# 4 CLUB NEWS METALINSIDER 2010





Not just a power-pack in the original: the TGV POS high-speed train - Märklin is now fitting both of the end cars with a motor.

### Contents Issue 04/2010





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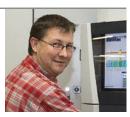
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In the Club mailing 04/2010 you will find the following enclosures: Insider News 04/2010, Märklin Magazin 04/2010, order forms for the Insider anniversary loco "175 Years of German railroads", 1. FC Märklin Locomotive of the Year 2010.



Be there live and win: Märklin TV.



Varity: The MIST67 Round Table offers its members a wide range of subjects.

#### Your service numbers

### **Customer Service**

#### Club Hotline:

Telephone Monday-Friday from 10 a.m.-6:30 p.m. Telephone: +49(0)7161/608-213 • Fax: -308 E-mail: insider-club@maerklin.com

### Questions about technology, repairs and spare parts / complaints:

Telephone Monday-Friday from 10 a.m.-6:30 p.m.

Telephone: +49(0)7161/608-222 • Fax: -225

E-mail: service@maerklin.de

#### Internet

www.maerklin.com

### Moving?

Please inform us in good time of your new address so we will know where we can reach you. A forwarding address at the Post Office unfortunately will not suffice.

Thank you for your cooperation!

### Dear Insiders,

175 years ago, the first trip of a railroad in Germany set a success story rolling. Märklin is now commemorating this event with the production of an exclusively-designed class 120.1 locomotive. The 84-tonne loco to celebrate this anniversary will be in passenger service for the year between Westerland and Freilassing, and the model will be exclusively available to members of the Insider Club as an H0 or Z gauge model as well. This year's new model releases will certainly be playing a major part in the proceedings at Märklin's Open Days in the middle of September: following the



Dietmar Kötzle. **Head of Customer Clubs** 

overwhelming response at the last event we are complying with the oft-repeated wish to allow another look behind the scenes. The Club News gives you a foretaste of what is to come at the event: we ask the manager of the electroplating department how component surfaces are made to shine and are protected. In addition, we will tell you how you can use Märklin TV in the Internet to keep abreast of the latest developments at Märklin. And if you answer one question correctly, you might be the lucky winner of an Insider locomotive. Have fun reading your Club News!

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Märklin's factory 1: meeting point for model railroad enthusiasts.

### Highlight for your 2010 diary

### Open Day in Märklin factory 1

On September 17 and 18, 2010 the Märklin staff will allow you to look over their shoulders again: the model railroad market leader is once more arranging an Open Day - last year, some 10,000 visitors found their way to Göppingen to take in the tour of the foundry, the electroplating and the final assembly lines. But it's not just guided factory tours

waiting for the guests: in addition to the insights into manufacturing, Märklin is also preparing an entertaining fringe program with model railroad layouts, a play corner, a kiddies' railroad, and in locomotive and rolling stock fitting, even the visitors themselves can have a go. Sports car manufacturer Porsche will also be appearing at the event.

### "Goldenes Gleis" for class 23

As winning model in the "Goldenes Gleis" competition sponsored by the Railroad publishing group of Berlin, we are proud to present you Märklin's class 23 (item 39230) - in category A for traction units in H0. The accolade announced in June for quality of work at Märklin is based on a survey of the readership of four specialist trade journals: Eisen-

bahn-Journal, Miba, Modelleisenbahner and Züge.



Sales and Marketing

**Director Lars Schilling** 





Splash of color: with its yellow paintwork, the "Oppeln 5088 Grs" stood out in post-war freight traffic – otherwise in freight cars, the dominant color was red-brown.

Insider Annual Car 2010 in H0

# Classic of freight transportation

Through its coloring and lettering, the "Oppeln 5088 Grs" would at its time have been strikingly different. The Insider Annual Car 2010 brings variety to every layout even today.

It certainly was something special, the freight car with the identification code "Oppeln 5088 Grs" and the owner's lettering "DB Brit-US-Zone". Not so much because of its type: it is just an "ordinary" boxcar (G), convertible to Russian broad-gauge (r) – a car with the region designation "Oppeln" with handbrake and brakeman's cabin. A

ALAK-Außen Klarlack

The ALAK brand: The yellow color distinguished it.

"normal Oppeln" and not, as erroneously described in Insider issue 03/2010, a "long Oppeln". It is the color scheme and the lettering which makes it stand out in the red-brown freight car monotony. In the early 1950s, it was exceptionally rare for railway-owned freight cars to wear advertising, which is why the "ALAK SPANGEN-**BERG-WERKE HAMBURG"** is so prominent. Company owner Willy Spangenberg started making a name for himself in 1948 with paints

and binders for the decorating trade and in 1950 introduced the "ALAK" brand, for which he was advertising on the freight car – on his road trucks was the sign "ALAK VOLL-SYNTHETISCH für den Maler (ALAK fully synthetic for the painter)". There are only black-and-white photographs found of the "Oppeln", and they suggest a white or pale gray coloring. However, one of the Spangenberg trucks

was photographed in color in those days: the bodywork is painted in bright, light yellow, as the photo in Märklin Insider 03/2010 shows. It is most likely that the "Oppeln" was also yellow, and hence for the models the color zinc yellow (RAL 1018) was specified.

The Spangenberg factory used not only boxcars and road trucks to carry their goods. They also used the "house-to-house" system which was already well developed by the 1950s, with pa containers which could be carried either on railroad cars or on road vehicles. With the "Oppeln" (item 48160) and the freight car set (item 48812), described in the Club News 03/2010, Insiders can build a model of the Spangenberg factory.

Text: Thomas Landwehr



Color empire: from their extensive premises in Hamburg-Eidelstedt, the Spangenberg factory supplied all of the still young federal republic with paints and varnishes.

hoto: Archiv



Exclusive: anniversary loco for Märklin Insiders

designed anniversary loco is fully detailed in HO and Z gauge, exclusively for Märklin Insiders. The original class 120.1 will be touring Germany for the whole year and reminding everyone of the first journey by rail in Germany in 1835.

# 175 Years of Railroads

Märklin is commemorating the 175th. anniversary of the railroad in Germany with a promotional locomotive. For Club members, the class 120.1 is being produced as an elegant anniversary loco.

With an 84-tonne, 7,500 HP Deutsche Bahn AG (DB AG) locomotive of class 120.1, Märklin reminds us of the maiden trip of an import from England weighing 6.1 tonnes and having a modest 41 HP: 175 years ago, on December 7th, 1835, the "Adler" steamed away from Nuremberg in the direction of Fürth. No longer would passengers be forced to put up with the jolting in a horse-drawn carriage for an hour to make the journey: they raced to their destination in barely a quarter of an hour.

The fact that Märklin are now sending an anniversary locomotive on its travels through the 16 Federal States with the lettering "Zukunft bewegen", or "Moving the future", has a triple significance:

• The journey from Nuremberg and Fürth stands for the start of a new era: only five years after this maiden trip there were already 500 kilometers - 310 miles - of railroad tracks in the Germanic states, and the steam engine was the motive power for industrialization and trade. Today, there

Cladding: large strips of special plastic foil are used to cover the paintwork.



Accuracy: the lettering is positioned precisely on the gold.



Final ordering date: October 8, 2010

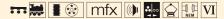
are some 1.2 million km (approx. 745,000 miles) of railroads across the world.

- The class 120, which took to the rails in 1979, has also moved the future. This was the first series-built, electrically-controlled AC locomotive to establish itself as a genuine all-purpose loco it would haul freight trains at night, and by day it was accelerating InterCitys and EuroCitys to speeds of up to 200 km/h (120 mph). It was economical with energy too: when braking, it would regenerate electricity. The drive was lighter and more compact and needed less maintenance than the single-phase series-wound motors in general use up to that point.
- The class 120 also presaged the direction in which the railroad's future lay: this maid-of-all-work achieved the world record for AC locomotives of 231 km/h (141 mph) on August 13th, 1980, and four years later, 120 001-3 achieved a speed of 265 km/h (162 mph). The engineering concept of this universal locomotive was later employed for the driving ends of the ICE, and at the same time it paved the way for the laying of high-speed rail lines. And these are today being built all over the world: with its virtues of speed, safety and environmental friendliness, the railroad is optimizing the logistics collaboration between it and road, water and air.

Märklin had the 19.2 meter-long (63 feet) 120.1 dressed up in Munich. Around 100 square meters of PVC foil are stuck on, using an adhesive which has a good bond and must also be removable. The foil must not be cut on the paintwork, nor must it be allowed to cover the silicone edges of the bodywork. On the 18-meter (59 feet) long, 2.5 meter (8.2 feet) high sides, the red lettering "Märklin" is emblazoned between the ventilators. The windowless flank is half covered in white and carries on the remaining surface in accordance with the occasion the colors black, red and gold. The dynamic livery imitates the ICE in shape and carries the years of the anniversary: 1835 and 2010. On her journeys around Germany which are now beginning, the Märklin railroad anniversary loco will attract the attention of well in excess of 2.3 million observers - such is the average pulling power of the Deutsche Bahn's promotional locomotives. Since she will be in long-distance pas-

## 37542 Class 120.1 special edition "175 Years of German Railroads"





**Prototype:** Fast general-purpose class 120.1 locomotive of the Deutsche Bahn AG (DB AG). Promotional design 175 years of the railroad in Germany.

**Model:** With mfx digital decoder, controlled high-efficiency propulsion, sound and light functions. Two driven axles. Traction tires. Lighting with warm white LEDs. will work in conventional operation, and can be controlled digitally. Engineer's cab with internal detailing. Engineer's cab lighting also digitally controllable. Separately-applied grab-handles. Length over buffers 22,1 cm / 8-1/2".

### ■ Model highlights 37542

- Promotional loco for the great anniversary "175 years of the railroad in Germany"
- Lighting with warm white LEDs.
- Digital sound: loco whistle and station announcement.
- The electric locomotive 37542 will be produced in 2010 in a one-off series for Insider Club members only.

Digital functions	Central Unit 6020	Control Unit 6021	Mobile Station 60652	
Headlights	•	•	•	•
Engineer's cab lighting	•	•	•	•
Station announcement	•	•	•	•
Signal horn	•	•	•	•
Direct control	•	•	•	•

Copyright: the lettering "Märklin" crowns the space up above, between the ventilators.



Precision work: Where the foil won't stick, the paintbrush comes to the rescue.





Final ordering date: October 8, 2010

### 88480 electric locomotive DB class 120.1





**Prototype:** Fast general-purpose class 120.1 locomotive of the Deutsche Bahn AG (DB AG) in the special promotional design for the anniversary "175 Years of Railroads in Germany".

**Model**: Both trucks driven. Dark wheel-treads. Triple headlight changes with the direction of travel. 5-pole motor. Length over buffers 87 mm / 8-1/2".

- **■** Model highlights 88480
- Promotional loco for the great railroad anniversary.
- The electric locomotive 88480 will be produced in 2010 in a one-off series for Insider Club members only.

senger service, she will be an eye-catcher on the open road, at grade crossings and all major stations between Westerland and Freilassing and Cologne and Frankfurt on the Oder. As an exclusive anniversary loco, this unique production will also be seen in many stations on H0 and Z-gauge layouts: it will be produced as a special edition "175 Years of Railroads in Germany" in 2010 in a one-off series only for Club members. Every Insider Club member can order one example of the model by taking the enclosed order form to the MHI dealer or other authorized Märklin dealer. We draw your explicit attention to the fact that Insider order forms are not transferable. A certificate accompanies each model. Please observe the closing date given on the order form: October 8, 2010. Deliveries are scheduled to commence in the in the fourth quarter of 2010.

Ray of light: Text: Rochus Rademacher/Photos: Kurt Bauer
The gold front of the class 120.1 squints out of the workshop into the greenery.





Black-red-gold: This is how the Märklin promotional loco will be running in charge of Inter-cities and Eurocitys through the country – and in H0 and Z soon on model railroads.



### A locomotive strong as a bear



# 1. FC Märklin 2010 Loco of the Year

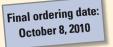
Specially for members of the 1. FC Märklin, a Loco of the Year is being produced in H0 gauge in 2010, and by tradition we offer this to all Insider Club members as well.

It's not just the kids and adults of today who love the taste of HARIBO golden bears. Even the last of the German emperors, Wilhelm II, is supposed to have been delighted by them and to have thought them one of the best things to come out of the 1920s. Similarly enthusiastic over fruit gums were writer Erich Kästner, Nobel prizewinner Albert Einstein, actor Heinz Rühmann and the first President of

the Federal Republic Konrad Adenauer. HARIBO has been advertising with "Wetten, dass...?" presenter Thomas Gottschalk for their premium product since 1991, and in 2006 the longevity of this advertising partnership even made it into the Guinness Book of Records. However HARIBO doesn't rely only on tradition. This year for the first time there is also a 1. FC Märklin locomotive which depicts the sweet golden bear. So members of the 1. FC and Insiders alike can combine two passions with one another. The order form is enclosed with this mailing and is handed in to your Märklin specialist dealer. Please note the date for receipt of last orders: October 8, 2010.

### **Model description**

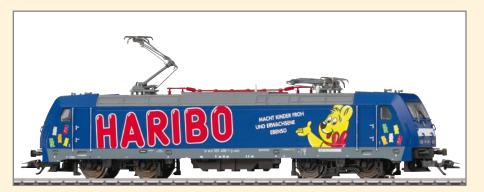
### 36603 1. FC Märklin 2010 Loco of the Year (H0)







Prototype: General purpose class 185.2 locomotive in a fictitious HARIBO livery. Built by Bombardier as a regular production locomotive from the TRAXX program. Dual system locomotive.



Model: Locomotive livery

illustrates a large golden bear, HARIBO lettering and slogan and a golden bear on both ends of the locomotive. Metal with many integral details. With digital decoder and special motor.

4 axles powered through cardan shafts. Traction tires. The triple headlights change over with the direction of travel, will work in conventional operation, and can be controlled digitally. Headlights are maintenancefree LEDs. The pantographs can be raised and lowered but are not electrically wired. Length over buffers 21.7 cm / 8-1/2". As an exclusive bonus, there is a tin included with a selection of HARIBO products.

In cooperation with Märklin, for the first time a Loco of the Year for 1. FC members and Insiders has been produced which is devoted to the sweet golden bear created in Bonn in 1922 by Hans Riegel. All Insider members can submit the accompanying order form to the MHI dealer or to the authorized Märklin dealer to order one example of this model. We draw your explicit attention to the fact that Insider order forms are not transferable. Model 36603 will be produced in 2010 in a one-off series for 1. FC and Insider Club members

Please observe the closing date given on the order form: **October 8, 2010**. Delivery is scheduled to commence in the fourth quarter of 2010.





Märklin TV: exclusive information for model railroad fans

# In the middle of it - live

The Internet TV station Märklin-TV transmits exclusive information for Club members about Märklin using moving pictures and model tips on operations and features covering events complete the infotainment.

Elegantly, the streamlined shape of the TGV POS slides into the station of Paris-Ost; the camerawork accentuates the majesty of this embodiment of speed through its view at knee height. Cut to the automatic injection molding machine in Märklin's production line just being filled with high-quality plastic granules, an operative is concentrating on entering control data – and finally, the 1:87 TGV casing is resting in a gloved hand. Thus Märklin links prototype with model, coupling fascination with expertise – infotainment on a professional level.

"We take our Club members to all those places where it is interesting": this is the motto of the exclusive media service for Insiders, which keeps the enthusiast community

the Märklin TV cameras
draw the Club members
directly into what is
happening — whether it
is into unusual dioramas,
into the complex world of
production at Märklin or
into the top events of the
model railroad scene.

updated every fortnight in ten to fifteen minutes – whether it's to do with Märklin's company policy, new model releases or about scene events such as the International Toy Fair in Nuremberg: anyone who couldn't make it is taken onto the stand.

The viewer doesn't sit in the front row, but in the middle of everything going on. He learns in real time about the model trends at the International Toy Fair, on the spot he sees the pre-production series of the class 03.10 Club model on the rolling test stand and the test bench with C-, K- and M-tracks. Well-staged prototype reports waken the emotions, whet the appetite for the models and impart the collector the running experience with his own treasures,



### This is how you call up the films:





 SIt's this easy: enter the Märklin start page www.maerklin.de and click on the field Märklin TV.



2

 Select your Club or your Club logo (center) or the link club.maerklin.de (below).



3

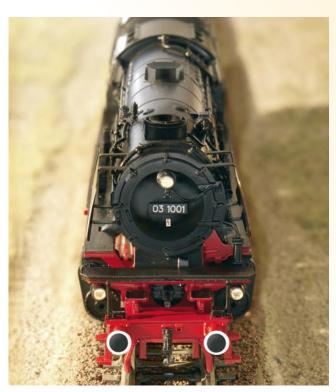
 Enter your membership number and password and click on the field "einloggen".



Λ

 In the Club area select menu point
 "Märklin TV" or click directly on the picture
 "Märklin TV". And now you can call up the films.

• Club members can also select the short-cut and enter directly under club.maerklin.de into the start page of the Club (see step 3).



Someone who has paid careful attention might win a class 03.10 with Märklin TV.

### Competition for the wide awake

Märklin TV is well worth watching for things other than the exciting video pictures and expert information. If you watch the last exciting installments of the Märklin TV-channel carefully, you might even be lucky enough to win a class 03.10, this year's Insider-loco – ifyou answer the following question in the Club area on the Märklin homepage correctly:

 The present Adler museum train is prototype for the anniversary model. In what year was this train put into service?



You can enter the answer in the Internet area for your Club (please go to the menu point Competition). From amongst those who have entered the correct answer, Märklin will then draw the winner's name for this year's Insider locomotive, the class 03.10, which is the main prize. Legal redress is excluded. Closing date for entries: September 19, 2010. Have fun!



### Themes of Märklin TV

#### Part 6 (06.05.2010)

Film of the large layout Wachau-Dürnstein; Albula line in Grisons; diesel powered rail car VT 08

#### Part 7 (28.05.2010)

In the hand-painting shop; 20 years of the Märklin-Händler-Initiative; Preserved loco 01.118; State Garden Show Villingen-Schwenningen

#### Part 8 (08.06.2010)

New from the "Dream factory" – Märklin TV shows the pro-

duction of the model legend V 200; Documentation Department – a peep behind the scenes of the central information point at Märklin.

#### Part 9 (28.06.2010)

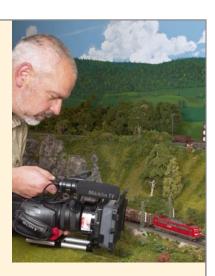
Distinction for Märklin & Trix – report on the prize giving ceremony on the Brocken; montage: "Adler" gets its wings – detailed report on stage-by-stage development of the special anniversary model.

#### Part 10 (mid-July)

Super celebrations: Bernina Railway centenary; new combined heat and power station at Märklin in Göppingen

### Further themes planned for 2010

- Illustrating the functionalities of the Märklin decoder
- How the Märklin Magazin is produced
- Production of Märklin's TGV
- The Göppingen location as seen by a long-serving Märklinist



protected in showcases. In addition, Märklin TV satisfies the demand for experiencing outstanding layouts like Wachau-Dürnstein – or gives tips for railway journeys worth making, which can also provide ideas to layout designers. To make sure of an unspoiled viewing quality, Märklin sets the standard for the film quality high: production is in the hands of a team of professionals made up of an editor, narrator, cameramen and continuity and graphic animation experts.

But Märklin TV doesn't just impart a feeling of being there and fascinating its viewers, it also supplements the manuals by offering valuable explanatory assistance. Stage by stage for example, programming double traction for the SBB Re 10/10 on the Central Station 2 is described or how to configure the acceleration delay on the Mobile Station for a Railion class 189 electric locomotive.

Naturally, the camera's lens also zooms in backstage at the company. This is how you can see investments in the future being used – like the Catia CAD design software or electroplating controls – as well as in-depth studies of Märklin's production processes. High quality products can only be manufactured with development, construction and material expertise, as well as quality assurance and a love of detail – and one becomes aware of this when a zinc rod turns into a class 03.10, when the VT 08.5 diesel powered rail car receives its fine sand-colored lining or sounds specific to a locomotive are transferred from the computer to the decoder. Commentaries are provided by the product managers, heads of departments or specialist staff – it is deliberate that those who contribute are those who deliver quality and value in the Märklin product range.

**Text: Rochus Rademacher** 

### A simple Internet connection is enough

Märklin's TV channel is transmitting on the Internet: with PC or Notebook in the Club area of homepage www.maerklin.de every 14 days a new transmission can be called up – together with the four previous ones. Most suitable for the Internet access is a digital DSL connection, which simply shares the cable belonging to the classic landline connection: you can surf and make calls with this for as little as 20 euro per month. The respective service provider supplies for a small charge – or even free – a DSL-router, which may be installed if required. Apart from Telekom, others well represented in the marketplace are Vodafone, 1&1 and Alice.

The bandwidths on offer range from 768 Kb to 16,000 Kb per second, in many cities even up to 50,000 Kb (VDSL). For Märklin TV, however, 768 Kb are perfectly adequate. A flat rate without time or volume limitations is the best value for money. To play the films, download the latest version of the Adobe Flash Player and enable the menu point "Active scripting" in your Internet browser. With its new TV channel, Märklin is right up-to-date: according to a recent study by the consultancy company Goetzpartners, there are already over 15 million German citizens enjoying their TV via the Internet. And the trend is upwards: in three years the figure is expected to reach 27 million.



Editorial team of Märklin TV on the spot: cameraman Mark Miller and Klaus Eckert (center).



### **Special models 2010**





4415.529 "L'Alsacienne" Various specialist dealers in France and Switzerland



48281.039 "Obletter Spielwaren" Obletter Spielwaren GmbH, Riesstrasse 59, 80993 Munich, Germany. Tel.: +49 (0) 89/1 43 21 82-0

### Please note:

Advertising models are only produced for Märklin dealers or for companies in industry (the latter identified by \* ). Normally the models identified by a \* are not offered for sale. Therefore we do not provide

any addresses for these models. Models can only be made known to the public on these pages that have already been shipped to the customer or where the customer has given explicit permission for this.

### **Exclusive "RAK Set"** of Porsche legends

"Cute is not adequate - great is not enough either!" The first RAK cars from Märklin on the market in the Sixty's immediately became the talk of the town, and quite rightly so: The bodies had been well engineered and the detail was very exact for those times. The doors could be opened – and: There are panes in the windows! The numbers of collectors soon grew. The outstanding quality of these RAK models is in no way inferior to the railroad miniatures from Märklin. This means there are still very many RAK originals in good condition today. The Porsche Museum is now offering a limited edition of the models. Märklin has been able to overhaul its special tooling for these to revive the RAK cars in the look of the Sixty's. This has resulted in a set of four (item. MAP.050.010.08) with a special matt-black painting made up of the models Porsche 911 Targa, Porsche 914 and the two prototype sports cars Porsche 907 Long Hatchback and Porsche 910. The color for the interior is a fine sand-beige.



Museum: The RAK special edition.

On showing their Club card, Insider Club members pay just 6.00 euro each instead of the regular entrance fee of 10 euro. This still includes the audio guide.

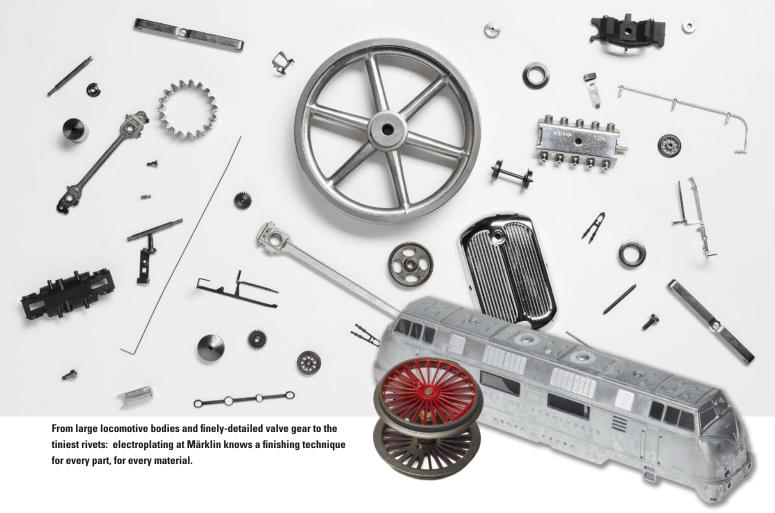
This RAK Set, limited to just 999 sets, is available as of August 1, 2010 in the shop at the Porsche Museum. The price is 120 euro. Entrance to the museum is not required to visit the shop. For more information and all inquiries: shop.museum@porsche.de and tel. +49 (0) 711/91 12 30 07.











Electroplating: how Märklin protects and enhances metal products

# Finished surfaces display toughness

Esthetics, protection and value – these are the three qualities Märklin achieves with surface treatment of the metal components. As manager of the surfacing department, Michael Ludwig is in charge of electroplating and painting: the two processes are closely connected with each other.

### Märklin Insider: Why does Märklin finish the surfaces of basic materials?

**Ludwig:** Black nickel-plated locomotive wheels are attractive and prototypical – so electroplating first of all ensures the surfaces are decorative. The second reason is functional: we alter the surface properties and take advantage of this technically. Thus a die-cast locomotive boiler has a protective anti-corrosion layer applied when we phosphate it, and at the same time this guarantees optimum color bonding. And thirdly we combine esthetics with protection: in classic nickel-plating, an attractive silvery covering layer is formed, which protects functionally against mechanical abrasion.

### Märklin Insider: How thick are the layers?

**Ludwig:** Thick? Extremely thin. The layer thickness of black nickel plating is between 12 and 16 micrometers – or thousandths of a millimeter. For comparison, a human hair has a diameter of about 70 micrometers. And the zinc phosphate layer on a locomotive only measures two micrometers. Due to our well-thought-out process analysis, we are able to maintain the finest tolerances.

### Märklin Insider: How is the surface finishing organized?

**Ludwig:** We operate two fully-automated lines, each with up to 24 cleaning, rinsing and process baths in a row for nickel-plating and phosphating mass-produced items – large numbers of rivets, wheels and gearwheels are fed into a drum, while larger parts such as locomotive bodies or car floors are fixed to frames, and other components like smokebox doors are put into baskets. We feed the part numbers into our control system, and this then carries out a predetermined program.

### Märklin Insider: And what do you with particularly fragile metal parts?

**Ludwig:** For example, crosshead guides, handrails and piston rods are immersed in a third line in the baths by hand – for the motion rivets, we have even borrowed parts from the watch making industry.

### Märklin Insider: How do you prepare the metal parts for this finishing?

Ludwig: Surfaces must always be scrupulously clean and



metallically pure. To start with, greasy marks such as fingerprints or lubricoolant, and oxide, dust and metal filings are removed in baths.

Märklin Insider: What exactly happens in nickel-plating? Ludwig: We apply a layer of copper as a bonding agent on the zinc casting by electrolysis. Passing an electric current through a special solution causes the copper ions to be deposited. Then – again in an electrolyte – the nickel-plating is applied to toughen the surface and as an abrasion protection. Finally, there is one more special bath in which anthracite-colored nickel is deposited, so that a locomotive wheel looks roughly like the original molding.

### Märklin Insider: Who determines the color?

Ludwig:Product management. We reproduce it precisely through the length of the treatment. Layers of black enhance the quality in partly-concealed parts, such as the weight on the rotary crane. This is concealed by the operator's cab, but if you look in it, or look at the underside, you won't see any gleams of silver at all.

Märklin Insider: By contrast, when you phosphate, the surface is altered chemically. Why is that necessary? Ludwig:A white deposit of zinc oxide forms very quickly on zinc under the influence of moisture. To prevent that, we treat the shiny, white zinc casting in the acidic phosphate solution so that it reacts to produce a mousey-gray, silky zinc-phosphate layer. The point is that the crystals in this layer lie haphazardly all over one another – and when in the next step of the process acrylic paint is applied, it runs into all the crevices in the surface and when it dries out it is optimally anchored. Here we have a process cleanly coordinated with the paint system.

Märklin Insider: What then is the actual challenge behind the electroplating at Märklin?



Lord of the process baths and colors: Michael Ludwig is responsible at Märklin for all surface finishing with electroplating and painting.

**Ludwig:** We have to maintain the quality standards which have been precisely determined for the whole company and not only with a high proportion of new parts, but enormous numbers – there have already been weeks where we have finished a million parts. Remember that the whole range also includes the replicas – think of the metal building kits, the steam engine or the screw steamboat Yolanda.

Märklin Insider: How do you actually guarantee the quality? Ludwig:Thanks to many years experience, we have achieved an excellent process standard – the pretreatment and finishing processes are reliable. On top of that, I always keep my ear to the ground in the market for new optimization

### How a zinc die-casting gets its decorative nickel plating



Step 1: In the pre-treatment section, the die-cast zinc component is cleaned. For this, an immersion process using tensides is used, or possibly also ultrasonic or electrolytic processes.



Step 2: Using electrolysis, a copper layer is applied to act as a key for further layers. Electric current takes care of the deposition of the copper ions.



Step 3: In a further process bath, nickel is then applied to the component over the copper layer and this hardens the surface and also protects it from abrasion.



Step 4: Finally, black nickel is applied to the components as a decorative layer, and the depth of color can be precisely regulated.





Before phosphating, the material surface of the zinc die-casting is cleaned in baths.



In the phosphoric acid bath a two-micrometer thick layer of zinc phosphate is formed.



Acrylic paints get an optimum anchorage on the sponge-like zinc phosphate surface.

processes. And Märklin has just invested massively in completely new control technology for process management and plant control: the predefined programs monitor what parts stay in which baths and for how long. Here we keep parameters such as temperature and addition of solution ingredients under observation. There are also cleaning and maintenance intervals laid down for all solutions.

### Märklin Insider: And if something does go wrong?

**Ludwig:**The surfacing is in the first place dependent on the quality of the input material – and Märklin's die-casting expertise has just been awarded a prize by the Zinc Initiative and described as "outstanding". We spot-check the layer thickness on a random basis with a test-probe: for example on a wheel, it must fit exactly into the axle-drilling. Apart from that, there are strict optical testing criteria.

Märklin Insider: What does the expert look for then? Ludwig: If there is something wrong with the phosphate layer, you can tell from the color, which is too light; bright spots give away inadequate covering, bubbles forming mean that a layer is peeling off. That apart, we know the weaknesses anyway: in loco wheels, the edges are sometimes a little critical. With our ultra-modern control technology, we can make elegant adjustments, because the treatment of each and every component in the various baths is carefully recorded.

### Märklin Insider: Zinc, nickel, copper – as an electroplating technician and expert, don't you sometimes feel rather understretched?

Ludwig: The number of processes may be limited, but the enormous range of different parts makes the task very interesting. In any case, we also treat other metals such as brass, steel and nickel silver. And all the expertise pays off when it comes to special models: the Esslingen loco we gold-plated – the small components indeed by hand in a glass tumbler. And the Rentenanstalt loco – the SBB 460 with the coats of arms of the Swiss cantons – was chrome-plated. We also finished a gauge 1 loco bodyshell at the same time, to see how the surfaces turned out in the larger scale.

Text: Rochus Rademacher

### Tricks for clean surfaces

First condition for finishing a surface is for it to be clean. "In the production process, the cleaning procedure is laid down for every part, according to its material and the surface finish intended for it", explains Filippo Cali, one of the electroplating shift leaders (pictured, right). For degreasing, the metal is treated with tensides in an alkaline bath at between 50 and 60 °C. "In a combined process, ultrasonics will be used to support the procedure by the sound-waves vibrating residues from the surface."

Cali says that Märklin Production is very careful with the resources. In wastewater treatment, pollutants are separated from the water and disposed of as hazardous waste, and rinsing water is cleaned and returned into circulation. And sludge containing nickel or zinc is resmelted.





Insiders stand together: MIST 67 is the home for protagonists of the widest variety of model railroad themes – and the assembled troops never have insoluble problems.

### Portrait of Märklin-Insider Round Table 67 Rhein-Neckar

# Talking shop among the experts

A civilized variety of interests is the hallmark of one of the largest Märklin Insider Round Tables in Germany. With its wide range of expertise, MIST 67 Rhein-Neckar was almost predestined to become known for extensive modular layouts – and for helping those looking for advice.



Priority for showpieces:
Round Table nights for
MIST 67 are always
running nights and the
number of over 80 members
guarantees that there will
always be exciting models
pounding the tracks.

At the beginning there stood a table, with 12 modules and a reversing loop. "Today our modules reach a length of 200 meters", explains Harald Meincken, joint boss of the Rhein-Neckar model railroad association, hived off from MIST 67. Two or three times a year, this club assembles a large model railroad layout for exhibitions: "This helps keep things together, and apart from that, the kids find the module building fascinating". Respect for individuality and variety is part of the program: a hobby won't put up with too many restrictions. "One person uses sawdust and Iceland moss, the next moves in the high end with miniature materials", is how round tabler Holger Schmidt sketches the harmonious polarity. On the layout displayed at Faszination Modellbau in Karlsruhe, visitors were even allowed to put their own locomotives on the rails, and – although the catenary was missing - the ICE was also doing its rounds. Schmidt: "We're not rivet-counters; we're just here to enjoy ourselves."

It all started in 2003, the year when Ulrich Klumpp moved to Speyer. As he himself says, he had no great desire to "sit in the cellar on my own with only my layout for company". His call for a round table to be formed sparked it all off. "Ten Märklin fans came to the first meeting; at the third meeting, there were 25 of us and now we have over 80 members, both male and female", recalls Klumpp. The secret of the expansion? "A large catchment area, very good networking with associated interest groups and a clear motto: no obligations", enumerates the MIST-67 spokesman. "Just turn up and do something that can't be done by someone on their own: chat about the Märklin hobby."

The experts' loyalty to the Märklin brand has its reasons. Jochen Köhn, a founder member, says: "Märklin has kept the system compatible over decades – an old analog loco can be modernized and will run digitally today, as an initial positive point. He goes on to list further plus points as multiprotocol compatibility, the CV programming, the stability of the Märklin decoder functionality and the fact that "we can run all the addresses from 1 to 255". To start with, round table themes were planned for the evenings. "But it's not easy to cater for 80 people all at the same time", as Klumpp





 ${\it M\"{a}rklin\ corner:\ first-hand\ information\ for\ MIST-67\ spokesman\ Ulrich\ Klumpp\ (centre).}$ 

admits. "Most of them just want to get together, and the whole range of subjects covering Märklin and the model railroad appear on the table." Model railroad operators spend time running on the table layout, the collectors discuss their newest acquisitions, others program decoders or repair models, while yet others are talking about the finer points of layout construction or tree modeling. All gauges from Z to H0 are represented, and even 0 gauge: indeed, Hans-Jürgen Harz' collection of rarities with over 60 gauge 0 locomotives is probably unparalleled - 90-yearold clockwork mechanisms still do their bit without complaint. The same applies to the 15 Märklin steam engines up to 100 years old which Thorsten Gillmann has restored including the family heirloom D7. Naturally MIST 67 also fosters togetherness: there are workshops put on, members submit reports on major events, new products are introduced and exhibitions and club trips are arranged. "Our first excursion took us to Göppingen in 2004 to have a guided tour of the Märklin factory", recalls Klumpp. The steam locomotive works at Meiningen, special trips by tram, visits to preserved railroads - all these have been on the MIST 67 agenda. "You always undertake a lot on your own, but



Visitor magnet: Just as at the "Faszination Modellbau" in Karlsruhe, the round tablers use C-tracks for their modules because of contact reliability.



dynamics only come into it when the group organizes a trip. At any rate, the bus is always fully-booked very quickly."

Köhn joined MIST 67 from the already-existing Common interest group Digitale Modellbahnsteuerung in Hockenheim.

"Today many of us have second functions in other model railroad groups", reports Köhn. There are reciprocal visits to the meets and events in this well-connected scene. Above all, the MIST 67 exhibitions display a tremendous public effect. On the first presentation of our modular layout in a sports hall in Speyer in 2007, around 2000 visitors made the space rather full. "Then we were invited to the Advent exhibition in the Concert Hall in Hockenheim", as MIST-67 member Hartmut Piehl relates.



Home game: The Speyer Module Days of the Insiders attract up to 3,000 visitors every year.



**Brief details MIST 67** 

Platform for young and old: play yourself instead of letting the computer run everything for you.

### History

MIST 67 Rhein-Neckar (www.mist67.de) was established on October 15, 2003 with ten members. On the last-but-one Wednesday every month, the model railroad fans, now numbering over 80, head for their regular meeting place AV03 in Speyer. To avoid saddling members with personal liability for the numerous exhibitions they promote, on March 18, 2009, the "Verein Modell-bahnfreunde Rhein-Neckar" (www.modellbahnfreunde-rhein-neckar.de) was established in Speyer. MIST 67 is closely connected among others with the "Common interest group for digital model railroad controls Hockenheim" (www.ig-modellbahn.de) – and naturally other round tables such as Berlin, Mainz, Reutlingen or the Ruhr.

#### **Activities**

MIST 67 sees itself as an open platform for Insider exchange. Excursions, workshops and exhibitions are organized. And their own exhibition was arranged with the Speyer Module Days.

#### **Services**

MIST 67 has long established itself as the address for mails, letters and telephone calls from those desperate for help. If no solution to the problem is immediately forthcoming, the Round Table invites the person to a meeting: an appropriate expert is sure to be at there. And it's not just restricted to technical matters. "An elderly lady wanted to make sure her husband's estate found its way into good hands and asked for help", reports MIST-67 secretary Andreas Müller, who spent some 50 hours dismantling the layout and cleaning the locos and cars, and packing everything for sale. "People are delighted when they get help from a serious and non-commercial source such as a round table", states MIST-67 spokesman Ulrich Klumpp, who wants to extend the idea as an added value service of the round table: "We are pleased to offer help in word and deed – after all, it is all about our hobby, and we are mighty proud of it".

"The packed hall and the children's sparkling eyes were all the encouragement we needed." Further exhibitions followed; the most recent was Faszination Modellbau. The trouble is well worth it, Piehl assures us: "There is a multiplier effect – every time we get more people at the Round Table."

Secretary Müller connects the layout construction with a great vision: "One module fits in the trunk, and you can take it to Hamburg, Berlin or Munich with you." The vision of MIST 67: a mega-meet of all module builders, where the biggest modular layout in the world is put together.

Text: Rochus Rademacher Photographs: Ulrich Klumpp



Thorsten Gillmann (left) gets his own "steam corner" at all MIST-67 exhibitions and crowds always gather around his Märklin steam engine rarities.



More power: the French showpiece train TGV accelerates more flexibly with twice the motor power.

TGV POS with two motors

# Double power for the superstar

Märklin makes no compromises in the streamlined TGV: there is now a motor in each driving end of the high-speed train. "With the upgrading, we have achieved the silky smooth acceleration typical for the TGV", explains the designer of the model, Andreas Schumann.

Märklin Insider: Originally it was planned to release the TGV POS with a motor in only one of the two driving ends. Why then was the plan modified?

**Schumann:** Fundamentally, one single-engined driving end would have been perfectly adequate for running operations with the TGV PO, so Märklin's development has done a very good job. The fact that we have after all decided to use a second motor in each basic unit has only one reason: we want to improve the quality.

Märklin Insider: So to what extent does the upgrade represent an improvement in quality?

Schumann: In April 2007 the modified TGV-POS unit 4402

set the highest speed up to that time for conventional rail vehicles of 574 km/h (357 mph) – the TGV is surrounded by the aura of speed like scarcely any other train. Even in regular traffic on the Paris-Eastern France-Southern Germany line it reaches speeds of up to 320 km/h (199 mph). Märklin aims to transfer the prestige of the TGV as a world record train to the model layout. Due to being fitted with a motor in each of the driving ends, the TGV POS primarily has a better performance and thus paints a more dynamic picture.

### Märklin Insider: So it's more lively?

**Schumann:** Due to its streamlined shape, the TGV already radiates a stylish vigor and now the model brings this





onto the tracks – just like the prototype. The second motor gives it the added advantage when running that the model can still accelerate even at high speeds and thus provides a picture of supple elegance and agility.

Märklin Insider: Does it also have a higher hauling power? Schumann: The hauling power is designed to handle a specific number of intermediate cars and it thus doesn't need to have a better hauling power. The effect of having two motors is similar to that experienced if you change from a car with a four-cylinder engine to one with an eight-cylinder engine – there is no situation in which such an arrangement would not make for elasticity in acceleration.

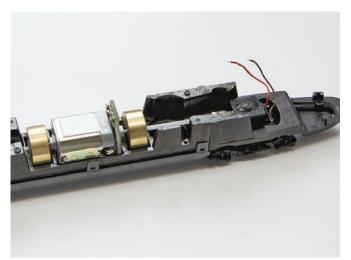
### Märklin Insider: What is the maximum length of the TGV POS?

**Schumann:**The original consists of two driving ends plus a maximum of eight intermediate cars and it is then 200 meters long. The model can be strengthened to prototype length with the basic train set and the three add-on car sets into a ten-vehicle consist. In this way, the TGV POS in H0 reaches a total length of 230 centimeters (7' 6-1/2") on the layout.

Märklin Insider: For reasons of weight, the bodyshell of the TGV POS is made of high-quality plastic. How can you be sure the model will run smoothly?

**Schumann:** The model has a very low center of gravity. The design is basically similar to that of the ICE 3, which also has weights in the floor of the cars.

Text: Rochus Rademacher/Photos: Hartmut Seehofer



Inner life: the high-efficiency propulsion is located centrally in the power car.



Andreas Schumann, responsible for the design of the showcase train: "The twin motor of the TGV has the advantage that even when running at high model speeds, the model is still capable of accelerating."



Reaches a length of 230 centimeters (7' 6-1/2") in H0 gauge: the TGV POS.

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### **Digital Info Days**

Märklin Dealer for the Event	Date	Time		
Germany:				
12105 Berlin, Prühssstraße 34, Modellbahn-Pietsch	24.08.2010	10 am-6 pm		
31135 Hildesheim, Peiner Landstrasse 213, Modellzentrum Hildesheim	07.09.2010	10 am-6 pm		
33332 Gütersloh, Kampstr. 23, Modellbahnladen	02.09.2010	10 am-6 pm		
38124 Braunschweig, Jenastieg 12, Modellbahnen Broders	25.08.2010	10 am-6 pm		
38226 Salzgitter, Albert-Schweitzer-Strasse 53, Spiel & Freizeit Breustedt	26.08.2010	10 am-6 pm		
48231 Warendorf, Everswinkler Strasse, Kieskemper	01.09.2010	10 am-6 pm		
49078 Osnabrück, Hörner Weg 80, Märklin-Service Fricke	31.08.2010	10 am-6 pm		
63739 Aschaffenburg, Löherstraße 37, Modelleisenbahnen Seide	07.09.2010	10 am-6 pm		
64283 Darmstadt, Elisabethenstraße 1–3, D. Faix & Söhne GmbH	08.09.2010	10 am-6 pm		
68766 Hofheim, Ubierstrasse 11, Spielwaren-Bieger	19.08.2010	10 am-6 pm		
70597 Stuttgart, Löffelstrasse 22, Märklin-Shop-Degerloch	09.09.2010	10 am-6 pm		
71546 Kleinaspach, Allmersbacherstrasse 1, Modellbahnlädle	10.09.2010	10 am-6 pm		
80335 Munich, Bahnhofplatz 7, Karstadt	22.09.2010	10 am-6 pm		
86199 Augsburg, Gögginger Strasse 110, Augsburger Lokschuppen	23.09.2010	10 am-6 pm		
Ask your Märklin dealer about the break for lunch!				

### Märklin-Seminar program





### **Seminar content**

- Principles of the Central Station (60214): Connections and operating the control panel
- ■Inputting, running and programming locomotives (mfx and motorola)
- Setting up a shuttle train control using contact tracks
- Setting up and switching turnouts and signals
- Creating circuit diagrams of the layout
- Setting up pathways
- Incorporating the Central Station in existing layouts
- Connecting additional units to the Central Station (e.g. a Mobile Station)

Aim of the seminar: Acquiring the expertise to design a model railroad layout with the Central Station or to convert a layout already in existence.

Miscellaneous: Every participant will receive an exclusive Seminar special car on the theme of Märklin Digital Duration and cost of the training courses: 1 day (8.45 am to approx 4.30 pm), 159 euro for Insiders, otherwise 189 euro



### **Dates**

Date	Venue	Tel. No. of hotel	No.	Seminar leader
Mi 29.9.2010	Frankfurt/Main Intercity Hotel Poststr. 8 60329 Frankfurt/Main	+49 (0) 69/27 39 10	612 a	Gunther Schneider
Th 14.10.2010	Berlin Sylter Hof Berlin Kurfürstenstr. 114 – 116 10787 Berlin	+49 (0) 30/2 12 00	612 b	Gunther Schneider
Th 28.10.2010	Munich Intercity Hotel Bayerstr. 10 80335 Munich	+49 (0) 89/44 44 40	612 c	Gunther Schneider
Tu 05.10.2010	Unterentfelden/Switzerland Märklin-Vertriebs AG Mönchmattweg 3, CH-5035 Unterentfelden, Switzerland	+41/62/7235121	612 d	Dieter Lorenz

### Registration for all seminars:

Gebr. Märklin & Cie. GmbH, Stuttgarter Strasse 55–57, 73033 Göppingen, Germany

Telephone: +49 (0) 7161/608-257 or -222, Fax: +49 (0) 7161/608-143 training@maerklin.de or instantly online under **www.maerklin.de** Our conditions of registration and participation are laid out below. No separate seminar brochure is available.

All seminars are held in German!



### **New cooperation partners**

As an Insider Club member, you are entitled to reductions from cooperation partners. On this page we introduce new partners to you.



### Modellbahnland Erzgebirge

Modellbahnland Erzgebirge – a world of experience for large and small Mittelweg 4 (directly on the B95)

09488 OT Schönfeld, Germany, Thermalbad Wiesenbad

Telephone: +49 (0) 37 33/59 63 57

E-mail: info@modellbahnland-erzgebirge.de Homepage: www.modellbahnland-erzgebirge.de

#### Days of opening:

Open all year from Tuesday to Sunday, 10 am to 5 pm. Closed only on Christmas Eve December 24, and New Year's Eve December 31st.

In 1:32 scale, the district around Annaberg-Buchholz is modeled in 770 square meters in Modellbahnland Erzgebirge. Using digitalized computer controls, over 30 trains and shunting portions can be run over 660 meters of track. The layout reflects the era around 1980, which can be seen from the landscape design, the locomotives and cars, buildings, bridges, roads and the figures themselves. The Pöhlberg, Bärenstein and Fichtelberg hills give the scenery its characteristic appearance along with the river valleys of the Sehma, Zschopau, Schwarzwasser and Pressnitz. Since the beginning of December 2006, the Modellbahnland has been blacked out every half hour for seven minutes, to become a night landscape. The lights then come on in 450 buildings, in the streets and the squares on the layout. The building façade is equally inviting: in summer 2007 a section of the model railroad layout was portrayed outside on an area of 480 square meters using 300 canisters of spray paint.



» Your Club benefit: On presentation of their Club card, Insiders will receive a 10% discount on the price of an adult admission or on the family card.



### Tripsdrill adventure park

Tripsdrill adventure park 74389 Cleebronn, Germany Telephone: +49 (0) 71 35/99 99 E-mail: info@tripsdrill.de Homepage: www.tripsdrill.de

### Times of opening:

from March 27 to November 7, 2010, daily 9 am to 6 pm

Just outside Stuttgart's gates in the middle of blooming nature is the amusement park of Tripsdrill, Germany's first adventure park. The family concern started in 1929 with an old women's mill. Today, there are over 100 original attractions for the visitor to enjoy, and they guarantee fun for all generations. Awaiting the brave visitor is the wooden roller-coaster "Mammut". The trains are designed as saws and thunder through the enormous sawmill at 80 km/h / 50 mph. The bathtub ride and the washing barrel rafting will freshen you up! Up into the sky with the free-fall tower "Double thunder beam" or the maypole. Specially for the youngest visitors there is a soapbox Derby and the mill-stream ride, a flume ride from a height of three meters. In the Tripsdrill Wildparadies, there are over 130 different animals to observe, to feed and to touch. Learn things worth knowing at feeding times for the wolf, the lynx, the vulture etc. every day except Fridays at 2.30 pm or at the flying display of birds of prey immediately afterwards from the new falconry stage. For a visit to Tripsdrill lasting more than one day, there are atmospheric shepherd's wagons available from summer 2010; later on there will be original tree-houses.





### THE BONUS FOR MÄRKLIN CLUB MEMBERS

### 2.50 EURO REDUCTION

On presentation of this voucher at the cashier's office in Tripsdrill, one person will receive a discount of 2.50 euro on the price of a day pass. Valid for 1 person until November 7, 2010 (except in August). Cannot be combined with other reductions, group tickets or special prices.

### Märklin TV - live!



Märklin TV provides exclusive knowledge in moving pictures: Club members are always in the midst of the action with the Internet television channel – like here in the production of the newly designed legendary glass train. A new episode will be waiting for you every 14 days in the Internet Club area – each one a complete program with model highlights, features on manufacturing techniques and reports of trends on prototypes, layout and model railroad scene events. A competition is announced in the Internet Club area – anyone who has watched the latest parts of Märklin TV could win a class 03.10, the current Insider model. More on the competition and on Märklin TV in the latest Club news from p. 10 or under club.maerklin.de.