24640



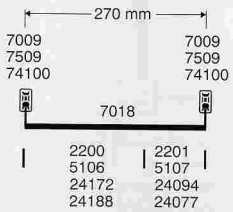
Crossings
2257, 2275

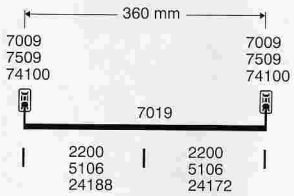


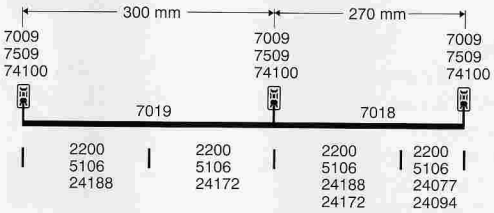
Three-Way Turnouts
2270
5214
24630



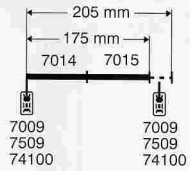
Straight Sections

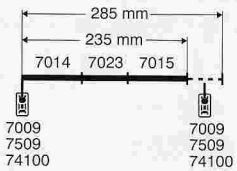




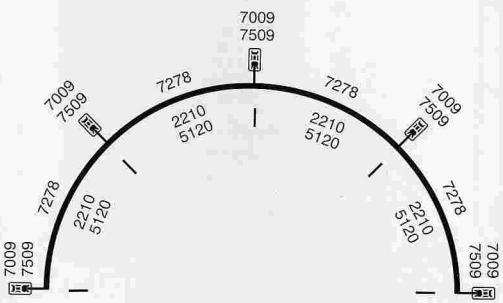


Intermediate Lengths

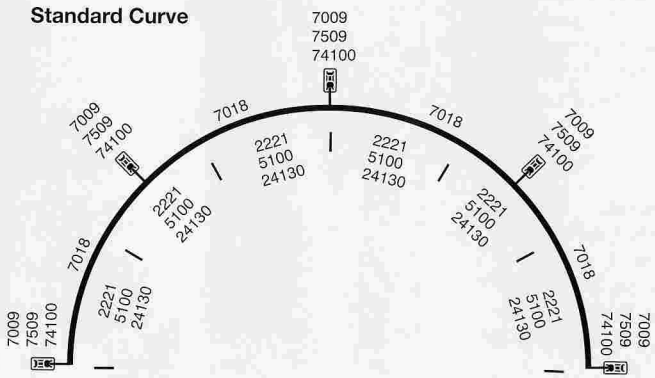




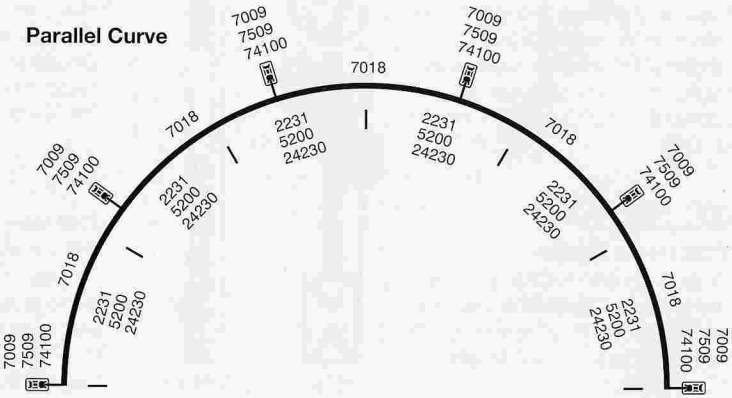
Industrial Curve



Standard Curve



Parallel Curve



Signals for M Track

Stop and Go on the rails

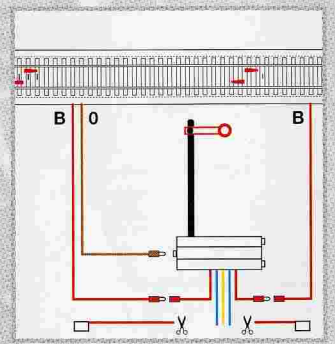
Model signals fulfill important control and safety functions just like those of the prototype. Märklin signals control traffic, because they not only show prototypical signal indications, they also directly influence the movement of trains. When set for "stop" they turn off current in their area to the center rail and to the catenary – the train remains stopped. When set for "slow" or "full speed" they turn the current on – the train travels through the area or starts up again. Anyone wanting to be even more realistic can set up distant signals at the proper intervals; these are coupled with their home signals and show the same signal settings.

Color light and semaphore/target signals are controlled with the 7271 control box and in the Digital system with the accessory decoders. In conjunction with circuit tracks or switching contacts, signals can also be controlled by trains in operation, thereby automating many operating procedures.

Tip: semaphore/target signals for K Track
The semaphore/target signals were originally designed for M Track, but can also be installed easily on layouts with K Track with just a few additional parts.

The following are required for connecting a home signal to such a layout:
2 x 7522 center rail insulators
2 x 7504 center rail terminal clip
1 x 7500 ground terminal clip

Tip: Semaphore/target signals for C Track
The semaphore/target signals were originally designed for M Track, but can also be installed easily on layouts with C Track with the 74043 hookup kit.

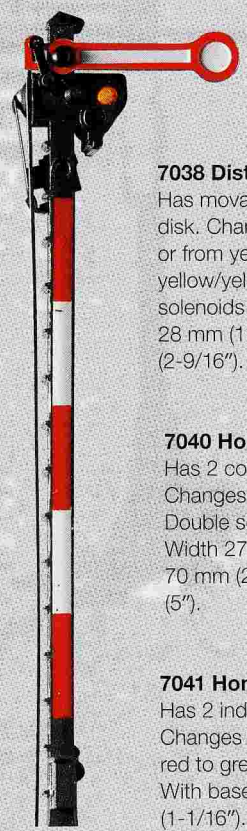


7036 Distant Signal.
Has movable disk. Changes from yellow/yellow to green/green. Double solenoid. With base plate. Width 28 mm (1-1/8″). Length 65 mm (2-9/16″). Height 73 mm (2-7/8″).


7036

HOBBY

7039 Home Signal.
Single semaphore. Changes from red to green. Double solenoid. With base plate. Width 27 mm (1-1/16″). Length 70 mm (2-3/4″). Height 125 mm (5″).


7039

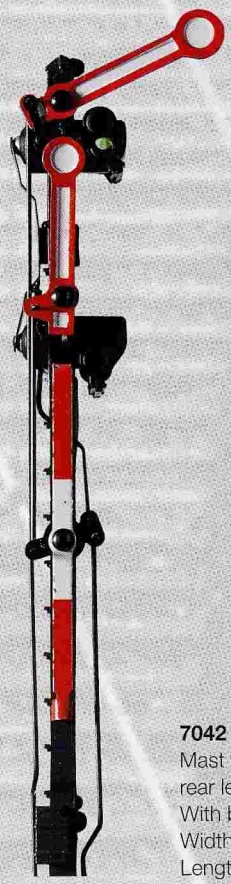
7038 Distant Signal.
Has movable arm and movable disk. Changes either as the 7036 or from yellow/yellow to yellow/yellow/green. 2 double solenoids. With base plate. Width 28 mm (1-1/8″). Length 65 mm (2-9/16″). Height 73 mm (2-7/8″).

7040 Home Signal.
Has 2 coupled semaphores. Changes from red to green/yellow. Double solenoid. With base plate. Width 27 mm (1-1/16″). Length 70 mm (2-3/4″). Height 125 mm (5″).

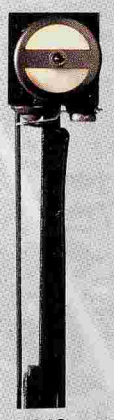
7041 Home Signal.
Has 2 independent semaphores. Changes from red to green or red to green/yellow. 3 solenoids. With base plate. Width 27 mm (1-1/16″). Length 97 mm (2-9/16″). Height 125 mm (5″)


7038


7040


7041

7042 Yard Signal.
Mast with movable front and rear lens. Double solenoid. With base plate.
Width 28 mm (1-1/8″).
Length 70 mm (2-3/4″).
Height 70 mm (2-3/4″).


7042

Explanation of signal aspects

Usually on main lines or at stations with no turnouts/crossings.



7036
Prepare to stop
Vr0



7039
Stop
Hp0



7036
Prepare to proceed
Vr 1



7039
Proceed
Hp1

Usually at or near stations with turnouts/crossings.



7038
Prepare to stop
Vr0



7040
Stop
Hp0



7038
Prepare to proceed slowly
Vr2



7040
Proceed slowly
Hp2



74043 Signal Hookup Kit for C Track.
Suitable for color light and semaphore/target signals. Contains insulators, wire and connectors for a signal block.

At or near stations with turnouts/crossings or straight through operation.



7038
Prepare to stop
Vr0



7041
Stop
Hp0



7038
Prepare to proceed slowly
Vr2



7041
Proceed slowly
Hp2



7038
Prepare to proceed
Vr1



7041
Proceed
Hp1

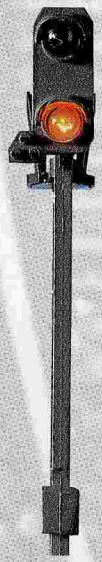
Controls switching movements in a station/yard.



7042
Stop!
Sh0



7042
Proceed
Sh1



7188

HOBBY

7188 Color Light Home Signal.
Changes from red to green. Double solenoid. Additional hand lever. With base plate.
Width 28 mm (1-1/8″).
Length 70 mm (2-3/4″).
Height 90 mm (3-9/16″).



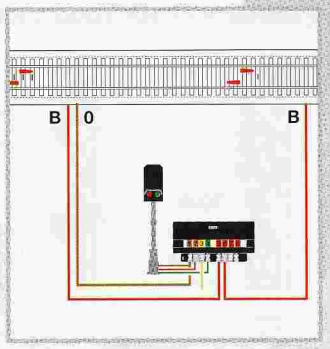
0343 Märklin Signal Book for 7000 and 7100 Signals.
Extensive explanations with multi-color illustrations of how the 7000 and 7100 signals as well as the universal relay are used and installed on C and M Track. Contents 28 pages.
Format 18 x 25 cm (7-1/8″ x 9-1/8″).

Signals for K and M Track

Light signals

Märklin color light signals reproduce all of the important signal settings for modern railroading: home and distant signals for main lines, for junctions, stations and yard tracks. In conjunction with the signal settings, the Märklin signals also switch the current to the locomotives, for both the center rail and the catenary. The necessary hardware and installation instructions are included with each signal.

The signals are controlled with the 7272 control box and in the Digital system with the accessory decoders. In conjunction with circuit tracks or switching contacts, signals can also be controlled by trains in operation. This makes it possible for you to have rich and varied operations with many trains, because Märklin signals control the movement of trains and safeguard particular parts of a route.



72441 Signal Module.
Signal mechanism with integrated circuit for controlled stops of digital locomotives with high-efficiency propulsion. Connections for a 2 position color light signal, for the 3 track blocks required for safe braking of the locomotive. This signal module can be controlled with either a k 83 decoder or a conventional 7272 control box. Dimensions 100 x 54 x 22 mm (3-15/16″ x 2-1/8″' x 7/8″).

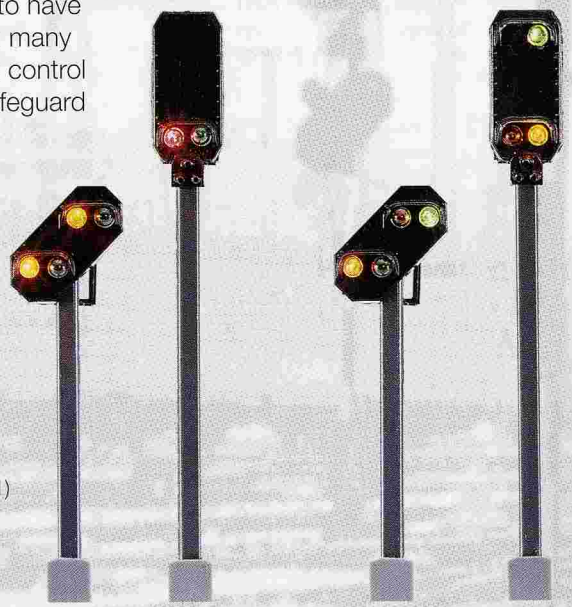
The signal module requires 3 isolated track blocks in the area of the signal. This first block is a transition area and should be as long as a pickup shoe (approx. 70 – 90 mm / 3″ - 4″). The second block is the actual braking area in which the locomotive will be brought to a controlled stop. The length of the braking block is determined by the setting for the braking delay on the locomotive's decoder. This second block should be at least 40 to 50 cm / 16″ to 20″ long. The third block is a safety block in which the track voltage is turned off as is done in simple signal blocks. This keeps the locomotive from accidentally overshooting the signal. The signal module is suitable for use with color light and semaphore signals.

Locomotives with built-in, Digital or DELTA electronic circuits without a control feature (i.e. acceleration / braking delay) come to a stop partially in the braking area or not until the safety area is reached. A simple solution to this situation is not possible. For that reason we do not absolutely recommend using the 72441 signal module together with propulsion systems without a control feature.

Tip: Color light signals for C Track
The color light signals were originally designed for K Track, but can also be installed easily on layouts with C Track with the 74043 hookup kit.

7236 Color Light Distant Signal.
Changes from yellow/yellow (Vr0) to green/green (Vr1). With 7230 mounting bracket and base plate. Width 16 mm (5/8″). Length 28 mm (1-1/8″). Height 67 mm (2-5/8″).

7239 Color Light Home Signal.
Changes from red (Hp0) to green (Hp1) and controls track power with double solenoid mechanism. Additional hand lever. With base plate. Width 30 mm (1-3/16″). Length 70 mm (2-3/4″). Height 90 mm (3-9/16″).



7237 Color Light Distant Signal.
Changes from yellow/yellow (Vr0) to yellow/green (Vr2). With 7230 mounting bracket and base plate. Width 16 mm (5/8″). Length 28 mm (1-1/8″). Height 67 mm (2-5/8″).

7240 Color Light Home Signal.
Changes from red (Hp0) to green/yellow (Hp2) and controls track power with double solenoid mechanism. Additional hand lever. With base plate. Width 30 mm (1-3/16″). Length 70 mm (2-3/4″). Height 90 mm (3-9/16″).

7238 Color Light Distant Signal.
Changes from yellow/yellow (Vr0) to green/green (Vr1) or yellow/green (Vr2). Double solenoid mechanism for the yellow/green aspect. With base plate. Width 30 mm (1-3/16″). Length 70 mm (2-3/4″). Height 67 mm (2-5/8″).

7241 Color Light Home Signal.
Changes from red (Hp0) to green (Hp1) or green/yellow (Hp2) and controls track power with double solenoid mechanism with additional third solenoid for the green/yellow aspect. 2 additional hand levers. With base plate. Width 30 mm (1-3/16″). Length 95 mm (3-3/4″). Height 90 mm (3-9/16″).



Explanation of signal aspects

Usually on main lines or at stations with no turnouts/crossings.



7236 Prepare to stop Vr0



7239 Stop Hp0



7236 Prepare to proceed Vr 1



7239 Proceed Hp1

Usually at or near stations with turnouts/crossings.



7237 Prepare to stop Vr0



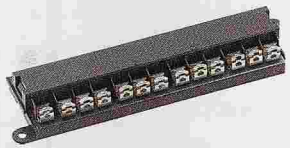
7240 Stop Hp0



7237 Prepare to proceed slowly Vr2



7240 Proceed slowly Hp2



7244 Universal Relay.
With 4 single pole switches. Contacts have 2 amp capacity. Can be activated by control box, circuit track, contact track, reed switch or digital decoder.

74043 Signal Hookup Kit for C Track.
Suitable for color light and semaphore/target signals. Contains insulators, wire and onnectors for a signal block.

At or near stations with turnouts/crossings or straight through operation.



7238 Prepare to stop Vr0



7241 Stop Hp0



7238 Prepare to proceed slowly Vr2



7241 Proceed slowly Hp2



7242 Yard Signal.
Changes from red/red (Sh0) white/white (Sh1) and controls track power with double solenoid mechanism. Additional hand lever. Width 30 mm (1-3/16″). Length 70 mm (2-3/4″). Height 18 mm (11/16″).



7245 Universal Relay.
With two single-pole switches and one double-throw switch for various circuits. Unit can operate up to 3 functions simultaneously. Applications described in the 0368 signal manual. Double solenoid mechanism. Can be activated with circuit tracks, reed contacts, control boxes or with the hand lever on the unit. Width 30 mm (1-3/16″). Length 70 mm (2-3/4″). Height 8 mm (5/16″).



7238 Vorsignal: Fahrt erwarten Vr1



7241 Proceed Hp1

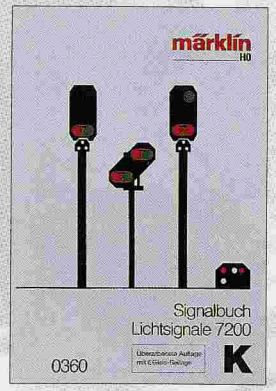
Controlling switching movements in a station/yard.



7242 Stop! Sh0



7242 Proceed Sh1



0368 Märklin Signal Manual for 7200 Signals.
Extensive explanations with six-color illustrations of how the 7200 signals and universal relay are installed with K track and how they are used. Contents 48 pages. Format 18 x 25 cm (7-1/8″ x 9-1/8″).

7230 Mounting Bracket.
Required if the masts for the 7238, 7239, 7240 7241 and if the 7242 yard signal are to be mounted separately from their mechanism. This allows installation of the mechanism below the baseboard level.

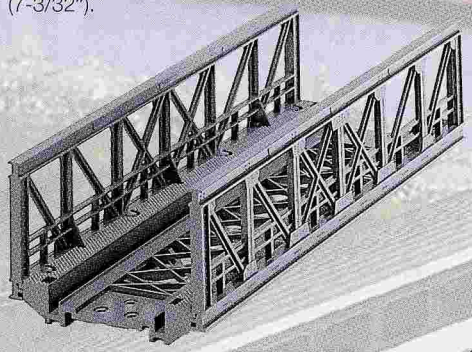
Bridges

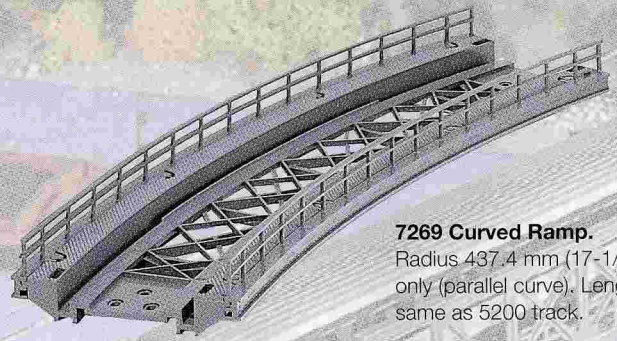
Bridges and approach ramps bring the third dimension to a model railroad layout: from flatness to a sense of height.
From the simple bridging of a road or river, to crossing several tracks, to realistically linking different levels on the layout – the Märklin accessory program offers the right solution for each task.

7267 Curved Ramp.
Radius 360 mm (14-3/16″). For K or M Track. 3 clips for mounting K Track. Length and radius same as 2221 and 5100 track.

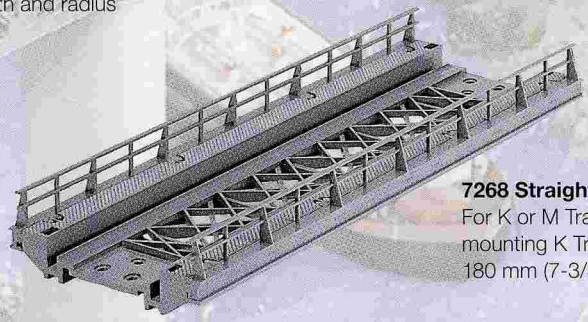


7262 Truss Bridge.
Can be used alone or with 7263 arched bridge. For K or M Track. 3 clips for mounting K Track and instructions for setting up bridges.
Height 45 mm (1-3/4″). Length 180 mm (7-3/32″).

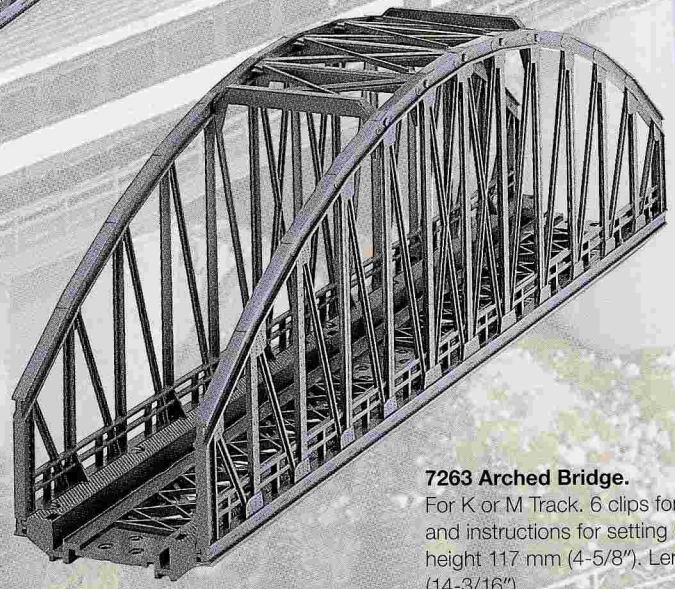




7269 Curved Ramp.
Radius 437.4 mm (17-1/4″). For M Track only (parallel curve). Length and radius same as 5200 track.



7268 Straight Ramp.
For K or M Track. 3 clips for mounting K Track. Length 180 mm (7-3/32″).



7263 Arched Bridge.
For K or M Track. 6 clips for mounting K Track and instructions for setting up bridges. Arch height 117 mm (4-5/8″). Length 360 mm (14-3/16″).

7569 Curved Ramp.
Radius 424.6 mm (16-3/4″). For K Track only (standard curve II). 3 clips for mounting track. Length and radius same as 2231 track.



High Up …

märklin HO

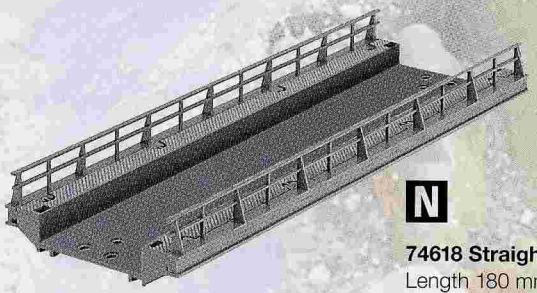
… The C Track Bridges.
The bridge program with the look of steel girders takes C Track into the third dimension. Ramps, approaches and overpasses can be built systematically with the sturdy superstructures and 7250 to 7253 pillars. The C Track lies in the bridge and can be slid back and forth, thus enabling you to have a custom installation of the bridges on a layout. The width of the bridges takes into account parallel approaches even in the track spacing used by the wide radius turnout geometry of 64.3 mm (2-9/16″).

Suitable bases are available for catenary masts and color lights In the bridge area.



N

74636 Arched Bridge.
Length 360 mm (14-3/16″). 64 mm wide (1-5/16″). Height 117 mm (4-5/8″). For straight sections of C track. One arched bridge is the same length as the 24188 + 24172. The 74620 is suitable as an approach bridge.

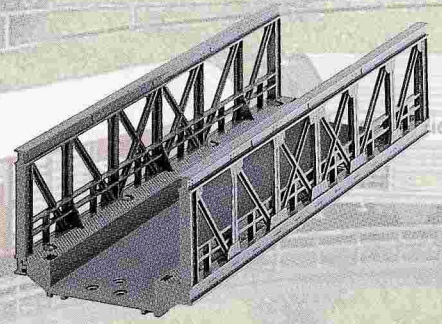


N

74618 Straight Ramp.
Length 180 mm (7-3/32″). 64 mm wide (1-5/16″). For straight sections of C track. Two ramp sections are the same length as the 24188 + 24172.

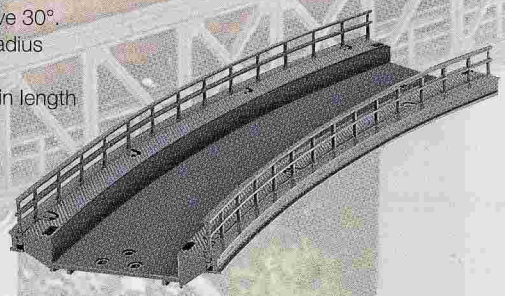
N

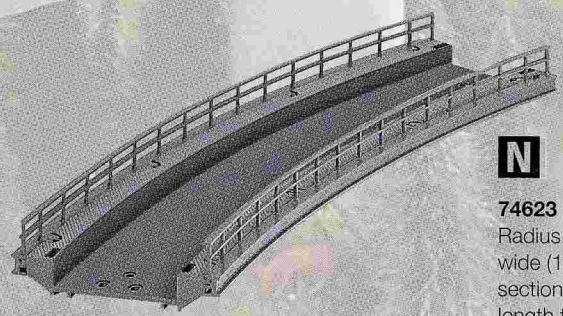
74620 Truss Bridge.
Length 180 mm (7-3/32″). 64 mm wide (1-5/16″). For straight sections of C track. Two truss bridges are the same length as the 24188 + 24172. Can also be used as an approach bridge to the 74636.



N

74613 Curved Ramp.
Radius 360 mm (14-3/16″). Curve 30°. 64 mm wide (1-5/16″). For R1 radius C track curved sections.
One ramp section corresponds in length to the 24130 track section.





N

74623 Curved Ramp.
Radius 437.5 mm (17-1/4″). Curve 30°. 64 mm wide (1-5/16″). For R2 radius C track curved sections. One ramp section corresponds in length to the 24230 track section.

Bridge Approaches

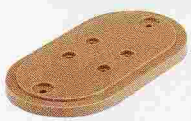
These drawings show how many track sections and pillars are required for approach ramps to achieve necessary minimum height clearance. This allows you to determine how a line of track should be built on a layout. The grade is 5% and is decreased at the start and end of the approach ramp.

Bridges and approach ramps can be built in any desired combination and length. The 7252 and 7253 pillar sections go together like building blocks and allow you to construct pillars in 6 mm (approx. 1/4″) increments, 3 mm (approx. 1/8″) increments are possible by combining the 7251 base plates with the 7250 base plate. The 7599 wood screws can be used to fasten the pillar sections to the base board and to each other.

7250 Base Plate.
2.5 mm (3/32″) high.
Used as pillar foundation.



7251 Base plate.
3 mm (1/8″) high. Can be used only in conjunction with 7250.



7252 Pillar.
6 mm high (1/4″). For building ramps in 6 mm (1/4″) increments.



7253 Pillar.
30 mm (1-3/16 ″) high.



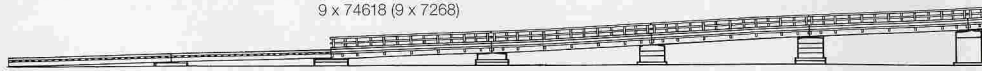
7234 Base Plate.
For mounting masts of 7200 signals on bridges.



Ascending and descending grades with C Track for steam and diesel locomotives (M Track in parentheses)

6 x 360 mm / 14-3/16″
(12 x 180 mm / 7-3/32″)

9 x 74618 (9 x 7268)

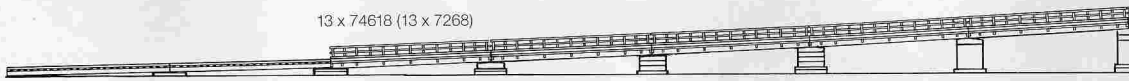


Pillar Height	1	2	3	4	5	6
	2.5 mm 1 x 7250	5.5 mm 1 x 7250 1 x 7251	11.5 mm 1 x 7250 1 x 7251 1 x 7252	20.5 mm 1 x 7250 3 x 7252	29.5 mm 1 x 7250 1 x 7251 4 x 7252	38.5 mm 1 x 7250 1 x 7252 1 x 7253

Ascending and descending grades with C Track for electric locomotives with catenary (M Track in parentheses)

8 x 360 mm / 14-3/16″
(16 x 180 mm / 7-3/32″)

13 x 74618 (13 x 7268)

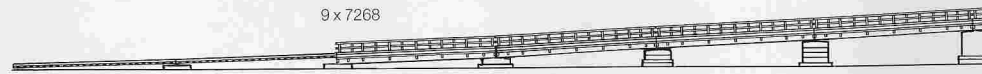


Pillar Height	1	2	3	4	5	6	7
	2.5 mm 1 x 7250	5.5 mm 1 x 7250 1 x 7251	11.5 mm 1 x 7250 1 x 7251 1 x 7252	20.5 mm 1 x 7250 3 x 7252	29.5 mm 1 x 7250 1 x 7251 4 x 7252	38.5 mm 1 x 7250 1 x 7252 1 x 7253	47.5 mm 1 x 7250 1 x 7251 2 x 7252 1 x 7253

A Grade with K Track for Steam and Diesel Locomotives

12 x 180 mm /
7-3/32″

9 x 7268

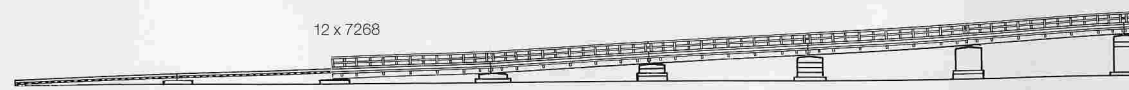


Pillar Height	1	2	3	4	5	6
	2.5 mm 1 x 7250	2.5 mm 1 x 7250	8.5 mm 1 x 7250 1 x 7252	17.5 mm 1 x 7250 1 x 7251 2 x 7252	26.5 mm 1 x 7250 4 x 7252	35.5 mm 1 x 7250 1 x 7251 1 x 7253

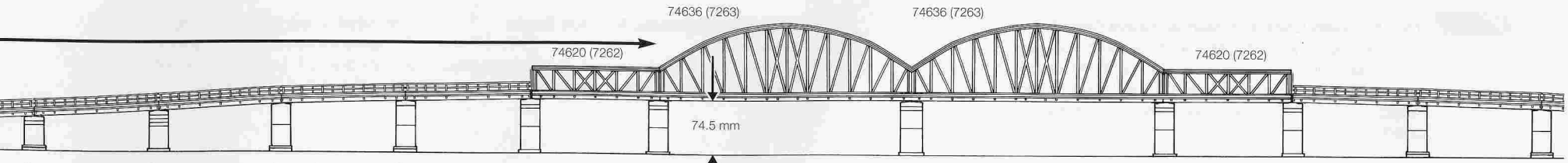
A Grade with K Track for Electric Locomotives with Catenary

15 x 180 mm /
7-3/32″

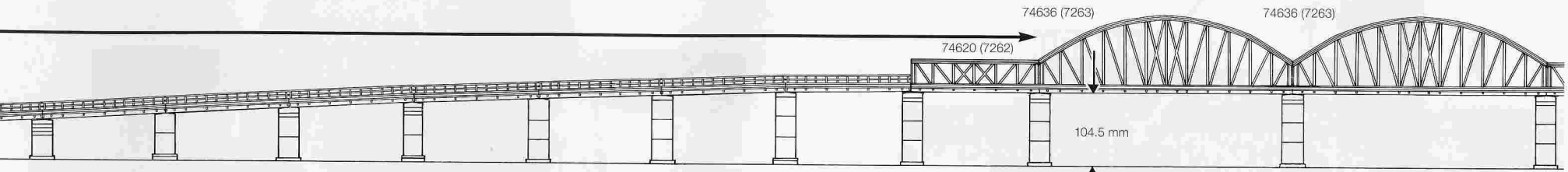
12 x 7268



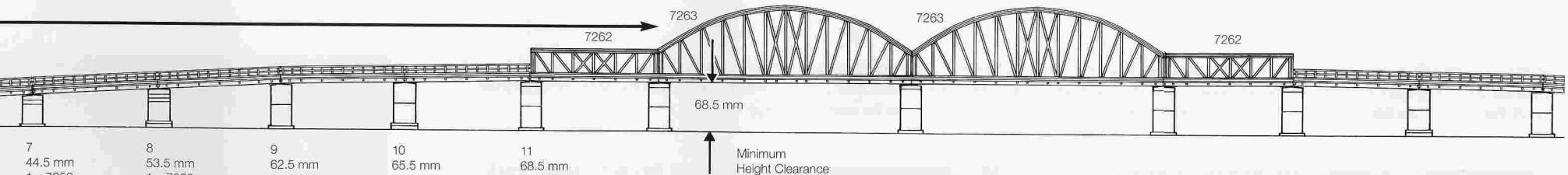
Pillar Height	1	2	3	4	5	6	7
	2.5 mm 1 x 7250	2.5 mm 1 x 7250	8.5 mm 1 x 7250 1 x 7252	17.5 mm 1 x 7250 1 x 7251 2 x 7252	26.5 mm 1 x 7250 4 x 7252	35.5 mm 1 x 7250 1 x 7251 1 x 7253	44.5 mm 1 x 7250 2 x 7252 1 x 7253



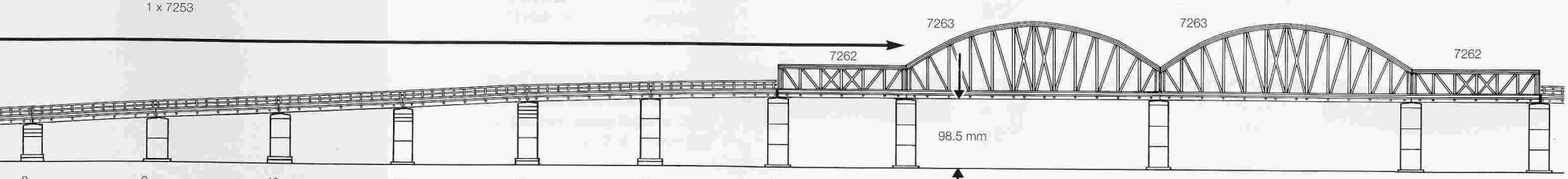
7	8	9	10	11
47.5 mm	56.5 mm	65.5 mm	71.5 mm	74.5 mm
1 x 7250	1 x 7250	1 x 7250	1 x 7250	1 x 7250
1 x 7251	4 x 7252	1 x 7251	1 x 7251	2 x 7252
2 x 7252	1 x 7253	2 x 7253	1 x 7252	2 x 7253
1 x 7253			2 x 7253	



8	9	10	11	12	13	14	15
56.5 mm	65.5 mm	74.5 mm	83.5 mm	92.5 mm	98.5 mm	101.5 mm	104.5 mm
1 x 7250	1 x 7250	1 x 7250	1 x 7250	1 x 7250	1 x 7250	1 x 7250	1 x 7250
4 x 7252	1 x 7251	2 x 7252	1 x 7251	3 x 7253	1 x 7252	1 x 7251	2 x 7252
1 x 7253	2 x 7253	2 x 7253	3 x 7252		3 x 7253	1 x 7252	3 x 7253
			2 x 7253			3 x 7253	



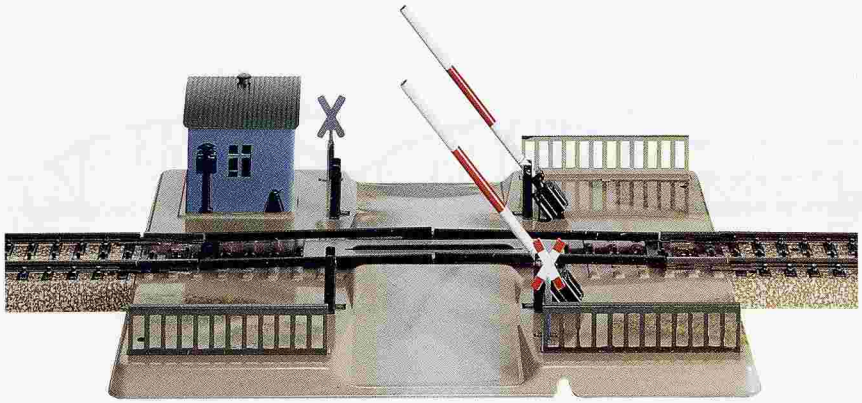
7	8	9	10	11
44.5 mm	53.5 mm	62.5 mm	65.5 mm	68.5 mm
1 x 7250	1 x 7250	1 x 7250	1 x 7250	1 x 7250
2 x 7252	1 x 7251	2 x 7253	1 x 7251	1 x 7252
1 x 7253	3 x 7252		2 x 7253	2 x 7253
	1 x 7253			



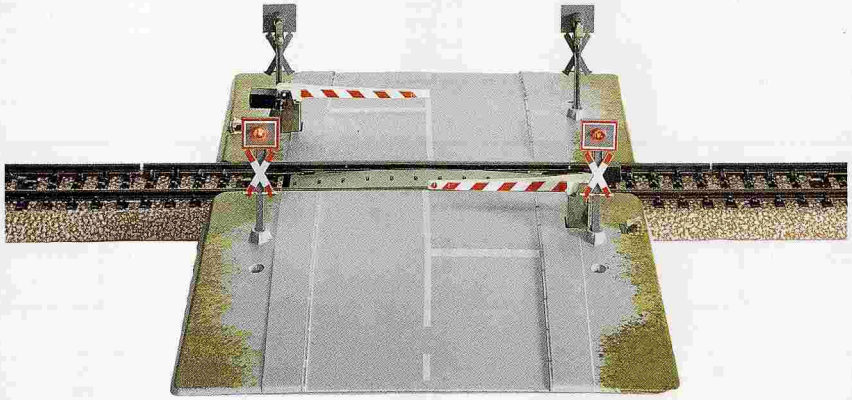
8	9	10	11	12	13	14
53.5 mm	62.5 mm	71.5 mm	80.5 mm	89.5 mm	95.5 mm	98.5 mm
1 x 7250	1 x 7250	1 x 7250	1 x 7250	1 x 7250	1 x 7250	1 x 7250
1 x 7251	2 x 7253	1 x 7251	3 x 7252	1 x 7251	1 x 7251	1 x 7252
3 x 7252		1 x 7252	2 x 7253	4 x 7252	3 x 7253	3 x 7253
1 x 7253		2 x 7253		2 x 7253		

Railroad Grade Crossings

HOBBY **7390 Manually Operated Railroad Grade Crossing.**
With full gates. With built-in M Track for single track route. Rocker-type rails are pressed down by passing locomotive/car and the gates go down. Gateman's hut and warning sign. Track length same as 5106. Base dimensions 135 x 180 mm (5-3/8" x 7-3/32").



7292 Fully Automatic Railroad Grade Crossings.
With half gates. For M Track. 2 solenoid activated gates with 2 warning signs and 2 red warning lights which come on when the gates to down. Contact track set: 3 straight tracks each 90 mm (3-9/16"). Dimensions for each base half 137 x 95 mm (5-3/8 x 3-3/4").



The gates for the fully automatic railroad crossing gates descend the minute an oncoming train reaches the contact area, and do not go back up until the last car has left the contact area. The contact area can be extended to any length desired. Standard straight and curved track sections can be used with K Track and C Track; with M Track only the 5115, 5116 or 5145 contact tracks can be used (see page 253).



5115 Straight Contact Track.
Length 180 mm (7-3/32").
Same as 5160.

5116 Curved Contact Track.
Radius 360 mm (14-3/16").
30°. Same as 5100.



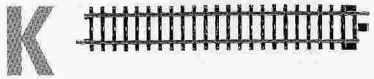
5145 Straight Contact Track set.
2 tracks. Length of each 90 mm (3-9/16"). Same as 5107.



24951 Straight Adapter Track.
Allows C Track to be connected to the 7292 and 7390 railroad grade crossings. Length 180 mm (7-3/32").



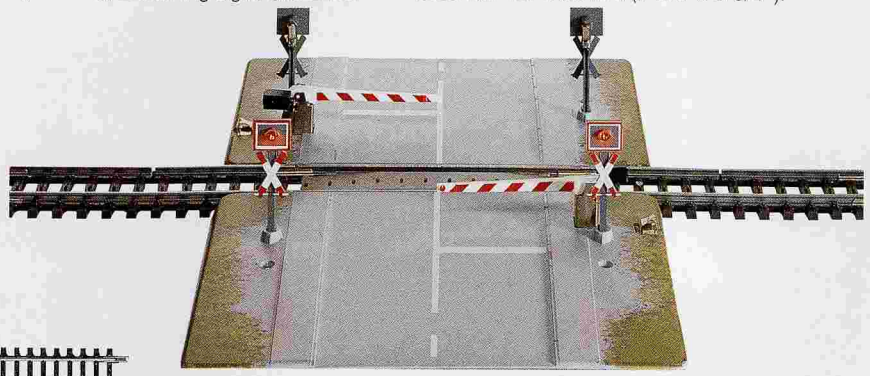
24922 Straight Adapter Track.
Allows C Track to be connected to the 7592 railroad grade crossing. Length 180 mm (7-3/32").

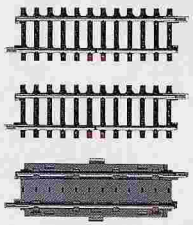


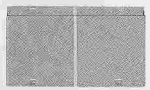
2291 Straight Adapter Track.
Allows K Track to be connected to the 7292 and 7390 railroad grade crossings. Length 180 mm (7-3/32").



7592 Fully Automatic Railroad Grade Crossings.
With half gates. For K Track. 2 solenoid activated gates with 2 warning signs and 2 red warning lights which come on when the gates go down. Contact track set: 3 straight tracks each 90 mm (3-9/16″). Dimensions for each base half 137 x 95 mm (5-3/8″x 3-3/4″).

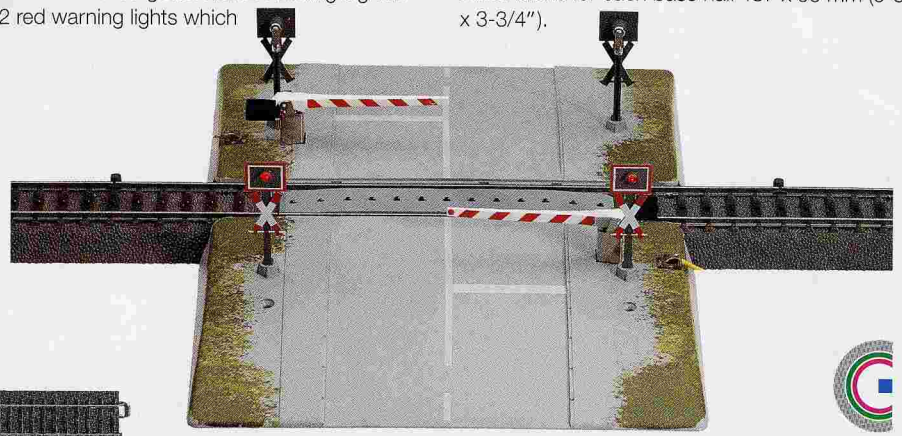


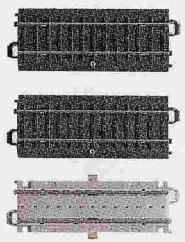


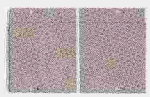


7593 Add-On Set.
For 7592 railroad grade crossing. For K Track. Required for each additional parallel track. Contact track set: 3 straight tracks each 90 mm (3-9/16″). Road section can be adjusted for spacing of 33 to 68 mm (1-5/16″ to 2-11/16″) (track spacing of 64 to 99 mm/2-1/2″ to 3-7/8″).

74920 Fully Automatic Railroad Grade Crossing.
With half gates. For direct connection to C Track. 2 solenoid activated gates with 2 warning signals and 2 red warning lights which come on when the gates come down. Ready to be connected to the layout, simple installation. Contact track set: 3 straight tracks each 94.2 mm (3-3/4″). Dimensions for each base half 137 x 95 mm (5-3/8″ x 3-3/4″).





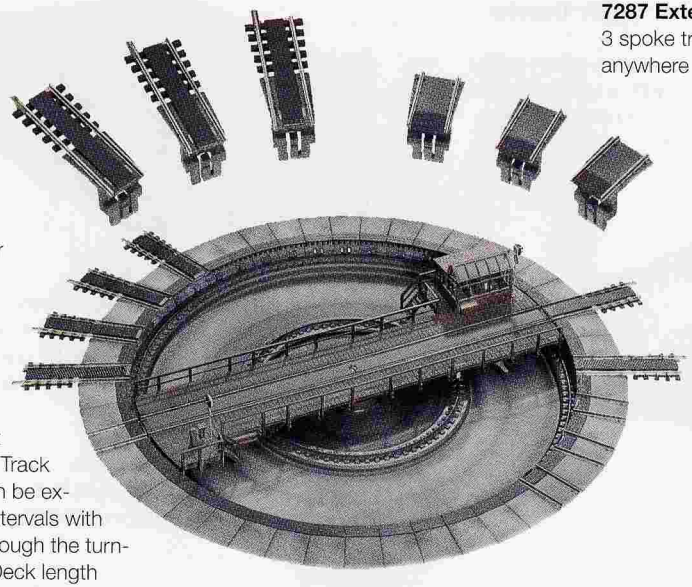


74930 Add-On Set.
For 74920 railroad grade crossing for C Track. Required for each additional parallel track. Contact track set: 3 straight tracks each 94.2 mm (3-3/4″). No other connections required. Road section can be adjusted for a spacing of 26 to 61 mm (1″ to 2-3/8″) (track spacing of 64 to 99 mm / 2-5/8″ to 4″).





Turntable

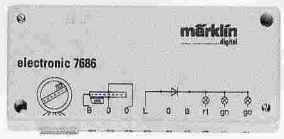


7286 Remote Control Turntable.
Standard DB design 27 meters (88' 6"). Suitable for conventional and digital train operation. Remote controlled deck with built-in motor. Conventional controller included. Function: turns to the right/left in single steps and continuously to a stop. Can be retrofitted with 7687 digital set for easy control with digital. Turntable pit for inset installation on a layout. 6 spoke tracks for K Track which can be installed at any spot on the turntable. Can also be used with C Track and M Track in conjunction with adapter tracks. Can be expanded to a maximum of 48 spoke tracks at 7.5° intervals with 7287 extension kit. Track power to spoke tracks through the turntable deck. External diameter 386 mm (15-3/16"). Deck length 310 mm (12-1/4"). Can be used with 7288 locomotive shed.

This model is a joint project with the Fleischmann Company, Nürnberg, Germany.

7287 Extension Set for the 7286 Turntable.
3 spoke tracks for K track and 3 dummy tracks. Can be installed anywhere on the turntable. Built-in track power contacts.

7687 Digital Retrofit Set for 7286 Turntable.
Enables easy control of the turntable with track indexing in the Digital system. Deck turns to the right/left in single steps and continuously. Consists of electronic control circuit with digital decoder, all necessary hardware and complete instructions.



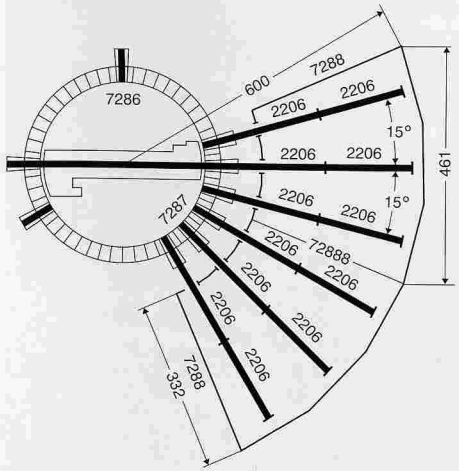
A 6021 Control Unit and a 6040 Keyboard are required to operate the digital turntable (7286 with 7687). It is also possible to control the turntable with a computer (6051 Interface). The digital control is independent of the conventional or digital control of the trains.

2291 Straight Adapter Track.
Allows M track to be connected to the 7286 turntable. Length 180 mm (7-3/32").

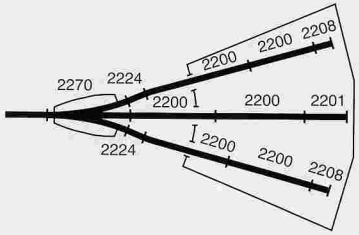


24922 Straight Adapter Track.
Allows C Track to be connected to the 7286 turntable. Length 180 mm (7-3/32").

This illustration shows how 2 of the 7288 locomotive shed are set up with the 7286 turntable.



Suggestion for combining the 7288 locomotive shed with a 2270 threeway turnout.

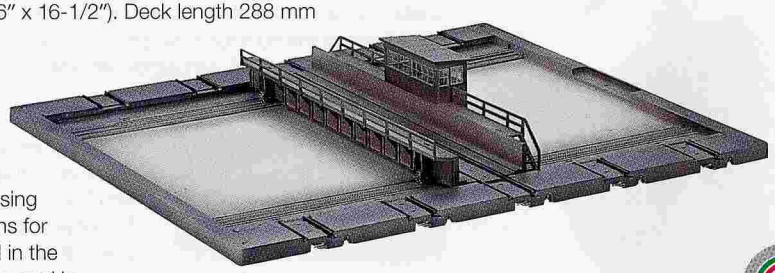




7288 Locomotive Shed Kit.
3 stalls at 15° intervals. Suitable for use with the 7286 turntable. For M and K track (track not included). Doors that close automatically when a locomotive enters. Two each additional 7288 locomotive sheds can be built on to this unit without intermediate walls by using the 72888 roof support kit. Dimensions 335 x 461 mm (13-3/16" x 18-1/8"). Height 128 mm (5").

Transfer Table

7294 Remote Control Transfer Table.
Base plate with 2 approach tracks and 8 stall tracks. Track connections for M Track. Can also be used with C Track and K Track in conjunction with adapter tracks. Can be used with 7289 locomotive shed. Deck with motor in engine shed for forward and reverse operation. Control box and cable for remote control. Deck stops automatically at the tracks. Track power to the stall tracks through the deck. Additional connections for catenary. Dimensions of base 360 x 420 mm (14-3/16″ x 16-1/2″). Deck length 288 mm (11-3/8″).

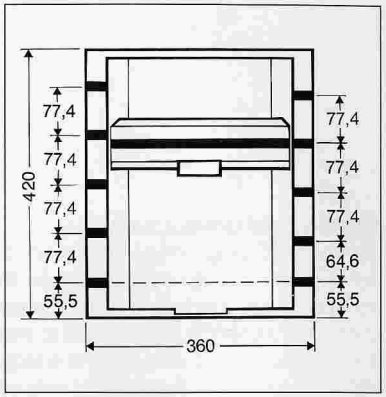


The transfer table can also be controlled with Märklin Digital using a k 84 decoder. The connections for the transfer table are described in the instructions for the k 84 decoder and in the 0308 / 0308A Digital book.

7295 Catenary Set for Transfer Table.
Consists of 2 catenary gantry masts, 1 wire section with a connection wire for the deck and 10 short catenary wire sections for track connections.



7289 Locomotive Shed Kit.
Two-stall shed with 4 manually operated roll doors for run-through operation. For M and K Track (track not included). Can be used with 7294 transfer table. Size 280 x 150 mm (11″ x 6″).



24951 Straight Adapter Track.
Allows C Track to be connected to the 7294 transfer table. Length 180 mm (7-3/32″).

2291 Straight Adapter Track.
Allows K Track to be connected to the 7294 transfer table. Length 180 mm (7-3/32″).



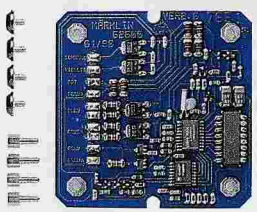
Rotary Crane

märklin HO

7051 Remote Control Rotary Crane.
Metal base and superstructure. 2 motors for turning the cab and raising and lowering the load. Electromagnet for loading iron parts. Crane cab with lighting. Special control box and connecting cable for remote control. Adjustable boom. Height 240 to 310 mm (9-1/2″ to 12-1/4″). Boom swings up to 360 mm (14-3/16″). Base dimensions 90 x 90 mm (3-9/16″ x 3-9/16″).

The non-digital rotary crane is connected to the control box included with the unit and to a standard transformer with a 6 conductor cable. The speed of the motors is constant.



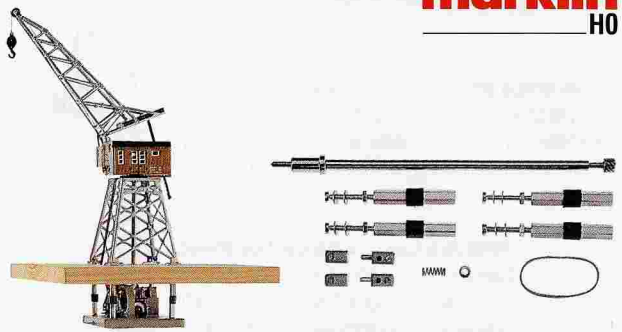


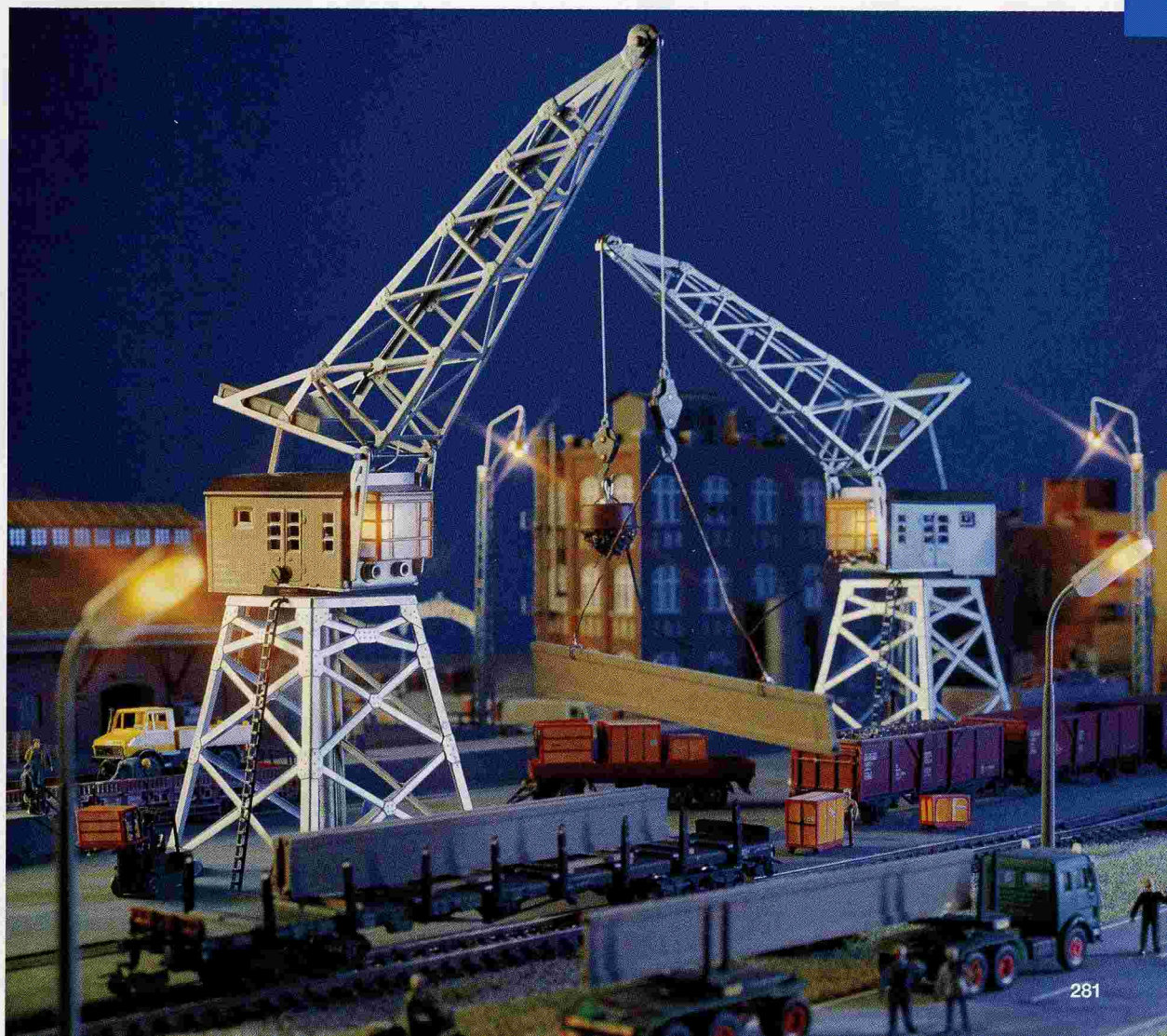
fx

7652 Digital Retrofit Kit for Rotary Crane.
Consists of crane decoder and all necessary hardware. For converting the 7051 remote control rotary crane to digital operation.

7054 Below-Baseboard Mounting Kit for Rotary Crane.
Consists of drive shaft, spacers as well as all necessary hardware and complete instructions.

This mounting kit can be used to install the mechanism for the remote control rotary crane below the baseboard on a layout. The complete mechanism will be below the layout ground level after the conversion.

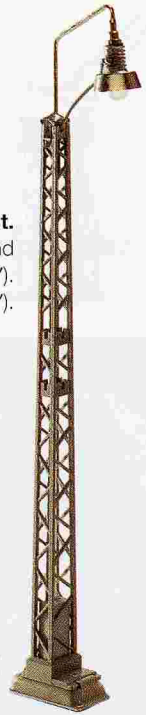




Lamps and Lights

These lamps and lights are delicate in design and yet sturdily made. All of the round masts are metal. The lattice masts are the same in dimensions and design as the catenary tower masts.

7046 Arc Lamp with Lattice Mast.
Can be used with catenary for M and C Track. Height 192 mm (7-9/16″). Base 14 x 28 mm (9/16″ x 1-3/32″).



7283 Tower Mast Lamp.
Mounted on tower mast. Has base plate. Can be used with catenary. Height 170 mm 6-11/16″).





7281 Station Platform Light.
Twin lights. Height 97 mm (3-13/16″). Base diameter 25 mm (1″).

7048 Arc Lamp.
Height 156 mm (6-1/8″). Base diameter 29 mm (1-1/8″).



7284 Park Light.
Height 63 mm (2-1/2″). Base diameter 15 mm (1/2″).





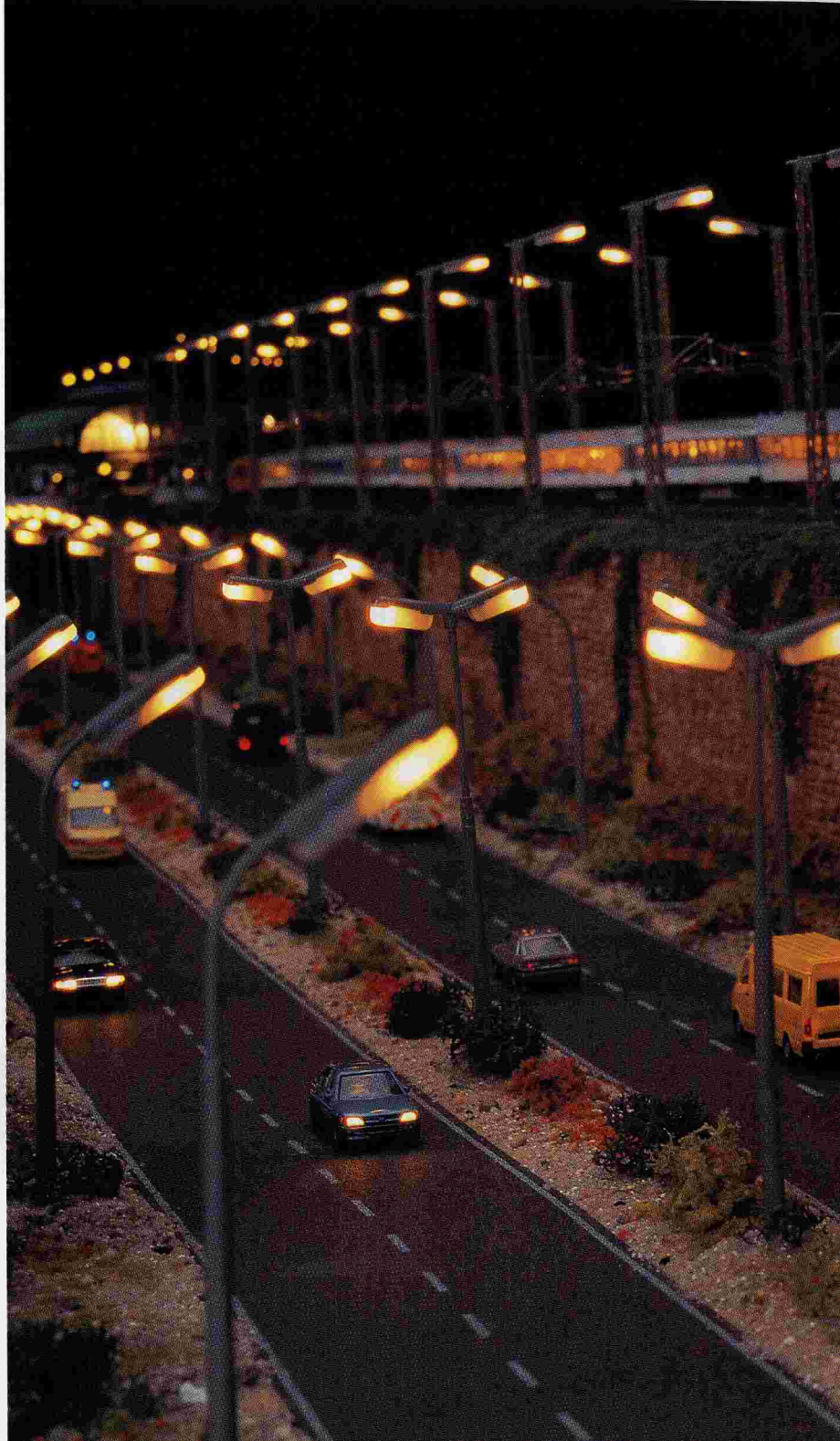
7280 Street Light.
Height 117 mm (4-5/8″). Base diameter 25 mm (1″).



7282 Street Light.
Twin lights. Height 120 mm (4-3/4″). Base diameter 25 mm (1″).



7047 Lamp.
Height 127 mm (5″). Base diameter 27 mm (1-1/16″).



Light Bulbs for Accessories

märklin H0

Light Bulbs

Accessory	Catalog Number	Approx. Power Use
Rotary crane	7051	**60 0000** 0.8 VA
Lamps	7280, 7281, 7282, 7283, 7284	
Track bumper	7191	
Signals	7036, 7038, 7039, 7040, 7041, 7042	
Car lighting	7077	
Turnouts	2262, 2263, 5128, 5137, 5140, 5202	
Signals	7188, 7339	**60 0010** 0.8 VA
Car lighting	7079	
Signals	7188, 7339	**60 0020** 0.8 VA
Car lighting	73150*, 7330*, 7333*, 7335*, 73155*	**60 0080** 0.9 VA
Lamps	7046, 7047, 7048	**60 0100** 0.8 VA
Light mast	5113	
Car lighting	7323	
Car lighting	7197, 7318, 7320, 7322, 7329	**60 0150** 1,0 VA
Car lighting	7074	**60 0200** 0.8 VA
Signals	7242	**60 2000** 0.5 VA
Crossing gates	7292, 74920, 7592	**60 2010** 0.5 VA
Signals	7239, 7240, 7241	
Signals	7236, 7237, 7238, 7239, 7240, 7241	**60 2020** 0.5 VA
Signals	7236, 7237, 7238, 7240, 7241	**60 2040** 0.5 VA
Car lighting	73140	**60 2100** 0.3 VA
Car lighting	7317	**61 0080** 0.7 VA

* The 61 0080 is recommended as a replacement for continuous operation in the Digital system.

The power consumption figures given refer to a current of 16 volts available at the accessory terminals/sockets of Märklin transformers. The total power required for lighting in a circuit is figured by adding the watts for each of the lamps in that circuit. Note: 1 VA = 1 watt.



The most common colors in the Märklin H0 wiring system

Red = locomotive power connection (transformer to third rail or catenary)

Brown = ground from track roadbed or control box to transformer

Yellow = lights and solenoid accessories

Blue = ground return from solenoid accessories to the control box or circuit track (with green, red, and orange plugs)

Wire
The copper conductor in this wire consists of 24 separate strands each 0.10 mm (0.004") in diameter with a total cross section of 0.19 sq. mm (0.0003 sq. in.). This is sufficient even in the event of a short circuit with a 52 watt transformer.

7100 Single conductor. Gray. 10 m (33').

7101 Single conductor. Blue. 10 m (33').

7102 Single conductor. Brown. 10 m (33').

7103 Single conductor. Yellow. 10 m (33').

7105 Single conductor. Red. 10 m (33').

71060 Wire.
Dealer package assortment with 10 rolls each of red, brown, blue and yellow wire. Length of each roll 10 meters (33 feet). Wire cross section 0.75 sq. mm (0.001 sq. in.). Rolls of wire can also be sold separately.



The wire in this dealer package assortment with a cross section of 0.75 sq. mm (0.001 sq. in.) is recommended for large H0 layouts and for Märklin 1.



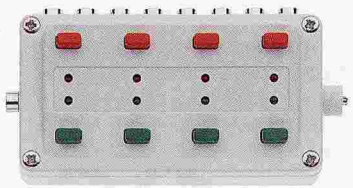
7130 Plug and Socket Assortment.
100 pieces (66 plugs and 34 sockets). Assorted according to average requirements for each color.

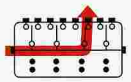
603026 Automatic Wire Stripper.
For stripping insulation from all single conductor wire 0.19 to 6.0 square millimeters in size. Wire stripper mechanism automatically adjusts itself to the size of the wire. Length of wire insulation to be stripped can be adjusted from 5 to 12 mm. Side cutter integrated into the wire stripper.



Control Boxes

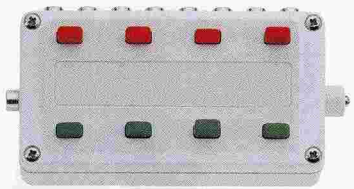
For remote-control operation

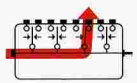




Schematic of 7271
(Button 3 pushed)

7271 Control Box.
With 8 sockets for connecting 4 double solenoid accessories. Automatic feedback of the accessory setting with LEDs when used with 7549 (K) and 74490 (C) turnout mechanisms. Dimensions 80 mm x 40 mm (3-1/8″ x 1-9/16″).

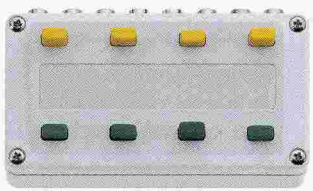


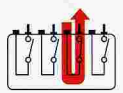


Schematic of 7272
(Button 3 pushed)

HOBBY

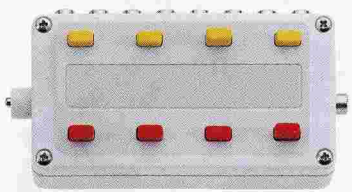
7272 Control Box.
For controlling 4 double solenoid accessories. The position of the buttons shows the setting for the signals, turnouts, etc. Dimensions 80 mm x 40 mm (3-1/8″ x 1-9/16″).

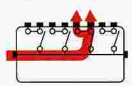




Schematic of 7273
(Button 3 pushed)

7273 Control Box.
For turning 4 different track or accessory circuits on and off. For example, power can be controlled in 4 storage sidings in 4 different track circuits. Dimensions 80 mm x 40 mm (3-1/8″ x 1-9/16″).





Schematic of 7274

7274 Control Box.
For dividing or switching a track or accessory circuit into 4 different circuits, each with two connections. For example, 4 accessory circuits for building illumination can be turned on or switched over. Dimensions 80 mm x 40 mm (3-1/8″ x 1-9/16″).



7209 Distribution Strip.
Has 11 electrically linked connections. Dimensions 50 x 20 mm (2-3/4″ x 11/16″).

Feeder connections and insulators:
for C Track, on page 245
for M Track, on page 249
for K Track, on page 259

Wire, sockets and plugs can be found on page 283.



0716 Electrical Manual for H0.
Practical tips for hooking up turnouts and signals as well as all of the working models in the Märklin assortment such as the rotary crane, turntable, and transfer table. Numerous sample circuits and circuits for hooking up electrical items for conventional and digital control of model railroad layouts. Contents 78 pages. Format 22.0 x 26.4 cm (8-5/8″ x 10-3/8″).



0733 Service Manual H0.
Function, care and maintenance of locomotives. Useful tools and how to use them. Troubleshooting locomotives and layouts. Tips on the Digital system. Extensive spare parts tables. Contents 72 pages. Format 22 x 26.4 cm (8-5/8″ x 10-3/8″).

Transformers



HOBBY

6645 100 volts Japan. 32 VA.
6646 120 volts USA. 32 VA. UL/CSA-tested
6647 230 volts. 32 VA.
76648 240 volts. 32 VA.
32 VA Transformer.
Track current adjustable between 4 and 16 volts. 16 volt accessory current. Plastic housing. Dimensions 120 x 140 x 80 mm (4-3/4″ x 5-1/2″ x 3-1/8″).



6000 100 volts Japan. 50 VA.
6001 110 volts USA. 42 VA. UL/CSA tested.
6002 230 volts. 52 VA.
6003 240 volts. 52 VA.
Accessory Transformer for Lighting Circuits and Solenoid Accessories.
LED pilot light. 52/42 VA output. 16 volt alternating current. Plastic housing. Dimensions 120 x 140 x 80 mm (4-3/4″ x 5-1/2″ x 3-1/8″). VDE/UL/CSA tested.

Tested for Safety
We guarantee trouble-free operation of our trains only when used with original Märklin transformers. The transformers must be protected from dampness and are not designed for use outdoors. Connect the transformer only to alternating current.

Also pay close attention to the operating instructions for the transformers (see "General Information on the hookup and operation of Märklin model railroads" on the inside of the catalog cover.)

Multi-train operation with separate power circuits
In conventional train operation if several trains are to be operated independently of each other, the layout is divided into several power circuits. A transformer and at least one feeder track are assigned to each power circuit and are electrically separated simply from other power circuits with a center conductor insulator (5022 or 7522). In the Märklin H0 system the running rails have the same polarity everywhere on a layout and do not need to be interrupted.

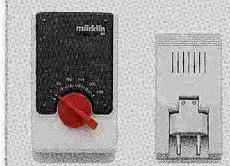
Power circuits can be closed routes like most main routes or other areas of track with their own operation. Examples of the latter would be branch lines, station areas, storage sidings, switching yards or railroad maintenance areas. In this way you have the possibility of controlling individual locomotives for specific purposes simultaneously with fully automatic route operations.

As a rule catenary for electrified routes is connected to its own transformer as an additional power circuit. This allows you to control locomotives used in catenary operation independently of locomotives or railcars powered from the track. Catenary power circuits can be separated from each other with the 7022 insulated section.

Power Consumption of Locomotives and Accessories
The output indicated on the transformer (in VA/watts) is available for the power consumption of all users in the power circuit. Some sample power use calculations:

With a load, smaller locomotives (ex. 3000 tank locomotive) require about 9 watts, larger locomotives (ex. 33803 diesel locomotive) about 12 watts. The power consumption for train lighting is based on light bulbs built into the cars and is usually less than 2 watts per car.

After subtracting the output required by trains, the remaining reserve in the transformer can be used at the accessory outputs for electric accessories. Here, light bulbs use between 0.5 and 1 watt (see table "Light Bulbs for Accessories" on page 283) and turnout or signal mechanisms use about 6 watts when activated. Additional electric accessories should be connected to an additional accessory transformer.



ALPHA rechargeable locomotive controller, item no. 6710, rechargeable battery insert, item no. 6709 and rechargeable locomotive controller from set no. 2510.

We have been made aware in one case concerning the rechargeable battery locomotive controllers for the former ALPHA train system that these controllers can heat up to unacceptable levels due to the deterioration of an electrical component in the charging circuit. This condition may cause injury to the user of the controller. What is being referred to here is a locomotive controller with a rechargeable battery (not to be confused with the Märklin transformers).
We are requesting that all consumers operating such a controller please take this controller to their authorized Märklin dealer. The dealer will give you a Märklin transformer at no cost in exchange for the rechargeable battery controller.

DELTA Multi-Train Operation

Operating enjoyment multiplied.

First you add some track and turnouts, then more cars and one day a second locomotive is being run on the layout – now you are faced with the decision whether to keep operating locomotives conventionally or with a multi-train system.

In order to control both locomotives independently from on another, in conventional operation you have to isolate an area of track and power it with a second transformer. Each of the two locomotives is than controlled in its area of track by its train control transformer. In principle you are operating two model railroad layouts next to one another. Of course, each locomotive can also be run into the track area of the other, but it also enters the area controlled by the other's transformer.

With a multi-train system you have quite different possibilities. The locomotives do not need their own areas of track; they receive control commands from a locomotive controller. Each command contains information regarding which the locomotive it is intended for and what that locomotive is to do. Only the locomotive so selected reacts to these control commands. It needs a decoder for this purpose, one that receives and decodes these commands. All Märklin DELTA and digital H0 locomotives and all Maxi and standard 1 Gauge locomotives are equipped with this sort of decoder. Other H0 locomotives, such as from the HOBBY assortment, can be retrofitted with a decoder.

With Märklin you have a choice between two DELTA multi-train systems for four to five locomotives or the Märklin Digital system that you can expand in steps for layouts of up to 80 locomotives as well as digitally controlled accessories. DELTA and digital locomotives are compatible with all of these systems.

The 6604 DELTA Control

The entry level system for H0 layouts is connected between the layout and the existing AC power train control transformer. One of four previously determined locomotive addresses is selected. This locomotive is controlled independently from the train control transformer; the others continue to run at the last speed and direction given to them. A fifth locomotive can even be controlled with the 6605 DELTA Pilot hand controller. The maximum power output of this system depends on the transformer used. The powerful 6647/6646 transformer from our starter sets is sufficient for small to medium size layouts. Auxiliary locomotive functions cannot be addressed in this system. You would continue to control signals and turnouts conventionally and independently of DELTA.

The 6607 DELTA Station

This system is suitable for H0 and Maxi. Either a 6647/6646 AC power transformer with 32 VA power output or the 6002/6001 transformer with 52 VA (42 VA for 6001) power output, sufficient for the power requirements of the layout, is used to supply power. The DELTA Station can be set up at any desired distance from the transformer used to supply power and is thus suitable for use outdoors. The DELTA Station has no controls on it. Instead, a total of four 6608 DELTA Mobil hand controllers can be connected to it. Each hand controller can address each of four locomotive addresses. With several hand controllers each controller is assigned to a locomotive, so that a maximum of four people can each be controlling their locomotive at the same time. All train operations can be stopped with an emergency button on each hand controller. With this system, you would continue to operate accessories conventionally.

If the abilities of the DELTA system are not enough for you, because you want to control more locomotives individually or because you want to operate accessories digitally, then you should look at the Märklin Digital system on the following pages.

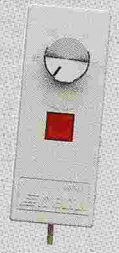


DELTA

6604 DELTA Control.
Control unit for individual control of locomotives with built-in DELTA module. Easily installed between feeder track and transformer. Plastic housing. Dimensions 125 x 135 x 55 mm (4-15/16″ x 5-5/16″ x 2-3/16″).

DELTA

6605 DELTA Pilot.
Hand controller for connection to the DELTA Control. With this hand controller a digital locomotive can be controlled simultaneously and independently of the 4 locomotive types on the DELTA Control. The digital locomotive must be set for an address of "80". Rotary knob for speed control. Direction reversing with push button. Plastic housing. Dimensions 39 x 100 x 40 mm (1-17/32″ x 4″ x 1-9/16″).



DELTA

6607 DELTA Station.
DELTA electronic unit for individual control of locomotives with built-in DELTA modules. The output of this DELTA Station is designed for Maxi locomotives. When connected to a transformer (6001/6002), a maximum power of approximately 45 VA (approx. 35 VA with the 6001) is available. Up to 4 DELTA Mobil (6608) hand controllers can be connected to this unit. 1 DELTA Mobil is included with this unit. The DELTA Station can control 4 locomotives individually. These 4 addresses can be called up from any hand controller connected to the Station. The DELTA Station can also be used outdoors to control Maxi locomotives. Dimensions 135 x 120 x 80 mm (5-5/16″ x 4-3/4″ x 3-1/8″).





DELTA

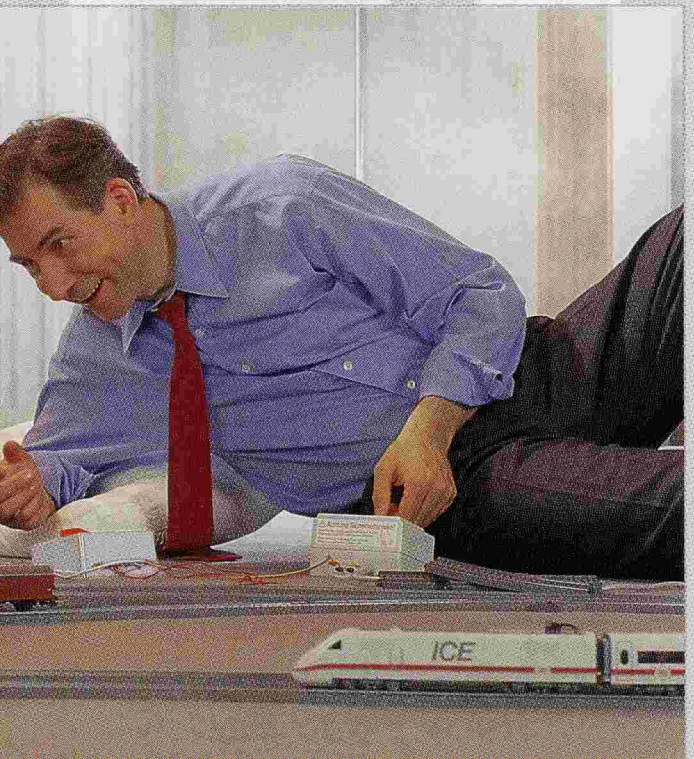
6608 DELTA Mobil.



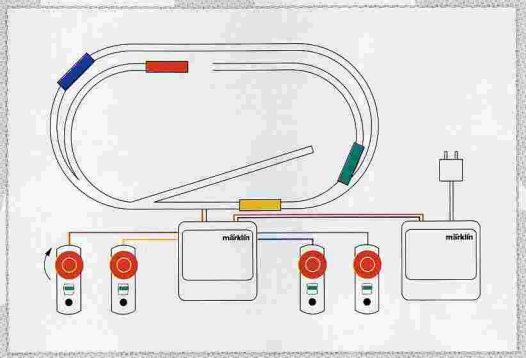
Hand controller for use with the DELTA Station (6607). The 4 different addresses for the DELTA Station can be selected with a slider switch. Rotary knob for speed control with easy-to-recognize direction setting for Maxi locomotives. Emergency stop button with LED indicator. Dimensions 130 x 50 x 37 mm (5-1/8″ x 1-15/16″ x 1-7/16″).

DELTA multi-train system: With a hand controller each of the four locomotives can be addressed one after the other, or with 4 hand controllers 4 different locomotives can be simultaneously controlled independently of each other.

Important: The DELTA Pilot (6605) cannot be used with the DELTA Station (6607). The DELTA Mobil hand controller (6608) is not suitable for use with the DELTA Control (6604).



The manufacturer warranty is covered only when the DELTA modules are installed by an authorized Märklin dealer.



Overview of the Märklin Multi-Train Systems

DELTA

6603 DELTA Module.



Electronic component for converting conventional Märklin H0 locomotives to the DELTA multi-train control system. Suitable for locomotives with the Märklin standard motors (flat commutator motor or drum commutator motor). Locomotive can be operated with conventional transformer, DELTA Control, DELTA Station or Märklin Digital. Coding switches for setting the mode of operation and the address for multi-train operation. Electronic direction reversing. Locomotive headlights turned on when the unit is in motion and change over with the direction of travel. Dimensions 36 x 21 x 4 mm (1-7/16″ x 13/16″ x 3/16″).

DELTA

66031 DELTA Module with Auxiliary Function.

Electronic component for converting conventional Märklin H0 locomotives to the DELTA multi-train control system. Suitable for locomotives with the Märklin standard motors (flat commutator motor or drum commutator motor), specially for locomotives with Märklin TELEX couplers. Locomotive can be operated with conventional transformer, DELTA Control, DELTA Station or Märklin Digital. Coding switches for setting the mode of operation and the address for multi-train operation. Electronic direction reversing. Auxiliary function (example: TELEX couplers) can be turned on and off when the direction is changed twice. Locomotive headlights turned on when the unit is in motion and change over with the direction of travel.

System	DELTA	DELTA	Digital
Basic unit	DELTA Control 6604	DELTA Station 6607	Control Unit 6021
Number of locomotive addresses	4 + 1	4	80
Digital locomotive functions	none	function + f1 turned on f2 to f3 turned off	max. 5
Controllable accessories	none	none	256
Suitable transformers	6647	6647 or 6002	6002
Outdoor operation	no	yes	yes
Suitable for	H0	H0, 1	H0, 1
Other control units	1 DELTA Pilot 6605	max. 4 DELTA Mobil 6608	Control 80 f, Keyboard, Memory, Interface

Simulated Reality with Märklin Digital.

märklin digital

Märklin Digital has been proving itself as a digital control system for H0 and 1 Gauge since 1984. In keeping with the Märklin philosophy, it is easy to operate, reliable in its function, and compatible with Märklin's H0 and 1 Gauge products. Märklin Digital controls locomotives, working models, or solenoid accessories. Each locomotive can be addressed individually. On locomotives with the high-efficiency propulsion, the maximum speed as well as acceleration and braking delay can be custom-tailored to approach the operation of that model's prototype. Remote controlled auxiliary functions such as headlights, sound effects, horn, or a smoke generator allow you to get even closer to reality.

Märklin Digital is a system for the future, and can be expanded with new functions, thus always remaining up-to-date. All of the power and operating components are carefully designed to go together.

Only original Märklin products guarantee full compatibility and reliable operation of the entire system.

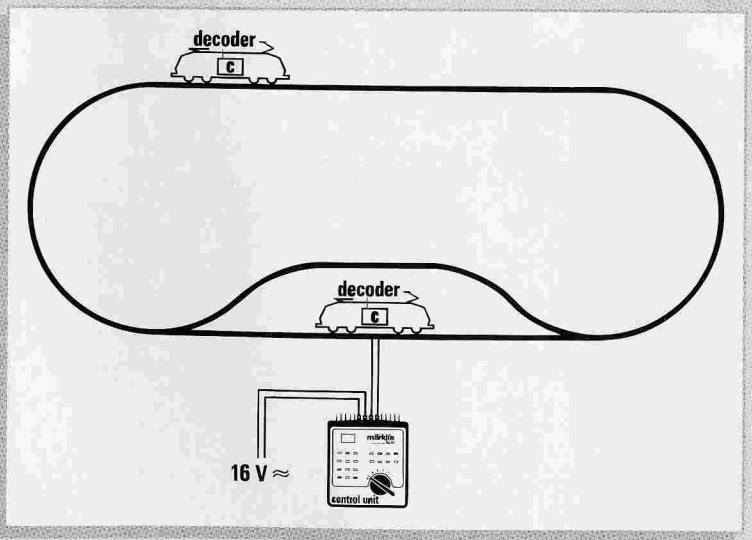
How does Märklin Digital work?

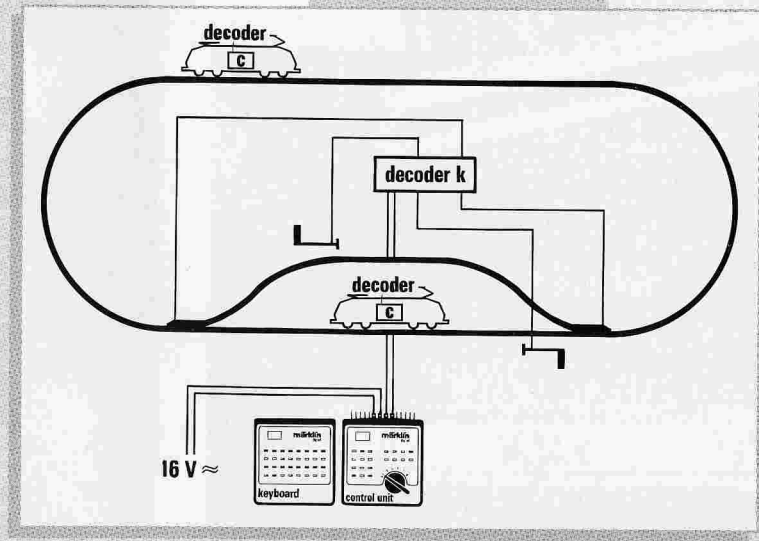
With conventional train control you use the train control transformer to regulate the voltage in the track for running trains; the locomotive then runs faster or slower. You have to isolate areas of track from one another and supply them with their own train control transformers in order to have locomotives run independently of one another.

With Märklin Digital the operating voltage in the track is almost constant. Regardless of the way you turn the control knob on the locomotive controller, the level of the operating voltage remains the same. Instead, the central unit sends control signals through the track. Each control signal contains an address (which locomotive it is intended for) and an actual command (run faster, stop, etc.). The locomotives have decoders that act as locomotive engineers, and they receive these signals. Initially, they check to make sure that the command is actually for them, whether the address agrees with the address they have. If yes, they accept the command. High-efficiency decoders have their own "brain" in this situation. At the command "Stop" (control knob on the locomotive controller set for zero) they do not immediately turn off power to the locomotive; they decrease it continuously, so that the train slowly comes to a stop as in real life. Or, at the command "full speed" (control knob turned all the way over to the right) they allow only enough operating voltage to the locomotive until it reaches a prototypical maximum speed. These functions can be custom tailored for each locomotive with high-efficiency propulsion.

In addition to locomotives, Märklin Digital can also control solenoid accessories. Up to 256 turnouts and signals can be operated with ease either individually or in routes.

This multitude of functions does not require extensive wiring – all commands travel via two wires to the decoders.





These drawings show the principles of the Digital system.

Märklin Digital for H0 and 1

The first step

The 29845 premium starter set (see pages 36-39) is the right first step to get started in the digital age. Of course, there are two trains in this multi-train composition, in addition to the 6021 Control Unit and the powerful 6001/6002 transformer. Any of the other starter sets currently available can be expanded easily with the 6021 Control Unit (H0, see pages 26-35, Maxi, see pages 388-393).

Every Märklin H0 locomotive with DELTA or digital propulsion can be operated on digital; the other locomotives can be retrofitted with a decoder. In Märklin 1 all Maxi locomotives and standard 1 Gauge models come from the factory ready for digital operation.

Or do you want to transfer over?

If you want to convert your existing Märklin H0 or 1 layout to Digital, in principle what you need is a Control Unit as a central unit. An already existing train control transformer can be used to supply power. The Control Unit's full output capability is realized with the 6001/6002 transformer. The addition of 6017 Boosters can adapt the digital system to higher power requirements. Your authorized dealer can retrofit conventional locomotives with DELTA or digital decoders.

You can continue to operate turnouts, signals and uncoupler tracks conventionally with control boxes. Anyone who has set up the wiring on his layout with patience and care, so that it is neat and clean and who doesn't want to destroy this beautiful workmanship, can stay with conventional operation of the accessories. On the other hand, anyone wanting to make use of the additional functions of digital technology or wanting to save wiring when expanding, will use the digital Keyboard and decoders for his accessories.





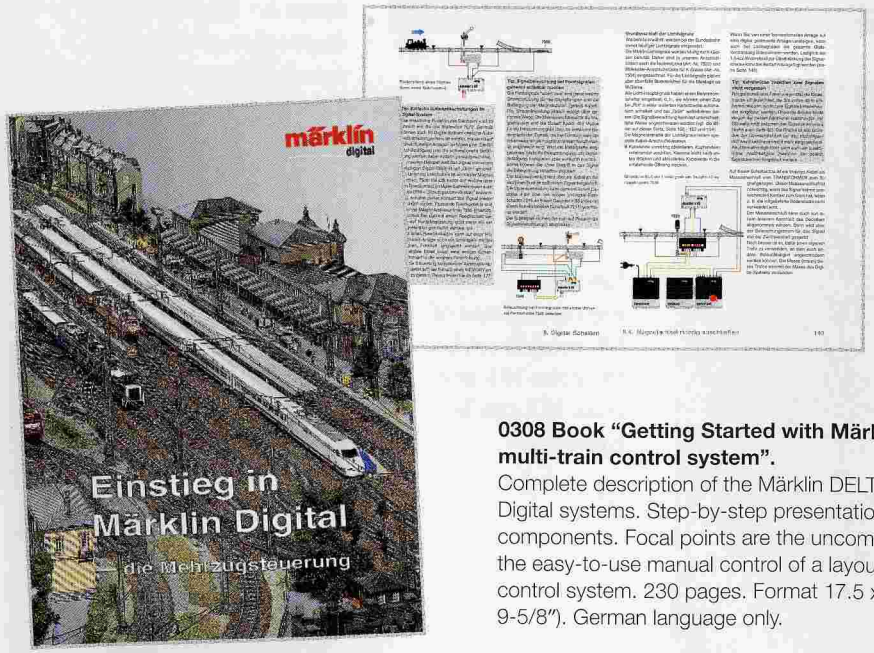


The Heart of Every Märklin Digital Layout

6021 Control Unit

The heart every Märklin Digital layout in H0 and 1 is the Control Unit. It combines the functions of three components: It is first a *locomotive controller* for operating locomotives, second a *booster* for supplying the layout with current to operate locomotives and accessories, third it is the *central unit electronics circuit* which processes all commands for other control components. The Control Unit collects and stores all commands for locomotives and accessories and sends them as data signals to the track.

The Control Unit can recognize up to 80 locomotives. It calls up locomotive addresses from 01 to 80 with the 10 button keypad, and this address appears on the two-digit display. You then control this locomotive manually as you wish and turn on/off the functions built into the locomotive such as headlights, TELEX couplers or smoke generator. When a new address is called up, this locomotive continues to run with
the speed last set for it. The power supplied to the layout through the Control Unit is limited for reasons of safety.



0308 Book "Getting Started with Märklin Digital – the multi-train control system".
Complete description of the Märklin DELTA and Märklin Digital systems. Step-by-step presentation of the necessary components. Focal points are the uncomplicated setup and the easy-to-use manual control of a layout with this multi-train control system. 230 pages. Format 17.5 x 24.5 cm (6-7/8" x 9-5/8"). German language only.



6021 Control Unit.
Central unit for Märklin H0 and 1 layouts with built-in locomotive controller. Supplies the layout with power and control commands. The built-in locomotive controller has the same features as the Control 80 f. Terminal clips for transformer and track layout. 1 multi-pin connector for Booster. LED pilot light. Maximum output current 2.5 amps.
Dimensions 135 x 120 x 80 mm (5-1/2" x 4-7/8" x 3-1/2").

More and More Models with More and More Functions.

We at Märklin see technology as a means to an end to make model railroading even more realistic and more rich in adventure. We want to do more than just reproduce models that are as true in their detailing as possible; we want to make their functions and the operation of them just as realistic. These would include adjustable operating characteristics typical of that locomotive's prototype such as the maximum speed, acceleration, and braking. Also included would be remote controlled auxiliary functions for locomotives, cars, and working models. Examples and an overview in this section will show you which H0 and 1 Gauge models are equipped with which functions. There will be more in the future.

Up to five functions can be controlled
With Märklin Digital up to five functions can be controlled, depending on the model. The headlights can be turned on with the "function" button and off with the "off" button. In addition, the Control Unit has four buttons marked "f1" through "f4" that can be used to control other locomotive functions.

Controllable train lighting
The decoder for H0 car lighting will not leave its passengers sitting in the dark. The interior lighting in the cars can now be left on when the train is stopped in the same manner as the headlights for digital locomotives, something that now gives the right atmosphere to the scene at a station. The 60960 decoder can be retrofitted into cars. When the lighting for different cars is linked together with current-conducting couplers, then one decoder can control the car lighting for the entire train.





Better vision at high speed
The modern, high speed locomotives have both standard headlights and long distance headlights. This is better for the locomotive engineer, because at high speeds he can see further and is not driving in the dark; at the same time the train can be seen from a further distance.



The front and rear long distance headlights on different digital versions of H0 models such as the class 101 and class 152 can be turned on.



Factory-Equipped Features of H0 Locomotives with Several Digitally Controlled Functions

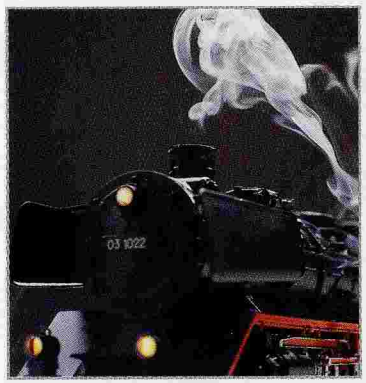
Item No.	Description	Function	f1	f2	f3	f4
26508	DB class 86	headlights	–	–	–	turning off the acceleration/braking delay
26600	EMD F 7	headlights	motor sound effects	bell	horn	dynamic brake sound + turning off the acceleration/braking delay
37021	DRG class 53	headlights	cooling fans mechanism	smoke generators[1)]	–	turning off the acceleration/braking delay
37060	K.Bay.Sts.B. class EP 3/6	headlights	smoke generator[1)]	–	–	turning off the acceleration/braking delay
37080	DB class 10	headlights	smoke generator[1)]	running gear lights	whistle	steam locomotive sound effects
37090	DB, Inc. class Sggoorrss 700	headlights	–	–	–	turning off the acceleration/braking delay
37184	DRG class 18.4	headlights	smoke generatorv[1)]	–	whistle	bell
37231	SNCB/NMBS class 122 (22)	headlights	marker light	horn 1	horn 2	turning off the acceleration/braking delay
37261	NS class 1700	headlights	–	horn 1	horn 2	turning off the acceleration/braking delay
37350	DB, Inc. class 152	headlights	–	front long distance headlights	horn	rear long distance headlights
37352	DB, Inc. class 152	headlights	–	front long distance headlights	horn	rear long distance headlights
37374	DB, Inc. class 101	headlights	–	front long distance headlights	rear long distance headlights	turning off the acceleration/braking delay
37432	DB, Inc. class 151	headlights	–	brake sounds	horn	turning off the acceleration/braking delay
37661	DRG class E 52	headlights	–	–	horn	turning off the acceleration/braking delay
37622	EMD F 7	headlights	motor sound effects	bell	horn	dynamic brake sound + turning off the acceleration/braking delay
37681	DRG class E 18	headlights	–	–	–	turning off the acceleration/braking delay
37761	DB, Inc. class 610	headlights	interior lights	–	–	turning off the acceleration/braking delay
37780	DB, Inc. class 406	headlights	interior lights	front long distance headlights	rear long distance headlights	turning off the acceleration/braking delay
37803	DB class V 200	headlights	motor sound effects	rear headlights 1	horn	rear headlights 2
37884	DB class 44	headlights	–	–	–	–
37911	DRG class 03.10	headlights	smoke generator[1)]	–	–	turning off the acceleration/braking delay
39710	DB, Inc. class 410	headlights + interior lights	–	–	–	turning off the acceleration/braking delay

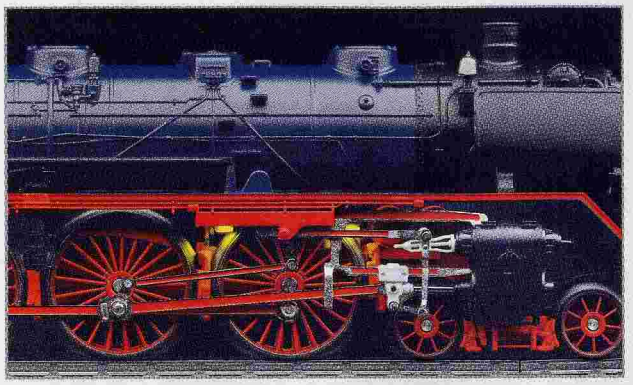
As of July 1999

[1)] = Smoke generator not included with locomotive as delivered from the factory.

Digital right from the start

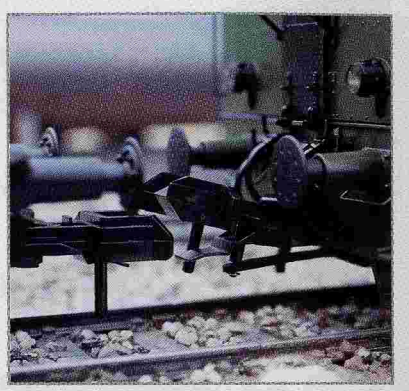
Even the two locomotives in the digital premium starter set feature auxiliary functions. On the class 216 these are the headlights, a high and a low horn; on the class 03 they are the headlights, running gear lights, and the smoke generator. Since all of these functions will work in the digital system when the train is stopped, the smoke generator will provide an effective atmosphere at a station or in the maintenance facility.





Uncouple anywhere by remote control

On the V 36 standard 1 Gauge locomotive the TELEX coupler in the front and the rear can be controlled with Märklin Digital just like the headlights. Like its large prototype, this locomotive is just right for switching work.



Factory-Equipped Features for 1 Gauge Locomotives with Digitally Controlled Functions

Item No.	Description	Function	f1	f2	f3	f4
55280	DB class 56[2-8]	headlights	smoke generator	steam sound effects	whistle	bell
55151	KPEV class G8.1					
	(1st decoder)	headlights	smoke generator	whistle	bell	acceleration / braking delay min.
	(2nd decoder)	–	cab lighting	running gear lights	–	–
55302	DB class V 36	headlights	–	TELEX front	TELEX rear	–
55712	DB class 218 DB blue/cream	headlights	–	diesel motor sound effects	horn	horn selection
55722	DB, Inc. class 213	headlights	–	–	–	–
55724	DB, Inc. class 213 with camera	headlights rear	camera and sender	–	–	–
55981	Baden class P 8	headlights	smoke generator	steam sound effects	whistle	bell

As of July 1999

Everything in motion

The digital Maxi crane is a special type of working model. Function buttons are used to turn the crane



cab, raise and lower the boom, and raise and lower the hook; the speed for these functions is controlled with the rotary control knob on the Control Unit. This makes it possible to control the crane's movements precisely down to millimeters.

Maxi high-efficiency decoder

Single-motor Maxi locomotives can be retrofitted with a digital, high-efficiency decoder. The makes the same, excellent, controllable operating characteristics available on these units as is found on the standard 1 Gauge locomotives.

A good roar, F7

Five functions can be controlled on the H0 F7: headlights, motor sound effects, bell, horn, and the sound of the dynamic brakes.

Steam locomotive sound effects in H0 too

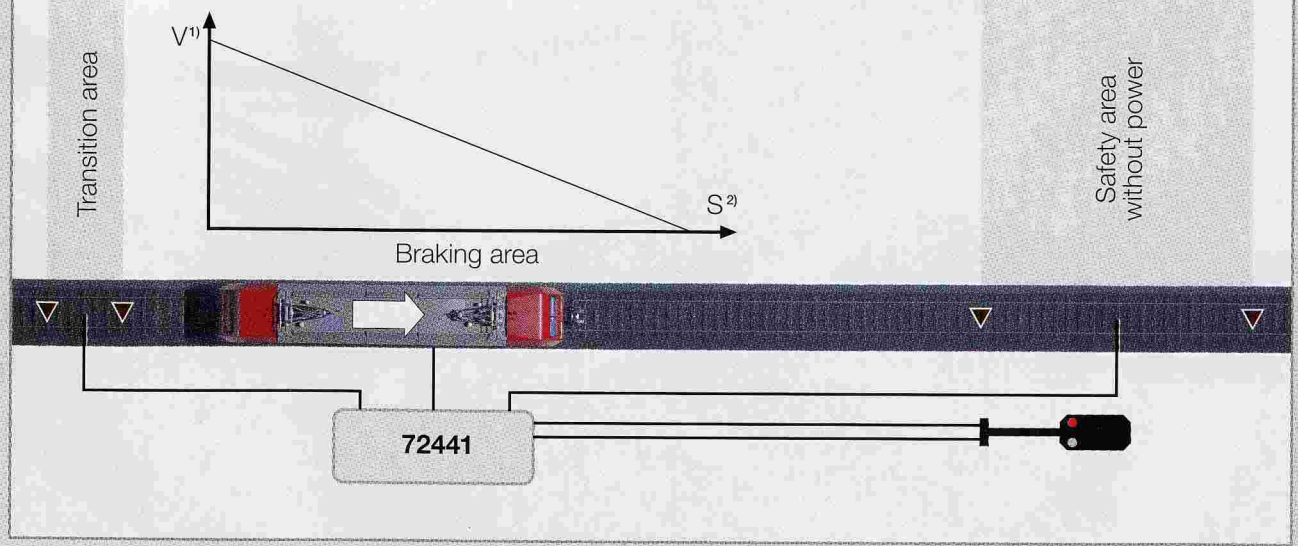


The new class 10 in a digital version is another milestone in the technical development of Märklin H0 locomotives. It is the first Märklin H0 steam locomotive with a built-in sound effects generator for the sounds of a locomotive in operation. The sound of a real steam locomotive was recorded for this, converted to a digital format and processed. The sound picture is adapted to the operating condition of the locomotive at any given moment. The locomotive whistle can be activated from the controller.

A gentle stop at signals

For a signal set for "stop" the signal module gives a command to the digital decoders of high-efficiency propulsion locomotives approaching the signal. The decoder then controls the braking delay set on it up to the stop in front of the signal. A safety area of track with the power shut off in it prevents a locomotive from overrunning the signal, if the former's braking delay is set for too long a distance.

Automatic Braking Section in Digital Operation



1) V = speed

2) S = route traveled

When the layout gets bigger...

In addition to the Control Unit there are other digital components for additional power supply or for increased ease of operation.

Operating with one another

If you want to control several locomotives simultaneously, or if you want to operate the model railroad layout with your friends, you can also connect additional Control 80 f locomotive controllers – some with an Adapter cable at a remote location on the layout. A different locomotive is then addressed with each locomotive controller.



6036 Control 80 f.
Locomotive controller. Access to 80 locomotive and function addresses. Address entry using 10 button keypad. Two-digit display of the locomotive address currently called up. On and off buttons for the locomotive auxiliary function. 4 combined on/off buttons for additional functions. Function status shown by LEDs. Emergency halt and release buttons. Can be connected to Control Unit or another Control 80 f. Dimensions 135 x 120 x 80 mm (5-1/2″ x 4-7/8″ x 3-1/2″).



6038 Adapter 180.
Extension cable for remote setup of the Control 80 f, Keyboard, Memory or Interface. Ribbon cable with 2 plug-in sockets for the Digital system. Length 180 cm (71″).

6039 Adapter 60.
Looks and functions like the Adapter 180. Length 60 cm (23-1/2″).

See "General Information" on the inside of the catalog cover.



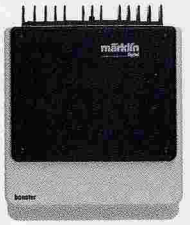
More power for more trains

The more trains, train lighting, functions or solenoid accessories that you place into operation, the more power you have to supply. You do this by dividing the layout into different power supply areas. The Control Unit is used with the first area. A Booster, each with its own transformer, is required for each additional area. The Boosters reinforce the commands from the common Control Unit, so that all power supply areas are receiving identical data and so that the locomotive decoders do not notice the transition from one area to another.



6000 100 volts Japan 50 VA.
6001 110 volts USA.
42 VA UL/CSA tested.
6002 230 volts. 52 VA.
6003 240 volts. 52 VA.
Transformer.
Transformer for supplying power to the 6021 Control Unit or 6017 Booster. Suitable for supplying power to conventionally controlled Märklin accessories. 16 volt alternating current. LED pilot light. Dimensions 135 x 120 x 80 mm (5-1/2″ x 4-7/8″ x 3-1/2″).

The 6000, 6001, 6002 and 6003 transformers are not to be set up outdoors. They must be protected against moisture.



6017 Booster.
Output supply unit for large, digitally controlled Märklin H0 and Märklin 1 layouts. Maximum output current 2.5 amps. LED pilot light. With switchable voltage reduction for slow speed areas as with the 6021 Control Unit. 2 each terminal clips for transformer and track. 1 each multi-pin connector for Control Unit and additional Boosters. 1 adapter cable for connection to Control Unit. Dimensions 135 x 120 x 80 mm (5-1/2″ x 4-7/8″ x 31/2″).

Locomotives with more functions

Another advantage of digital technology is the independent nature of operating locomotives and of other functions. Since the power in the tracks is no longer "turned off", headlights remain on although the train is standing still. Or the diesel motor continues to rumble at an idling speed until you turn it off. More and more digital H0 locomotives have controllable functions such as long-distance headlights, exhaust fans, smoke generators or sound effects circuits for even greater operating enjoyment. In 1 Gauge smoke generators, steam or diesel sound effects, bells, locomotive horns, whistles or headlights can be controlled, and even Maxi locomotives can have up to three controllable functions with the high-efficiency decoder that can be retrofitted into them.

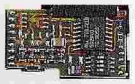
DELTA



6603 DELTA Module.
Electronic component for converting conventional Märklin H0 locomotives to the DELTA multi-train control system. Suitable for locomotives with the Märklin standard motors (flat commutator motor or drum commutator motor). Locomotive can be operated with conventional transformer, DELTA Control, DELTA Station or Märklin Digital. Coding switches for settingthe mode of operation and the address for multi-train operation. Electronic direction reversing. Locomotive headlights turned on when the unit is in motion and change over with the direction of travel. Dimensions 36 x 21 x 4 mm (1-7/16″ x 13/16″ x 3/16″).

The manufacturer warranty is covered only when the DELTA modules are installed by an authorized Märklin dealer.

DELTA



66031 DELTA Module with Auxiliary Function.
Electronic component for converting conventional Märklin H0 locomotives to the DELTA multi-train control system. Suitable for locomotives with the Märklin standard motors (flat commutator motor or drum commutator motor), specially for locomotives with Märklin TELEX couplers. Locomotive can be operated with conventional transformer, DELTA Control, DELTA Station or Märklin Digital. Coding switches for setting the mode of operation and the address for multi-train operation. Electronic direction reversing. Auxiliary function (example: TELEX couplers) can be turned on and off when the direction is changed twice. Locomotive headlights turned on when the unit is in motion and change over with the direction of travel.



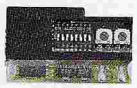
6081 c 81 Decoder.
Decoder for H0 locomotives with pickup shoe and permanent magnet motor. Can be controlled with the Control Unit (6021). 1 locomotive function. Can be coded for 80 different locomotive addresses. Dimensions 36 x 21 x 9 mm (1-3/8″ x 13/16″ x 3/8″).



60901 High-Efficiency Propulsion Set.
Consists of locomotive decoder and high-efficiency motor as well as installation hardware for converting most Märklin H0 locomotives with drum commutator motors to the current high-efficiency propulsion system. The electronic circuit has a total of 4 controllable functions. The "function" output is intended for the locomotive's headlights. The "f1" and "f2" outputs can be used for other functions such as TELEX couplers or a smoke unit. The "f4" function allows you to turn the controlled motor functions off for easier switching of cars. The "f1", "f2" and "f4" functions can be controlled only with the Control Unit (6021), a Control 80 f locomotive controller connected to this central unit, or the Interface. The electronic circuit in this set allows you to adjust maximum speed as well as acceleration and braking delay. Controlled motor functions under different load conditions such as on ascending and descending grades. Can be coded for 80 different locomotive addresses. The "function" and "f1" functions are turned on when the locomotive is operated conventionally with AC power. Decoder dimensions 36 x 21 x 9 mm (1-3/8″ x 13/16″ x 3/8″).



6080 c 80 Decoder.
Decoder for Märklin H0 locomotives with alternating current motor. Can be controlled with the Control Unit (6021). 1 locomotive function. Can be coded for 80 different locomotive addresses. Dimensions 36 x 21 x 9 mm (1-3/8″ x 13/16″ x 3/8″).



60902 High-Efficiency Electronic Circuit.
High-efficiency decoder for converting Märklin H0 locomotives with built-in 6090 high-efficiency propulsion to the new version with more functions. The electronic circuit has a total of 4 controllable functions. The "function" output is intended for the locomotive's headlights. The "f1" and "f2" outputs can be used for other functions such as TELEX couplers or a smoke unit. The "f4" function allows you to turn the controlled motor functions off for easier switching of cars. The "f1", "f2" and "f4" functions can be controlled only with the Control Unit (6021), a Control 80 f locomotive controller connected to this central unit, or the Interface. This electronic circuit allows you to adjust maximum speed as well as acceleration and braking delay. Controlled motor functions under different load conditions such as on ascending and descending grades. Can be coded for 80 different locomotive addresses. The "function" and "f1" functions are turned on when the locomotive is operated conventionally with AC power. Decoder dimensions 36 x 21 x 9 mm (1-3/8″ x 13/16″ x 3/8″).

The manufacturer warranty is covered only when the 60901 high-efficiency propulsion set, the 60902, 6095, 60952, and 60955 high-efficiency decoders, and the 60960 function decoder are installed by an authorized Märklin dealer.

Important Information!

Märklin digital decoders and components are complex electronic systems designed for Märklin models. We can guarantee compatibility and functional reliability only when original Märklin parts and components are used.

The warranty becomes invalid if non-original Märklin parts or other makes of parts not authorized by Märklin are used.

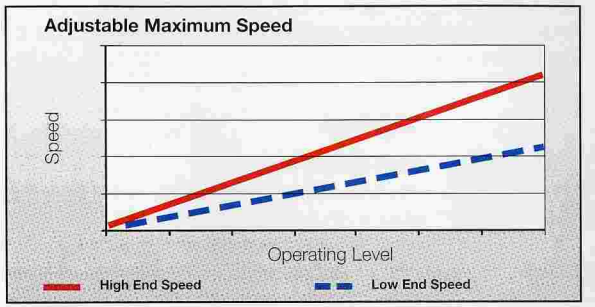
60955 Maxi High-Efficiency Electronic Circuit.
High-efficiency decoder for converting single-motor Maxi locomotives to the high-efficiency propulsion system. This electronic circuit has a total of 4 controllable functions. The "function" output is intended for headlights. The "f1" and "f2" outputs can be used for other functions such as a sound system or a smoke generator. The "f4" function enables you to turn off the load-dependent speed control feature for easier switching maneuvers. The "f1", "f2" and "f4" functions can be turned on and off only with a Control Unit (6021) or with a Control 80 f locomotive controller or an Interface connected to this central unit. This electronic circuit offers the potential to adjust maximum speed as well as acceleration and braking delay. Built-in load-dependent speed control for different load situations such as ascending and descending grades. Can be coded for 80 different locomotive addresses. When operated with AC power or with the 6607 DELTA Station, the "function" and "f1" functions are turned off. Decoder dimensions 43 x 25 x 8 mm (1-11/16″ x 1″ x 5/16″).

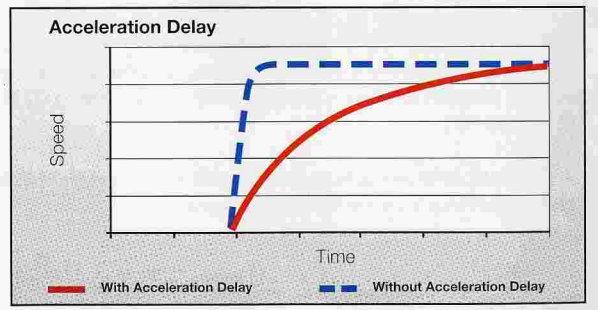
60960 c 96 Function Decoder.
Decoder for controlling up to 4 auxiliary functions (f1 to f4) from the Control Unit (6021), a Control 80 f locomotive controller connected to this central unit, or the Interface. This function decoder can either be installed in locomotives along with a locomotive decoder or by itself in cars. Can be coded for 80 different addresses.

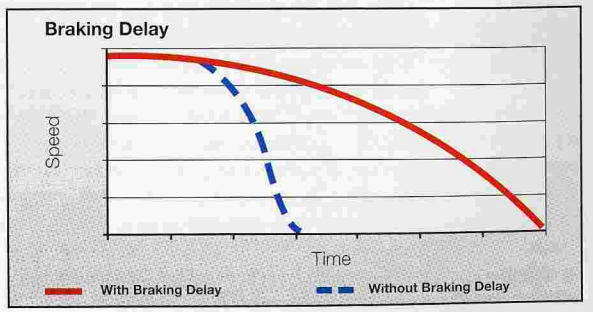
When sufficient space is available, any Märklin digital locomotive or any locomotive with a built-in DELTA module can be equipped with additional controllable functions such as a smoke unit or TELEX couplers (where the locomotive already has these couplers). On passenger cars interior lighting can be a controllable function.

The diagrams present the principles of this propulsion concept.

Prototypical operating characteristics
Märklin's high-efficiency propulsion offers even more prototype realism. It can be used to set the acceleration and braking characteristics as well as the maximum speed for the locomotive. In addition, the electronics in this propulsion can recognize deviations in the motor rpm and adjust it accordingly. This gives the locomotives outstanding slow speed characteristics and almost constant speed on ascending or descending grades.







Controlling accessories digitally

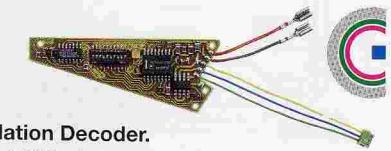
märklin digital

The great advantage of controlling turnouts, signals and other accessories digitally is in the ease of operation and in the manner in which you can monitor the layout. On conventional layouts miles of wiring to the area of operation are often required, while with digital control only short control wires from the accessory to the decoder are needed. The decoders are installed out in the area of the accessories to which they are assigned. Each decoder can be used with any four accessories. The turnout decoders for C Track are clipped in and connected up directly under the roadbed – the control signals come through the track; it doesn't get any easier than this. The Keyboard is used to control the accessories such as turnouts and signals, and the settings for the latter are clearly indicated by LEDs. Four decoders are assigned to each Keyboard.

The k 83 decoder controls four double solenoid accessories such as turnouts or signals. The k 84 decoder is used to switch track power circuits, lighting circuits or function models. The k 73 decoder is an alternative to the k 83 decoder for mobile layouts with M track. For the C Track system there is an installation decoder that is connected to the turnout mechanism.



6040 Keyboard.
Controller for 16 solenoid accessories. LEDs show settings for turnouts and signals. Coding switches for setting the Keyboard address (1–16). Memory storage for the last valid turnout and signal settings after power is shut off.
Can be connected to Control Unit or another Keyboard or Memory. Dimensions 135 x 120 x 80 mm (5-1/2″ x 4-7/8″ x 3-1/2″).



74460 Digital Installation Decoder.
Can be retrofitted to all C Track turnouts with an electric mechanism. Electrical connections are made with plug contacts. Address can be set with coding switches.



6089 Adapter s 88.
Longer connecting cable for s 88 decoder.Length 200 cm (78-3/4″).

Routes at the push of a button

Many switching procedures repeat themselves in model railroad operations. Example: For a train to enter a station track, you must always switch the same entry turnouts and signals.
These routine switching sequence can be recorded, stored and called up again in the Memory, just as you would with a tape recorder. Up to 24 routes, each with up to 20 setting commands for turnouts and signals, can be set up automatically at the push of a single button in this manner. A maximum of four Memories can be used on a layout. Automatic block operations or reliable control of a staging yard can be realized with the Memory and the s 88 feedback module decoder.



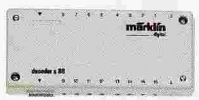
6043 Memory.
Route controller. Several solenoid accessories can be switched with the press of a button. Stores in each of 24 routes the position commands for up to 20 turnouts or signals. A maximum of 4 Memory units can be used with a Control Unit. Position commands are entered with a Keyboard or Interface. Operation is also possible without the accessory controllers. Routes currently called up indicated by LEDs. The routes and the last current status for the unit remain in memory storage after the power is shut off. Suitable for automatic operation. Dimensions 135 x 120 x 80 mm (5-1/2″ x 4-7/8″ x 3-1/2″).



6083 k 83 Decoder.
Decoder for controlling turnouts, signals or uncoupler tracks. Can be activated by Keyboard, Memory or Interface. Coding switches for setting decoder address. Four outputs for solenoid accessories. Dimensions 100 x 54 x 22 mm (4″ x 2-1/8″ x 7/8″).



6084 k 84 Decoder.
Decoder for turning on/off continuous current for lighting circuits or motors in accessories. Can be activated by Keyboard, Memory or Interface. Four different outputs. Coding switches for setting decoder address. Dimensions 100 x 54 x 22 mm (4″ x 2-1/8″ x 7/8″).



6088 s 88 Decoder.
Feedback module for contact generators on digital model railroad layouts. Can be connected to the Memory or Interface with the cable included with this unit. Connector socket for additional s 88 decoders.
16 inputs for contact generators. Dimensions 124 x 54 x 23 mm (4-7/8″ x 2-1/8″ x 29/32″).

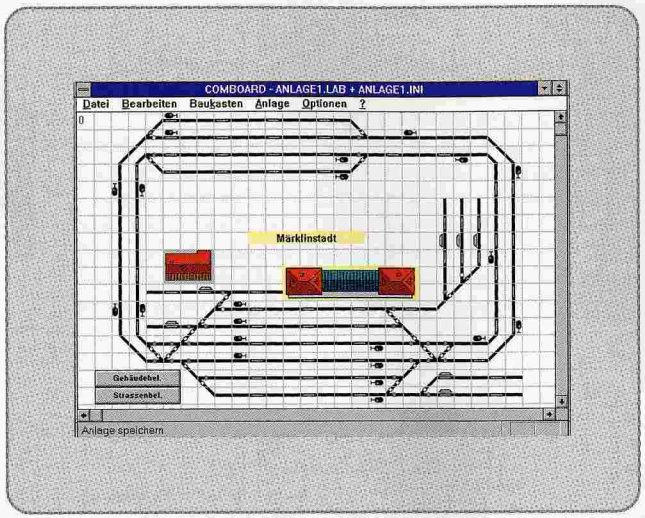
72441 Signal Module.
Signal mechanism with integrated circuit for controlled stops of digital locomotives with highefficiency propulsion. Connections for a 2 position color light signal, for the 3 track blocks required for safe braking of the locomotive. This signal module can be controlled with either a k 83 decoder or a conventional 7272 control box. Dimensions 100 x 54 x 22 mm (3-15/16″ x 2-1/8″ x 7/8″).

The signal module requires 3 isolated track blocks in the area of the signal. This first block is a transition area and should be as long as a pickup shoe (approx. 70–90 mm / 3″–4″). The second block is the actual braking area in which the locomotive will be brought to a controlled stop. The length of the braking block is determined by the setting for the braking delay on the locomotive's decoder. This second block should be at least 40 to 50 cm / 16″ to 20″ long. The third block is a safety block in which the track voltage is turned off as is down in simple signal blocks. This keeps the locomotive from accidentally overshooting the signal.The signal module is suitable for use with color light and semaphore signals.

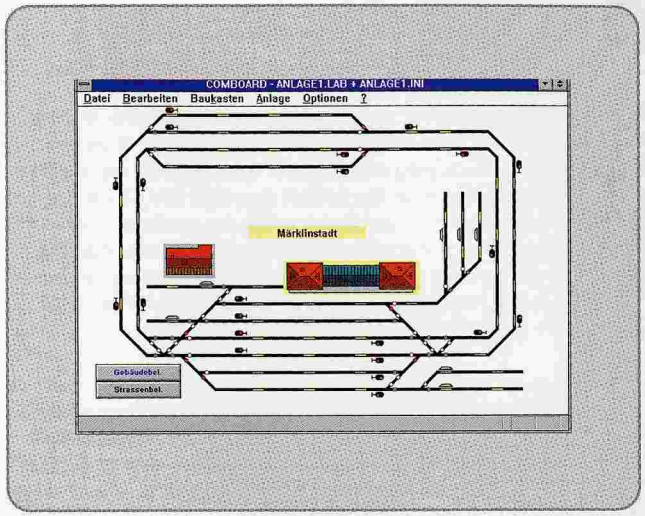
Locomotives with built-in, Digital or DELTA electronic circuits without a control feature (i.e. acceleration / braking delay) come to a stop partially in the braking area or not until the safety area is reached. A simple solution to this situation is not possible. For that reason we do not absolutely recommend using the 72441 signal module together with propulsion systems without a control feature.

A Computer Game That Means Something

With the COMBOARD track diagram control board program you can control your Märklin digital layout from the monitor of your personal computer. Turnouts, signals and other solenoid accessories are operated with the simple click of a mouse. You can also control entire routes, blocks and staging yards, as well as working models such as turntables, transfer tables and rotary cranes. The control status is indicated at all times; you always have an overview of the system. The modular setup of COMBOARD allows expansion with functions for new solenoid accessories or control for locomotives (now in the planning stage). This program is suitable for 1 Gauge and all H0 track systems (K, M and C Track).



▲ COMBOARD in Editor Mode. 640 x 480 pixel resolution.



▲ COMBOARD in Program Mode with block operation and staging yard.

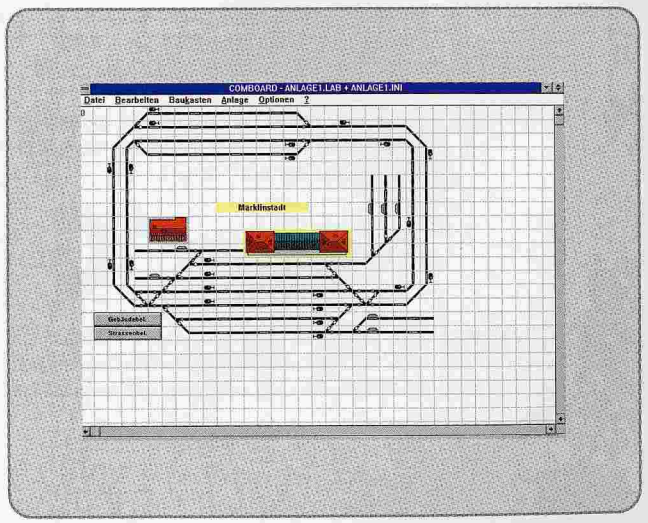


6051 Interface.
Link to a computer. 80 locomotive addresses and 256 accessories can be controlled though this unit. Connector for s 88 (6088) feedback module decoder. Output features are the same as the previous 6050 Interface. A cable for a computer (RS-232-C, 9 pole connection) and a diskette with demo programs are included with this unit. Can be connected to Control Unit or Control 80 f. Dimensions 135 x 120 x 80 mm (5-1/2″ x 4-7/8″ x 3-1/2″).

60511 "COMBOARD" Track Diagram Control Board.
Software program for controlling solenoid accessories on a digital model railroad layout with a computer.

Hardware requirements:
- Märklin digital central unit (Motorola format)
- Interface (6050 or 6051)
- s 88 decoder (6088) only for operation with feedback function.
- Computer with MS Windows 3.1 operating system, VGA graphics, (minimum 640 x 480 dots, 16 colors), CD ROM drive, mouse

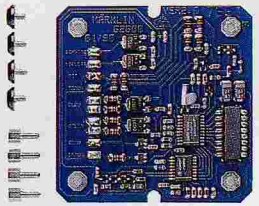
Program features:
- Modular setup of a track diagram control board on the computer screen. Control using the keyboard and a mouse.
- Easy switching of turnouts and signals
- Ability to switch routes
- Potential for track occupation indicator
- Block operation
- Staging yard control
- Can be used to operate turntable, transfer table and digital rotary crane
- German text



▲ For comparison, the upper track diagram control board shown with 640 x 480 and 800 x 600 pixel resolution.

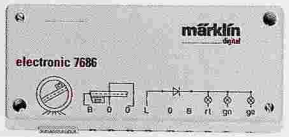
Digital Working Models

The icing on the cake for model railroad operations is the digital control of working models. When the 7051 rotary crane is equipped with the 7652 digital retrofit kit, the speed for lowering and raising the load and for rotating the cab and boom can be varied with a fine touch. This makes it possible to position the rotary crane very precisely.



7652 Digital Retrofit Kit for Rotary Crane.
Consists of crane decoder and all necessary hardware. For converting the 7051 remote control rotary crane (see page 281) to digital operation.

When the 7286 turntable is converted with the 7687 digital retrofit set, each track can be selected directly with automatic indexing or the locomotive can be turned 180 degrees automatically, this in addition to the usual functions for the turntable.



7687 Digital Retrofit Set for 7286 Turntable.
Enables easy control of the 7286 turntable (see page 279) with track indexing in the Digital system. Deck turns to the right/left in single steps and continuously. Consists of electronic control circuit with digital decoder, all necessary hardware and complete instructions.

All of these models can be used with the 6021 Control Unit only

märklin digital

List Of Current Digital Components

Item no.	Description	H0 ≈	1
6002	Transformer	•	•
6017	Booster	•	•
6021	Control Unit	•	•
6036	Control 80 f	•	•
6038	Adapter 180	•	•
6039	Adapter 60	•	•
6040	Keyboard	•	•
6043	Memory	•	•
6051	Interface	•	•
60511	COMBOARD	•	•
6080	c 80 decoder	•	•
6081	c 81 decoder	•	•
6083	k 83 decoder	•	•
6084	k 84 decoder	•	•
6088	s 88 decoder	•	•
6089	Adapter s 88	•	•
60901	c 90-1 decoder	•	
60902	c 90-2 decoder	•	
60955	Maxi c 95 Maxi decoder		•
60960	c 96decoder	•	•
6603	DELTA-module	•	•
66031	DELTA-module	•	
72441	Signal module	•	•
74460	C Track decoder	•	

The future has already begun.

Mini-club enthusiasts can also travel into the future with the new ICE 3, which will look particularly impressive on the long straights and gentle curves typical of Z Gauge. Likewise new are the bilevel cars for regional passenger service and many freight cars. There is a very attractive train set with the class 55 and lovingly designed German State Railroad cars for the anniversary "75 Years of the DRG". You'll also be pleased with the new gift set for the 140th anniversary of Märklin's birthday. The cubic shape of the packaging for this set will attract your attention to the unusual contents.



Model Size Z
Gauge 6.5 mm (1/4″)
Scale 1:220



Mini-club's special features.

Mini-club is a world in itself, and a complete system at that leaving almost nothing to wish for. With a scale of 1:220, mini-club has been the smallest mass-produced electric train system in the world and still is. This scale offers you the freedom to do things when building a layout that are not possible at all or only with limitations in the larger gauges.

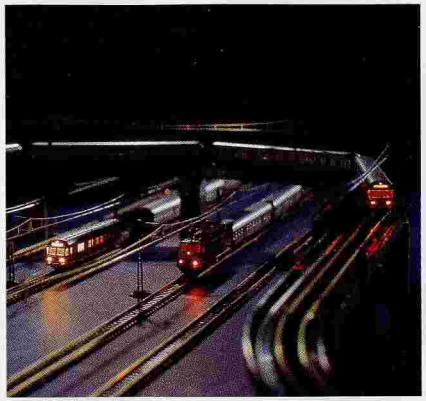


Small and original
In suitcases and aquariums, in display cases and drawers, on hats and records – a mini-club layout can be placed practically everywhere. With its smallest radius at only 145 millimeters (5-3/4"), there are no limits on your imagination - and hence the presentation of the most original layout at many is a part of the program at many mini-club meets.



Sweeping and realistic
With mini-club you can enjoy prototypically long train compositions in an almost ideal fashion on layouts with sweeping main lines.

Comprehensive system technology
Mini-club occupies a special position at Märklin in the area of system technology, because mini-club is operated with 2-rail DC power. Motors developed just for mini-club have very small dimensions and enable the tiny locomotives to run. Naturally, all of the necessary system components are part of the assortment such as a power pack, control boxes, and universal relay.



Functions that are right for model railroading
In mini-club the same things work that are offered in larger gauges. The headlights on most of the locomotives and on the cab control cars change with the direction of travel, with headlights and marker lights, depending on the model. Mini-club has real working catenary and signals with train control features.



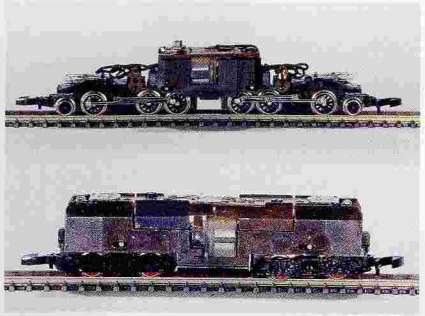
A complete track system
With three radii for curves, curved turnouts, 13° wide radius turnouts and double slip switches, with flex track, isolating tracks, circuit tracks, and uncoupler tracks, as well as a reverse loop set, any time of track layout can be made.



Prototypical proportions
It's an art with our model builders to translate the large prototypes into the small scale in such a way that the typical features are shown to their best advantage. Even in the scale of 1:220 mini-club locomotives and cars reproduce the proportions and essential details of the prototype. Hefty power, elegant dynamics, bizarre originality, or modern design – mini-club models are right on the mark.

Metal construction for frame and body
A metal frame forms a sturdy foundation on all of the locomotives. The body is extra fine in its execution and is made of high quality plastic or diecast metal. We use this expensive process for steam locomotives because the high level of body weight improves the tractive effort and running characteristics. On diesel and electric locomotives a ballast weight increases the tractive effort.

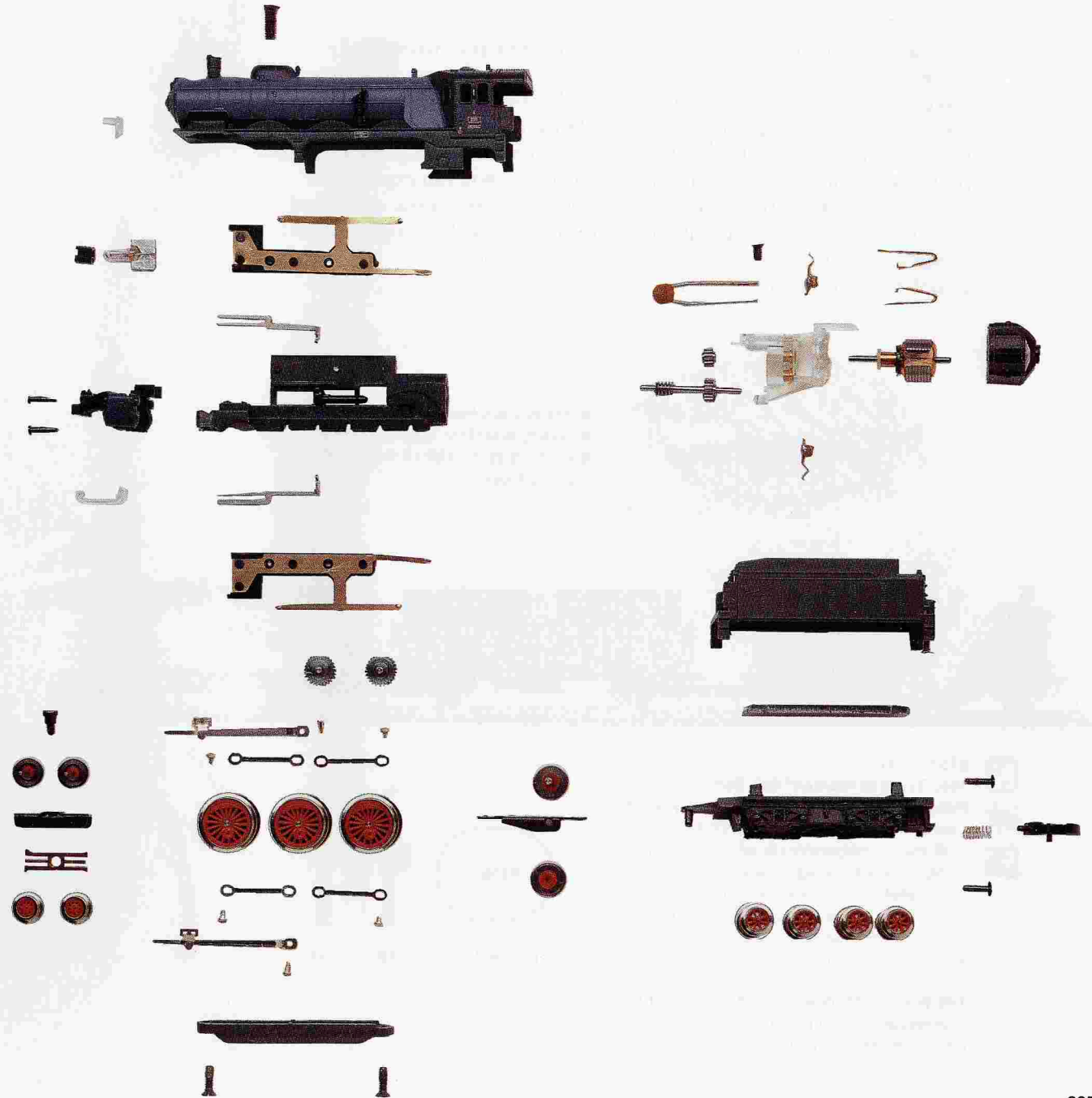
mini-club



Robust mechanisms
720 kilometers without stopping – this means the world record of 1,219 hours for continuous running for a 112 millimeter (4-7/16") long mini-club locomotive, or over 50 days without stopping – recorded in the Guiness Book of Records. The class 03 with six express train passenger cars behind it proves the kind of reliability these small motors are working with.



Working industrial models
Mini-club doesn't take a back seat to the larger gauges in its industrial models either. The railroad grade crossing with automatic gates ensures safe train operations. The remote controlled turntable or transfer table enables a variety of operations in the maintenance facility. The transfer table even works with catenary operation.

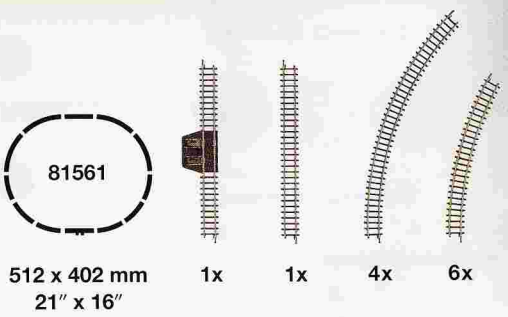


Cubic, practical, super fine.

This gift set is a great credit to its name. For with its beautiful bow this elegant cube is dressed up for spontaneous gift giving. And because it does not immediately betray its contents, it will make the recipient curious and increase the surprise. After it is opened, the practical side of this gift is revealed, namely a complete freight train with tank locomotive and two specially designed freight cars as well as an oval of track and a power pack. All of this makes your gift idea super fine – for immediate setup and operation. Of course, you can expand this original gift set as you desire with the mini-club SET program or with your own ideas.

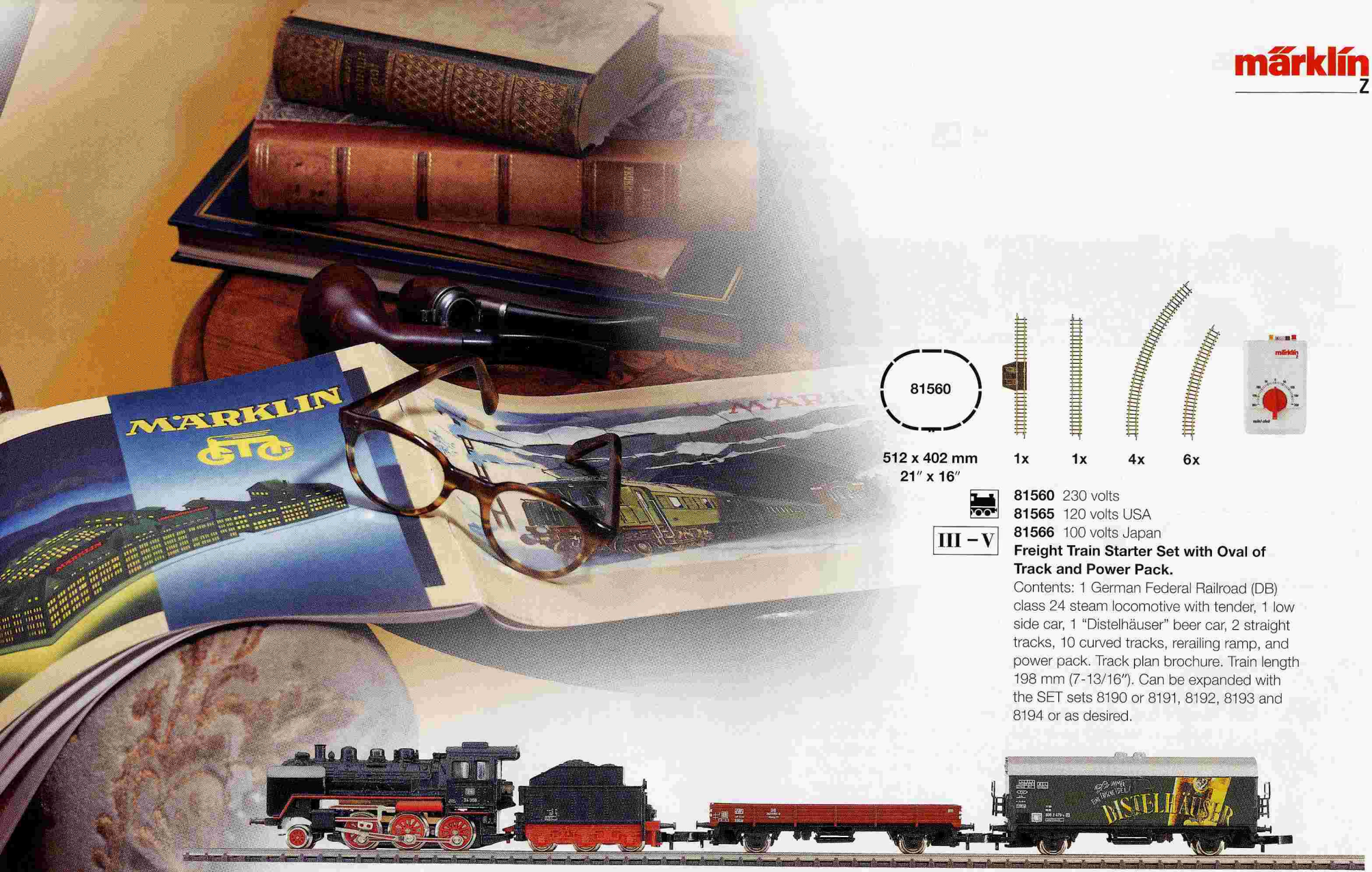


- *Already packed as a gift.*
- *Cubic, practical, super fine.*
- *A handy format at 18.5 cm (7-5/16″) on all sides.*



81561 230 volts
"140 Years of Märklin" Gift Set:
Freight Train with Oval of Track and Power Pack.
Contents: 1 class 74 tank locomotive, 1 gondola with a gift load, 1 refrigerator car with advertising on its sides, 2 sections straight track, 10 sections curved track, rerailer and power pack. Track plan brochure. Train length 169 mm (6-5/8″). Can be expanded with the SET track extension sets 8190, 8191, 8192, 8193, and 8194 or according to your own plans.

140 Years of Märklin. The 81561 starter set is being produced for this occasion in a one-time series only in 1999.



81560 230 volts
81565 120 volts USA
81566 100 volts Japan

III – V

Freight Train Starter Set with Oval of Track and Power Pack.

Contents: 1 German Federal Railroad (DB) class 24 steam locomotive with tender, 1 low side car, 1 "Distelhäuser" beer car, 2 straight tracks, 10 curved tracks, rerailing ramp, and power pack. Track plan brochure. Train length 198 mm (7-13/16″). Can be expanded with the SET sets 8190 or 8191, 8192, 8193 and 8194 or as desired.

Freight train models are illustrated full size

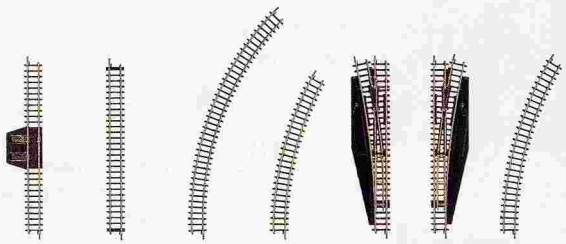
Starter Sets

81780 230 volts
Freight Train Starter Set with Track Layout and Power Pack.
Contents: 1 German Federal Railroad (DB) class 41 freight locomotive with tender. 1 type E 037 gondola, 1 "BP" oil tank car, 1 type Klms 440 low side car with tarp cover, 1 "Warsteiner" beer car, 1 type Pwg 012 freight train baggage car. 12 sections straight track, 12 sections curved track, 2 electric turnouts, rerailing ramp, control box, distribution strip, wire, plugs, sockets, and power pack.





1062 x 402 mm
42″ x 16″



1x 11x 4x 6x 1x 1x 2x



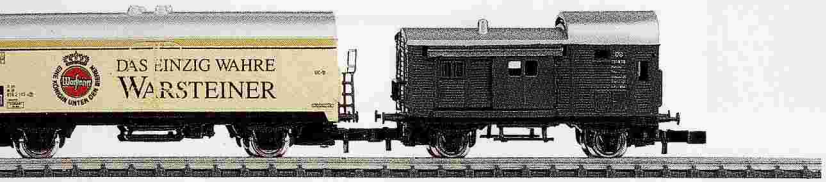




81861 230 volts
Freight Train Starter Set with Large Track Layout and Power Pack.
Contents: 1 German Railroad, Inc. (DB AG) class 120.1 general purpose locomotive with the new DB emblem. 1 container flat car loaded with a 40 ft. container lettered "Im Dienst für den Umweltschutz" ("In the service of environmental protection"). Container is removable. 1 four-axle type Spns stake car, "DB Cargo" version. Loaded with timber. 1 four-axle "Aral" petroleum oil tank car. 1 four-axle type Eaos gondola, "DB Cargo" version. 1 sliding wall boxcar. 20 sections straight track, 12 sections curved track, 1 double slip switch, 3 electric turnouts, 3 track bumpers, rerailer, control box, distribution strip, wire, plugs, sockets and power pack. Track plan brochure. Train length 463 mm (18-1/4″). Can be expanded with the 8192 and 8193 SET track extension sets or as desired.

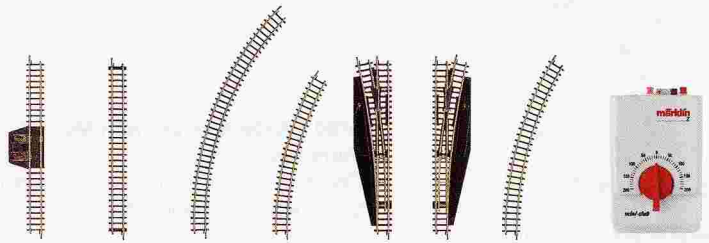


Track plan brochure. Train length 369 mm (14-17/32″). Can be expanded with the SET sets 8192, 8193 and 8194 or as desired.





1062 x 402 mm
42″ x 16″

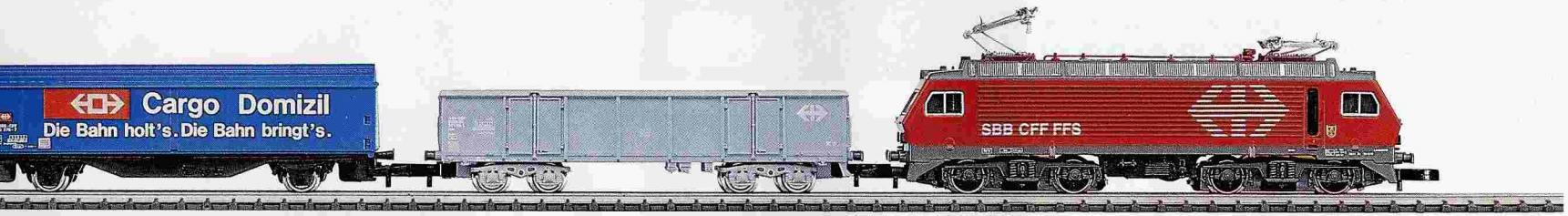


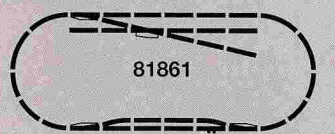
1x 11x 4x 6x 1x 1x 2x

8185 230 volts
Freight Train Starter Set with Track Layout and Power Pack.
Starter set with Swiss locomotive and cars.

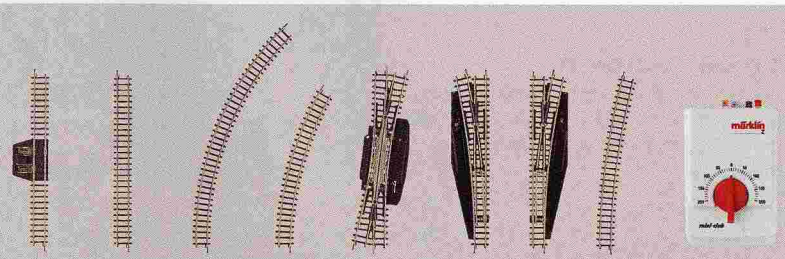
Contents: 1 Swiss Federal Railways (SBB) class Re 4/4^{IV}, 1 type Eaos gondola, 1 "Cargo Domizil" sliding wall boxcar, 1 "Shell" tank car, 12 sections straight track, 12 sections curved track, 2 electric turnouts, 1 Wintersdorf station kit, control box, distribution strip, wire plugs, sockets, and power pack. Track plan brochure. Train length 290 mm (11-3/8″).

Can be expanded with the SET sets 8192, 8193, and 8194 or as desired.





1062 x 402 mm
42″ x 16″



1x 19x 4x 6x 1x 1x 2x 2x



SET Extension Program

The SET extension set program is a progressive system with which you can expand the track layouts from the starter sets in steps. The E 8190 or E 8191 is used to expand the 81560/81565 set. You can then systematically expand in any sequence desired with the T1 8192, T2 8193, and T3 8194 track extension sets.

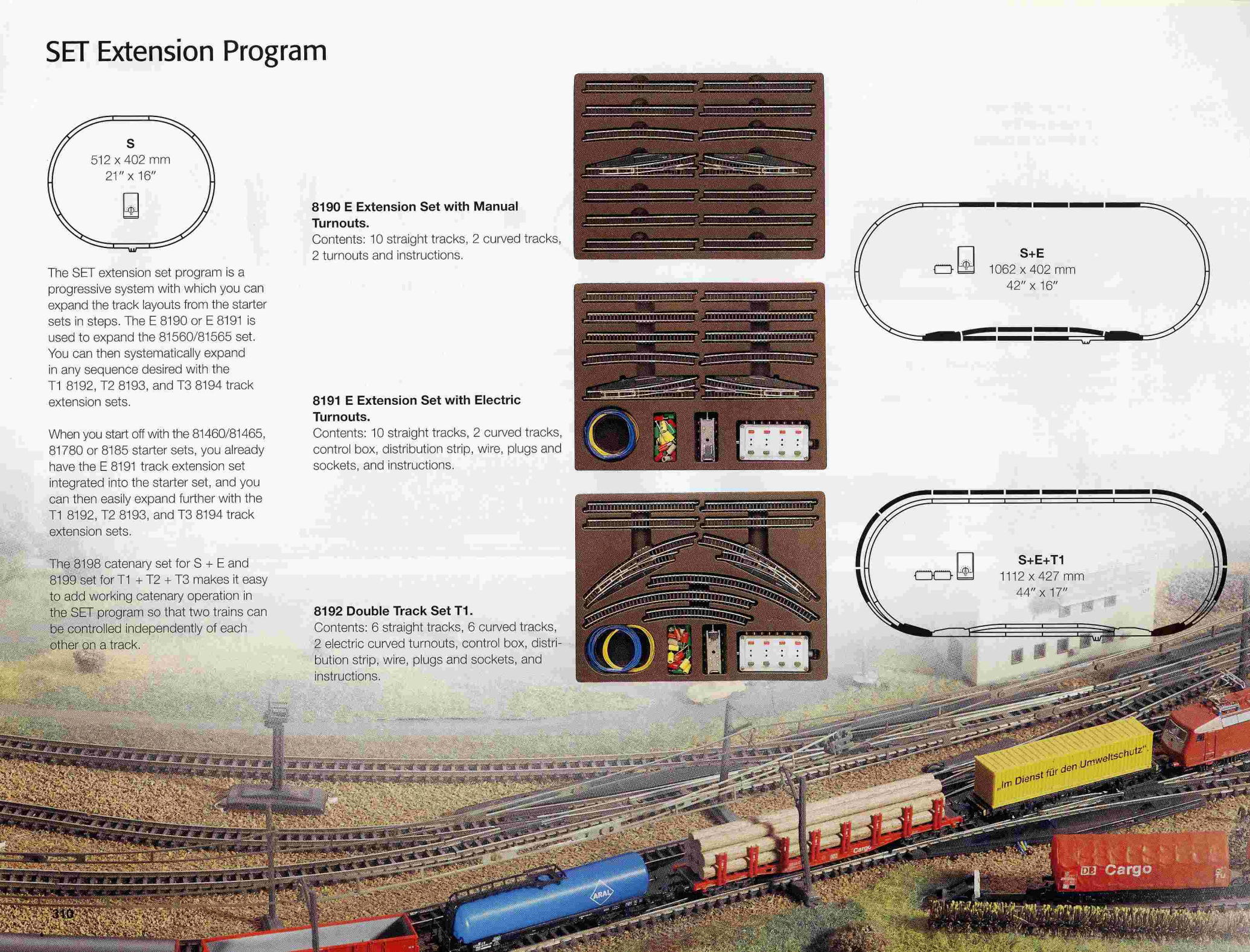
When you start off with the 81460/81465, 81780 or 8185 starter sets, you already have the E 8191 track extension set integrated into the starter set, and you can then easily expand further with the T1 8192, T2 8193, and T3 8194 track extension sets.

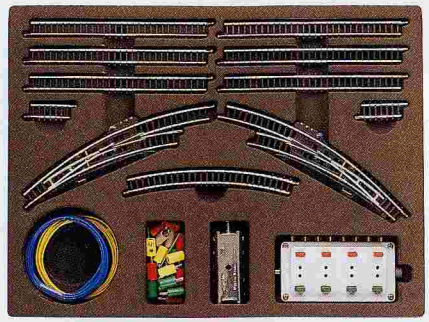
The 8198 catenary set for S + E and 8199 set for T1 + T2 + T3 makes it easy to add working catenary operation in the SET program so that two trains can be controlled independently of each other on a track.

8190 E Extension Set with Manual Turnouts.
Contents: 10 straight tracks, 2 curved tracks, 2 turnouts and instructions.

8191 E Extension Set with Electric Turnouts.
Contents: 10 straight tracks, 2 curved tracks, control box, distribution strip, wire, plugs and sockets, and instructions.

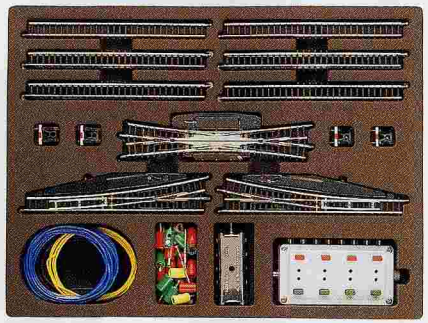
8192 Double Track Set T1.
Contents: 6 straight tracks, 6 curved tracks, 2 electric curved turnouts, control box, distribution strip, wire, plugs and sockets, and instructions.







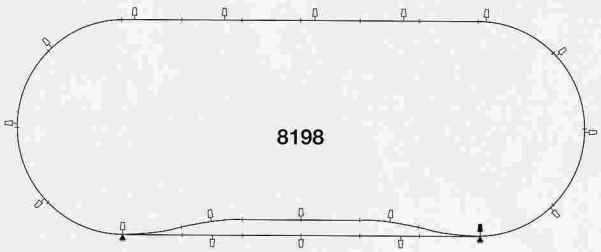
8193 Station Track Set T2.
Contents: 8 straight tracks, 2 curved tracks, 2 electric curved turnouts, control box, distribution strip, wire, plugs and sockets, and instructions.



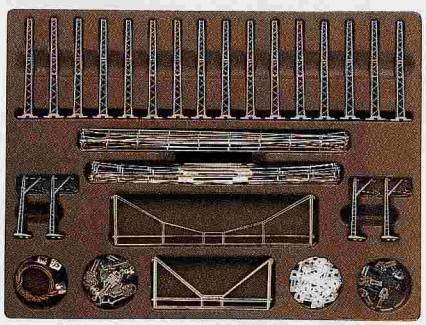


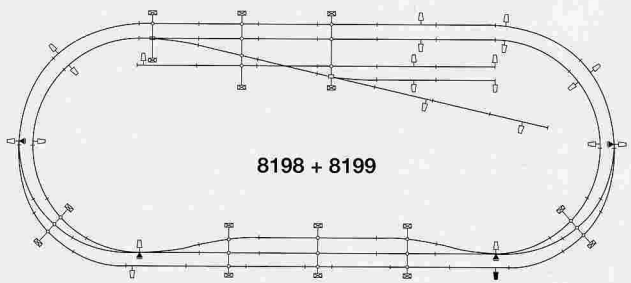
8194 Yard Track Set T3.
Contents: 10 straight tracks, 1 double slip switch, 2 electric turnouts, 4 track bumpers, control box, distribution strip, wire, plugs and sockets, and instructions.



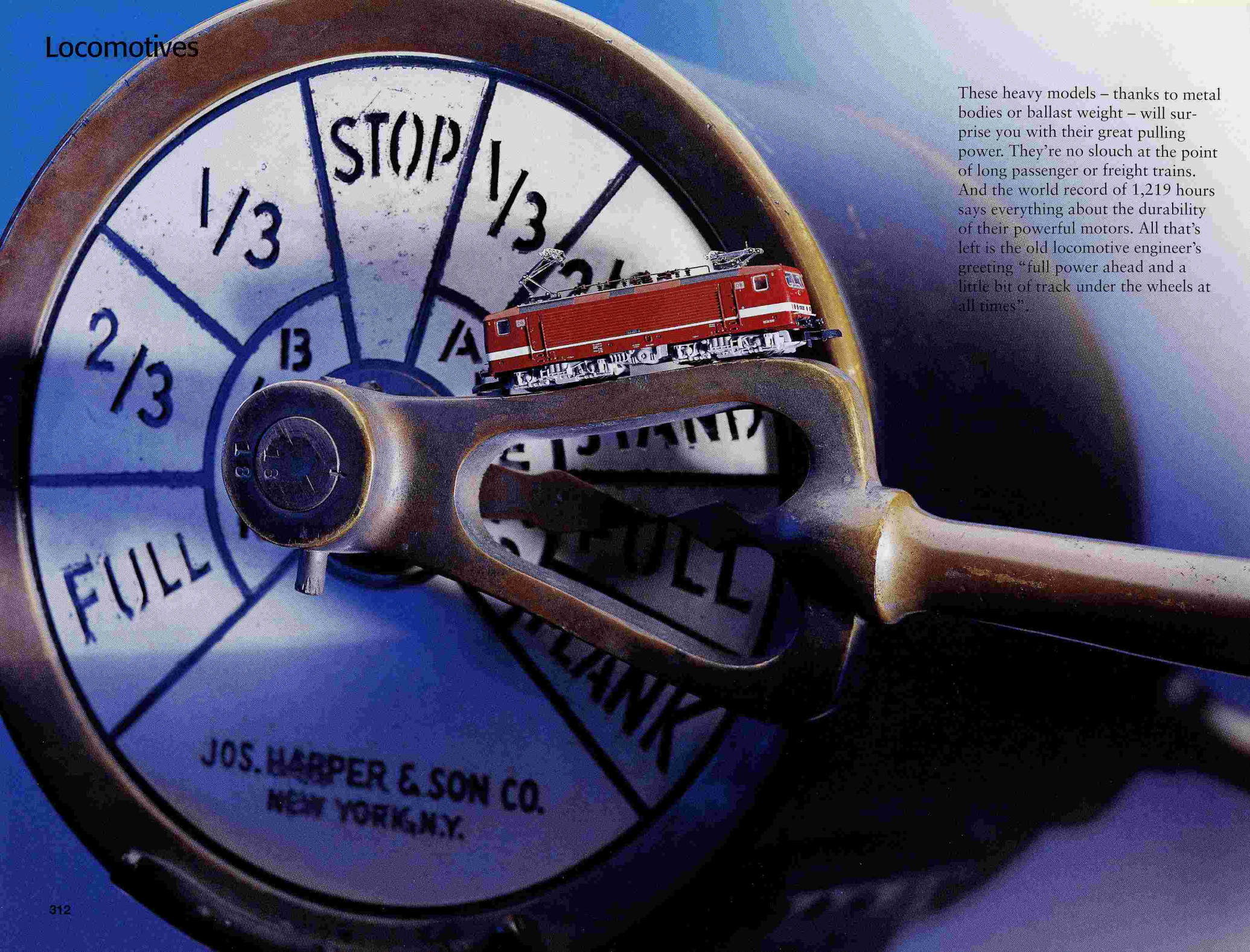


8198 Catenary Set for S + E.
Contains all parts needed to set up catenary on S + E layout. Contents: 19 catenary masts, 20 sections catenary wire, 8 insulators, 6 connecting springs and instructions.





8199 Catenary Set for T1 + T2 + T3.
Supplements 8198 for T1 to T3. Contents: 4 catenary masts, 16 tower masts, 30 sections catenary wire, 8 cross spans, 30 catenary wire insulators, 8 insulators, 6 connecting springs, 5 catenary terminal clips and instructions.



These heavy models – thanks to metal bodies or ballast weight – will surprise you with their great pulling power. They're no slouch at the point of long passenger or freight trains. And the world record of 1,219 hours says everything about the durability of their powerful motors. All that's left is the old locomotive engineer's greeting "full power ahead and a little bit of track under the wheels at all times".

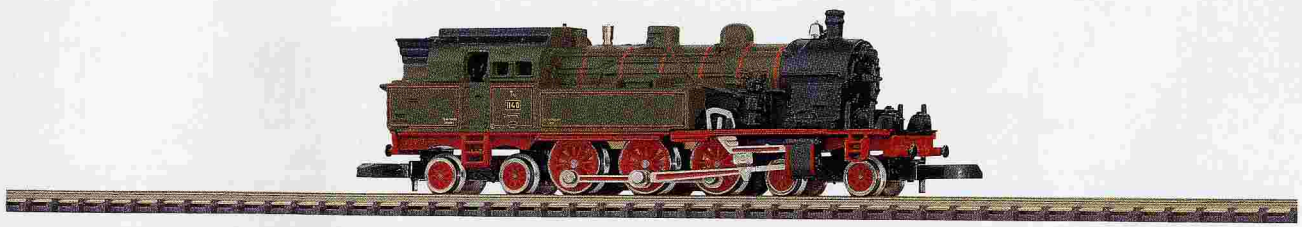


88180 Express Locomotive with Tender.
Royal Württemberg State Railways (K.W.St.E.) class C. All driving wheels powered. Length over buffers 110 mm (4-21/64″).

The class C express locomotive with a 4-6-2 wheel arrangement and a four-axle tender came into being at the start of this century, because the steam locomotives existing at that time were no longer adequate for the increasing demands on motive power, especially on grades such as the Geislingen Grade.

This elegant, rakish machine was lovingly named the "Schöne Württembergerin" ("Beautiful Lady of Württemberg") and was one of the most successful creations of its kind. The first locomotives were already in service by 1909. By 1921 the locomotive builder Maschinenfabrik Esslingen had delivered a total of 41 locomotives to the Württemberg State Railways.

The 87940, 87950 and 87960 Württemberg express passenger cars are an appropriate addition to the 88180 locomotive and can be found on page 337.



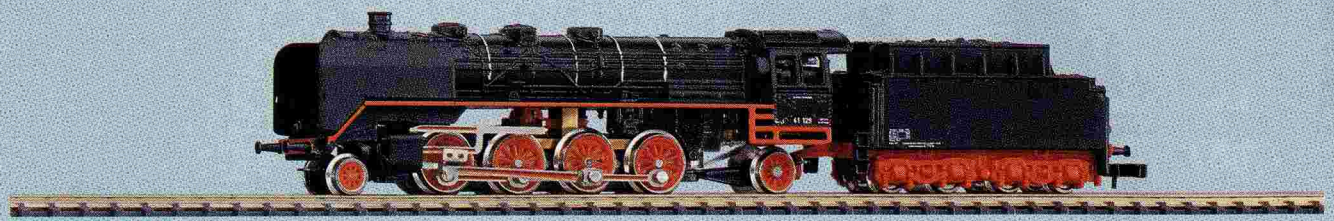
Models are illustrated full size



88061 Tank Locomotive.
Royal Württemberg State Railways (K.W.St.E.) class T 18. All driving wheels powered. Headlights with maintenance-free LEDs. Length over buffers 70 mm (2-3/4″).

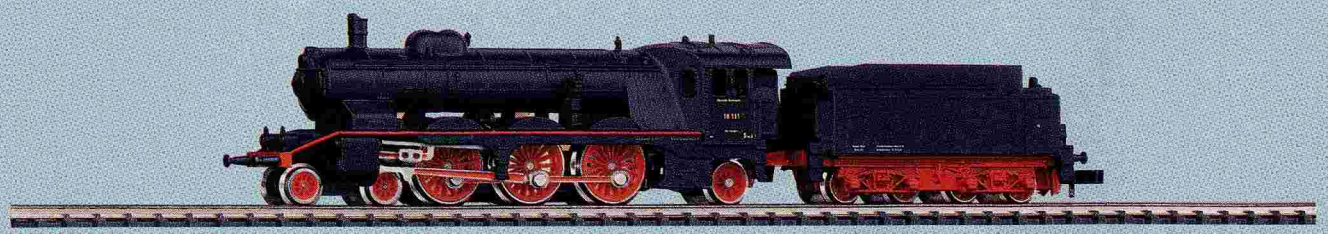
mini-club locomotives will not disrupt television/radio reception

mini-club locomotives should only be run with a Märklin 67011 power pack or with the power pack included in the starter sets.



II

88271 Freight Locomotive with Tender.
German State Railroad Company (DRG) class 41. All driving wheels powered. Length over buffers 112 mm (4-7/16″).

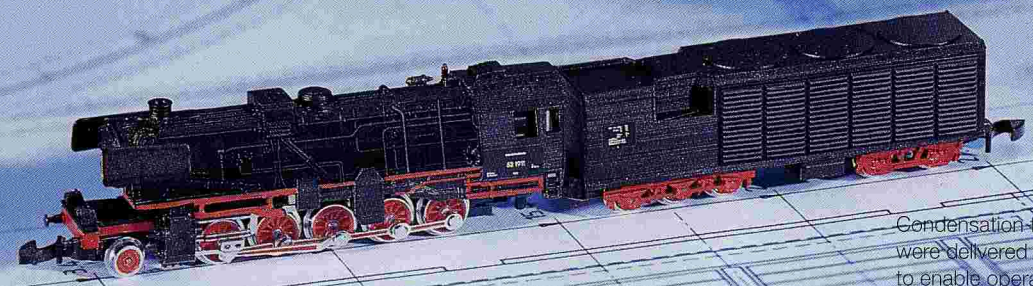


N II

88181 Express Locomotive with Tender.
German State Railroad Company (DRG) class 18.1. All driving wheels powered. Length over buffers 110 mm (4-5/16″).

The 87945 express train car set is the appropriate complement for the 88181 locomotive and can be found on page 338.

Please note the information on the Märklin Insider Club on page 65. Additional Insider models for 1999 in H0 can be found pages 66 and 112/113, and in and 1 Gauge on page 449 respectively.



Condensation tenders for the class 52 were delivered by Henschel starting in 1943 to enable operations on long routes where water was scarce. The first 137 class 52 locomotives procured by the German State Railroad Company came with the long, 5-axle type 3'2' T 16 Kon. condensation tender. The 41 locomotives that came later were equipped with a 4-axle variation of this tender. With the condensation technology the steam exhausted from the locomotive's cylinders was not released into the air as was customary with other units. The steam was routed to the so-called condensation tender by means of an oil separator. A turbine powered three axial cooling fans that cooled the steam and condensed it. The water derived from this could then be used to feed the boiler on the locomotive. This technology required a lot of work by the crews, but it made it possible to operate at distances of up to 1,200 kilometers (750 miles) without taking on water. After the war a large number of these locomotives were acquired by the German Federal Railroad, but were either rebuilt or retired by the mid 1950s. These locomotives were even in service in Poland, Belgium, and France. This mini-club model has the large 5-axle condensation tender. In addition to a number of changes on the locomotive's boiler, the cooling fans are represented prototypically and in the correct scale proportion on the tender, but they do not work. With a total length of 127 mm (5") it is the longest mini-club locomotive yet built by Märklin.

Highlight

- ***Locomotive body and condensation tender represent a new design for the most part.***
- ***Metal locomotive body and frame.***
- ***Scale with impressive dimensions even in mini-club.***
- ***With a length of 127 mm (5"), the longest mini-club steam locomotive built to date.***



N III

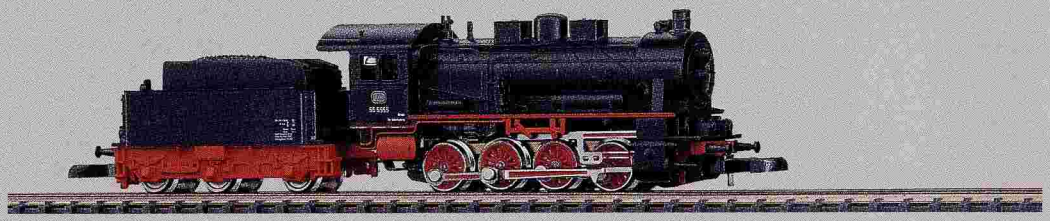
88835 Freight Locomotive with Condensation Tender.
German Federal Railroad (DB) class 52. All driving axles powered. Representation of the cooling fans on the tender. Length over buffers 127 mm (5").

The 88835 condensation tender locomotive is being produced only for Insider members in a one-time series in 1999.

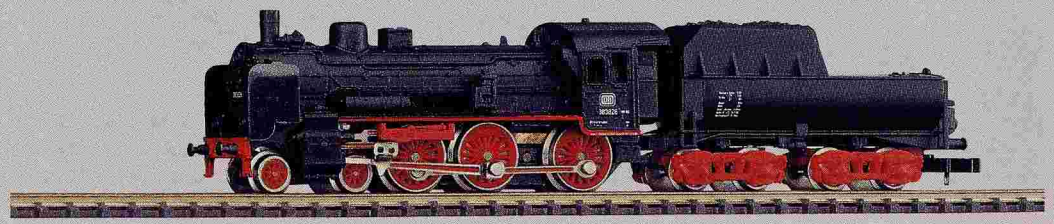
Steam Locomotives



88980 Freight Locomotive with Tender.
German Federal Railroad (DB) class 55[25]. All driving axles powered. Length over buffers 84 mm (3-5/16″).

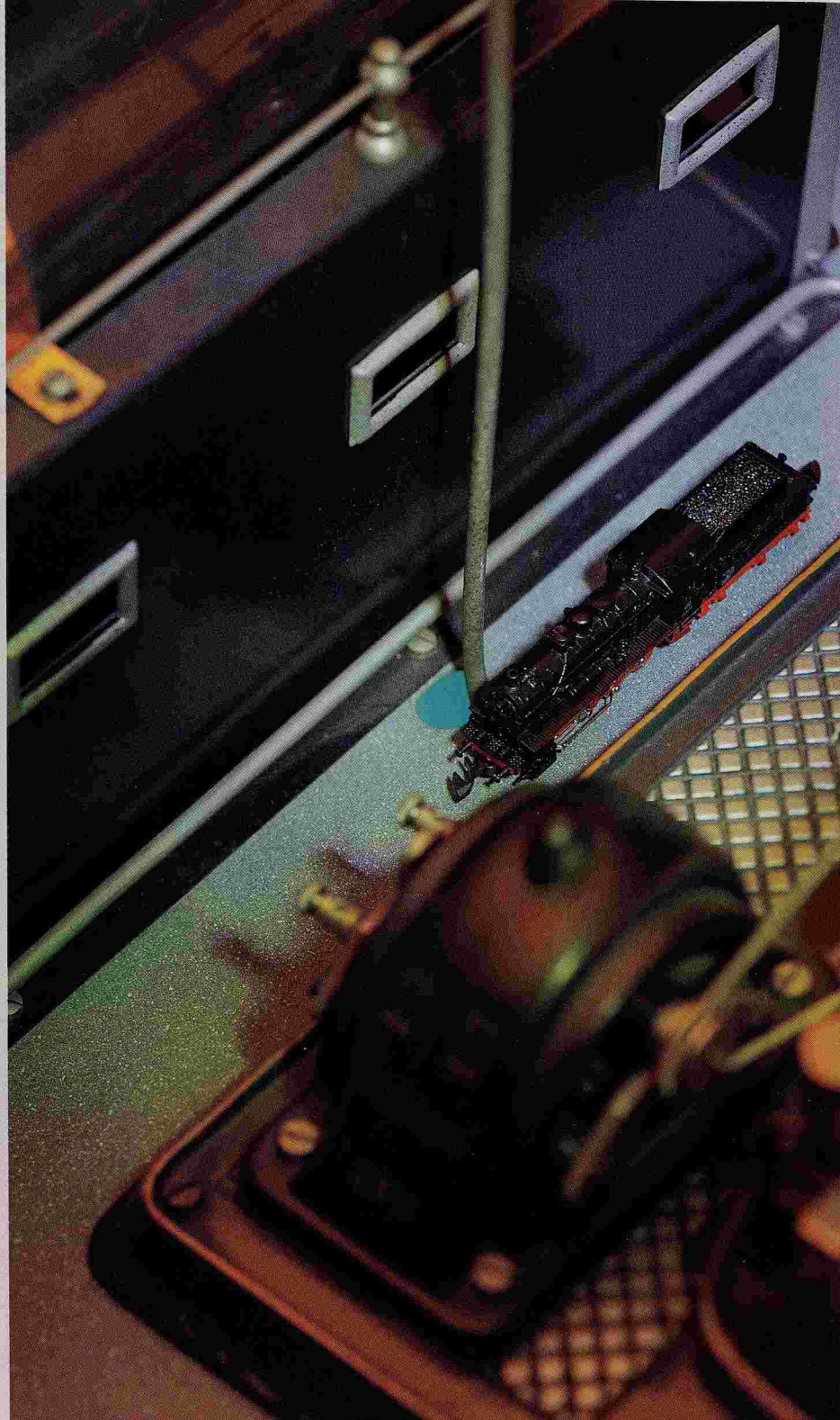


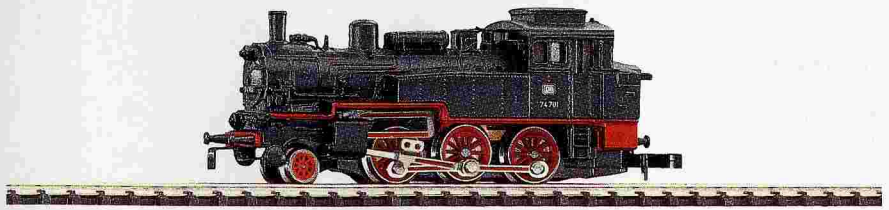
The class G 8.1 Prussian steam freight locomotives were a further development of the class G 8. The first locomotives were delivered in 1913. While something over 1,000 units of the G 8 were built, the G 8.1 was successful in ways that hardly any other locomotive had ever been. The Royal Prussian Railroad Administration (KPEV) took delivery of 4,934 locomotives that were then transfered to the German State Railroad Company (DRG). Ten locomotives went to the Mecklenburg Friedrich-Franz Railroad (MFF) and 137 units went to the Imperial Railways of Alsace-Lorraine. In 1922 Linke-Hofmann delivered 50 locomotives to the Polish State Railroad. Additional units went also to the Bagdad Railroad, to Lithuania and to Rumania. The class G 8.1 was one of the main supports for the German State Railroad's motive power. Even after 1945 there were still 1,000 locomotives in service in both parts of Germany.





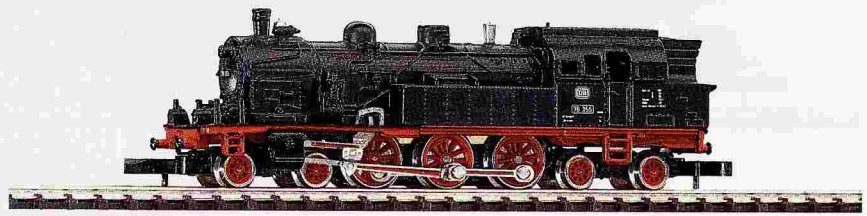
88991 Passenger Locomotive with Tub Style Tender.
German Federal Railroad (DB) class 38. All driving axles powered. Length over buffers 99 mm (3-7/8″).





III

8895 Tank Locomotive.
German Federal Railroad (DB) class 74. All driving axles powered. Coupler hook at front. Length over buffers 55 mm (2-3/16″).



III

8806 Passenger Train Locomotive.
German Federal Railroad (DB) class 78. All driving axles powered. Headlights with maintenance-free LEDs. Length over buffers 70 mm (2-3/4″).

The Prussian T 18 became the class 78 of the former German State Railroad Company and the later German Federal Railroad. It was used to pull passenger, fast passenger and D-Zug express trains. It was often used with push/pull commuter trains in urban areas, because its symmetrical wheel arrangement allowed the same high speeds in forward and reverse.



III

8896 Tank Locomotive.
German Federal Railroad (DB) class 86. All driving axles powered. Length over buffers 63 mm (2-5/8″).



III

8803 Passenger Train Locomotive with Tender.
German Federal Railroad (DB) class 24. All driving axles powered. Equipped for installation of 8953 light insert. Length over buffers 82 mm (3-1/4″).

Steam Locomotives

IV

8884 Freight Locomotive with Tender with Brakeman's Cabin.
German Federal Railroad (DB) class 050.
All driving axles powered. Length over buffers 109 mm (4-1/4").

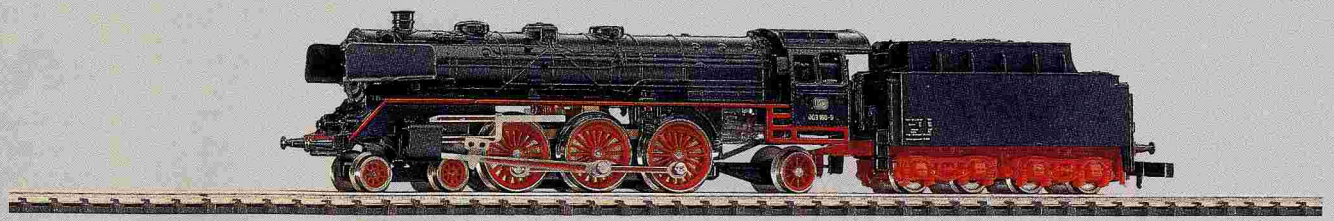


III

88831 Freight Locomotive with Tub-Style Tender.
German Federal Railroad (DB) class 52.
All driving axles powered. Length over buffers 107 mm (4-3/16").



The class 52 was developed as a simplified version of the class 50. This design was simplified considerably due to the difficulties in procuring many raw materials. This allowed all superfluous components to be left off of the locomotive. In 1942 the locomotive builders in the area ruled by the German state were provided with all of the means for mass production of the class 52. As soon as December of 1942 production rose to just under 400 units per month and reached a level of 500 units in June of 1943. An output that would have made it possible to produce 5,000 locomotives yearly. The end of the war brought an abrupt end to these plans. Despite this over 6,200 locomotives were built by 1951 of which many units remained in several European countries after the war. A large number of these locomotives were still present in both parts of Germany. At the start of the 1960s they were taken out of service on the German Federal Railroad (DB).



Until 1978 the world record for continuous running for model railroads in the famous "Guinnes Book of Records" was 440.7 km (275.44 miles) in about 300 hours. The 8885 mini-club locomotive with 6 passenger cars ran 720 km (450 miles) without stopping in 1,219 hours. This new record was set in an independent test facility.

IV

8885 Express Train Locomotive with Tender.
German Federal Railroad (DB) class 003.
All driving axles powered. Length over buffers 112 mm (4-1/2").



III

8889 Express Locomotive with Tender.
German Federal Railroad (DB) class 10 with partial streamlining. All driving axles powered. Length over buffers 120 mm (4-3/4").

The German Federal Railroad (DB) considered the procurement of a new class of locomotive as a replacement for their worn out express locomotives, and an attractive design study was done first for this new machine. However, only two units of this new class 10 with partial streamlining were built by Krupp, the 10 001 with supplemental oil firing and the 10 002 with main oil firing. Both locomotives were taken out of active service in 1967 and 1968 after several instances of damage to the running gear. The 10 002 was used as a heating locomotive until 1971 and then scrapped. The 10 001 can be found in the German Steam Locomotive Museum in Neuenmarkt-Wirsberg in Germany.



N III

88834 Freight Locomotive with Tub Style Tender.
Austrian Federal Railways (ÖBB) class 52.
All driving axles powered. Length over buffers 107 mm (4-3/16").

The 88834 locomotive is being produced in a one-time series only in 1999.

Diesel Locomotives



8879 General Purpose Diesel Hydraulic Locomotive.
German Federal Railroad (DB) class 218. Both trucks powered. Headlights with maintenance-free LEDs. Length over buffers 75 mm (3″).



8878 General Purpose Diesel Hydraulic Locomotive.
German Federal Railroad (DB) class 218. Both trucks powered. Headlights with maintenance-free LEDs. Length over buffers 75 mm (3″).

The experiences from a development period of almost 15 years for the V 160 general purpose road diesel locomotive led in 1971 to the German Federal Railroad (DB) class 218.

The output of these single motor units was increased to over 3,000 horsepower and offers sufficient reserves for all types of train services.



88781 Diesel Locomotive.
German Railroad, Inc. (DB AG) class 218 in the original old red paint scheme with the new DB emblem. Both trucks powered. Headlights with maintenance-free LEDs. Length over buffers 75 mm (2-15/16″).



8820 Diesel Hydraulic Locomotive.
German Federal Railroad (DB) class 221. Both trucks powered. Length over buffers 84 mm (3-5/16″).



N V

88641 Diesel Hydraulic Switch Engine. German Railroad, Inc. (DB AG) class 361 in current "traffic red" paint scheme with the new DB emblem and Cargo lettering. All axles powered. Length over buffers 49 mm (1-15/16″).

Even the aged class V 60 locomotives have been painted in the German Railroad, Inc.'s (DB AG) new "traffic red" color scheme after 40 years of service. As before they are indispensable in switching work.



The Baltimore and Ohio Railroad employed the thoroughbred train "The Capitol Limited" from 1923 to 1971 for the connection between important cities in the eastern part of the USA. On its almost thousand mile way from Chicago via Washington to the East Coast, the main station of Jersey City – directly across from the skyline of Manhattan – formed the end point of the train. Comprised entirely of Pullman cars – "The Cap" offered every conceivable comfort.

The 88602 locomotive is being produced in a one-time series only in 1999.

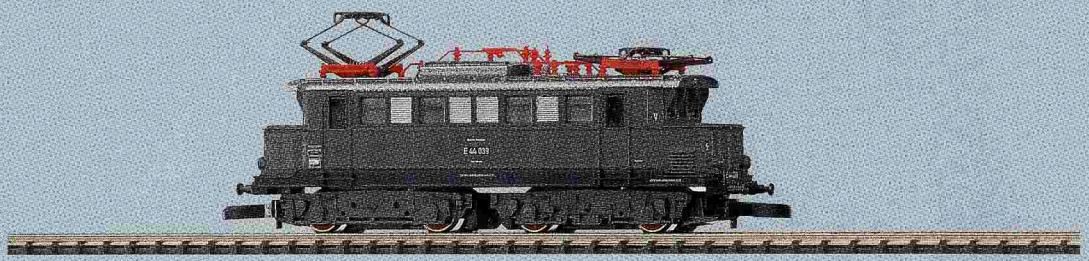
The 87845 streamliner car set on page 346 is the ideal addition to this two unit locomotive.



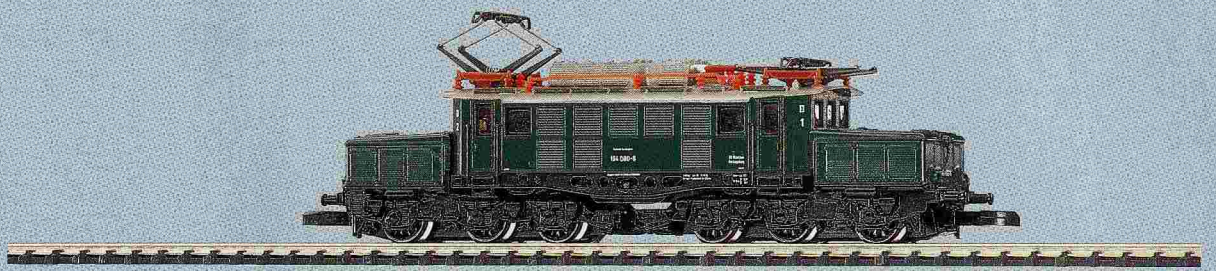
N •• III

88602 Diesel Electric Locomotive. Baltimore and Ohio Railroad General Motors EMD F 7 in the typical color scheme for "The Capitol Limited". Double unit consisting of an A unit (powered) and B unit (non-powered). Both trucks on the A unit are powered. Lighted number boards. mini-club coupler at the front that can be replaced by the pilot included with the locomotive. Both locomotive units are permanently coupled to each other with a drawbar. Total length 150 mm (5-7/8″).

Electric Locomotives









II

88111 Electric Locomotive.
German State Railroad Company (DRG) class E 44. Both trucks powered. Length over buffers 68 mm (2-11/16″)

The 87945 express passenger car set is an appropriate addition to this locomotive and can be found on page 338.

IV

8822 Freight Locomotive.
German Federal Railroad (DB) class 194. Metal end superstructures. Both trucks powered. Length over buffers 85 mm (3-11/32″).

V

88391 Electric Locomotive.
German Railroad, Inc. (DB AG) class 110. Original blue version with vents with rounded corners and new DB emblem. Both trucks powered. Length over buffers 75.5 mm (3″).

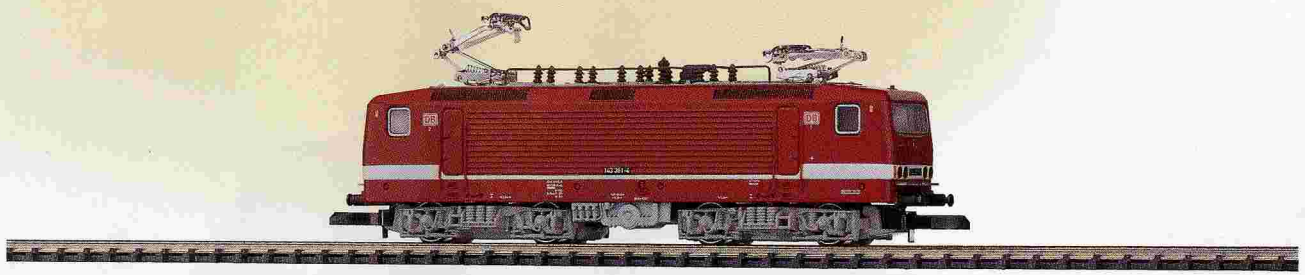
V

88381 Electric Locomotive.
German Railroad, Inc. (DB AG) class 139 in the current color scheme with the new DB logo and Cargo lettering. Both trucks powered. Length over buffers 75.5 mm (3″).

The German Railroad, Inc. (DB AG) is now presenting appropriate freight locomotives in the strikingly attractive “DB Cargo” design as part of its new “DB Cargo” freight car concept. Even the aging class 139 locomotives look quite good in this new color scheme.

Highlight

- *The general purpose locomotive in the old German Democratic Republic (East Germany).*
- *At present the backbone of the regional passenger traffic on the German Railroad, Inc.*
- *The ideal train composition with the bilevel cars.*
- *The class 143 is now used all over Germany.*
- *Prototypical white headlight / red marker light changeover*
- *Can be operated off of catenary.*



88431 Electric Locomotive.
German Railroad, Inc. (DB AG) class 143 in the original Bordeaux red paint scheme with the new DB emblem. Both trucks powered. Headlights with maintenance-free LEDs. Length over buffers 76 mm (3″).

Special one-time series in 1999.
Already delivered to the dealers.

The 212/243 family of classes was actually just supposed to replace the older electric locomotives still in used on the GDR's German State Railroad. The ongoing electrification at the start of the 1980s required a larger number of new electric locomotives, however. The new locomotive design had to be usable for high-quality express train service as well as for freight service with a different gear ratio. The first locomotive of this class was presented to the public at the Leipzig Spring Fair in 1982. There were extensive tests of this locomotive following its first presentation and until its final acceptance. In the fall of 1984 the first production locomotives began to be delivered. On the GDR's German State Railroad the class 243 quickly climbed to the position of a true general purpose locomotive.

At the end of the 1980s there were fundamental changes in the political landscape of the GDR. At the same time there was an acute shortage of motive power on the German Federal Railroad, because the opportunity had been allowed to pass to purchase replacements for the old standard design electric locomotives. So, starting in 1991 the DB leased large quantities of the class 243 German State Railroad locomotive that were designated as the class 143 starting in 1992. In the meantime the geographic area of use for the class 143 was expanded to all of Germany where it was used chiefly in regional and S-Bahn service to the point that it was considered part of the everyday scene on the railroad.

Electric Locomotives



8854 Express Locomotive.
German Federal Railroad (DB) class 103. Both trucks powered. Length over buffers 88 mm (3-1/2″).



88680 Electric Locomotive.
German Railroad, Inc. (DB AG) class 101. Both trucks powered. Headlights with maintenance-free LEDs. Length over buffers 87 mm (3-7/16″).

The rather different manner in which the class 101 electric locomotive was introduced was as innovative as the locomotive itself. The firm ADtranz presented the class 101 001 to the German Railroad, Inc. (DB AG) and to the public as the first locomotive of its new "Eco 2000" generation. Accompanied by a laser show, clouds of artificial fog and dancers, the rollout took place on July 1, 1996. A symbol for the new technology is probably the first use of a CD Rom with accompanying interactive visual material. The class 101 is a general purpose, high output electric locomotive. ADtranz began regular delivery of the locomotive in February of 1997. These units are designed for fast passenger service as well as for heavy freight traffic. They represent a totally new generation of locomotives.

The "Eco 2000" family of locomotives stands for modular construction in which important subassemblies are manufactured using the principle of unitized construction. The subassemblies have easily separated, clearly defined interfaces for interchangeability and are therefore easily swapped out. Special attention was paid to compatibility with the environment. This meant the use of biologically degradable cooling and insulating materials. In addition, fluorocarbons were avoided in the engineer's cab air conditioning. ADtranz is also committed to taking back locomotives for environmentally sound disposal and utilization of the locomotives at the end of their useful working life.



88572 Freight Locomotive.
German Railroad, Inc. (DB AG) class 151 in current "traffic red" paint scheme with the new DB emblem and Cargo lettering. Both trucks powered. Length over buffers 88 mm (3-7/16″).

The "traffic red" paint scheme is turning up more and more on the German Railroad, Inc. (DB AG). The striking "DB Cargo" lettering underscores the attractive, fresh appearance of this locomotive.



Electric Locomotives



8856 "Crocodile" Freight Locomotive.
Swiss Federal Railways (SBB) class Be 6/8[II]. Both trucks powered. Length over buffers 91 mm (3-5/8″).

The "Crocodiles" are among the most interesting locomotives in the world. Even in the mini-club gauge these massive units have a length of 91 mm (3-5/8″). With their articulated design they can master all of the mini-club curves with no difficulty.

N V

88453 Electric Locomotive.
Swiss Federal Railways (SBB) class 460. Both trucks powered. Headlights with maintenance-free LEDs. Length over buffers 84 mm (3-5/16″).

The 88453 locomotive is being produced in a one-time series only in 1999.





V

88448 Electric Locomotive.
Bern Lötschberg Simplon Railroad (BLS) class 465. With road number 465 002-4. Locomotive name "Gornergrat". Both trucks powered. Headlights with maintenance-free LEDs. Length over buffers 84 mm (3-5/16″).

The 87451 and 87461 express train passenger cars (see page 345) are the appropriate cars for the BLS class 465 electric locomotive.

The class 465 electric locomotive comes from the same family as the class 460. Both are very modern general purpose locomotives equipped with the latest technology. Both locomotives are designed for a maximum speed of 230 km/h (144 mph). Compared to the class 460, the class 465 has more power amounting to a total of 7.0 megawatts (9,387 horsepower), necessitated primarily by the use of these locomotives on the Lötschberg grade. A total of 8 class 465 locomotives are currently on the BLS roster.



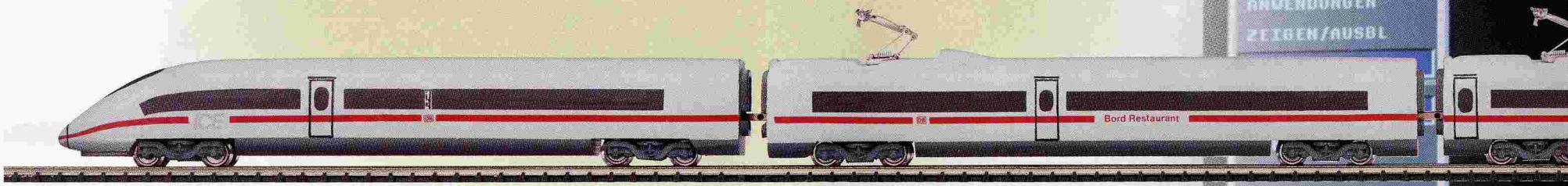


88454 Electric Locomotive.
Swiss Federal Railways (SBB) class 460. Both trucks powered. Headlights with maintenance-free LEDs. Length over buffers 84 mm (3-5/16″).

The 88454 locomotive is being produced in a one-time series only in 1999.

Powered Railcar Train

- ***Completely new design.***
- ***Interior lighting installed at the factory.***
- ***Motor and gear train in the Bord Restaurant car, enabling a prototypical reproduction of the end cars.***
- ***Prototypical, scale reproduction of all the cars in the train.***
- ***One of the latest high tech powered units on the German Railroad, Inc.***
- ***All intermediate cars equipped with pantographs like the prototype, Bord Restaurant car can be switched to catenary operation.***

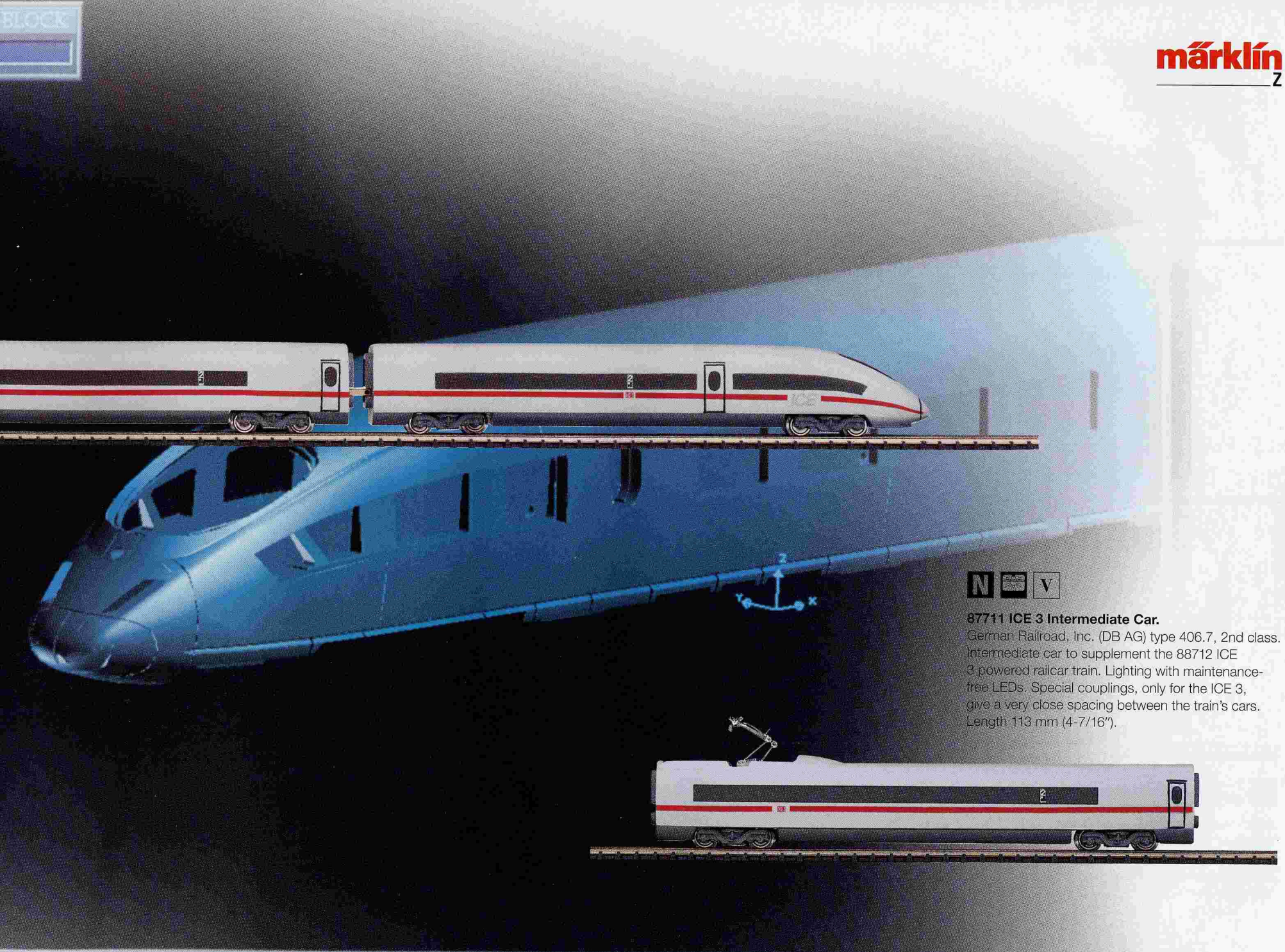


N V

88712 ICE 3 Powered Railcar Train.
High-speed Inter City Express train (ICE 3). German Railroad, Inc. (DB AG) class 406. 1 type 406.0 end car, 1st class. 1 type 406.3 dining car intermediate car with motor and drive gear. All 4 axles powered. 1 type 406.5 end car, 2nd class. Headlights for the end cars and interior lighting for all of the cars including the 2nd class intermediate car with maintenance-free LEDs. Special couplings, only for the ICE 3, allow the cars in the train to be close coupled with each other. Train length 465 mm (18-5/16″).

At the end of 1998 the third ICE generation, the ICE 3, was presented to the public for the first time at the Eurailspeed in Berlin. This new ICE is being presented with a whole series of technological refinements and will thereby contribute to the further shortening of travel times. With the ICE 3 the variety of locomotives and cars on the German Railroad, Inc. (DB AG) system will be expanded by one with a very striking appearance. The visual side of the ICE 3 attracts attention above all with its streamlined front part that sets new standards with its aerodynamic shape. The most striking technical change is of course the propulsion concept. Where the propulsion for the ICE 1 and ICE 2 was located in the two end powered cars, in the new generation ICE 3 the entire propulsion system is now distributed under the car bodies. The ICE 3 is generally operated as an eight car train and can be operated in tandem with another train. One part of the trains is equipped for the German Railroad, Inc.'s power system and is designated as the class 403. Another part is equipped as four-system trains for cross border use in Europe. These powered railcar trains are designated as the class 406 and are intended chiefly for international routings. The interiors of the trains also attract attention with their functional, appealing ambiance. Particularly attractive is the passenger area directly behind the engineer that allows a direct view into the cockpit and down the tracks. In 1999 these trains will be placed into service and in the year 2000 the first trains are to be used for the Expo in Hannover.

The special features of the end cars in the Märklin mini-club model can be reproduced true to the prototype for the most part by motorizing the dining car. The ICE 3 is designed for a minimum radius of 195 mm (7-11/16″).



N V

87711 ICE 3 Intermediate Car.
German Railroad, Inc. (DB AG) type 406.7, 2nd class. Intermediate car to supplement the 88712 ICE 3 powered railcar train. Lighting with maintenance-free LEDs. Special couplings, only for the ICE 3, give a very close spacing between the train's cars. Length 113 mm (4-7/16″).

Powered Railcars



IV

8831 Railbus.
German Federal Railroad (DB) class 798 lettered for "Jägermeister". Both axles powered. Length over buffers 62 mm (2-1/2").



IV

8817 Railbus Trailer.
German Federal Railroad (DB) class 998. Length over buffers 62 mm (2-1/2").



N V

88021 Inductive Measurement Car As A Powered Track Cleaning Car.
German Railroad, Inc. (DB AG) class 724. Two axles powered. Length over buffers 62 mm (2-7/16").

Two of the three axles on the powered track cleaning car are powered. The wheels on the rear axle and in front of the front axle have ridges on the treads. The two front cleaning wheels turn faster than the driving wheels. Regular use of the track cleaning car will prevent dirt buildup on the rails.



N II

81415 "75 Years of the German State Railroad Company" Train Set.
Contents: 1 German State Railroad Company (DRG) class 55 freight locomotive. 1 type Gn "Cassel" boxcar without brakeman's cab. Sliding doors that can be opened. 1 type R "Stuttgart" stake car with brakeman's cab and load. 1 refrigerator car with brakeman's cab. Privately owned by Klosterbrauerei Alpirsbach, Carl Glauner. Used on the German State Railroad Company (DRG). 1 tank car with brakeman's cab. Privately owned by German Ammonia Sales Association, Inc., Bochum, Germany. Used on the German State Railroad Company (DRG). 1 type O "Halle" gondola with brakeman's cab and load. 1 type Pwg "Wuppertal" freight train baggage car. Sliding doors that can be opened. Built-in, lighted red marker light. Locomotive and cars in a special version. Not available separately. Train length 358 mm (14-1/8").

The 81415 train set is being produced in a one-time series only in 1999 on the occasion of the 75th anniversary of the German State Railroad Company (DRG).

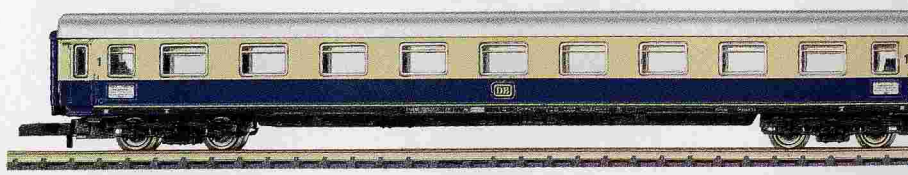


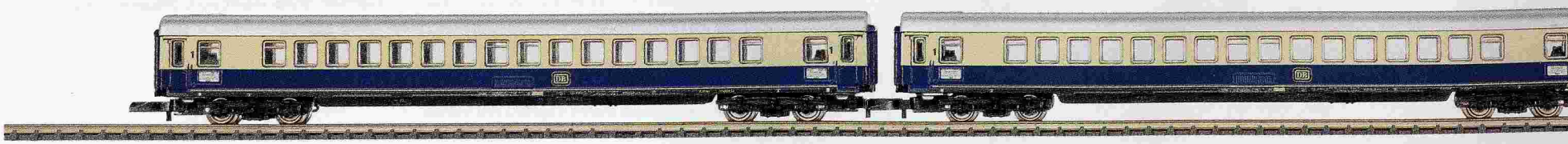
Models of the trains are illustrated full size

Fifty years have gone by since the founding of the German Federal Railroad, and in the meantime it too has become history. The German Federal Railroad had a difficult beginning. All rolling stock that was still operational after the war was pressed into service to master the increasing demand for transportation in the 1950s. The so-called "Thunder Boxes" were put to use again chiefly in commuter and branch line service. From time to time this resulted in unique but interesting and beautiful train compositions. The "Thunder Boxes" built at the end of the 1920s were given an attractive deep red paint scheme with cream colored striping and in their color scheme were adapted to powered railcars as substitute rolling stock for the latter. This mini-club commuter train served the route from Niebüll to Flensburg.



81412 "Rheingold" Train Set.
Contents: 1 German Federal Railroad (DB) class E 10 electric locomotive in the color scheme typical for the "Rheingold". 2 type Av4üm 1st class express train compartment cars. 1 type AD4üm express train vista dome car. 2 type Ap4üm 1st class express train open seating cars. Locomotive and cars in special version. Not available separately. Train length 690 mm (27-3/16").





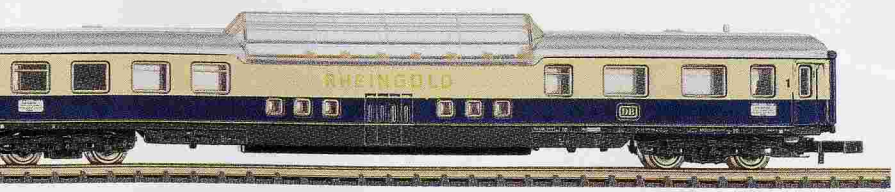


N III

81416 "Commuter Service" Train Set.
Contents: 1 German Federal Railroad (DB) class 86 tank locomotive. All driving axles powered. 1 type BCi passenger car, 2nd and 3rd class. 2 type Ci passenger cars, 3rd class. 1 type CCitr passenger car, 3rd class, with baggage compartment. Locomotive and cars in a special version. Not available separately. Train length 327 mm (12-7/8").

Special one-time series in 1999.
Already delivered to the dealers.





In 1960 the German Federal Railroad (DB) ordered development of a new, modern group of cars specially for the "Rheingold". Borrowing from the luxurious prewar "Rheingold", the new "Rheingold" was planned to clearly stand out from the multitude of other long distance express trains. It surpassed all previous German Federal Railroad (DB) passenger cars in comfort and the level of equipment, and the "Rheingold" once again became the absolute best of the German passenger trains.

There were both compartment and open seating cars for the passengers. In addition, a type of vista dome car previously only used in other countries was built with a raised, glassed in viewing area. The cars' interiors were elegant in their design. For example, the compartment cars were paneled in precious woods. In the open seating cars the reclining seats could be turned for the direction of travel. These very comfortable seats were upholstered in materials with tasteful colors.
Even special locomotives were planned for the "Rheingold", as variations of the proven class E 10.1. However, these locomotives were still not available in May of 1962, the train's debut, so 6 class E 10.1 locomotives had to be used whose speed was specially raised to 160 km/h (100 mph) for this purpose. Naturally, for the duration of their use these locomotives were given the multi-color paint scheme planned for the cars.



N III

81418 "Swiss Passenger Service" Train Set.
Contents: 1 Swiss Federal Railways (SBB) class Ae 3/6 II express locomotive. 2 type 4ü older design passenger cars, 1st/2nd class. 1 BLS design type 4ü baggage car. Locomotive and cars in a special version. Not available separately. Train length 338 mm (13-5/16").

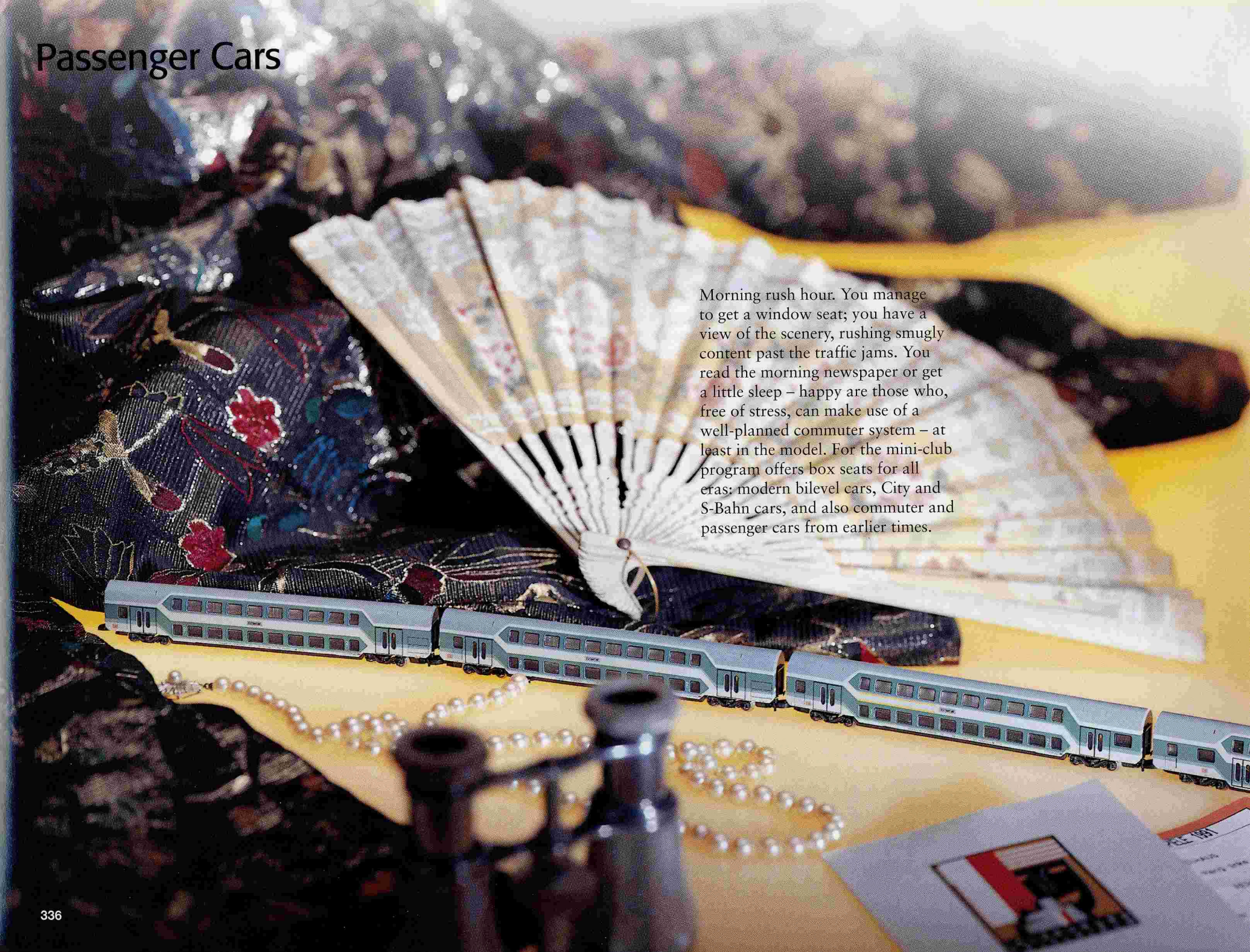


81413 "Zürich Commuter Traffic" Train Set.
Contents: 1 Swiss Federal Railways (SBB) class Ae 6/6 general purpose locomotive. City locomotive "Stadt Zürich" in a red paint scheme with the road number 11426.

3 bilevel cars, 2nd class, in the attractive color scheme of the Zürich S-Bahn service of the Swiss Federal Railways (SBB). Locomotive and cars in special version. Not available separately. Train length 460 mm (18-1/8").



Passenger Cars



Morning rush hour. You manage to get a window seat; you have a view of the scenery, rushing smugly content past the traffic jams. You read the morning newspaper or get a little sleep – happy are those who, free of stress, can make use of a well-planned commuter system – at least in the model. For the mini-club program offers box seats for all eras: modern bilevel cars, City and S-Bahn cars, and also commuter and passenger cars from earlier times.

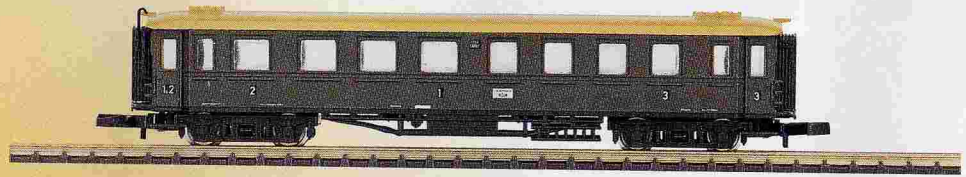


I **8700 Passenger Car.**
Württemberg Provincial Railroad.
Length over buffers 60 mm (2-3/8″).

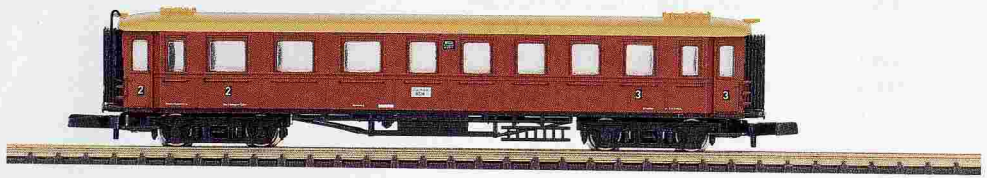


I **8701 Passenger Car.**
Württemberg Provincial Railroad.
Length over buffers 60 mm (2-3/8″).

Models of the cars are illustrated full size



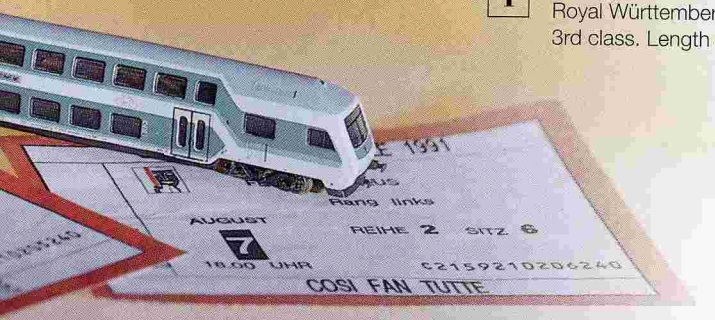
I **87940 Württemberg Express Train Passenger Car.**
Royal Württemberg State Railways (K.W.St.E.) type ABCC.
1st, 2nd and 3rd class. Length over buffers 88 mm (3-15/32″).



I **87950 Württemberg Express Train Passenger Car.**
Royal Württemberg State Railways (K.W.St.E.) type BCCü.
2nd and 3rd class. Length over buffers 88 mm (3-15/32″).



I **87960 Württemberg Express Train Passenger Car.**
Royal Württemberg State Railways (K.W.St.E.) type CCü.
3rd class. Length over buffers 88 mm (3-15/32″).



At the turn of the century the Royal Württemberg State Railways (K.W.St.E.) purchased new express train passenger cars to meet the increasing demands of passenger rail traffic. These cars were built by the Esslingen Machine Company starting in 1904. These cars were totally new designs, and their most noticeable feature was a particular standardization of different subassemblies. The resulting design as so advanced that these cars were operated for decades far beyond the borders of Württemberg all over Germany and in parts of Europe. They were without a doubt one of the most successful car designs of the K.W.St.E.

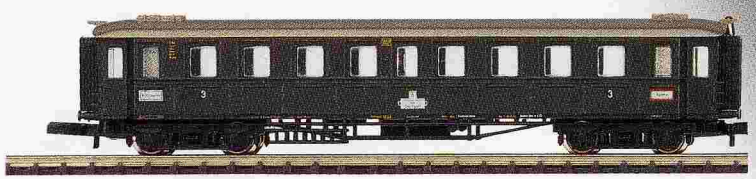
The 88180 Württemberg locomotive is the appropriate locomotive for these express train passenger cars and can be found on page 313.

Car Set

II

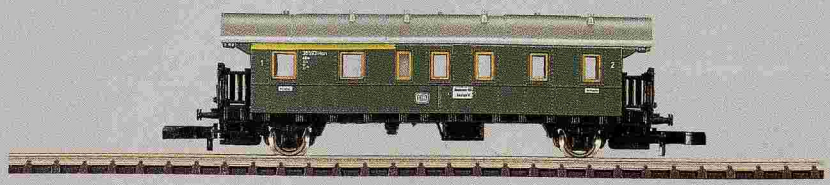
87945 Express Train Car Set.
Contents: 3 Württemberg express train coaches in the German State Railroad Company (DRG) version. 1 type ABC4ü coach, 1st/2nd/3rd class. 1 type BC4ü coach, 2nd/3rd class. 1 type C4ü coach, 3rd class. All cars in special version. Not available separately. Total length 270 mm (10-5/8″).

The 88111 locomotive is the appropriate locomotive for the 87945 express train car set and can be found on page 322.





Passenger Cars



III **8750 "Thunder Box" Standard Design Passenger Car.**
German Federal Railroad (DB) type ABi. 1st and 2nd class.
Length over buffers 63 mm (2-1/2″).



III **8751 "Thunder Box" Standard Design Passenger Car.**
German Federal Railroad (DB) type Bi 29. 2nd class.
Length over buffers 63 mm (2-1/2″).



III **8752 "Thunder Box" Standard Design Baggage Car.**
German Federal Railroad (DB) type D2ie. Length over buffers 63 mm (2-1/2″).

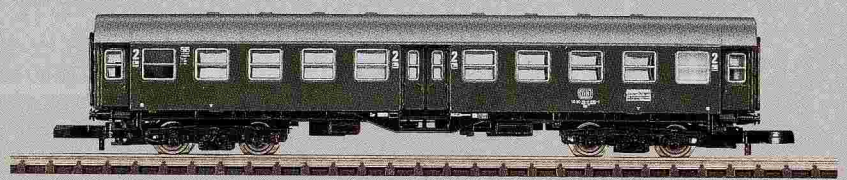
These two-axle standard design passenger cars originally had wood roofs and interior walls. Later they were built entirely of metal as the class 29. By today's standards these German Federal Railroad (DB) cars are very loud and they rumbled a great deal. For this reason they were colloquially called "Donnerbüchsen" ("Thunder Boxes").

Starting in 1954 the German Federal Railroad (DB) rebuilt a large number of old two-, three-, and four-axle passenger cars into modern units.

The car bodies for these rebuilt cars were completely new and were built using a frame design. Old trucks, mostly Prussian designs, were reused for the most part.



IV **8753 Four-Axle Rebuild Car.**
German Federal Railroad (DB) type AByg 503.
1st and 2nd class. Length over buffers 89 mm (3-1/2″).

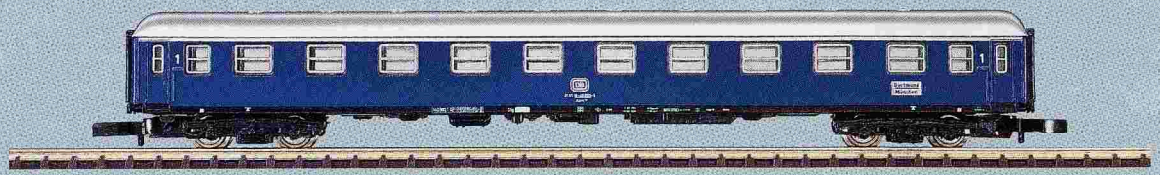


IV **8754 Four-Axle Rebuild Car.**
German Federal Railroad (DB) type Byg 515.
2nd class. Length over buffers 89 mm (3-1/2″).

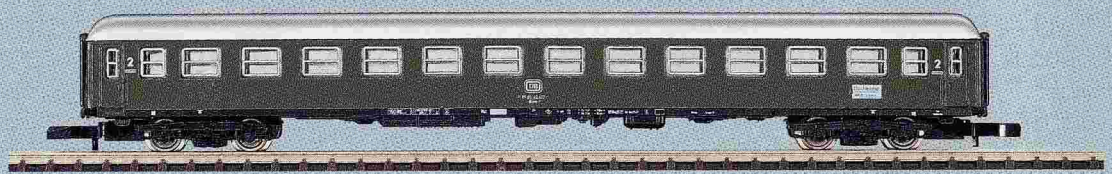


IV **8755 Four-Axle Rebuild Car with Baggage Compartment.**
German Federal Railroad (DB) type BDyg 533. 2nd class.
Length over buffers 89 mm (3-1/2″).

Express Train Passenger Cars



IV **8710 Express Train Passenger Car.**
German Federal Railroad (DB) type Am 203.
1st class. Length over buffers 120 mm (4-3/4″).



IV **8711 Express Train Passenger Car.**
German Federal Railroad (DB) type Bm 234.
2nd class. Length over buffers 120 mm (4-3/4″).



IV **8712 Express Train Baggage Car.**
German Federal Railroad (DB) type Dm 902.
Length over buffers 120 mm (4-3/4″).

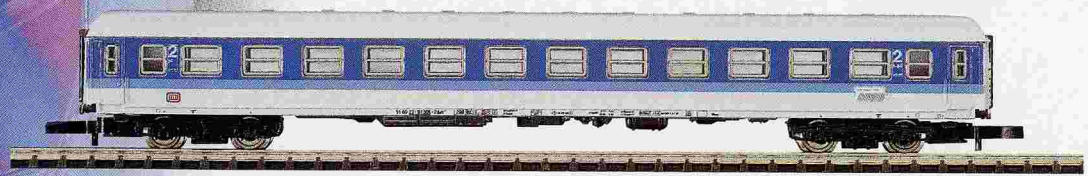


IV **8713 Dining Car.**
German Federal Railroad (DB) type WRmh 132.
Length over buffers 120 mm (4-3/4″).



V **8743 InterRegio Coach.**
German Federal Railroad (DB) type Aim,
in the current color scheme. 1st class.
Length over buffers 120 mm (4-3/4″).

In the last few years InterRegio (IR) trains have to a large extent replaced the out-moded D-Zug trains. The cars in the former are operated on lines with an every other hour frequency. In addition to a new paint scheme, they also have a totally new interior which features light, airy compartments and friendlier colors.



V **8744 InterRegio Coach.**
German Federal Railroad (DB) type Bim,
in the current color scheme. 2nd class.
Length over buffers 120 mm (4-3/4″).

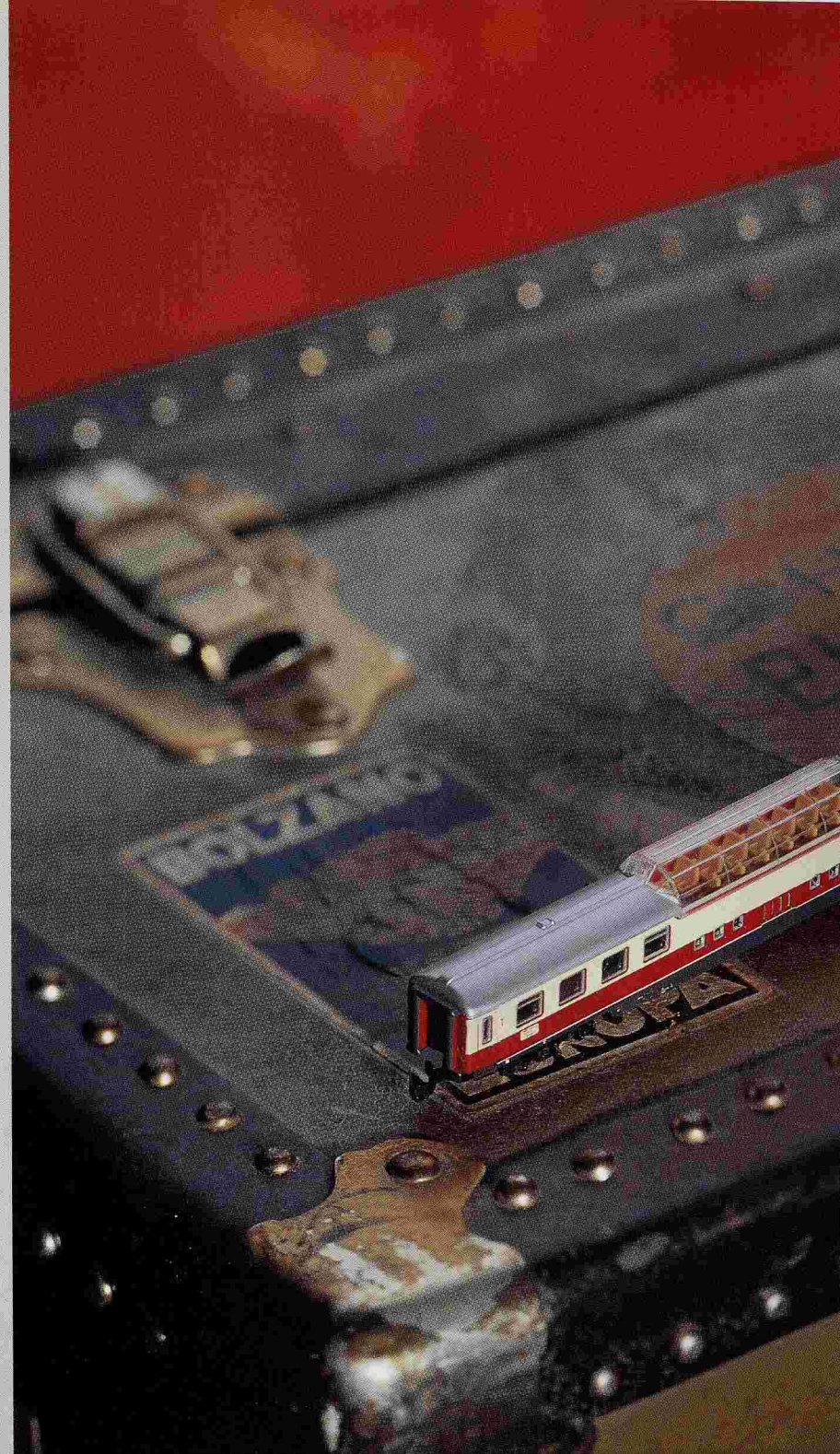
InterCity Cars



IV **8724 TEE/IC Compartment Coach.**
German Federal Railroad (DB) type Avmz 111.
1st class. Length over buffers 120 mm (4-3/4″).



IV **8725 TEE/IC Open Seating Coach.**
German Federal Railroad (DB) type Apmz.
1st class. Length over buffers 120 mm (4-3/4″).



InterCity trains are the best that the German Federal Railroad (DB) offers in passenger train service. The IC trains have 1st class seating and run only with air-conditioned compartment and open seating coaches with the highest level of comfort.



IV **8726 TEE/IC Dining Car.**
German Federal Railroad (DB) type WRmh.
Length over buffers 120 mm (4-3/4″).

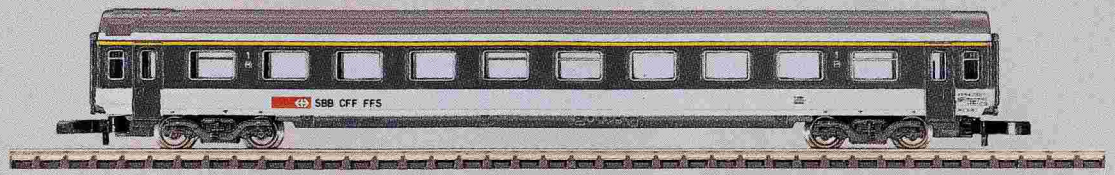


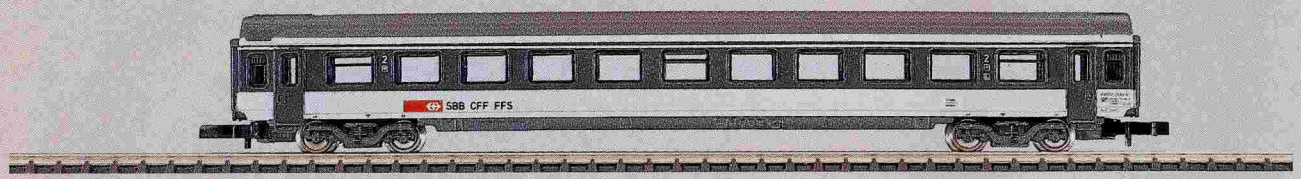
IV **8728 TEE Vista Dome Car.**
German Federal Railroad (DB) type ADm 101.
1st class. Length over buffers 120 mm (4-3/4″).

Express Train Passenger Cars

V

8745 Express Train Passenger Car.
Swiss Federal Railways (SBB) standard design Mark IV type A. 1st class. Length over buffers 120 mm (4-3/4″).





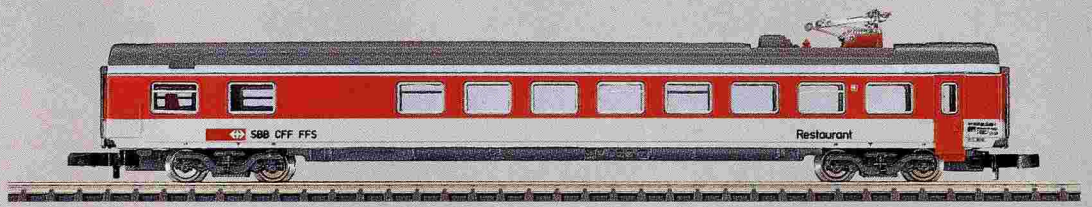
V

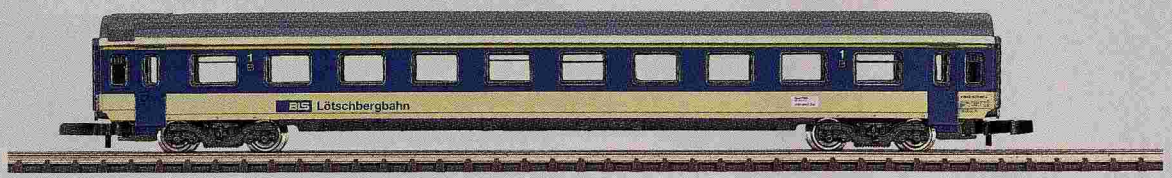
8746 Express Train Passenger Car.
Swiss Federal Railways (SBB) standard design Mark IV type B. 2nd class. Length over buffers 120 mm (4-3/4″).

V

8747 Express Train Dining Car.
Swiss Federal Railways (SBB) standard design Mark IV type WR. Length over buffers 120 mm (4-3/4″).

The Swiss Federal Railways (SBB) purchased these new standard design Mark IV cars for use in express trains running between major cities. They are longer, higher, heavier, quieter and considerably more comfortable than their predecessors.



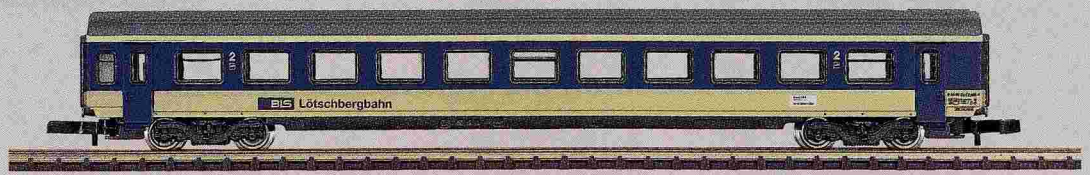


V

87451 Express Train Passenger Car.
Bern Lötschberg Simplon Railroad (BLS) standard design Mark IV type A. 1st class. Length over buffers 120 mm (4-3/4″).

V

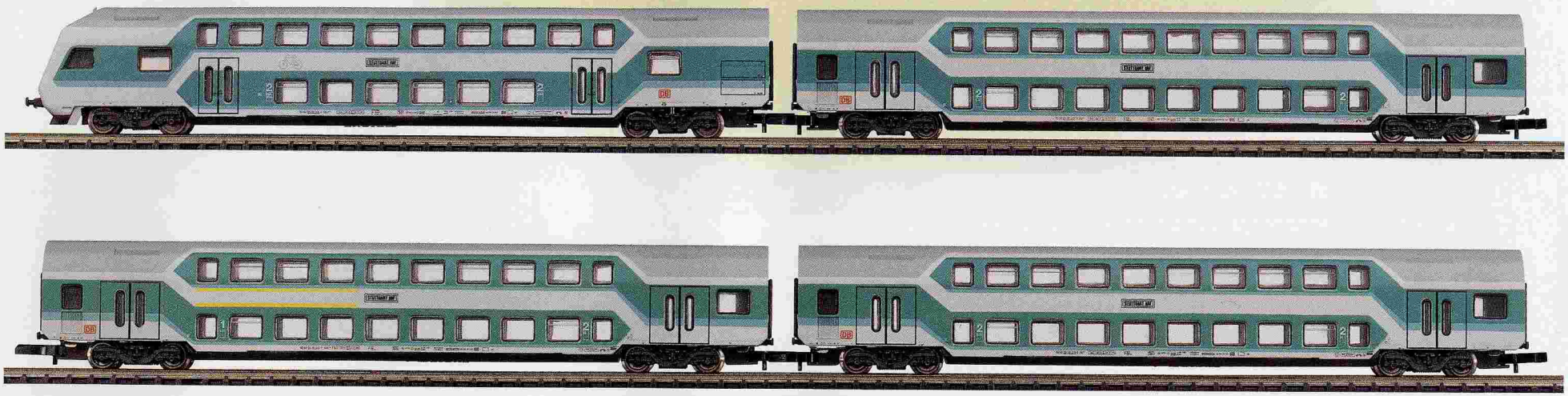
87461 Express Train Passenger Car.
Bern Lötschberg Simplon Railroad (BLS) standard design Mark IV type B. 2nd class. Length over buffers 120 mm (4-3/4″).



The BLS class 465 electric locomotive (Märklin-model 88448, see page 326) is the appropriate unit for the der Bern Lötschberg Simplon Railroad (BLS) express train passenger cars.

Highlight

- *New design for the cab control car.*
- *Prototypical white/red light changover.*
- *The ideal train composition with the class 143 electric locomotive.*
- *Cars used all over Germany in regional passenger service.*



N V

87290 "Bilevel Coaches" Car Set.
Contents: 4 different German Railroad, Inc. (DB) bilevel coaches. 1 type DABz 756 bilevel coach, 1st and 2nd class. 2 type DBz 751 bilevel coaches, 2nd class. 1 type DBbzf 761 bilevel cab control car, 2nd class. Lighting with maintenance-free LEDs. All cars in special version. Not available separately. Total length 499 mm (19-5/8″).

Special one-time series in 1999. Already delivered to the dealers.

When operated cab control car first, triple white headlights shine.





When operated cab control car last, dual red marker lights shine.

Car Set







N III

87845 "The Capitol Limited" Streamliner Car Set.
Contents: 6 different Baltimore and Ohio streamliner cars in the typical color scheme for the "Capitol Limited" train. 1 baggage car. 1 passenger coach. 1 dining car. 1 vista dome car. 1 duplex roomette sleeping car. 1 chair observation car. All cars in special version. Not available separately. Total length 691 mm (27-3/16″).

The 87845 car set is being produced in a one-time series only in 1999.

The 88602 two unit diesel electric locomotive on page 321 is the appropriate motive power for this streamliner car set.



Railroading Considered as a Whole.

märklin Z

Two things are fascinating about mini-club. First, that it's so tiny. And second, that you can reproduce realistic prototype operations on extensive track layouts. The one is naturally related to the other. Because the small amount of space required allows on the one hand attractive, small layouts, on the other a majestic main line on which prototypically long trains from the provincial railroad period up to the modern railroad really come into their own for the first time. Seen this way the trains work as a whole unit. Examining the fine detailing and correct lettering of each individual model should not keep you from mini-club.



Freight Cars



You have to go back to the earliest times to understand that freight belongs on the railroad. It was quite different in earlier eras. Raw materials and large quantities of freight could not be transported until the railroad came along. Industrialization, and with it prosperity, did not spread across the land until the railroad. Hence, transporting freight by rail has its own rank in all eras and its typical trains – from the colorful train compositions of the provincial railroad period to the high capacity cargo trains of the present – and you can reproduce all of them with mini-club.



I

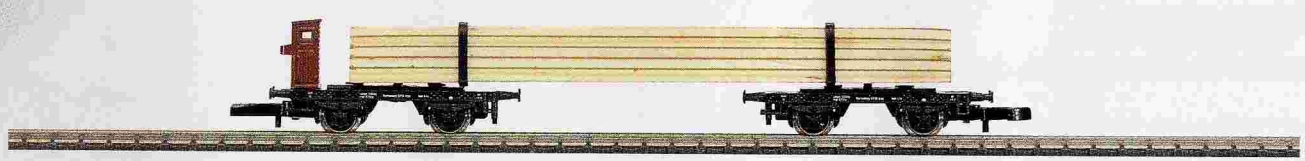
82171 Wine Barrel Car with Brakeman's Cab.
Car privately owned by the German Wine Barrel Car Company, Ltd., Kitzingen a. Main, Germany (Bavaria). Used on the Royal Prussian State Railroad Administration (KPEV). Wine barrels made of real wood. Length over buffers 33 mm (1-5/16″).

Freight car models shown full size

I

86612 Refrigerator Car with Brakeman's Cab.
Privately owned by the Hohenzollern Brewery Company "Englischer Garten Stuttgart" ("English Gardens Stuttgart") of Württemberg. Used on the Royal Württemberg State Railways (K.W.St.E.). Length over buffers 40 mm (1-9/16″).





I

8219 Lumber Car with Brakeman's Cab.
Royal Württemberg State Railways (K.W.St.E.) 2 part car. Loaded with processed lumber. Length over buffers 96 mm (3-3/4″).

N I

82172 "Tannery" Barrel Car Set.
Contents: 2 special barrel cars with brakeman's cab. Privately owned by the German Colonial Tanning Agent and Dyestuff Company, Inc., Karlsruhe, Germany. Used on the Baden State Railways. Different car numbers. Cylindrical barrels made of real wood. Separately applied ladders. Barrels individually imprinted. Both cars in a special version. Not available separately. Total length 83 mm (3-1/4″).



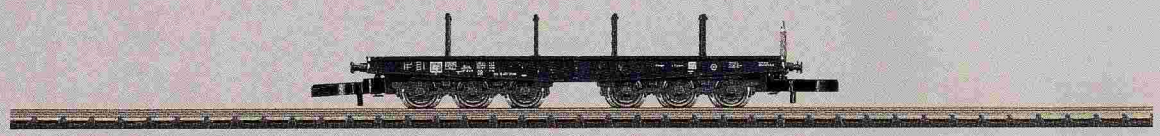
Special one-time series in 1999. Already delivered to the dealers.

The German Colonial Tanning Agent and Dye Stuff Company, Inc. located on the Karlsruhe harbor had several of these barrel cars that were used on the Baden State Railways. These special design cars were built by the Esslingen Machinery Company. Acids and caustic solutions required for sulfite cellulose production were transported in these cars.

Freight Cars



II **82321 Freight Car Set.**
Contents: 3 different design German State Railroad Company (DRG) freight Cars. 1 type Pwg freight train baggage car, sliding doors that can be opened. 1 type O Association design gondola with brakeman's cab. 1 type G boxcar with brakeman's cab, used as a refrigerator car to transport ocean fish, sliding doors that can be opened. All cars in special version. Not available separately. Total length 126 mm (4-15/16″).



II **82351 Heavy Duty Flat Car.**
German State Railroad Company (DRG) type SSym 46. Removable stakes included. Length over buffers 60 mm (2-3/8″).

In 1942 rolling stock for transporting heavy freight was built parallel to the development of the class 52. This was the origin of the type SSym 46 six-axle flat car. It had an empty weight of approximately 22 metric tons and a loaded weight of 80 metric tons. The maximum speed for these cars was set at 80 km/h (50 mph). After the war this class of cars was used to transport construction machinery, machine parts, steel products, concrete construction parts and many other types of heavy, single piece loads.





II **82312 Tank Car with Brakeman's Cab.**
Privately owned by Rhenania-Ossag Petroleum Oil Works, Inc., Düsseldorf, Germany. Used on the German State Railroad Company (DRG). Brakeman's cab and platform with ladders separately applied. Finely detailed, partially open frame. Length over buffers 40 mm (1-9/16″).



III

82352 Heavy Duty Flat Car.
German Federal Railroad (DB) type SSym 46. Removable stakes included. Length over buffers 60 mm (2-3/8″).



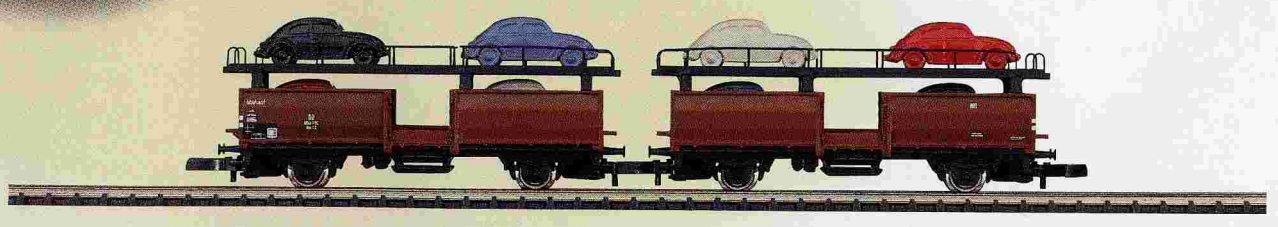
III

82314 Tank Car with Brakeman's Cab.
German Federal Railroad (DB) car for express milk traffic, Frankfurt-Hoechst, Germany. Brakeman's platform and catwalk with ladders separately applied. Additional lettering on the ends of the tank. Finely detailed, partially open frame. Length over buffers 40 mm (1-9/16″).

In 1952 a small series of two-axle tank cars was placed into service on the German Federal Railroad (DB) for transporting milk between regular destinations.

Highlight

- ***Protypical double unit.***
- ***8 VW Beetles as a freight load.***
- ***Typical 1950s "Pretzel" Beetles made of metal.***



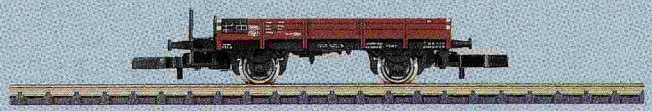
N

III

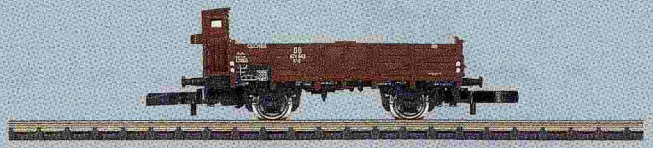
86221 Auto Transport Car Set.
Contents: 2 German Federal Railroad (DB) type Laae 540 auto transport cars. Each car includes 4 metal VW beetles as a load. Two each of the auto transport cars make up a prototypical double unit. Both cars in special version. Not available separately. Total length 111 mm (4-3/8″).

In the 1950s the German Federal Railroad (DB) developed bilevel auto transport cars based on the type E 037 gondolas. Two cars that were permanently coupled together formed a double unit. The side doors and end walls were left off.

Freight Cars



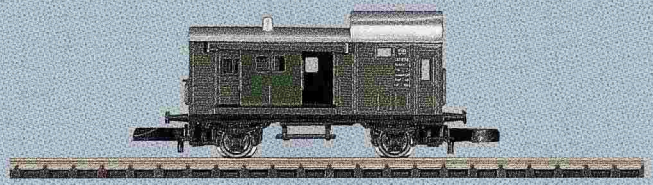
III **82331 Low Side Car with Brakeman's Platform.**
German Federal Railroad (DB). Imitation of the wood plank floor inside the carbody. Length over buffers 40 mm (1-9/16″).



III **82322 Gondola with Brakeman's Cab.**
German Federal Railroad (DB) type O 10. Length over buffers 40 mm (1-9/16″).



III **86611 Refrigerator Car with Brakeman's Cab.**
Privately owned by Kaiser-Friedrich-Quelle, Offenbach/Main, Germany. Used on the German Federal Railroad (DB). Length over buffers 40 mm (1-9/16″).



III **8609 Freight Train Baggage Car.**
German Federal Railroad (DB) type Pwg 012. Sliding doors that can be opened. Length over buffers 40 mm (1-9/16″).



IV **8624 Ballast Car.**
Talbot self-unloading car for maintenance work on the German Federal Railroad (DB). Unloading hatches that can be opened. Actual working function. Length over buffers 33 mm (1-5/16″).

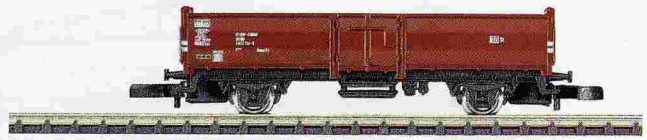


III **86661 Silo Container Car.**
Type Ucs 909. Privately owned by Club-Kraftfutterwerke GmbH, Mannheim, Germany. Used on the German Federal Railroad (DB). Length over buffers 40 mm (1-9/16″).





IV **8610 Low Side Car.**
German Federal Railroad (DB) type Klms 440. Length over buffers 54 mm (2-1/8″).



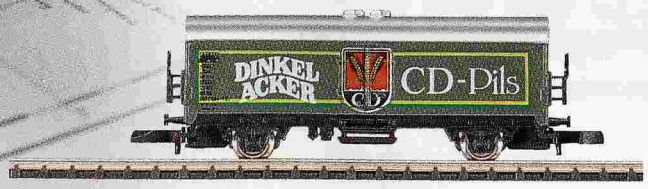
IV **8622 Gondola.**
German Federal Railroad (DB) type E 037. Length over buffers 54 mm (2-1/8″).



IV **8630 Hopper Car.**
German Federal Railroad (DB) type Fals 176. Length over buffers 53 mm (2-1/8″).



IV **8605 Boxcar.**
German Federal Railroad (DB) type Gos-u 253. Length over buffers 54 mm (2-1/8″).



V **8648 Beer Car.**
Privately owned by Dinkelacker. Used on the German Federal Railroad (DB). Length over buffers 54 mm (2-1/8″).



V **86001 Beer Car.**
Privately owned by Fürstlich Fürstenbergischen Brauerei KG, Donaueschingen, Germany. Used on the German Railroad, Inc. (DB AG). Length over buffers 54 mm (2-1/8″).

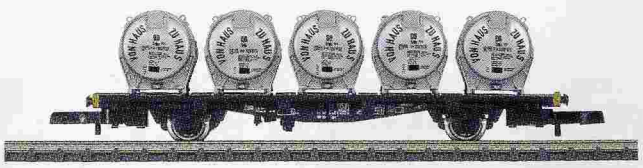
Freight Cars



IV **8657 Crane Car Set.**
Contents: 1 each German Federal Railroad (DB) low side car and crane car, with rotating cab, movable boom and boom support. Crane hook can be raised and lowered with hand crank. Total length 93 mm (3-5/8″).



IV V **8226 Stake Car.**
German Federal Railroad (DB) type Snps 719. Loaded with logs. The tension bands on the stakes can be prototypically reproduced with the 8 black rubber bands included with the car. Length over buffers 95 mm (3-3/4″).



In house-to-house service, the tank containers are offloaded directly from the flat cars onto trucks for delivery. The containers themselves are secured on the flat car with quick lock fasteners.



N IV **82366 Container Car.**
Type LgJs 598. Privately owned, used on the German Federal Railroad (DB). Loaded with 5 removable cylindrical containers lettered for Dortmunder Union Brauerei. Container car floor made of metal. Length over buffers 64 mm (2-1/2″).



IV **82363 Flat Car for Containers.**
German Federal Railroad (DB) type Lgjs 598. Loaded with 5 removable "Von Haus zu Haus" ("From House to House") tank containers. Flat car with metal floor. Length over buffers 64 mm (2-1/2″).



N V

82374 "Quarz Quarry" Freight Car Set.
Contents: 3 German Federal Railroad (DB) type Td dump cars with hinged roof. Different car numbers. All cars have a movable, hinged roof. Color reproduction of the freight load. All cars in a special version. Not available separately. Total length 139 mm (5-1/2").

Special one-time series in 1999.
Already delivered to the dealers.



N V

82375 Side Dump Car with Hinged Roof.
Type Td. Privately owned by Eva, Railroad Transport Services, Inc., Düsseldorf, Germany. Used on the German Railroad, Inc. (DB AG). Movable hinged roof. Separately applied railings, ladders and rods for closing unloading hatches. Length over buffers 43 mm (1-11/16").

V

82373 Side Dump Car.
German Railroad, Inc. (DB AG) type Fcs 089 in a traffic red paint scheme, lettered for "DB Cargo". Separately applied railings, ladders, and hatch levers. Length over buffers 43 mm (1-11/16").





Tank Cars



V

8203 Oil Tank Car.
Privately owned by Minol Petroleum Oil Distribution, Inc., Berlin, Germany. Used on the German State Railroad (DR) of the GDR. Length over buffers 40 mm (1-9/16″).

IV V

8611 Oil Tank Car.
Privately owned by German Shell, Inc. Used on the German Federal Railroad (DB). Length over buffers 40 mm (1-9/16″).





V

82181 Pressure Gas Tank Car without Heat Shield.
Privately owned by Schröder & Klaus OHG and lettered "BP flüssiggas". Used on the German Federal Railroad (DB). Length over buffers 75 mm (3″).

V

8628 Oil Tank Car.
Privately owned by German BP, Inc. Used on the German Federal Railroad (DB). Length over buffers 75 mm (3″).





V

82360 "Container Transport" Car Set.
Contents: 3 German Federal Railroad (DB) type Lgjs 598 flat cars. 1 flat car loaded with a 40 ft. container lettered for "Mitsui O.S.K. Lines" with side and end doors. 1 flat car loaded with two 20 ft. containers lettered for "UASC S.A.G." and "K Line" respectively, each container with an end door. 1 flat car loaded with a Swiss Federal Railways (SBB) 40 ft. container with side and end doors. All containers are removable. Metal flat car platforms. All cars in a special version. Not available separately. Total length 207 mm (8-1/8").

The German Federal Railroad (DB) had this new type of 2-axle container car built starting in 1966. This was the first series of cars with shock absorbers. These cars are therefore especially suited for transporting shock sensitive freight. These flat cars are used to transport interchangeable containers, 20 ft. containers and 40 ft. containers. Unloaded the cars weigh 11 metric tons and up to 29 metric tons loaded according to the route class. They are operated at a maximum speed of 100 km/h (approx. 63 mph).



N V

82509 Freight Car Set.
Contents: 4 different design freight cars. Privately owned by Henkel KgaA, Düsseldorf, Germany. Used on the German Federal Railroad (DB). 1 sliding wall boxcar. Paint scheme with repaired areas picked out in a different color. 1 "Persil" powdered freight car. 1 gondola. Paint scheme with repaired areas picked out in a different color. 1 tank car. All cars in special version. Not available separately. Total length 207 mm (8-1/8").

At the Henkel Company there is a long tradition of shipping freight by rail. The first industrial railroad was in operation at the Düsseldorf parent plant as early as 1999. A fireless steam locomotive was placed into service in 1911 as the first industrial railroad locomotive. At present 5 locomotives owned by Henkel move about 90,000 cars with over 1.5 million metric tons of freight annually. A switch yard with its own hump track is used by the Henkel railroaders to move cars around the 40 kilometers / 25 miles of track with its approximately 130 loading stations spread out over the plant. Outside the gates of the plant leased freight cars and cars owned by Henkel are used for quick transport to the customer.

Special one-time series in 1999.
Already delivered to the dealers.

Freight Cars



82367 "DB Cargo" Container Car Set.
Contents: 2 German Railroad, Inc. (DB AG) type Lgjs 598 container transport cars. 1 car loaded with a 40 ft. "DB Cargo" container. 1 car loaded with two 20 ft. "DB Cargo" containers. All of the containers are removable. Container car floor made of metal. Both cars in special version. Not available separately. Total length 131 mm (5-3/16").



86352 "DB Cargo" Sliding Tarp Car Set.
Contents: 3 German Railroad, Inc. (DB AG) type Shimmns-tu 718 sliding tarp cars in the current "traffic red" paint scheme with "DB Cargo" in large letters. Different car numbers. All cars in special version. Not available separately. Total length 171 mm (6-3/4").

These cars have been built since 1996 specially for the transport of weather-sensitive sheet metal coils. As a successor to the type Shimmns 708 flat cars with telescoping covers, these cars have a tarp cover to keep out snow as compared to the steel telescoping covers of the other cars. The tarp cover can be arranged so that 2/3 of the load surface is open for loading and unloading. Over 2 metric tons of weight per car are saved by using the tarp covers instead of steel telescoping covers.

86681 Gondola with Retractable Roof.
German Federal Railroad, Inc. (DB AG) Tams 886 with the new DB emblem. Weathered roof tarp. Length over buffers 63 mm (2-1/2").







N V **82382 Sliding Wall Boxcar.**
German Railroad, Inc. (DB AG) type Hbbillns 305.
Length over buffers 64 mm (2-1/2″).



V **86351 Flat Car with Telescoping Covers.**
German Railroad, Inc. (DB AG) type Shimmns 708 with the new DB emblem. Length over buffers 55 mm (2-3/16″).



V **82380 Sliding Wall Boxcar.**
German Railroad, Inc. (DB AG) type Hbbins in "traffic red" paint scheme, lettered for "DB Cargo". Length over buffers 64 mm (2-1/2″).

Freight Cars



N V

82383 Sliding Wall Boxcar Set.
Contents: 2 Swiss Federal Railways (SBB) type Hbbillns sliding wall boxcars with different advertising imprinted on them. 1 "Der Decibello" sliding wall boxcar. 1 "Volg frisch und fründlich" sliding wall boxcar. Both cars in special version. Not available separately. Total length 131 mm (5-3/16").



V

82381 Sliding Wall Boxcar.
Swiss Federal Railways (SBB) type Hbbillns. Length over buffers 64 mm (2-1/2").



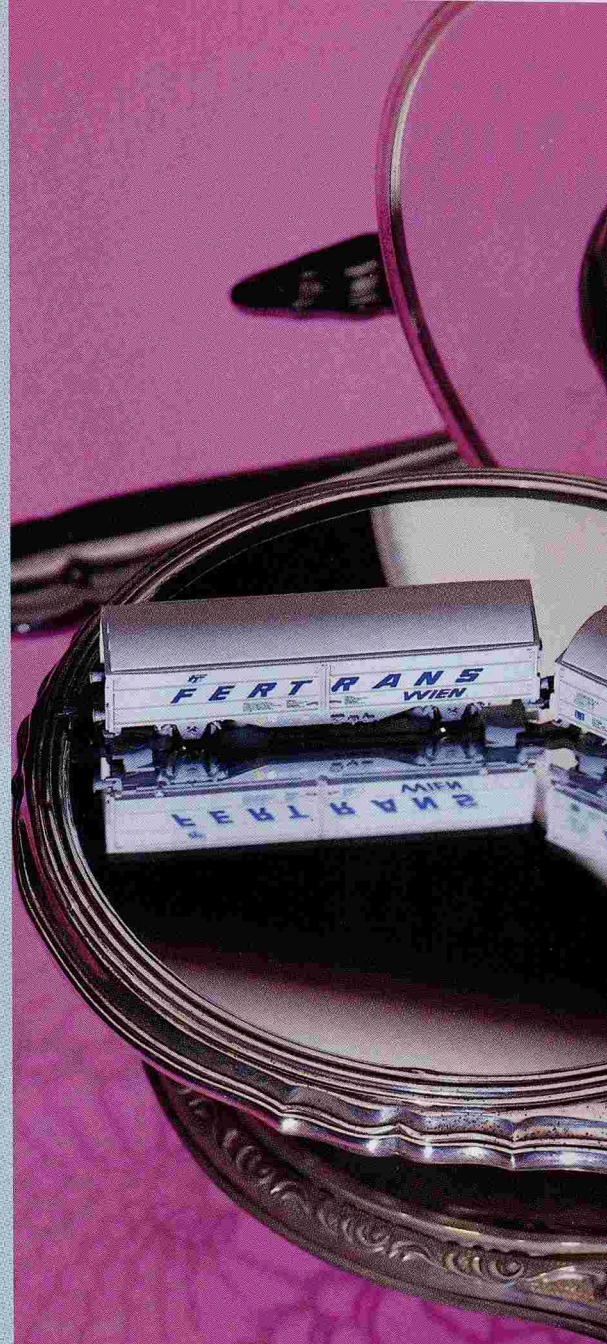
N IV V

86301 "Swiss Cement Works" Hopper Car Set.
Contents: 3 hopper cars with trucks, with different advertising on their sides. Privately owned, used on the Swiss Federal Railways (SBB). 1 "Juracement Wildegg" dump car. 1 "Vigier Cement AG" dump car. 1 "Portland Cement Works AG Olten" dump car. All cars in special version. Not available separately. Total length 165 mm (6-1/2").

V

82281 Piggyback Flatcar.
Privately owned by the Swiss HUPAC Company, Chiasso, Switzerland. Used on the Swiss Federal Railways (SBB). Loaded with 2 removable, interchangeable flatbed trailers for Spedition Bertschi AG, Dürrenäsch, Switzerland. Length over buffers 78 mm (3-1/16").







N
V

82154 "Fertrans" Freight Car Set.
Contents: 2 sliding wall boxcars. Privately owned by Fertrains, Inc. Used on the Austrian Federal Railways (ÖBB). Both cars in special version. Not available separately. Total length 131 mm (5-3/16″).

The 82154 freight car set is being produced in a one-time series only in 1999.

Fertrans, Inc. organizes international rail transport in all parts of Europe and is currently one of the leading specialists in this area. Type Hirrs four-axle cars were purchased for the further development of the rail business. These cars have a load volume of 168 cubic meters (approx. 5,932 cubic feet) and a maximum load limit of 52 metric tons on a total load length of 2 x 12.7 meters (41 feet 8 inches). They are employed as privately owned cars and can be used all over Europe.



V

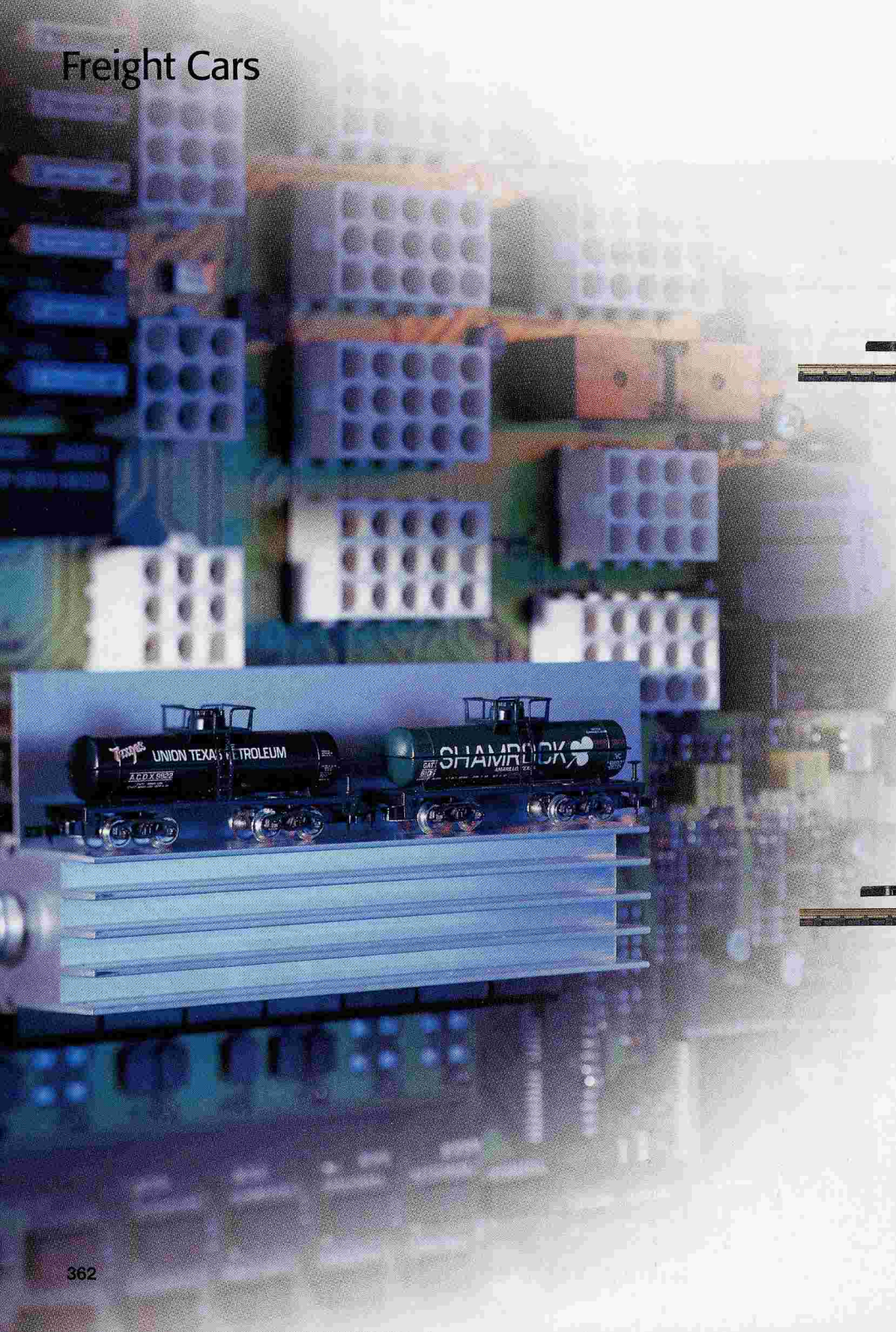
82282 Piggyback Car.
Austrian Federal Railways (ÖBB) type Sdgkkmss. Loaded with 2 removable flatbed trailers with tarps lettered for Gebrüder Weiss GmbH, Transport und Logistik (Weiss Brothers, Inc. Transport and Logistics), Vienna, Austria. Length over buffers 78 mm (3-1/16″).

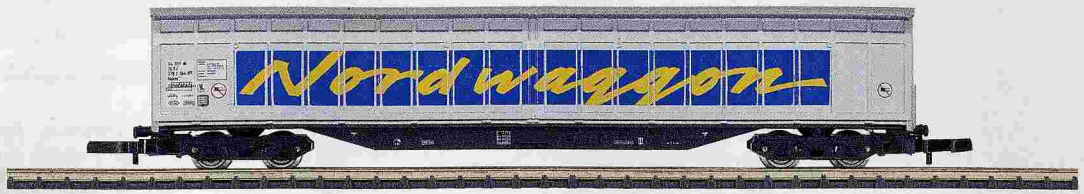
N
IV

82365 Container Transport Flat Car.
Privately owned, used on the Austrian Federal Railways (ÖBB). Loaded with 5 removable milk tank containers. Container car platform is made of metal. Length over buffers 64 mm (2-1/2″).



The 82365 container transport car is being produced in a one-time series only in 1999.





V

82413 High-Capacity Sliding Wall Boxcar.
Type Habins. Privately owned by Nordwaggon Company AB. Used on the Swedish State Railways (SJ). Length over buffers 106 mm (4-1/8″).





N

III

82251 Tank Car Set.
Contents: 2 American tank cars in different paint schemes. 1 tank car lettered “Union Texas Petroleum”. 1 tank car lettered for “Shamrock”. Both cars in a special version. Not available separately. Total length 111 mm (4-3/8″).

The 82251 tank car set is being produced in a one-time series only in 1999.

Building a Layout

märklin Z

The complete mini-club assortment offers all of the possibilities for purely fantasy layouts or prototypical model operations. Three radii for curves, long flex track, wide radius turnouts, working catenary, working industrial models such as a turntable or a transfer table, finely formed lights and all sorts of accessories offer unlimited potential. Mini-club's small scale keeps inspiring the "fiddler" to build original, extremely small layouts – and "serious" model railroaders to construct sweeping main lines for prototypically long train compositions.



Layout Planning / Overview of Track

Overview of Track

With a gauge of 6.5 mm (1/4″), the total width of the track is 11.5 mm (29/64″), the height 2.5 mm (approx. 3/32″). Rail joiners are used to connect sections of track, and an additional lug/socket feature built into the tie strip reinforces the track joint.

The mini-club track system has an easy-to-understand geometry. With the 3 track radii 145 mm (5-3/4″), 195 mm (7-11/16″) and 220 mm (8-11/16″) as well as turnouts with a 13° angle, it is possible to have a wide variety of track configurations.

Straight Track / Function Tracks



8504
25 mm
(1″)

8503
55 mm
(2-3/16″)

8587
55 mm
(2-3/16″)

8588
55 mm
(2-3/16″)

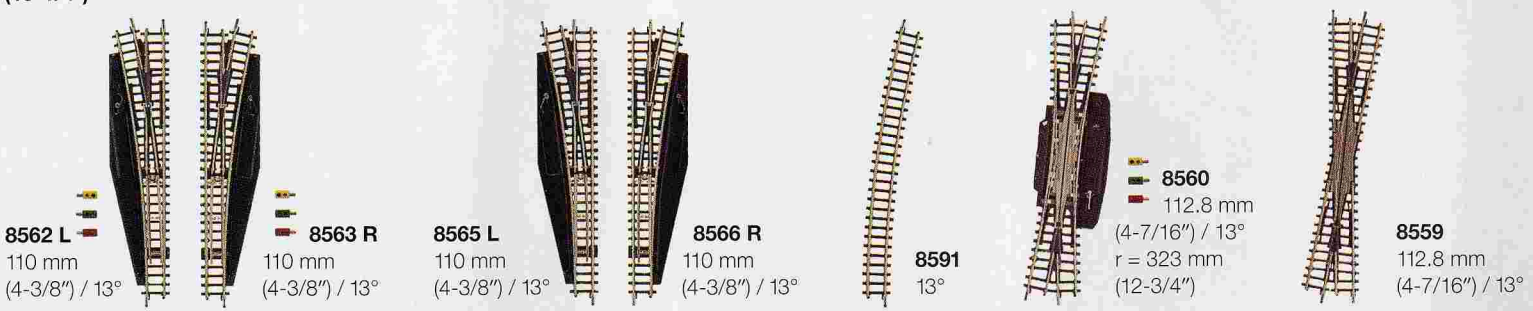
8589
55 mm
(2-3/16″)

8500
110 mm
(4-3/8″)

8506
108.6 mm
(4-1/4″)

Crossings and Turnouts

Radius
490 mm
(19-1/4″)



8562 L
110 mm
(4-3/8″) / 13°

8563 R
110 mm
(4-3/8″) / 13°

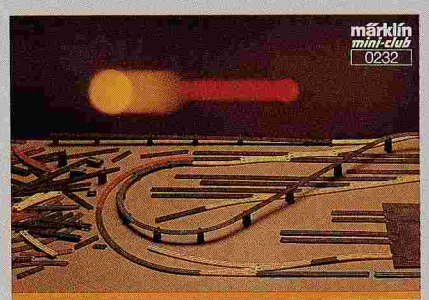
8565 L
110 mm
(4-3/8″) / 13°

8566 R
110 mm
(4-3/8″) / 13°

8591
13°

8560
112.8 mm
(4-7/16″) / 13°
r = 323 mm
(12-3/4″)

8559
112.8 mm
(4-7/16″) / 13°



0232 Track Planning Game.
For planning and setting up mini-club layouts in a scale of 1:2. Enough material for a medium size layout. All track sections provided with catalog numbers. Arranged in 5 colors (3 radii, straight sections and turnouts). The track sections can be snapped together quickly and firmly.

Layouts can be planned in a reduced scale almost like a game without prior knowledge of the track geometry. Departures from the geometry are immediately recognizable thanks to the different colors of the track radii.



8590
110 mm
(4-3/8″)



8507
112.8 mm
(4-7/16″)



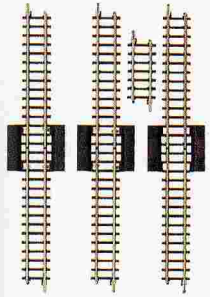
8592
100 to 120 mm
(3-15/16″ to
4-3/4″)



8505
220 mm
(8-13/16″)



8594
660 mm
(26″)



8993
3 x 110 mm
(4-3/8″)
1 x 25 mm (1″)



8931
16 mm
(5/8″)



8991
15 mm
(19/32″)

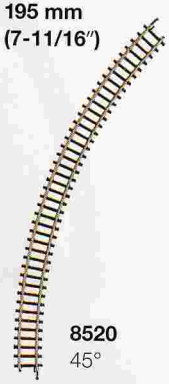
Curved Track

Radius
145 mm
(5-3/4″)



8510
45°

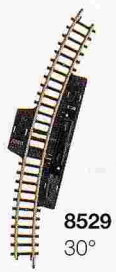
Radius
195 mm
(7-11/16″)



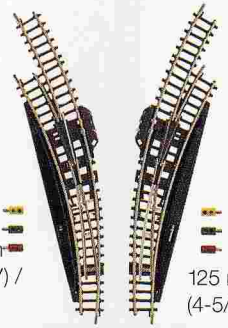
8520
45°



8521
30°



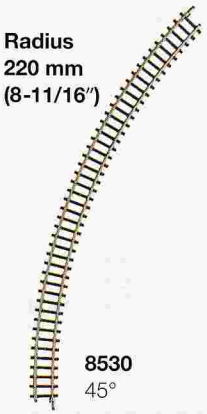
8529
30°



8568 L
125 mm
(4-5/16″) /
30°

8569 R
125 mm
(4-5/16″) / 30°

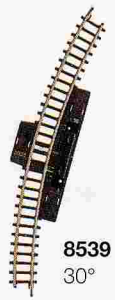
Radius
220 mm
(8-11/16″)



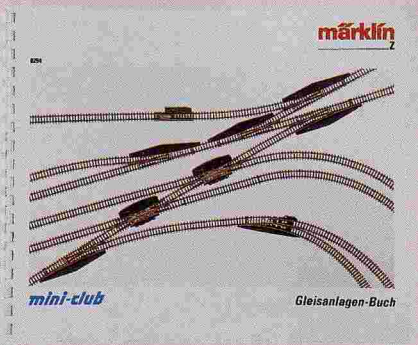
8530
45°



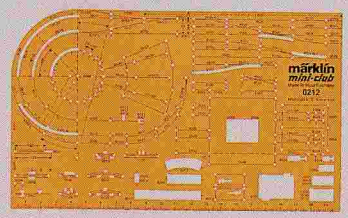
8531
30°



8539
30°



0296 Track Plan Book.
Illustrated instructions for the setup of track layouts and catenary, how to connect up power packs and accessories, constructing bridges, with tips for building layouts. Contents 72 pages. Format 22 x 26.4 cm (8-21/32″ x 10-3/8″).



0212 Track Planning Stencil.
For planning your own track layout. All track sections in the stencil are in a scale of 1:5. Extensive instructions included.

Straight and Curved Track

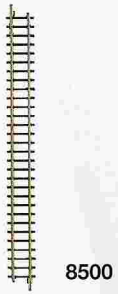
Straight Track

8500 Straight Track.
Length 110 mm (4-3/8″).

8503 Straight Track.
Length 55 mm (2-3/16″).

8504 Straight Track.
Length 25 mm (1″).

8505 Straight Track.
Length 220 mm (8-13/16″).


8500


8503


8504


8592

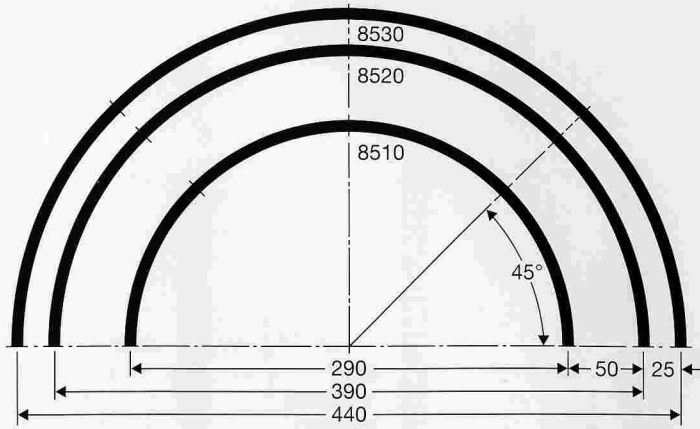

8505

8952 Straight Adjustment Track.
Adjustable in length from 100 to 120 mm (3-15/16″ to 4-3/4″) for situations where a standard section will not fit.

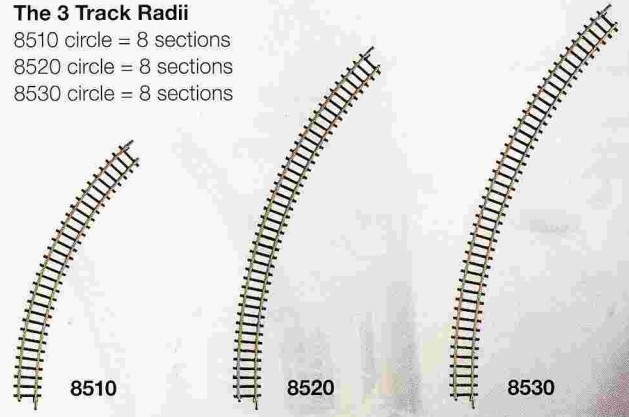
8954 Package with 10 Insulated and 20 Regular Rail Joiners.
For electrically separating rails or for creating an electrical rail joint.

8594

8594 Flex Track.
Length 660 mm (26″). Can be made flexible by cutting the tie strip. Cut rails and tie strip to desired length and install new rail joiners (8954).



The 3 Track Radii
8510 circle = 8 sections
8520 circle = 8 sections
8530 circle = 8 sections


8510 8520 8530

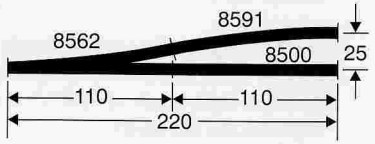
Curved Track

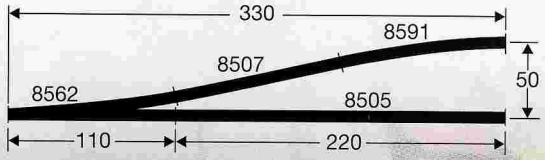
8510 Curved Track.
Radius 145 mm (5-3/4″). 45°.

8520 Curved Track.
Radius 195 mm (7-11/16″). 45°.

8530 Curved Track.
Radius 220 mm (8-11/16″). 45°.

Turnouts 8562 L, 8563 R, 8565 L and 8566 R





8562 L Left Electric Turnout.
Length 110 mm (4-3/8″). 13°.
Radius 490 mm (19-1/4″).

8563 R Right Electric Turnout.
Length 110 mm (4-3/8″). 13°.
Radius 490 mm (19-1/4″).

The 8562 left and the 8563 right turnouts have double solenoid mechanisms and hand levers. They can be activated with the 7272 control box or with circuit tracks.

8565 L Left Manual Turnout.
Length 110 mm (4-3/8″). 13°.
Radius 490 mm (19-1/4″).

8566 R Right Manual Turnout.
Length 110 mm (4-3/8″). 13°.
Radius 490 mm (19-1/4″).

8591 Curved Track.
Complementary curve for turnouts. 13°.
Radius 490 mm (19-1/4″). Same curve as branch on the 8562 L, 8563 R, 8565 L and 8566 R turnouts.



Curved Turnouts / Crossings

Curved Turnouts

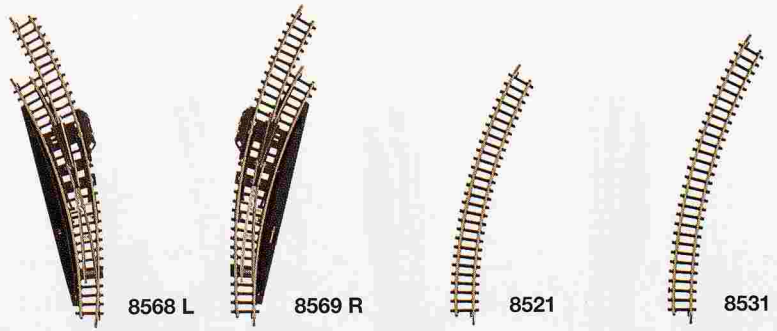
8568 L Electric Left Curved Turnout.
Radius 195 mm (7-11/16″). 30° (same as 8521). Main track length 125 mm (4-5/16″).

8569 R Electric Right Curved Turnout.
Radius 195 mm (7-11/16″). 30° (same as 8521.) Main track length 125 mm (4-5/16″).

8521 Curved Track.
Radius 195 mm (7-11/16″). 30°.

8531 Curved Track.
Radius 220 mm (8-11/16″). 30°.

The 8568 left and the 8569 right curved turnouts as well as the 8560 double slip switch have double solenoid mechanisms and hand levers. They can be activated with the 7272 control box or with circuit tracks.



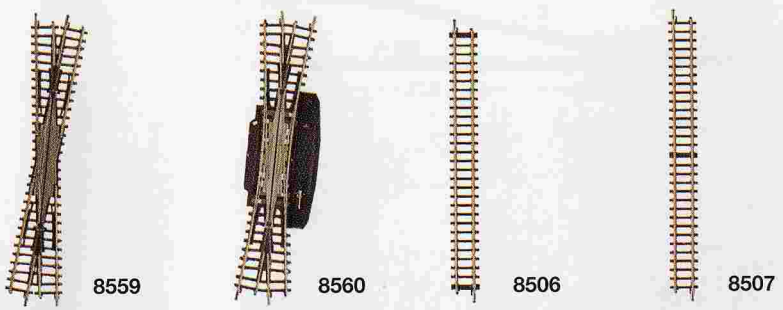
Crossings

8559 Crossing.
Length 112.8 mm (4-7/16″). 13°.

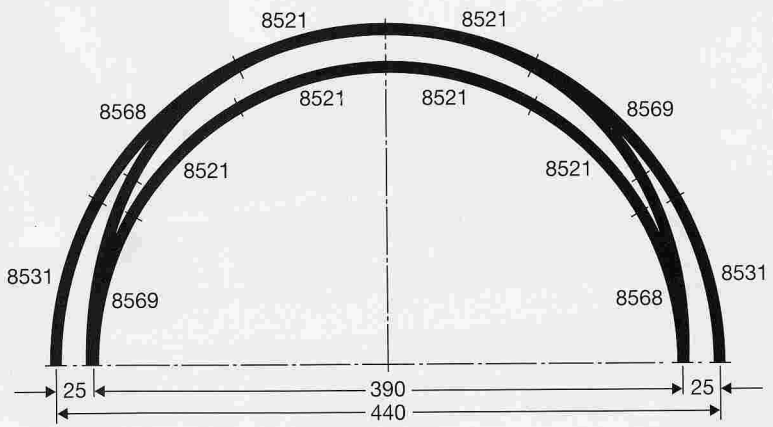
8560 Double Slip Switch.
Length 112.8 mm (4-7/16″). 13°.
Radius 323 mm (12-3/4″).

8506 Straight Adjustment Track.
Length 108.6 mm (4-1/4″). For adjusting length on the 8559 crossing and 8560 double slip switch.

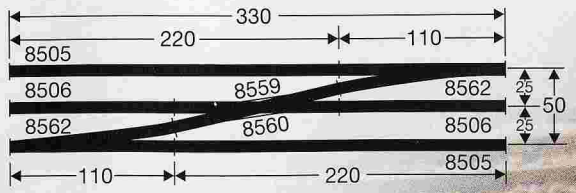
8507 Straight Adjustment Track.
Length 112.8 mm (4-7/16″). Same length as the straight length of 8559 crossing and 8560 double slip switch.

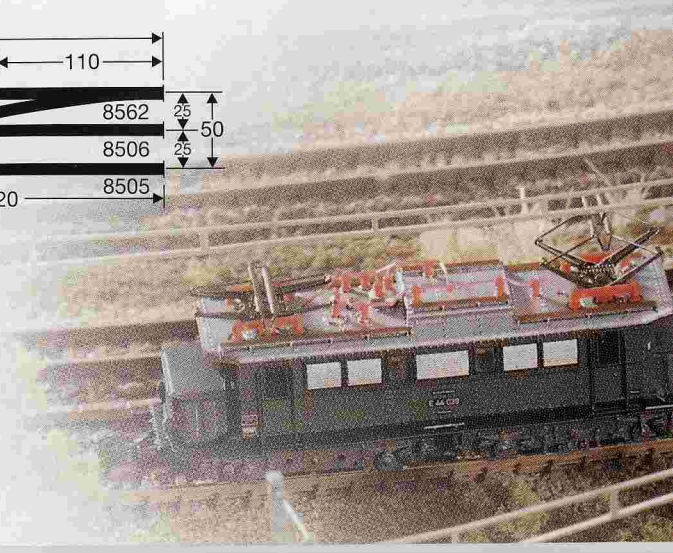


8568 L and 8569 R Curved Turnouts



8559 and 8560 Crossings





Function Tracks / Accessories

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Straight Function Tracks

8587 Straight Uncoupler Track.
Length 55 mm (2-3/16″). With hand lever, or can be remote controlled with 7272 control box.

8588 Straight Isolating Track.
Length 55 mm (2-3/16″). With terminal clips. One rail is gapped in the middle.

8589 Straight Circuit Track.
Length 55 mm (2-3/16″). With terminal clips. Passing train activates function.

8590 Straight Feeder Track.
Length 110 mm (4-3/8″). With noise suppression capacitor. 2 terminal clips for connections with the wire included with the unit.

Curved Function Tracks

8529 Curved Circuit Track.
Radius 195 mm (7-11/16″). 30°. With terminal clips. Passing train activates function.

8539 Curved Circuit Track.
Radius 220 mm (8-11/16″). 30°. With terminal clips. Passing train activates function.

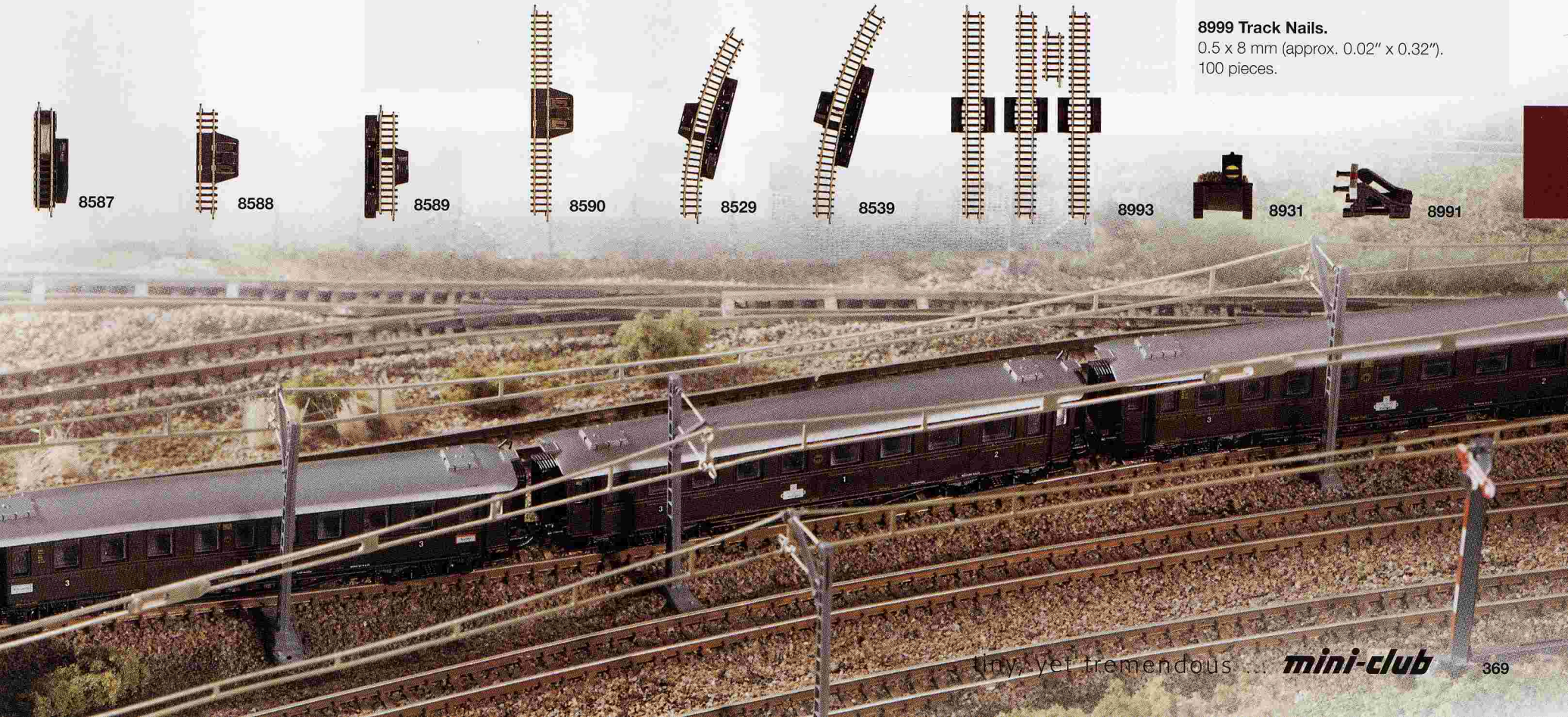
Accessories

8931 Track Bumper.
Has LED for lighted lantern. Length 16 mm (5/8″). Can be screwed to the end of the track. Wood screw included.

8991 Track Bumper.
Length 15 mm (19/32″). Can be clipped to the rails.

8993 Reverse Loop Set.
Trains can traverse reverse loops in one direction when reverse loop set tracks are installed in order according to their markings.

8999 Track Nails.
0.5 x 8 mm (approx. 0.02″ x 0.32″).
100 pieces.



Catenary

mini-club catenary functions and supplies power just like catenary in the prototype. All electric locomotives can easily be set for catenary operation by adjusting the selector switch. This increases the operating enjoyment considerably, because now 2 locomotives can be operated independently of each other on the same track with 2 power packs.

Tower masts and cross spans are used over three or more tracks (station and yard areas). Catenary circuits can be separated using the catenary insulators. The standard masts are sufficient for single or double track lines. For double track lines they are placed on the outside of each track.

The sprung catenary arms guarantee reliable contact for the wire sections.



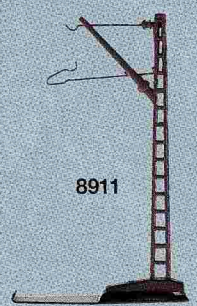


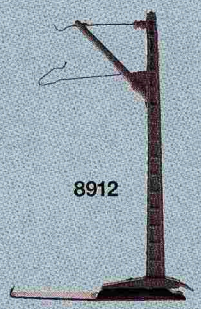
8911 Catenary Mast.
Standard mast with base plate. Height 38 mm (1-1/2″).

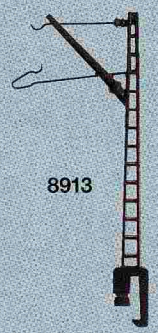
8912 Feeder Mast.
For supplying power. Has base plate and wires. Height 38 mm (1-1/2″).

8913 Bridge Mast.
Can be clipped to the sides of bridges and ramps. Height 41 mm (1-5/8″).

8914 Tower Mast.
With notches for attaching 8924 and 8925 cross spans. Base 7 x 13 mm (9/32″ x 1/2″). Height 61 mm (2-3/8″).


8911


8912


8913

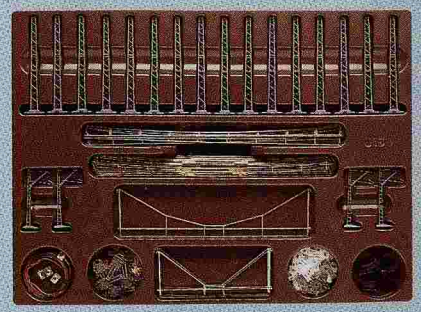

8914

Catenary Sets

8198 S + E Catenary Set.
For SET extension program (pages 310/311). Contains all of the parts for setting up catenary for S + E. Contents: 19 catenary masts, 20 wire sections, 8 separater clips, 6 connecting springs and instructions.



8199 T1 + T2 + T3 Catenary Set.
For SET extension program (pages 310/311). Supplements 8198 for T1 to T3. Contents: 4 catenary masts, 16 tower masts, 30 wire sections, 8 cross spans, 30 catenary insulators, 8 separater clips, 6 connecting springs, 5 catenary terminal clips and instructions.





Accessories



8921 Package of Catenary Insulators.
For insulating catenary wire sections from the cross spans. Contains 8 white and 2 gray insulators. The white insulators connect 2 and the gray connect 3 wire sections together.



8926 Package of 8 Separater Clips and 6 Connecting Springs.
Units are used to create separation points in the catenary and are used at branches above turnouts.



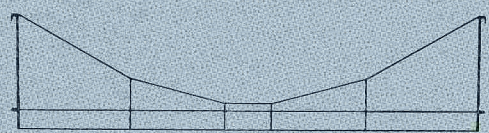
8927 Package of Catenary Terminal Clips.
Contains 2 set screw clips with and 3 without wires. For feeding power to catenary or for holding wire sections together over crossings, for example.



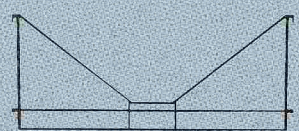
8922 Wire Section.
For straight and curved track. Length 165 mm (6-1/2″).



8923 Wire Section.
Adjustable in length from 150 to 180 mm (5-7/8″ x 7-1/8″).



8924 Cross Span.
For attaching to tower mast. Spans 5 tracks. Span width about 123 mm (4-7/8″).



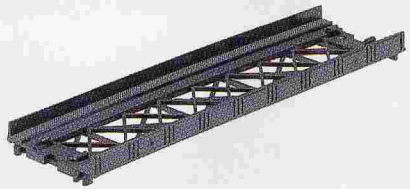
8925 Cross Span.
For attaching to tower mast. Spans 3 tracks. Span width about 72 mm (2-7/8″).

Bridges and Ramps

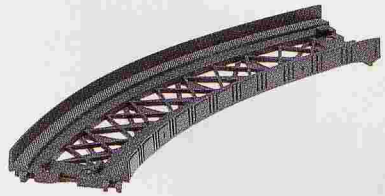


8975 Arched Bridge.
Length 220 mm (8-13/16″).

Bridges and approach ramps bring the third dimension to a model railroad layout: from flatness to a sense of height. From the simple bridging of a road or river, to crossing several tracks, to realistically linking different levels on the layout – the mini-club accessory program offers the right solution for each task.



8976 Straight Ramp.
Length 110 mm (4-3/8″).



8977 Curved Ramp.
Radius 145 mm (5-3/4″). Track curve 45°.



8978 Set of Approach Pillars.
Contains 10 pillars. Height 4, 8, 12, 16, 20, 24, 28, 32, 36 and 40 mm (5/32″ to 1-5/8″).

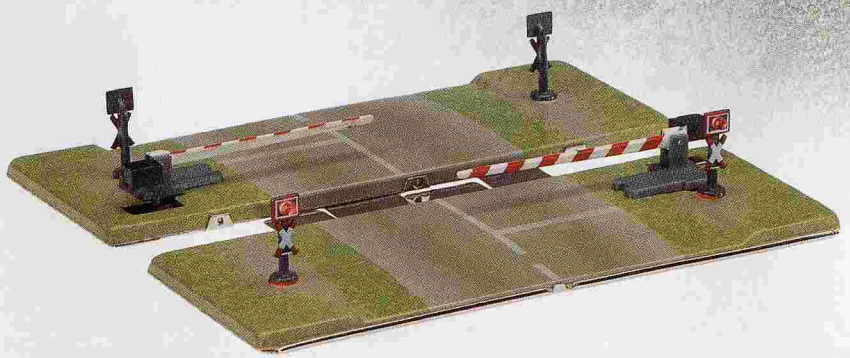


8979 Set of Bridge Pillars.
Contains 5 pillars. Height 40 mm (1-5/8″).

7599 Wood Screws.
200 pieces 1.4 x 10 mm (approx. 1/16″ x 3/8″), size 00. For mounting bridge sections on bridge pillars.

Signals and Railroad Crossing Gates

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8992 Railroad Crossing Gates with Half Gates.
Set consists of 2 solenoid activated gates, each with 2 red warning lights which go on when the gates descend. Dimensions for each base 96 x 37 mm (3-3/4″ x 1-1/2″).

The following are required for the railroad crossing gates:
- for **manual operation**: 1 manual signal controller 8946.
- for **automatic operation** by a passing train:
  1 each 8945 universal relay and 2 circuit tracks (8529, 8539 or 8589 according to the layout) per track.

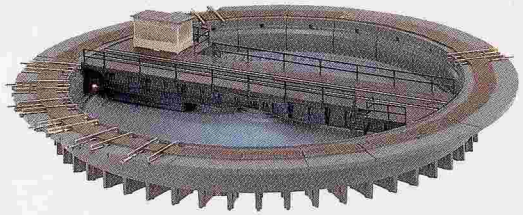


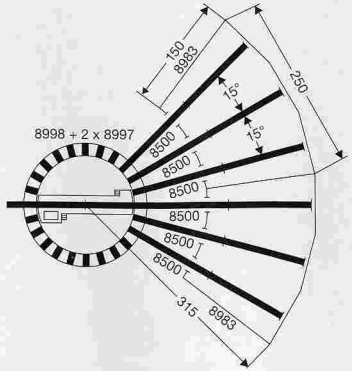
8939 Color Light Home Signal.
Light changes from red (Hp0) to green (Hp1). 2 light bulbs. Can be operated by 8945 universal relay or by the 8946 manual signal controller. Height 34.5 mm (1-3/8″).



8940 Home Signal with 1 Semaphore.
Light changes from red (Hp0) to green (Hp1). Double solenoid mechanism. Has train control function. Can be activated with the 7272 control box or with circuit tracks. Height 45 mm (1-3/4″).

Turntable





8983 Locomotive Shed Kit.
Doors operated electro-mechanically. Equipped for installation of 3 locomotive stall tracks. 3 special track sections included to automatically stop locomotives. Base dimensions 150 x 250 mm (5-29/32″ x 9-7/8″). For use with 8998 turntable.



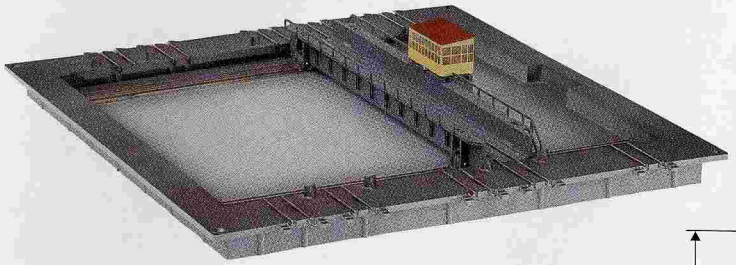
8998 Turntable.
Turntable pit requires sunken installation for flush mount on layout. 8 spoke tracks on outer edge. Can be expanded to 24 spoke tracks with 8997 extension set. Extensive details and prototypical paint work. Turntable operated by remote control using control box included with unit. Electric motor mechanism. Automatic shutoff of power to all tracks not in contact with the deck. External turntable diameter 170 mm (6-11/16″). Deck length 132 mm (5-3/16″). Flush mount installation requiring 145 mm (5-3/4″) diameter hole. Can be used with 8983 locomotive shed.

8997 Extension Set for 8998 Turntable.
8 spoke tracks that can be snapped onto turntable edge. The turntable can be expanded to 24 spoke tracks with 2 extension sets.

This illustration shows how 2 of the 8983 locomotive sheds can be set up with the 8998 turntable.

Transfer Table

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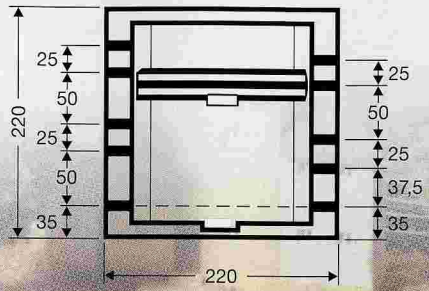


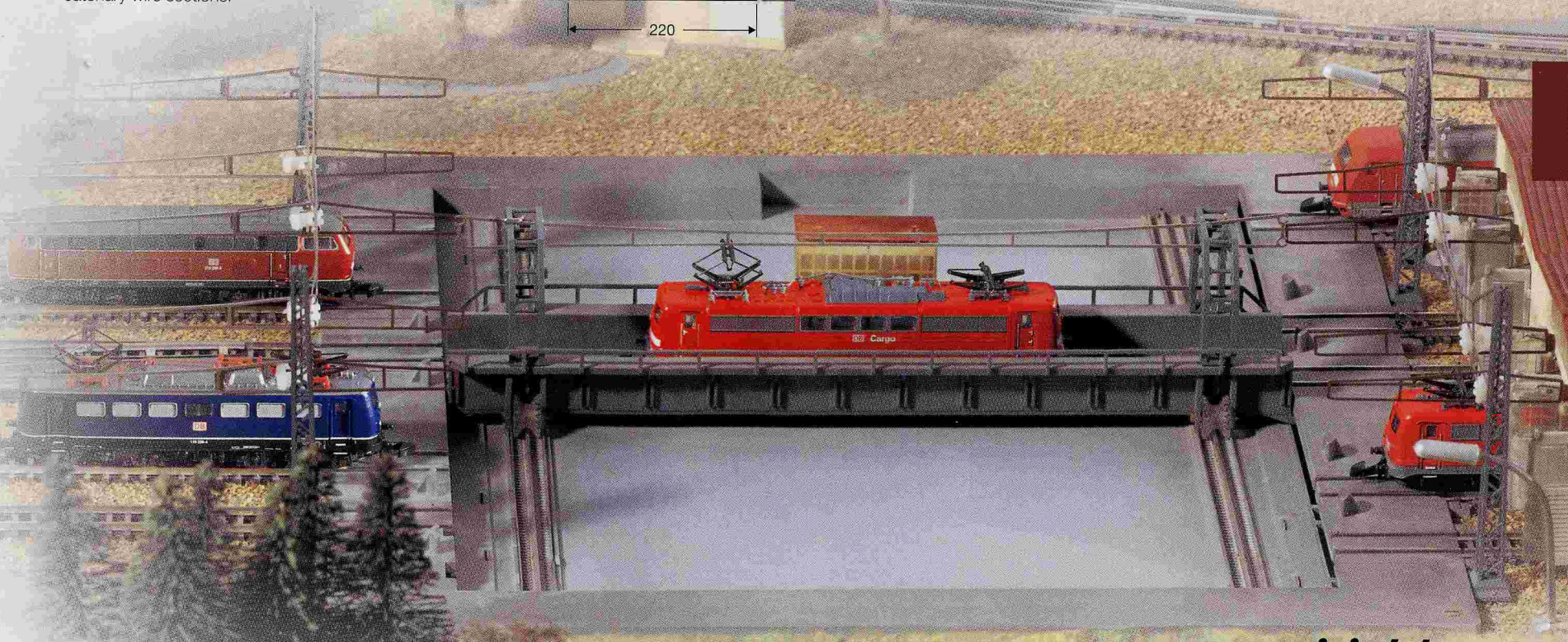
8994 Transfer Table.
2 approach tracks and 8 stall tracks. Transfer table pit requires sunken installation for flush mount on layout. Controller for remote control of deck and locomotives. Electric motor mechanism. Automatic shutoff of power to all tracks not in contact with the deck. Width and length each 220 mm (8-5/8″). Can be used with 8980 locomotive shed.



8980 Locomotive Shed Kit.
Doors operated electro-mechanically. Equipped for installation of 2 locomotive stall tracks (center-to-center track spacing 25 mm/1″) and catenary. Length 152 mm (6″). Width 74 mm (2-7/8″). Height 51 mm (2″). 2 special track sections included to automatically stop locomotives. For use with 8994 transfer table.

8995 Catenary Set for Transfer Table.
2 catenary gantry masts. 1 no. 8922 wire section with wire soldered to it. 10 short catenary wire sections.



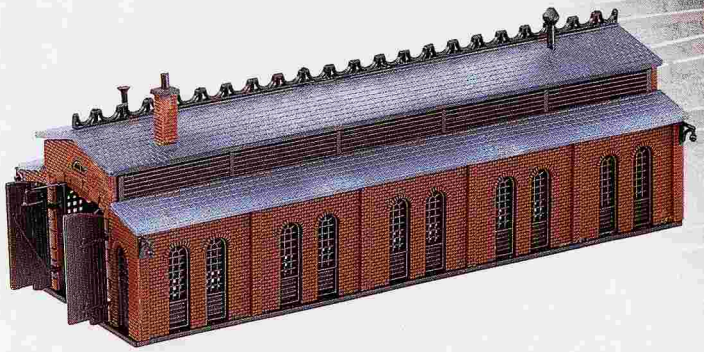


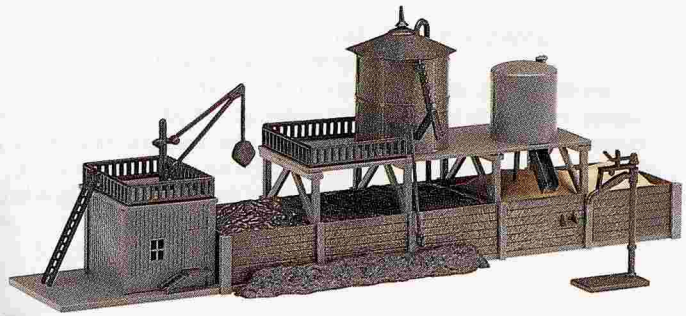
Layout Accessories

8986 Lineside Detail Set.
Contents: 2 turnout tension levers, 4 grade crossing warning signs, 4 sets of 3 grade crossing approach signs, 1 telephone hut and 1 footbridge.



8981 Locomotive Shed Kit.
Doors operated electro-mechanically. Equipped for installation of 1 locomotive stall track. 1 special track section included to automatically stop locomotives. Base dimensions 150 x 50 mm (5-29/32″ x 2″).





8982 Coaling Station Kit.
With crane, coal bunker, water tower, sand tower and separate water standpipe. Base dimensions 167 x 45 mm (6-9/16″ x 1-3/4″).



8972 Container Terminal Kit.
Gantry crane with movable crane carriage, containers and truck. Base dimensions 135 x 65 mm (5-5/16″ x 2-9/16″).

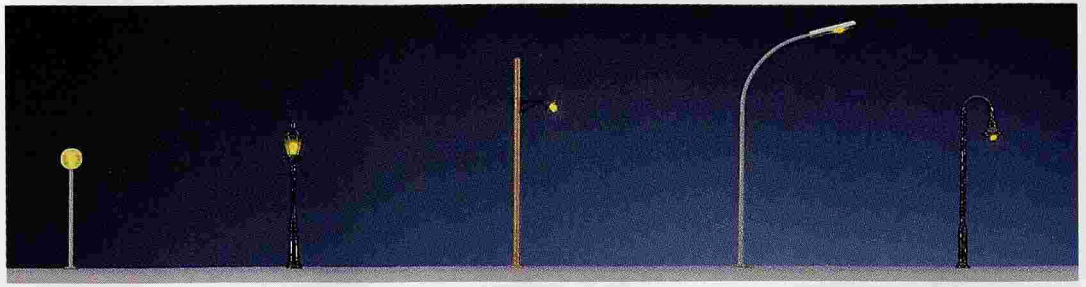


8996 Water Tower Kit.
With water standpipe. Base dimensions 52 x 52 mm (2″ x 2″). Height 75 mm (3″).

Layout Accessories

Large eyes instead of a magnifying lens.

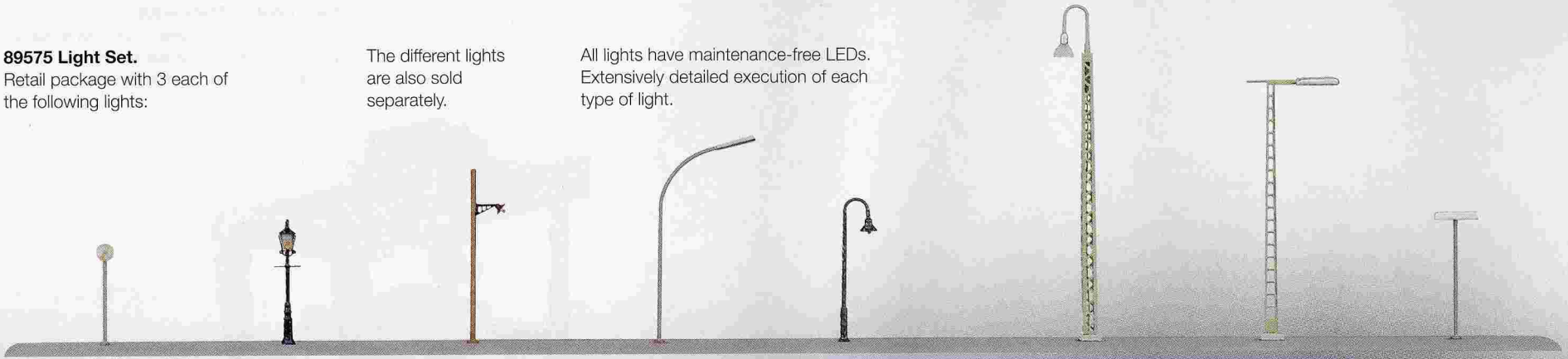
Unbelievable, these tiny little lamps. Scale limits that are otherwise unavoidable in 1:220 seem to be surmounted. Material integrity, detailing, proportions – all of this impresses you as being true to the prototype. Your amazement at the fine features of these lamps continues at dusk, because the lighting power of the little diodes conjures up a nocturnal atmosphere on your layout that makes you forget the scale. This leads inevitably to the question: "How do they do it?", which we will not reveal to you. The main thing is they are here, the new lamps in Z.



89575 Light Set.
Retail package with 3 each of the following lights:

The different lights are also sold separately.

All lights have maintenance-free LEDs. Extensively detailed execution of each type of light.



601223
Park Light.
Height 16 mm (5/8″).

601224
Historic Street Light.
Height 20 mm (13/16″).

601225
Light with Wooden Mast.
Height 29 mm (1-1/8″).

601226
Curved Street Light.
Height 33 mm (1-5/16″).

601227
Goose Neck Light.
Height 23 mm (7/8″).

601229 Station Light on a Tower Mast.
Height 54 mm (2-1/8″).

601231 Station Light on a Standard Catenary Mast.
Height 42 mm (1-5/8″).

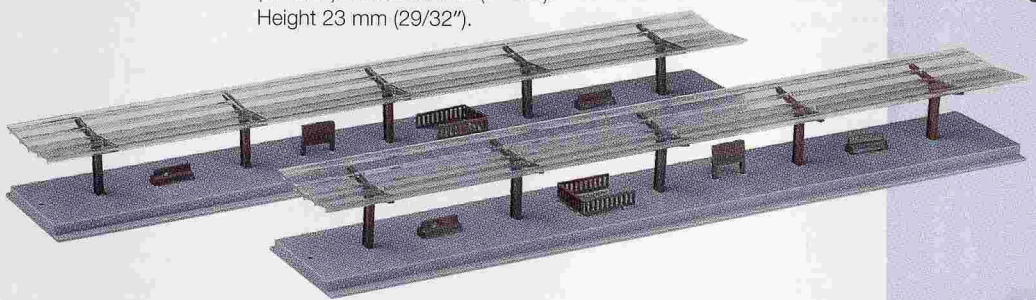
601228 Station Platform Light.
Height 20 mm (13/16″).





8970 Wintersdorf Station Kit.
Main and annex building with roofed passage-way. Can be used by itself and with 8971 freight shed. Base dimensions 72 x 112 mm (2-7/8″ x 4-3/8″). Height 54 mm (2-1/8″).

8961 Station Platform Kit.
2 parts. Total length 440 mm (17-1/4″). Width 38 mm (1-1/2″). Height 23 mm (29/32″).



8971 Freight Shed Kit.
Warehouse, loading ramp and tool shed. Can be used by itself and with 8970 station. Base dimensions 53 x 130 mm (2-1/8″ x 5-1/8″). Height 38 mm (1-1/2″).





8903 Truck Set Kit.
Contents: Parts for the construction of the following 6 differently colored truck models. 1 cement truck, 1 dump truck, 2 Mercedes transporters with a closed box body and 2 Mercedes transporters with side and rear windows.

8904 Automobile Set Kit.
Contents: Parts for the construction of the following 12 different colored automobile models. 3 Mercedes Benz 500 SE, 3 Opel Rekord Caravan, 3 BMW 735i and 3 VW Passat.





8952 Automobile Set.
4 models: VW Passat, Opel Rekord Caravan, BMW 735i and Mercedes 500 SE. Can be loaded onto the 8709 auto transport car.

8917 Fire Truck Set.
Contents: 1 fire truck with ladder, 1 crash truck and 1 DB 508 fire truck with fire fighting equipment.

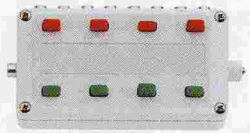


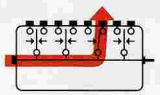


89010 Container Set with Truck Transport.
Contents: 6 each 20 ft. containers, three designs, every 2 containers with the same design. 6 each 40 ft. containers, three designs, every 2 containers with the same design. Parts to construct 3 truck tractors. 3 trailer frames included. The 40 ft. containers can be placed on the trailer frames for transport.

Control Boxes

For remote-control operation

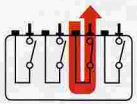




Schematic of 7272
(Button 3 pushed)

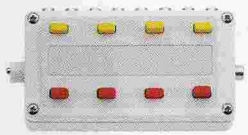
7272 Control Box.
For controlling 4 double solenoid accessories. The position of the buttons shows the setting for the signals, turnouts, etc. Length 80 mm (3-1/8″). Width 40 mm (1-9/16″).

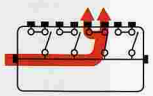




Schematic of 7273
(Button 3 pushed)

7273 Control Box.
For turning 4 different track or accessory circuits on and off. For example, power can be controlled in 4 storage sidings in 4 different track circuits. Length 80 mm (3-1/8″). Width 40 mm (1-9/16″).





Schematic of 7274

7274 Control Box.
For dividing or switching a track or accessory circuits into 4 different circuits with 2 connections per circuit. For example, 4 accessory circuits for building illumination can be turned on or switched over. Length 80 mm (3-1/8″). Width 40 mm (1-9/16″).



8945 Universal Relay.
With two single-pole switches and one double-throw switch for various circuits. Unit can perform a wide variety of tasks automatically (up to 3 functions simultaneously). Operating current 10 volts. Double solenoid mechanism. Can be activated with circuit tracks, the 7272 control box or with the hand lever. Width 30 mm (1-3/16″). Length 70 mm (2-3/4″). Height 8 mm (5/16″).

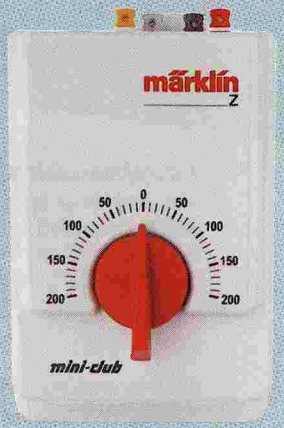


8946 Manual Signal Controller.
With two single-pole switches and one double-throw switch for controlling the light changeover on the 8939 signal and track current, for example. Width 30 mm (1-3/16″). Length 70 mm (2-3/4″). Height 8 mm (5/16″).



8947 Double-Pole Reverse Switch.
(Polarity switch). Operating current 10 volts. Double solenoid mechanism. Can be activated with circuit tracks, the 7272 control box or with the hand lever. Width 30 mm (1-3/16″). Length 70 mm (2-3/4″). Height 8 mm (5/16″).

Power Packs



67011 230 volts
67201 100 volts Japan
67271 120 volts USA. UL/CSA tested.
mini-club Power Pack.
Sensitive speed control for gradual acceleration, consistent slow speed and power increases in speed up to the maximum speed. Single knob operation for adjusting track current (direct current) between 0 and 10 volts and for determining the direction of travel by turning the speed control knob from the center position. Up to 8 VA power available in the track circuit, 8 VA at 10 volts (alternating current) in the accessory circuit. Plastic housing. Dimensions 85 x 125 x 75 mm (3-3/8″ x 4-15/16″ x 2-15/16″).

8950 Light Socket for Buildings.

8953 Light Insert.
Has 10 volt light bulb. For use with 8950 light socket, 8939 and 8940 signal, 8992 railroad crossing gate, in all locomotives with headlights and in ICE intermediate cars. (Exception: units with maintenance-free LEDs for headlights.)

269060 Light Bulb.
For 8871 ICE powered end units.

602100 Light Bulb.
For 8718 and 8782 commuter cars, for rear of 8896 locomotive.

8987 Pair of Brushes.
For locomotives 8803 and 8895.

89871 Pair of Brushes.
For locomotive 88641.

8988 Pair of Brushes.
For locomotives 8831, 8854 and 88572.

89881 Pair of Brushes.
For locomotive 88021.

8989 Pair of Brushes.
For locomotives 8806, 88061, 88111, 88180, 88181, 8820, 8822, 88271, 88381, 88391, 88448, 88453, 8856, 88680, 8878, 88781, 8879, 88831, 88834, 8884, 8885, 8889, 8896, 88980 and 88991.

89891 Pair of Brushes.
For locomotives 88431, 88454, 88535, 88602, 88712 and 88835.



262470 Scheren Pantograph.
With mounting screw (785150).
For locomotives 88111, 8822, 88381, 88391, 8854, 8856 and 88572.



265370 Single Arm Pantograph.
With mounting screw (785150).
For locomotives 88448, 88431, 88453, 88454, 88535, 88680 and 88712.

8974 Rerailer.
Facilitates placing locomotives and cars on the track.

7149 Oiler with Narrow Applicator Opening.
Contains 10 ml (0.0338 oz.) special oil for lubricating locomotives and cars.

Wire
The copper conductor in this wire consists of 24 separate strands each 0.10 mm (0.0004″) in diameter with a total cross section of 0.19 sq. mm (0.008 sq. in.). This cross section of wire will withstand a short circuit.

After the track has been laid, it's time for wiring. This is no problem with the Märklin wiring system.

Operating Trains
The adjustable track voltage (DC) is carried to the track with the red (power to the track) and brown (ground return) wires.

Accessories
The accessory circuit (AC) is completed with the yellow wire to the user and with the gray wire (ground return) back to the power pack.

Solenoid Accessories
The blue wires on the solenoid accessory always go to a contact generator, either to the 7272 control box or to an 8529, 8539 or 8589 circuit track. The gray wire goes from the control box to the power pack.

Wire
7100 Wire.
Single conductor. Gray. 10 m (33′)
7101 Wire.
Single conductor. Blue. 10 m (33′)
7102 Wire.
Single conductor. Brown. 10 m (33′)
7103 Wire.
Single conductor. Yellow. 10 m (33′)
7105 Wire.
Single conductor. Red. 10 m (33′)



7130 Plug and Socket Assortment.
100 pieces (66 plugs and 34 sockets). Assorted according to average requirements for each color.



7209 Distribution Strip.
Has 11 electrically linked connections. Dimensions 50 x 20 mm (2-3/4″ x 11/16″).

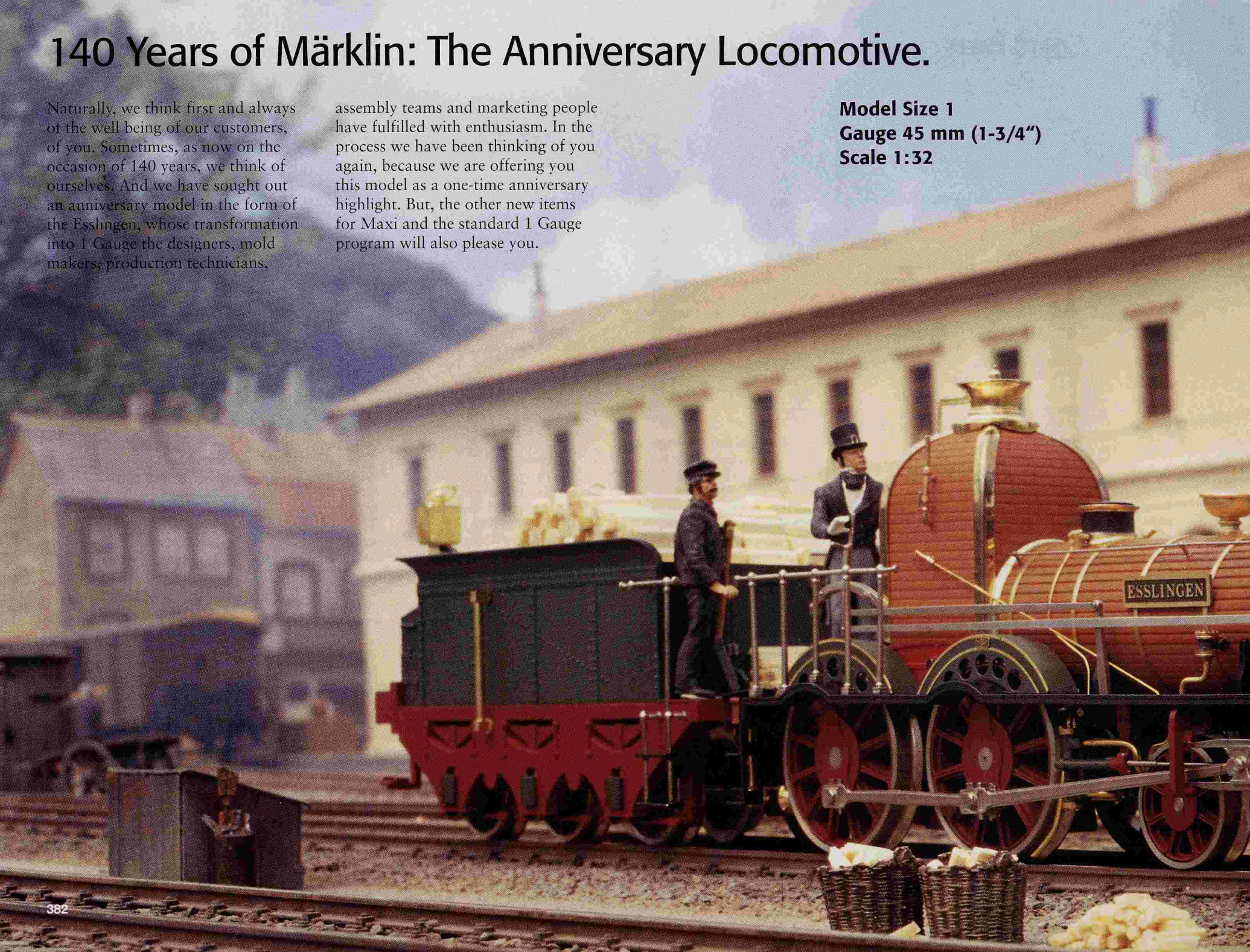


603026 Automatic Wire Stripper.
For stripping insulation from all single conductor wire 0.19 to 6.0 square milli meters in size. Wire stripper mechanism automatically adjusts itself to the size of the wire. Length of wire insulation to be stripped can be adjusted from 5 to 12 mm. Side cutter integrated into the wire stripper.

140 Years of Märklin: The Anniversary Locomotive.

Naturally, we think first and always of the well being of our customers, of you. Sometimes, as now on the occasion of 140 years, we think of ourselves. And we have sought out an anniversary model in the form of the Esslingen, whose transformation into 1 Gauge the designers, mold makers, production technicians, assembly teams and marketing people have fulfilled with enthusiasm. In the process we have been thinking of you again, because we are offering you this model as a one-time anniversary highlight. But, the other new items for Maxi and the standard 1 Gauge program will also please you.

Model Size 1
Gauge 45 mm (1-3/4")
Scale 1:32





Different and Out of the Ordinary: Maxi

In a few years Maxi has taken over a special place in model railroading. Because nothing else is like Maxi: Metal construction with the unmistakable charm of sturdy, sheet metal toys. With curves small enough for inside. Large enough and weather-resistant for operation outdoors. Also, multi-train and digital possibilities with the DELTA electronic circuit that is built in at the factory. But also suitable for conventional alternating or direct current operation. With the great railroads of the world as its prototypes. And fully compatible with the standard 1 Gauge program's technology and accessories.




Puri
Put
Gut

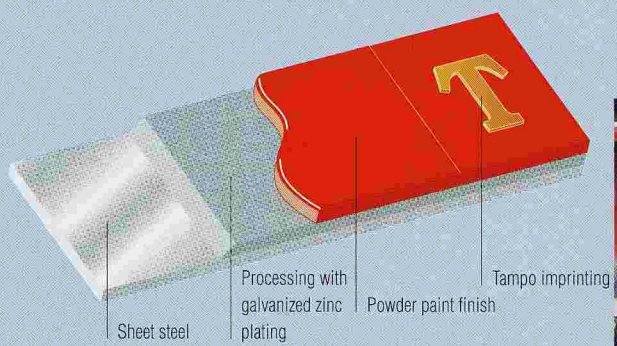
Everything speaks for Maxi.

You can approach Maxi in two ways, with feeling or with understanding. For feeling it's best to go to your Märklin dealer and hold a Maxi locomotive once in your hands. Anything else that could be said about it would be too much. If you want to approach Maxi with understanding, we have assembled the most important reasons in its favor:



Metal construction:
The locomotives and cars consist of metal - the bodies are made of heavy, precisely formed sheet metal, the wheel set are of nickel-plated zinc castings.

The weight: The heavy metal construction promotes pulling power and realistic running characteristics. The high level of weight also improves electrical pickup. And when you hear the clatter of the wheels over the rail joints, you have an idea of where the railroad got it's nickname the "high iron".

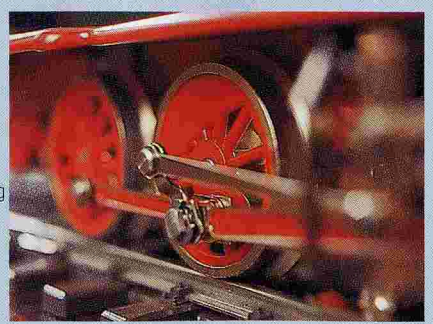


The manufacturing process:
The high-quality sheet steel is processed in several steps like modern automobile car body building. The final step is the color-fast powder paint finish; scratches on this finish can be quickly repaired with a paint kit from an autoparts store. Tampo printing is used to produce sharp striping and lettering.

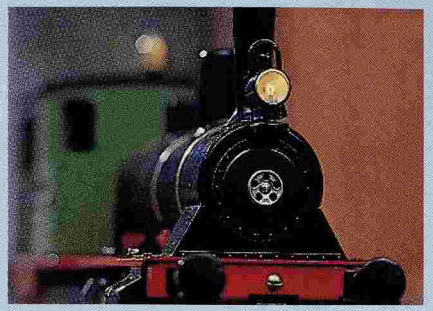
Technology: The sturdy mechanism is located in a protected position in the locomotive and is designed for many years of service. The electronic circuit plate allows operation with AC power, Märklin DELTA or Digital and simply plugs into the locomotive wiring circuit; a second circuit plate is included for operation with DC power.



The DELTA multi-train system:
All Maxi locomotives have a built-in DELTA module. Using a hand controller you can address up to four Maxi locomotives, or with four hand controllers you can control them independently of each other at the same time. On a single power circuit and without extensive wiring.

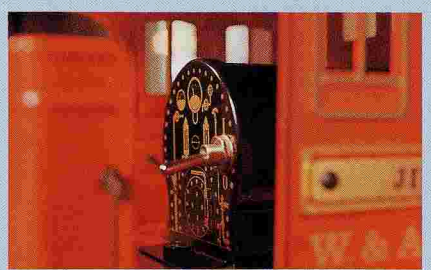


The quality:
Metal construction, multi-step processing and technology make Maxi almost indestructible. Long life is guaranteed with even the most rigorous play conditions; the occasional scratch and dent actually increases the charm of sheet metal toys.



Headlights:
Every Maxi locomotive is equipped with headlights at one or both ends. These headlights switch over with the direction of travel on several of these locomotives.

Railroading outdoors:
With this kind of quality Maxi is the ideal railroad system for the yard or terrace. The track is durable and is weather resistant. The size of 1 Gauge also makes Maxi the ideal railroad for playing outdoors.



Smoke generator:
The smoke generator in Maxi steam locomotives can be turned off with a switch in the cab to reduce power consumption when operating several locomotives at the same time.

Play value:
The car bodies are screwed on the frames and are equipped for experimental discoveries. Doors can be opened, roofs can be removed, and different working models along with the handy size of the models increase the play value.



The high-efficiency decoder:
For single-motor Maxi locomotives there is a digital, high-efficiency decoder that can be retrofitted into these units. Maximum speed, acceleration and deceleration rates can be custom adjusted for each locomotive on this decoder. A load compensation feature provides near constant speed during slow running and on ascending and descending grades. In addition, up to three auxiliary functions on the locomotive can be controlled with this decoder.



The sound effects circuit:
The "Union Pacific" steam locomotive with a tender and the "Santa Fe" diesel locomotive have a sound effects circuit that can be turned on and off. They simulate realistic steam or diesel locomotive sounds when starting, stopping and at regular speeds out on the main line, independent of the locomotive's speed.



Using Maxi with standard 1 Gauge:
Maxi is fully compatible with the standard 1 Gauge and its track, turnouts, signals, Märklin Digital and other model railroad technology. With a scale of 1:32 Maxi has an almost inexhaustible choice of prototypes among the standard gauge railroads of the world.

Couplers:
Maxi and the standard 1 Gauge program have the same sturdy 1 Gauge couplers. Locomotives and cars can be coupled together in any order that you want. Preuncoupling using the uncoupler track is possible when switching cars.

The locomotive name plates:
On many Maxi locomotives the name plates put on at the factory can be changed. Locomotive name plates with custom names can be ordered for a small charge – ideal as a gift, a souvenir, a gag or just for the fun of it.

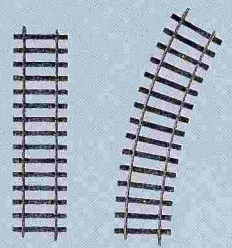
Everything revolves around Maxi.

Anywhere that people meet, Maxi has a good chance of becoming the center of activity. Because Maxi is more than just a model railroad system; it offers one's feelings room for expression and overcomes barriers. Maxi awakens memories, surprises you with modern technology and fascinates people with its high level of quality. Thanks to its sturdy construction, anyone can join in to play with it to their heart's desire: Simply unpack the starter set, set it up, and Maxi is already bringing young and old alike together to play with it.

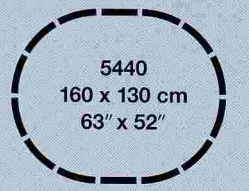


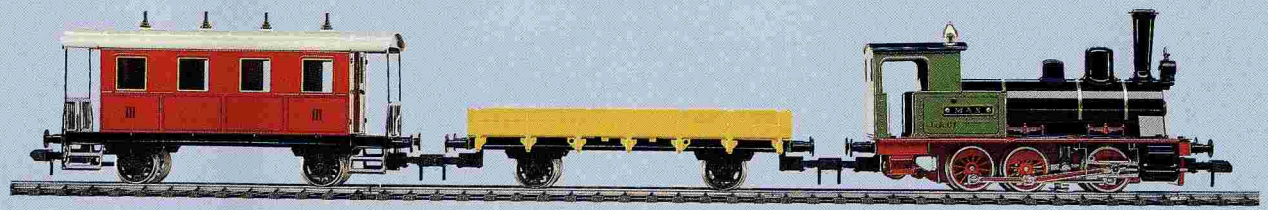


5440 230 Volts
"Maxi" Starter Set.
Contents: 1 Swabian tank locomotive, 1 passenger car 3rd class, 1 low side car, 12 no. 5922 curved track, 2 no. 5903 straight track, 1 each 32 VA / 2 amp transformer, 1 figure of an engineer, 1 figure of a fireman, 1 no. 5654 feeder clip set. 1 no. 56031 track clip set. Can be expanded with the entire Märklin 1 assortment. Tank locomotive with built-in electronic circuit board for operation with AC power or Märklin DELTA. Electronic circuit board included for operating the locomotive with DC power. Locomotive has headlight at the front. Built-in smoke generator with a switch in the engineer's cab to turn it on and off.

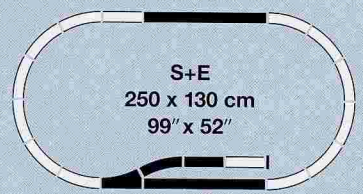


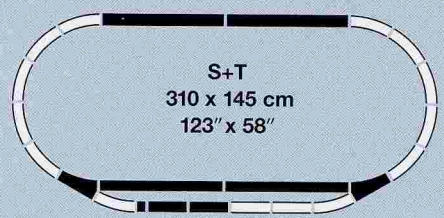


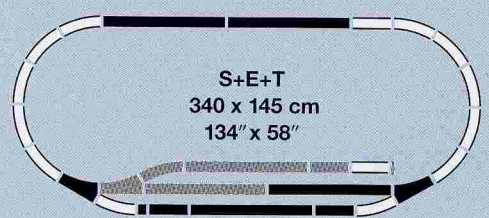




The 5440/5441 Maxi starter set can be expanded with the E 59850 and T 59851 track extension sets (see page 454) and the entire 1 Gauge assortment.







MAXI

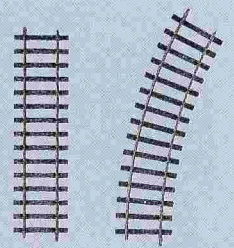
Start with Emma.

Emma is the name of the smallest Maxi locomotive that is equipped with the same technology as her larger sisters: DELTA electronic circuit, smoke generator and headlight. Emma is part of the Maxi starter set of the same name. With a dump car and a low side car, it's been created for working with dirt in your garden or, indoors, for transporting large quantities of peanuts and gummi bears.

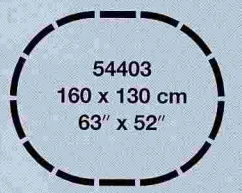




54403 230 Volts
54404 110 Volts USA
"Emma" Starter Set.
Contents: 1 tank locomotive, 1 dump car, 1 low side car loaded with lumber, 12 no. 5922 curved track, 2 no. 5903 straight track, 1 each 32 VA / 2 amp transformer, 1 figure of an engineer, 1 no. 5654 feeder clip set. 1 no. 56031 track clip set. Can be expanded with the entire Märklin 1 assortment. Tank locomotive with built-in electronic circuit board for operation with AC power or Märklin DELTA. Electronic circuit board included for operating the locomotive with DC power. Locomotive has headlight at the front. Built-in smoke generator with a switch in the engineer's cab to turn it on and off.

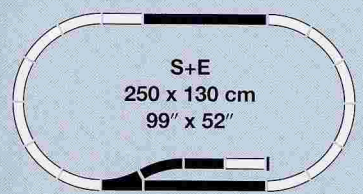


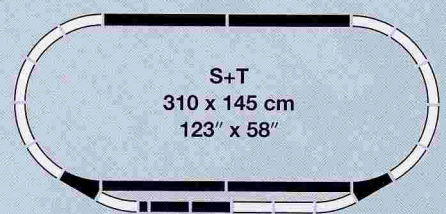


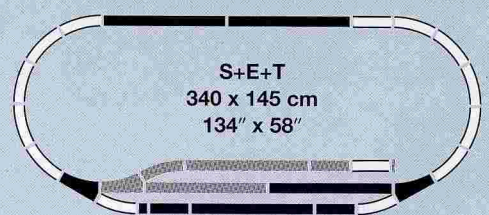




The 54403/54404 Maxi starter set can be expanded with the E 59850 and T 59851 track extension sets (see page 454) and the entire 1 Gauge assortment.







MAXI

Maxi in the New World.

To roam playfully in foreign countries, to explore other cultures, to overcome borders, to wander through history. Everything is allowed in a fantasy – colorfully supported by the Maxi starter set with a tank locomotive and two cars lettered for the „Western & Atlantic R.R.“.

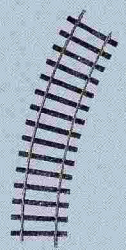
Typically Maxi, this smallest of our American locomotives comes complete with an electronic circuit for operation with DC power, AC power or with DELTA. A smoke generator that can be turned on and off and a headlight also come with this locomotive.



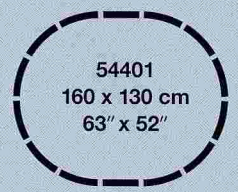


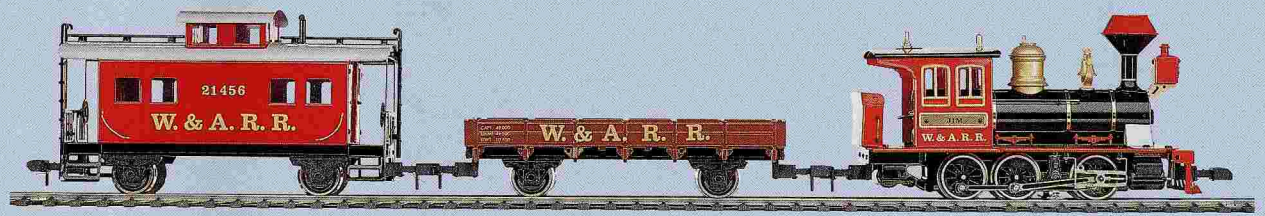
54401 230 Volts
54402 110 Volts USA
"American" Starter Set.
Contents: 1 American tank locomotive, 1 low side car, 1 caboose. All three models painted and lettered for the Western & Atlantic Railroad. 12 no. 5922 curved track, 2 no. 5903 straight track, 1 each 32 VA / 2 amp transformer, 1 figure of an engineer, 1 figure of a fireman, 1 no. 5654 feeder clip set. 1 no. 56031 track clip set. Can be expanded with the entire Märklin 1 assortment. Tank locomotive with built-in electronic circuit board for operation with AC power or Märklin DELTA. Electronic circuit board included for operating the locomotive with DC power. Locomotive has headlight at the front. Built-in smoke generator with a switch in the engineer's cab to turn it on and off.


2 x

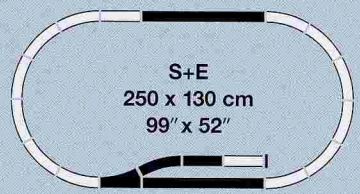

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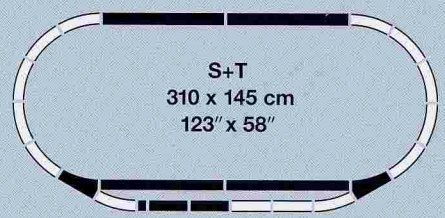


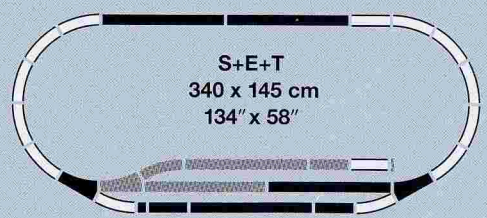




The 54401/54402 Maxi starter set can be expanded with the E 59850 and T 59851 track extension sets (see page 454) and the entire 1 Gauge assortment.







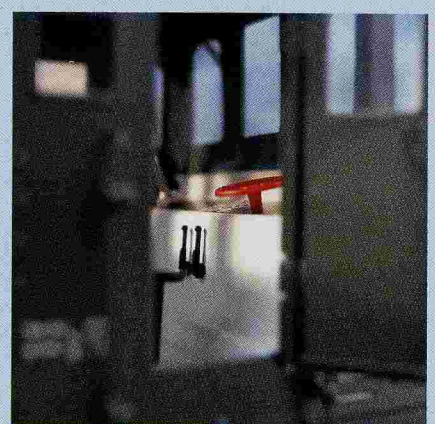
MAXI

Short and Good.

This little regional train is a Bavarian treat whose charm can hardly fail to attract non Bavarians. The class E 69 executed in the Maxi style will enchant you with its typical proportions and numerous, separately applied details. Two Bavarian cars complete the composition. The class E 69 was first used in Bavaria in 1909 and until 1982 was the oldest DB locomotive still in service. It is now in Garmisch as an operational museum locomotive.



54102 Bavarian Train Set.
Set consists of 1 electric locomotive and 2 passenger cars with different imprinting. Two-axle class E 69 electric locomotive in green paint scheme. 1 axle powered. 2 traction tires. Catenary pantograph. Extensive imprinting and lettering. Built-in electronic circuit for operation with AC power or Märklin DELTA and Digital. Electronic circuit board for operating the locomotive with DC power included. Headlights front and rear that change with the direction of travel. 2 two-axle Bavarian Railroad passenger cars with different imprinting. Doors on the ends that can be opened. Removable roofs. Minimum radius for operation is 600 mm (23-5/8″). Train length 78.0 cm (30-11/16″).

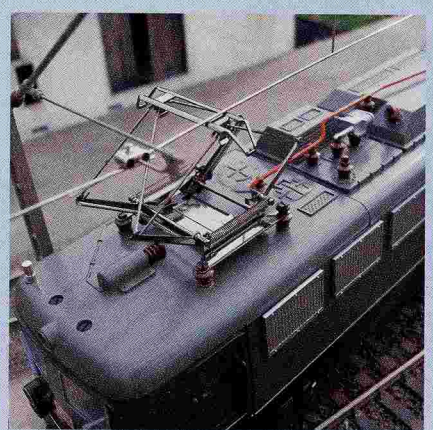


The Locomotive in Green.

It is one of the so-called standard locomotives that were used in freight service to bring the German economy up to speed. It came out in its original green color scheme as a freight locomotive and is a classic that was seen in mixed service over many decades. With two motors, our Maxi model is also equipped for all sorts of jobs on your 1 Gauge layout.



54213 Electric Locomotive.
German Railroad, Inc. class 140 four-axle electric locomotive in green color scheme.
2 motors. 2 axles powered. 4 traction tires.
2 catenary pantographs. Extensive imprinting and lettering. Built-in electronic circuit for operation with AC power or Märklin DELTA, Digital and DC power. Headlights front and rear that change over with the direction of travel. Minimum radius for operation is 600 mm (23-5/8″). Length over buffers 48.5 cm (19-1/8″).



The power of two motors.

The imposing class 110 is the bridge from Maxi to the standard 1 Gauge program; at the same time it is the first Maxi locomotive in the colors of a modern railroad. Its prototype has been used in a variety of ways since the 1950s. Our model proves how impressively Maxi combines the dynamic power of the prototype with the character of high quality, sheet metal construction. With two motors, our model can even pull heavy freight trains with the modern container cars, for example. The class 110 can easily negotiate the smallest Maxi curve; a minimum radius of 1,020 mm (40-5/32″) is required for operation with catenary.





54212 Electric Locomotive.
Class 110 4-axle electric locomotive in the German Federal Railroad's (DB) red paint scheme. 2 motors. 2 axles powered. 4 traction tires. 2 catenary pantographs. Extensive imprinting and lettering. Built-in electronic circuit for operation with AC power, Märklin DELTA and Digital, or DC power. Headlights front and rear that change over with the direction of travel. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 48.5 cm (19-1/8″).

Die standard 1 Gauge models illustrated require curved track with a minimum radius of 1,020 mm (40-5/32″).

MAXI

Quite close to the sky.

The white and blue state colors symbolize how close the Bavarians feel to the sky. Blue on white is what you see here; Maxi is not taking a back seat in this closeness to the sky. The small Bavarian electric locomotive with a passenger car of the same color brings a real Bavarian holiday mood into your front yard – or into the playroom. Of course, the E 69 can also be operated off of catenary.



54201 Bavarian Electric Locomotive.
Class E 69 2-axle electric locomotive in white and blue paint scheme. 1 axle powered. 2 traction tires. Catenary pantograph. Extensive imprinting and lettering. Built-in electronic circuit for operation with AC power or Märklin DELTA and Digital. Electronic circuit board for operation with DC power included. Headlights front and rear change over with the direction of travel. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 23.0 cm (9-1/16″).

54711 Bavarian Passenger Car.
Bavarian Railroad 2-axle passenger car. Paint scheme in the traditional Bavarian colors of white and blue. Doors at the ends that can be opened. Removable roof. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 27.5 cm (10-13/16″).

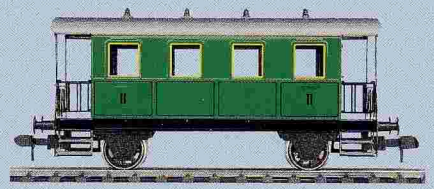




54833 Boxcar.
Two-axle boxcar lettered "König Ludwig" ("King Ludwig"). Sliding doors that can be opened. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 27.5 cm (10-13/16″).



54851 Bavarian Baggage Car.
Two-axle Bavarian Railroad baggage car. Sliding doors on the sides and doors at the ends that can be opened. Removable roof. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 27.5 cm (10-13/16″).



5470 Swabian Passenger Car.
Württemberg Railroad two-axle passenger car. 2nd class. Doors at the ends that can be opened. Removable roof. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 27.5 cm (10-13/16″).

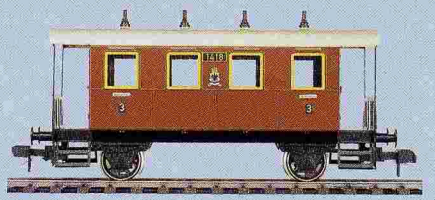
MAXI

Noblesse oblige.

What better way could you find to christen such a stately Prussian locomotive and tender? The "Alte Fritz" reflects the pride of the era, the fine striping and strong colors are proof of an attempt at a certain kind of splendor such as was common among the royal provincial railroads of the times. This is fine with us, because the Maxi models with their powder paint finish make an even more attractive impression with these color schemes. The Prussian passenger car is the appropriate addition to this locomotive.



54522 "Alter Fritz" Prussian Locomotive with Tender.
Three-axle steam locomotive with tender in the typical colors of a Prussian locomotive. 3 axles powered through side rods. 2 traction tires. Extensive imprinting and lettering. Built-in electronic circuit for operation with AC power or Märklin DELTA and Digital. Electronic circuit board for operation with DC power included. Headlights front and rear that change over with the direction of travel. Built-in smoke generator with a switch in the engineer's cab to turn it on and off. Minimum radius required for operation 600 mm (23-5/8"). Length over buffers 48.0 cm (18-29/32").



54701 Prussian Passenger Car.
Prussian Railroad two-axle passenger car. 3rd class. Doors at the ends that can be opened. Removable roof. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 27.5 cm (10-13/16″).

MAXI

A Glass Palace With Steam Power.

Seldom do the prototype and the model come together so successfully as with the "Glaskasten" and Maxi. The lovely whimsicality of the original class 98[3] was made for Maxi's nostalgic metal look, in which all of the typical details are reproduced with great care, of course.

The Volkswagen was born 60 years ago and was built and rebuilt in many variations. The Beetle railcar is something special just for fun, a vehicle that brings us much enjoyment. Now as a model it will enrich your layout, too.

54312 Rail Beetle.
VW automobile on rails. Fine reproduction of the Volkswagen, Inc.'s world famous automobile. 1 axle (rear axle) powered. Interior details. Headlights front and tail lights rear. Built-in electronic circuit for operation with AC power or Märklin DELTA, Digital and DC power. Minimum radius required for operation 600 mm (23-5/8"). Length 11.5 cm (4-17/32"). Scale is 1:32.



Photo: Volkswagen AutoMuseum Foundation

MAXI



54504 "Glaskasten" Light Weight Tank Locomotive.
Two-axle tank locomotive in a German Federal Railroad (DB) paint scheme. 1 axle powered through side rods. 2 traction tires. Extensive imprinting and lettering. Built-in electronic circuit for operation with AC power or Märklin DELTA and Digital. Electronic circuit board for operation with DC power included. Headlights front and rear that change over with the direction of travel. Built-in smoke generator with a switch in the engineer's cab to turn it on and off. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 22.0 cm (8-11/16″).

Boredom unknown.

Each of these Maxi models will drive away boredom. The small tank locomotive, the yellow banana car, the dump car, and the crane car set offer all sorts of possibilities for switching and loading operations. To go with them, the wood locomotive shed for a short Maxi locomotive.

56175 Locomotive Shed.
Model of a 1-stall locomotive shed for 1 Gauge locomotives with a total maximum length of 30.0 cm (11-13/16″). Locomotive shed is built completely of wood. Doors that can be opened. Removable roof. Locomotive shed is delivered in parts. This locomotive shed is suitable for use indoors. Its use outdoors is possible only as long as the model does not come in contact with moisture (rain, wet ground). For that reason it should not be left continuously outdoors. Entry clearance maximum 15.0 cm (5-7/8″). Base dimensions 35.0 cm x 20.0 cm (13-3/4″ x 7-7/8″).

54835 Boxcar.
Two-axle boxcar lettered for an international trading company. Sliding doors that can be opened. Minimum radius for operation is 600 mm (23-5/8″). Length over buffers 27.5 cm (10-13/16″).

54510 Tank Locomotive.
Two-axle tank locomotive in the typical colors of a Baden locomotive. 2 axles powered through side rods. 2 traction tires. Extensive imprinting and lettering. Built-in electronic circuit for operation with AC power or Märklin DELTA and Digital. Electronic circuit board for operation with DC power included. Headlight at the front. Built-in smoke generator that can be turned on and off with a switch in the cab. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 21.0 cm (8-1/4″).

54757 Dump Car.
Two-axle dump car with imprinted car floor. Hopper can be tipped to either side. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 23.0 cm (9-1/16″).

54990 Crane Car Set.
Set consists of a three-axle crane car and a two-axle crane boom support car. Crane car with rotating crane. Boom can be adjusted with hand crank. Crane hook can be raised and lowered with second hand crank. Hinged support struts with spindle levelers at the four corners of the car. Crane boom support car with boom support. Minimum radius required for operation 600 mm (23-5/8″). Total length over buffers 54.0 cm (21-1/4″).

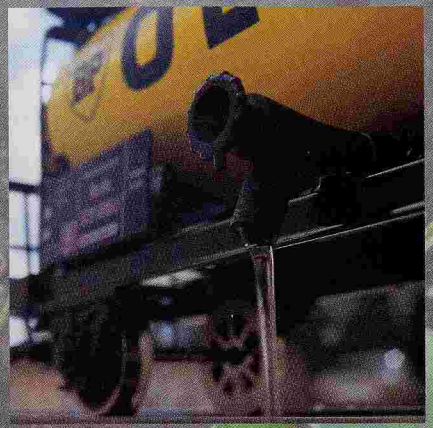


60955 Maxi High-Efficiency Electronic Circuit.
High-efficiency decoder for converting single-motor Maxi locomotives to the high-efficiency propulsion system. This electronic circuit has a total of 4 controllable functions. The “function” output is intended for headlights. The “f1” and “f2” outputs can be used for other functions such as a sound system or a smoke generator. The “f4” function enables you to turn off the load-dependent speed control feature for easier switching maneuvers. The “f1”, “f2” and “f4” functions can be turned on and off only with a Control Unit (6021) or with a Control 80 f locomotive controller or an Interface connected to this central unit. This electronic circuit offers the potential to adjust maximum speed as well as acceleration and braking delay. Built-in load-dependent speed control for different load situations such as ascending and descending grades. Can be coded for 80 different locomotive addresses. When operated with AC power or with the 6607 DELTA Station, the “function” and “f1” functions are turned on. Decoder dimensions 43 x 25 x 8 mm (1-11/16″ x 1″ x 5/16″).

Mixed and crossed over and over.

The grade crossing closes its gates automatically the moment a Maxi train is on its track. This is so that rail and road traffic can cross each other without running into one another. The modern piggy back car and the tank car from the German State Railroad period are an example of intermixing, something that disturbs only the most serious model railroader. The piggy back car is loaded with containers and is also suitable for transporting truck trailers.

54961 Tank Car.
Two-axle tank car with brakeman's cab. Lettered for OLEX Gas and Petroleum Oil Company, Inc., Berlin-Wilmersdorf, Germany. Tank can be filled through a hatch on the top and emptied from a valve on the side of the car. Minimum radius required for operation 600 mm (23-5/8"). Length over buffers 27.5 cm (10-13/16").



54758 Gondola.
Württemberg Railroad two-axle gondola. Metal car body. Minimum radius for operation is 600 mm (23-5/8"). Length over buffers 23.0 cm (9-1/16").



54760 Piggyback Car.
Four-axle flat car for transporting containers or truck trailers. Model comes with 2 removable containers. Doors at one end on both containers that can be opened. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 44.0 cm (17-5/16″).

59950 Mechanically Activated Railroad Grade Crossing.
With full gates. With built-in section of 1 Gauge track for single track routes. Rocker frame is pressed down by locomotive and cars passing over it and closes the gates. Metal base and superstructure. With crossbuck warning signs on the sides. Base size 30 x 30 cm (11-13/16″ x 11-13/16″).

Have the car fully loaded …

You'll carry every type of bulk freight over the rails with this four-axle gondola. The Americans probably call it a "gondola" because of its resemblance to the Venetian canal boats. This model is loaded with scale sized, real ballast.
The stake car shows the Era IV colors of the DB. The stakes can be folded down for loading. It also comes from the factory with a load, real metal pipe that is safeguarded with chains.

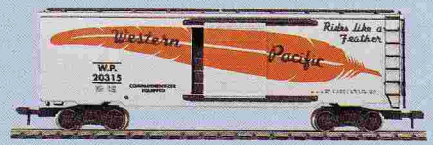
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54942 "Santa Fe" Gondola.
Four-axle gondola painted and lettered for the Atchison, Topeka & Santa Fe Railway. Loaded with real, scale size ballast. 2 trucks. Minimum radius for operation is 600 mm (23-5/8"). Length 40.5 cm (15-15/16").

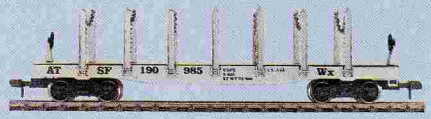


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54950 Stake Car.
Four-axle stake car loaded with metal pipe. Load surface set off in a different color. Stakes can be folded down. 2 trucks. Minimum radius for operation is 600 mm (23-5/8″). Length 44.0 cm (17-5/16″).



54871 Boxcar.
Four-axle boxcar lettered for the Western Pacific Railroad. 2 trucks. Sliding doors that can be opened. Minimum radius required for operation 600 mm (23-5/8″). Length 36.0 cm (16-3/8″).



54941 Flat Car.
Four-axle flat car painted and lettered for the Atchison, Topeka & Santa Fe Railroad. Stakes that can be folded down. 2 trucks. Minimum radius required for operation 600 mm (23-5/8″). Length 40.5 cm (15-15/16″).



54940 Gondola.
Four-axle gondola painted and lettered for the Pennsylvania Railroad. 2 trucks. Minimum radius required for operation 600 mm (23-5/8″). Length 40.5 cm (15-15/16″).



54861 Caboose.
Four-axle caboose painted and lettered for the Atchison, Topeka & Santa Fe Railroad. 2 trucks. Doors at both ends that can be opened. Minimum radius required for operation 600 mm (23-5/8″). Length 25.0 cm (9-13/16″).

As If Moved By Magic.

With this crane car set Maxi shows what Märklin Digital can do. Because all of the functions on the crane car are digitally remote controlled: The crane cab turns to the left or right, the boom rises and lowers, and even the hook is raised and lowered by a motor. The digital control of this process allows quite gentle, precise movements. Hinged support struts with spindle levelers stabilize the crane, and the boom can be lowered on the boom support car to enable the crane car to be moved to its work site. Whether as a support crane in the maintenance facility, as a loading crane or to support the track laying crew – the digital crane car will bring action to your layout – as if by magic.

MAXI



54991 Digital Crane Car Set.
Set consist of a three-axle crane car and a two-axle crane boom support car.
Power pickup, 3 motors, and a special version digital decoder for remote control with the 6021 Control Unit. On the crane car individual functions such as the rotating cab, movable boom, and the raising and lowering of the crane hook are digitally controlled. Hinged support struts with spindle levelers at the 4 corners of the crane car. Crane boom support car with boom support. Minimum radius required for operation 600 mm (23-5/8″). Total length over buffers 54.0 cm (21-1/4″).


Stuttgart 6709
Kranschutzwagen
LüP 7.4m
4 m
4,00 m
Kranwagen
6804
DB
21
13 m

From the time of the pioneers.

Maxi makes the pioneer period of American railroading come alive again. One the most famous railroad companies was the Union Pacific that crossed a large part of the North American continent from the Missouri River to California. The four-axle passenger car and the "Washington" locomotive with tender are two typical models from this time. Steam domes, cowcatcher and the boiler rings set off in gold color emphasize Maxi's tin-plate character.

54530 "Washington" Union Pacific Locomotive.
Four-axle Western American steam locomotive with tender in the typical colors of the Union Pacific Railroad. 3 axles powered through side rods. 2 traction tires. Extensive imprinting and lettering. Built-in electronic circuit for operation with AC power or Märklin DELTA and Digital. Electronic circuit board for operation with DC power included. Headlight front and rear that change over with the direction of travel. Built-in smoke generator with a switch in the engineer's cab to turn it on and off. Minimum radius required for operation 600 mm (23-5/8"). Length over buffers 49.0 cm (19-1/4").



54720 American Passenger Car.
Union Pacific Railroad four-axle passenger car. 2 trucks. Doors at the ends that can be opened. Removable roof. Minimum radius required for operation 600 mm (23-5/8″). Length 41.0 cm (16-3/8″)..





5473 American Passenger Car.
Central Pacific Railroad four-axle passenger car. 2 trucks. Doors at the ends that can be opened. Removable roof. Minimum radius required for operation 600 mm (23-5/8″). Length 41.0 cm (16-3/8″).

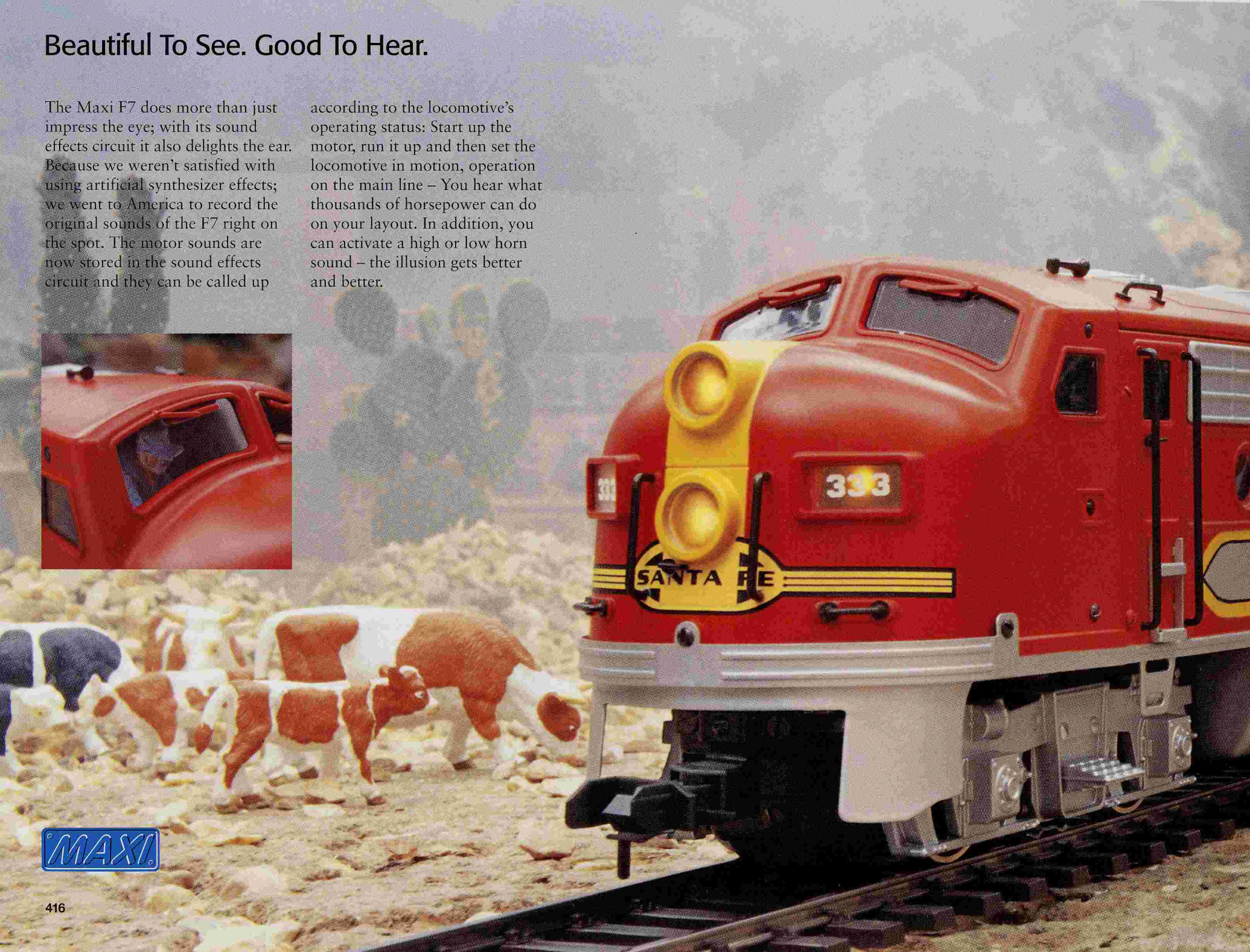


54731 American Passenger Car.
Atchison, Topeka & Santa Fe Railway four-axle passenger car. Two trucks. Doors at the ends that can be opened. Removable roof. 10 different figures in typical American clothing inlcuded. Minimum radius required for operation 600 mm (23-5/8″). Length 41.0 cm (16-1/8″).

MAXI

Beautiful To See. Good To Hear.

The Maxi F7 does more than just impress the eye; with its sound effects circuit it also delights the ear. Because we weren't satisfied with using artificial synthesizer effects; we went to America to record the original sounds of the F7 right on the spot. The motor sounds are now stored in the sound effects circuit and they can be called up according to the locomotive's operating status: Start up the motor, run it up and then set the locomotive in motion, operation on the main line – You hear what thousands of horsepower can do on your layout. In addition, you can activate a high or low horn sound – the illusion gets better and better.



MAXI

54307 Diesel Electric Locomotive (A Unit).
General Motors EMD F 7 four-axle diesel locomotive in the colors of the Atchison, Topeka & Santa Fe Railway. 2 Motors. 2 axles powered. 4 traction tires. Extensive imprinting and lettering. Built-in electronic circuit plate for operation with AC power, or Märklin DELTA, Digital and DC power. **Built-in sound effects circuit with the sounds of the original's motor. Can only be used in operation with Märklin Digital or Märklin DELTA.** Headlights at the front. Lighted number boards. Couplers at both ends. Minimum radius required for operation 600 mm (23-5/8″). Length 48.0 cm (18-7/8″).

54308 Diesel Electric Locomotive (Unpowered A Unit)
for the Atchison, Topeka & Santa Fe Railway. Complements the 54307 locomotive to form a prototypical two unit locomotive. Headlights at the front. Lighted number boards. Couplers at both ends. Minimum radius required for operation 600 mm (23-5/8″). Length 48.0 cm (18-7/8″).



Lightning Clean

The track cleaning car is very useful to couple to a train. Two flexible cleaning elements are mounted between the axles, and they wipe dust and dirt from the rails. Always have the track cleaning car in a train so that your track stays clean and electrically conductive.

54841 Track Cleaning Car.
Two-axle boxcar as a track cleaning car. The rails are cleaned by two cleaning blocks mounted parallel to one another on the underside of the car. These two cleaning elements are separately mounted. Minimum radius for operation is 600 mm (23-5/8″). Length over buffers 27.5 cm (10-13/16″).



Small details with a great effect.

It's the many small details that give a layout that final touch. For example, our figures that liven up the station, cars and the surroundings. Figures that are worth looking at closely: types, faces, posture, hairstyles, clothing and accessories are lovingly formed and carefully painted by hand.
An orderly chaos of freight such as barrels palettes, and crates – all of them made of real wood – also livens up the scene. A particularly interesting idea for playing is combining them with Maxi.



56051 Marker Light Kit.
Marker light with red light bulb, can be attached on the end of a car. Can be mounted on the buffer or on the end wall/hand rail of a car. Power supplied through two wheel contact strips.



56600 Load.
5 Europa pallets, 5 barrels and 1 transport crate. All made of wood. Pieces not available separately.



687130 687160 687170 687210 687230 687240 687250 687260 687300 687350

The 1:32 scale standing and seated figures formerly offered in the 5640 and 56401 selling assortments are now being offered individually under their six digit spare parts numbers. You can populate your 1 Gauge layout with these figures to improve its appearance and to provide more operating enjoyment.



672020 672090 672010 672100 672060 672040 672050 672080 672070 672030

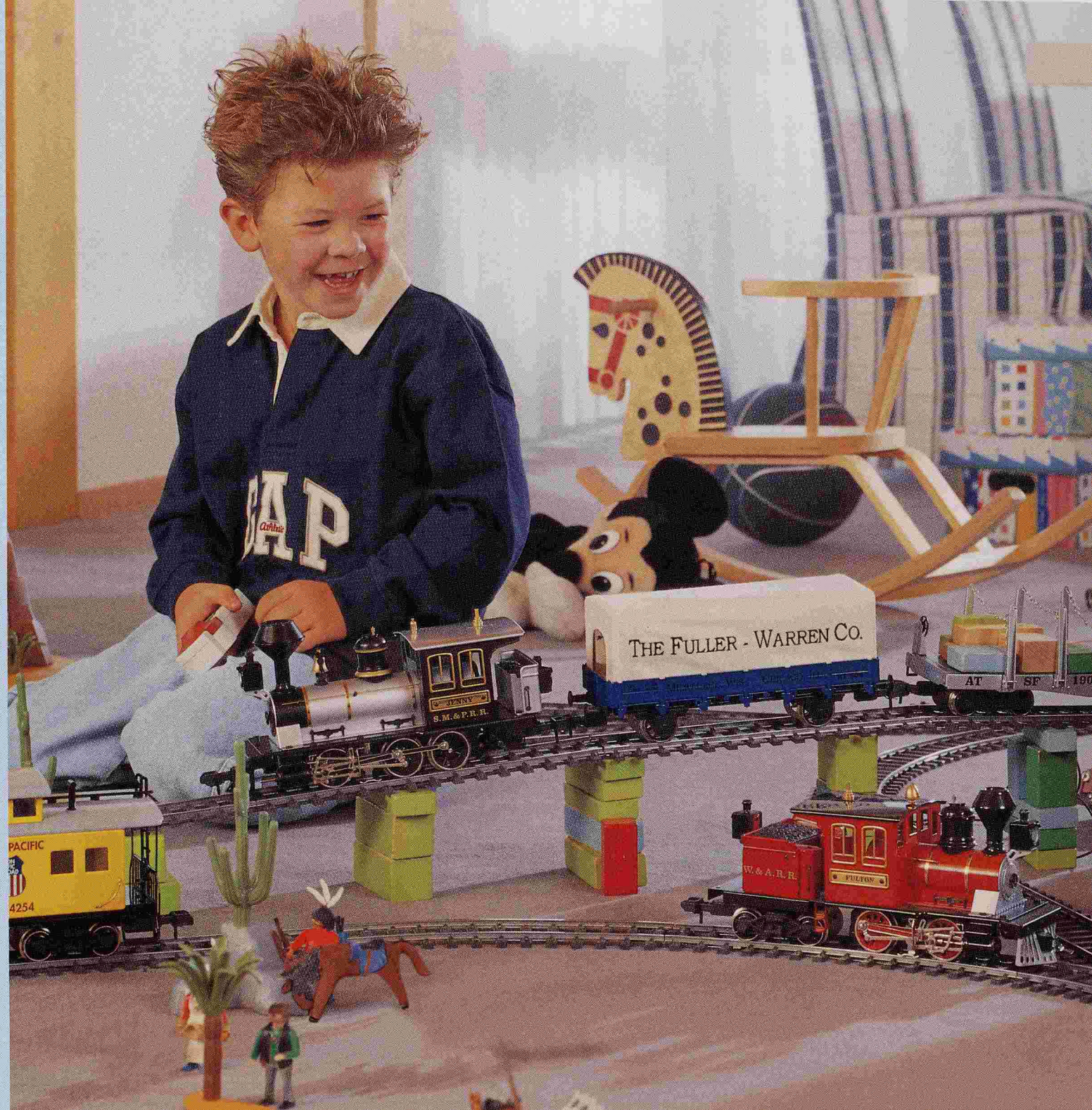


Maxi by yourself. Or for two, three or four.

All Maxi locomotives are equipped at the factory with a receiver component (module) for the DELTA multi-train control system. All you need is a transformer, a DELTA Station, a hand controller for each "engineer" – and you're ready to experience model railroading in totally new dimensions. Because now up to four operators can control their own locomotive independently of each other, each with his own hand controller – all of this on a single track circuit and without extensive wiring.

Just a few years ago the person sitting at the transformer dominated the model railroad layout – the others could only look. With the DELTA multi-train control system Maxi is truly democratic, everyone is equal, everyone is playing with the group. This makes the layout exciting.

DELTA







The 6647/6646 Märklin transformer is used to control the Maxi toy railroad.

6645 100 volts Japan. 32 VA
6646 120 volts USA. 32 VA. UL/CSA tested.
6647 230 volts. 32 VA
76648 240 volts. 32 VA

Transformer 32 VA / 2 Amps
Track current adjustable between 4 and 16 volts. Accessory current 16 volts. Plastic housing. Dimensions 140 x 120 x 80 cm (5-1/2″ x 4-3/4″ x 3-1/8″). VDE/UL/CSA tested.



DELTA

6607 DELTA Station.
DELTA electronic unit for individual control of locomotives with built-in DELTA modules. The output of this DELTA Station is designed for Maxi locomotives. When connected to a transformer (6001/6002), a maximum power of approximately 45 VA (approx. 35 VA with the 6001) is available. Up to 4 DELTA Mobil (6608) hand controllers can be connected to this unit. 1 DELTA Mobil is included with this unit. The DELTA Station can control 4 locomotives individually. These 4 addresses can be called up from any hand controller connected to the Station. The DELTA Station can also be used outdoors to control Maxi locomotives. Dimensions 135 x 120 x 80 mm (5-5/16″ x 4-3/4″ x 3-1/8″).



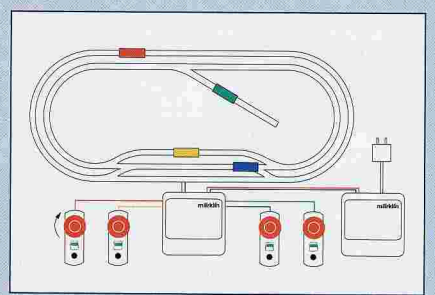
DELTA

6608 DELTA Mobil.
Hand controller for use with the DELTA Station (6607). The 4 different addresses for the DELTA Station can be selected with a slider switch. Rotary knob for speed control with easy-to-recognize direction setting for Maxi locomotives. Emergency stop button with LED indicator. Dimensions 130 x 50 x 37 mm (5-1/8″ x 1-15/16″ x 1-7/16″).

Important: The DELTA Pilot (6605) cannot be used with the DELTA Station (6607). The DELTA Mobil hand controller (6608) is not suitable for use with the DELTA Control (6604).

DELTA multi-train system: With a hand controller each of the four locomotives can be addressed one after the other, or with 4 hand controllers 4 different locomotives can be simultaneously controlled independently of each other.

MAXI



Additional information on the DELTA multi-train control system can be found on pages 286/287.

The Maxi railroad system can be expanded with the entire track system and accessory program of the standard 1 Gauge program (see pages 450-463).

Peaceful Coexistence.

A harmonious juxtaposition can be observed with increasing frequency on 1 Gauge layouts: the one in tinplate rich in tradition, the other with uncompromising detailing – two philosophies that are winning acceptance thanks to compatible technology. What we're referring to is the fact that more and more Maxi models are meeting the esthetic requirements of serious model railroaders, for the example, the Glaskasten, the class E 69 or the class 140. And because Maxi's all-weather qualities extend the model railroad season outdoors.




DB
140 218-9

The fascination of the model.

The scale of 1:32 has a special meaning for Märklin, because Märklin's discovery of the system railroad in 1891 can be traced to this scale. Märklin 1 has given new life to this large gauge, with all of the possibilities of modern technology. With its claim to a high level of detailing and function, Märklin 1 is a model railroad for connoisseurs. And where there isn't enough room for long main lines, the individual model can be the focal point with its movement and functions.

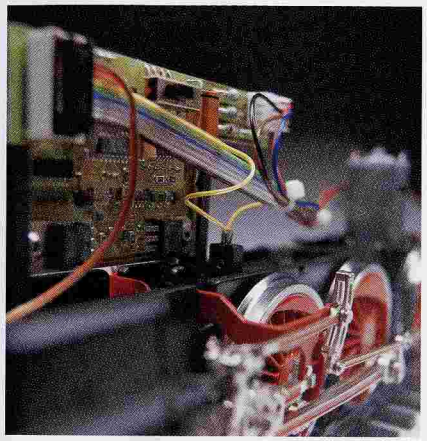




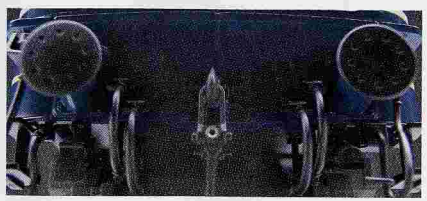
No compromises
The large gauge demands fewer compromised in its design. All of the details can be designed to scale in prototypical proportions. The lettering is readable with the naked eye, the windows are made with care to fit precisely into their openings, numerous details such as doors, hatches, and cranks work. The size of a locomotive's body offers enough space for the mechanism and for electronic circuits; interior detailing can also be reproduced here.



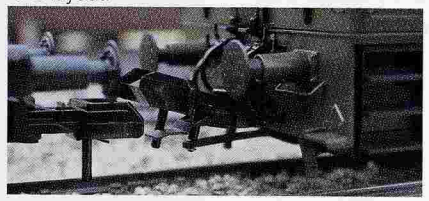
All of the senses are stimulated.
The raw materials for the high quality interlocking construction, the fine structure of the surfaces, the extensive imprinting, the metal clacking of the wheels at the rail joints, the sound effects true to the original, the smell of the smoke fluid – Märklin 1 models have a decidedly sensory quality about them that will keep you hands, eyes, ears and nose busy.



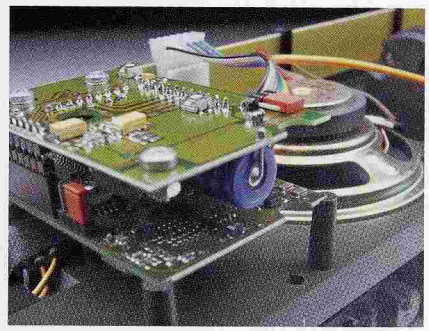
High quality propulsion technology
Märklin 1 locomotives are equipped at the factory with high-efficiency propulsion and digital decoders. They can be run with DC power, AC power, or Märklin Digital. In digital operation the decoder can be set for one of 80 locomotive addresses and can be adjusted for running characteristics that would be typical in real life for that locomotive. Depending on the other model, other functions such as headlights and lighting, a smoke generator, a horn, and steam or motor sound effects can be switched on.



Sprung buffers and hook couplers
The locomotives and cars have sprung buffers. The prototype couplers included with each unit can be used to replace the automatic claw couplers. This provides a prototypical, closer spacing between the cars in a train. The V 36 is available with a digital TELEX coupler that allows you to uncouple the locomotive from the cars anywhere on the layout.



Note the minimum radius for curves
The uncompromising design of the running gear requires larger radius curves for operation without derailment. Except for some 2-axle cars, the standard 1 Gauge models are not suitable for the 600 mm (23-5/8″) radius curves and turnouts; they require a minimum radius of 1,020 mm (40-5/32″).



sound effects electronics
1 Gauge models offer space for sound effects electronics with their accompanying loud speakers. The often very complex sound images of the original locomotives are recorded for this purpose, digitized, stored digitally and tuned to the acoustics of the models. The sounds are reproduced, synchronized to the action of the locomotive at any given moment, and can be turned on and off with the function buttons.

Something Royal in the Royal Class.

An anniversary model in Märklin 1 promises to be something special in every respect. The exclusive model chosen, the finely detailed execution and careful hand labor for it guarantee a first class model. The frame and body are made of metal and the many separately applied details are produced in limited run quality from brass and centrifugal cast metal. The boiler and firebox are covered with real wood strips. And when you take the "Esslingen" out of the display case, a motor with a bell shaped armature together with high-efficiency electronics provides prototypical running characteristics.The class III passenger locomotive was developed from a prototype from the Norris class. As the first locomotive developed by the Esslingen Machinery Company, it was christened with the name of its city and was delivered in 1847 to the K.W.St.E., two years after the founding of the state railroad company. This class turned out very well thanks to its outstanding characteristics, even on the Geislingen Grade, and it was a typical sight on the railroad in the Fils Valley well into the 1860s. The "Esslingen" was a daily sight for Theodor Friedrich Wilhelm Märklin, too, when he started production of metal toys in Göppingen in 1859.





N I

55520 Württemberg Steam Locomotive. K.W.St.E. class III "Esslingen". 2 axles powered through side rods. Bell-shaped armature motor. Built-in high-efficiency electronic circuit for operation with AC power, DC power or Märklin DELTA/Digital. The headlights and the built-in smoke generator can be turned on and off in digital operation. Model is produced completely of metal and wood with the finest detailing. Authentic prototype coupler (not compatible with the Märklin claw coupler). Figure of an engineer and a fireman are included with the locomotive. Minimum radius for operation is 1,020 mm (40-3/16″). Length over buffers 39.0 cm (15-3/8″).

This model has been selected as the anniversary locomotive for the 140th anniversary of the Märklin firm. The high level of the execution of this model is being done with a fine degree of detailing.
It is being offered in a one-time series only in 1999.

A Prussian in Baden.

The Prussian P8 was a genuinely successful model for its time and was exported to many German states and other countries. The Grand Ducal Baden State Railways was among them and ordered 40 units from the Maschinenbau Company of Karlsruhe, Germany. Our model reproduces the typical features of this version in all of its details. In its blue paint scheme, this version probably represents the most beautiful P8 variation built.





55981 Passenger Locomotive with Tender.
Baden State Railways class P 8. 3 axles powered through side rods. 2 drive wheels equipped with traction tires. Built-in high-efficiency electronic circuit for operation with DC power, AC power or Märklin Digital. Headlights and built-in smoke generator can be turned on/off in digital operation. When operating with DC or AC power, the intensity of the headlights and of the smoke from the smoke generator depend on the voltage present in the rails. **The steam locomotive sound effects circuit built into the tender as well as the whistle and bell that are part of it can be turned on only in digital operation.** Cab doors that can be opened. Coal bunker filled with real coal. Maintenance-free LEDs for headlights. Figures of locomotive engineer and fireman included. Minimum radius for operation is 1,020 mm (40-3/16″). Length over buffers 58.0 cm (23-1/8″).

After several experiments with their own developments that did not meet expectations, the Baden State Railways decided to buy the proven Prussian P 8. This model was delivered in 1923. The locomotive's blue paint scheme is the same as that for the Baden locomotives.
It is the great variety in colors that still makes the locomotives from Era 1 so sought after by many collectors and model railroaders.

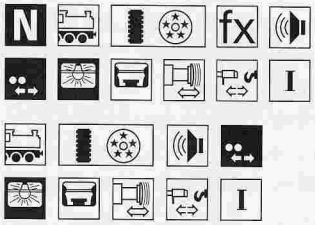
The Origins of a Long Career

Just under 5,000 units of the class G 8.1 freight locomotive were built for the Royal Prussian Railroad Administration starting in 1913, and they were placed into service in 2 different color schemes. In addition to the simpler black paint scheme, the "classic" green version of this locomotive was part of the everyday scene on the KPEV. This locomotive was offered in the black paint scheme in the Märklin 1 Gauge assortment under item number 5508 as early as 1991.

In realizing this locomotive, particular emphasis was placed on future development of the technical equipment. For that reason the current model represents a new milestone in the development of the Märklin standard 1 Gauge program. The new sound effects circuit and the total of 7 controllable digital functions document this evolutionary progress.







55151 Freight Locomotive with Tender. Royal Prussian Railroad Administration (KPEV) class G 8.1. 4 axles powered through side rods. 2 powered wheels equipped with traction tires. Built-in high-efficiency electronic circuit for operation with AC power, DC power or Märklin DELTA/Digital. The headlights change over with the direction of travel, and they and the built-in smoke generator can be turned on and off in digital operation. They are on constantly in operation with DC power, AC power or Märklin DELTA. Their intensity depends on the voltage in the track. **In digital operation the newly developed digital sound effects unit in the tender can be turned on.** The sound of a steam locomotive whistle or a bell can be also be activated in digital operation. The built-in cab lighting and running gear lights can be turned on and off with an additional, built-in function decoder. The cab lighting is also on constantly in operation with DC power, AC power or Märklin DELTA. Engineer cab doors that can be opened. Coal bunker with a real layer of coal. Maintenance-free LED lighting. A service and equipment packet with replacement couplers, smoke fluid, needlepoint filler for precise filling of the smoke generator, a figure of an engineer and a fireman, etc. are included with the locomotive. Minimum radius for operation is 1,020 mm (40-3/16″). Length over buffers 57.4 cm (22-5/8″).

Steam locomotive with universal features.

The conversion has been good for it: The longer side view with a pilot truck and altered boiler has transformed the proven but somewhat plump Prussian G8 into a sprightly looking, general purpose machine with the name class 56. In 1 Gauge the result has been a marvelous, finely detailed model that you can use for either freight or passenger trains.





55280 Freight Locomotive with Tender. German Federal Railroad (DB) class 56^{2-8}. 4 axles powered through side rods. 2 drive wheels equipped with traction tires. Built-in high-efficiency electronic circuit for operation with DC power, AC power or Märklin Digital. Headlights and built-in smoke generator digitally controlled. With DC or AC power operation the intensity of the headlights and the smoke generator depends on the voltage in the track. **The built-in sound effects circuit in the tender with steam sounds, bell and whistle can be turned on only in digital operation.** Cab doors that can be opened. Coal bunker filled with real coal. Maintenance-free LED lighting. Figures of locomotive engineer and fireman included. Minimum radius required for operation 1,020 mm (40-3/16″). Length over buffers 57.5 cm (22-5/8″).

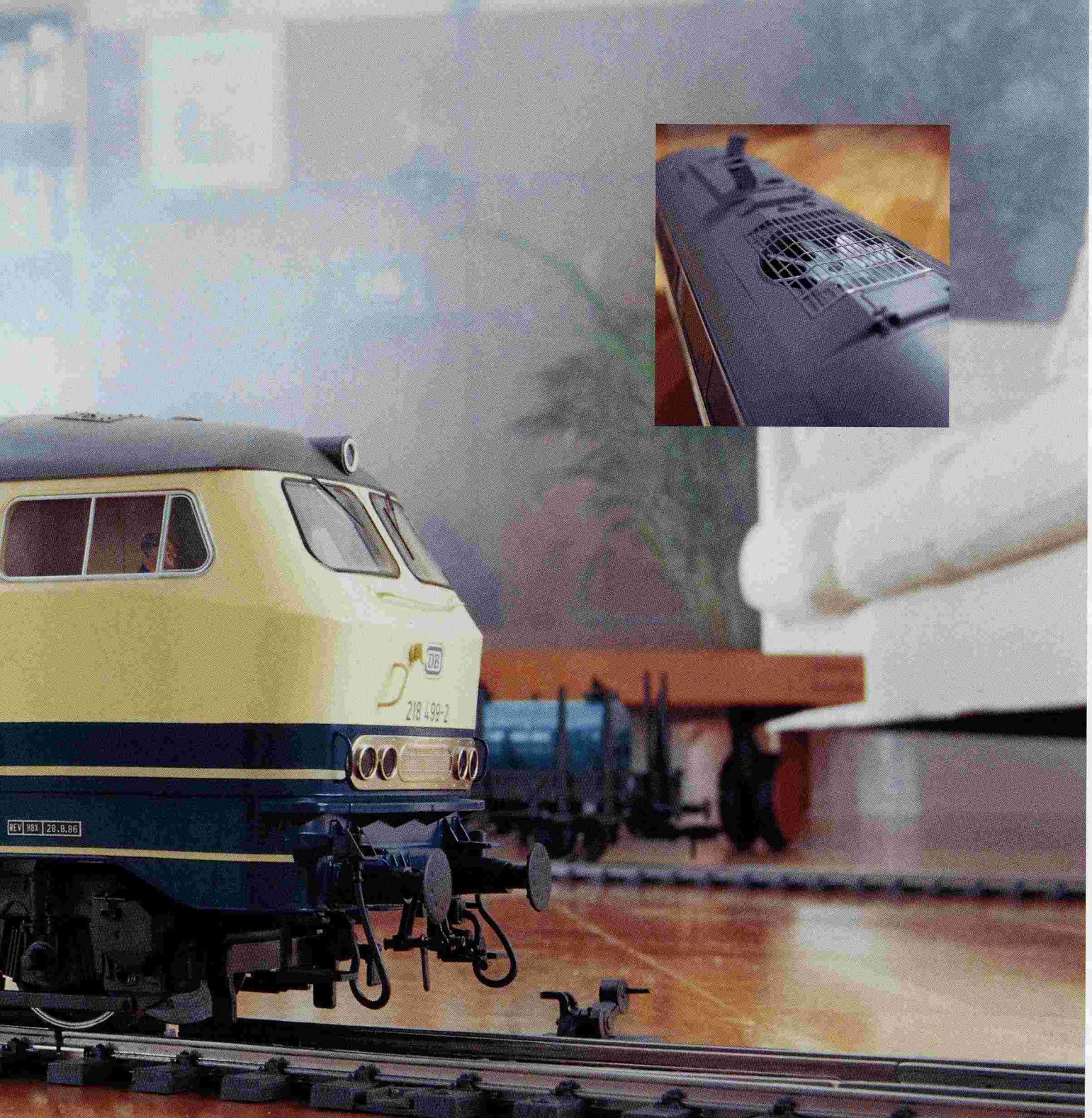
In the 1930s many of the class $G8^{1}$ locomotives were rebuilt as the class 56^{2-8}. A striking feature that distinguishes these two classes is the addition of the pilot truck to the latter class. The repositioning of the cab and boiler also gives the locomotive a whole new look from the sides.

This conversion allowed the maximum speed to be increased by 15 km/h (approx. 9 mph) to 70 km/h (approx. 44 mph). This made the locomotive suitable for passenger service. Approximately 370 of these locomotives were acquired by the German Federal Railroad. In 1967 the last locomotive of this class was retired by the DB.

2,500 Horsepower in Ocean Blue / Cream.

The era of the class 218 began in 1968, when the German Federal Railroad ordered the first prototypes of this new road engine. The V 12 diesel motor produced 2,500 horsepower, enough for the tractive effort to pull the train and also for the new electric car heating.
Our model shows the class 218 in the attractive ocean blue / cream paint scheme with Märklin 1's perfect finish and letter perfect lettering – prototypical with a different design for the roof and trucks. Our model is also impressive acoustically with its factory installed sound effects circuit; it allows the 2,500 horsepower to be heard independent of the speed, simulates the start-up and shut-off sounds and the high or low tone of the locomotive horn.
As with the real life prototype, the propulsion for the locomotive is a centrally mounted motor with cardan shafts to all four axles on the two trucks. The operating characteristics such as maximum speed, acceleration and braking behavior can be set prototypically as with all Märklin 1 Gauge locomotives.







55712 Diesel Locomotive.
German Federal Railroad (DB) class 218. All 4 axles powered by means of cardan shafts with 1 central gear box and 4 transfer gear boxes. Built-in high-efficiency electronic circuit for operation with DC power, AC power or Märklin Digital. Headlights and built-in cab lighting digitally controlled. With DC or AC power operation the intensity of the headlights depends on the voltage in the track. **Built-in sound effects circuit with motor sound effects and choice of activation of a high or low pitch locomotive horn; sound effects circuit can be turned only in digital operation.** Built-in figure of locomotive engineer. Various detail parts included with model such as additional brake lines, etc. that can be mounted on the model when it is used for display. Minimum radius required for operation 1,020 mm (40-5/32″). Length over buffers 51.5 cm (20-1/4″).

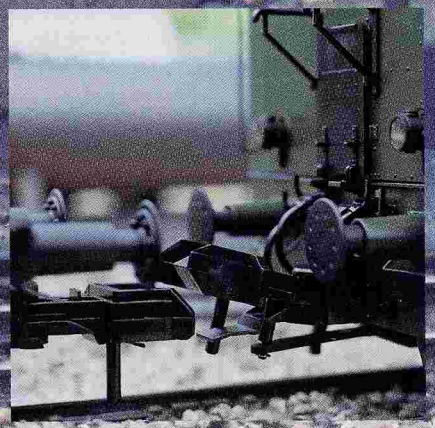
Probably the best known paint scheme for the class 218 is the ocean blue/cream livery that has been applied to this model. The color scheme is typically associated with Era IV.

Despite the standard classification, there have been different versions of the class 218. In comparison to the previous versions of the class 218 (Märklin models 5571, 55711), experts will be impressed by the prototypically correct changes to the roof and the trucks that have been made to this model.

Always ready.

This was the small V 36's strong point, it was always ready, did not have to be fired up, was equally fast in both directions, gave the engineer a good view all around and was simple for one man to operate.

It's no wonder that it replaced steam locomotives on branch lines: it even had a career in double heading. The V 36 was still part of the railroad's everyday operations in Era III.





märklin 1

55302 Diesel Hydraulic Locomotive.
German Federal Railroad (DB) class V 36. 3 axles powered through side rods. 2 drive wheels equipped with traction tires. Built-in high-efficiency electronic circuit for operation with DC power, AC power or Märklin Digital. Headlights digitally controlled. With DC or AC power operation the intensity of the headlights depends on the voltage in the track. Unit equipped at both ends with a digitally controlled TELEX coupler. Minimum radius required for operation 760 mm (30″). Length over buffers 28.5 cm (11-1/4″).

The TELEX coupler installed on the V 36 in the red paint scheme (Märklin model 55301) immediately found many enthusiasts among 1 Gauge operators. This remote-controlled coupler enables easy switching maneuvers in digital operation. For that reason the V 36 in the prototype's original green paint scheme has been brought into the Märklin 1 assortment as a successor to the red version.

Video Game or Locomotive Simulation?

Video trips in the cab of a locomotive are one of the most popular evening programs on television in Germany. Now you can have it live day and night, and on your own 1 Gauge layout. The program will be even more exciting when you place the transformer next to the television and act as the engineer. From the standpoint of your engineer this makes the simulation perfect. You drive and control the locomotive by sight from the perspective of the cab in the class 213.

The digital system supplies the camera and sender in the locomotive continuously with power, even when the locomotive is stopped. Thanks to its high sensitivity to light and sharpness of depth, the camera delivers a bright, sharp image. In addition, you can turn the camera on and off digitally.











N fx V

55724 General Purpose Diesel Hydraulic Locomotive.
German Railroad, Inc. (DB) class 213. **Technical variation of model 55722 with built-in video camera and sender. Color scheme and lettering for this model identical with that of the 55722.** All 4 axles powered from one motor by means of cardan shafts with 1 central gear box and 4 transfer gear boxes. 2 wheels equipped with traction tires. Built-in high-efficiency circuit for operation with DC power, AC power or Märklin. The triple headlights in the rear can be turned on/off in digital operation. **The front headlights are non-functioning due to the built-in video camera!** They are constantly on in operation with DC power, AC power or Märklin DELTA. Their intensity depends on the voltage in the track. **In digital operation a built-in camera can also be turned on. The video signal from it is transmitted wirelessly by means of a sender to a 60100 receiver. This receiver is included with the locomotive. The digital voltage present in the track is converted to supply power to the camera and the sender. For that reason there are no time limits on the use of this camera.** Minimum radius for operation is 1,020 mm (40-5/32″). Length over buffers 38.4 cm (15-1/8″).

What has lasted for so long is now getting longer.

"Finally," we can hear some of the 1 Gauge enthusiasts sigh, "finally there are four-axle express train passenger cars." Moreover, the type Aüm 203 (1st class) and type Büm 234 (2nd class) with a side corridor and 10 or 12 six seat compartments, cars built in large numbers in the 1960s. With folding doors and wider windows than their predecessors, these cars increased travel comfort. The cars were first used in long distance service, but also later in regional service, so there is no lack of prototypical operations with them. Now the class V 200 and class 218 express diesel locomotives can also be used for passenger train service with appropriate cars.



58011 Express Train Coach.
German Federal Railroad (DB) type Aüm 203. 1st class. Built-in interior lighting. Minimum radius for operation is 1,020 mm (40-3/16″). Length over buffers 75.0 cm (29-1/2″).

Four-axle passenger cars with a length of 26.4 meters (86 feet 7-3/8 inches) have characterized the typical appearance of passenger service since the 1950s. 2 typical representatives from this group of cars for express train service in the original color scheme (blue = 1st class, green = 2nd class) are now appearing for the first time in the Märklin 1 assortment. This new family of cars will be expanded and added to in the next few years.

N III

58021 Express Train Coach.
German Federal Railroad (DB) type Büm 234. 2nd class. Built-in interior lighting. Minimum radius for operation is 1,020 mm (40-3/16″). Length over buffers 75.0 cm (29-1/2″).



Passenger Cars

The three-axle rebuild cars are among the most beloved and sought after 1 Gauge models from the past. These models are being offered again in limited numbers with different lettering.

58111 Passenger Car.
German Federal Railroad (DB) type BD3yg 766. 2nd class. Axles linked together and controlled by the center axle. Doors that can be opened. Imitation rubber corridor connections. Sliding jalousie doors at the ends of the car. Minimum radius for operation is 1,020 mm (40-3/16″). Length over buffers 41.6 cm (16-3/8″).







58092 Passenger Car.
German Federal Railroad (DB) type B3yg 761. 2nd class. Axles linked together and controlled by the center axle. Doors that can be opened. Imitation rubber corridor connections. Sliding jalousie doors at the ends of the car. Minimum radius for operation is 1,020 mm (40-3/16″). Length over buffers 41.6 cm (16-3/8″).

58101 Passenger Car.
German Federal Railroad (DB) type AB3yg 756, 1st and 2nd class. Axles linked together and controlled by the center axle. Doors that can be opened. Imitation rubber corridor connections. Sliding jalousie doors at the ends of the car. Minimum radius for operation is 1,020 mm (40-3/16″). Length over buffers 41.6 cm (16-3/8″).

Car Set

58312 Provincial Railroad Car Set.
Set consists of 1 type G 10 boxcar, used on the Mecklenburg Friedrich-Franz Railroad, 1 gondola, used on the Royal Prussian Railroad Administration (KPEV), and 1 wine barrel car, used on the Royal Württemberg State Railways (K.W.St.E.). Boxcar has two sliding doors that can be opened. Wine barrel car is a new design with wooden barrels. All cars in special version. Not available separately. Minimum radius for operation is 600 mm (23-5/8″). Total length over buffers 85.0 cm (33-7/16″).

In the previous century locomotives and cars usually never left their own railroad, but this changed in 1909 with the founding of the German State Railroad Freight Car Association. From this time on individual cars were now used across borders.

The Prussian type O cars were the first with a 4 meter (13' 1-1/2″) wheel base to be built without a brakemanís cab or platform.

The wine barrel car with its 3 transverse mounted wine barrels is a new design. As a special use car it is the only privately owned car in this set.



N IV V

58713 Flat Car with Load.
Flat car loaded with a Büssing old-timer truck. Minimum radius for operation is 600 mm (23-5/8"). Length over buffers 31.5 cm (12-3/8").

From the provincial railroad period to the present, the railroad has taken damaged low side and high side gondolas and converted them into flat cars. Such cars have been used in part by large firms on their internal industrial plant railroads or by privately owned railroads. Old-timer vehicles are in great demand for promotional appearances because of their unusual look. These vehicles are best transported from one appearance to the other by rail. When is the Büssing truck going to its next event on your 1 Gauge layout?

Already sold out at the factory.



Freight Cars

III

58491 Stake Car.
German Federal Railroad (DB) type loaded with 2 stacks of boards made of real wood. 18 removable stakes included. Metal car floor. Minimum radius required for operation 1,020 mm (40-5/32″). Length over buffers 37.5 cm (14-3/4″).

The prototype of this car dates back to the provincial railroad period. As an Era III version this car now has only a brakeman's platform instead of a brakeman's cab. The original spoked wheels and older design buffers were replaced in the 1930s with solid wheels and a newer, heavier design buffer.



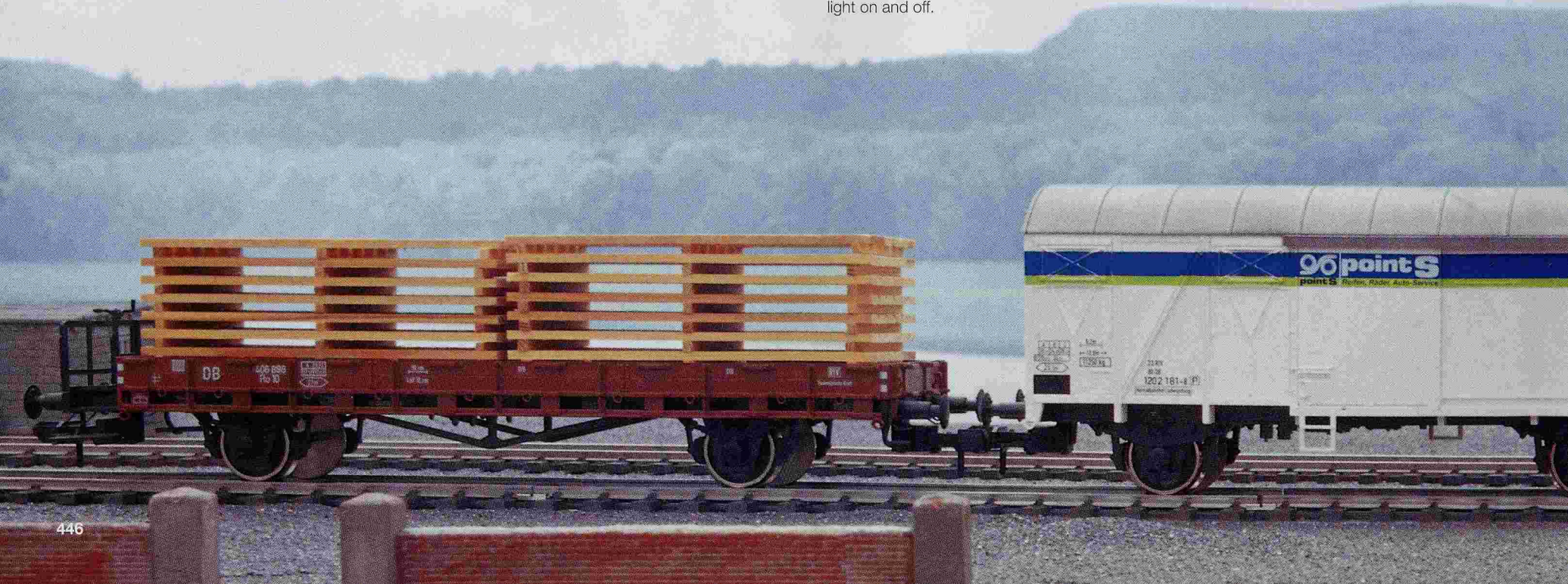
IV

58265 Boxcar.
Privately owned by Point S Company, used on the German Federal Railroad (DB). With built-in marker light. Doors that can be opened. Minimum radius required for operation 600 mm (23-5/8″). Length over buffers 31.5 cm (12-3/8″).

The Point S Company is a union of several medium size specialty tire dealers that are located in countries bordering Germany as well as in Germany itself. Race car fans are familiar with this name from its sponsorship activities in different racing categories.

The 58265 car has wheel pickups and a marker light like the former 5826 boxcar. This marker light works in all modes of operation. Digital operators have the possibility of retrofitting this model with the c 96 (60960) function decoder for turning the marker light on and off.







56600 Load.
5 Europa pallets, 5 barrels and 1 transport crate. All made of wood. Pieces not available separately.



N V

58781 Flat Car with Telescoping Covers.
German Railroad, Inc. (DB) type Shimms 708, DB Cargo Business Area. Movable covers. Minimum radius for operation is 1,020 mm (40-3/16"). Length over buffers 37.6 cm (14-13/16").

For the first time the flat car with telescoping covers is back in the program. Its sliding covers invite you to do your own loading and unloading of freight. Over the course of the last 3 years an interesting start in the current Era V has been accomplished with this car, together with the red/cream class 218 (55711), the "new red" class 213 (55722, 55724 with video) and the different current freight cars (58351 dump car, 58291 ballast car set). This area in our 1 Gauge program will be expanded in the coming years.

Railroad Romanticism and Circus Air

Circus trains are one of the most beloved themes in which railroad romanticism and the atmosphere of the circus enter into a close connection. Appealing operation scenes and an execution rich in detail make these models an eye catcher on any layout.
The G 10 boxcar has a billboard-like effect with its extensive advertising imprinting brining the spirit of the times from the early DB years back to life.

N

58954 Boxcar with Advertising Lettering.
German Federal Railroad (DB) type G 10. Extensive advertising imprint on both sides. Doors that can be opened. Minimum radius for operation is 600 mm (23-5/8″). Length over buffers 30.0 cm (11-13/16″).



The 58954 boxcar is being produced in a one-time series i 1999 only for Insider members.

N IV V

58233 Stake Car with Load.
Type Kbs 443, loaded with a circus wagon. The circus wagon, an exclusive Märklin product for this 1 Gauge car, is modeled from an original car of the "Roncalli" Circus and is constructed of a mix of metal for the floor, wood for the walls, and plastic for the roof. Removable stakes included. Minimum radius for operation is 600 mm (23-5/8″). Length over buffers 31.5 cm (12-3/8″).

The "Roncalli" Circus does more than just entice its patrons with its program into a unique world of fantasy. The complete set of equipment for the circus tent with the many restored old wagons is a visual delight for every circus enthusiast.
The "Roncalli" Circus makes use of the railroad as a means of transportation for appearances away from its home base of Cologne, Germany. The Circus travels as a complete train consisting of different flat cars leased from the railroad; these cars transport the circus' wagons and tractors.

This car is the start of a complete circus series. In the coming years additional "Roncalli" Circus models will be brought out on different railroad cars. Over the next few years a unique standard 1 Gauge theme train will be developed from this.

The first of the cars with the number 18 selected for this series usually forms, along with a similar car, the right and left ends of the circus train as viewed from the side.



Alone or with Many

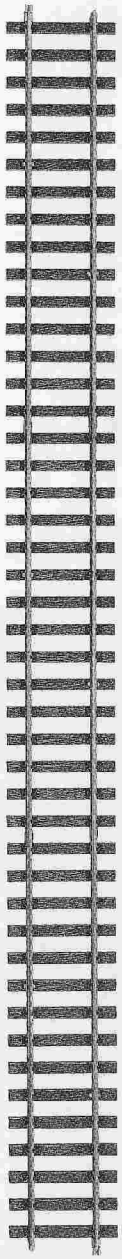
In spite of their high quality, it would be a shame to restrict Märklin 1 Gauge models to a display case. Because the prototypical operating characteristics, working functions and sounds are not truly appreciated until you see the locomotives and cars in operation. Even in this large scale there are possibilities for turning that dream of a 1 Gauge layout into reality. For example, with a diorama of a maintenance facility or a freight yard. An individual model's many working functions and excellent appearance will make it the centerpiece of the layout.

Anyone not having any space for a layout at home can meet with other 1 Gauge fans and can bring his 1 Gauge models along or operate them on a club layout.





Model Track with All-Weather Qualities



59033

Maxi and the standard 1 Gauge program run on identical track with shiny, solid rails made of stainless steel that will resist rusting. The two small radii of 600 and 760 mm (23-5/8″ and 30″) are already available for Maxi. They will fit into a child's bedroom or can snake through the formal garden. Most of the locomotives in the standard 1 Gauge program require the two large radii of 1,020 and 1,176 mm (40-5/32″ and 46-1/4″).

The filigree appearance of our 1 Gauge track system along with the flex track kit offers the model railroader all of the possibilities for prototypical layout construction. Despite this the track sections are quite sturdy and can be laid without a baseboard. They are durable, they're weather resistant, and they can be used for a permanent outdoor layout as well as for the toy layout that is quickly set up and taken down. The new 900 mm (35-7/16″) track makes it even easier to build up the main line.

Straight Track

59033 Straight Track.
Length 900 mm (35-7/16″).
The 59033 track can be installed on straight areas of track and replaces 3 sections of 5903 track.

5903 Straight Track.
Length 300 mm (11-3/4″).

5917 Straight Track.
Length 150 mm (5-7/8″).

5904 Straight Track.
Length 80.4 mm (3-5/16″).

5916 Straight Track.
Length 59.5 mm (2-3/8″).

Curved Track

5922 Curved Track.
Radius 600 mm (23-5/8″).
30°.

59230 Curved Track.
Radius 760.8 mm (29-15/16″).
30°.

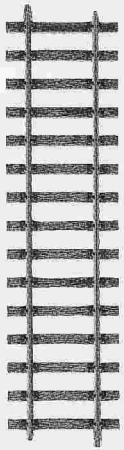
5935 Curved Track.
Radius 1,020 mm (40-5/32″).
22° 30′.

5936 Curved Track.
Radius 1,176 mm (46-1/4″).
22° 30′.

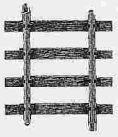
All Maxi locomotives and cars can be used on the 5965 and 5966 turnouts as well as the 5922 curved track with a radius of 600 mm (23-5/8″). Some of the other Märklin 1 locomotives require a minimum radius of 1,020 mm (40-5/32″). Please note the appropriate information about these products in the Märklin full-line catalog or in the instructions.

The 59230 track serves as a parallel circle to the 5922 curved track. The center-to-center spacing (160.8 mm / 6-11/32″) is based on the 5965 and 5966 turnouts.

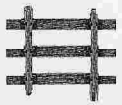
The 5936 track has a spacing of 156 mm (6-1/8″) with the 5935 track. This is the same track spacing as when two 5976 or 5977 turnouts are put together to make a crossover or when a 5976 or 5977 turnout and a 5935 curved track are combined.



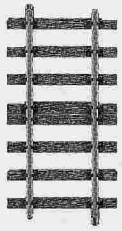
5903



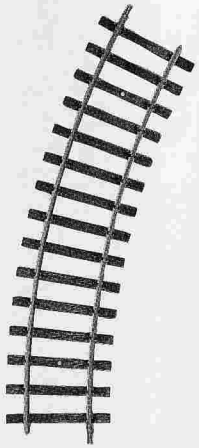
5904



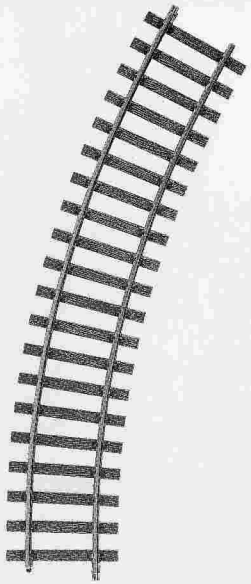
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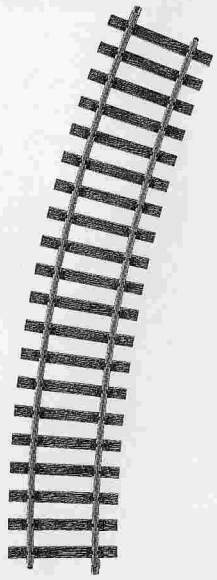
5917



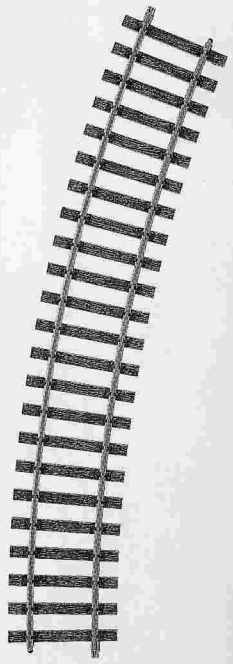
5922



59230



5935



5936

Turnouts

5965 Left Turnout

5966 Right Turnout

With hand lever. Sprung switch rails. Turnout angle 30°. Branch radius 600 mm (23-5/8″). Length of the straight side 300 mm (11-3/4″).

The hand lever for 5965, 5966, 5976 and 5977 can be mounted on the right or left side or can be replaced by the 5625 electromagnetic turnout mechanism.

5976 Left Turnout

5977 Right Turnout

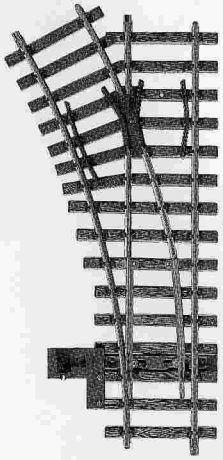
With hand lever. Sprung switch rails.Turnout angle 22°30′. Branch radius 1,020 mm (40-5/32″). Length of the straight side 390.5 mm (15-3/8″). Can be extended to 450 mm with the 5916 straight track included with the unit.

5625 Turnout Mechanism.
Double solenoid mechanism with feedback contacts, end position shutoff and locking feature. Can be mounted on the 5965, 5966, 5976 and 5977 turnouts. Can be operated by remote control using the 7272 or 7271 control boxes (conventional operation) or the 6083 k 83 decoder (digital operation). 3 hookup wires included. Dimensions 67 x 41 x 17 mm (2-5/8″ x 1-5/8″ x 5/8″).

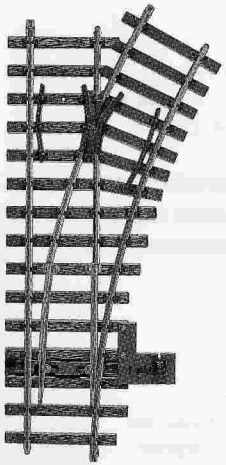
5998 Track Kit.
Contents: 2 rails 900 mm (35-1/16″) long, 45 ties with different wood patterns and 6 rail joiners. The connecting notches on the ties are so designed that curved track with almost any radius or straight track can be built.

5994 Uncoupler Module.
Mounted on 5903 track. Designed to be joined with straight track at almost any location desired. Solenoid mechanism. Can be operated by remote control using the 7272 or 7271 control boxes (conventional operation) or the 6083 k 83 decoder (digital operation).

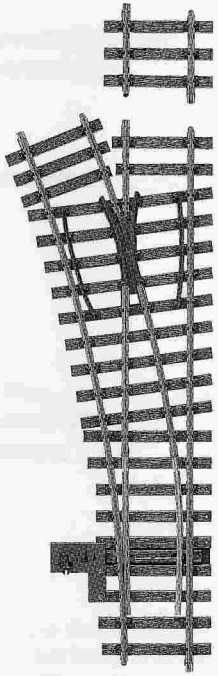
5602 Track Bumper.
Reproduction of a bolted steel design. Can be slid over the rails. Length 98 mm (3-7/8″).



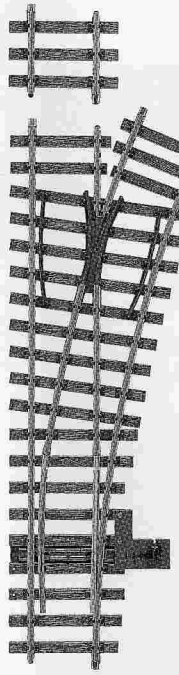
5965



5966



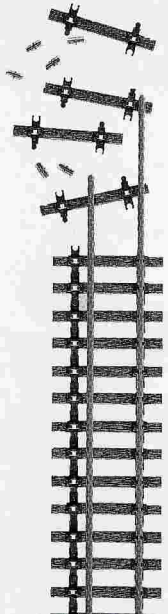
5976



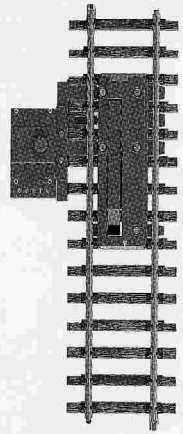
5977



5625



5998



5994

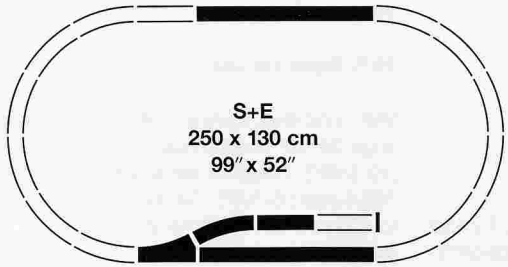


5602

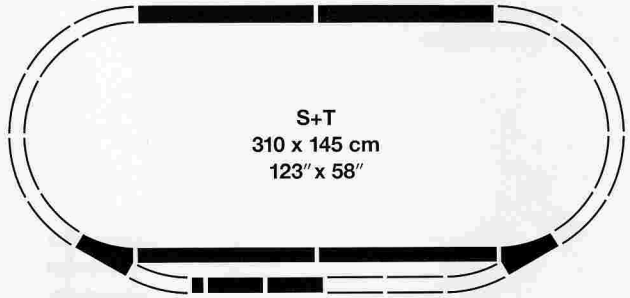
It's easier with a set

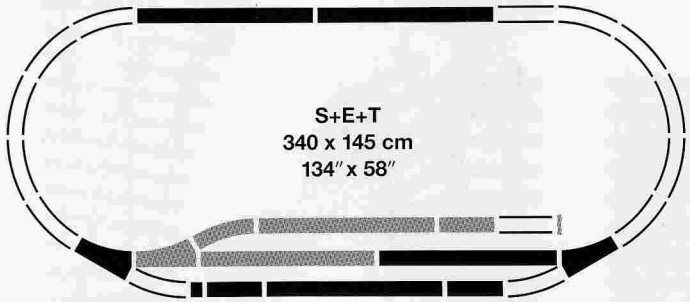
You can expand your Maxi starter set with two track extension sets – for switching cars or storing cars, for a small loading area or a passing siding. The turnouts can be converted to electric operation with the 5625 electric turnout mechanism. The entire 1 Gauge track assortment is available for further expansion with parallel tracks, large curves and wide radius turnouts.

59850 E Track Extension Set.
Track extension set to expand all Maxi starter sets with a storage or a loading siding. Contents: 1 section 5903 straight track, 2 sections 59033 straight track, 1 section 5922 curved track, 1 each 5965 manual turnout, 1 each 5602 track bumper, 1 feeder wire set, track clips and instructions.



59851 T Track Extension Set
Track extension set to expand all Maxi starter sets with a passing siding or station track. Contents: 2 section 5903 straight track, 4 sections 59033 straight track, 1 section 5904 straight track, 1 each 5965 manual turnout, 1 each 5966 manual turnout, 1 feeder wire set, track clips and instructions.





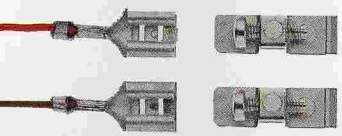


These two track extension sets can be used to expand the three Maxi starter sets (see pages 388-393) in steps.

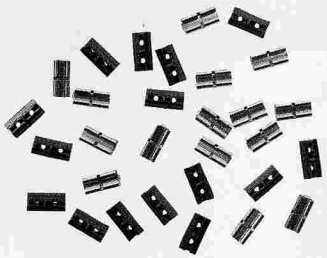
5654 Feeder Clip Set.
For supplying power to any spot on a track layout. Reliable contact with set screw connections.

56031 Track Clips.
Replaces 5603 track clips. This design of track clip improves electrical conductivity in the rails in addition to safeguarding track joint connections for 1 Gauge track. Bag with 30 pieces.

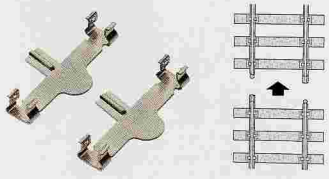
56091 Insulated and Regular Rail Joiners.
Package with 15 insulated rail joiners and 15 regular rail joiners. The insulated rail joiners can be installed at any rail joint between two rails instead of a regular rail joiner to separate track circuits.



5654



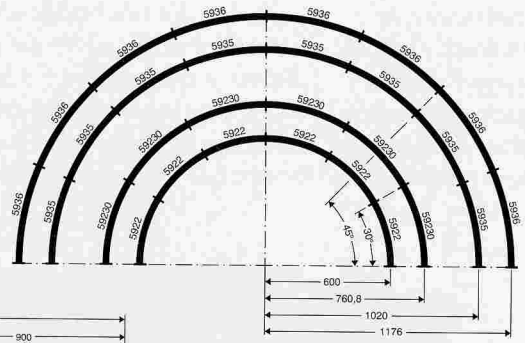
56091

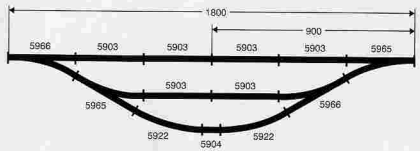


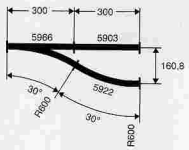
56031

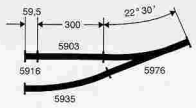
Track Geometry

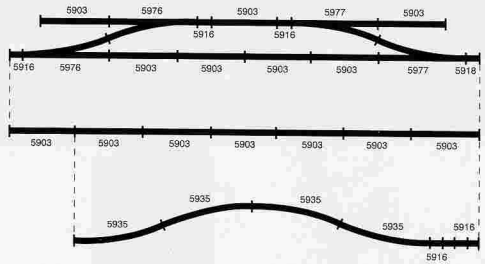
The 4 track radii
5936 circle = 16 sections
5935 circle = 16 sections
59230 circle = 12 sections
5922 circle = 12 sections

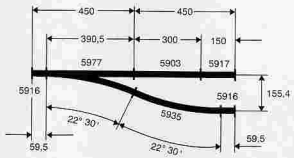


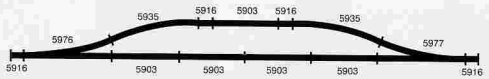


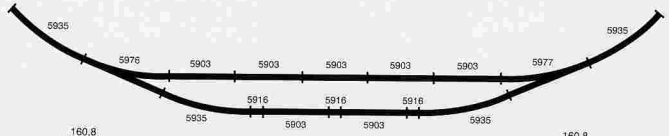


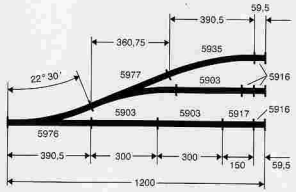


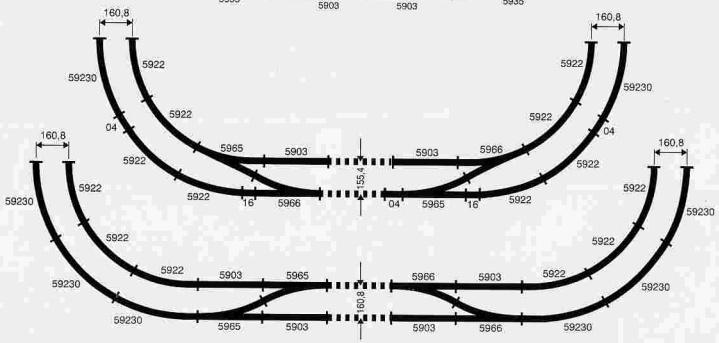


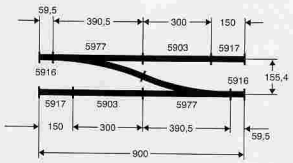










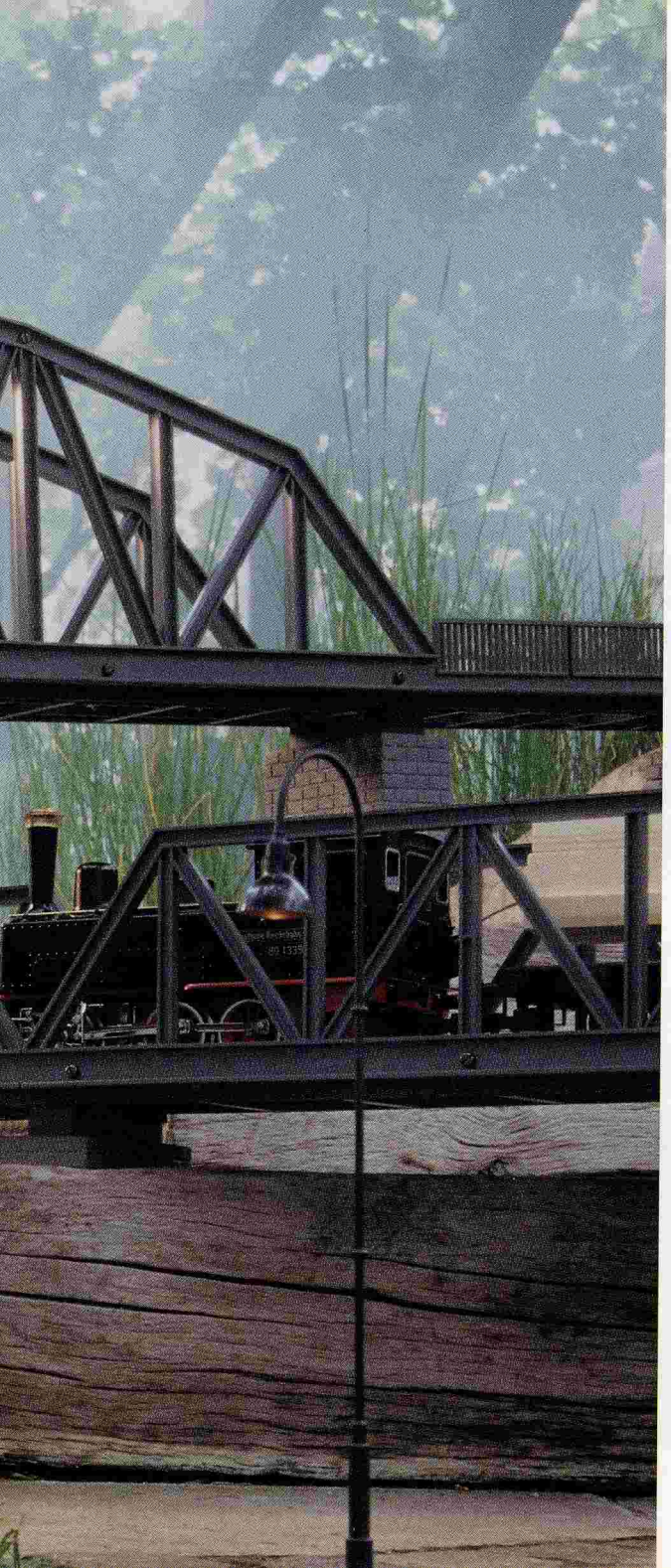


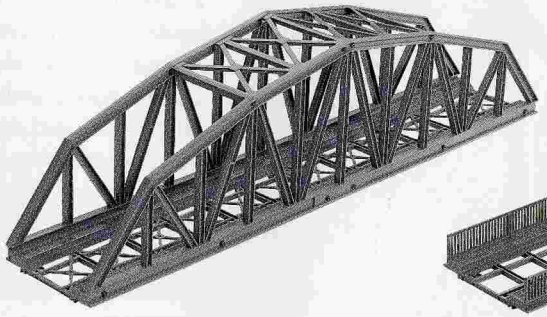
The magic of bridges

What does a model railroader do after he has set up his track and has test run his locomotives? Right, he builds a bridge. Because railroads and bridges go together. In the prototype there is hardly a route built that did not bridge some natural or artificial obstacle – over ditches, roads to farm fields, highways, canals, valleys, rivers or other tracks – every trip over a bridge has a certain magic about it.

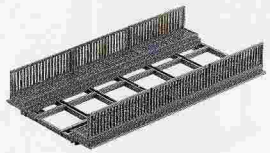
Our bridges are designed for the track curves and weight of the Maxi and standard 1 Gauge models.







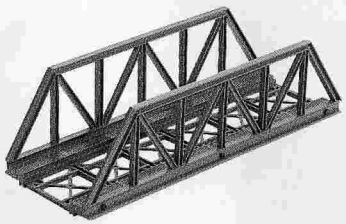
56291 Arched Bridge.
Design with straight deck girderwork in a reproduction of crisscross metal construction. Separately applied reproduction of metal construction in an arched form on the left and right bridge wall, with diagonal upper connecting girders at the crown of the arch. Takes 3 each 5903 straight track or one 59033 straight track. Bridge length 900 mm (35-7/16″). Arch height 230 mm (9-1/16″).



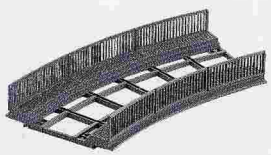
56293 Straight Ramp.
Ramp with straight deck in a reproduction of metal construction. Safety railing on the left and right sides of the ramp. Takes 1 each 5903 straight track. Ramp length 300 mm (11-13/16″).



56296 Bridge Supports.
The bridge supports serve as a connecting element between the bridge pillars and the bridges or ramps. The height of the bridge support is 18 mm (11/16″). 10 pieces to a package.



56292 Truss Bridge.
Straight truss bridge design in a reproduction of metal construction. Left and right sides of the bridge in form of right angle railings. Takes 1 each 5903 and 5917 straight track. Bridge length 450 mm (17-11/16″).



56294 Curved Ramp.
Ramp with curved deck in a reproduction of metal construction. Safety railing on the left and right sides of the ramp. Ramp for 600 mm (23-5/8″) track radius. Takes one each 5922 curved track.

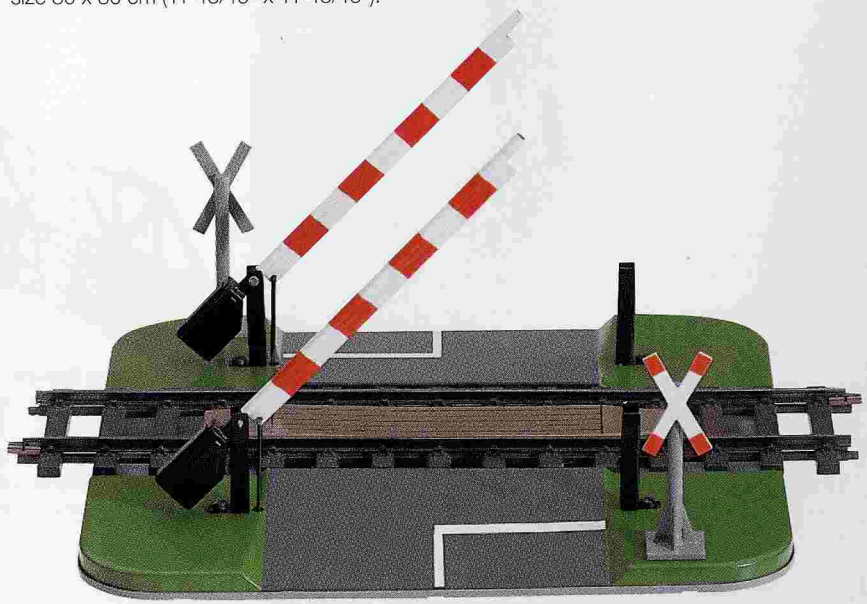


56295 Bridge Pillars.
Bridge pillars in reproduction of a double row offset brick pillar. The individual bridge pillars can be stacked on top of each other. This will result in different pillar heights at intervals of 15 mm (9/16″). The height of a single bridge pillar is 15 mm (9/16″). 4 pieces to a package.

Hey, everyone, look at the signals

Our 1 Gauge accessories liven up a layout in more ways than just looks. On conventionally operated layouts the signals' train control feature safeguards operations. Their effect in digital operation is even more impressive: Trains brake in a prototypically slow manner before signals through the joint effect of the braking module and the high-efficiency propulsion systems in the locomotives.

59950 Mechanically Activated Railroad Grade Crossing.
With full gates. With built-in section of 1 Gauge track for single track routes. Rocker frame is pressed down by locomotive and cars passing over it and closes the gates. Metal base and superstructure. With cross-buck warning signs on the sides. Base size 30 x 30 cm (11-13/16″ x 11-13/16″).



Signals

72441 Signal Module.
Signal mechanism with integrated circuit for controlled stops of digital locomotives with high-efficiency propulsion. Connections for a 2 position color light signal, for the 3 track blocks required for safe braking of the locomotive. This signal module can be controlled with either a k 83 decoder or a conventional 7272 control box. Dimensions 100 x 54 x 22 mm (3-15/16″ x 2-1/8″ x 7/8″).

The signal module requires 3 isolated track blocks in the area of the signal. The first block is a transition area and should be as long as the longest locomotive on the layout (approx. 60–75 cm / 24″–29″). The second block is the actual braking area in which the locomotive will be brought to a controlled stop. The length of the braking block is determined by the setting for the braking delay on the locomotive's decoder. This second block should be at least 100 cm / 39″ long. The third block is a safety block in which the track voltage is turned off as is done in simple signal blocks. This keeps the locomotive from accidentally overshooting the signal.
The signal module is suitable for use with color light and semaphore signals.

Locomotives with built-in, Digital or DELTA electronic circuits without a control feature (i.e. acceleration / braking delay) come to a stop partially in the braking area or not until the safety area is reached. A simple solution to this situation is not possible. For that reason we do not absolutely recommend using the 72441 signal module together with propulsion systems without a control feature.

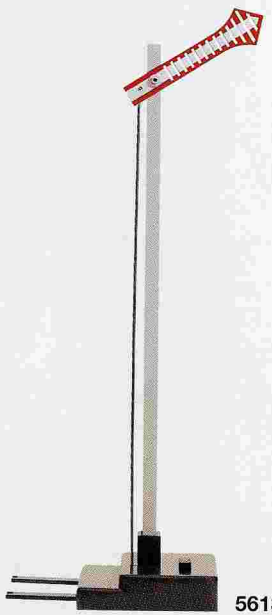
56131 Bavarian Semaphore Signal.
Bavarian prototype manual semaphore signal with train control feature. Can be mounted at the track joint of two straight sections of track. Height 20.0 cm (7-7/8″).

56135 Color Light Home Signal.
Changes from red (Hp0) to green (Hp1). Lighted with LEDs. 16 volts operating voltage. The signal comes without a mechanism. The universal relay (7244 or 72441) or the k 84 decoder (6084) can be used as a mechanism.

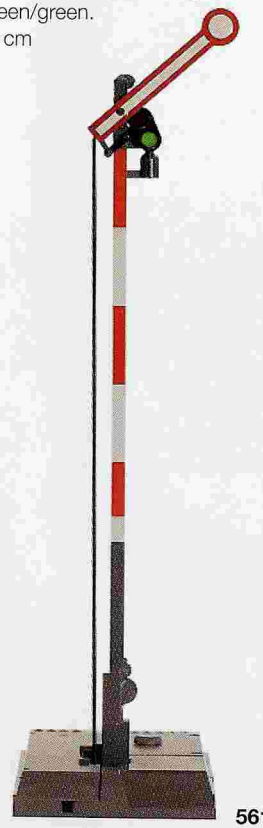
5613 Home Signal.
With a semaphore arm. Solenoid mechanism with end position shutoff and feedback contacts. Can be used to control train movements. Light changes from red to green. Can be operated by remote control using the 7272 or 7271 control boxes (conventional operation) or the 6083 k 83 decoder (digital operation). Height 26.5 cm (10-1/2″).

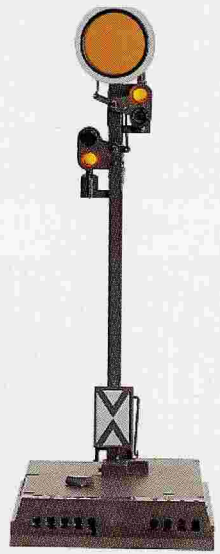
5614 Distant Signal.
Complements 5613 home signal. Solenoid mechanism. Light changes from yellow/yellow to green/green.
Height 19.3 cm
(7-5/8″).

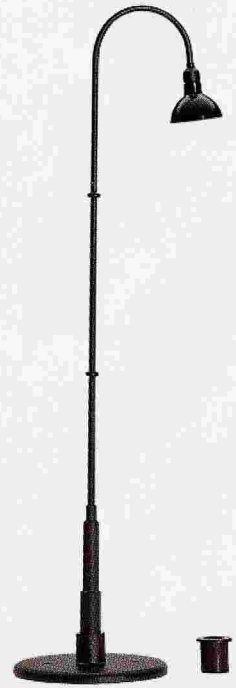
56610 Curved Street Light.
For operation with 16 volts AC. Metal mast. 2 different mounting bases for installing the light on a permanent layout or for setting it up on the floor. Height 24 cm (9-7/16″).


56131

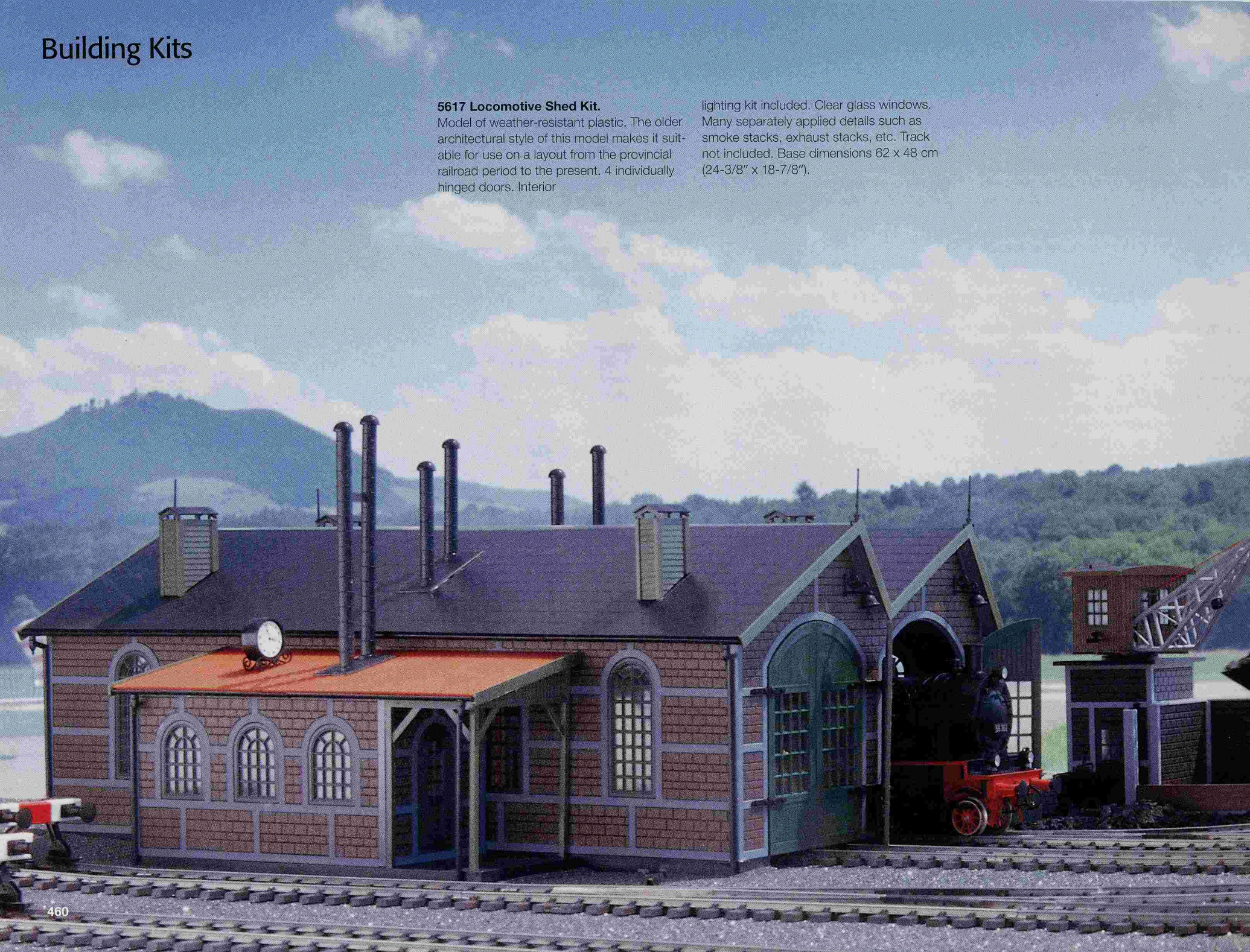

56135


5613


5614


56610

5617 Locomotive Shed Kit.
Model of weather-resistant plastic. The older architectural style of this model makes it suitable for use on a layout from the provincial railroad period to the present. 4 individually hinged doors. Interior lighting kit included. Clear glass windows. Many separately applied details such as smoke stacks, exhaust stacks, etc. Track not included. Base dimensions 62 x 48 cm (24-3/8″ x 18-7/8″).



5618 Coaling Station Kit.
Model of a small coaling facility for steam locomotives, consisting of coal bunker, two coal carts and a movable crane. The crane can be turned manually and the load hook can be raised and lowered with a hand crank. Genuine coal and sand included to fill the bunker. The boards on the coal bunker are removable. Made of weather-resistant plastic. Base dimensions 40 x 18 cm (15-3/4″ x 7-1/8″).

5615 Altmühlhof Station Kit.
Model of a small town station with waiting room and freight shed. Clear glass windows. Interior lighting kit included. Decals and small accessories such as crates, etc. Station platform extension with railing (length 31 cm / 12-1/4″). Made of weather-resistant plastic. Base dimensions 60 x 29 cm (23-5/8″ x 11-1/2″).

Additional accessories such as sets of figures and freight loads to liven up your 1 Gauge layout can be found on pages 419 and 446.



Conventional Train Operation

All Märklin 1 locomotives will operate with no problems on conventional layouts. Transformer, locomotive controller, two wires and some track – this is all you need to get started.



6000 100 volts Japan. 50 VA
6001 110 volts USA. 42 VA. UL/CSA tested.
6002 230 volts. 52 VA
6003 240 volts. 52 VA
Transformer. LED pilot light. 2 pairs of terminal clips. 52 VA/42 VA output. 16 volt AC output. Plastic housing. Weight 1.6 kilograms (3-1/2 pounds). Dimensions 135 x 120 x 80 mm (5-1/2″ x 4-7/8″ x 3-1/2″). VDE/UL/CSA approved.

The 6000, 6001, 6002 and 6003 transformers cannot be set up outdoors. They must be protected from moisture.

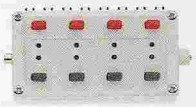


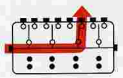
6645 100 volts Japan. 32 VA
6646 120 volts USA. 32 VA. UL/CSA tested.
6647 230 volts. 32 VA
76648 240 volts. 32 VA
Transformer 32 VA.
Track current adjustable between 4 and 16 volts. Accessory current 16 volts. Plastic housing. Dimensions 120 x 140 x 80 mm (4-3/4″ x 5-1/2″ x 3-1/2″).

The 32 VA transformer (6646/6647) is only suitable for operation of a Märklin 1 layout indoors.



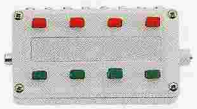
7209 Distribution Strip.
Has 11 electrically linked connections. Dimensions 50 x 20 mm (2-3/4″ x 1-1/16″).

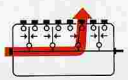




7271 Control Box with Feedback Function.
With 8 sockets for connecting 4 double solenoid accessories. Automatic feedback of the accessory setting with LEDs when used with 5625 turnout mechanism. Dimensions 80 mm x 40 mm (3-1/8″ x 1-9/16″).

Schematic of 7271 (Button 3 pushed)

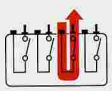




7272 Control Box.
For controlling 4 double solenoid accessories. The position of the buttons shows the setting for the signals, turnouts, etc. Dimensions 80 mm x 40 mm (3-1/8″ x 1-9/16″).

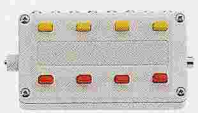
Schematic of 7272 (Button 3 pushed)



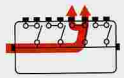


7273 Control Box.
For turning 4 different track or accessory circuits on and off. For example, power can be controlled in 4 storage sidings in 4 different track circuits. Dimensions 80 mm x 40 mm (3-1/8″ x 1-9/16″).

Schematic of 7273 (Button 3 pushed)



7274 Control Box.
For dividing or switching a track or accessory circuit into 4 different circuits, each with two connections. For example, 4 accessory circuits for building illumination can be turned on or switched over. Dimensions 80 mm x 40 mm (3-1/8″ x 1-9/16″).



Schematic of 7274



603026 Automatic Wire Stripper.
For stripping insulation from all single conductor wire 0.19 to 6.0 square millimeters in size. Wire stripper mechanism automatically adjusts itself to the size of the wire. Length of wire insulation to be stripped can be adjusted from 5 to 12 mm. Side cutter integrated into the wire stripper.



71060 Wire.
Dealer package assortment with 10 each rolls of red, brown, blue and yellow wire. Length of each roll 10 meters (33 feet). Wire cross section 0.75 square millimeters (0.1163 in.). Rolls of wire can also be sold separately.

The wire in this dealer package assortment with a cross section of 0.75 square millimeters (0.1163 in.) is recommended for large H0 layouts and for Märklin 1.

02420 Smoke Fluid.
Large 50 milliliter (1.69 oz.) bottle for Maxi and Märklin 1 locomotives with built-in smoke generators.

7149 Oiler with Narrow Applicator Opening.
Contains 10 ml (0.0338 oz.) special oil for lubricating locomotives and cars.



6000 100 volts Japan. 50 VA
6001 110 volts USA. 42 VA UL/CSA tested.
6002 230 volts. 52 VA
6003 240 volts. 52 VA
Transformer. Transformer for supplying power to the 6021 Control Unit or 6017 Booster. LED pilot light. 52 VA output (42 VA for 6001). The 6000, 6001, 6002 and 6003 transformers are not to be set up outdoors. They must be protected against moisture.



6021 Control Unit.
Central unit with built-in locomotive controller for Märklin H0 and Märklin 1 layouts. Supplies power and control commands to the layout.



6017 Booster.
Power output component for large digitally controlled Märklin H0 and Märklin 1 layouts.



6036 Control 80 f.
Locomotive controller. Access to 80 locomotive and function addresses.



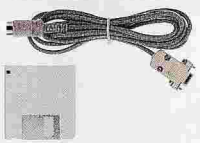
6040 Keyboard.
Controller for 16 solenoid accessories. LEDs show settings for turnouts and signals.



6043 Memory.
Route controller. Several solenoid accessories can be switched with the press of a button. Stores in each of 24 routes the position commands for up to 20 turnouts or signals. Maximum of 4 Memories can be connected to the Control Unit.



6051 Interface.
Link to a computer. 80 locomotive addresses and 256 accessory addresses can be controlled through this unit.



The "COMBOARD" program (see page 300) can be used to control solenoid accessories with a computer.



6083 k 83 Decoder.
Decoder panel for controlling turnouts, signals or uncoupler tracks.



6084 k 84 Decoder.
Decoder panel for tuning on/off continuous current for lighting circuits or motors in accessories.



6088 Decoder s 88.
Feedback module for contact generators on digital model railroad layouts.

6038 Adapter 180
6039 Adapter 60
6089 Adapter s 88

Illustrations and product descriptions can be found on pages 296 and 299.

60955 Maxi High-Efficiency Electronic Circuit.
High-efficiency decoder for converting single-motor Maxi locomotives to high-efficiency propulsion. This electronic circuit has 4 controllable functions. Can be controlled with a Control Unit (6021). Can be coded for 80 different locomotive addresses. This electronic circuit enables you to adjust maximum speed as well as acceleration and braking delay. Built-in load-dependent speed control for different load situations such as ascending and descending grades. When operated with AC power or with the 6607 DELTA Station, the "function" and "f1" functions are turned on. Decoder dimensions 43 x 25 x 8 mm (1-11/16" x 1" x 5/16").

60960 c 96 Function Decoder.
Decoder for controlling up to 4 auxiliary functions (f1 to f4) from the Control Unit (6021) or from a Control 80 f locomotive controller or Interface connected to the Control Unit. This function decoder can be installed in addition to the locomotive decoder in locomotives or as an individual decoder in cars. Can be coded for 80 addresses.

The complete Digital system is shown in its entirety on pages 288–301.

First Class Adventure

Bavaria's sights are not limited to King Ludwig and his castles. It's worth a family outing to Bavaria in the small scale too – to one of the most beautiful display layouts in Europe.
The Ruhpolding model railroad show is an attraction for every model railroader. On a 32.5 meter / 106 foot long Märklin H0 layout with extensive yards and sweeping main line curves, you'll be fascinated by the train operations with prototypically long trains such as the Rheingold, ICE, Rollende Landstraße, and other passenger or freight trains. In addition to this large layout, there are other, constantly changing display layouts in operation. And there are four layouts to play with at no charge from the wooden train to Märklin Maxi.

Ruhpolding Model Railroad Show
Rathausplatz 5,
83324 Ruhpolding, Germany
Telephone: 08663/5613

Before you start off on a trip, we recommend calling up first to see if the dates this show is open are still valid. The show is open on these days from 9:30 AM to 5:30 PM, also on holidays:

05/17/1999 – 11/07/1999	Monday through Saturday
11/08/1999 – 12/17/1999	Saturday and Sunday
12/18/1999 – 03/12/2000	Monday through Saturday
03/13/2000 – 04/14/2000	Saturday and Sunday
04/15/2000 – 05/02/2000	Monday through Saturday
05/03/2000 – 05/14/2000	Saturday and Sunday
05/15/2000 – 11/07/2000	Monday through Saturday

Subject to change



Maxi in a Paradise of Flowers

märklin

Mainau, the isle of flowers on Lake Constance, without a doubt makes the heart of every flower and botanical enthusiast beat faster. All year round 70 gardeners keep up a sumptuous display of flowers and plants under 6,000 square meters / 64,583 square feet of glass and on 32,000 square meters / 344,445 square feet of grounds. With exhibitions and concerts, children's festivals and barbecue parties, culinary festivals, and botanical shows, Mainau offers a challenging as well as colorful program. Hence, Mainau calls itself the "isle with five seasons in the year".

Model railroaders can also feel their hearts beat faster here. Because a Maxi garden railway goes right through this sea of flowers: 6 trains on 200 meters / 656 feet of track with stations and buildings, valleys and tunnels, bridges and lakes.

The fact that the outdoor pros on the Isle of Mainau in their search for a suitable model railroad decided on Maxi speaks for Maxi's extraordinary qualities. And the powder paint finish on the metal models make colorful accents even in a paradise of flowers.

MAINAU

The Lake Constance Isle with 5 Seasons in the Year

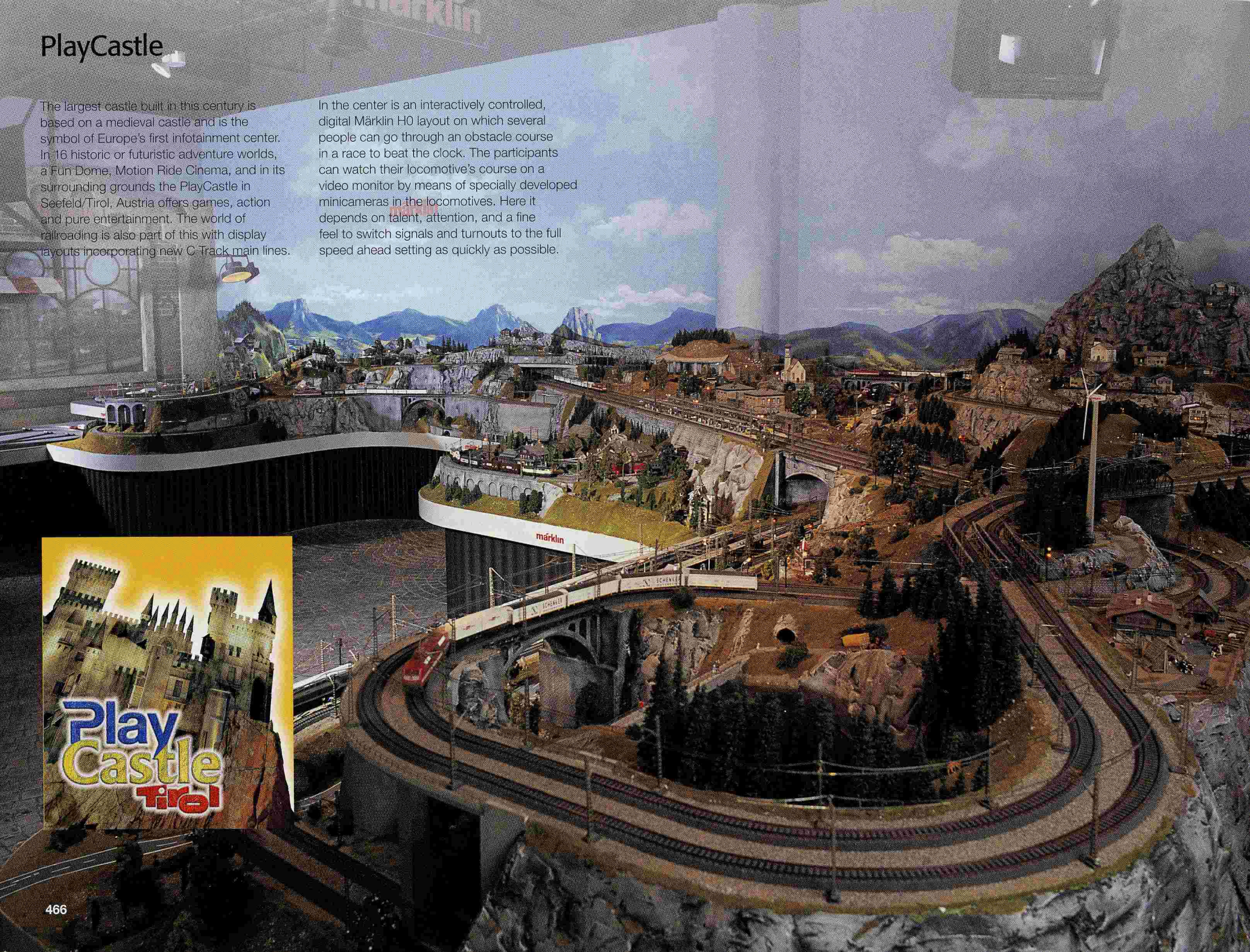
Mainau is open all year around.

MAXI

PlayCastle

The largest castle built in this century is based on a medieval castle and is the symbol of Europe's first infotainment center. In 16 historic or futuristic adventure worlds, a Fun Dome, Motion Ride Cinema, and in its surrounding grounds the PlayCastle in Seefeld/Tirol, Austria offers games, action and pure entertainment. The world of railroading is also part of this with display layouts incorporating new C Track main lines.

In the center is an interactively controlled, digital Märklin H0 layout on which several people can go through an obstacle course in a race to beat the clock. The participants can watch their locomotive's course on a video monitor by means of specially developed minicameras in the locomotives. Here it depends on talent, attention, and a fine feel to switch signals and turnouts to the full speed ahead setting as quickly as possible.



Harz Model Building Center Lautenthal, Inc.

märklin

This model building center presents layouts on over 1,000 square meters (10,760 square feet) in the gauges Z, N, TT, H0, and 1. In the center is a 50 meter (164 feet) and between 1.20 and 2.20 meter (3 feet 11 inches and 7 feet 2 inches) wide Märklin H0 layout. Following the slogan "From the coast to the high mountains", it presents the modern Era V German railroad – but also special excursion steam trains for railroad romantics. Two personal computers control the operations with approximately 120 trains.
A 40 meter (131 feet) Märklin Maxi layout in 1 Gauge brings the Wild West into the present. And in mini-club Switzerland is the theme. This layout is on three levels and goes through vacation landscapes up to the highest mountains. Layouts for children to play with, daylight and nighttime scenery, video transmissions from the trains en route, multimedia shows, seminars and expert advice complete the program.

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We would like to thank the Busch, Gebr. Faller, HEKI Kittler, Vollmer and Kleinkunst Werkstätten Paul M. Preiser companies as well as the Staufeneck Burg Restaurant for their friendly support.

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märklin

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Märklin special imprint models are available in all versions in Märklin Z, H0, and 1 Gauges. We would be happy to advise you.

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The Märklin Club Of North America



All Aboard The Märklin Club!

Besides getting your hobby started on the right track with valuable technical and product information, a Märklin Club membership gives you many other exclusive benefits.



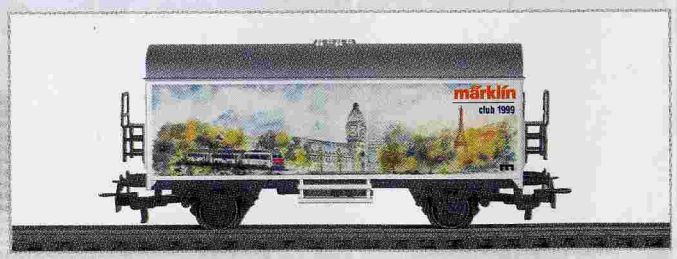
***Insider* – The Club Newsletter**

The club newsletter, Insider, provides full-color detailed help with building layouts; maintaining your trains, new product updates, historical perspectives and many other topics to make training with Märklin more enjoyable. In addition to Insider, the *Märklin Depot* is also received exclusively by Club members.This small catalog offers books and videos on all kinds of train subjects, as well as unusual gift items such as tool kits, apparel, prints and posters.



Collectible Annual Club Cars

Club cars are available each year for purchase by Club members only. News and availability about other Märklin collectible cars are always made available to Club members on a timely basis.





Special Bonus For Club Members

In 1992 Märklin GmbH established the Insider Club, which is open to enthusiasts who reside in Germany, Austria and Switzerland. Each year the Insider Club releases special locomotives and cars that are produced by reservation only. These highly sought after collectibles are also available to Märklin Club members to purchase, using the reservation system.

Other Services and Benefits

***Märklin Magazin* Subscription Service**

Club members may subscribe to the German language *Märklin Magazin* through the Märklin Club.

Technical Help

Through the *Insider* magazine and a variety of guide-books and videos, a world of technical and layout building assistance is available to Club members.

To find out how to join the Märklin Club, call or write us at: Märklin, Inc., P.O. Box 510851,





Special Gift Items
You can purchase many special gift items through the Club including coffee mugs, caps and apparel. Informational magazines, videos and books cover a variety of topics from electrical wiring and layout building techniques to exciting stories about the real life railroads and prototypes.

Personalized Display Plaques
To display your club cars or other collectible cars, the Märklin Club offers high-quality personalized display plaques of natural black walnut in both H0 and Z gauge.



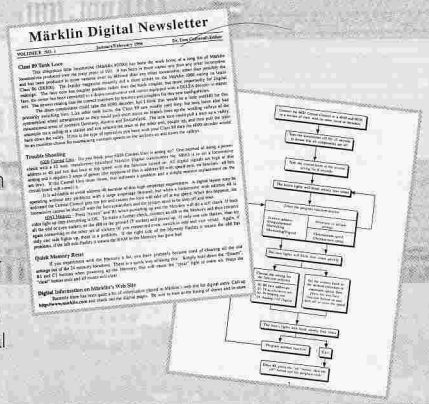


Display Cases
Display the detail and beauty of your Märklin train collection in a high-quality custom oak display case. Cases may be purchased through the Club in your choice of H0 or Z gauge.

Prints and Posters
Richly colored prints and posters are suitable for framing. Reproduced artist's illustrations of model trains, and historic Märklin catalog covers, with an explanation of their special significance in Märklin train history.



The Märklin Digital Club
Dedicated specifically to Digital, this separate club provides members with indepth knowledge and insight into Märklin's most technologically advanced multi-train control system. Members receive a bi-monthly newsletter edited by Dr. Tom Catherall, Märklin's digital consultant. This newsletter is designed to help members better understand the digital system and the host of personal computers that connect to the interface.



New Berlin, WI 53151-0851, 414-784-0717. Visit our World Wide Web Site at http://www.marklin.com

Visit these international model railroad shows:

1999

Germany

November 27 – December 5, 1999
17th Internationale Modelleisenbahn-Ausstellung, Munich

2000

Germany

April 12 – 16, 2000
Intermodellbau 2000, Dortmund

October 5 – 8, 2000
Modell & Hobby 2000, Leipzig

November 9 – 12, 2000
18th Internationale Modelleisenbahn-Ausstellung, Cologne

November 23 – 26, 2000
Modellbau und Modellbahn 2000, Stuttgart

Belgium

March 4 – 12, 2000
Lentebeurs, Flanders Expo, Gent

France

April 1 – 9, 2000
Salon International de la Maquette et du Modèle Réduit, Paris

Great Britain

February 18 – 20, 2000
Model Railway Exhibition, The Brighton Centre

February 25 – 27, 2000
Model Railway Exhibition, Glasgow Exhibition Centre

Netherlands

July 9 – August 29, 2000
Modelspoor Expositie in de "Efteleing" in Kaatsheuvel

September 22 – 24, 2000
Internationale Modelspoor Tentoonstelling "RAIL" in de Brabanthallen in Den Bosch

Austria

October 25 – 29, 2000
Modellbau International, Vienna

Switzerland

September 20 – 24, 2000
SuisseToy, Bern

USA

March 25 – 27, 2000
East Coast Hobby Show,
Fort Washington Expo Center,
Fort Washington, Pennsylvania

June 8 – 11, 2000
Big Train Show,
Aboard the Queen Mary,
Long Beach, California

July 5 – 9, 2000
National Garden Railway Convention,
Town & Country Hotel and Convention Center,
San Diego, California

July 30 – August 6, 2000
NMRA National Convention,
San Jose Convention Center,
San Jose, California

August 26 – 27, 2000
East Cost Large Scale Train Show
Garden State Expo Center
Somerset, New Jersey

October 19 – 22, 2000
National Model & Hobby Show,
Rosemont Exposition Center,
Rosemont (Chicago), Illinois

Explanation of Symbols

New item for 1999

New version 1999

Hobby Assortment

Multi-train operation

Metal locomotive frame

Metal frame and mostly metal locomotive body

Metal frame and locomotive body

Metal car frame

Metal car frame and body

Universal locomotive with DELTA electronic circuit. For operation with Märklin transformers, in the Märklin DELTA system and in the Märklin Digital system (Motorola format).

Digital locomotive or digital control unit for the Märklin Digital system (Motorola format).

Digital locomotive mit high-efficiency propulsion. Maximum speed and acceleration/brake delay are adjustable. Special motor with electronically enhanced load compensation or compact bell armature motor design. Can be operated with a Märklin transformer, in the Märklin DELTA System or in the Märklin Digital System (Motorola-Format). 1 auxiliary function (function) that can be turned on in Digital operation.

Digital decoder mit additional, digitally controlled functions (f1, f2, f3 or f4) when operated with the **6021 Control Unit**. The functions present depend on the way the locomotive is equipped. Standard function (function) active during conventional operation.

Locomotive with controlled, adjustable C-Sine propulsion. Can be operated with Märklin transformers, in the Märklin DELTA system, and in the Märklin Digital system (Motorola format).

Built-in sound effects circuit

Single headlight at the front

Single headlights that change over with the direction of travel

Dual headlights at the front

Dual headlights front and rear

Dual headlights that change over with the direction of travel

Triple headlights at the front

Triple headlights front and rear

Triple headlights that change over with the direction of travel

Four-light headlights that change over with the direction of travel

One red marker light

Dual red marker lights

Dual headlights and dual red marker lights that change over with the direction of travel

Triple headlights and dual red marker lights that change over with the direction of travel

Triple headlights and a white marker light that change over with the direction of travel

Märklin close couplers with pivot point

Märklin close couplers in standard coupler pocket with pivot point

Märklin close couplers in standard coupler pocket with guide mechanism

Built-in interior lighting

Interior lighting can be installed. (example: with **7330**)

Built-in interior details

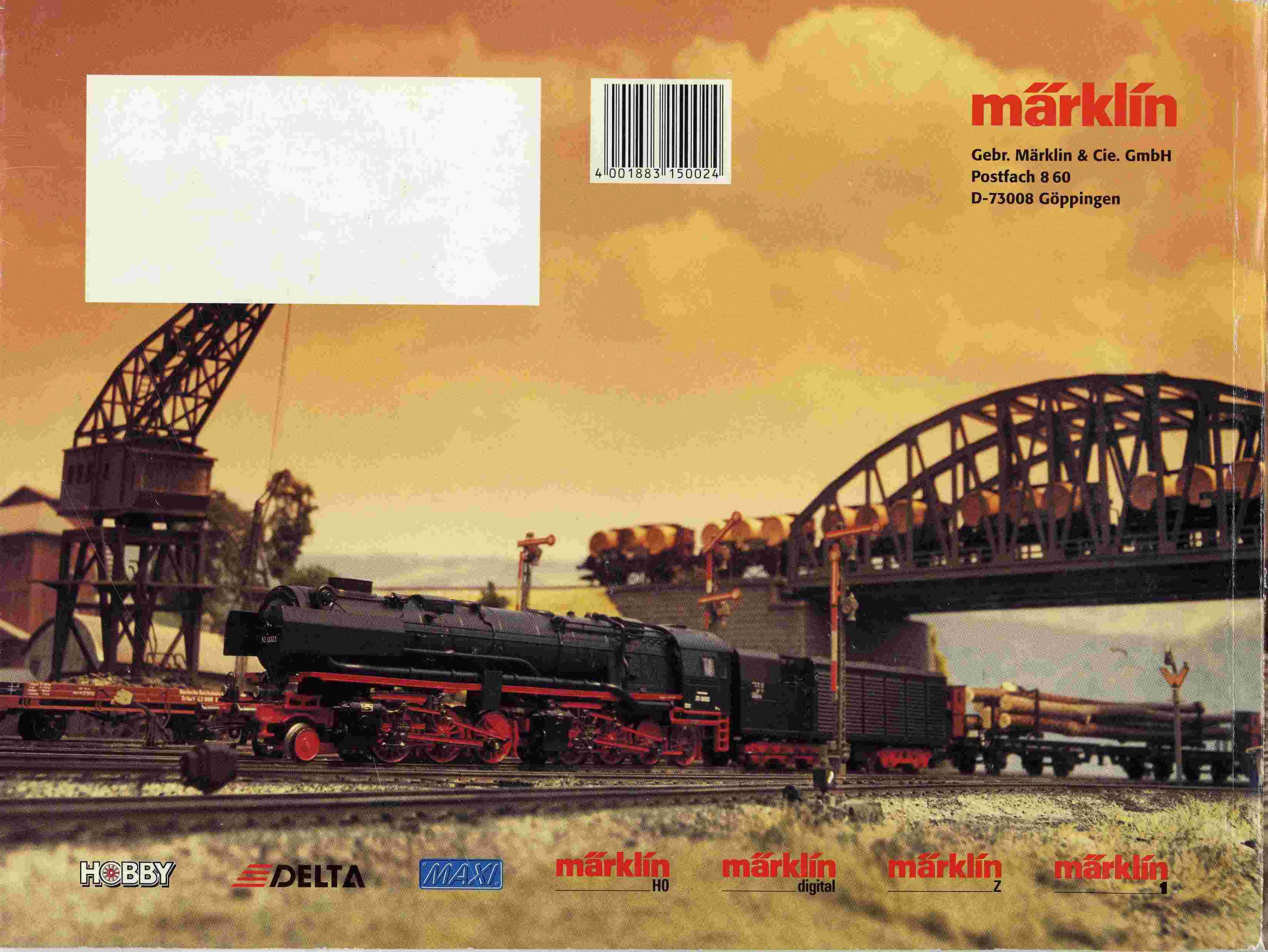
Power supply can be switched to operate from catenary

Locomotive/car has sprung buffers

Automatic claw couplers can be replaced with reproduction prototype couplers.

Märklin *exclusiv* special models – produced in a one-time series

Useful information about the railroads and their eras can be found on pages 160/161.



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HOBBY DELTA MAXI märklín HO märklín digital märklín Z märklín 1