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in the scale 1:220
and Prototype

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Trainini

German Magazine for Z Gauge



The new Pwgs 41 from Märklin

50 Years of Accessories and Small Series
Our Diorama before Completion

50
Years
of Z Gauge

Introduction

Dear Readers,

All good things come in threes: I am very pleased that Joachim Ritter has resumed his editorial work and is once again providing us with strong support through editing and by attending trade shows.

Sticking together and covering each other's backs was and is something that has kept our team together, particularly this year. We are not co-workers; we have a friendly bond.

And we share the fun of putting together an exciting piece of work for our readers every month, together with our translators and helpers. We hope and wish that you can feel this edition after edition. The letters and calls we receive certainly speak for this.

And I would like to take this opportunity to thank you all for your years of loyalty. This year in particular, we have received a great deal in return, which has strengthened our motivation. This includes, for example, spare parts that we need for various projects that will eventually result in an article.

We all do not take this for granted at all, which is why it must be mentioned occasionally. We also want to express our solidarity with our readership through the congratulations and impressions you have submitted on the round anniversary of Z gauge.

We have thought long and hard about what to publish and where to draw a line. Everyone should have a voice, but it should also not exceed the limits of the magazine. And then there is the problem that certain views can be repeated.

With this edition, you now receive the results, and we hope that all of you will find something in this edition. It also remains for us to say thank you for your participation. Märklin offered ten books as prizes instead of the requested three, and yet, as was to be expected, they were not enough. But that would have disappointed us, as I'm sure you can imagine.

So, travel with us again today through a part of the history of an exciting and challenging scale, look forward to a new and long anticipated model, share the joy of tinkering with us and enjoy a few impressions off the track.

A very thick and colourful issue has been compiled again and we could have filled it even further. However, it would not have been finished in November. That promises material for many more delightful stories that we have not been able to accommodate in the 2022 volume and will not be able to do so now.

That, too, is often a result of active reader participation and support from our great community. Before the anniversary year soon concludes, feel embraced and confident that we will all continue to write a success story as a great community!

Sin-Z-erely,

Holger Späing



Holger Späing
Editor-in-chief

Märklin Pwgs 41 goods train baggage car

This is one for the Books...

As part of a five-car set, Märklin is bringing a new Pwgs 41 freight train baggage wagon on the market. Its Prussian predecessor, also aged as a model, had to endure exactly 50 years before it was finally replaced. That's why we took a close look at this unexpected new product.

Not only as a model, but also in the original, the type of freight train baggage wagon later called Pwgs 41 by the DB was a successor to the old baggage wagons from the Prussian state railway era. Due to the war, they were a simplified version of the Pwgs 38, of which only 35 were built.

A total of 700 wagons of this simplified design were built until 1943 by Westwaggon Köln-Deutz, Waggonfabrik Rastatt and Simmering Graz Pauker (SGP) in Vienna, and a further 100 were originally planned.

On the outside they differed from the peacetime design by the omission of the vents above the side windows and changes in the interior. The end ladders were only half-height and were finally saved. Further differences followed during the more than three years of construction.



On 7 October 1962, V 60 102 was doing shunting work at Villingen station. Right behind her is one of the freight train luggage wagons Pwgs 41, which was built by Westwaggon Köln-Deutz with wartime simplifications, as also shown in the new Märklin model. Photo: Helmut Röth, Eisenbahnstiftung

Thus, first the streamlined roof cockpit was simplified and replaced by an angular shape that was less costly to produce, and finally a cockpit was completely omitted. As far as the equipment was affected, the electric heating, the electric lighting, and, finally, also the steam heating were cancelled.

The number of side windows was also reduced. The rear windows behind the loading door were considered dispensable. All in all, the Pwgs 41 offered an extraordinary variety of appearances, which made it interesting for a model implementation.

After the Second World War, just under 260 wagons were delivered to the DB, presumably a further 19 examples followed via the Saar-Eisenbahnen (Saar Railways). Because of their good running characteristics and their 100 km/h permission, they were popular and in demand with the Bundesbahn, although the maximum speed could not yet be used in the first post-war years. Without exception, they initially ran in express freight service.

The external appearance also changed noticeably. This initially concerned the changed lettering and, from the 1960s onwards, the removal of the cover strips below the edge of the windows. End ladders became dispensable and were dismantled after the signal supports had been removed and replaced by supports near the buffers.

The long running boards under the loading doors gave way to short running boards, and the door latches were also changed. The bars behind the windows next to the loading door were replaced by three horizontally mounted boards. Some wagons received modern transfer windows in place of the old windows.

A peculiarity were the eleven coaches (Pwif 41/52 and Pwif 41/55) that were converted into reversible train command coaches (for the V 36, among others) from 1952 onwards. They were equipped with Hagenuk or Fabeg type command devices, top signals, a bell, and a horn. The lavatory was relocated towards the center of the wagon, and a door and transition fittings were mounted at the end of the load compartment.



The purple red Pwif 41/52 driving trailer with the road number 124 635 Han, photographed in 1956, was converted by the DB four years earlier. It shows a possible type of shape of the new product, provided that this option was also taken into account in the tooling. Photo: Günter Scheingraber, Railway Foundation

They served in their new function until about 1966, before the equipment was removed again and they were used regularly as freight train baggage wagons once more, despite remaining passenger wagon lettering as Di.

In 1965, the re-lettering plan still provided for 265 wagons for a UIC number, which proves that the stock had hardly shrunk. Their numerical ratio to older wagon types had, therefore, even tended to increase.

They became dispensable from the end of the 1970s, when the locomotive operator had to take over the function of the train manager in the freight train. Some representatives, however, still had a period of grace on lines where unstaffed stations had to be served.

In these cases, the shunting personnel rode in the train and used the baggage wagon. 1995 is recorded as the last year of use, with a few examples even making the leap to Deutsche Bahn AG.

Märklin's implementation

Already some years ago we suggested to include the Pwg(h)s 41 in the Mini-Club program, since it is a well-known and once widespread, as well as, versatile type. After all, the Pwg pr 14 from 1972 with its sheet metal sliding doors has been outdated for many years and has long since been exhausted in terms of its printing possibilities.

But it still had to complete its 50 years, as we know today. Using the anniversary of the Z gauge for a contemporary new design was certainly a good move. But this also raises the question of how well Märklin tackled this challenge.



The freight train baggage wagon Pwgs 41 (far right) is the new type in the wagon pack 86070 and was overdue from our point of view.

After all, its H0-gauge counterpart does not belong to the veterans but has received a lot of negative comments due to a rather poorly implemented chassis. Some of this would certainly become blurred because of the greater downsizing, but the new one is not supposed to look old again in five years. That's why we want to take a closer look.

Märklin has decided not to offer its new model individually, but as a fixed component of a five-piece wagon pack (art. no. 86070). The two Omm 52 open wagons that can be found in it are also still very new and will certainly be able to contribute to the customers' stocks.

The K 15 hinged-lid car is sure to please most people, because this braked car with a handbrake platform has never been offered as a Bundesbahn version before. And the basic form has been in the programme since 1991!

The covered type G 10 does not quite fit in with the other four cars. It can certainly be called a classic of the assortment but is probably already represented in the Zetties' stocks in a similar number as the prototype once was.



A small peculiarity in the pack is also the K 15 hinged-lid wagon with brakeman's platform. This wagon has never been offered with DB lettering before!

After all, Märklin chose the most visually appealing version without brakeman's cab and molded instead of movable sliding doors, but this type of construction was a trade-off in 1:220 scale from the very beginning.

It inherited the chassis of the Prussian luggage car, and this demanded some concessions: The models turned out to be too short and, above all, even a non-expert can see that something is wrong with the running boards not sitting centrally under the loading doors. So, the G 10 clearly falls behind the other cars.

coherent overall impression with the Pwgs 41. The car appears neither distorted nor out of scale. So, the first impression is accurate.

The most important selling point must therefore be the new product type.

And that's where we first discover a

Märklin has decided (for the time being) to produce a prototype without a roof pulpit, as most of the cars in the stock, and without the side windows at the rear end next to the loading area door. We are sure that interchangeable inserts for the tools will also allow other versions.

The handlebars at the corners of the wagons are part of the cast, but not detached, in order to remain sufficiently stable for everyday use.

At this point Märklin is not following its approach with new locomotive models, where such rods are attached as a separate part.

The next thing to do is to put the calliper to work. It confirms what the eyes perceive.

Almost all the important basic dimensions are accurate, the deviation in width of 1.5 % compared to the nominal dimension means a tiny 0.2 mm and is beyond the perceptible.



The first impression reveals an overall coherent wagon. As can be seen in this photo, the handlebars at the corners (rear left and front right) are not free-standing.

The model is painted in RAL 6020 chrome oxide green, has a deep black frame (RAL 9005) and a white aluminium painted roof (RAL 9006). Silk-matt and cleanly finished, the paintwork leaves no reason for complaint.

This continues with the neatly applied tampon (pad) prints on the car body and on the edge of the frame. The inscriptions for Era III identify the model as a Pwgs 41, i.e., a wagon without a steam heating system, with the service number 124 713 from the DB stock. It is thus to be in Era III until about 1964.

Dimensions and data for DB's Pwgs 41 freight train baggage wagon:

	<u>Prototype</u>	<u>1:220</u>	<u>Model</u>	<u>Variance</u>
Length over buffer (LüP)	10.300 mm	46,8 mm	46,9 mm	+ 0,2 %
Height (roof edge) above rail head	3.675 mm	16,7 mm	16,8 mm	+ 0,6 %
Width (car body)	2.946 mm	13,4 mm	13,6 mm	+ 1,5 %
Body length	9.004 mm	40,9 mm	41,3 mm	+ 1,0 %
Axle base	6.000 mm	27,3 mm	27,3 mm	0,0 %
Wheel diameter	1.000 mm	4,5 mm	4,5 mm	0,0 %
Loading door width	1.500 mm	6,8 mm	6,6 mm	- 2,9 %
Weight	11,5 t	---	5,8 g	
Permissible.	maximum speed 100 km/h			
Years of manufacture	1940 - 1943			
Built quantity	700 specimens			

The external features that Märklin decided to include the missing end ladder and signal supports, which can be considered to be part of the changes made from 1959 onwards.

As with other models, Märklin has reproduced the note box in white print. This seems reasonable because not all variants will require it.

Surprisingly, however, Märklin has reproduced the cover strips under the windowsill by means of engraving.

This makes it difficult for Märklin to

reproduce recent versions without a little compromise, unless this can be varied by exchanging moulding inserts.

It should be explicitly mentioned here, however, that the version with long steps under the load compartment sliding door fits perfectly. There are no doubts that Märklin has deliberately left variation possibilities or taken them into account.



Both front sides no longer show ladders and also no holders for upper carriage lanterns. This corresponds to the upgrades carried out on the prototypes around 1959.

In contrast to its predecessor in the line-up, the wagon has windowpanes that are crystal-clear injection-moulded parts inserted from the inside. The windows on both sides of the wagon next to the sliding door do not show any bars engraved on them, nor have any protective boards been indicated by an imprint.



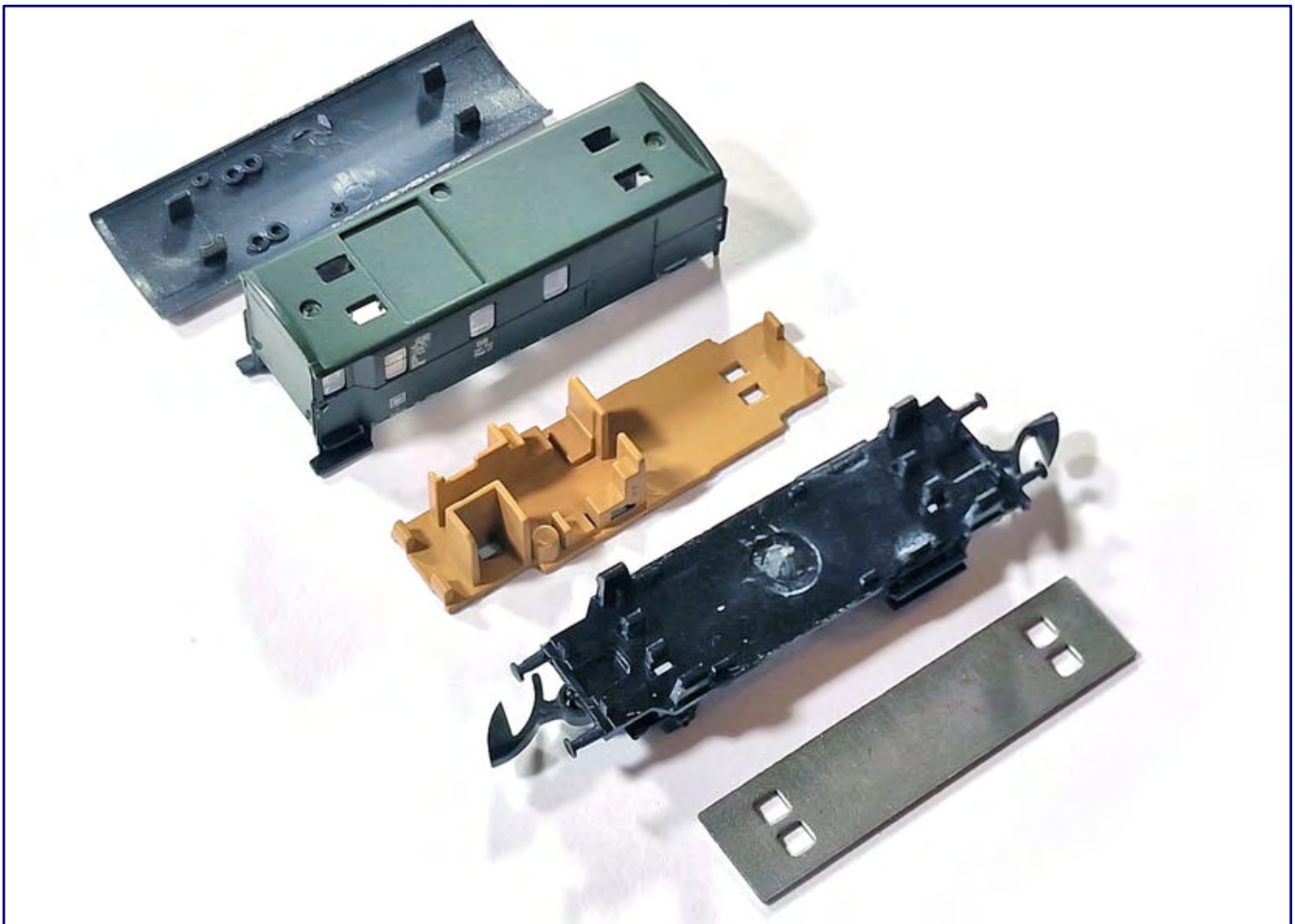
All the important prototype features are also found on the model; only behind the side window next to the loading door (on both sides) there are neither bars nor protective boards to be seen (photo above). On the other hand, the fine printing, which also includes the door handle of the entrance door for the train driver, is one of the highlights (photo below). The strong gloss of the running gear is somewhat disturbing.

Strictly speaking, this is a mistake compared to the prototype, but it is hardly noticeable given the size of the windows. Otherwise, we would also have noticed something that our translator Oleksiy Mark noticed

during the test disassembly: The new product has received an injection-moulded interior painted a sandy yellow!

This seems to be very well done, but unfortunately it is not visible from the outside. This leads to speculation as to why Märklin went to this seemingly useless effort. We think it is conceivable that variants with interior lighting are planned.

A power supply would be necessary, for example, for the version hoped for by many as a Pwif 41/52 push-pull train command car. And with the additional windows, something of the interior would also be visible. We note at this point that Märklin has obviously designed its important new product to be future proof.



The test disassembly by our translator not only clarifies the constructive structure of the model, but also reveals a surprise: the Pwgs 41 has even been given an interior that cannot be seen from the outside. Photo: Oleksiy Mark

Let us now turn to the chassis of the new model. In the side view, the strong gloss of the unpainted plastic parts is somewhat disturbing, which contrast too much with the silk matt of the body. Axle brackets, hooks, and leaf spring assemblies look acceptable and do not cause the frustration that once prevailed in 1:87 scale.

Only the plain bearings, whose lubrication hole we can however safely make out, seem too lacking in contour. So, the substructure is not the great strength of the new construction, even if it can be called successful overall.

The brakes are a plus point, because they have been placed in the wheel plane, just like on the Rmms 33 stake car. When looking at these features we also noticed that the bearing of the wheels has been changed. For the first time, the central brackets which all wagon models had up to now have been omitted. On the Pwgs 41, only the tip bearing of the axles is sufficient.

This had no impact on the rolling performance in our test. And the weight is also within the usual limits, so that on the one hand it can run safely through curves and over turnouts without imposing too much trailer load on the locomotive.

Our final conclusion

Märklin's model is not the first of this type in 1:220 scale. Small-series manufacturers and private builders have already tried their hand at it. Now the car, which has been on many wish lists, is finally available for all Zetties.

Placed directly behind the locomotive, it fits all express goods trains of the fifties and sixties. Further variants will probably also be "suitable for branch lines" for the seventies. The new product cuts a fine figure and is without a doubt one of the successful designs from Märklin.



The perfect field of operation for the new model are express goods trains and a suitable basic stock for this can already be found in the wagon pack. Fast running steam locomotives such as the class 41 are suitable, but the class 50 was also widely used for such trains.

Nevertheless, smaller details could certainly have been reproduced even better. The great strength, however, is its perfectly scaled implementation, completed by immaculate painting and lettering.

In view of its prototype significance, we will certainly see many more variants, which will hopefully also provide for the variety of the original. We honor the present result with a nomination for the new product releases of the year 2022 in the category wagons.

Model manufacturer:
<https://www.maerklin.de>

Boeing 737-200 of Hapag-Lloyd High Flyer's 50th Anniversary

Colourful, appealing and eye-catching were the aircraft of the Hapag-Lloyd Flug. Like the Z gauge, it saw the light of day in 1972. We take this as an opportunity to take a look at this marginal segment of our gauge. We look at the model of an aircraft with which the company achieved a breakthrough on the market.

Aircraft models on a scale of 1:200 are also at least a marginal topic for Z gauge, which the author spontaneously becomes aware of with no less than four layouts. Therefore, in the context of the many views of our anniversary this year, we should also take a look at this segment.

In this context, a jubilarian that would also have been 50 years old in 2012, i.e., that went on the market at the same time as the Z scale, fits perfectly. We are talking about the charter airline Hapag-Lloyd Flug with its former home base in Hannover. Its name later disappeared from the scene and it was absorbed as the core of today's TUI fly.



Like Z gauge, Hapag-Lloyd, which no longer flies under that name, is 50 years old. The Boeing 737-2K5 Advanced was still the backbone of its flight service in June 1988. Photo: Aero Icarus (CC-BY-SA-2.0)

The aircraft on display today, on the other hand, represents their heyday. Hapag-Lloyd once started operations with second-hand Boeing 727 triple-jet aircraft, which were to be supplemented in the early 1980's and replaced in the future.

In 1980 the time had come and the American aircraft manufacturer was allowed to enter a new customer number in its lists, which incidentally still exists today: The K5 combination went to the subsidiary of the Hamburg shipping company of the same name. Boeing was allowed to enter six Boeing 737-200 Advanced aircraft in its order lists at the same time. The aircraft were to be delivered from June 1981.

This further development of the “Baby Boeing” proved to be a direct hit after the demand for the short-haul aircraft 737-100 (launch customer: Lufthansa) and -200 had been rather restrained due to their short range. Now, however, there was also a model to choose from, with which destinations in the Canaries, Madeira or Egypt could be flown to from northern Europe without a stopover.

In this performance-enhanced concept for medium-haul routes it was also better than the three-engined Boeing 727 with which Hapag-Lloyd had started flight operations fifty years ago. This aircraft type, which was built until 1988, finally replaced its predecessor completely.



The external distinguishing feature of the Boeing 737-200 Advanced was the elongated shape of the engines under the wings, which can also be seen immediately on the model. Photo: Oleksiy Mark

For its part, Hapag-Lloyd also became the launch customer for the Boeing 737-800 in 1998, which became the most successful series with over 5,000 sold. However, the original for the Herpa model was long gone from the fleet: in 1990 it was sold to Aviogenex in Yugoslavia.

Fresh from the factory, the German charter airline received its Boeing 737-2K5 – the customer number was always included in the version number – in January 1982 as the third of the ordered aircraft. Registered D-AHLI, it had a rather generous seating configuration, which, at 120 seats, was nowhere near its maximum capacity.

A look at the model

Back in February 2019, we presented the then new Boeing 737-200 in the colours of the launch customer Lufthansa and found at least one small, but also quite recognisable fault. Fortunately, this is not repeated in the new Advanced version for medium-haul flights.

The two models have some, but by no means everything, in common. They belong to the same type of aircraft and therefore follow the same design language. Since both also have the same basic dimensions (length, height, wingspan and fuselage diameter), we will refrain from repeating the measurement results published almost four years ago.

The list of similarities is exhausted at this point. Even without any knowledge of the prototype, the clearly different paint schemes of the two airlines are obvious to a layman.

Lufthansa's rather staid and simple design with a midnight blue window band certainly belongs to the serious but staid-looking designs in the field of aviation. Only the yellow crane logo on the blue vertical stabiliser, nicknamed the fried egg, at least provides a splash of colour.



Many details are reproduced through elaborate printing, which greatly enhances the overall effect. Among the applied parts is the fine antenna on the centre of the cabin. Photos: Oleksiy Mark

The colours and contrasts of the Hapag-Lloyd are quite different. The warm orange on the hull, which is also white, creates a certain tension. Together with the blue window strip above it, it forms both a cold-warm and a complementary contrast. Incidentally, Hapag-Lloyd Flug used cognac to designate its distinctive identification colour.

The design of the Hapag-Lloyd Flug (art. no. 572132) suits the Boeing 737-200 Advanced well, as it did its three-engine predecessors Boeing 727-100. The colour appearance in the area of the towering vertical tail is dominant.



On layouts that can accommodate an airport section, the Boeing 737-200 Advanced from Herpa (item no. 572132) will definitely be an eye-catcher. Photo: Oleksiy Mark

Unchanged cast in metal are almost all-important components of the aircraft, which is therefore also quite heavy and conveys a certain value. The paint, which we have just described, is opaque, even and cleanly applied.

The majority of the details are traditionally reproduced by Herpa using pad printing, as is the case with this model. In addition to inscriptions and logos, this also includes the outlines of the doors, the position lights and the windows of the cockpit and cabin. The printing of the frames, which is common today, also looks good.

However, a decisive distinguishing feature of the Boeing 737-200 Advanced cannot be implemented in the model: As a further development of the original -200 variant, it retained the same dimensions but was still easily recognisable.

This was due to its revised Pratt & Whitney JT8D-9A engines, which had increased power and were optimised in terms of fuel consumption and noise generation. They, therefore, had an elongated shape and protruded far beyond the wing at the rear, which clearly distinguished this design from others.

Herpa has also correctly applied this to its new products, which belong to the so-called original types of this aircraft type still built today, by fitting deviating parts. These engines enabled the prototype to take off from shorter runways even with higher payloads.



In the meantime, the aircraft has entered service at its home airport in Hannover, framed by a Boeing 737-200 of the short-haul version from Lufthansa's inventory and its predecessor Boeing 727-100, which it will replace in the near future.

For the miniature, this is certainly another argument in the model railway sector, because this keeps the size of an airport section clearly in check without having to lower the standards to a pure sports airfield.

Model manufacturer:
<https://www.herpa.de>

1. Modellbahn Ausstellung mit Börse der IG SWWS In der Turnhalle Dörflas

Samstag 10.12.2022 10-18 Uhr

Sonntag 11.12.2022 10-17 Uhr



**Ausstellungshalle:
Dörflaser Hauptstr. 41
95615 Marktredwitz-Dörflas**



Zu bestaunen gibt es:

- **Europas größte Modul US-Z-Anlage**
- **Eine riesige H0m Anlage nach Schweizer Vorbild**
- **Andi's Kirmes**
- **Weitere Spur 1, H0 und N Anlagen**

Parken:

Parkplatz am Skaterpark Marktredwitz, gegenüber dem Naturbad in der Roßlermühlstraße.

On the hairline - a diorama (part 3)

Continuing our Work from Home

Some things have been done, although progress has been slow lately. But now our fingers are itching again to get busy. Working from home, we are going into the final lap for our little show piece which we do like more and more. You as well?

A few weeks have already passed and work on the diorama has picked up again. Having long been back from occupational therapy at a rehabilitation centre, work on the remaining elements of the diorama have been done from home, with the advantage of improved access to the necessary material: We can again draw on our full resources!

In this particular case, much of the major landscaping had been already done and we can dedicate ourselves more to the details. So we have access to three different types of static grass fibres from Noch, with an available fourth one being shorter but no not bringing further colour into play.



General view of our diorama: Today the show piece should be finished. But until it will look like this, there is still a lot to do.

In the event, we could have done without it and alternatively used of the hair clippers to trim the grass. And we will indeed still use them today, but before that, more grass has to sprout.

This is done in the usual way with the help of the Grass Glue XL and, for the first step, Microrama's "Microgras Pen" static grass applicator (art. no. 81 01 1010). This tiny device, which, at first glance, looks like a wired microphone, only holds a tiny amount of grass fibres, but it can access places where alternative devices cannot.



In order to set individual, withered tufts of grass in the area under the tree, we need a smaller device. The Microgras Pen's fibre pick-up capacity is very limited, but it does the job with flying colours.

In our case this is the area under the tree, whose branches, even bent upwards, make access difficult. Here, individual patches of dry stalks are still to be set, which are reproduced with beige 4mm length grass fibres Noch (08362).

For this, the grass glue is dabbed on here and there, followed by applying the fibres applied the mini grass applicator. This small and carefully executed measure changes the appearance very effectively in the direction of more realism.

In all further processes where grass is to be shot into the glue bed, the Noch's Gras-Master 3.0 Profi, which has already proven itself, is used again. Together with the glue, it ensures sufficient hold and vertically standing fibres. The first of three rounds on the so far grass-free areas is done with the lush green ornamental 2.5 mm grass (08314).

All areas that promise a good water supply for the flora also in summer, especially of course the areas near the banks, get more extended areas in this colour shade.

The aforementioned fourth variety of meadow material also is of the same colour, but in Noch's most recently available 1.5 mm fibre length (08214) for lawns around residential buildings. We use it for the grass areas at the edge of the small "sandy beach" section by the pond.

Here, a figure is later to sit on the grass, but not sink into it. The material thus added has the appropriate scale specific length. Work breaks are always important and we thus give the meadow areas sufficient time to dry between each individual application.

As with the previous section around the tree, beige fibres (4 mm long) now follow again. If our calculation does not work out, selected areas with dried grasses can be reworked later. Experience teaches us, however, that the full effect can anyway only be seen and assessed after having passed the shaving machine.



On the remaining areas, Noch's Gras-Master 3.0 Profi static grass applicator is used again. Four different types of grass in three different colours are processed one after the other, not mixed. They make for the desired natural and authentic appearance.

And that's how it will be here, too. Before that, the third and final layer of grass has to be added. For this we use the master grass mixture "Summer Meadow" (07076) in the biggest available package (100 gr plastic container because of the required quantity — not only for this project.

After everything has dried and with the excess grass removed, it's time to shorten individual fibres with the clippers. The last mixture used has fibre lengths of 2.5 up to 6 mm, which is too much for our scale, at least when there is a reference point for the eyes or, more aptly formulated, for our brain.

It is important that no "excess lengths" are left behind and that the wild meadow areas do not show any monotony. Any excess is vacuumed off. Now the effect is right and the landscape looks as it was intended.

But wild meadows do not make a landscape, neither in the prototype, nor in our diorama. In places we have also interspersed some soil for more sparse grassy areas, as well as, foliage from foliage material from Faller and Noch. Where they shine through the green areas after fibres have been cut back, they give the impression of weeds.

In other places, nature calls for more plants, for example on the surface of the pond. At the left edge of the diorama, we plan to add a water lily area, in which frog Gisbert – see first part – should find his place.

It was a lucky coincidence to discover the water lilies (14114) from Noch's Lasercut Minis series. Although they are actually designed for H0 gauge, they do not look too big to the observer and with their photo-realistic surface print they can well be used for Z scale projects.

Two sheets, each with three differently sized and not identically divided leaf-and-flower areas, are included with this product. Since each sheet is printed on both sides, it offers the buyer even more variety in use. You should be able to find something suitable for any water surface.



From the light-cut water lily sheets printed with leaf and flower motifs (Noch 14114), we choose the most suitable template, cut it out and stick it onto the water surface with a glue stick. The future habitat for the amphibians is now ready.

Once the best possible variant has been found, we carefully cut it out of the sheet with a sharp craft knife. The outlines are already pre-cut by the laser, only tiny bars hold them in place until they are used.

We choose to glue them on with Uhu glue stick, because it doesn't drip, can be applied over a wide area and poses the least risk of permanently spoiling the surface. And if an accident happens, any traces can be wiped off completely with a moist cloth.

Flora and fauna

We remember: Among the impressions we picked up, which are to be reproduced on the diorama, is a slow worm (see **Trainini**® 9/2022 on page 49), or, to be scientifically precise, a western slow worm. This is one of the most common reptiles found in Central Europe.

The animal had been sunbathing when we discovered it, lying on the tarmac at the side of the road. They are often run over in the process. They can be easily distinguished from snakes because their scaly skin is smooth and slightly shiny. The colour tone can be classified between brown and copper colours.

This now enables us to recreate this reptile with the help of a piece of untreated enamelled copper wire. Otherwise, it would not be noticeable on our roadsides either, because it is simply too tiny: most slowworms are 40 to 45 cm long, the maximum body length is about 57.5 cm.



The slow worm (described in part 1) is basking in the sun on the side of the road. It is almost true to scale and, in order to be recognisable at all, needed to be in a colour that would make for a sufficient contrast to the ground: The enamelled copper wire did therefore not receive any additional colour treatment.

With a Z scale length of 2.0 to 2.6 mm, it will therefore inevitably have to be displayed minimally larger, otherwise the observer will not find it despite indications. Key for a successful search is the colour contrast, which is why we choose pure copper and the typical body posture in a serpentine form.

We look for a piece of enamelled copper wire with a cross-section of about 0.1 mm, cut it to length and bring it into the desired shape with the help of fine tweezers. We have already determined the desired location on the field path. Now it is important to apply some Uhu Kraft all purpose glue with the help of a toothpick tip. This has to be done in a precise fashion in order to attach our model securely to the surface without leaving visible traces of glue.

Then we continue with the fern, which is supposed to add variety to our ground vegetation. In the last part we had pre-treated the fern (14606) from Noch's Lasercut Minis series with colour. With the spray paint application, the leaves are a bit darker than their models, but look more authentic.

Taken straight from the set, as we had noticed before, the ferns have a somewhat unnatural and whitish appearance. Adding colour brings it closer to other laser-cut solutions that use green-coloured cardboard as a base material.

Use nail scissors to cut out the individual plants at the thin holding webs and then, starting from the bottom ring (base), bend all the leaves upwards, i.e., put them at an angle. With the tip of the toothpick, the ring can be easily reached from above and fixes the tuft sufficiently.



The repainted Noch fern is cut out and bent into shape. The central base ring forms the gluing point from which the leaves spread out in a ring.

So, we place it on the diorama at each designated spot, which is first moistened with a drop of Uhu Kraft. It is important to arrange the fern in a varied way: sometimes as a single plant, in other places in groups of two, three or even up to five, which together form uneven areas. It is also possible to glue two plants together to create a denser bunch.

Each pack contains 18 specimens, so several are used up quickly, but their overall effect in the landscape justifies this use. The choice of sites should be considered in advance: There is a reason that fern is often found in deciduous forests. It prefers damp places and also tolerates the higher humidity very well.



If the ferns are inserted into the diorama and fixed with Uhu Kraft, they keep pushing the grass fibres up. We work against this with the toothpick as soon as the glue sets.

For our model, this means selecting places where rainwater stays longer after a downpour or where it runs into depressions in the ground. A water vein in the soil or rock can also favour its growth. Under no circumstances should it be planted in a dry sandy soil.

The “ring” at the base of the fern, which has already been mentioned twice, should no longer be visible after the glue has dried, but the leaves will have to be aligned somewhat later with fine tweezers and brought into an arc. The best way to ensure success is to press each plant down several times with a toothpick while the glue is being applied.

The grass fibres work against it at first, the fine plants always come up a bit. Only when the glue develops sufficient adhesive power do they stay in position.

The next step is the reed strip at the right end of the pond. There are two products to choose from here. This time we decide against the laser-cut mini option incorrectly labelled as reed (14608). It imitates cattails, as can be seen from the fruiting plants - a completely different plant species from the order of sweet grasses.

Therefore, our decision falls on the reed grass assortment (07060), also a Noch product. This is the classic bristle solution that was also common on layouts 30 years ago.

The stalk structure in a dense strip fits quite well with the reed grass (without fruiting), but in the past it was not convincing in terms of colour, because the bristles were natural in this respect. The current composition by Noch also contains reddish brown and dark green coloured specimens – all three neatly separated from each other.

The green stalks correspond best to our ideas here and are to be used this time. The ideal way to mount them is to glue them into a drilled hole, but reeds grow in belts and not individual shrubs. In addition, our plywood base plate does not allow for deep drill holes.

We therefore resort to other tools: with a countersinking tool for screw heads, we drill into the water surface at the desired points at short intervals. In this way we pierce the individual layers of paint and grind the wallpaper base, as well as the wood.



In order to be able to use the reeds from Noch's reed grass assortment (07060), a "planting hole" is required in the base plate. This is drilled out with suitable tools and cut to size.

With the Mozart craft knife, we then cut the edges smooth and lift off the loosened material. The open areas now present themselves in a shade between light wood and white wallpaper remnants. If this were to show through later, any illusion of reality would be ruined.

Therefore, we mix another colour that matches the water surface and has a slightly greener tint. We use it to paint over the "planting area." After it has dried, we fill it with Uhu power glue and insert the green bristles. If they are in danger of falling over, support them at the edges with tools.

It is advisable to shorten the bristles to half their length with a pair of scissors, because the Noch material is also intended for larger scales. This way we only use half of what would otherwise be used. And by the way, the stalks are at a lesser risk of falling over.

We give our reed belt a one-night rest in order for it to properly dry. The following day, we will have to shorten the reeds again. At this point we should be aware that a height of about 8 mm is equivalent to two metres of grass rising out of the water. Reeds can reach heights of up to 4 metres, but we don't necessarily have to use that to the full.

continues on page 27



In the ground-out area in the pond, an emulsion paint in similar shade to the water is applied with a brush so that this area does not later shine through between the reeds (photo above). After drying, the green coloured stalks are glued in place with Uhu Kraft Alleskleber (all-purpose glue) (photo below). To save material, they can be cut in half before application; further shortening will be necessary later.

A nature reserve

In nature reserves it is forbidden to leave the paths, which not many people are aware of. It is not uncommon to see them walking cross-country, often in company of a free-roaming dog. To protect rare plants and the biotope with ground-dwelling animals, we need a partially fenced area to keep out hikers.

Therefore, we looked for a suitable fence. We also came across such a companion to the left or right of the path in a photo in the rehabilitation clinic. It was therefore a good idea to incorporate this idea into the model.

The only thing left to think about was what the fence should look like: setting individual real wooden posts and stretching a thin, black enameled wire as a barbed wire replica? Or should we purchase a ready-made product?

Whilst still pondering this question, we heard about a new suitable product from the Z scale accessories manufacturer Archistories.

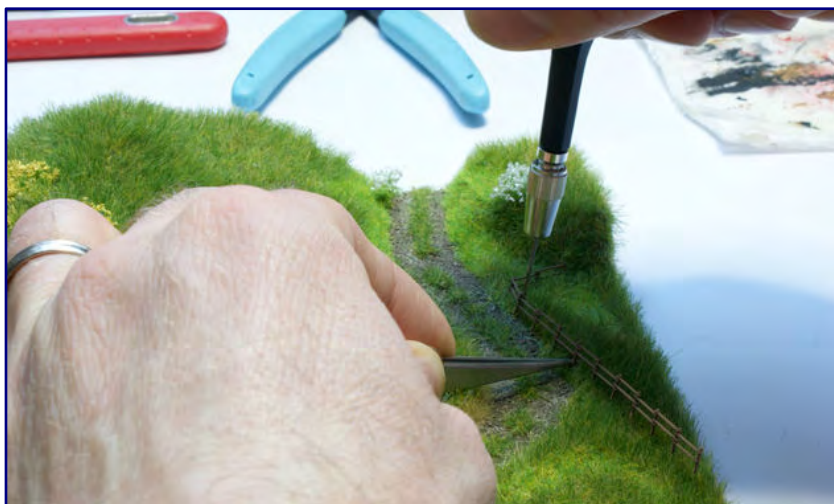
We had already flirted with the willow fence (815171), but the brand new mountain meadow fence (815221) seemed even more suitable.

We assembled a suitable section from its three elements, glued on the reinforcement for the post replica



To enclose the nature reserve and prevent cross-country hiking, we decided to use the new mountain meadow fence (815221) from Archistories. Before it can be used, the fence posts have to be cut out and are glued on with Expert Laser glue from Faller.

with Faller Expert Laser glue and drilled tiny, not too deep, holes at the points of the diorama where the fence is then to stand. The glue of choice here is a wood glue, in our case from Uhu.



Piece by piece, the finished fence is "pre-bent" and held in place with the tweezers. Holes with a diameter of 1.1 mm holes – not too deep - are drilled at the designated locations. The posts are then glued into these holes with Faller Expert Laser glue

Except for the figures, which we glue in at the very end, the diorama is now finished. So we finally bend the branches of the Norway maple into position again and start attaching its foliage.

Pre-cut, partly torn and plucked pieces of the dark green tree foliage (07301) from Noch are glued on with Uhu Kraft.

continues on page 29



The tree receives its green cover by applying dark green foliage (07301) and working from the inside to the outside and from the bottom to the top (photo above), so that the respective part is also completely accessible for hands and tools. Once the work is done, Noch's Haft & Fixierspray (Adhesive and Fixing Spray) (61152) protects against unwanted leaf fall (photo below).

The treetop should be so dense that the wire of the tree armature is no longer visible. At the same time, however, the foliage should also appear airy, because between the branches of the model, moving in the summer wind, a ray of sunlight always finds its way to the ground.

Although quickly described, this step certainly requires a little time, calm action and continuous checks from all angles. As soon as the final result is to our liking, the finishing touches follow before the final series of photos can start. The last step for finishing the tree is to seal the foliage with Noch's adhesive and fixing spray (61152).

Four hiker figures are to find a place in our local recreation area, which the manufacturer Trafofuchs already designed six weeks ago according to our specifications. On the one hand, there is the resting couple with backpacks, sitting on the lying tree trunk along the hiking trail and enjoying the idyllic nature.



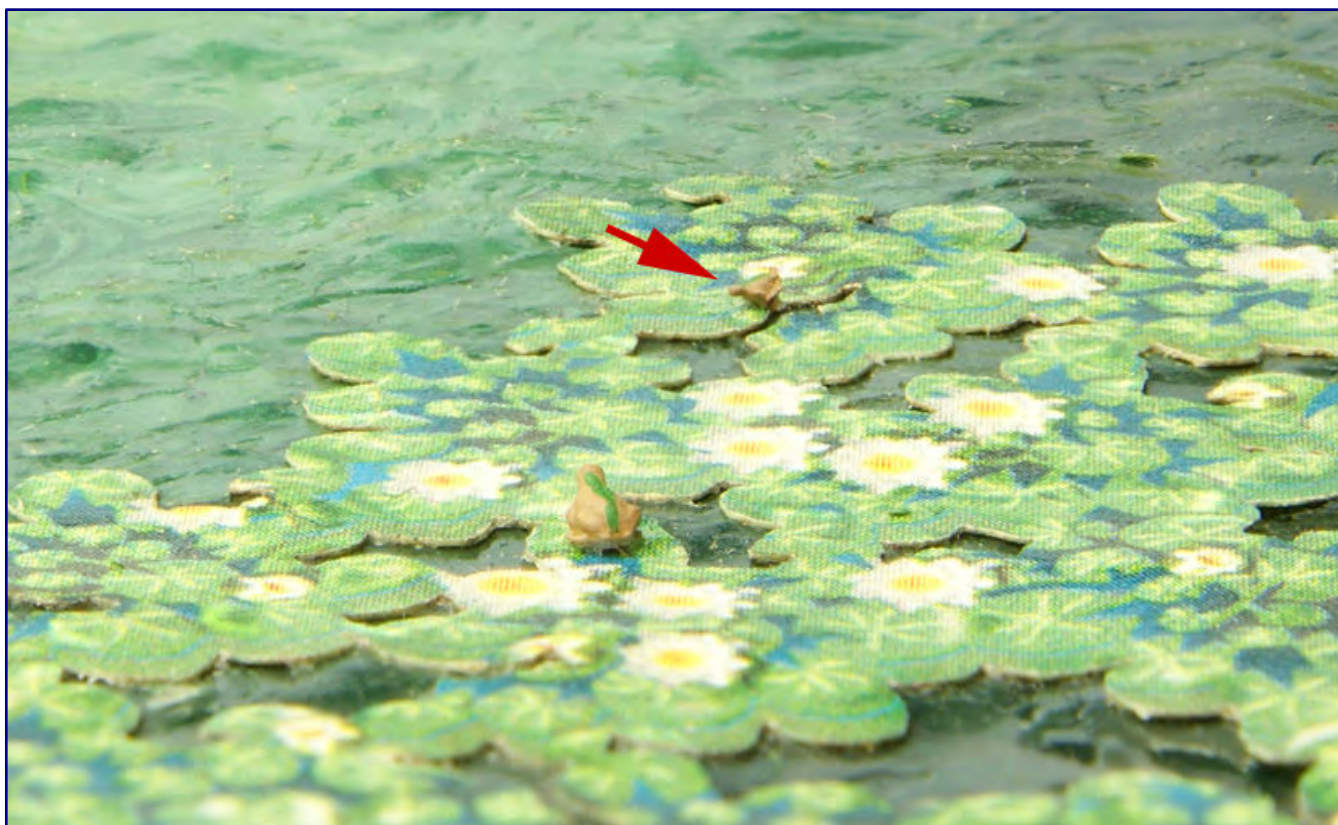
A pair of hikers with backpacks have made themselves comfortable on a tree trunk that has been converted into a seat. The figures, as well as all the others on the diorama, were custom made by Trafofuchs using CAD design for 3D printing.

At the pond itself, a female day tripper has discovered the pond for herself and is already knee-deep in the cool water. Her companion has sat down on the bank. To make sure it stays that way, a tiny drop of Uhu Kraft, applied with a toothpick, protects them all from getting lost.

This also applies to Gisbert, the secret hero of our little modelling series. The lonely lake frog has sought the protection of the water lilies, because their colour camouflages him well from his predators. From there, he closely follows the bathing activity at his waterhole.

In order for viewers to be able to make him out at all, however, he has - in contrast to the original figure - been given a companion. It is a female sitting nearby who, as in reality, is somewhat larger and can therefore just about be made out with the un-aided eyes. It is therefore intended to draw attention to Gisbert.

continues on page 31



Inspired by a similar figure arrangement on a Kuhlmann diorama in H0 size, the top scene with the young couple (photo above) was created, in which the woman refreshes herself with a cool foot bath and encourages her partner to do the same. Meanwhile, Gisbert the frog (photo below, see arrow) did not stay alone either and was able to attract a larger female with his croaking.



Finally, we show the place on the diorama where the field path together with the enclosing fence winds along in a similar way as it could be seen on a mural in a group room of the rehabilitation clinic. The photo perspective has also been chosen similarly.

What might our bachelor think about the unexpected presence of a lady? “Hopefully these people will disappear again soon, because when it starts to dawn, it will be time for my croaking concert.”

Material Manufacturers:

- <https://www.archistories-shop.com>
- <https://www.faller.de>
- <https://microrama.eu>
- <https://www.noch.de>
- <http://www.trafofuchs.de>
- <https://www.uhu.de>



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Note for English readers: The literature section that follows is not translated into English because the original texts of the books involved are in the German language. The original German is left here for information purposes only.

Modellbaugeschichte(n)

Geradezu revellutionär

Kennen Sie Revell? Diese Frage an unsere Leser ist wohl eher rhetorischer Natur. Wohl jeder heute aktive Modellbahner hat als mindestens einen Bausatz aus Ostwestfalen geklebt. Ob Flugzeug, Schiff, Auto oder auch Lok – an Revell führte und führt kein Weg vorbei. Auch für die Spurweite Z eigneten sich einige wenige Bausätze aus Bünde, weshalb wir dieses Buch unseren Lesern empfehlen möchte.

Ulli Taubert / Andreas A. Berse
Die Revell-Story
Bauanleitung zum Erfolg

Delius Klasing Verlag
Bielefeld 2018

Gebundenes Buch mit Schutzumschlag
Format 22,0 x 24,6 cm
176 Seiten mit 467 Farb- und S/W-Abbildungen

ISBN 978-3-667-11399-3
Preis 29,90 EUR (Deutschland)

Erhältlich antiquarisch
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Dieses Buch brannte uns schon lange auf der Seele, denn es ist besonders: Es weckt Erinnerungen an die Jugend, stellt die hierzulande bekannteste Marke für den Plastikmodellbau in den Fokus und streift auch leicht den Maßstab der Spurweite Z.



Auf jeden Fall findet sich im Revell-Programm wohl für jeden ein passender Bausatz. Modellbahner finden hier Abwechslung oder können ihre Fertigkeiten an einem Plastikmodellbausatz verfeinern und üben, um Gelerntes im Kern ihres Hobbys erfolgreich einzusetzen.

Einziges Wemutstropfen ist, dass wir dieses Buch aktuell – es ist bereits 2018 erschienen – nicht mehr im Verlagsprogramm gefunden haben. Das spricht für eine gute Nachfrage und weckt bei uns Hoffnungen auf eine zweite Auflage. Ansonsten ist es nur antiquarisch oder aus Restbeständen der Buchhandlungen zu beziehen.

Etwas irritierend fanden wir zunächst den Titel „Die Revell-Story“: Der überflüssig erscheinende Anglizismus hat aber seine Berechtigung, denn Revells Wurzeln liegen in den Vereinigten Staaten von Amerika. Hier liegt ein entscheidender Teil der Firmengeschichte, und den wollen die Autoren nicht verschweigen.

Anlass, dieses Firmenportrait mit vielen wegweisenden und wichtigen Produkten zu schreiben, war wohl das 60-jährige Jubiläum der deutschen Niederlassung in Bünde. 1956 wurde sie gegründet und war zunächst nur eine Vertriebsstelle. Eigene Entwicklung und Produktion auf eigene Rechnung kamen bald

hinzu, bis die deutsche Tochter – es gab zeitweilig auch eine zunächst bedeutendere in England – eher zur Zentrale eines globalen Bausatzriesen wurde.

Gezeichnet ist diese Erfolgsgeschichte von Höhen wie auch Tiefen, die in diesem Werk ebenfalls zur Sprache kommen: Seien es irrsinnige Produktideen der Ehefrau des ursprünglichen Inhabers, Pläne eines französischen Eigentümers, die Marke verschwinden zu lassen oder die Insolvenzfolgen eines späteren Eigentümers.

Innovative Ideen, Mut und Gespür für den sich weiterentwickelnden Markt haben Revell aber immer zu einem Juwel gemacht, das auch schweren Wetterlagen zu trotzen wusste. Drei noch lebende frühere Geschäftsführer kommen in Interviews zu Wort und schildern, durch welches Fahrwasser sie Revell führen mussten und warum sie das Unternehmen heute gut aufgestellt sehen.

Eine Stärke des reich bebilderten Bands ist das Wissen von Ulli Taubert, einem der beiden Autoren. Fünfzig Jahre hat er bei Revell gearbeitet und hat als Chef der Entwicklungsabteilung das Modell-Portfolio über Jahrzehnte entscheidend mitgeprägt.

Die Vorbilder seiner Bausätze waren zu Lande, zu Wasser oder in der Luft unterwegs, teilweise auch im Weltraum. Die daraus entstehenden Modelle basierten manchmal auch nur auf Annahmen, Projektabbildungen oder sonstige Darstellungen, weshalb ihnen im Einzelfall nicht mal ein Original folgte.

Zweiter Autor ist Andreas A. Berse, Erfinder und Chefredakteur der Fachzeitschrift Modell-Fahrzeug. Journalistisches Gespür und internes Unternehmenswissen führen hier deshalb zusammen zu einer Chronologie voller Überraschungen und auch exklusiven Fotos seltener Bausätze. Wussten Sie, dass in Revell auch Musik steckt? Auch die vier Pilzköpfe der Beatles wurden hier einst miniaturisiert.

Die Texte sind durch die Reihe spannend wie unterhaltsam geschrieben und hervorragend bebildert. Alle Aufnahmen und Katalogabbildungen sind nicht nur treffend gewählt, sondern auch nahezu perfekt reproduziert worden.

Auch für jeden Modellbahner ist es interessant zu erfahren, wie Bausätze oder Fertigmodelle entwickelt und später produziert werden. Schließlich sind die Geschichten, die in den Reportagen erzählt werden, auch mit jenen vergleichbar, die wir im Markt der Modellbahn und ihres Zubehörs finden.

Übrigens hat auch Revell selbst nicht nur Lokomotiven und Reisezugwagen im Maßstab 1:87 produziert, sondern sich auch mal als Hausmodellanbieter zu etablieren versucht. Auch das ist eine Facette der Unternehmensgeschichte eines Mittelständlers, die hier wiedergegeben wird.

Einen einzigen kleinen Kritikpunkt gibt es anzubringen: Stellenweise hat der Leser den Eindruck, nicht die Revell-Geschichte, sondern eine Taubert-Biographie zu lesen. Ganz vermeiden lässt sich das nicht, denn der Autor war ja in einer zentralen Position tätig und seine eigene Geschichte ist eng mit der seines früheren Arbeitgebers verbunden.

Es sollte vielleicht nur nicht ganz so deutlich und häufig in den Vordergrund gerückt werden, denn als verstecktes Eigenlob missverstanden, würde es seine Werke zu Unrecht schmälern.

Bereut haben wir die Lektüre zu keinem Zeitpunkt. Das Buch hat Spaß gemacht und das Interesse am Modellbau gefördert, obwohl das im Falle des Rezensenten gar nicht erforderlich wäre. Insofern schließen wir uns gern dem an, wie der Verlag selbst diesen Band zusammenfasst: „Wer irgendwann einmal ein Bauteil vorsichtig mit dem Bastelmesser und der Pinzette aus dem Gießast gelöst hat, den wird dieses Buch unweigerlich in seinen Bann ziehen.“

Genau so ist es... Viel Spaß beim Lesen und Erleben!

Publishing pages:
<https://www.delius-klasing.de>

Lokportrait der Baureihe 120

Zum Durchbruch verholfen

Mit nur 60 Serienexemplaren, die stolze acht Jahre nach den fünf Prototypen geliefert wurden, blieb die betriebliche Bedeutung der Baureihe 120 überschaubar. Und ihre lange Erprobungszeit legt vielleicht den Schluss nahe, dass diese Entwicklung ein Fehlgriff war. Die Realität sieht anders aus: Die Maschinen waren Pioniere und verhalfen dem Drehstromantrieb zum Durchbruch. Überholt wurden sie nur vom Fortschritt und einer geänderten politischen Wetterlage.

Karl-Gerhard Haas
Baureihe 120
Revolution der Antriebstechnik

Transpress Verlag
Stuttgart 2022

Gebundenes Buch
Format 23,0 x 26,5 cm
176 Seiten mit 300 überwiegend farbigen Abbildungen

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Kennen wir Karl-Gerhard Haas? Als wir das an dieser Stelle zu besprechende Buch zur Hand nahmen, erschien uns der Name zunächst vertraut, doch im Regal konnten wir kein weiteres Eisenbahnwerk von ihm finden.



Feiert ein Autor hier also seine Buchpremiere? Das steigert unsere Spannung noch mehr, denn mit einer zunehmenden Zahl an Werken werden auch die persönliche Handschrift und Schwerpunkte deutlich. Dieser Autor war für uns noch ein unbeschriebenes Blatt Papier und – so viel sei schon an dieser Stelle verraten – er hat uns sehr angenehm überrascht.

Wie wir durch unsere Recherchen nach der Lektüre herausfinden konnten, ist Karl-Gerhard Haas ein Technikjournalist und hat seinen Wissensschwerpunkt bei elektrischem Strom und Elektronik. Sein Fachwissen hat er schon mehrfach in Technikratgebern weitergegeben.

Die Voraussetzungen für einen Titel zur Drehstromlok, die ein Meilenstein in der deutschen Eisenbahngeschichte ist, waren also hervorragend. Und im Rückblick müssen wir sagen: Was wir zur Vita des Autors gefunden haben, überrascht uns jetzt gar nicht mehr.

Verständlich, gut strukturiert und anschaulich hat er die Geschichte der Baureihe 120 aufbereitet. Sein Buch ist nicht das erste über diese Ellok, spielt aber ganz vorn mit. Es ist schwierig zu entscheiden, ob es in diesem Fall das beste Baureihenportrait ist, schließlich stellt sich ja auch die Frage, für wen es denn eigentlich geschrieben wurde. Genau das möchten wir mit unserer Besprechung auch herausarbeiten.

Werfen wir zunächst einen Blick auf das behandelte Thema: Die Entwicklung der Elektrolokomotiven der Baureihe 120 bis zu ihrer Serienreife dauerte rund zehn Jahre. Dies ist ein außergewöhnlich langer Zeitraum, der gut erklärt und in diesem Fall auch begründet sein will.

Der Bau der fünf Prototypen markierte einen Meilenstein der Lokkonstruktion, denn er bewirkte tatsächlich und ohne jede Übertreibung eine Revolution der Antriebstechnik: Mit ihnen gelangte die Drehstromtechnik zum Durchbruch, nachdem sie auch zuvor jahrzehntelang das Interesse von Ingenieuren fand.

Die Baureihe 120 steht ganz vorn in der Ahnenreihe der ersten ICE-Generation. Auch wenn nur 60 Serienexemplare gebaut wurden, ist die Aufmerksamkeit, die die ICE-1-Triebköpfe fanden, vor allem ihr Erfolg.

Der Autor berichtet über die Entwicklung, den Bau und die Geschichte dieser revolutionären Baureihe, ohne dabei auch nur ein wichtiges Detail zu vergessen. Um sie angemessen würdigen zu können, ist allerdings weit auszuholen.

Gleich zu Beginn wird erklärt, warum die Baureihe 120 ein Meilenstein der Technikgeschichte ist. Das erforderliche Grundlagenwissen, dies verstehen und einordnen zu können, nimmt einen großen Teil des vorliegenden Werks ein.

So werden die einzelnen Stromarten Gleich-, Wechsel- und Drehstrom erläutert und erklärt. Ein Rückblick auf mit Drehstrom betriebene Bahnen zeigt auf, warum sie nur Versuchscharakter behielten, sich nicht für den Bahnalltag eigneten und als Insellösung in Italien dennoch lange überleben konnten.

Geschickt arbeitet der Autor heraus, wo die Vorteile dieser Technik liegen, aber das Zuführen des Drehstroms von außen zum unlösbaren Problem wurde. An dieser Stelle kommt die Entwicklung der Halbleitertechnik und Leistungselektronik ins Spiel.

Scheinbar ganz nebenbei werden wichtige Versuchsträger wie die Versuchslokomotiven der Baureihe 202 erklärt und eingeordnet. Dem Leser wird klar, welchen großen Schritt auf dem Weg zur Baureihe 120 sie darstellten. Unterstrichen wird dies auch mit einem abgedruckten Interview aus den Reihen der Entwickler.

Zum erwartungsgemäßen Inhalt gehört natürlich das Beschreiben der Technik. Der Abriss zur Erprobung und den Änderungen an den Serienmaschinen nimmt aber einen größeren Umfang ein, als es zunächst zu erwarten wäre. Hier wird der hoch experimentelle Charakter deutlich, weil die Lok nicht in einer Ahnengeschichte stand, wie die nebenbei als Rückschritte bezeichneten Baureihen 111 und 103.

Am Ende des Buches versteht der Leser auch, warum die Baureihe 120 als „erste Drehstromlokomotive der Welt“ gilt, obwohl es in der Geschichte viele Gegenbeweise zu geben scheint und Henschel / BBC selbst bereits 1976 Drehstromlokomotiven an die RAG lieferten. Die Auflösung verraten wir an dieser Stelle selbstverständlich nicht!

Das Buch lässt kaum Wünsche offen, denn es ist angenehm zu lesen, technisches Wissen wird verständlich vermittelt und durch reiches Bebildern unterstützt. Aufgeschlossen für Technik zu sein und sich für Eisenbahnen zu begeistern, reicht als Einstiegsvoraussetzung für einen Kauf. Lohnenswert wird das Anschaffen auch angesichts der von Märklin umgesetzten Werbelok-Motive, die zum großen Teil auch hier wiederzufinden sind.

Das führt uns aber auch zum einzigen Schwachpunkt: Einige Bilder, glücklicherweise nur wenige, sind bescheiden reproduziert worden. Sie kranken dann an fehlender Helligkeit und verbesserungsfähigen Farbkurven. Die große Mehrheit der Aufnahmen sorgt allerdings für Genuss. Und so nominieren wir dieses Buch für die Neuerscheinungen des Jahres 2022 in der Kategorie Literatur.

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50 years of Z gauge (part 6)

The Guarantors of Diversity

In the previous parts we have almost exclusively focused on the large manufacturers and their rolling stock. Now it is time to also look to the right and left to discover which manufacturers and products have made Z gauge more compelling in the 50 years of its existence.

It was an important step for Z gauge to be able to establish itself sustainably on the market so that Märklin would not remain alone with its courageous decision in 1972. The Göppingen-based manufacturer saw itself as a full-range supplier, in whose programme everything needed to build a mini club layout gradually appeared.

Not just polystyrene kits for building construction found their way into the programme early on and these were not limited to railway stations and engine sheds. Lights and vehicle models also appeared in the founder's programme.

Many of the materials available at the time could be used in landscaping, but trees, in particular, were still reproduced considerably too small at the time. Thus, leafy specimens of larger scales may well have been usable. Whether many first-time customers were aware of this remains to be seen.



We were not always "blessed" with accessories as good as those of today: In the photo you can see on Volker Bastel's layout some car model classics from various manufacturers as well as the village church (art. no. 282775) and market garden (282788) as more recent and popular kit editions from Faller.

The conifers at that time were almost exclusively the brush-like specimens fondly called “pipe cleaners,” which can still be found in the programmes of Busch and Noch today. Since they were offered by the bag in different lengths, the Zettie also found what he was looking for here.

In any case, for an easy start Märklin had come up with the “Toporama,” a kind of photo wallpaper that was stuck onto the layout base and then covered with track. Locations for in-house buildings were provided and marked on it.

Some versions had pre-flocked grass areas, the single version was only printed in four colours. Over the years, this early form of layout construction was constantly developed and improved with the SET extension system, and was also offered in kits pre-assembled on a wooden board, including accessories, until this form of prefabricated layout no longer fit the times.



This toporama from 1972 for the SET extension system and how Märklin envisioned its design was demonstrated by Jürgen Walther at the Märklin Days 2007 in Göppingen.

But the question of how the nominal size Z would be received on the market always lay like a dark shadow over it. Märklin had by far the highest market shares and a dense network of dealers, and thus ensured a presence of the small gauge that aroused curiosity.

However, it would be a clear sign if other large manufacturers also began to serve this scale. We are not referring here to the other model railway suppliers who had committed themselves to the 9 mm gauge as a small alternative, but to the relevant accessory manufacturers.

In retrospect, we cannot determine whether Märklin surprised them with the Mini Club in 1972, or whether such intentions had been placed through confidential channels but the companies in question remained reticent. However, it is more likely that Märklin did not share its intentions with third parties.

With usual market lead times for new products of about two years for model selection, construction, tool making and production preparations, reactions from this market segment could be expected from 1974 at the earliest. In fact, it was to take two more years. This speaks volumes for the fact that many doubted that the Märklin idea was perhaps only a flash in the pan.

The former Böblingen company Kibri then courageously went ahead. In 1976, it also included ready-made layouts in thermoforming technology in its programme and was the first to offer some building models for the small scale. The large Bad Nauheim railway station (art. no. 6700) can be regarded as the original product of the supplier with the largest range of accessories over many years.



The Bad Nauheim station (6700) was the starting point for what was for many years the most extensive range of Z gauge accessories apart from its inventor. This classic can also be seen on Peter Grundmann's module layout together with the following town houses.

The expansion of the range was already vigorously pursued in the following year, and to this day the various building series, castles, bridges as well as truck models can be found on many layouts and are still produced from the old moulds by Viessmann.



Measured by the number of kits in the range at the same time, first Lütke Modellbahn (in the photo: stable building 73294) and later MBZ replaced Kibri as the most important accessories manufacturer for 1:220 scale. Photo: Lütke Modellbahn



An example of the extensive MBZ programme is the old forge with petrol station (16388). Like all kits of this manufacturer, it consists of light-cut Finn cardboard and has to be painted by the customer himself.

The role as the largest manufacturer, measured in terms of the variety of kits offered, was not to be taken over until many years later, after the turn of the millennium, by Lütke Modellbahn (milled polystyrene kits for self-painting) and subsequently by MBZ (light-cut Finnish cardboard kits for self-painting).

Faller dares to take the step

Two other manufacturers that were to become important for Z gauge did not follow until 1980, when the history of our gauge was already slowly preparing to conclude its first decade. Z gauge did not yet appear in Faller's catalogue in 1979/80. This only changed with the 1980 new products brochure.

In it, the introduction stated (abbreviated): "Even more mini club fun with the new Faller bridge system. Bridges are just as attractive and important for the landscape of the model railway as for the large prototype in reality." The expression "even more" here probably did not refer to the company's own assortment, but served as a reference to enhancing the foreign assortment on one's own.

What then followed is described by Faller connoisseur and book author Ulrich Biene, in comparison to the H0 gauges of the fifties and N gauges of the seventies: "Faller had recognised that the model railway enthusiasts who had taken Z gauge to their hearts lacked landscaping skills in particular."

Developing a feeling for the new scale and correct proportions must indeed have been a particular challenge. Even today, industrially produced trees suffer, after all, from being reproduced too small.

Faller tries to support here by presenting a complete terrain construction set (2950) and a decor set (2983) as basic material. The various bridge constructions including driveways framed this successfully and diversely: viaducts, tower, bar arch, steel girder, and stone arch bridges from the beginning.



The Blumendorf stop (2706), modelled here in winter, was one of three stations with which Faller noticeably expanded its Z-gauge programme begun the previous year in 1981.

In 1981, buildings also followed, starting with three stations: the Blumendorf stop (2706), the railway buildings package (2703) and the Neustadt station (2712). In addition, a glass-transparent station hall appeared. The package 2703 with the station Schönblick, this year reissued in new colours for the anniversary, and the item 2712, by the way, came from the N gauge assortment. This was easy to recognise from identical basic dimensions.

This access to kits of a larger scale remained uncritical, because in the sixties and even seventies it was still common to scale down building models considerably. This was sometimes obvious when figures were taller than an entrance door or when a model railway enthusiast tried to imagine how the floor plan of a house would have to resemble the dimensions of a rabbit hutch.

So, what was originally designed for N scale would fit better for 1:220 scale. There was also something comparable with the Wasserburg (2242), which was never declared for the nominal size Z, but fitted it best. This was already revealed by the figures depicted on the package, which were probably standing in front of a dwarf gate. And Kibri also used the trick of offering the same kit in two nominal gauges – see the concrete factory (47900) announced again for 2022.

Let's continue with the listing of the new products from Gütenbach in 1981: The gas tank and the filling station for fuel should also become classics for the area of goods loading. A brochure "Modellbau leicht gemacht" (Model making made easy) for the Z gauge provided a round basic range, which was to grow more slowly for the time being.

1982 saw the last expansion for the time being, followed by a break until 1985. The range of important railway buildings was extended with a double-track rectangular locomotive shed (2732). Only it was immediately recognisable as an N gauge building (2116), because a masonry insert had simply been placed in the much too large entrance openings to accommodate the smaller gates.

This was due to economic constraints, because mould making for polystyrene kits swallows up large sums of money. And Faller was under great pressure from the market at the beginning of the eighties. Vollmer and especially Pola enjoyed a lot of attention because of their filigree and very realistic new products, and Faller had to catch up, if it did not want to lose touch with the market.



The former Schönblick railway station (2703) returned to the programme this year for the anniversary in new colours as a three-piece station pack (282713). In the background you can see many buildings from the modern hard cardboard programme, which became a success thanks to the light-cutting technique. Photo: Faller

So it can be assumed that with regard to the new Z gauge range, the market response should first be awaited before extensive investments were made. The most important buildings were now available, residential buildings would have required a completely new development, and that would have to be reliably profitable.

Looking back, we can see that Faller did not rest on its laurels. Over a period of around thirty years, i.e. without interruption up to the present day, the programme has always been followed by sensible additions and expansions.

The move to hard cardboard modelling was a ground-breaking step, which instead of high tooling costs with high quantity requirements, increasingly focused on smaller editions and individuality. So, in the Black Forest, signals from the market were heard!

Vollmer shows off

But back to the early eighties: what was happening on the market at that time and which we have just sketched can also be traced in 1:220 scale. Vollmer also discovered the Z scale in 1980. And the first new products are still very well known today.

The Neuffen railway station (9510) competed in various scales and impressed with its aesthetics, handy dimensions and accuracy of fit. And it fit exactly into the development line with which this supplier from Zuffenhausen stepped into the limelight.

Two matching platforms for extension (9525) and also separately available but non-functional platform lamps (9526) completed the initial range. At Vollmer, the matching village houses soon followed, individually as well as as a village pack, later also a burning house with an optionally retrofittable smoke generator. Only a church was to be a long time coming.

With this, the “top dogs” for the building range were set and their products were to shape the familiar photo of Mini-Club layouts for decades. The buildings from the Märklin programme seemed rather coarse (imitation roof tiles) and undetailed compared to those of the three accessory suppliers.

But from the nineties at the latest, the pace of innovation slowed down; real new products were scarce or often seemed rather uninspired. This opened up opportunities for smaller suppliers, which we will turn to in a moment.



Cover page of the Vollmer new product brochure 1980, which also announced its entry into Z gauge: Vollmer (Viessmann)



The template for Vollmer's classic kit (9510) is now a terminus station, but still well preserved in its former appearance. Photo: Public Domain

But first we would like to take a look at everything else that is important for a model railway far away from houses and trains. Certainly, rather a nice marginal phenomenon for our scale are the aeroplane models from Herpa – see also the separate model article in this issue.

Two kits from Revell are even more niche, because a drilling platform and a large bucket wheel excavator from open-cast lignite mining cannot be accommodated on layouts of ordinary size. In addition, their theme is very special and not compatible with the usual motifs.



A successful, but short episode in the accessories programme for Z scale was marked by the Mercedes-Benz Actros from Herpa together with various trailers. Here it has been souped up with an inserted driver figure and etched rims by Zettzeit.

On the other hand, there is also an unfortunately very short episode to mention about the Herpa brand, which reached its peak in the early years after the turn of the millennium. With the first-generation Mercedes-Benz Actros tractor, the Dietenhofen-based company delivered a well-detailed truck model for contemporary layouts. The only weak point were the rims, which had to do without engravings.

The box trailers also showed up without any particularly striking features, as they followed their plain models, but could be printed very well. Variety was brought by an open trailer that demanded cargo. Apparently Herpa did not consider the models a commercial success, because no further new models followed.

Some Zetties, however, will have been waiting for a product update of the tractor's chassis, as well as for more appealing-looking trailers, for example, with a flatbed and tarpaulin. But, unfortunately, nothing came of this.

There was no shortage of landscaping material. Popularised by Bernhard Stein, Heki developed in the early eighties into a brand for particularly realistic landscaping material at the time. Its most prominent brand ambassador was recognisably heard with his ideas, which revolutionised landscaping at the time.

This was to take longer at Noch, but lead to a power of innovation that continues to this day. In the now 50-year history of Z Gauge, many important implementations came from Wangen. The earliest were glue rolls with asphalt road or the very popular Merkur track beds, which were in the programme for many years and also found their way into our diorama construction in the early years.

Today, the accessories specialist from the extreme south of Germany has unique selling points in the market with ready-made systems in deep-drawing technology, as well as, modern inserts for cases, which are cast from hard foam, which can hardly be tamed due to its expansion forces during hardening.



Looking back 50 years, the accessory supplier Noch was and is indispensable for Z gauge. In addition to design material, plastic buildings, figures, car models and traffic signs, these hard cardboard buildings also came from Wangen.

The diversity of the programme was also shown with traffic signs that could be glued on themselves, which could not be found elsewhere, as well as the modern hard cardboard buildings, which were introduced only a few years ago, in order to inherit aged kits from Märklin and Vollmer on their own prefabricated layouts. Modern successors for own small buildings were also implemented.

Early car diversity

However, Noch probably became unforgettable with its car programme, from which many are still in demand on the second-hand market today. Here, the supplier occupied a segment early on that had been criminally neglected for a long time. Until then, the only models available were Märklin's rubber models, which were not even offered individually.

Still, first offered one-piece casts with dark-painted windows and later specimens that were transparent. Many of these vehicles could no longer stand up to today's demands, once they were with alternatives.

What also does not look old are the various trucks from the Noch programme. They were manufactured in several parts in modern injection moulding processes, painted more elaborately and printed. Vehicles with trailers as well as various tractor units with different types of trailers were produced. However, these vehicles also exist in two production generations of different quality.

The best-engineered model of a Setra coach became a real classic. When it was no longer included in the Noch programme, it was still produced for customers such as the Z Club 92 or the Stammtisch Untereschbach e. V. All of the imprints produced in this way probably make it the car model with the highest number of variants on a scale of 1:220.



The Setra coach from Noch saw many editions. This print version came from Z Club 92 and reproduced the bus of line 444, which is subject to a surcharge, on behalf of the Dortmunder Stadtwerke AG.

In terms of quality, the range offered under its own brand was on a par with the best Noch conversions by H. Fischer GmbH, which probably supplied at least a significant proportion of the vehicles to Noch. But there were not only semi-trailers and caravan conversions that were completely identical to Noch's, but also excellent smaller commercial vehicles.

The ambulance service, the post office and the police provided popular models that are still popular on layouts today. At least some of the moulds were probably taken over by Märklin at the end of the business, because a rather unusually designed fire engine on three axles later reappeared in the Märklin programme, also in an ultramarine blue THW version.

The small series manufacturer MZZ from Switzerland dominated the market for many years. The metal cast vehicles were not a benchmark in terms of detailing or painting, but for a time they were the only ones offered. And the variety they produced created a lot of interest. However, the sometimes coarse casting quality, and, above all, a too thick paint application always left something to be desired.



Examples from the MZZ range (left) and from Limized (right) are intended as a reminder of which manufacturers served the accessories sector of car models almost exclusively for many years.

In the course of time, these were mainly served by the four manufacturers that are now to be named: First and foremost is the Limited brand by Ingrid Lindig. Some of these were MZZ supplies that were refined and skilfully painted and printed. This showed what could be achieved here. But there were also many constructions of their own that raised the bar. By the way, this also included ship models.

The withdrawal from the business followed after MWB (Modellbau Wolfgang Baumann) had established itself with a range of well over one hundred different car models. They all sprang from two-part moulds in which resin was cast.



What is possible today with resin casting and 3D printing is impressively demonstrated by JMC Scale Models (left) or EtchIT-Modellbau (right).

The speed with which development was carried out here at the highest level and unrivalled scale fidelity overtaxed some other small series suppliers. Unfortunately, this source has also largely dried up for years, leaving a painful gap in the Z gauge market.

If we leave talented private tinkerers out of the equation here, only Alvaro Cortes, JMC Scale Models and EtchIT-Modellbau now push into this segment with comparable quality. NoBa-Modelle, which will be mentioned later, focus more on larger commercial vehicles and consequently do not serve the same segment.

MO-Miniatur had an impressive development to show before it suddenly became quiet from this supplier of years.

Early models were first made of metal, later already of resin, and were even less detailed, sometimes not even clearly positioned in 1:220 scale.

The breakthrough came with new suppliers and modern production methods. The Claas Europa combine harvester made an impact on the market.

It was not only the first harvester in 1:220 scale, but also set new standards with its mix of materials and the finest details. Print runs in the high three-digit range speak a



A new chapter in accessory detailing opened with the Claas combine harvester from MO-Miniatur, seen here in its second edition.

clear language for a small series manufacturer in nominal gauge Z! Equipped in this way, several more successes were to follow, including the small Mercedes-Benz O 321 H bus, an important gap filler.

Technology for the small gauge

Turning to the technology, we have two different aspects to consider here: on the one hand, the technology for use on the model railway, and on the other, the technology used in the production process.

Under the first mentioned point we must not forget the company Busch from Viernheim. Their range includes the “warning lights” (5954 and 5955), which have been indispensable in 1:220 scale for decades.



With only minor modifications, the so important level crossing safety devices by Busch (5955) can be found without gaps under the same item number in the programme!

The small, flashing St. Andrew's crosses have never changed their appearance, although Brawa did have more finely detailed alternatives in their range for a period. But these, as well as the extremely fine lights, have long been history. For several years, only Märklin had comparable filigree in its programme, today Viessmann is the only large-series supplier here, by the way, also for signals that Märklin buys for its own range.

But, Busch also brings to mind innovative landscaping products that include material that finds its way onto our layouts without hesitation: Flowers from the Natur-pur series made from injection-moulded parts



And this is how the Busch warning lights look to the viewer when used on the layout. The vehicle models in the foreground are from MZZ (VW Transporter) and from H. Fischer GmbH (Mercedes-Benz, repainted).

multi-coloured terrain mats from the same series, and the unrivalled realistic conifers from this series.

Innovative technology in the production process appeared early on with two suppliers who today form an important pillar in the cross-manufacturer range with their hardboard kits. We are talking here about the architectural kit manufacturers Archistories and Modellbau Laffont.



"Grandpa with Children" (88557) is the name of this figure pack from Preiser, which stands out from many other sets in the programme.

The only thing they have in common is the material used and the production method using light-cutting technology. Their range of products could not be more different in terms of choice of prototype and construction philosophy. Depending on personal taste and plant theme, every Zettie is guaranteed to find what they are looking for at one of the two.

Artitec from the Netherlands has become a particularly important supplier. Various resin kits made the start at the end of the nineties, but in the meantime the programme has shifted strongly in the direction of prefabricated models. All of them captivate with the smallest details and an extremely realistic colouring. The variety of the programme ranges from figure scenes, bicycles and motorbikes to cars and machines, ships and buildings.

What would a model railway be without figures? Without them, all scenes would be static and without life. This was prevented by the manufacturers Preiser and Merten, the latter brand also belonging to Preiser today. Figure sets assembled according to themes have always formed an equally important mainstay of the small gauge.

With the increasing desire for more individuality, a door opened for special artists. From figure blanks, customised specimens could be made according to personal wishes, which optionally also have their hands on tools or musical instruments.



Two successful products with which scenes can be designed very individually and "not off the peg:" "two train drivers" by Trafofuchs (left) and the squirrel (right) by Klingenhöfer Miniaturen.

The author of this article remembers well the first time he met Birgit Foken-Brock of Trafofuchs: a fire brigade task force was one of her first creations. Today, her figures are constructed on the computer and output on the 3D printer before they receive their final colour.

Klingenhöfer Miniaturen is the second supplier of individually designed figures. Today, a wide variety of animal figurines form the main focus of the equally diverse range, which can no longer do without modern 3D printing technology.

Small-series manufacturers of the early days still had a certain aura. It was not as transparent to most people as it is today how the many small works of art were created. So, people were all the more amazed at the filigree fine models that were created.



An expert in this field was Detlef Beier from Bremen, who was active under the company BMT Beier. Tiny platform luggage trolleys, wheelbarrows and sack barrows (with gas bottles as loads), running platforms for the railway station or even the smallest cable holders, as they led next to the tracks to the shaped signals, were created in his workshop.

HOS Modellbahntechnik took over the legacy of Beier Modellbahntechnik (BMT) a few years ago. Although no old models were taken over into this programme, Heinz O. Schramm has filled many gaps with new designs that Detlef Beier left behind with his retirement.

After he retired, first 1to220-Modelle, and later HOS Modellbahntechnik, filled this gap. Heinz O. Schramm also has other working methods in his portfolio, in addition to etching technology, which is why he is also the most important traffic sign supplier for 1:220 scale today, for example.

Do not forget: Rolling stock

It takes many pages and lines to review the accessories market and its development in Z-gauge. And we have only been able to list the most important suppliers. Many are missing from this list and that is only due to space reasons, because they have of course also contributed to the current state of Z gauge.

For example, we would like to mention Z-Modellbau, which we recognised in detail in our 2021 awards and honoured for its overall work. And then Zmodell, formerly active in Ukraine, would also be an example from this round. This supplier is still young, but well positioned with plans for its return as soon as all the framework conditions for it are in place.



The E 69 02 from Z-Modellbau will also remain unforgotten, because this small-series manufacturer created models that were previously considered unmotorisable.

So, we have now deliberately moved on to the rolling stock, which was also enriched apart from Märklin's work. Railex, then still under the direction of Wolfgang Besenhardt, and later Roland Kimmich, and Schmidt from Hameln were active at an early stage. Westmodel should not be forgotten here either.

Railex shone early on with important pioneering achievements such as a detailed control on the express steam locomotive of the class 01 with a new boiler. But many other great conversions originated here, especially the Era I segment was skilfully and deliberately given a boost here.

Westmodel and Schmidt always chose other prototypes, which could be dated later and were often based on Märklin bogies. At Westmodel, for example, the Prussian ETA 177 battery railcar or the class 930-4 tank steam locomotive (Prussian T 14) remain in the memory.



Schmidt's V 320 001 was also useful as a small-series model under contact wire. Due to the very high price, however, its production run remained manageably small.

Schmidt's largest model was the heavy V 320, which will soon find a successor from Märklin, the small-series model can already boast more than 20 years of history there.

Later, Krüger Modellbau and Bahls Modelleisenbahn joined the list of small-series manufacturers. Firmly associated with the name Krüger are, for example, acid pot wagons, which were not offered in large-scale production for a long time and have produced a great variety here.



Not only complete wagons and locomotives were sold under the brand name Railex. Accessories or loads, such as this 20-foot tank container, were also included in the programme.

Michael Bahls is above all a specialist for steam locomotives. In addition to superstructures and conversions based on Märklin, the former Schmidt employee created other impressive masterpieces with the DB class 23 new-build steam locomotive and the Swiss "Elefant".

Also in the nineties, Heckl Kleinserien and FR Freudenreich Feinwerktechnik entered the market.

Dieter Heckl is above all a lover of Era II and has created many conversions that had their operational peak there. Among them are Bavarian local railway wagons, a full-scale G 10 goods wagon and small cattle wagons.

Harald Thom-Freudenreich was late to discover the European market.

After he had abandoned American models, he devoted himself to the German Federal Railway and Scandinavian models. Classics of his assortment were the NOHAB diesel locomotive or the Oppeln type boxcar.

We would like to close the enumeration of our historical summary, deliberately without any claim to completeness, with NoBa-Modelle. The duo behind this name celebrates its fifth anniversary in 2022 and thus belongs to the youngest suppliers of our scale. Certainly, however, it is a manufacturer with a lot of potential.



This DB self-service dining car WRbumz 138 from the Heckl Kleinserien programme was certainly unknown to many Zetties. The model, made with the help of etched sheets, exactly reproduces window sizes and arrangement on both sides.

Having started out with accessories and commercial vehicle models, designer Norbert Heller and product reconditioner Barbara Heller have long since discovered rail vehicles for themselves. After successes with tower railcars and modern commuter trains, the Ardelt crane 57 ton puts an exclamation mark. It has only recently been extended by an equipment wagon and tender for the fuel and water supply of the weight-lifter, which was once steam-powered in the prototype.

We can say that the field is well tilled and Z gauge is well positioned. So the prospects for the future are bright and we hope that art and skill will not diminish in the years to come until the centenary.

Internet pages of the active manufacturers:

- <https://www.archistories.com>
- <https://www.artitecshop.com>
- <http://www.bahls-modelleisenbahnen.de>
- <https://www.busch-model.info/>

- <https://www.faller.de>
- <https://fr-model.eshop.t-online.de>
- <http://hecklkleinserien.de>
- <https://www.heki-kittler.de>

- <http://www.hos-modellbahntechnik.de>
- <http://jmc-scalemodels.blogspot.com>
- <https://www.noch.de>
- <https://www.klingenhoefler.com>

- <http://krueger-modellbau.de>
- <https://www.maerklin.de>
- <https://www.mbz-modellbahnzubehoer.de>
- <https://modellbau-laffont.com>

- <https://www.mo-miniatur.com>
- <https://www.noba-modelle.de>
- <https://www.preiserfiguren.de>
- <https://www.revell.de>

- <http://www.trafofuchs.de>
- <https://viessmann-modell.com>

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50 years of Z gauge (Part 7)

This is Z-Gauge for our Readers

We asked you to let us and all of you know what Z gauge means personally to those who are involved with it in the year of its fiftieth anniversary. Our lucky fairy drew the following entries. Their senders will each receive one of the ten books "All about Z Gauge" that Märklin has offered as a prize.

We are happy about the participation and colourful impressions, which is why we also like to use them to impressively show how multifaceted, special and individual - in sum, unique - our gauge is by publishing it.

The prizes will be sent out in time for Christmas. Congratulations to all the lucky winners and thank you very much to all those who did not win for their participation.

"My fascination with the size still lies in the scale realisation of the railway.

Even though the scale of 1:220 often pushes us to the limits of what is possible, it is a lot of fun to work on the small things until the eye is satisfied. You can't see a lot of things without enlarging them, but you notice that they are there.

Certainly, larger scales are more detailed, but the masses have these things and it is therefore no longer special, but if you can delight even experts with our trace, then you know that all efforts have borne fruit.

Hopefully the eyes and hands without trembling will make it possible to pursue this hobby for a long time to come."

Dirk Rohwerder, Sprockhövel

I remember the launch of the Mini-Club very well. My model railway dealer at the time, Kaps in Hamm, proudly presented me with the BR 89 that had just been released.

At that time, I was an N-railroader and this new gauge was much too small for me. Today I am an enthusiastic Z gauge enthusiast and am always amazed by the excellent detailing of the models.

Rainer Hetfeld, Bad Sassendorf

50
Years
of Z Gauge

What is it about our small gauge that fascinates you so much??

"I have always appreciated the great possibilities of building layouts with a lot of landscape, even with limited space, with the aim of a 'landscape with a railway' instead of a 'railway with some landscape'.



„Landschaft mit Eisenbahn“ lautet das Ziel und Motto eines unserer Gewinner und das ist nach einhelliger Meinung unserer Leser nur mit der Spurweite Z ohne Kompromisse möglich. Foto: Jochen Brüggemann

Bernhard Stein already set impressive standards in this sense with his two famous Loreley and Geislinger Steige layouts in the 1980s. I have also followed this principle for decades, from my first layout (built 1980 - 1989), then with a landscape segment of the ZMRR community layout (built 1993 - 1996), and also with my layout currently under construction (since 2002)."

Jochen Brüggemann, Essen



"Sisiphos" moves locomotive and wagons seemingly without any power supply. Photo: Matthias Wozniak

Mathias Wozniak from Mühleberg (Switzerland) writes to us: "In 2022, Z-Spur celebrates its 50th birthday - 25 years ago I met my partner and with her also the Mini-Club. Since then, I have been enthusiastic about the products and their unique possibilities."

In his own special way, he congratulates with two technology arrangements called "Rolli Rapid" and "Sisiphos", on which models seem to move as if by magic.

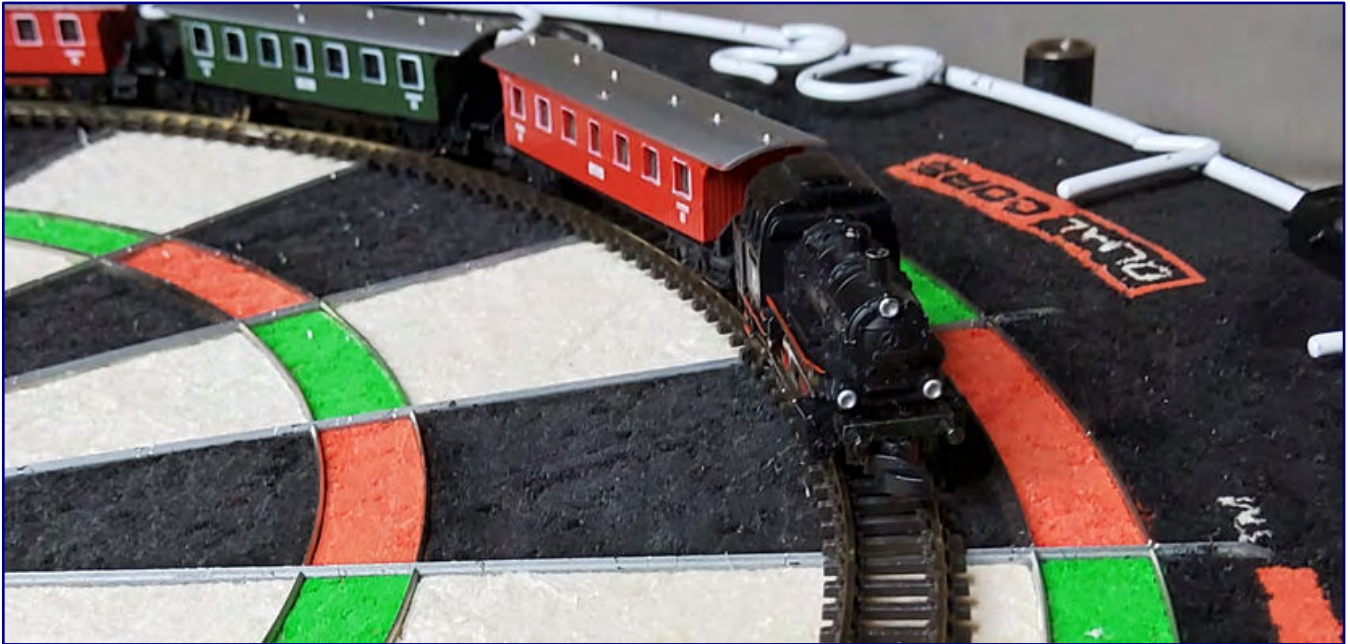
We present this great idea in moving pictures on Trainini TV: https://youtu.be/xwFyiM_ioTk

"What fascinates me so much about the Z gauge:

- that I can still run my almost 44-year-old locomotives and wagons that I got as a Christmas present in 1978 when I was nine years old.
- that the Z gauge with 6.5 mm internal dimension is even narrower than a double field (8 mm) on a dartboard (darts is my second hobby!).
- that I could put my just emerging diorama "Terminbahnhof Neuffen" with the track plan based on the original on 177 x 25 cm on a shelf.
- that I can fit the 33.50 metres of track of my main layout on just 2.15 square metres in the living room.

- that I use both analogue and digital on my layout and that both have their appeal
- that it is always a challenge of this small scale to keep the trains running, without unplanned stops on a switch.
- that despite a long abstinence from my Mini-Club (about 30 years!), I found love with it again in 2020."

Klaus Lehmich, Vreden



At 6.5 mm, the Z gauge is even narrower than a double field on a dartboard, yet our models run as precisely as clockwork! Photo: Klaus Lehmich

An idea, a conception, turning one's own imagination into a model is certainly what drives almost every model maker.

The fascination of 1:220 scale, however, also consists in realising a richness of detail not thought possible and in creating a work that can only be recognised as a model on closer inspection and that always leaves the mouths of exhibition visitors agape, especially when many of the decorative details are created by oneself, because they are not produced in series by anyone else.

Especially in Z-gauge it is true: "Can't be done - doesn't exist!"

Friedrich Scholta, Köln (Cologne)

For me Z is the greatest. Thanks to all the people who have made this possible over the past 50 years.

I still have the memory of buying my first starter pack when I was 14 years old. And now, after all these years, I'm glad I did.

During the trip I met many enthusiastic people to help and support. On to the next 50 years!

Pieter Willems (Belgien (Belgium))

What is it that fascinates you so much about our small gauge?

- It's inherent in our DNA to find smallness appealing; from the cuteness of a baby animal to the wonder of quantum mechanics.
- Z scale gives us smallness in the model railway world.
- Z scales smallness gives us the ability to create highly detailed, beautiful and accurately scaled mini worlds in the most mini spaces.
- Happy 50th anniversary to Märklin and Z scale! You have given me the greatest amount of pleasure in the smallest way possible.

Two images attached of my recent (2021) and first Z scale layout, created on an office desk, that was only possible because of Märklin and Z scale.

Rick Pullin, Quarteira (Portugal)



In any other scale, a layout of this dimension would not be feasible within the living space. Photo: Rick Pullin



“There is room in the smallest hut”, but only thanks to the advantages of our Z gauge. Photo: Rick Pullin

Congratulations to everyone for 50 years of Z gauge modelling. Railway modelling which has become more and more amazing year by year.

I remember seeing some of the wonderful early Märklin advertisements in the 1970's such as the class 89 inside a walnut which inspired me to find out more about Z gauge. The fascination with collecting and modelling in Z gauge is of course the small and very detailed scale of the models.

As a Z gauge modeler living in the UK, reading the international edition of your magazine keeps me up to date with the latest news and lots of interesting and useful information.

Darren Bentley, Lincolnshire (United Kingdom)

It was a pure coincidence that made me become a Z-train enthusiast in 1978 (confusion between N-gauge and Z-gauge), because until then I had only known the H0-gauge from Märklin.

So my employer gave me an initial package with turnouts, tracks and Toporama.

When I had the package with the contents in my hands, it was like Christmas for me, even if it was in October. I immediately set up the layout and was thrilled by the little locomotive with the two goods wagons.

This enthusiasm has remained, because in the long time I have acquired about 90 locomotives and about 500 wagons.

And today, now 74 years old, I still enjoy watching the locomotives and their wagons making their rounds on the Toporama.

Peter Racher, Grabenstätt



Readers' letters and messages

Zetties and Trainini in Dialogue

Thank you for each letter to the editor and all the feedback that reaches us. Write us (contact details are in imprint) - Trainini® lives from dialogue with you! Of course, this also applies to all suppliers in Z gauge, who would like to introduce innovations here. A representative sample is our goal. Likewise, here we note any events or meetings with significance to Z gauge reference, if we are informed in time.

Limited anniversary model number 2:

In **Trainini®** 3/2022 we announced a special model in the article about railway service cars with the photo of the printing representation, which may have been completely overlooked by our readers.

This 2nd anniversary model of the 1zu220-Shop, again produced in close cooperation with FR Freudenreich Feinwerktechnik and **Trainini®** has been produced in a unique edition of only 40 pieces.

The number of pieces was carefully weighed and determined between the selectable batch sizes resulting from the specifications of the etched boards and the expected market opportunities. It is clear to those involved that the number of pieces is tight, but it was the only one that was economically justifiable. And after all, an anniversary model should be something special, not a mass-produced item.

To ensure that all interested parties had equal opportunities to get hold of one of the special models, the sale was announced in advance in the news on our portal pages. The wagon could be ordered from Friday, 25 November 2022 at 17:00. On Saturday morning, this model was already sold out.



This 631 equipment car (Item no. 49.342.31) is the second 2022 anniversary model from the 1zu220-Shop, produced by FR Freudenreich Feinwerktechnik. It also enriches the latest Märklin construction train with its high recognition value.

A Bundesbahn service freight car of epoch IV was chosen. It is based on the former wartime Bremen design, which was modernised after the war and, among other things, received new exterior walls. As a

non-public transport wagon, it is painted ocean blue with RAL 5020; the roof is in RAL 9006 white aluminium.

This new product was labelled according to the historical model as equipment car 631 (item no. 49.342.31), which perfectly complements the construction train car based on the Oppeln and Märklin's car set 87761 that was previously released at the 1zu220-Shop. The special features of this wagon are its retrofitted windows, and the large axle base with wheels that protrude far out, which give it an unmistakable face.

The basic form of this model was once developed for the Stammtisch Untereschbach e.V. as a club model, and, with the permission of this club, is only being used for this second purpose with modified lettering. The wagon will therefore retain its distinct exclusivity in the long term.

Flood of new products at Modellbau Laffont:

A whopping eight new products have recently become available at Modellbau Laffont! No less than four of them offer individual combination possibilities and can be put together according to one's own taste.

The new single-track truss box bridge is available in reseda green (item no. Z4501) as well as in graphite grey (Z4511). Both are 165 mm long and can accommodate a catenary (height inside 35 mm). It can also be built up several times in a row and has replicas of the rivets on the gusset plates on longitudinal and cross girders.

If the matching bridge piers are used, the bridge can also be crossed under by tracks that are also equipped with overhead lines.

These 41 mm high specimens have fine quarry stone engravings and can also be shortened several times in height by means of dividing lines and cut markings.

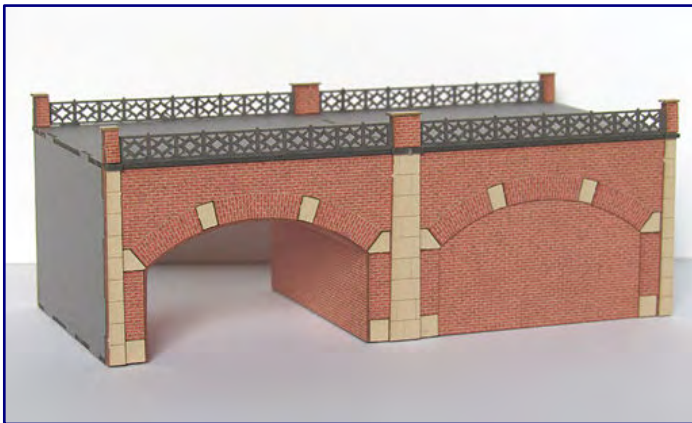
They are supplied in pairs, are also compatible with other bridges from the Laffont range and are available in the stone colours grey (Z4601) and grey beige (Z4611).

With new products number 5, the assortment of arcade elevated railway segments is expanded, which we already presented here in detail with a construction report.

New is now an example with a subway (Z2421). Like the other kits of this series, it has a length of 110 mm (corresponds to the Märklin standard track 8500), a track height of 34.9 mm and offers space for a double track with 25 mm centre distance.



The single-track truss box bridge in reseda green (Item No. Z4501) harmonises well with the bridge piers in grey beige (Z4611). Photo: Modellbau Laffont



The current autumn novelties also include an arcade elevated railway segment with subway (Z2421; photo left) and the brick shed (Z4001; photo right) for use in the Bw environment. Photos: Modellbau Laffont

Scenes between the tracks and in the depot are enriched by the new brick shed (Z4001). The rear wall is designed as a corrugated sheet metal façade with demolitions, the other three walls are dominated by finely engraved brick.

Modellbau Laffont is sweetening the Advent season on the layout with two Christmas market stall sets. The “Christmas Market I” set (Z6001) consists of a Christmas bakery, a booth, an entrance gate, and two wall partitions. “Christmas Market II” (Z6101) consists of a taproom and two booths with slightly different dimensions.



The “Christmas Market I” set (Z6001) belongs without a doubt to the current season and helps to create atmospheric layout scenes in an appealing way. Photo: Modellbau Laffont

All kits are made of solid-coloured architectural hardboard using the laser-cutting technique and do not require any colour treatment. However, this material can also be patinated individually, on request.

Model Railroading Day 2022:

On 2 December 2022 it will again be International Model Railroading Day. We hope that in our anniversary year many Zetties will take the opportunity to draw attention to our scale on this day or the weekends before and after, and to showcase our layouts appropriately.

We know of two events with participation in 1:220 scale, which we would like to point out here and hope that they will also be well supported by lively attendance: On the first Advent weekend (26th / 27th November 2022), an exhibition organised by Markus Schiavo, himself a fan of N scale, took place at the Binnenschiffahrtsstraßenmuseum in Duisburg-Ruhrort.



Scene from the home installation “Altenmühl Station” by Volker Bastek.

Clubs and private individuals showed their layouts, dioramas and other exhibition layouts. For Z gauge, Ralf Junius held up the flag with an arrangement of members' layouts.

He wanted to show how little space is enough to occupy oneself with this great hobby. Other exhibitors in our nominal scale were André Kammels with the “Stellwerk Marl-Sinsen” and Volker Bastek with “Altenmühl”. In both cases, these are the private layouts of the individuals.

On our homepage, we have already referred to this event in advance and here we once again mention the website address for more information:

<https://www.spur-n.com/tag-der-modelleisenbahn-in-duisburg-2022.html>.

On 4 December 2022, the second Sunday in Advent, the model railway club Soest 03 e.V. (<http://mes03soest.de>) invites you to an operating day in their club rooms. Among the layouts on display will be one in Z gauge.

This is what AZL releases in November:

The ALCO PA1 and the new container wagons also dominate November at AZL. The diesel locomotive with a “bloody nose” from Southern Pacific (Item Nos. 64418-1 to -3) and in the Erie-Lackawanna livery is on its way to the customer (64406-1 / -2).



The Maxi IV coaches are shown here in the version for Bran (item no. 906551-2; photo left) with the BNSF circle logo (906559-1; photo right). Photos: AZL / Ztrack

The Maxi IV wagons are available in various container configurations in Bran blue (906551-1 to -5) and brown with BNSF circle logo (906559-1 to -4). Manufacturer photos of the current deliveries can be found at <https://www.americanzline.com>.

The smallest Christmas tree in the world:
From 1 Advent (27 November 2022) until Thursday, 28 December 2022, the world's smallest Christmas tree will once again be on public display.

The world record, which has existed since April 2007 and is recognised by the Book of Alternative Records, attracts many interested people to Dortmund every year to see this tiny tree on the fringes of the Christmas market.

In recent years, the scenery has been freshened up and animal figures in the diorama have been changed so that the tiny creation can also present itself in an attractive environment.

It can be seen daily in the shop window of Galerie Lamers at Kleppingstraße 8 (pedestrian zone near the Reinoldikirche underground stop).



Embedded in a wintry diorama, the world's smallest Christmas tree presents itself to visitors. The arrangement in the shop window is stylishly framed by a shiny silver wooden frame.

More new products at EtchIT-Modellbau:

With the commercial vehicle IFA W50 BTP 4x2 as construction crew vehicle with long cabin and platform/canvas cover (art. no. XD155btp_Z) EtchIT-Modellbau (<http://etchit.de>) has realised the workhorse of the former GDR in this version. The roof rack and tarpaulin are designed as separate parts so that the customer can depict different uses and also facilitate multi-coloured painting.

The photo shows an N scale model, which, however, largely corresponds to the counterpart of our size. At this point we can also reproduce a product image of the hydrants presented in the last issue. These are print simulations, with which the later output quality on the printer cannot yet be fully reproduced.



The IFA W50 BTP 4x2 is shown here as an N-scale model as a construction crew vehicle with long cabin and platform/tarp (item no. XD155btp_Z). Photo: EtchIT-Modellbau



Pressure simulation of hydrants for Z gauge (XD002_Z). Figure: EtchIT-Modellbau

Delivery push for the Christmas business:

The class 194 freight locomotive (item no. 88225) in chrome oxide green seems to have been delivered in full. The Era IV model with German Federal Railways markings is state-of-the-art; and, unlike similar predecessors, now has an umber grey roof.



The now delivered class 194 freight locomotive (item no. 88225) wears a chrome oxide green paint scheme, which could not be seen from the product image, which was too dark. Photo: 1zu220-Shop (Jörg Erkel)

The four-piece US freight car pack (82497) with four Union Pacific covered bogie cars has also gone on sale in its entirety. This is a reissue of well-known models with compresses on the occasion of the 160th anniversary of the Union Pacific this year.

We have already mentioned the DB goods wagon pack (86070), which warranted a detailed look because of the new shape it contains.



New catalogues published:

The new main catalogue 2023/2024 from Noch, which summarises the current programme of design material and accessories for building and landscaping as well as the assortments of the partner brands, has just been published.

At Märklin, too, the new catalogue 2022/23 is currently being delivered to the dealers. As with Noch, all the new products known, so far, are included in it. In the case of Märklin, however, this also means that the Insider Club model 2023 cannot yet be found in it. As far as we know, this will be announced on Model Railway Day (2 December 2022).

Faszination Modellbau Making in Review:

From 4 to 6 November 2022, Faszination Modellbahn took place at Messe Friedrichshafen. Why it now adorns itself with the label "Internationale Modellbahn-Ausstellung" (International Model Railway Exhibition) after the end of the traditional exhibition in Köln (Cologne), unfortunately, remained unclear for us.



Faszination Modellbau in Friedrichshafen was well attended, and, for the first time it was also able to adorn itself with the label of the Internationale Modellbahn-Ausstellung (International Model Railway Exhibition).

We could not see any change in the trade fair concept, which continues to include all model building sectors. The internationality also appeared to us to be on the same scale as at previous editions. Of course, this fuels the impressions of those who thought that the end of the exhibition in Köln (Cologne) was not accidental, but deliberately brought about, in order to be able to use an effective advertising name elsewhere.

Our scale was well represented in their anniversary year, at least on the idealistic side, by the Z-Freunde International. We will report on this in more detail in the December issue.

Current deliveries of Micro-Trains:

Micro-Trains delivers its Christmas wagon 2022 with Micro-Mouse motif (item no. 548 00 150) and its wagon number 9 from the Railroad Magazine special series (502 00 648). Both are covered freight wagons.



This is how the 2022 Christmas coach (item no. 548 00 150; photo left) looks. Also announced for delivery is the covered 50-foot car in Great Northern blue (511 00 51; photo right). Photos: Micro-Trains

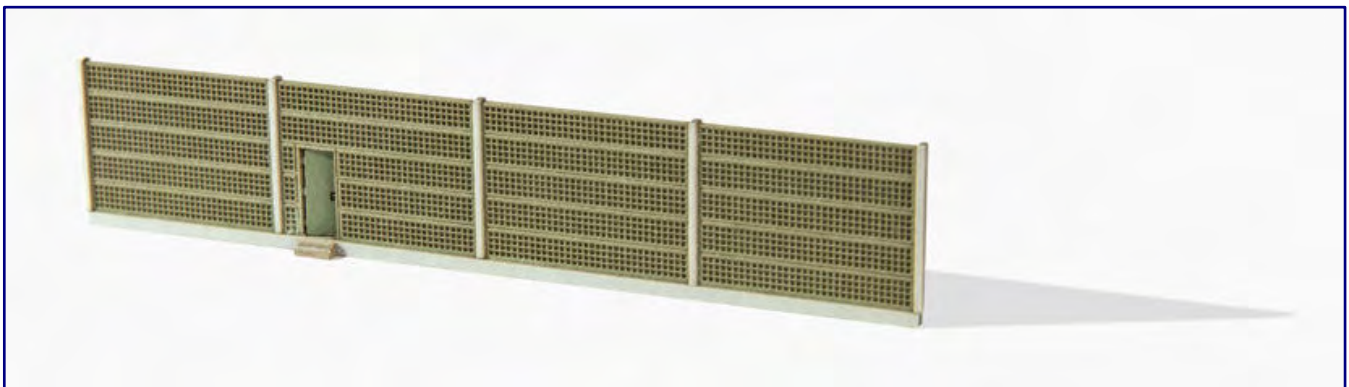
50-foot copies appear in brown, blue and red for the following railway companies: PRR (511 00 011 / -012), ATSF (511 00 273 / -274) and Great Northern (511 00 051 / -052).

New from Archistories:

Archistories has some new products to announce, but first it should be noted that the articles “Building fence” (art. no. 810171) and “Sandstone slab” (806181) will no longer be available. Instead, the following products will now be added to the range as autumn novelties.

The noise barrier (816221) is certainly not an expression of aesthetics, but today it is found alongside railway tracks and roads to protect residents from traffic noise with its sound-absorbing, horizontally inserted panels.

The kit reproduces this in a prototypical way including the fine square perforation between the light grey framework, on the opposite side the panels are correspondingly smooth. One segment also has a maintenance door with stairs. In three segments the kit covers a length of 303 mm, the height is 19 mm.



Elaborately reproduced is the new noise barrier (art. no. 816221; photo above), while the old construction fence (805221; photo below) attracts attention with its reproduced damage. Photos: Archistories

The mountain meadow fence (815221; to be seen in the diorama building article) can also be used in many ways, because the rustic wooden fence pacifies meadows, cattle pastures or paddocks at high altitudes, and is also a filigree eye-catcher next to hiking trails or at forest edges. The height is 5 mm, length and division correspond to the previous article.

The old building fence (805221) also has a rustic design and is also supplied in three elements, but measures 319 mm in total length. Its height is 9 mm. It shows some gaps and crooked slats for the decoration of fallow land, building sites or industrial areas.

For individual nailing and modifying kits, the new sandstone masonry slab (804221) is intended to represent sandstone masonry in Roman bond. Repetitions of the individual stone blocks are inconspicuous. The plate measures 115 x 170 mm with a thickness of 0.4 mm and is smooth on the back.

American barns in two designs are produced on behalf of Ztrack: The mansard roof barn 'Gambrel' (106221) consists of three structures that can be arranged as desired. It is available in four colours. The version with the 'Saltbox roof' (110221), which consists of two structures that can be arranged as desired, even has five colours.



The new mansard roof barn 'Gambrel' (107221) consists of three structures and is presented here in the red version. Photo: Archistories / Dirk Kuhlmann

These buildings feature full-surface wood engraving, roof surfaces treated with real rust and classic advertising lettering "Mail Pouch Tobacco" on one of the facades. However, this wall can also be exchanged for an unlettered one. So, these barns are also suitable for some European themes.

All Archistories kits are made of precisely light-cut architectural hardboard. The kits of the own product line are available directly from the manufacturer (<https://www.archistories-shop.com>) and from selected distribution partners.

Advance notice for the Trainini Photo Calendar 2023:

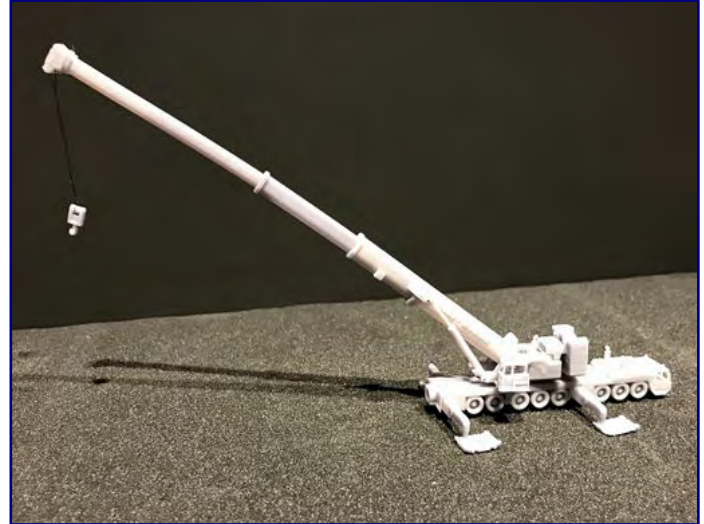
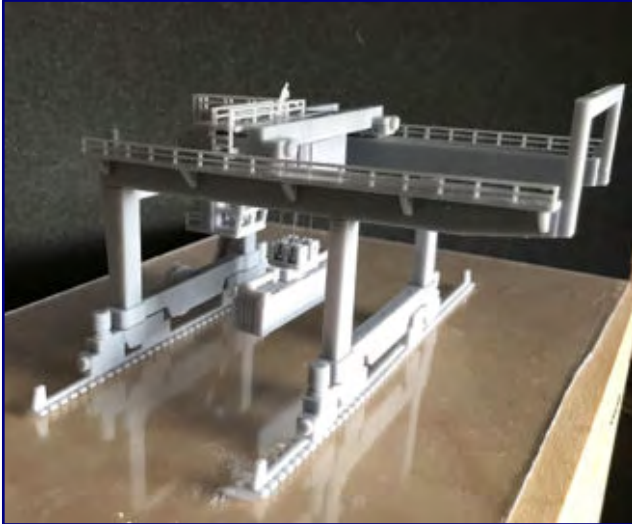
Usually we have announced the **Trainini Photo Calendar** in November 2022 and made it available for self-printing on our pages. This year will be no exception, as there will also be a German and an English version for 2023.

However, due to existing backlogs on last month's issue, on our **Trainini TV** channel and some construction projects, we have decided to finish and publish it only in December, in order to slightly ease our schedule.

In return, we promise that once the motifs have been selected, a beautiful **Trainini Photo Calendar 2023** awaits you, depicting all types of traction and many railway administrations as representatively as possible for the cross-manufacturer Z gauge programme.

New products from NoBa-Modelle:

As new products in November, three models have been released by the 3D printing specialist. First, and foremost, is the large container crane (art. no. 3105R) for the rail-road transfer points of Z gauge.



Large container crane (art. no. 3105R; photo left) and Liebherr LTM 1500 truck-mounted crane (6390R; photo right). Photos: NoBa-Modelle

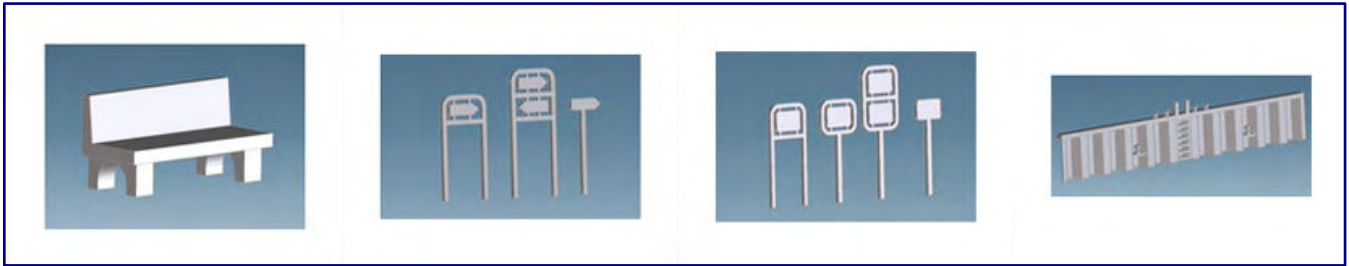
But the Liebherr LTM 1500 (6390R) truck crane also seems to be able to lift quite a few loads, because the crane superstructure can be rotated manually and its support legs can be pulled out manually. Since the boom can also be telescoped three times and the hydraulic cylinders can be extended and adjusted in inclination, nothing stands in the way of flexible model use.

The Ardelt steam crane also gets company. Available as a kit (5323R) as well as a finished model (5323RF) are a tender 2'2' T 34 and a covered service freight car G 10. They are used to supply the crane with coal and water or to transport necessary material.



The DB-modified 2'2' T 34 tender and a covered service freight car G 10 (5323RF) complement the Ardelt steam crane in its duties. Photo: NoBa-Modelle

For downloading for own printing, NoBa-Modelle has opened a new product series in which selected models are to be placed that fill edge and cross-section themes. STL files are available for the following themes for the time being:



These models are new in the small series manufacturer's programme as STL files for self-printing. Illustration: NoBa-Modelle

Park/seat benches (21001), a sheet pile wall with 15 mm height (21002), place name signs (21003), and information signs (21004). The complete programme can be found at <https://www.noba-modelle.de>.

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