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Z Gauge in North America

Model Railway for Health
The Interior of the Locomotive Shed

50
Years
of Z Gauge

Introduction

Dear Readers,

I, Dirk Kuhlmann, have taken the time over the last few days to check the special trunk used for exhibitions.

All the important components were still in place, but I was startled to realise that my last public presentation was in February 2020.

Since then, the Covid 19 virus has thwarted all my pre-planning, even to the point of events that I was unable to attend due to postponements.

In the process, I also caught myself thinking about whether an exhibition should be visited at all in the future. Presentations on the internet, reports in magazines and the smallest real meetings were enough in these rather odd times, weren't they?

Far from it, this small, but benign, exhibition virus is still there. A quick look into one's own photo archives helps, and it could actually start right away. Whether you are an active presenter of your model railway or a trade visitor, a high level of cohesion is extremely important, especially for the smaller gauges.

Now, in the worst economic times, this continues to show the high level of interest and, incidentally, helps the entire industry. Currently, for cost reasons, I am focusing on just one fantastic hobby – model railroading!

The second hobby, photography, must get by with the equipment that is available. After all, I was able to use it to document the decline, the interim periods, and the new beginnings of the old railway town of Opladen for over 20 years. A small selection is shown for the first time in this magazine.

In the second part of his series of reports, Heribert Tönnies takes us back to the old Märklin locomotive shed, which, according to his modification proposals, no longer corresponds at all to the original model. Even on a modern layout, the model would fit very well.

Fresh and healthy and back “on duty,” I, Holger Späing, would also like to say a few words to our readers. Since the middle of the month, I have been writing and editing diligently again.

I want to recommend that you take a look at North America, where the 50th anniversary of our gauge is also being celebrated, with Japan, a third important foreign market, on the agenda for the last quarter.

I also used my time out for my health to pursue model building. I was able to experience that it also fits in perfectly with occupational therapy. Model making can cure and also promote and maintain health. Did you know that? In two parts I will explain this in more detail and show you the results of my “research.” Dirk and I hope you enjoy again reading this edition!

Sin-Z-erely,

Dirk Kuhlmann & Holger Späing



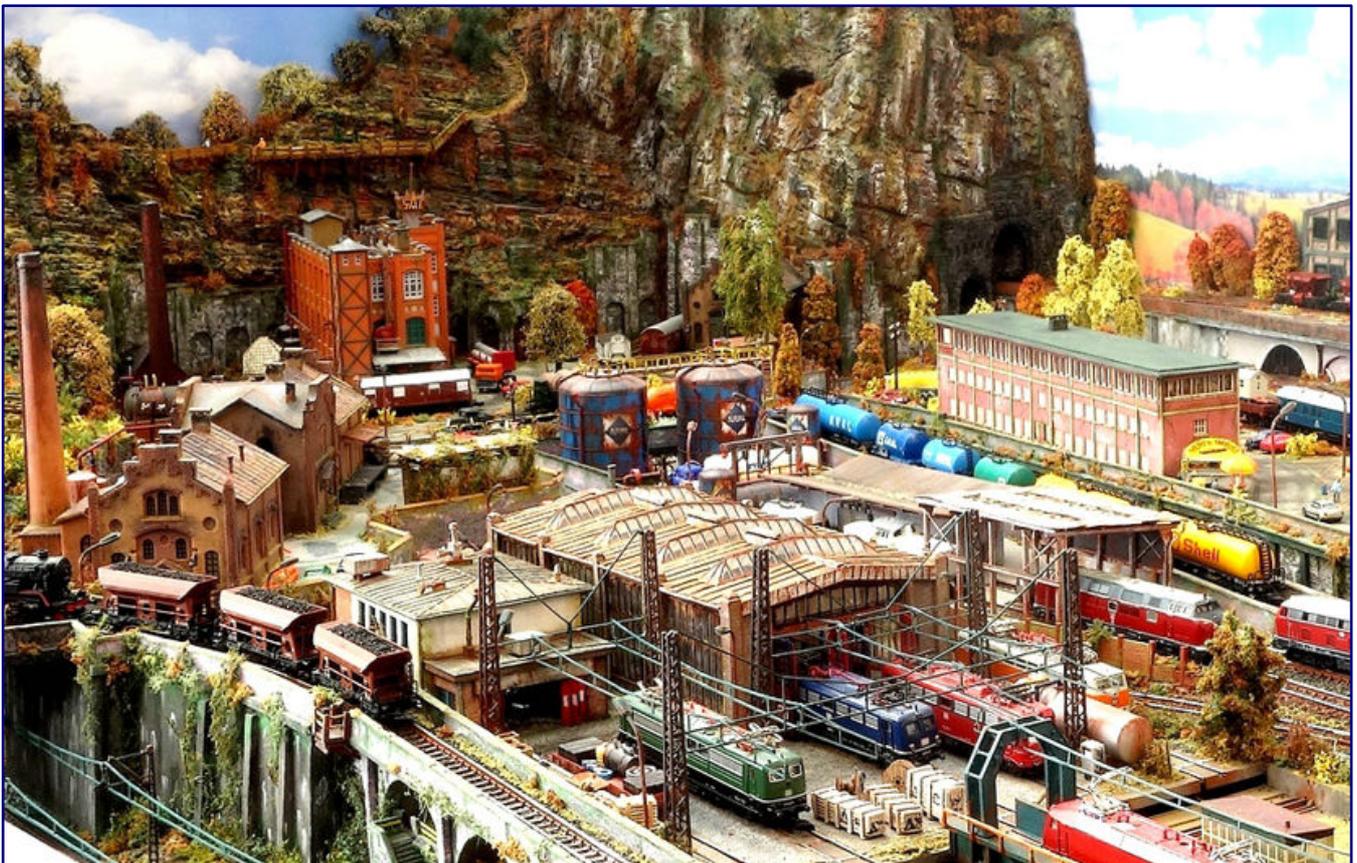
Dirk Kuhlmann
Editor

Holger Späing
Editor-in-chief

A convincing locomotive shed (part 2) **Roof Works and Interior Design**

After our reader and book author Heribert Tönnies described the preliminary considerations, planning and the first conversion measures in Part 1, the project can now be completed. The further building steps are presented in no less detail in this second part.

By Heribert Tönnies. In the first part of this short series, we completely changed the appearance of the aged Märklin electric locomotive shed with simple means such as paint and Redutex texture sheets. The model was given a patina that corresponds to many years of operation and that makes for a unique look.



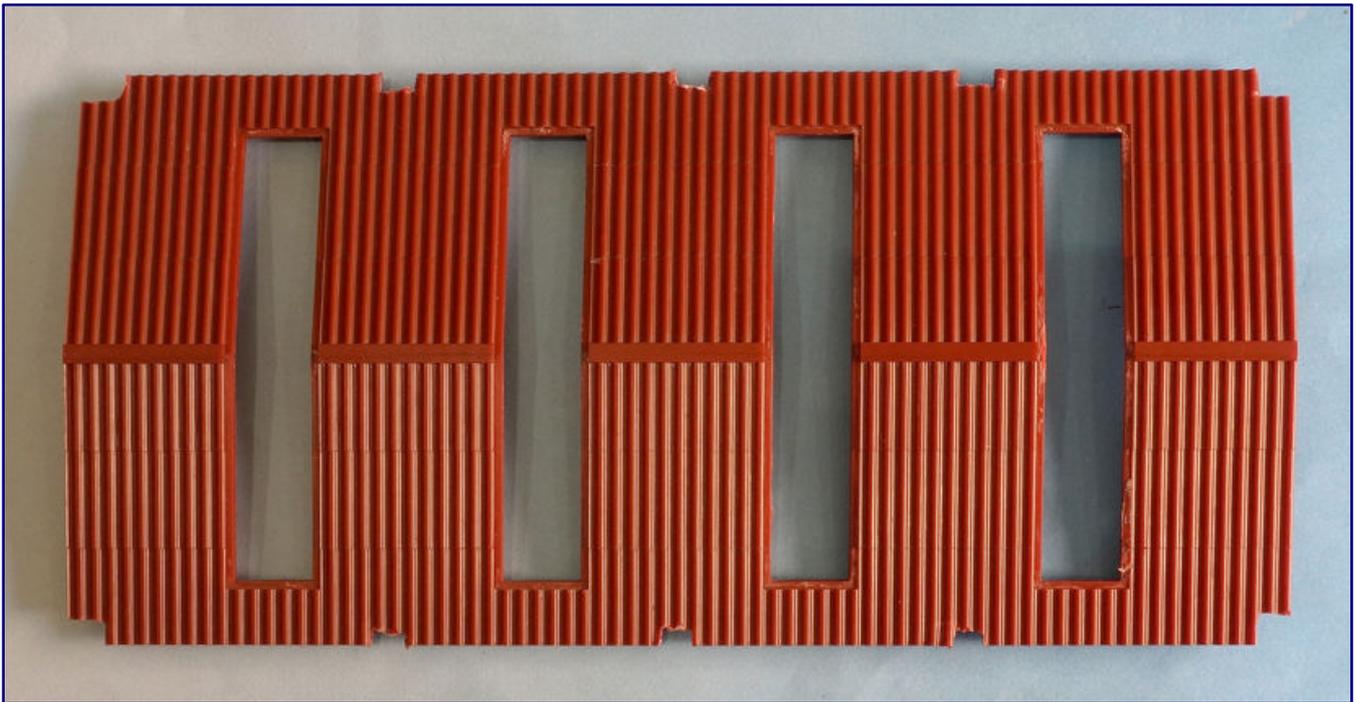
In the first episode, Märklin's aged electric locomotive shed received a completely new exterior as well as a patina that reflects the ravages of time. Today, the roofing, the doors and an adequate interior will follow.

The plastic kit (which is no longer in production) has already taken on a custom made and individual appearance, but we are not finished yet: As promised, today we will devote ourselves to its roof, the interior, the gates and other things that are important for a convincing result. We start today's work session with the shed's roof.

Roof surfaces

The original roof is already embossed with corrugated metal roofing, but it looks new, sterile and has an unnatural sheen. The structure is also a little too coarse for me and the skylights still need to be adapted to the new architecture.

The photo shows the already dismantled skylights and the new notches for the masonry pillars.



I was lucky that the skylights on my finished model were very easy to remove from the roof surface by applying light pressure from below. Basically, the glued-in skylights can be left on the roof. However, it is a little more difficult to handle the window bars and to adjust the balsa wood lining.

For the further conversion I have the following options:

1. Build a completely new roof using the existing skylights,
2. Treat the roof with colour only (weathering), or
3. To completely cover the roof with texture sheets to give them an entirely new look.

For reasons of simplification and stability, I have decided on the third variant. My reasons for this are:

- High stability of the existing plastic construction (when the door mechanism is in operation, the roof must be easy to remove and fit again, but stable),
- I can easily fix (glue) the roof light bands again,
- New rain gutters, not yet present on the model, are easy to glue on,
- The somewhat thicker roof edges at the gables can be upgraded very easily with a facing, and
- with a texture sheet already aged by the manufacturer in a weathered surface look, an authentic corrugated iron roofing can be achieved very well even for beginners. This saves the time-consuming imitation of rust, sheet metal, weathering and moss traces, which can be applied with different colours and differentiated painting techniques. However, I will rework the colours of the roofing sheets used.

Note: "Checking and reworking the basic roof"
With some second-hand specimens it can happen that the roof does not lie absolutely flat, i.e., straight on the longitudinal walls of the model. I recommend checking this in advance and correcting the roof, if necessary, before working on the roof surfaces. By applying some slight heat, e.g., with water vapour, it should be possible to carefully bend these slight distortions into shape.

to be cut out on the back. Because the plastic sheet is relatively thick, I do not use a hobby knife for the notches, but a side cutter.

Tip: "Preparing the cuts with the side cutter."
To prevent the plastic from tearing further or uncontrollably at the interface beyond the end of the cut when cutting with the side cutter, the side edges marked for the cut are first pressed in only slightly with the side cutter blades, but not cut through. This creates a pre-stamped predetermined breaking point.

Only after that is the plastic completely cut through. Although there is no cross-section as a predetermined breaking point (cut boundary) at the planned end of the cut, the cut usually does not tear further if the plastic is not yet brittle.

However, if uncontrolled tearing is to be reliably prevented, a boundary cut at right angles to the planned end of the cut must be made with the hobby knife at the end of the cut. It is usually sufficient to just score the material. This cut then takes on the function of a predetermined breaking point/cut length limitation.

The original roof protrudes slightly over the window front at the sides. The new piers in front therefore require notches in the roof surface at these points.

To do this, I mark the outlines of the areas

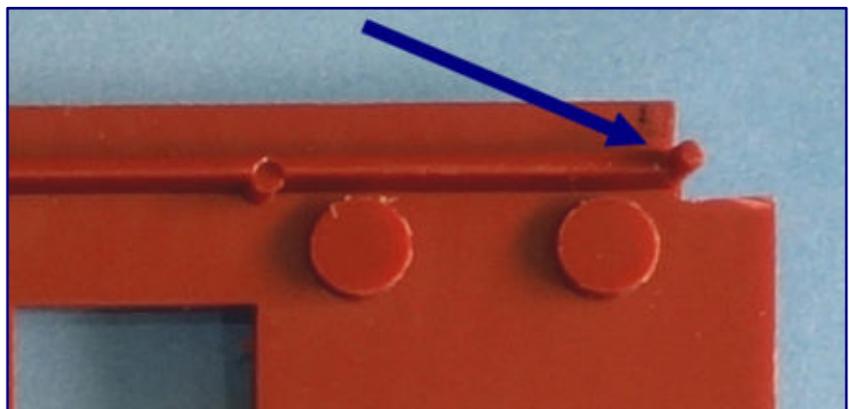
The notches for the corner posts are relatively easy to make and require only one horizontal and one vertical cut.

The cut-outs for the centre pillars are made up to the protruding edge formed on the underside.

Here, it is sufficient to make the two lateral cuts with the side cutter and then carefully break out the plastic part to be cut with needle-nose pliers.

If you want to be absolutely sure, you can score the breaking point parallel to the eaves along the edge with a hobby knife (predetermined breaking point). The ambitious model railroader may use a small grinder, a milling cutter, or the like, or pre-drill the corner points.

When making the cut-outs for the pillars, make sure that the small pegs on the four corners of the roof are not cut off. As described in part 1, this is used to fix the model to the model cube. In this respect, no larger pillar widths than those described in part 1 should be provided. Finally, the edges are straightened with the hobby knife.



Due to the planned gluing over of the original panel structure with structural foil and the thin balsa wood underlay, the cut-outs do not have to be 100 % accurate in this case. Minor inaccuracies can be covered with the foil lamination and the cut-outs can thus be worked to fit the pier heads exactly.

After a test fit, I start covering the roof surface. A simple solution is to cover both halves of the roof with one continuous foil each and then make the light cut-outs.

However, due to the recessed smooth adhesive surface around the cut-out of the light strips, the cut-outs cannot be created simply by guiding the hobby knife along the cut-out edges. The longer and wider roof cut-outs to be created would require meticulously precise measuring (strip light sizes, position of the cut-outs, distances, support heads, etc.). In the relatively large individual area, this would be an exciting task with a lot of potential for error!



I have therefore opted for a somewhat more elaborate, but ultimately, simpler solution, which also looks more authentic. I describe this procedure below.

The original roof panel is over-proportionally profiled. Gluing the roof panel on directly would therefore lead to unsightly effects and also reduce the adhesion.

That's why I cover the profiled plastic sheet with a 0.6 mm thick balsa wood sheet (it is also possible to use correspondingly thick cardboard).

The balsa wood can be perfectly adapted to the contours to be cut out (prop heads), which may be a little too large in the plastic sheet. Recesses for the light strips can be cut out now, or after the texture sheet has been glued on.



Tip: "Cut-outs for strip lighting"

To make the cut-outs necessary for a precise fit of the light strips, I run the hobby knife from below along the cut-out of the plastic roof surface and thus separate the first cut-out from the glued-on balsa wood.

Now you only have to cut out a strip of about 1.5 mm width for the gluing surface of the skylight from above along the edge of the cut-out, guided by a ruler or similar. I mark the cut-outs for the light strips by placing the light strips on top of each other and drawing around them with a thin felt-tip pen or similar.

At the eaves I let the balsa wood protrude about 0.5 mm over the plastic edge. The gutter will be glued under this later. At the top, the balsa wood cladding starts below the ridge upstand.

As a new roof covering, I cut approx. 6 mm narrow strips from Redutex corrugated roofing sheet texture, cut parallel to the course of the corrugation (corrugated sheet peaks/valleys). These strips are glued to the roof surface with an overlap of approx. 1 mm.

This results in an individual panel appearance in so-called couler width (width of the individual sheets). The individual sheet lengths are already embossed in the film as a slight elevation.

With the narrow strips, I can easily make the necessary adjustments to the intervening building components (supports) and to the light strips. If the overlapping appearance with accentuated 3D joint at the single panel edge is also to be achieved at the transverse joints, the strips can be additionally divided into shorter single panel lengths and additionally overlapped at the transverse joints.

Attention: The first panel strip must then always be glued on starting at the eaves, the others upwards with an overlap of 1 mm each. Why? If you started at the ridge, the water would run into the building through the open transverse joints in the direction of the water drainage – not tragic on the model, but, also, not prototypical.

This level of effort seemed too much to me, however, also because to compensate for the somewhat different appearance between longitudinal and transverse joints, it will be possible to "play" with light and shadow later on. In addition, the roof surface is sufficiently structured with the interrupting light bands and the exhaust vents that still have to be mounted on the ridge and will still be heavily aged.



To ensure that the individual strips have the same cross slope due to the material thickness in the overlap zone, an approx. 2 mm narrow foil strip can be stuck under the first strip on the left along the roof edge (verge) (provided that the installation of the roof strips is started on the left). Then stick the first roof strip on the left flush with the verge, completely overlapping the narrow strip.

The roof surface is now completely covered with texture strips, running vertically, with 1 - 2 mm overlap each. Cut-outs for the skylight strips and support heads can easily be cut off precisely in the individual texture sheet strips before gluing. The sheets end at the top of the ridge at the upstand of the plastic plate.

If you want it to be even more authentic, you can always apply the embossed horizontal joints slightly offset in height from strip to strip.

I design the other half of the roof according to the same principle. Because an original roof covering is oriented with the side of the overlap of the longitudinal joints to the main wind direction, the edges of the overlap on the model should also be on the same side in each case, i.e., either facing the gate or the rear gable wall.

This means that if the first half of the roof was started on the left side, the second half of the roof must also be started from the left, as can be seen clearly in the photo. I let the roof foil strips protrude minimally over the balsa wood at the eaves. The somewhat frayed edges are deliberately designed this way, because it is a roof that is already decades old and in the process of weathering.



For the rain gutters to be glued between the pillars, I use Evergreen "Half Round" 1.5 mm profiles. Because they are full profiles, I imitate the inner curvature with a black marker on the top centre. Then I use Tamiya XF-16 (flat aluminium) to draw a fine edge at the top of the outer edge and paint the gutter silver on the underside.

Before installation, it is also advisable to weather with rust and dirt traces. If plastic adhesive is used, a narrow strip must be left untreated at the rear edge of the gutter.

However, I attach the gutter pieces to the edge of the roof (eaves) with superglue.

Due to the curvature and the very narrow glue line, it is also possible to embed the gutters more firmly in wood glue. The chosen gluing method depends on one's modelling skills and should be tested in advance.



As can be seen in the photo, these semicircular profiles can also be used well for old, grimy buildings in 1:220 scale. The colour technique results visually in an open gutter.

Tip: "Timing of rain gutter installation."

According to the logical construction sequence, it would now be the time for the gutters to be attached. However, because the roof has to be worked on and moved frequently, it makes sense to move this step relatively far back due to the small size of the gutters and the narrow gluing areas. I have often found myself touching the edges of the roof, and thus the gutters, when inserting the roof into the model, thereby risking damage.

Because in the prototype, old gutters are often full of dirt, moss, and leaves – the roofers haven't been around for a long time to clean the gutters.

Due to the fact that the gutters are glued under the roof overhangs (balsa wood and texture sheet), their excessive width of 1.5 mm (i.e., 33 cm) is less noticeable. But in any case, larger, mostly industrial roof areas are also drained with wider gutters. If you want to work completely prototypically, you can use half-brass tubes for the gutters from the relevant accessories trade.

Roof structures

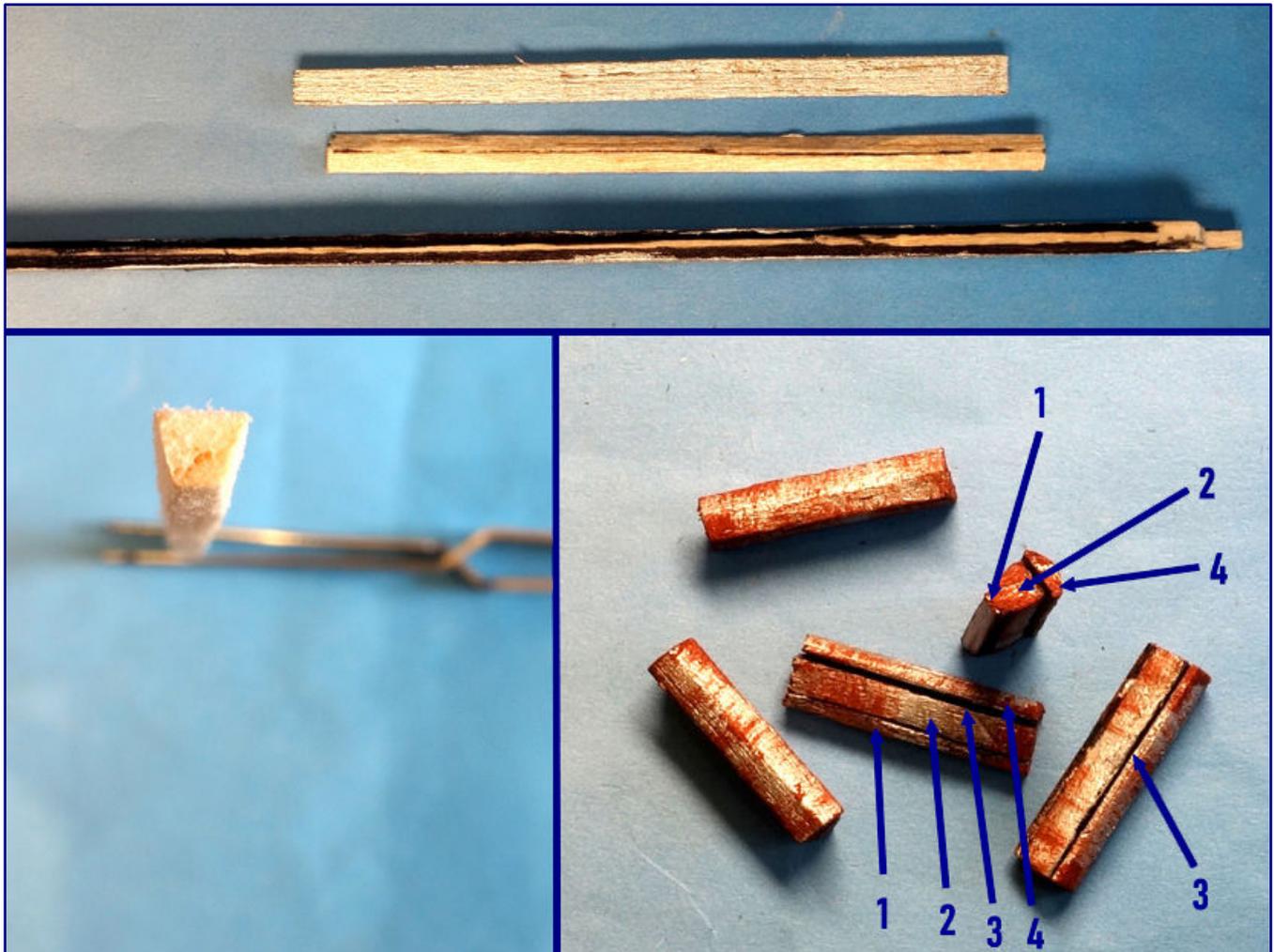
Before installing the hall ventilators, the roof light strips are glued back in place. Beforehand, the glazing bars and lower edges are to be coloured black, "rusted and mossed" as already described for the windows in Part 1.

To prevent the red edges of the roof panel from shining through the light strips at the roof cut-outs later, blacken these edges before installing the light strips. This also works very well and quickly with the marker pen.

And because the marker is already in use, the edges of the roof texture sheet and the thin balsa wood edge at the eaves, ridge, verge and the notches for the pillars are also directly coloured black to avoid light shining through.

I glue the prepared light strips into the notches with plastic glue. Depending on the (exact) cut of the roof sheets, make sure that the light bands are also pressed down completely to the plastic surface of the roof panel (and do not just rest on the roof texture sheet or the balsa wood)!

We can now turn our attention to the optional three fire dampers / hall ventilators. Ventilation engineers will forgive me, it will be a simplified representation: fire dampers open upwards, for example. The



ventilation units to be built consist of a thin base (1), the fan box (2), an intermediate strip as an air outlet slot (3), and the fan cowl (4).

The 2 mm wide base is cut from 0.8 mm thick balsa wood. For the fan box I cut a 3 mm wide strip from a 3 mm thick balsa wood board.

The side surfaces are to be sanded conically on 600 grit sandpaper. After that, the component is 2 mm wide at the bottom and 3 mm wide at the top.

To increase the level of detail and to imitate the air vents in normal operation (3), I cut a strip only 1 mm wide from 0.6 mm thick balsa wood. All three components are to be assembled along the centre axis with super glue.



Tip: "Cut pieces to a slightly larger size than needed"
 When cutting the components to size, leave them approx. 1 - 2 mm longer, because a small corner can always break off or a wood fibre can fray. Only after gluing the roof ventilators together, the head sides are sanded flat and to the required length with 600 grit sandpaper.

Now, the 1 mm wide strip at the top centre and the flat surfaces of the conical component next to it on both sides are coloured black, as are the narrow side edges of the plastic upstand of the roof

(ridge). The black creates a fine, strongly contrasting groove that emphasises the level of detail of the component.

To complete the part, I sand the fan cowl (4) from a 4 x 2 mm strip of balsa wood so that it forms a triangular bar. The lower edge width is about 4 mm. The underside is painted black and the fan cowl is then glued to the prepared component with fan box.

Only now are the components shortened to the required lengths, sanded down and everything painted with Tamiya XF-16 in a silvery matt finish. It makes sense to apply the corrosion marks, etc. already now.



Finally, the three roof ventilators are mounted on the ridge surfaces of the plastic roof. I had tried mounting five ventilator elements, but that was too much for me. Therefore, I glued a thin strip of balsa wood to the two outer ridge surfaces with a little overhang to the side, which I also painted silver-matt as a sheet metal preservation and then aged.

The sheet metal roof is also slowly gathering dust and is given a patina with rusty wash running in strips towards the eaves, partly applied using the dry brush technique. The intensity is again a matter of taste. I apply a little more, so that it matches the style of the old maintenance depot and to achieve a more homogeneous look.

Because the original roof is already more than 1 mm thick and balsa wood and roof sheets have been glued on, the verges on the gable ends have to be covered. For prototypical reasons, however, I would also do this with an original roof. I decided to use zinc standing seam cladding.

Analogous to the tip for the façade (plinth), I colour an approx. 1 cm wide and 0.6 mm thick balsa wood in silver colour on both sides and on the two longitudinal cut edges. Then, I cut 3.5 mm wide strips, each with a painted edge.

In order to maintain the correct angle at the ends of the verge strips to be fitted at an angle, I place the upper edge of the strips, which have been left slightly longer, against the edge of the roof and cut off the protruding ends at the eaves side and in the ridge area vertically with the hobby knife.

This way I get vertical edges without time-consuming measuring and fiddling with the protractor. Glued on with superglue, painted edge at the bottom, the result is a completely different look, see photo.

To complete the panelling, I draw vertical lines on the panelling with a fineliner pen at intervals of approx. 4 mm. These imitate a fascia made of zinc sheet in standing seam construction.

As is standard in my depot, the ravages of time have already affected the structure through corrosion. The comparison before and after impressively shows the difference to the original model.



Door opening mechanism

Despite the conversion to a rather dark look, the model is very transparent due to the large windows. Even the light coming in through the roof light strips makes the rear and side windows shimmer brightly. I have therefore now decided not to install the automatic door control in favour of an unobstructed view into the interior.

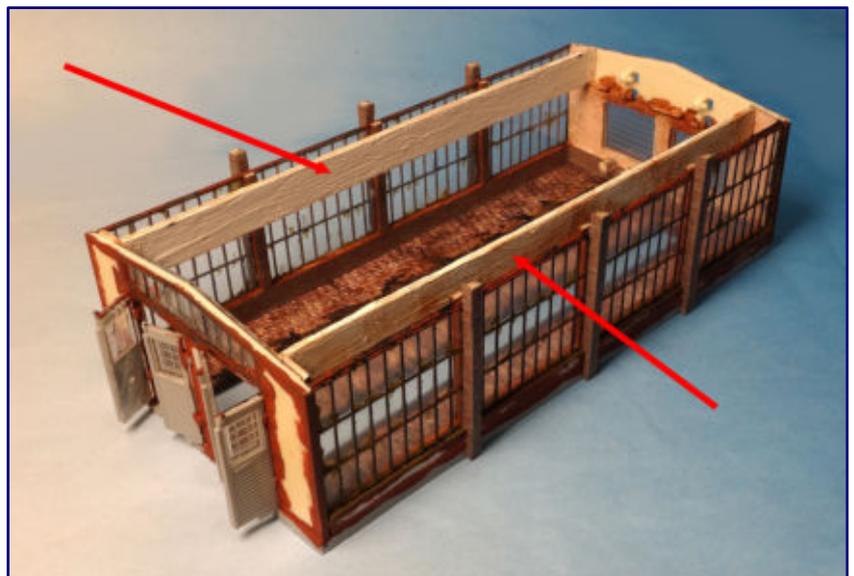
However, if the automatic opening system is to be retained, the low-hanging door mechanism and possibly also the power cables will be visible through the large side windows. To avoid this rather unattractive appearance, however, there is a simple solution.

Two side panels can be made from 1.5 mm thick balsa wood sheets and glued to the front and rear gable walls parallel to the longitudinal walls. The panels fit tightly against the webs moulded onto the gable walls to hold the base plate of the door mechanism (see photo).

The colour of these panels should be relatively light (concrete white) with a few traces of dirt pointing to the windows.

To illustrate this, I have mounted such panels on a test basis (I don't need them in my model).

Because I decided relatively late to not use the automatic system, I leave the plastic bars for the automatic door control system on the gable walls.



These now represent protruding concrete beams or other building components (in old halls, a lot was rebuilt, added to, demolished, etc., so that this look was also found in a similar way).

If you decide early on to leave out the door control mechanism, you can cut off these support bars and clad the walls room-high with balsa wood. However, I would leave the pegs for attaching the overhead line. That these components are not really disturbing in an old hall is proven by the atmospheric interior photo later in the article in the final stage of construction.

Inspection pits

After the roof and façade are largely finished, I turn my attention to the two inspection pits which I make out of balsa wood. To avoid repetitions, I refer to the book "Praxisanleitungen - Das Bahnbetriebswerk" (Practical instructions - the railway depot) offered on my website, in which I describe in detail the making with staircase descent, track formation and fastening for the locomotive upgrade track. Below are two photos showing the construction phase for the maintenance hall:

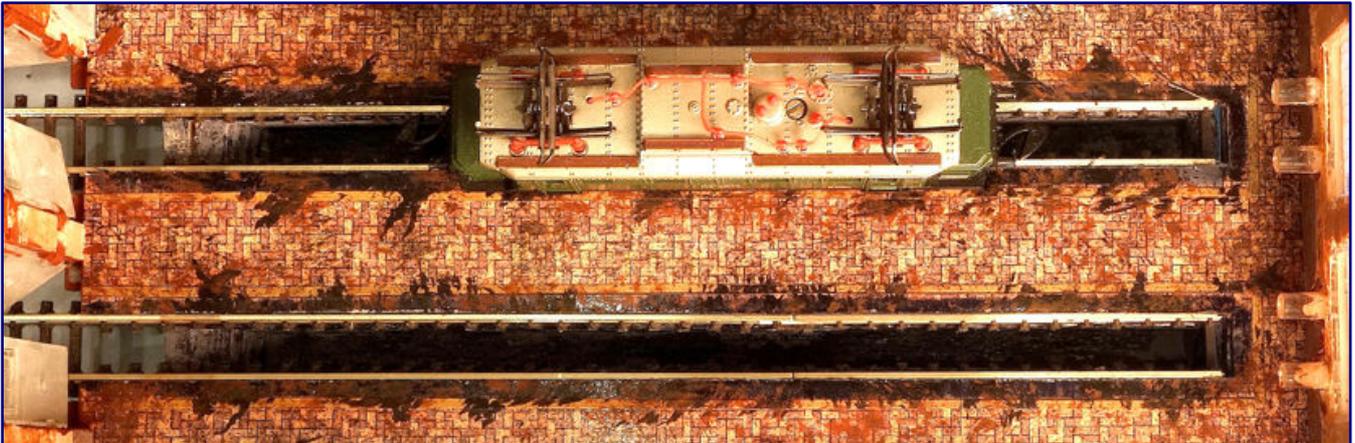


In the newly designed interior, I don't want to see the disturbing diodes on the track for the automatic limit switching. That's why I don't use the barrier track. However, there are other possibilities for using a structurally modified barrier track that do not show those diodes. I will not go into this in detail here.

However, in order to have all possibilities of an individual control of the tracks (block sections) in the maintenance hall (or from the transfer table in front of it), I solder power cables to both tracks. This way I am free to control the track in the future, either through the transfer table or separately. I hide the cables behind the pit walls.

A careful manual control of the locomotives, as long as there is no automated digital operation or other control units intended for analogue operation, is necessary due to the missing automatic limit stop; but there is no speeding in the depot.

Finally, the pits get lighting in the middle of each side wall and look coherent when installed, already weathered with oil and rust washes.



Interior

There are only a few models of buildings that have such great transparency as this locomotive shed and it makes sense to play on this advantage. That is why I have decided, also because of the building's location in the foreground of the layout, to also model an interior.



Because no major repairs take place in my halls, but rather maintenance and upgrading work, I limit myself, also for reasons of space, essentially to workbenches, supplies cabinets and here and there a few spare parts lying around.

Tip: "Resolution print templates"

To ensure that the fine structures and details remain relatively recognisable in Z scale printouts, a high resolution of at least 500 pixels per inch should be selected. Otherwise, with the usual 96 pixels/inch, the downscaled printout will only be completely blurred and "muddy."

As for the workshop equipment, I use a variety of Z scale printouts of various selected photos.

I glue the workbenches assembled using the paper model folding technique (only the front

and side parts are needed) onto rectangular balsa wood pieces, cut to size.

For a realistic finish, the workbenches get a worktop made of 0.5 - 0.6 mm thick balsa wood, which protrudes slightly from the front and sides of the cabinet body. Compared to cardboard, balsa wood has the advantage that a rough, prototypical surface is created with the paint for ageing.

Workshop trolleys and a liquid container (1,000-litre IBC) used in more recent times should not be missing either. Here and there, a pipe, metal part or the like glued to the workbenches and floors from handicraft scraps complete the scenery. Machines, lathes, etc., are also conceivable.



The photo shows a locksmith's shop during the conversion stage (also from a plastic kit), which has found its place next to an electric locomotive shed.

Here, too, a nice machine-like interior has been created with leftovers, mainly from old H0-gauge truck models.

So give your creativity free rein, it's worth it. And if not, the ambitious accessories trade and small series manufacturers now also offer very well-designed models using the 3D printing process.

This concludes the construction phase of the interior design and the comparison before/after shows the striking effect, despite the relatively simple implementation from my point of view.

Hall doors

The doors have a large material thickness due to the continuous transparent backing for the hinge formation.

Because it is not possible to simply adapt them without making changes (e.g., to the hinges), I use a trick.

I paint the hall doors in two colours. I run the dark colour of the door frames around the edges of the doors and let it end in the middle of the narrow sides (door edges) at the joint to the rear transparent plastic part.

On the inside, I paint the doors factory red. This two-tone effect makes the doors look more graceful when viewed from the edges.

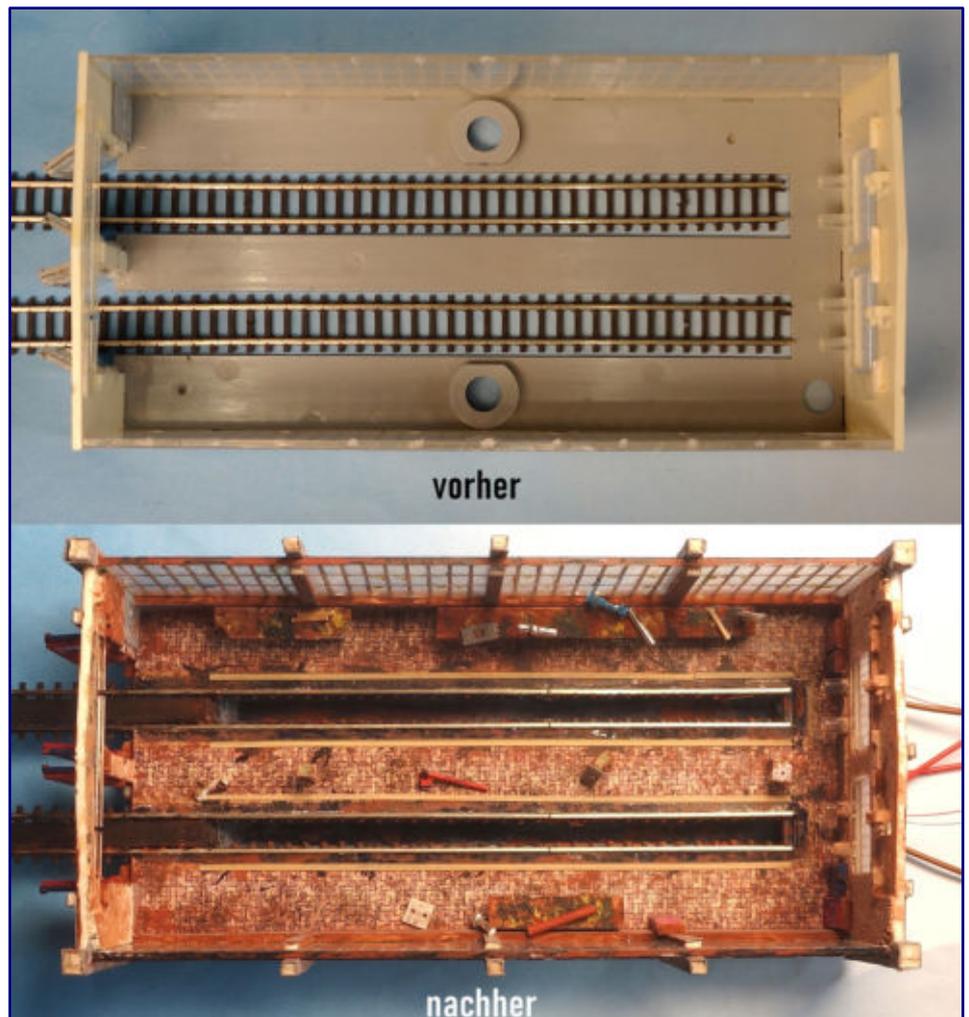


Photo above—before; Photo below—after



An alternative, which is only possible before assembling the doors, would be to sand the edges at an angle so that they appear relatively narrow all around.

Tip: "Painting accuracy"

Do not always be one hundred percent accurate with the buildings that are to be trimmed to look old. The paint applied with a brush on these models may also be applied a little thicker or in an iridescent colour - because in the past, people sometimes simply painted over rust, dents or missing parts.

After all, the maintenance depot should not appear squeaky new and old depots still provide examples for an authentic look. But if you want it to look "old in new condition", you mask the joints, colour transitions, edges etc., and use an airbrush. However, it is debatable which method looks more authentic as it has been in use for many years.

In connection with the painting of the gates, I directly apply the barrier boards. These can be a little slanted here and there, because they are already old and some screws have already been lost, the rust is still coming.

The photo also shows the effect of the bars on the gate windows, which were applied with overhead film and only become clearly visible with this measure.

Other

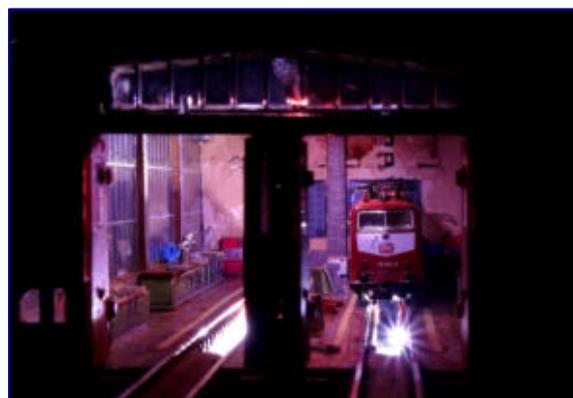
To increase the transparency of the hall, even in the dark at night, I am installing hall lighting under the roof. Because of the omitted door opening technique, I painted a rod (3 x 3 mm) black and mounted it under the roof in the ridge area as an auxiliary component. On the upper side I lead the strands of the lights to the gable wall at the back, concealed under a thin balsa wood panel.



To hide the cables leading down to the floor, I build a hollow pillar in the middle of the rear gable from strips of balsa wood, which is covered with masonry texture sheet.



Together with the pit lighting, an atmospheric effect is created, which is also maintained from the outside through the large windows.



Completing the corner outer pillars

Because the corner pillars are not made of solid wood, the cubic shape must still be added above the roof, facing the roof surface. To do this, I glue a 4 x 4 mm balsa wood rod into the open angle with wood glue or superglue, which is then adapted to the square contour with the hobby knife. I also cover these outer surfaces with masonry texture sheet.

Now only are the upper pillar covers missing. Because it is to be a pyramid-shaped cover, I need a simple solution. The covers could be cut / sanded from balsa wood or plastic parts. However, for two locomotive sheds I need 8 pieces of approx. 4 x 4 mm (corner pillars) and 12 pieces of approx. 3 x 3 mm (middle pillars). The effort to make these covers myself is too great for me.



Heeding my own advice is to always look at what is available in other hobbies, I found what I was looking for at "Strass stones" (rhinestones) (usually used for fingernail decorations, costumes, art pictures, etc.). There I found 50 - 200 pieces each of 3 x 3 mm and 4 x 4 mm, for about EUR 3.00 each, including shipping. There we go, "self-carving" makes no sense.

However, the large stones are not symmetrically formed with four equal sides, but are somewhat "playful" in diamond cut. The small stones do not have a pure pyramid shape either, but are flattened on the top. But, my architects wanted to give the locomotive shed a little Art Nouveau look. Painted silver and weathered, the result is completely acceptable to me in relation to the effort involved in building it myself.

Downpipes

Rainwater downpipes complete the façade. A few years ago, in the **Trainini**® report on the construction of lattice mast luminaires, I already referred to the very inexpensive LED street lights from China.

On auction platforms, for example, these are still offered relatively cheaply in packs of ten, including resistors.

Due to their diameter, unused lampposts are ideal as rainwater downpipes for large commercial/industrial buildings. With two small pliers I carefully bend the cranked upper part of the metal tube almost vertically upwards.

This creates a slight S-bend, which ideally imitates the bend transition from gutter to downpipe. Painted with Tamiya "aluminium matt," shortened to length and a



little rusty, a perfect downpipe is created, which only needs to be glued into the pillar corners. And here, too, for me: if there is a small kink, it's no big deal, after 40 - 50 years zinc pipes look like this.

I use superglue to attach the rainwater downpipes to each corner pillar and to the right and left of the centre pillars. This way, each partial roof area is drained separately in a prototypical way.



However, thinner brass tubes from the accessories trade are also suitable. A particularly inexpensive and easy-to-shape option is to use floral wire, e.g. Knorr prandell, with a diameter of 0.8 mm.

If you want it to be even more precise, let the tube end approx. 3 - 4 mm above the ground (on industrial buildings also higher for protection) and glue a metal or plastic rod with a slightly larger diameter underneath it as a so-called standpipe (in the original made of cast iron).

The photo shows an example from another 1:220 scale building project.

Even if no automatic door opening system is installed, the roof should remain detachable (a locomotive could derail in the hall).

That is why the rainwater downpipes must not be glued to the gutters, but only to the pillars!

And the somewhat crooked and slanted gutters correspond to the status of a "rotten place" in the early stage – this is how it should be in my model.

Catenary

Finally, a decision has to be made about the overhead line (OL). In the original model, the overhead lines are attached directly to the door opening plate and are hooked onto the retaining pins in the gable wall. If the electric door opening is retained, the OL belonging to the locomotive shed can be mounted directly, as intended.

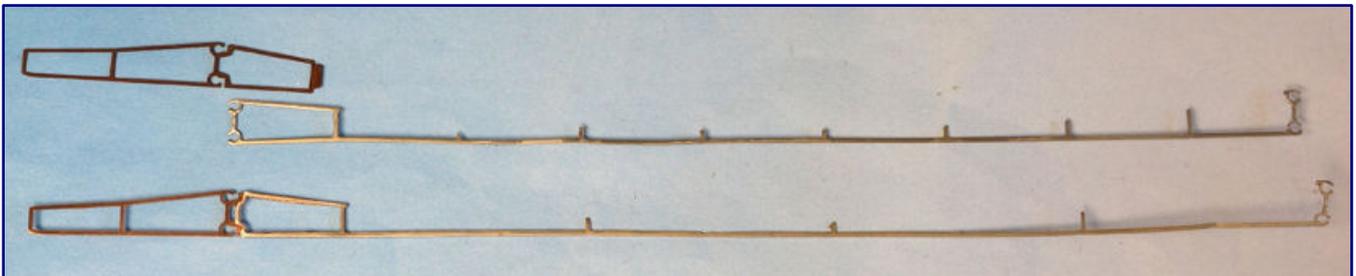
If the electric door opening is omitted, on the other hand, it must be decided whether the OL is also omitted. In principle, this is possible, because in the prototype, the locomotive can either drive itself in with an auxiliary motor without an OL or be pushed in with a small locomotive.

However, if you decide to install an overhead line without the standard door opening control, you should be aware that the installation of the overhead line is not that easy. It requires dexterity, coordination, and a certain amount of tinkering.

Instead, I use a transfer table in front of the hall, which is then also equipped with the technology-heavy overhead line for the sake of its interesting appearance. It is therefore logical to lead the overhead line into the hall.

There are several ways to do this, from building your own to using parts from the original model. I decided to use the original overhead line for simplification reasons and because of the already formed eyes. But because it is necessary to adapt it, here is how to proceed.

The OL is fixed with small metal pins in the base plate of the gate control, which are bent over on the top side when mounted correctly. With a small pair of pliers I bend the pins up and carefully pull them downwards off the base plate.



It could actually be hung directly back into the model. However, real-life operation with catenary should not take place because the structure is not very stable over the length of the building without intermediate suspension and there would have to be masts with cross braces directly in front of the hall for suspension.

Due to the high transparency of the hall, I am bothered by the protruding pins on the one hand and the lack of a prototypical fastening of the contact wire inside the hall on the other hand. Fortunately, at least the pins in the rear area are axial to the inner main supports at the side windows.

It is advisable to attach concrete beams running transversely to these supports from window side to window side. The contact wire only has to be pressed into these with the pins and additional measures.

Provided they are handled carefully, the new concrete beams will be 2 x 3 mm. I cut the strips from 2 mm thick and relatively hard balsa wood. However, I do not set the width of the strip (= height of beam) at 3 mm, but at 5 mm.

This is because I will still present support heads at the ends, which I cut together with the beam. With the graceful end piece, to avoid breaking along the direction of the grain, the correct cut and sequence are important, which I describe in more detail in my electronic book. Solidifying the end sections with superglue beforehand can also be helpful.

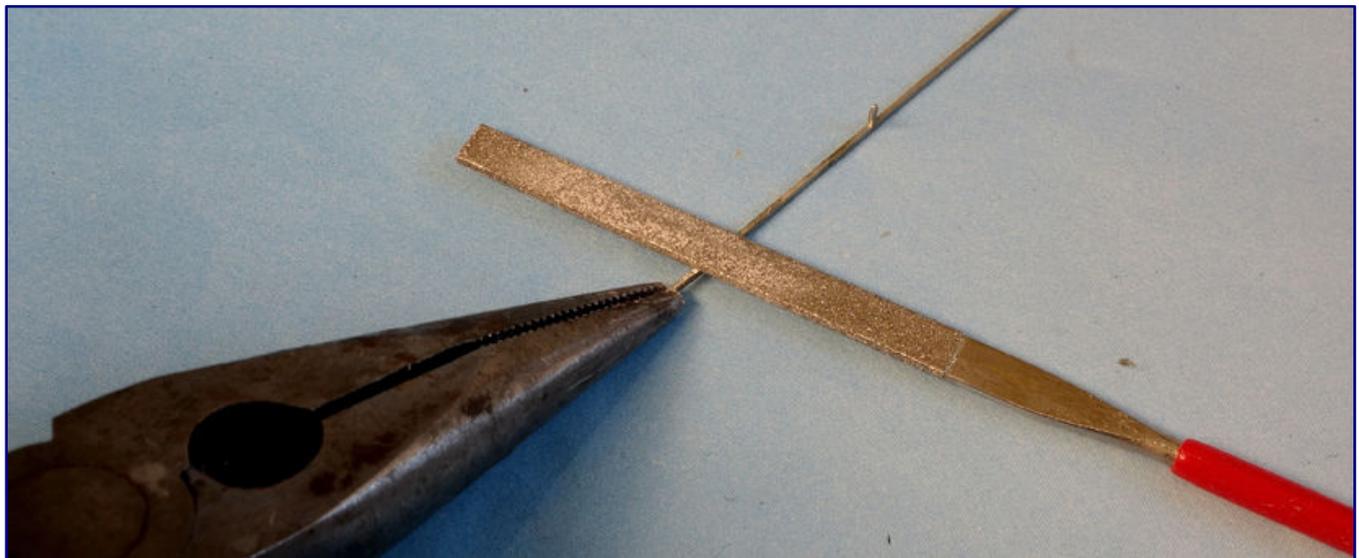
The result of a previous test confirmed that the beam width of 2 mm is sufficient to be able to press in the less than 1 mm wide web of the overhead line there without the wood breaking or tearing (assuming the right quality of wood, medium-strength).

Note: "Quality balsa wood"
Balsa wood is offered in different qualities. There are very large differences, from very soft to relatively hard wood structure, sometimes even within one balsa wood board in the standard dimensions of 10 x 100 cm. Neither the very soft nor the very hard wood is suitable for concrete beams.
If balsa wood cannot be selected by personal examination at the shop itself, it is advisable to ask for available qualities in the (model construction) specialist trade before buying.
If you work a lot with balsa wood, as I do, the best thing to do is to stock up on the various degrees of hardness and material thicknesses.

I cut off the pins I don't need from the punched part with a side cutter and file off the pin remnants that still stick up a little smoothly. Then, sand the cut edges smooth.

However, filing does not work if only held between the fingers, the thin wire will bend directly. If no tinkering vice with small-edged jaws is available (the contact wire is only about 0.5 mm high), a small pair of pliers can be used to hold it.

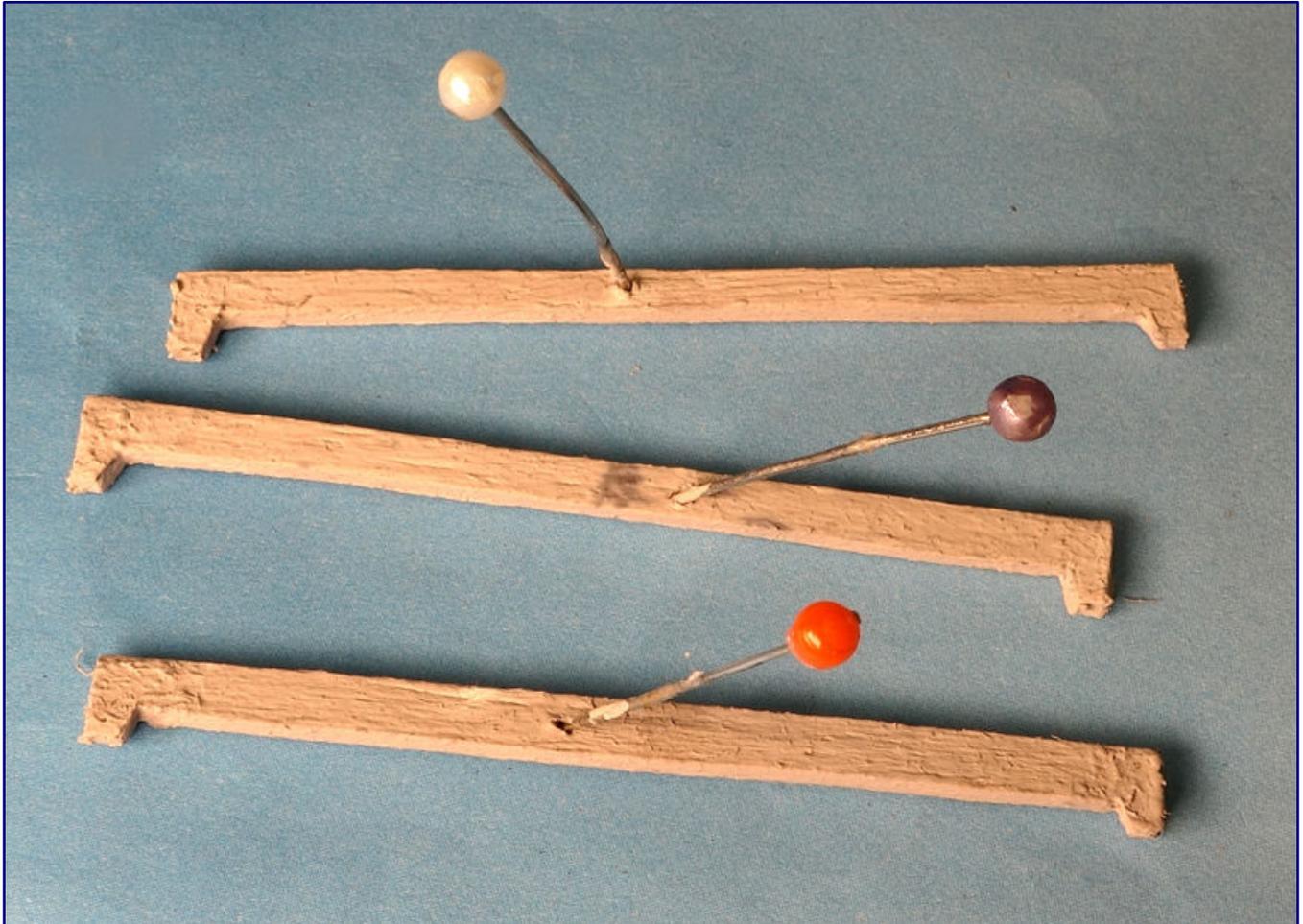
The tip of the pliers must be close to the area to be filed. The OL held with the pliers, pins pointing upwards, placed on a support, can also be worked on in this makeshift way.



Before gluing the supports into the model, narrow transverse slits must be stamped on the underside with the hobby knife at the points where the part is pressed directly into the wood. I also recommend pressing the pins into the wood before mounting the supports. Precise measuring of the distances is required.

After the joists have been colour-treated, I glue them between the pillars. Because there can always be the slightest deviation in dimensions, I mark the beams with L (left), M (middle), R (right) beforehand to ensure that they are mounted in the right place.

However, such a mark is usually no longer visible after painting. I kill two birds with one stone: for each marking, I choose a different coloured pen on which to place the support. In addition, the pencil forms a handle with which I can easily turn the component in all directions while painting.



The height of the beams is determined by the lower edge of the contact wire in the hall. To do this, I temporarily hang it on the pins in the gable wall and have determined a height of 28 mm from the upper edge of the rail to the lower edge of the beam in my model (with the floor already newly installed).

I colour the overhead line that later protrudes from the hall to the outside with copper oxide. This is not necessary on the inside, because there is no strong oxidation due to the lack of rainwater.

After drying, the catenary is hung on the gable and glued with the pins pressed into the wood of the girders from below (a drop of super glue on the pins should be enough). Where there are no pins, it is pressed into the cross slot of the girder, again fixing with superglue.

To simplify assembly, I first hung the catenary on the rear gable wall and fixed it there first, with superglue. To avoid bending, however, it is necessary to work quickly from the back to the front afterwards.

The pipe suspended from the gable is pulled up from the back to the front from joist to joist and glued into the wood step by step. This requires a certain dexterity.

Tip: "Preparing the OL before its installation"

Depending on the distance of the locomotive hall to the transfer table or to the next transverse tensioning device of the OL, it makes sense to solder the connection OL before installing the OL. This is either the standard contact wire or, if the distance to the transfer table is standard, directly the movable connection wire for making contact with the transfer table's contact wire.

If the standard dimensions provided by Märklin are adhered to, this may not be necessary if the OL can be hooked into a cross-span directly in front of the hall with the eyelets.

The catenary wire that is not yet hooked in at the door side can first be roughly fixed with clamps, clamping tweezers, or similar and then gradually lifted upwards into the final position during assembly.

The pipe suspended from the gable is pulled up from the back to the front from joist to joist and glued into the wood step by step. This requires a certain dexterity. The catenary wire that is not yet hooked in at the door side can first be roughly fixed with clamps, clamping tweezers, or similar, and then gradually lifted upwards into the final position during assembly.

Make sure that the lower edge is always slightly lower than the lower edge of the girders so that the pantographs of the locomotives do not get caught on the girder!

The result will look like this:



Tip: "Alternative assembly overhead line"

If you want to save yourself the fiddly exercise of pressing the catenary line into the girders from below, possibly even with the hall lighting mounted in advance, prepare the girders with the catenary already glued in outside the model. The entire structure then only needs to be glued into the hall and the catenary hung on the gable wall.

However, this procedure also requires an exact measurement of the catenary and the position of the beams in the building and in relation to the catenary. The distance between the columns and the catenary, the position of the pins in relation to the concrete beam, etc. must be taken into account. In addition, 6 gluing points and the hanging of the catenary in the gable wall have to be carried out at the same time, which also requires quick and precise work. If you prefer this approach, you can install the catenary before installing the lighting.

Roof mounting

On my model, the roof sits very tightly due to the precisely fitting notches in the inner wall panelling and the roof cut-outs for the pillars, so that it is unlikely to fall out even when the layout is transported.

If the roof is relatively loose on other models, a little Uhu all-purpose glue can be applied to a few places on the supporting surfaces (e.g., the tops of windows or gables). This would always allow the roof to be lifted off at a later date.

Conclusion

With relatively simple means and without the need for elaborate tools or workshop equipment, the non-descript seventies building was transformed into a beautiful electric locomotive maintenance hall, whose automatic door function can alternatively be retained without restriction, but with minor visual impairments.

The converted maintenance shed is no longer comparable with the original model, if only because of the new façade and roof design, and as an individual model it is a great enhancement to the layout. The building style fits perfectly with the architecture of a common steam locomotive depot.

And the icing on the cake is the interior design together with the prototypical maintenance pits, which now also allow the transparent window systems with a generous view into the interior of the hall to fully unfold their effect, illuminated, even in the dark.

Finally, a few impressions that show not only the technical but also the successful visual integration of the locomotive sheds into my railway maintenance depot layout concept.



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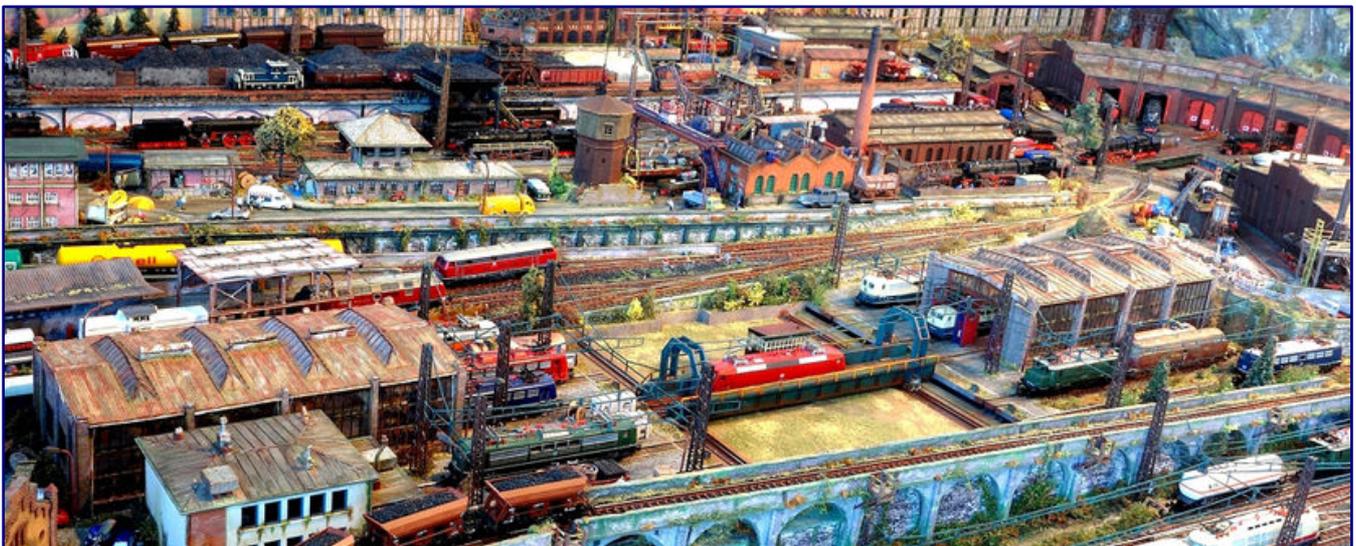


Material used for the project:

- Märklin electric locomotive shed, (item no. 8980)
- Balsa wood 0.6; 0.8; 1.0; 1.5 mm
- Redutex 3D sheet (220LD823 "Engineering brick") for brickwork
- Redutex 3D sheet (160T1122 "weathered corrugated iron") for roof covering
- Evergreen Scale Models, 1,5 mm (241 "half round") for gutters
- Lamp posts of LED street lamps (various suppliers) for rainwater downpipes
- Flower-stick-wire 0,8 mm (Knorr prandell, 6478204) alternatively for regular downpipes
- Rhinestones 4 x 4 and 3 x 3 mm
- Various acrylic paints (mainly Tamiya and Vallejo)
- Superglue
- Wood glue
- Uhu all-purpose glue

I hope that my building report has given you a few basic ideas for your conversion projects and wish you every success with your individual building projects.

All photos and illustrations of this article: Heribert Tönnies



Webpages of the author:

<http://bestagernet.de>

Construction blog:

<https://www.facebook.com/modellbahn.bahnbetriebswerk>



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Decline – Interim Times – New Life?

The former Railway Town of Opladen

For 20 years, Dirk Kuhlmann has been documenting the changes in the former railway town of Opladen with his camera. There are photos of the decline, but, also, the changes over the decades. He gives us a first insight into a later and much more substantial report.

Many readers may have noticed in recent years that I come from Opladen. This former railway town in the Rhineland has become a household name among us model railway fans because of its electric locomotive repair workshop.



For decades it was the AW (German abbreviation for repair workshop) in the north, while Munich-Freimann inspected and repaired the locomotives in the south of the Federal Republic until 1994. At that time, locals assumed that the maintenance of the vehicles would now be divided between Opladen and Dessau in the future. The “forbidden city” simply was part of us. This was a joking and respectful expression among the townspeople, as access to the workshop was, of course, not open to the public.

For all those interested in railways, the firm Bender is, of course, a household name to this day. It is a scrap metal company with a siding, but there are always more or less well-known locomotives ready for dismantling there. How often have I seen seasoned men with glazed eyes looking on?

Currently, two main railway lines still meet here in Opladen, but that was it. Why?



In 2000, there were still enough vehicles in front of the depot for repairs (top photo). Gate 2 was the northern exit of the depot directly at Opladen station (photo below), the photo on the right shows the condition around the year 2010.

Local politicians and businessmen have introduced the term “new railway town: Opladen” for the restructuring of the Leverkusen district. For original Opladeners, former railway men or even just railway friends, this is a real slap in the face, if viewed purely subjectively.

Our reception building has been demolished. The current new station consists of two covered platforms with access via a connecting pedestrian bridge. Somehow it reminds me of an oversized train stop, modern but faceless.



After the dismantling of the freight and shunting tracks, Opladen presents a bleak picture.

The entire track installations have shrunk to no more than 10 per cent of their greatest expanse in the last 25 years. Many railway buildings have disappeared. That the railway is always changing should of course be clear to every reader and to me. Only the change on our own “home line” is particularly painful and accompanied by sadness.

As early as 1994, we had to hear that the so-called Opladen hub was to be abandoned. The extensive goods handling operations at the east station were discontinued. The tracks there, including the shunting hump, were soon a thing of the past. How often we stood here on the old pedestrian bridge as children and watched the individual freight wagons!

You can always do worse

In the year 1998 it came still more terrible, I had learned from some railroad employees known to me that the closing of the AW Opladen was put up for debate. On 26 June 2001, the board of the Deutsche Bahn



"Hunger strike for work" can be read on the class 103 high-speed locomotive: This symbolic image of the decided closure of the factory was seen in the media nationwide.

officially announced the shutdown of the workshops. This news made headlines all over Germany, in connect with the long-lasting protests of the staff, up to a hunger strike.



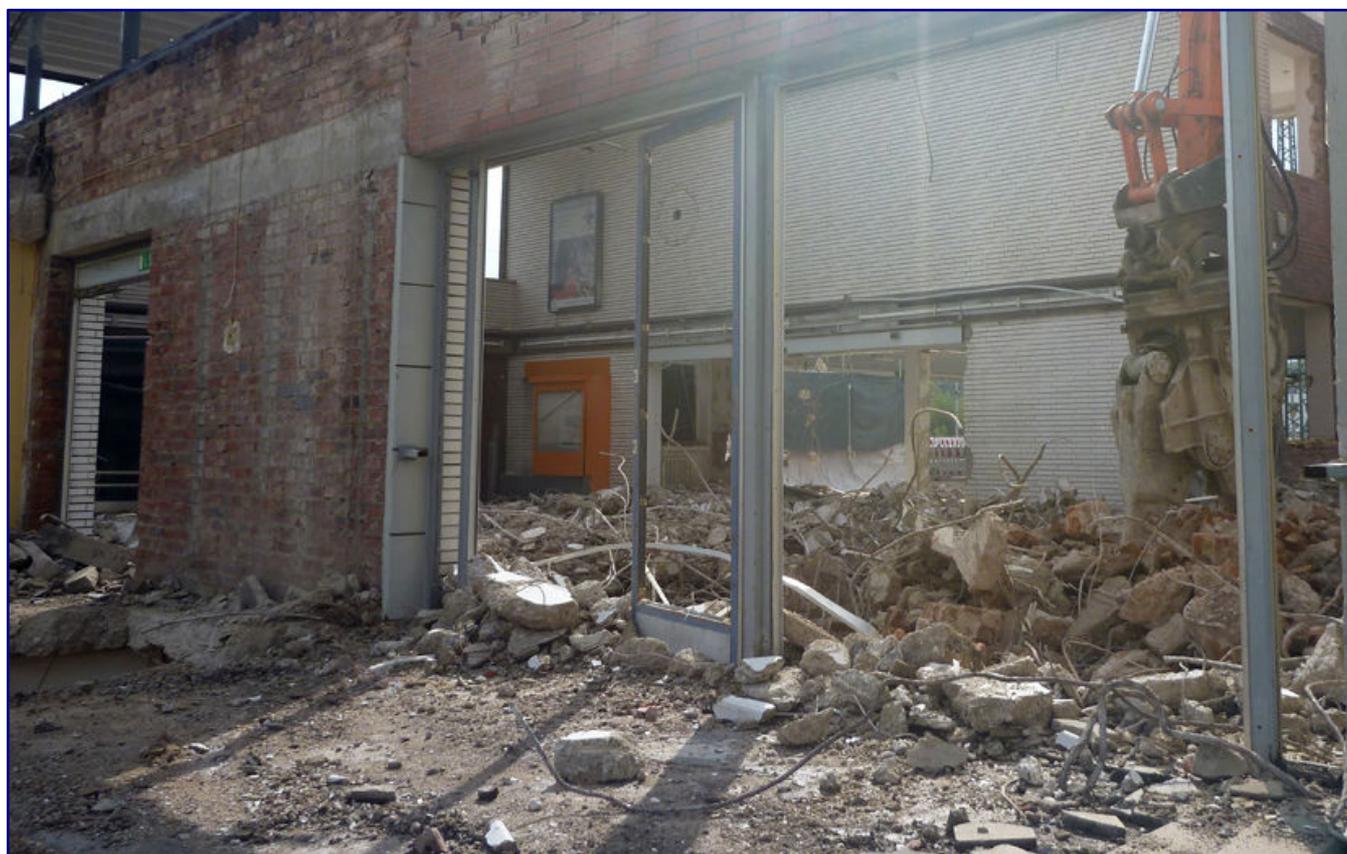
In 2008, the last remains of the western shunting hump ("Donkey's Ridge") could still be found on the old freight train line.

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Photo gallery on the demise of the former railway facilities in Opladen:



In summer 2016, the old freight tracks were still in use, a year later the bridge was also just history (photo above). Until 1983, tracks 6 and 7 on platform III were the starting point for journeys on the “Balkan line” towards Remscheid (photo below).



The familiar view for the people of Opladen before going to platform 1 (photo above). This was finally over on 3 September 2015. Opladen no longer had a station building (photo below).



The central signal box had been out of service for several years when this photo was taken in 2013 (top photo). The remains of the open-loading access at Opladen station (bottom photo).



View into the old car shed 1 of the repair shop, even the 24m car transfer table had been dismantled long ago (photo above).



The demolition of the northern workshops, usually called Hall 2, is in full swing in 2013 (photo above). The track dismantling and its typical remnants can also be seen here (photo below).

The complete discontinuation of all work in the repair workshop took place on 31 December 2003. Thus, Opladen as a railroad town was only history.

As early as 2000, I started to record my photographic chronicle of the decline and the interim periods up to the change. After more than twenty years of silent observation, you will experience a first and exclusive overview here in **Trainini®**.

As already mentioned, the tracks at the eastern station had already been removed and nature was reclaiming large areas. Also, the platform with track 6 for the former KBS 411 to Remscheid was completely overgrown with plants. Other railroad facilities and buildings looked similar: "Opladen Botanical Garden" would probably have been an appropriate name for the station.



In 2006, the Opladen station area was visibly deteriorating. The Mehdorn era showed the ugly face of the effects of the rigorous austerity mandate at the DB AG during these years.

were made. But even in Z gauge and feasible compression of the scenery it would not have been implemented for space reasons. After all, 10 meters of model railroad would have to be built, not to mention the costs!

After all, a distinctive section will be built soon. But now let's continue to look at the original.

In 2010, a meeting took place in a small circle with representatives of the city of Leverkusen, businesspeople, and me. Actually, it was about a planned illustrated book about the railway town of Opladen and, of course, the financial support.

Already after few minutes of the photo presentation the discussion round was stopped. Quickly there was talk of destructiveness and a certain mood of doom! Correct. The truth is that Leverkusen's Opladen district, which has already been lying waste for years, should not cause any more negative headlines.

The historical photos of railroad facilities in one's own city are gladly viewed in the historical context, also the various plans and already implemented designs, the mostly bleak "interim period" is gladly faded out to a large extent.



Gate 1 – the former access road to the repair workshop Opladen, and not a botanical garden reflects this several years old photo.

Later, I learned that other photographers with much more appealing photos for the external presentation of the city had already been awarded the contract.

Of course, stopping the chronicle was out of the question and the observations and documentations were again done in silence.

Witnesses of the interim period

I would also like to briefly mention some positive aspects at this point. Some distinctive building sections from the repair workshop did not fall victim to the excavator, and historic facade sections were integrated into the new buildings. Faculties of the Technischen Hochschule Köln (Cologne University of Technology) will be housed here before the end of the year.

The old water tower serves as a meeting place for local carnival revellers. A residential complex has been built on the site of the demolished side buildings. Fortunately, there are also people in charge who can demonstrate a little historical awareness. If you look closely enough, you will discover relics from the “prehistoric times” again and again.

Amazingly, the buildings of the administration and training workshops on “Werkstättenstrasse” have been preserved and restored, even the old chestnut trees are still there. I have been passing by here on my bicycle for 50 years, so a little of the old has survived after all.



The administrative buildings and training workshops of the former DB repair workshop Opladen have been preserved to this day.

Looking across the street, it's just disconcerting. On the west side of the station, the freight train tracks have been located directly next to the passenger train line since 2017. For this purpose, all buildings from the signal box to the previously mentioned reception building have been levelled to the ground by the summer of 2015.

This also includes the former dispatch of goods, the old signal box, the shunting and equipment rooms, the track scales, the baggage handling, the station administration, the customs clearance, the customs office, the forwarding agency, the freight hall, and the other above-ground buildings of the old repair shop.

If the large-scale demolition on the area of the repair workshop was already dramatic, many of the railroad fans here in Opladen stood on the desert-like station area with a feeling of helplessness, and the cardiovascular system really went crazy.

Here, too, new housing developments were and are now being built piece by piece, and there is also finally a direct passageway from north to south without having to drive through the narrow streets of Opladen's old town.

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Pictorial witnesses of the interim period in the former railway town of Opladen:



In 2009, even the old fire pond behind Hall 1 could still be found. In the decades before, many families of the workshop employees had their bathing fun here (photo above). Some distinctive parts of the facade will be integrated into the new buildings being constructed (photo below).



Bender – more words are not necessary! The infamous track 86 (photo below) is the way to be scrapped. Until the closure of the train yard Opladen in 1966, it was the main supply track there for steam locomotives.



In 2020, nothing could be seen of the old freight tracks any longer; in the foreground, work is underway on the new bus station.



In December 2010, there are enough supplies for the firm Bender on the tracks which are no longer needed. The view at the loading siding of the freight shed will soon be history as well (photo above). The station building is no longer there, the preparations for the new tracks are in progress, at the bottom left the foundation walls of an old turntable can still be seen (photo below).

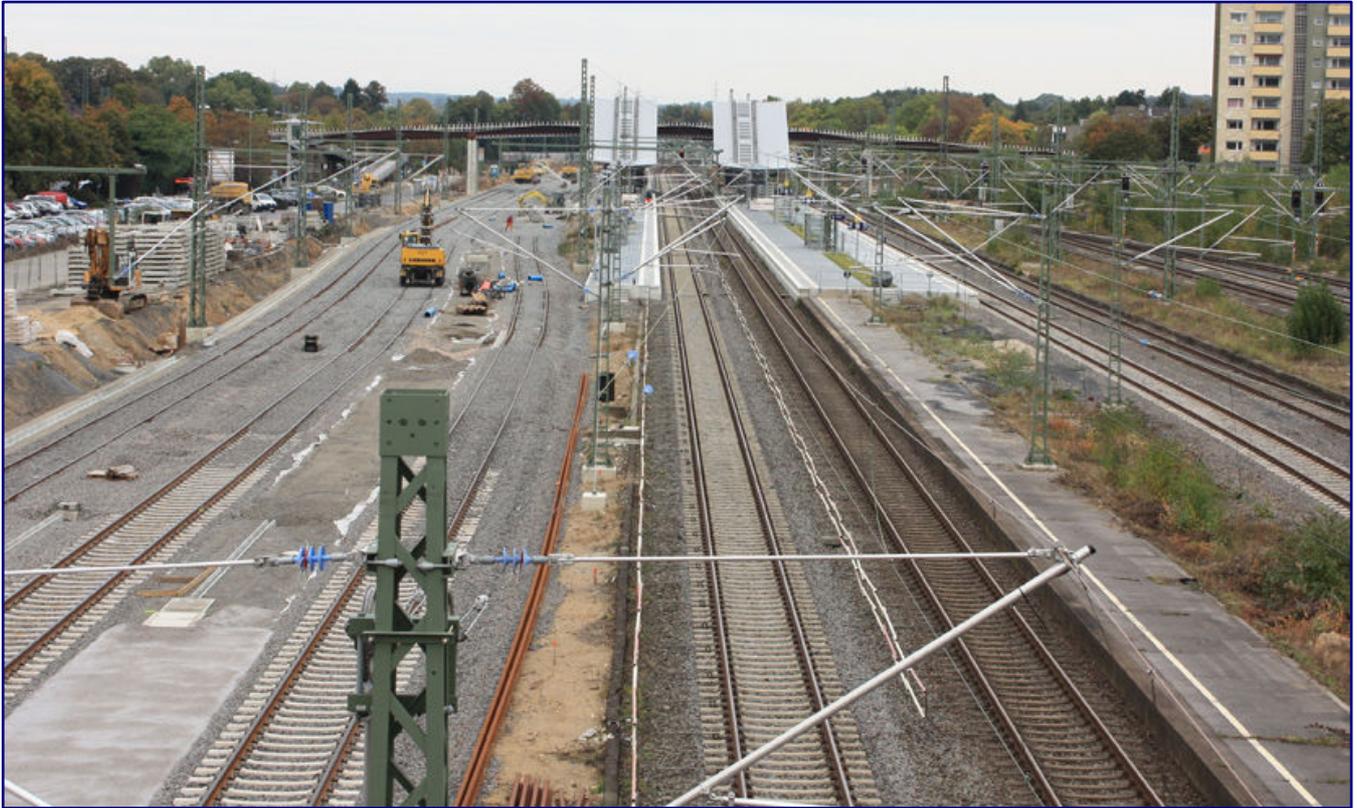


The new cargo train line (photo above) has just been in operation for a few days. The photo from 2019 shows the condition before the construction of residential buildings (photo below).



Remnants of the old platform 1 are still present in 2022, unfortunately, not accessible.

How would one describe the current railroad facilities in Opladen? A downright narrow track corridor through the city was created, as it is often seen in the republic. At the moment, however, a rethinking is taking place at the DB, which demands the preservation of the still existing (rather) small-town station buildings.



After demolition of the old railroad buildings, work on the new cargo tracks is proceeding at full speed in 2016. The new Opladen station, more of a stopping point, is already in place.



A photo from today: freight and passenger train lines are next to each other.

In a recent press release on the “rail experience”, it states that stations are “the gateway for passengers to the train, and their buildings and forecourts are, as it were, the calling card of a place”.

Let's see, maybe we'll get a new entrance gate, Opladen would certainly deserve it.

The webpages of the author:
<http://helenensiel.com>

On the hairline - a diorama (part 1)

The Model Railway as Therapy

All readers of this magazine know from their own experience that model railways are the most beautiful hobby in the world. However, most of them are probably not aware of its true value for health and personal well-being. And it has many other qualities: For example, model making in occupational therapy can help people regain everyday skills.

When we go to the basement and work on our model railway, we do something for ourselves, relax and end a strenuous day with a good feeling and sense of well-being. That is probably also the very purpose of a hobby that captivates us, challenges us and at the same time gives us so much in return.

Model railways can help relieve stress, train finger and manual skills, stimulate creative thinking, and activate our reward system, because a finished model, a piece of self-created landscape, or even a moving train confirms the success of our own actions.



Impressions of nature like these, captured during a hike, are to be transposed impressionistically into a small diorama. The central element will be a Norway maple, similar to the very free-standing specimen on the right, but which does not represent the particular model.

This is exactly why the hobby of model railways is also very suitable to become a measure of creative therapy within the framework of occupational therapy for adults. In rehabilitation measures after a heart or coronary disease, as well as some mental disorders such as a stroke, our hobby can help to regain and promote typical everyday skills that have been completely or partially lost.

Especially in the field of psychosomatic therapy, where it is often a question of switching off, avoiding and coping with stress and being mindful of one's own self, it shows all its advantages. This already begins with environmental or nature studies for a new showpiece.



The fleeing slow worm at the edge of the path is one of the impressions to be reproduced on the planned diorama.

There might be a walk or a hike where only the way is the goal. We are exclusively in the here and now, enjoying the little things that come our way and not thinking about what we will do once we arrive.

Let us imagine just that in our minds: Suddenly we discover a tall, solitary maple tree: strikingly tall, with spreading full foliage, its typical shape that is somewhat pointed at the top, but a trunk that seems thicker than its species is used to.

A photo of this Norway maple as a reminder, or, in this case, even just the impressive image stored in your mind, and you're already slowly moving on.

As we continue on our way, we discover many more beautiful things that Mother Nature gives us. There is a slow worm, which wanted to warm itself on the asphalt, wriggling into the protective layer of leaves on the ground next to an agricultural road. Ripe fruit on trees lends the air a sweet smell, while fleecy clouds pass by in the sky.



Gisbert was the name of the little frog we discovered lonely at a pond. He, too, will have a place of honour in the diorama. Photo: Holger Jacke

At a small pond, a lake frog looks at us, well camouflaged by lily pads. It is probably wondering if we have spotted it and if it is in danger. But no, these creatures don't look like herons.

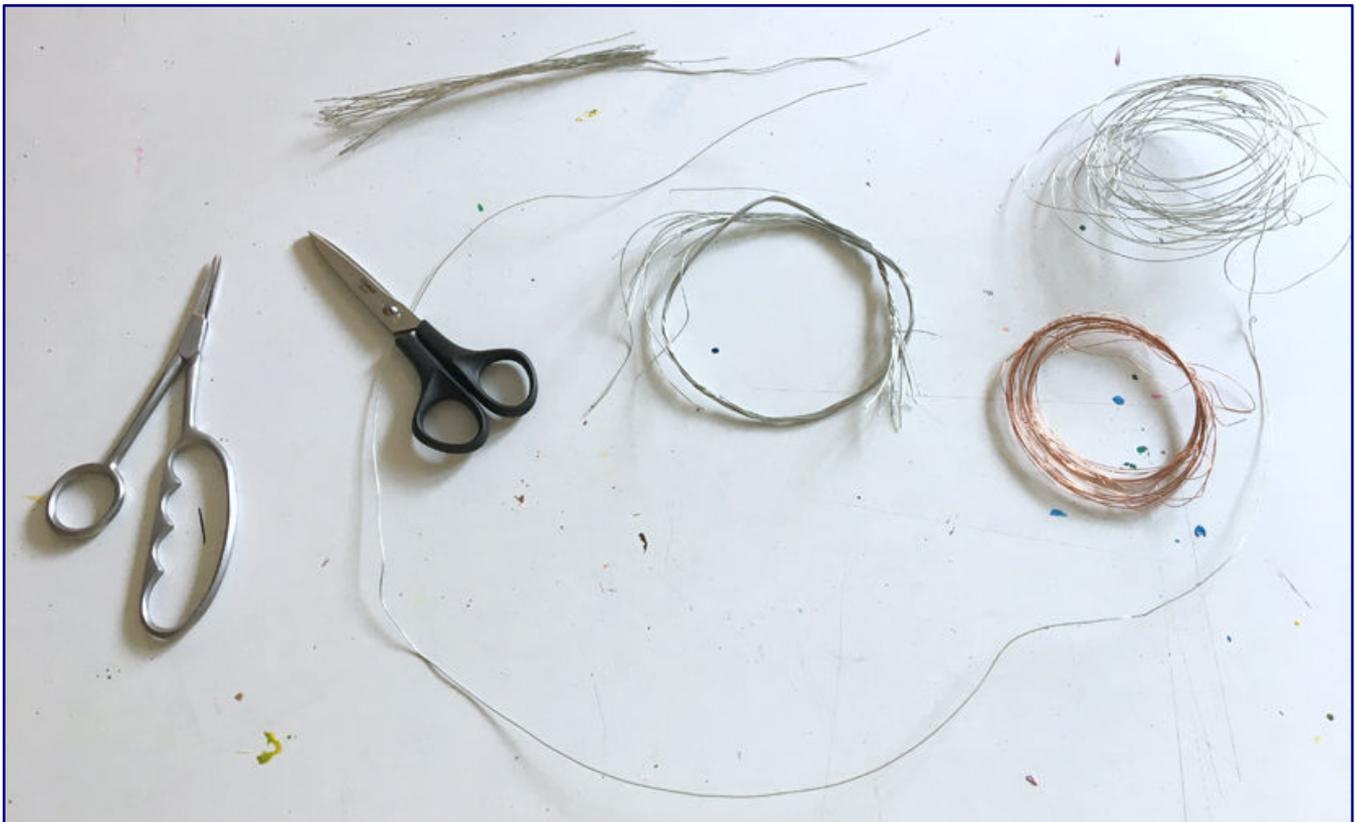
They probably don't eat amphibians at all and so it remains calmly in its place. Gisbert, as we call the green survivalist, also gets a place in our memories of this summery day.

The withered stalks of tall grass sway back and forth in the wind. Their rhythmic rustling is clearly audible. Between their sandy brown we discover many more flowers, herbs, grasses and blackberry bushes that still look lush green and provide harmonious contrasts with their colourful blossoms. Simply wonderful, such a walk in the warm, fresh air!

Are you in the mood? Can you imagine the scenery described around us? Fine! Then we have successfully undertaken a little dream journey together. We take the inspiration with us and will now begin to transform these beautiful impressions into a diorama as a personal therapy.

Begin with obstacles

In this case, however, our diorama arises rather "incidentally." The therapeutic desire is to be creative and express oneself while trying out new techniques or ways of working. So working as a stonemason on a soapstone would have been a possible alternative.



Limited by the choice of materials, the decision is made in favour of a tree that is to be twisted and bent out of wire. In addition to various scissors, there are three types of craft wire to choose from for the project – most of the other materials have to be procured or substituted yourself.

But model making seems too tempting and when looking at the materials on offer, a gap comes to mind that could be filled perfectly: the author of these lines has already accomplished many trees with bark and foliage, but they were always based on blanks that could be purchased or created by third parties.

So what could be more obvious than to choose unpainted handicraft wire (aluminium) and to design the Norway maple, which has “burned” itself into the memory, completely according to the model and own ideas? No sooner said than done, the choice is made, while the thinner copper wire and other materials are eliminated.

A tree is a symbol of stability and reliability, with strong foliage it is also a sign of life. Without a suitable environment, however, it will not be able to work. This closes the circle of giving it a credible environment parallel to its emergence, in which it can express its strength as a tall solitary tree.

The framework is now set, a plan must be made, a list of materials drawn up and checked against the offer. This is what the rest of this first part is about.

Part of our demonstration project is that we can't “draw from the full.” This means that we hardly have any tools of our own and only a limited supply of materials.

Therefore, we need to be creative: What can we substitute and how? What material is indispensable? What tools can we procure?

Of course, we don't want to make it too difficult for ourselves and so you will find most of what we normally use successfully here, but not everything.

The name of the new work reveals where we collected and recorded the personal impressions for this project: “Am Haarstrang” refers to the mountain range that borders the Westphalian Bay in the south and separates it from the Sauerland at the Arnsberg Forest.

It is the most important recreational area in the immediate vicinity of our editorial office. As a working title I still note “Norway maple by the pond”, because this summarises the two neutral elements of our plan. Such a plan still needs to be visualised and drawing is also one of the creative forms of expression.



A sketch captures the proportions of the sighted tree and helps to plan the branches to create the typical shape of the crown that characterises our template.

A first sketch captures the shape of the tree crown and the proportions in relation to the trunk, in order to be able to recognize the proportions for the branches. Another sketch depicts the scenery in which the tree will later be “planted.”

In it, the central elements are recorded and placed in order to be able to check the overall effect. If something seems too crowded, or does not create the desired impression, then the necessary conclusions can still be drawn.

Thus, the decision is made to enlarge the long side from which a viewer will look at the pond, while maintaining the same depth, and also to place the bank facing away from it higher in order to better reproduce the impression of the slopes on the hairline. And paths are still missing so that it does not become a still life.



A drawing of the diorama with its most important elements already determined helps to estimate the space required and the ratio of length to width. The decision is quickly made to extend the showpiece on the right side.

The chosen construction method corresponds in principle to our usual practices: The diorama is to be based on a plywood board (6 mm thick). This is also available in the therapy workshop's stock, as fretwork is also offered.

When it comes to the other requirements, things get more difficult: Styrodur boards with their fine hard foam structure cannot be found, so the only alternative for roughly shaping the terrain is the coarse-pored Styrofoam that can be found as the remains of a packaging in the form of a board. If necessary, it can be worked on with a sharp paring knife, which can be wiped off again.

There is also a problem elsewhere: with the only fret saws that can be found and a Japan saw, it is not possible to make straight cuts. But that is exactly what is needed because our diorama base is to be sawn out of a larger poplar plywood panel.

So, we have to work roughly and ask for help in the building services department. I'm sure they have a circular saw and a workbench. The workmen there are happy to help me and cut the crooked edge precisely. The base area of 22.5 x 40 cm is now also fixed.

In order to create the tree before shaping it, however, a soldering iron and solder are needed in addition to the wire. A branding iron must be used, which can obviously generate the necessary heat. Only its tip will wear out conspicuously. The solder is again supplied by the building services department, where I can even use a roll for the next stage of construction.

With these explanations, however, I have now skipped a few steps in the construction of the tree. Before the solder is used, pieces of the craft wire must first be cut to the right length.

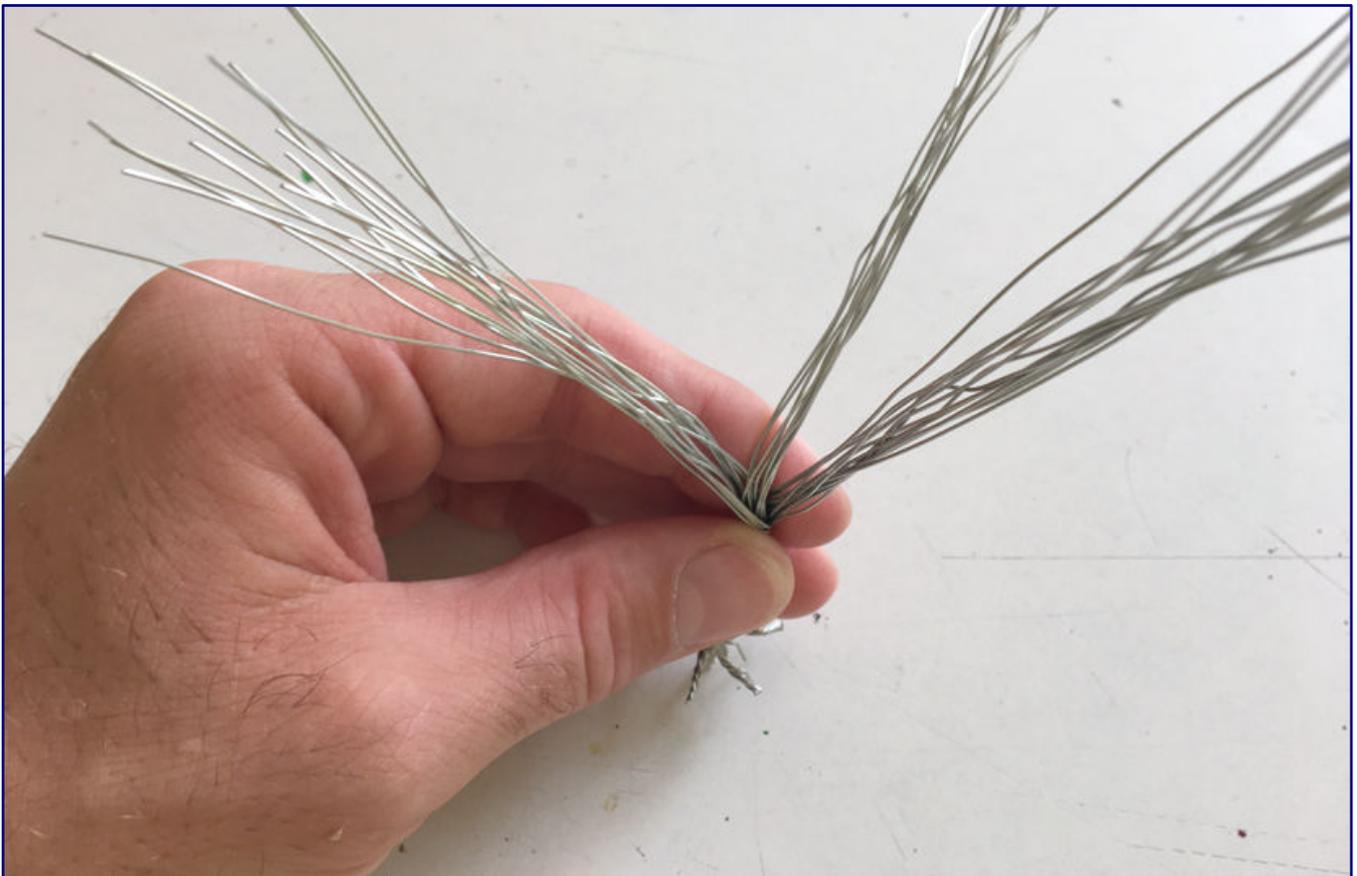


The pieces of wire cut to the same dimensions are first twisted into a trunk with the help of two pairs of pliers. Sufficiently long pieces are left for roots and branches.

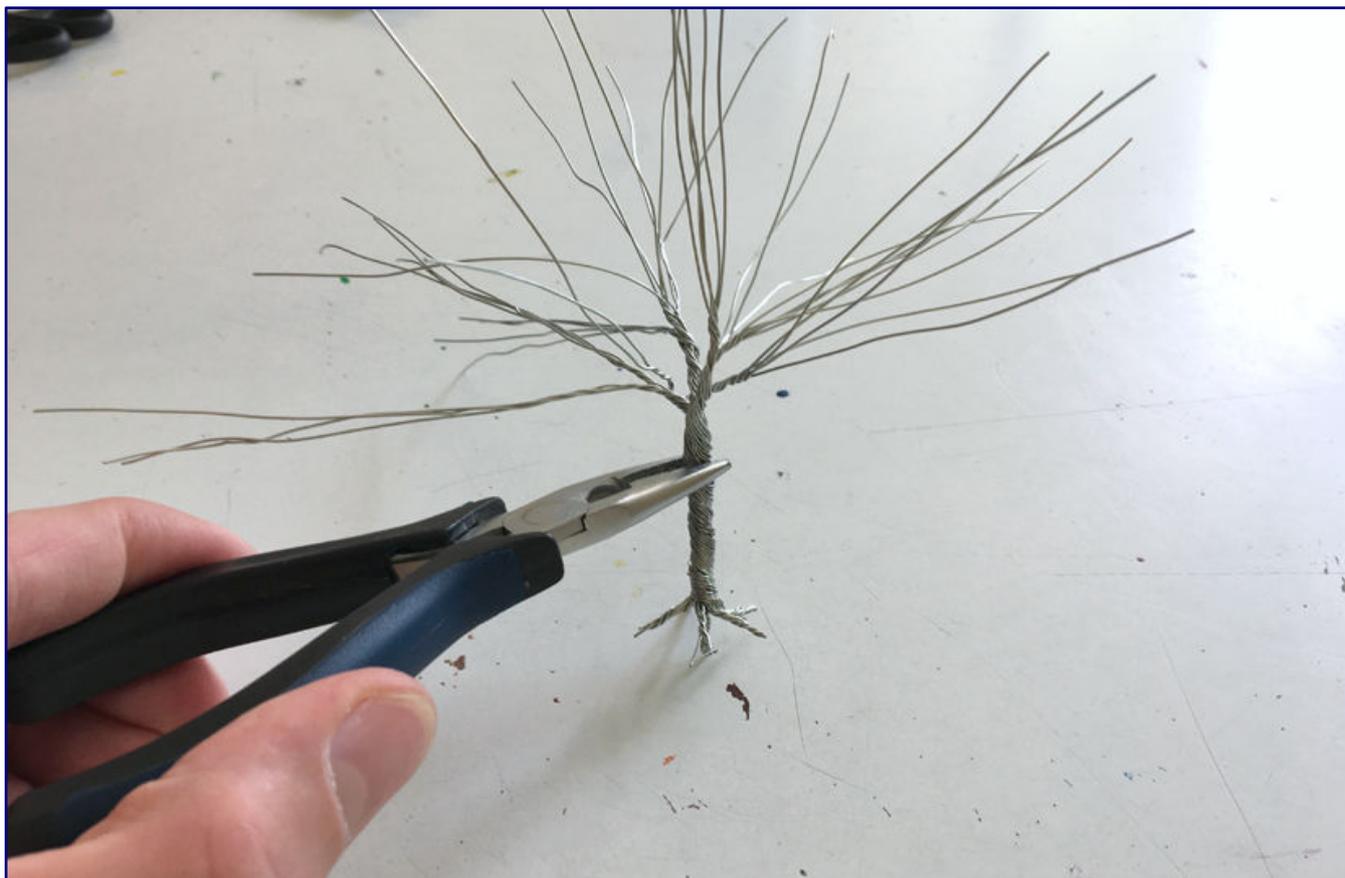
A Norway maple reaches a height of 20 to 30 metres. For a tall solitary tree, wire pieces of 13 cm are therefore not over dimensioned and they can also be shortened a little later, if necessary.

A fixed number of wire pieces is not specified. Instead, the cut pieces can be grasped with one hand and pressed together until the visible proportions believably reflect the trunk diameter of the prototype.

continues on page 58



After the trunk, the wire ends protruding at the bottom are twisted into roots (photo above), leaving an assembly pin in the middle. At the top, the long ends are first woven into individual, large branches (photo below).



The large branches have become finer ones, at the ends of which the individual wires then form the branches to be leafed (photo above). To ensure that the basic material of the maple is no longer visible, the trunk, roots and branches are covered with solder (photo below).

Then, it's time to start twisting the wires. Starting in the trunk area, a pair of combination pliers and a flat-nose pliers do a good job of making this task sufficiently tight. A short piece is left free at the bottom, from which a few root strands are twisted and bent. In the middle, the wire ends are twisted tightly to form a fastening pin.

Now our maple already has a good base for inserting into a wooden board for storage until the next therapy session. But before that, there is more to do, because the large branches and the many fine branches that come from them also need to be twisted.



The tree blank is now further processed in terms of colour: First, a coat of brown acrylic spray from Noch (61173) is applied so that no more metallic tones show through. The bark on the trunk is reproduced with mud paste from Vallejo.

The solder then serves to flow into the many cracks between the individual wires, thus holding them together permanently and covering their recognisable structure. With many trees, including those I have built myself; it always bothers me that the spirally wound, brown-coloured wire remains visible, at least in places, and looks unnatural. For me, this has to be prevented in advance!

By the way, this step also requires some improvisation, because the strongly heated workpiece cannot be held by hand and has to be fixed with the help of a screw clamp and a frame that is not used for this purpose.

Improvisation is (almost) everything

From now on, work continues in parallel in different places: the diorama needs to be prepared, and its rough structure needs to be created. At the same time, the work on the tree is progressing, which makes it possible to make good use of drying breaks instead of having to wait idly for a new day.

The tree gets a brown primer, which also means the end of the work for the individual wire ends before the foliage. It is done with the matt acrylic spray from Noch in the colour brown (art. no. 61173). It is one of the indispensable things to be ordered from home.



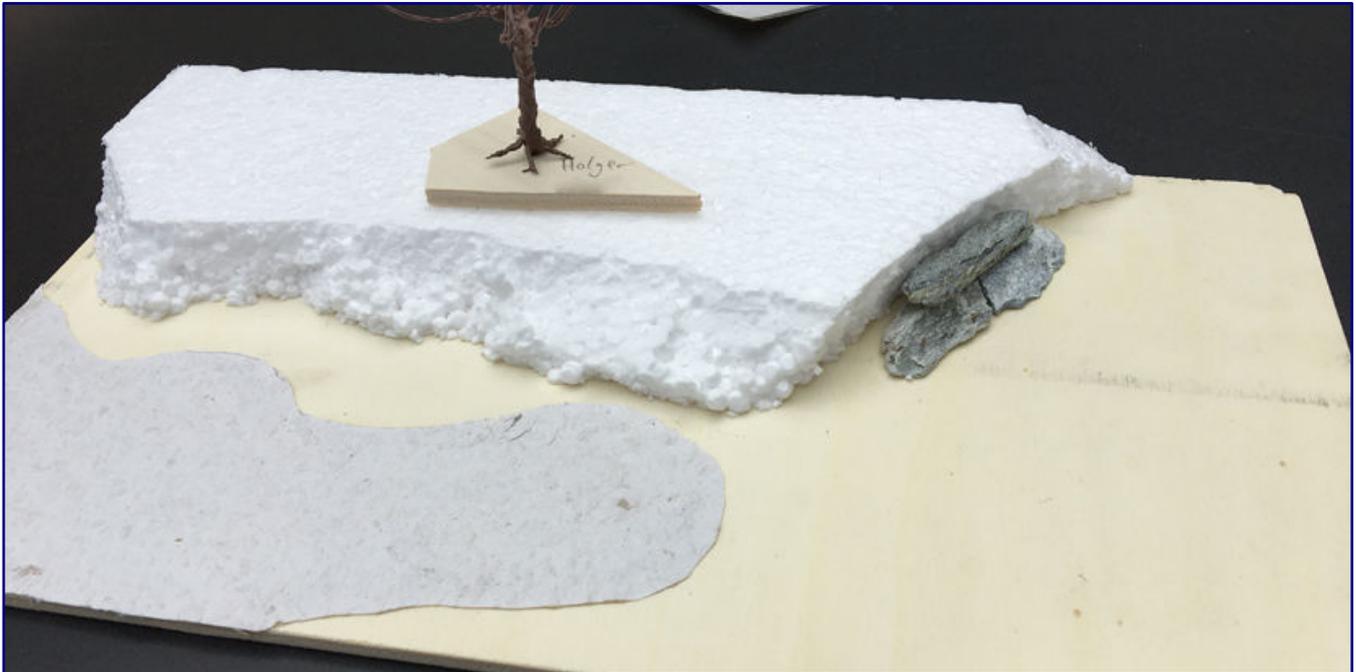
The piece of woodchip wallpaper is laid out on the base plate and the outlines of the pond are drawn. Then the scissors are used before Uhu Por ensures a permanent hold on the plywood.

While it dries, the first work on the diorama follows. The sawn and re-sawn wooden panel lies in front of us, as does a leftover piece of Erfurt woodchip wallpaper, which also comes from home. It will be laid with its backside facing upwards and glued on.

Before that, however, the course of the bank has to be drawn with a pencil and cut out. To check the proportions practically, I lay out three pieces of soapstone, which together will form a visible rock where sunbathing lizards can quickly find refuge.

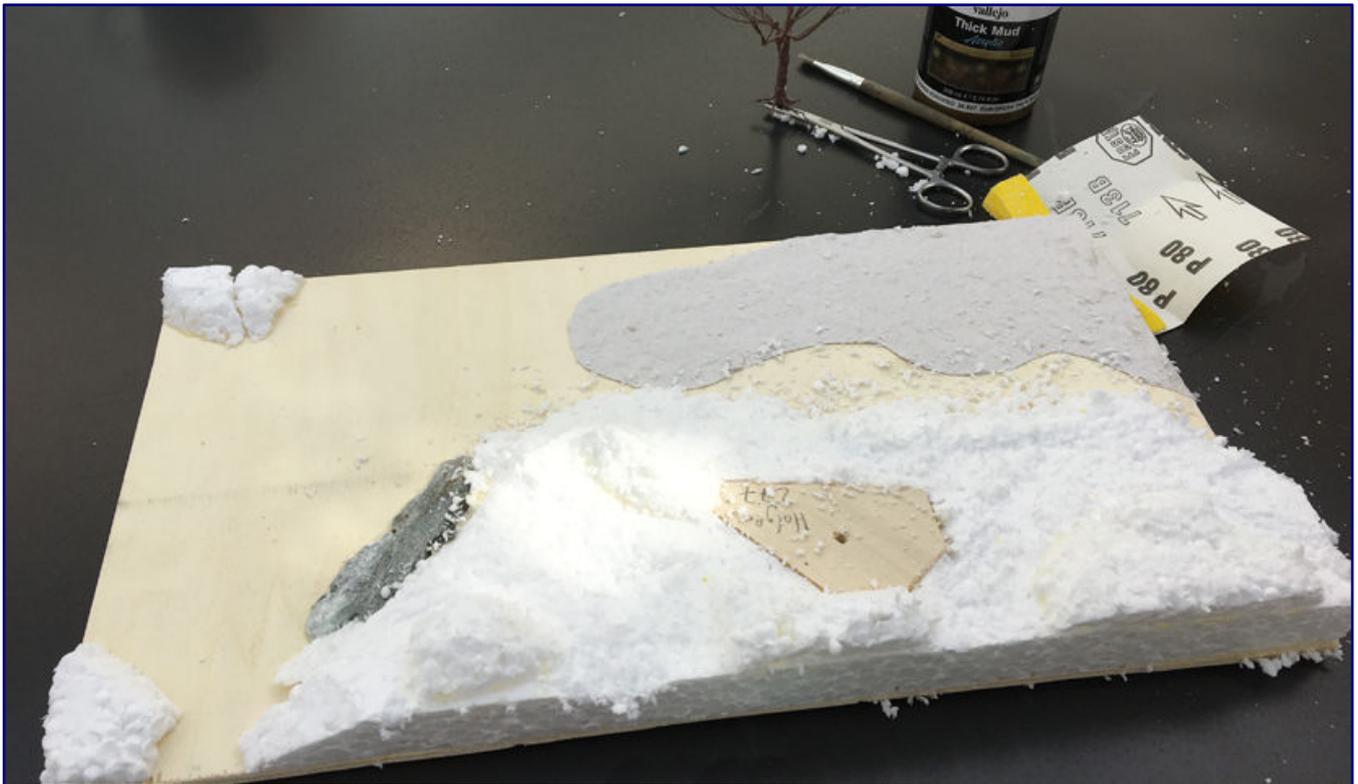
I will fix the piece of wallpaper with the glue Uhu Por. It doesn't give off a solvent smell in the room, and won't come off later with the water-based paints that will be used later.

We continue with the rough terrain structure. The rock fitting test also revealed that the Styrofoam plate has a suitable thickness. It is now placed on top and, due to the lack of tinkering blades left at home, given a rough shape with a sharp paring knife.



After the pond has taken its place, the cutting of the polystyrene plate follows, which must leave space on the right side for the rock made of three pieces of soapstone (photo above). The location of the tree is also determined now before it is worked in and glued with its "holding plate" (photo below). This is followed by final work on the rough terrain structure with the knife.

They and a few other parts that give the terrain its structure are also permanently fixed with Uhu Styrofoam glue, as the small piece of wood with a drilled hole that has served as a stand for the tree up



“Fine-tuning” would probably not be the appropriate word, but the final landscape structures can very well be seen after a further working step with sandpaper.

to this point. For the three parts made of soapstone, however, we recommend Uhu Wood Glue Express from the tube, because any escaping glue can then be wiped off moist and without leaving traces.

Once everything is dry, a step follows that causes a lot of dirt and needs to be well chosen. With the knife, the polystyrene is now given final structures in the slope areas and is also reworked with 80-grit sandpaper.

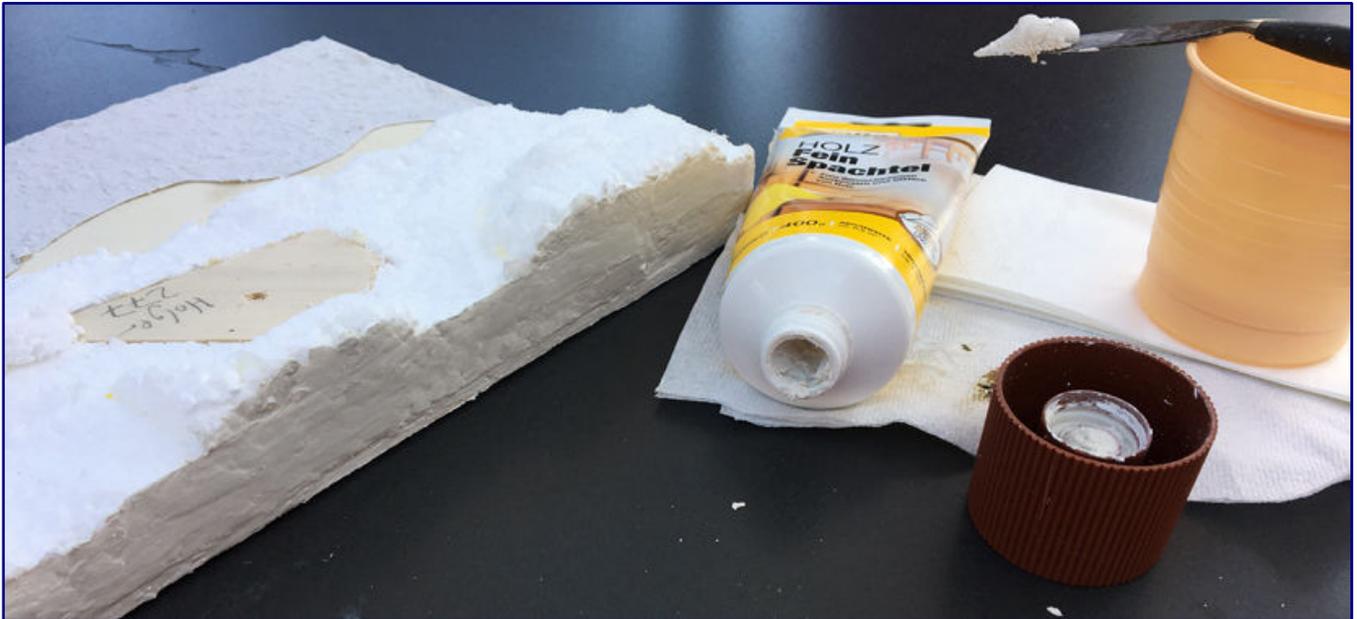
What is removed here becomes statically charged, and, on carpeted floors, often even resists the vacuum cleaner.

Then, it's the tree's turn again. It gets its bark applied with a bristle brush, which is best done by dabbing. Vallejo “Thick Mud Acrylic” from the Faller range is suitable in terms of colour and matt appearance, and as the acrylic paint from Faller, I chose the colour “European Thick Mud” (26.807).



Vallejo's mud paste, dabbed on with a bristle brush, forms a perfect bark structure that no longer requires any finishing work on the trunk.

After that, I continue with the diorama, which will serve as a backdrop for our Norway maple. Here, I now turn to the outer edges, which are marked by the edges of the plywood panels and the glued-on polystyrene. To give them a uniform look that doesn't impose itself and distract from the "stage," I fill in all the unevenness with Molto's wood fine filler from the tube.



The outer edges are covered with Molto wood filler (photo above), sanded and then coloured with Marabu acrylic paint spray in neutral grey, including the underside.

After drying, fine sandpaper, grit 1000, removes the last unevennesses. Afterwards, the edge and the underside can be painted with a neutral grey spray paint. The acrylic paint spray from Marabu from their "A-System" (979) was chosen here.

The most exciting task, and also a new one for me in the sense of therapy, is the design of the in grain wallpaper as a water surface with a depth effect. This is where illusion painting in the sense of old Dutch artists comes into play.

This requires various acrylic paints, which are in stock in the therapy workshop from the supplier Gerstaecker: black, dark blue, terracotta, permanent green and ivory. They are applied with a brush and mainly used in the wet-on-wet technique.

First, however, it is necessary to mix a base colour for the water. This is created from a high proportion of green, to which a touch of dark blue and black are added. If its impression matches the green (not blue!) of a plant-covered lake or pond, it is applied thickly to the wallpaper.



Various acrylic paints from the therapy workshop are used for the water design. These are used to create a basic colour for the water (on the plate below), others are used to introduce colour nuances in plant-covered, deep or shallow areas. Ivory is still missing from the selection for the short sandy section of the shore area.

Now, it is important to use the time before drying to work in all the colour nuances that the model water has to offer. The shore areas are tinted with a little terracotta and a lot of ivory to give the impression of a sandy bottom with traces of clay. Towards the middle of the pond, this colouring decreases and the dark blue-green dominates.

In the area of the right spur, there will later be reeds, indicating a rather shallow shore zone. Here, the proportion of ivory is again increased somewhat compared to the deeper areas. The area on the far left will have a depth, where the eye can no longer reach the bottom. This impression is achieved by working in pure black.



After applying the water base colour, work continues wet in wet – see the different brushes and the traces of colour from wiping on the paper towel. The different depths of the water are created with the help of illusion painting only in the mind of the viewer!

Now that the finished work is in front of us, it can be said that this step was much easier than expected. Worries about not being able to master this technique are indeed unfounded.

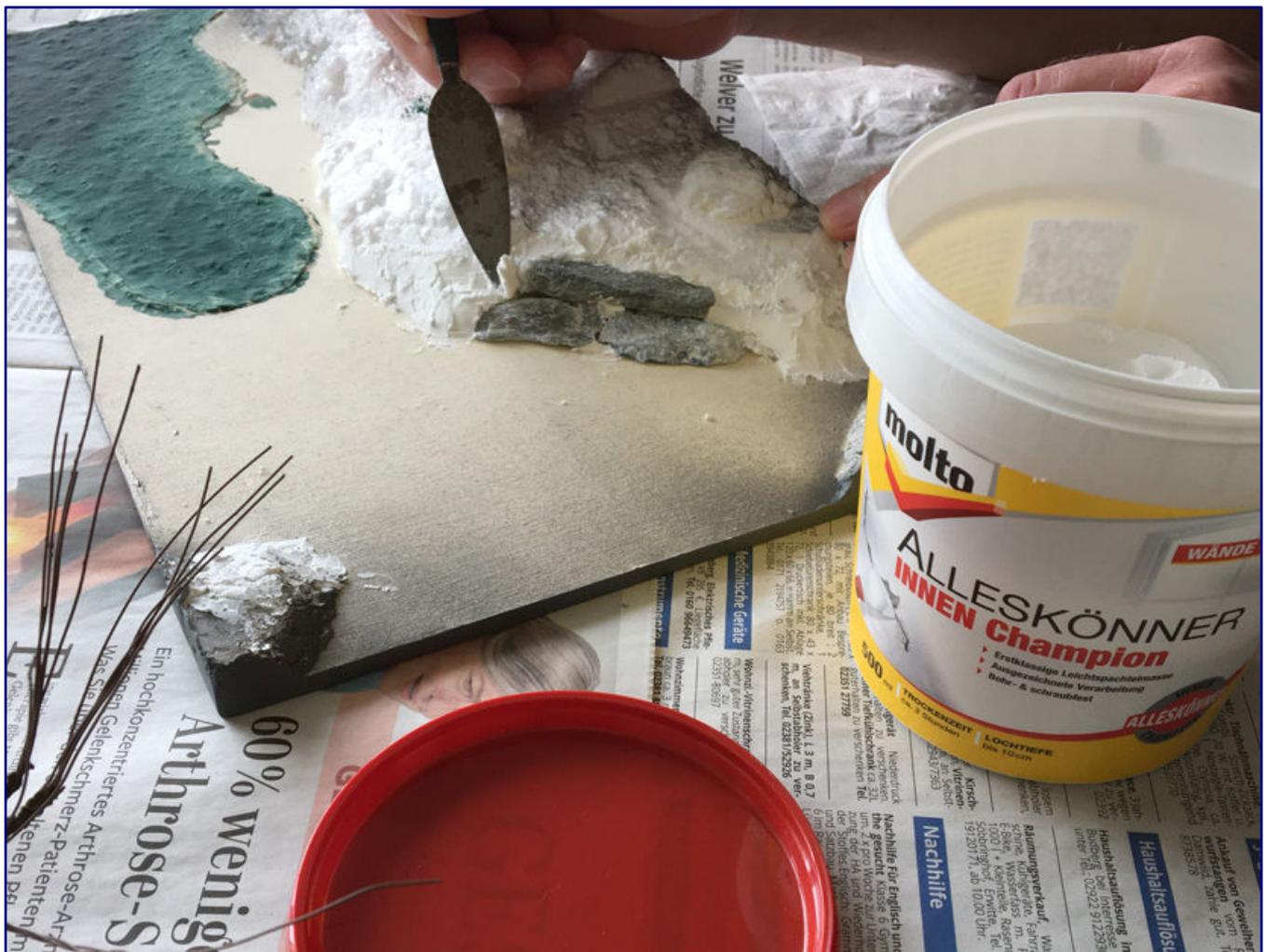
Integrated product test

A Molto product innovation aroused our interest some time ago. Since the putties from this company have proven themselves very well in landscape work and leave a much more realistic-looking surface than ordinary plaster, we are tempted to try more.

The new product is called “Molto All-Rounder Interior Champion” and on request we are provided with a sample, because our successful experiments and applications have long since reached the manufacturer. This filler is intended for filling boreholes and cracks. They may have a maximum depth of 10 cm in order to be able to work in a single operation.

That should be enough for model railway purposes. But, at first, disillusionment sets in. The can in the usual format gives the impression of not being filled. Fortunately, this concern is dispelled after opening the box, because it is well filled.

But the viscous white mass inside seems light as a feather. Can it really close holes permanently and keep its promise? We already know the answer from initial tests at home on a few drill holes, and so this new product is also allowed to travel with us to the clinic to pass its acid test in landscaping, as well.



Cracks and joints between the stone pieces and the individual polystyrene blocks can be closed perfectly with the new "Alleskönner Innen Champion" (All-rounder Interior Champion) from Molto. This white putty knife also impresses with its extremely low weight.

Its tasks will be to close the cracks and joints in the individual pieces of Styrofoam and to fill holes that were torn in its surface during the scratching and sanding process. The soapstone also requires a transition to the later landscape at its edges.

We pick up small amounts with the spatula, apply it in the desired places and carefully spread the mass. This is easy to do and the surface also looks even and quite smooth. It is also possible to press it in and spread it with the fingers.

Fingers and tools are quickly cleaned under running water, after two hours the mass is hardened, and, in contrast to plaster, without shrinking. Since a test with our tree revealed that it would stand too high and could be wobbly, the thought suddenly crossed my mind to model a fitting aid for it too with the all-rounder.

A larger piece is turned into a ball and placed on the drill hole in its wooden base plate, whereupon it can be inserted. The result looks good. The only difficult thing is to pull it out again in such a way that our "champion" does not get stuck by its roots.

The use of a few drops of water would probably have been a good idea, but with my hands I also master the undertaking to such an extent that this experiment succeeds. The tree is glued in place with wood glue after drying.



The lightweight filler also reshapes the root of our tree so that it can be glued in more easily afterwards with Uhu Holzleim Express. The only thing we didn't find right away was the best possible way of working with this moulding process.

This would normally only come as the final act, but there will also be finer touches to be made and the roots are supposed to disappear into the grass realistically. In addition, the diorama and tree will have to be transported in such a way that both arrive home intact. That would be impossible with a loose tree.

Further explanations on “Model Railways and Therapy” as well as practical instructions on how to use the “All-rounder Indoor Champion” are available in a film clip on **Trainini** TV (episode 8), before we continue with the construction in October.

- List of products used:**
<https://www.bergswerk.de>
<https://www.faller.de>
<https://www.heki-kittler.de>
<https://www.marabu-creative.com>

<https://www.molto.de>
<https://www.noch.de>
<https://www.uhu.de>

Trainini TV on Youtube:
<https://www.youtube.com/TraininiTV>



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.

Schulstoff praktisch vermittelt **Lernen über die Modellbahn**

Ohm'sches Gesetz, Hofmann'scher Zersetzungsapparat oder Parallel- und Reihenschaltungen – haben Sie es noch „drauf“? Bei den meisten ist es lange her, aber da war doch mal so etwas im Physikunterricht, manches Mal auch eng verwoben mit der Mathematik. Vieles gehört zur täglichen Praxis im Bereich der Modellbahn, doch der theoretische Unterbau ist längst nicht mehr jedem präsent. Praxisnah lässt sich dies wieder ins Bewusstsein heben.

Uwe Grellmann
Physik und Mathe - Leichter geht's mit der Modelleisenbahn
Einführung Elektrotechnik

Springer Fachmedien Wiesbaden GmbH
Wiesbaden 2018

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Autor Uwe Grellmann ist Lehrer mit Leib und Seele. Das muss man nirgendwo nachschlagen oder einer Biographie entnehmen. Es ist beim Lesen des hier vorgestellten Buches zu spüren – und das gleich zu Beginn und ohne Umschweife.

Autor und Verlag versprechen dazu, dass trockener Stoff hier anschaulich und zugänglich dargestellt wird, wie es Schulunterricht meist nicht bieten kann: Mathematische und physikalische Erkenntnisse werden hier mit Hilfe der Modelleisenbahn gewonnen und angewandt.

Oder, um es mit der Sprache des Autors auszudrücken: Die Modelleisenbahn taugt hier als Spaßpauker – denn dann klappt's auch mit dem Kاپieren. Unsere Leser werden nun ahnen, was ihnen mit diesem Buch blühen wird. Doch keine Sorge, die Rückkehr auf die Schulbank kann enorm hilfreich sein und fühlt sich auch gar nicht schlimm an.

Das Buch stellt in lockerer, verständlicher aber stets fachkompetenter Form die Grundlagen der Elektrotechnik dar und leitet zu Experimenten an, die hier als praktische Hilfe vorgestellt werden. Ausnahmsweise gilt hier mal: Nachbauen zu Hause explizit gewünscht!

Im Bereich der Erkenntnisse zum Elektromagnetismus, der für das Verstehen von Motoren wichtig ist, betreten wir aber auch Bereiche, die ein Gefahrenpotenzial bergen. Ein Starthilfegerät fürs Auto liefert



dann die erforderlichen Stromstärken zum mess- und sichtbaren Ablenken einer Kompassnadel und betritt damit längst Bereiche, die Gesundheitsgefahren beinhalten.

Teils werden die Inhalte auch mal mit ungewöhnlichen, aber sehr anschaulichen Bildern und Grafiken dargestellt. Es werden innovative, bislang teils noch nicht eingesetzte Analogien dargestellt, z. B. bei den Kirchhoffschen Regeln, beim hydrodynamischen Analogon der elektrischen Spule und des Transistors. Für das Verständnis des Lesers ist dies sehr förderlich und hilft auch der Ablage im Langzeitgedächtnis.

Motivieren möchte der Autor seine Leser nicht nur auf diese Weise. Für das Durchführen der Versuche und deren Auswerten stellt er Formeln um, behandelt die Winkelfunktionen mit Abstechern in die Geometrie und es führt nebenbei auch recht gründlich in die Tabellenkalkulation ein. Für den Käufer des Titels bedeutet das einen Mehrwert, der sich gut in die Versuchsreihen integrieren ließ.

Aber wie lassen sich die Inhalte kurz und verständlich zusammenfassen? Fünf Experimente bilden den Kern des Buches und sie bauen schlüssig aufeinander auf. Zunächst werden elektrische Grundlagen (Einheiten und Wesen der elektrischen Werte, Schaltungen) vermittelt, es folgt anschließend der Bereich des Elektromagnetismus und dessen Anwenden in Motoren und Spulen.

Das nachfolgende Erläutern elektrischer Bauteile liefert zugleich praktische Anwendungsformen des Alltags, die bis zu Radio und Verstärker führen. Hier wird der engere Bezug zur Modellbahn allerdings verlassen und nur zum Schluss kurz auf die moderne Digitaltechnik als Anwendungsgebiet verwiesen.

Hier setzen auch die wenigen Kritikpunkte an, die wir zu diesem Buch haben: Für die Versuche kamen stark betagte Modellbahnartikel (Fahrtransformatoren; Lokmodelle eher unerheblich) zum Einsatz, die fünfzig und mehr Jahre „auf dem Buckel haben“.

Das ändert zwar nichts an der Aktualität und ist wegen der Bauteilgröße anschaulicher, entspricht aber nicht dem Erleben der heranwachsenden Generation im Zeitalter von Mikrokomponenten und Hochleistungselektronik.

Klarer Schwachpunkt des Titels sind seine Fotos: Sie sind zum größten Teil schlecht ausgeleuchtet und es erfolgte wohl auch kein Weißabgleich. Auch das ist für die dokumentarische Funktion zu den geschriebenen Inhalten unerheblich, wirkt beim Durchblättern aber leider wenig einladend – Fotos haben eben eine „Visitenkartenfunktion“! Hier hätten Autor und Verlag wohl gut daran getan, sich fachkundige Hilfe ins Boot zu holen.

Uwe Grellmann bemüht sich bewusst um eine saloppe Alltagssprache. Er versucht also, den Ton seiner Schüler zu treffen, was die eigentliche Zielgruppe seines Werks verrät. Aber auch erwachsene Modellbahner können dieses Buch nutzen, um elektrisches Grundlagenwissen sowie solches zu Elektrik- und Elektronikkomponenten aufzufrischen – das ließen wir bereits anklingen.

Der Test mit den eigenen Kindern verriet, dass zum Verständnis des Stoffs die einschlägigen Kenntnisse aus dem Physik- und Mathematikunterricht erforderlich sind. Es ist keine Hilfe fürs reine Selbststudium, sondern erweist sich eher als eine praktische Arbeitshilfe, um Inhalte zu vertiefen, besser zu durchdringen und ins Alltagsleben übertragen zu können.

Die gewählte Sprache entspricht übrigens nicht der Zielgruppe, wohl aber eines Lehrers, der um einen guten Kontakt zu seinen Schülern bemüht ist. Wer dreißig oder mehr Jahre älter als sie ist, wird sich an seine Schreibweise erst gewöhnen müssen. Das Buch ist dies auf jeden Fall wert.

So können wir den Titel auch der Mehrheit unserer Leser empfehlen: Wie oft ist das Grundwissen aus der Schulzeit zwar vorhanden, aber in der gerade gefragten Anwendungsweise nicht abruf- oder anwendbar?

• Publishing pages:
• <https://www.springer.com>
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Lastwagen aus Kassel dokumentiert **Der Henschel-Stern am Kühler**

Aus dem Straßenbild längst verschwunden und bei vielen deshalb vergessen: Die traditionsreiche Firma Henschel aus Kassel war auch einmal Nutzfahrzeughersteller. Für Kenner der Szene sind die Fahrzeuge mit dem sechszackigen Stern Ikonen der Technikgeschichte. Ein Typenkompass gibt dazu Aufschluss und Hilfe.

Wolfgang H. Gebhardt
Typenkompass Henschel
Lastwagen 1925-1974

Motorbuch Verlag
Stuttgart 2012

Taschenbuch mit Klebebindung
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128 Seiten mit 145 S/W- & 31 farbigen Abbildungen

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Der Buchtitel, den wir an dieser Stelle vorstellen möchten, ist bereits vor zehn Jahren erschienen, ab Verlag aber noch erhältlich. Unser Anlass, ihn für diese Rezension aufzuarbeiten, waren Neuheiten von NoBa-Modelle (Henschel HS 12) und JMC Scale Models (11-m-Stadtbus Henschel HS 160).

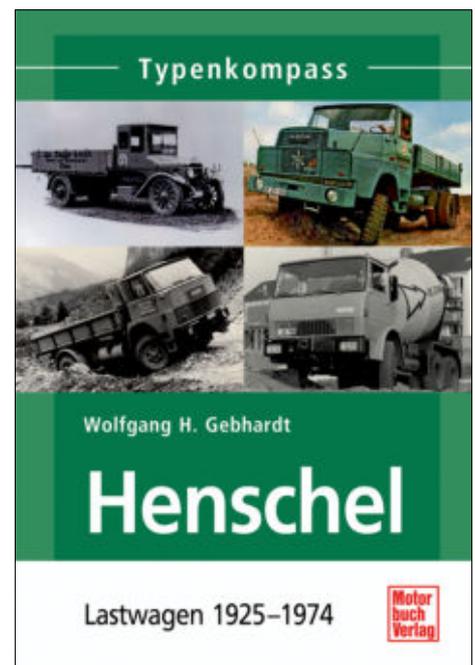
Auch wenn der Bus – im Gegensatz zum Lkw – nicht in diesem Typenkompass behandelt wird, so erscheint die Geschichte der Fahrzeuge und des Unternehmens hinter ihnen einfach spannend. Mit Henschel verbinden Eisenbahner bis heute bekannte und bewährte Lokomotiven. Die Nutzfahrzeuge aus Kassel scheinen hingegen längst vergessen.

Dies erschien uns eine gute Gelegenheit, an sie zu erinnern, nachdem sie auch in unserem Maßstab Einzug gehalten haben und der Henschel-Stern auch auf unseren Modellbahnen sichtbar wird. Nicht weniger interessant ist die Geschichte des Unternehmens, die auch im Einführungskapitel behandelt wird.

Dort spielt selbstverständlich auch die Eisenbahn eine Rolle: Aufnahme der Schienenfahrzeugproduktion 1848 mit der Dampflok „Drache“, das nachfolgende Etablieren in diesem Segment und erst nach Ende des Ersten Weltkriegs die Suche nach einem zweiten Standbein, die zum Bau von Lastkraftwagen führte.

Doch vor uns liegt ein Nachschlagewerk, kein Geschichtsbuch, und verewigt sind hier deshalb die Fahrzeugtypen, die Henschel zwischen 1925 (Aufnahme der Nutzfahrzeugproduktion) und 1974 (Ende der Lasterproduktion) gebaut hat.

Als Autor tritt hier Wolfgang H. Gebhardt aus Bad Homburg, auf, der besonders im Motorbuch-Verlag einige Fahrzeugtitel veröffentlicht hat. Er ist in dieser Szene als Nutzfahrzeugspezialist bekannt, Schwerpunkte sind dort deutsche Omnibusse, Lastwagen und Traktoren. Bücher von ihm haben wir daher ebenfalls schon vorgestellt. Auch in Fachmagazinen publiziert er regelmäßig.



Für das Thema dieser Lektüre war er also gewiss eine gute Wahl. Und auch, wenn wir mangels vollständiger Geschichtskennntnis in diesem Bereich die Vollständigkeit der aufgelisteten Lastwagen nicht prüfen können, so haben wir zu keinem Zeitpunkt auch nur das Gefühl gehabt, es bestünde eine Entwicklungslücke in der chronologischen Abfolge.

Die verantwortliche Eisengießerei und Maschinenfabrik wurde 1816 in Kassel gegründet, gehörte bald zu den wichtigsten Großbetrieben in Deutschland und firmierte 1957 schließlich als Henschel-Werke. In der Wirtschaftswunderzeit erfolgte eine neue Blüte als Nutzfahrzeugfabrikant, aber auch eine finanzielle Krise, die zu einem Eigentümerwechsel führte.

Der Spezialist für Lokomotivbau und Rüstungstechnik wurde 1964 von der späteren Rheinstahl übernommen, die Lkw-Produktion 1969 schließlich mit der von Hanomag verschmolzen und 1974 als Entscheidung des maßgeblichen Eigentümers Daimler-Benz dann eingestellt.

Im behandelten Zeitfenster entstanden unter dem Markenlogo des Henschel-Sterns hochwertige und eindrucksvolle Schwerlastwagen, die teilweise bis heute unter Kennern unvergessen sind. Henschel hatte nicht nur ein eigenes „Gesicht“, besonders bei seinen Frontlenkern, sondern ging auch bei den Dieselmotoren lange Zeit eigene Wege.

In Erinnerung blieben kräftige Fahrzeuge mit zwei Aggraten, vermarktet unter der Bezeichnung „Bimot“, oder auch der einzige Achtzylinder-Reihenmotor seiner Zeit, der in einem Henschel-Laster verbaut wurde. Der Kasseler Hersteller wurde nicht nur damit zu einer Ikone der deutschen Nutzfahrzeuggeschichte.

Henschel-Lastwagen kamen auch bei der Bundesbahn zum Einsatz, was die Nähe zur Modellbahn erhöht und auch erläutert, warum es sich lohnt, sich auch als Zettie damit auseinanderzusetzen. Das vorliegende Buch ist also gewiss nicht nur Lektüre für Henschel-Freunde, Geschichtsinteressierte und Technikbegeisterte.

Jede Baureihe wird, wie aus der Typenkompass-Reihe bekannt, auf einer oder zwei Seiten vorgestellt. Die wichtigsten Informationen sind in ausformierten Texten zusammengefasst, dazu gibt es jeweils mindestens ein Foto und einen Datenspiegel. Dieser informiert zusätzlich über die Bauart, Bauzeit, wichtige technische Daten wie Motor, Leistung und Maße sowie ergänzende Anmerkungen.

Einzig schade am Titel ist, dass nur 31 der 176 Aufnahmen farbig sind. Das ist nicht dem Autor oder Verlag anzulasten, denn besonders bei den vor 1945 gefertigten Fahrzeugen war die Fotografie noch Jahrzehnte von einem Farbbild-Standard entfernt.

Ihren dokumentarischen Zweck erfüllen die Bilder aber alle Mal: Sie sind passend ausgewählt und gut reproduziert worden, obwohl sie ihr hohes Alter erwartungsgemäß nicht verbergen können. Das möchten wir also eher als authentischen Eindruck festhalten.

Auch die erläuternden Texte sind sachlich klar, leicht verständlich und dem Zweck angemessen. So ist auch dieser Typenkompass ein hilfreiches Taschenbuch, das seinen Zweck erfüllt und gewiss auch ein guter Begleiter in einem Technik- oder Fahrzeugmuseum sein kann.

Wir möchten es nicht missen und freuen uns über mögliche neue Henschel-Modelle im Maßstab 1:220, besonders die noch komplett fehlenden Frontlenker, die wir dann auch hier nachschlagen können und uns vielleicht zu passenden Anlageneinsätzen inspirieren.

1zu220-shop.de

Ihr Fachhändler im Netz für die Spur Z

Der Kallentaler und der Dörpeder Hof setzen die Erfolgsserie des www.1zu220-shop.de mit den bewährten Gestaltungsmerkmalen fort. Das Thema 2017 ist ein detailverliebter Bauernhof mit passend gestalteter Scheune. Das Set ist wie immer in zwei Varianten erhältlich: Klassisch dunkelbraunes Fachwerk mit weiß verputzten Gefachen setzen mit dem Kallentaler Hof in mittel- bis süddeutsch geprägten Dioramen idyllische Akzente, während die roten Ziegelausfachungen mit weißem Fachwerk, inspiriert von Motiven aus dem Alten Land, eher norddeutsche Themen bedient.

Es handelt sich um ein zweiteiliges Set bestehend aus Hofgebäude und Scheune.

Bausatz aus hochwertigem, durchgefärbtem Hartkarton.
Abmessungen: ca. 66 x 60 x 53 mm (LxBxH, Wohnhaus), ca. 52 x 43 x 37 mm (LxBxH, Scheune)

Auftragsentwicklung exklusiv für den 1zu220-shop

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je 55,00€*



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Weihnachtswagen Spur Z 2022



Spur Z - Art.Nr. 82596
Güterwagen-Set mit gemischten Ladungen



Spur Z - Art.Nr. 81320
Zugpackung "Wiebe" mit V320 001-1



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50 years of Z gauge (part 4)

Decoupled from Märklin

If we look at the North American market far away from the European home, we see that Z gauge has taken a very different development there. In many respects it has broken away from its inventor, Märklin, and has also led to the Göppingen-based company no longer being the market leader in this scale.

When we celebrate 50 years of Z gauge with joy in 2022, we will do so in a large, worldwide community. Aware of how a common hobby connects us across continents and enables friendly exchange thanks to electronic media, we will then also look at the large foreign markets of the small gauge.



This is what Z gauge looks like today according to North American models. However, more than thirty years of history to our nominal size passed before such scenes could be filled with such sophisticated models.

Right in the first decade of the Mini-Club, Märklin took steps towards Switzerland and also the United States of America. But, while the Swiss Confederation is only a small country with a correspondingly limited market, on the other side of the Atlantic there was potential that promised an export destination of lasting importance.

So, Märklin deliberately took its invention to the land of unlimited possibilities and created an initially small, but also growing circle of fans there. However, until 1984 the Zetties overseas had to make do exclusively with models based on European models, far too long.

Either Märklin did not recognise the important needs in time, or the limited investment funds did not allow it to invest earlier in models based on American prototypes.

And so, the enthusiasts there looked around for solutions that, in retrospect, mark important cornerstones in the history of Z gauge in the USA.

The central figure of the quest there was Nelson Gray, born on 23 September 1916 in Hamilton (Ontario / Canada) as the youngest of eight children.

Many fans of the small scale will not know his name, and yet benefit from the creative spirit and legacy of his pioneering work for the 1:220 scale.

Nelson Gray was a toolmaker by trade and a model railroader by passion for his hobby. This combination led to his significant role in the early development of Z and Nn3 gauge in America. Prior to this he was involved in 1-inch gauge, designing and building bogies and couplers.

Having moved to the Syracuse area (New York / USA) in 1939, his work in an aircraft parts manufacturing company saved him from military service during World War II. Later, together with his brother, he went into business for himself and sold, among other things, the "Plasticor," a small hobby injection moulding machine designed for home use.



Nelson Gray, here a photo from 1982, was the decisive pioneer for Z-gauge in the United States of America. Photo: Collection of Ztrack

UNDECORATED Z KITS N/140 (most parts black)	
100	Rail Box Kit X/M \$ 4.25
101	" " Decals .75
102	Tank Car Kit T 4.00
103	Flat " " F 3.25
104	Bulkhead " FB 4.00
105	Gondola " GB 4.00
106	F-M Dumpy Kit 4.00
107	F-M Shell Only* 3.50
108	* Gt. Nubl. 8874 & 8875 chassis
109	
110	
Z Parts	
120	F-7 Frame-Wt. 1.00
121	" Trucks pr. 1.80
122	" Bulkheads pr. .25
123	" Front Coupler long .25
124	" Rear " short .25
125	Car Couplers (Märklin convertible) 50 pr. 1.35
126	Arch-Bar Trucks pr. 1.35
127	Attendorf " pr. 1.35
128	Roller Bearing " pr. 1.35
129	Pressed Steel type Car Ends pr. .75
130	Gon. Floor-Frame die-cast 1.00
131	Rail Bow 1.00
132	Brake Wheel .10
133	
134	
135	
136	
Prices & designs subject to change without notice. Phone (315) 469-4254, 8-10 pm Eastern time, 7 days. When writing a SSAB helps. Refunds on unaltered goods only. Post. Paid. U.S. & Canada Overseas 1% of \$. UPS has 2.00 chgs. for pick up, or 30 miles to UPS.	

UNDECORATED Nn3 KITS/ TRUCKS (less couplers)		
ITEM #	DESCRIPTION	PRICE
200	Wood type Box Car Kit B.R.	\$ 4.35
201	" " Gon. " " R	4.10
202	" " Flat " " R	3.85
203	" " " W/ stakes R	4.10
204		
205		
206		
Nn3 Parts		
220	Barber A-B trucks B.R.	pr. 1.60
221	Diagon " " B.R.	pr. 1.60
222	4 wheel Pans. " B.R.	pr. 1.80
223	Box car body B.R.	1.50
224	Flat " " R	1.00
225	Gon. " " R	1.50
226	Floor-Frame die-cast R	1.00
227	Flat body W/stakes R	1.50
228		
229	(Pass car rear Φ ?) lr. B	
230		
231		
232		
300	Boiler/cab die-cast will fit Märklin 2-3-2 or for scratch building. Φ ?	
301	Older type Tender Kit Φ ?	
303	Dummy couplers 1pr. plain shank, 1pr. to fit our frames. 2pc. brake wheels, 2pc. stop-cyls, 2pc. bk. plat-forms. lot 1.00	
Nelson W. Gray 600 E. Brighton Ave. Syracuse, N.Y. 13205		

An early price list from Nelson Gray reveals many kit models and his parts offerings that were to give momentum to Z scale in North America. Photo: Collection of Ztrack

His knowledge and skills benefited a total of three model railway scales, eventually including Z gauge. He initially cast the parts he developed using sand moulds. However, the necessary reworking caused him to rethink.

In his workshop he built his own die-casting machine, moulds and other tools to streamline the production process. The first product was wheels, soon followed by clutches and other details of unprecedented quality.

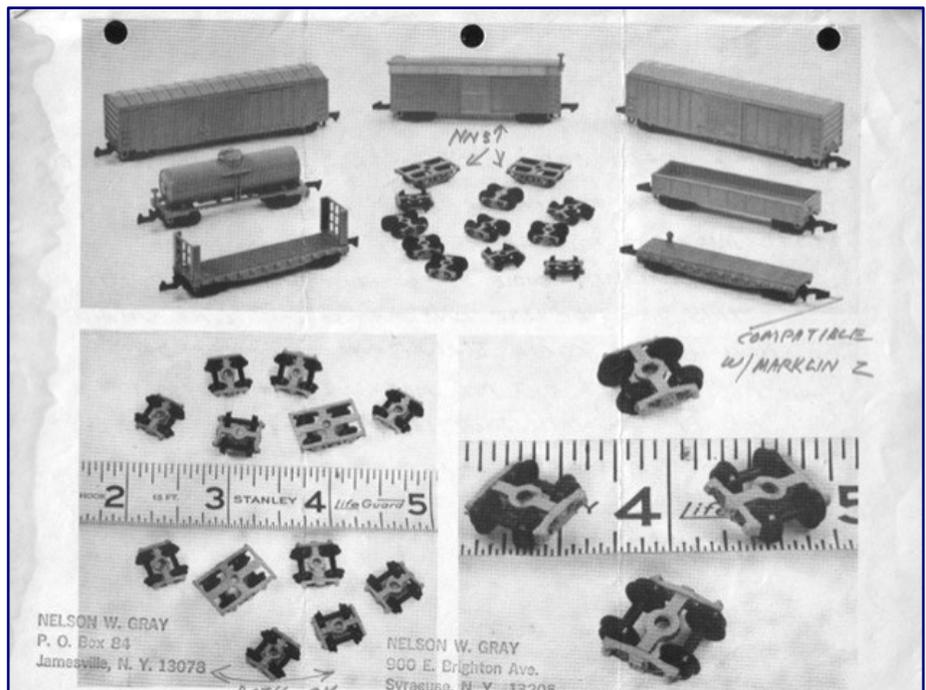
In 1979, he discontinued production for the 1-inch large railway in order to take on a new challenge: the Nn3 and Z gauges.

Contact with N scale and the level of detail achieved there raised the question of whether this could also be achieved in 1:220 scale. In mid-

1977 the time had come and Nelson Gray started work on a diesel locomotive EMD F7A on a modified large-scale chassis - seven years before the appearance of the (compromised) Märklin model.

With its round "nose", it made high demands on the mould construction, which he had done by a company active in automobile construction.

Even before this first model was finished, he placed small advertisements in US model railroad magazines announcing the production of kits for American rail vehicles in 1:220 scale.



The programme overview of the early years already shows a varied range of different freight wagons and individual bogies. Photo: Collection of Ztrack

As a market test, a flat car and a ballast car (gondola) were announced in a small series of 1,000 units. The actual number produced cannot be determined with certainty today. Dealer advertisements followed at the beginning of 1978, the success took its course, the programme grew and also included the nominal size Nn3.



It was not until 1984 that Märklin ventured into the North American market with a compromised EMD F7. In comparison with the better proportioned locomotive of the same prototype by Nelson Gray, which was later produced by Micro-Trains, it always had the disadvantage of being the only locomotive on the market.

Only the EMD F7A was still not ready in late summer 1979. Problems with indicators in the PS (polystyrene) plastic used finally prompted the pioneer to switch to injection moulding with ABS (acrylonitrile butadiene styrene).

In 1982, a step followed that marked the leap to the present and is remembered by few in connection with this pioneer: Nelson Gray sold his moulds for the Z and Nn3 tracks to the manufacturer Micro Trains (MTL), which is still active today and familiar to Zetties as a high-volume manufacturer.

First large-scale manufacturer

To this day, models from his designs are still being offered sprayed and fully assembled. Thus, every US model railroader of Z gauge probably has a piece of Nelson Gray's legacy in his hands or treasures it in his collection without suspecting its origins. The MTL programme has become more colourful and diverse, but in the last fifteen years it has hardly seen any new additions.

Without a doubt, however, the market entry of this manufacturer has given wings to the Z scale in the North American market, because Märklin could not and still cannot keep up with the variety of freight cars and the true-to-scale conversion of locomotives and cars following domestic models.



The two-storey US cattle cars are classics in the Micro-Trains range and are still being reissued today.

The EMD F7A in particular was able to hold its own against the competitor model from Göppingen for an astonishingly long time despite the lack of window inserts and not fully developed running characteristics. Only AZL made this locomotive look old in the truest sense of the word decades later.

With production outsourced to a Chinese manufacturer, two more diesel locomotive types followed later, which were offered until the manufacturer went bankrupt and then abruptly disappeared from the market. The EMD SD40-2 made it to a new edition in the new millennium, but enthusiasts of the model are still waiting for the EMD GP9 and GP35.



The EMD SD40-2 was one of three newly constructed locomotives from Micro-Trains. It made it to a re-release even after the Chinese supplier went out of business. Photo: Ztrack

The two track systems should also be mentioned as milestones of Micro-Trains: a ballast track similar to that of Rokuhan, but with closer sleeper spacing and visibly mounted shaft drives, as well as a ballastless track, which is still considered exemplary today.

As a competitor in this area, Atlas Model Railroad entered the Z gauge market a few years ago. Turnouts, double crossovers (both without included drives), and a long flex track are the products that set new standards here. An expansion of the programme to include rolling stock was explicitly not planned.

This segment was tackled in 2017 by another manufacturer, Intermountain Railway Co., which announced and finally delivered many colour variants, including very colourful and eye-catching examples of an American bulk freight wagon.

Production was based on the number of pre-orders collected, subsequent models did not appear and were not announced. It is possible that this pre-order procedure, which is common in the USA, did not work out well for a completely new manufacturer in our scale, and that the supplier was disappointed by the response.

But one reason could also be the overwhelming dominance of the Norwegian-American supplier American Z Line (AZL), which gave our gauge a lot of fresh impetus and made it grow significantly. It profited from the delivery difficulties that had occurred with the insolvency of the Chinese supplier at Micro Trains and also Märklin.

The “locust years” at Märklin and the subsequent insolvency in 2009 also paralysed their commitment there, and left a vacuum that had to be filled if Z-gauge was not to lose its appeal. Only the GG1 (2004) and the streamlined steam locomotive J-2 “Commodore Vanderbilt” of the NYC (2007) are still to be mentioned as form new products from Göppingen for the 21st century.



For a long time now, there have been no new designs based on US models from Göppingen's own production. Until today, the offer from own production is limited to reissues of the freight wagons, which are also subject to compromises.

AZL as a new star in the sky

It is probably thanks to Hans Riddervold, founder of AZL, that the nominal scale Z did not burn in North America like a shooting star. His merit for market-oriented products can hardly be measured in the overall view of fifty years. Therefore, we would like to take a brief look back at his company at this point.



The path to American Z Line was not straightforward and was rather the result of a series of unfortunate coincidences. The process began with the Small Scale Works company, which wanted to develop a Challenger steam locomotive for Z gauge.

But the ambitious plan brought neither results nor progress, and overnight a new target was focused on with an EMD GP38-2. In 1997, the operation was closed.

This abruptly led Don Bouchard and Jon La Mere to found a new manufacturer, Rogue Locomotive. Hans Riddervold financed the company as a backer and a small industrial building rented in Medford (Oregon) became the company headquarters.



Looking back, Hans Riddervold recalled this period in our partner magazine Ztrack: "The best things that Small Scale Works produced were the numerous machines needed to make moulds and injection moulded products. We also knew what we could produce within our means."

Hans H. Riddervold, John LaMere, and Don Bouchard (photo above; left to right) pose for a group photo at Rogue Locomotive Shops in Medford, Oregon (photo below) in 1998. Photos: Collection of Ztrack

Because of prototype engines parked nearby, which could be photographed and modelled, the choice fell on the EMD GP38-2, a multi-purpose diesel locomotive. As



The EMD GP38-2 was the first locomotive that AZL was able to offer on the market. It was also reissued in recent years and, as in the case of the model shown here based on a Union Pacific pattern, also produced for Märklin.

a model, it was to have an 8 mm bell-shaped armature motor with two shafts and flywheels mounted in a milled frame divided longitudinally to poles.

This ensured sufficient weight for good traction and the one-piece injection-moulded housing could simply be put over and completed with a compressed air horn and railing. But practice proved not to be so simple, because every hole for the railing support had to be drilled manually. The bogies, gearboxes, and light guides also caused a lot of headaches.

Further help was obtained externally, including the outsourcing of pad printing and the production of paint masks. Part-time employees took over the painting of the models and helped with other work. In the end, the result was an innovative and functional model that would later, already under AZL's direction, make it into the Märklin range, as part of a cooperation.

But then Don Bouchard died in a motorbike accident in 2010. Rogue Locomotive was also to have only a short life span, especially since the market was a much smaller Z-gauge community than today.

When this company also had to close, the locomotive moulds were put into storage, while tools and machines were sold. The last project that was initiated consisted of 500 housings ordered from Ajin in Korea for the GE C44-9W diesel locomotive. Unfortunately, Rogue Locomotive was no longer able to produce the running gears for these.

Hans Riddervold also ordered them from Ajin and this was the birth of American Z Line – today the largest Gauge Z supplier of rolling stock in the American market. To this day, AZL has no manufacturing capacity of its own, and leaves this to external service providers, who have already had to be changed several times.

However, in cooperation with Rob Allbritton, a US-American, this supplier has already developed and offered many very attractive and long-lost models, including locomotives such as the “Big Boy,” the legendary UP series 4000, as well as many freight cars.



As a high-priced brass model, the legendary “Big Boy” of the UP series 4000 also appeared in the programme of American Z Line.

Today, they are mostly produced by plastic injection moulding (housing), the undercarriages are cast (metal die-casting). Especially in the early years, however, heavy and correspondingly expensive brass models were preferred and were offered in much smaller numbers. Swiss originals were offered under the subsidiary line SZL (Swiss Z Lines).



The ALCO PA1 and PB1 can currently be found as injection moulded plastic models in the AZL range. There, however, it also has an older predecessor in the form of this duo in brass construction, easily recognisable by the non-flush window inserts.

More recently, it can be observed that many AZL classics made of brass are now returning to the programme as plastic models, including the currently offered ALCO PA1. And, also, all US models that



Another example of the brass era at AZL, dating from around 2005, is also presented here together with the packaging customary at the time.

are new in form for Märklin, which were brought onto the market after 2009, originate from AZL and were only modified with regard to the system coupling.

This is always recognisable by the long-since split cast block, which has only been adopted for Märklin's own designs from 2018, and by the locomotives' traction tyres, which are not otherwise used in Göppingen.

Without a doubt, AZL has been the driver and engine of an ongoing development for well over ten years that keeps the 1:220 scale going and makes it more attractive than ever. Märklin is taking advantage of this with a cooperation in order to keep up and to be able to offer an attractive US programme itself.

Small series for the collectors

But AZL is not only a supplier of rolling stock. This market player has long since discovered the accessories sector for itself. Z-Panzer supplied and still supplies many road vehicles based on military models, construction machinery and tank miniatures, which AZL adds as cargo.



Of course, the accessories sector was and is also well represented with buildings (Gray Brothers, Micro Structures, etc.) and civilian vehicles (MCZ, Showcase Miniatures, etc.) and is served by the small series.

Currently active, larger manufacturers in this segment are Rokuhan and also the German brand Archistories, which mainly supplies exclusive models that are offered by Ztrack. Light cutting

Photo left:
Three in one: This shot shows tank cars from AZL, the ballast track from MTL and a US signal box from small series production by 1zu220-Modelle.

technology and 3D printing are undoubtedly the driving forces of the present and have also given new impetus in the USA.

An important load supplier in the United States is Hay Bros. Garage with a very creative programme, which includes, for example, the “blue coal,” so called because of its distinct colour shimmer. Regularly equipped with their load inserts are the models of open bulk wagons offered at WDW Full Throttle.



This steam locomotive is a model developed by Westmodel and distributed by Aspenmodel, which received further modifications at Michael Bahls - a typical example of the small series with the target market USA.

This is currently the longest active small-series supplier in the US market, who time and again offers exclusive editions of various freight car models in double packs, which are manufactured for them at Pennzee.

Also worth mentioning are the refrigerator wagons with wooden walls, which were once developed by Father Nature and have been reissued thanks to their commitment in the recent past, since the former manufacturer is no longer active.

Before the nominal Z scale really grew wings in North America, the market there was even more manageable. One of the very active companies at that time was the German manufacturer FR Freudenreich Feinwerktechnik, which produced many high-quality and, also, more exotic models for the US market and distributed them there.

This continued until the early years of the 21st century, when FR withdrew from the U.S. market and refocused its business on the European market with an emphasis on Scandinavia. The reason for this was less favourable trade rates, but also the new competitive situation, which meant that many developed models were replaced by mass-produced offerings.

It is probably impossible not to forget any of the suppliers in this historical summary, while a reasonable scope of this article also dictates that only the larger milestones of the long development are highlighted. This also includes several steam locomotive models contributed by Westmodel, as well as various other conversions that gladly made use of Märklin's class 89 running gear.

Searails contributed a two-axle motor chassis, which was to serve as a starting point for self-builds. And at Micro-Trains, two steam locomotives with trailing tenders once caused a sensation, which appeared in manageable numbers, but with Era I served a then new segment of our size.

Micro-Trains proved to be a real grab bag several times anyway. They also creatively use old moulds for attractive new products by upgrading the models with elaborate patina ex-works or by reissuing them with attractive loads, including animals in cattle cars.



FR Freudenreich Feinwerktechnik also served the North American market in earlier years, including this 300 hp Algeir box locomotive for the Reading company.

A big leap was also the adoption of the moulds for passenger cars, which had originally been developed for the German dealer Marsilius and were initially intended to establish a new product segment as the “Marsilius Line”. However, this was only a short-lived idea, which became a permanent part of MTL's programme.

If we draw a summary from this brief outline, then it is probably that the road to the present for the North American market was rather rocky. Märklin established it, but was not able to give it lasting impetus.

Small series became the salt in the soup on both sides to fill gaps and to supply the market with more exotic models. After the pioneering work of Nelson Gray, it was up to MTL and later especially AZL to establish the Z gauge permanently and sustainably as a “professional gauge” in America as well and to give our gauge the broad recognition it deserved.

Especially the seemingly endless goods trains on the American continent are a strong argument in favour of Z gauge: Such long lines of wagons with sometimes up to six diesel locomotives as draught horses cannot be reproduced in any other scale so impressively and close to the prototype.

The enthusiastic Zetties in the USA and Canada realised this much earlier than those in Märklin's European home market. Thanks to the modern media possibilities, however, we all always remain in open and friendly exchange.

This article was written in cooperation with our partner magazine Ztrack.

Current US rolling stock manufacturers:
<https://aspenmodel.com>
<https://www.americanzline.com>
<https://www.maerklin.de>
<https://www.micro-trains.com>
<http://www.wdwfullthrottle.com>

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.

Praise and an error message on the international July issue:

I really enjoy reading your excellent magazine. You always pack the magazine with such fantastic information which is so very useful to me as a Z Gauge modeler who is not living in Germany. I am looking forward to reading about the French Azar Models company.

When I click the download link for the international magazine the German edition appeared, hope you can fix the link soon.

Darren Bentley (England), per E-Mail

German translation:

Ich lese Ihr ausgezeichnetes Magazin wirklich gerne. Sie bestücken das Magazin immer mit solch fantastischen Informationen, die für mich als nicht in Deutschland lebenden Spur-Z-Modellbauer sehr nützlich sind. Ich freue mich schon darauf, etwas über die französische Firma Azar Models zu lesen.

Wenn ich den Download-Link für das internationale Magazin anklicke, erscheint die deutsche Ausgabe, ich hoffe, Sie können den Link bald reparieren.

Answer of the editors board: We were very pleased about the great interest in the manufacturer Azar Models and its products that we received from our readers. We are happy to keep our loyal readers up to date here. We discovered the wrong link to **Trainini International Edition** 7/2022 on the day of posting and corrected it immediately.

Question about motorised floor models:

I have a question: Do you know if it is possible to buy additional wagons from Minitrains? I have an eTW 4010 from ÖBB. Unfortunately, there is only one middle carriage, but the train was much longer. I saw in the railway magazine that Mr. Markus Krell has motorised this eTW 4010. I would also be interested in that, but the train should have more middle cars (two or three). Perhaps you can help me further.

Peter Racher, Grabenstätt

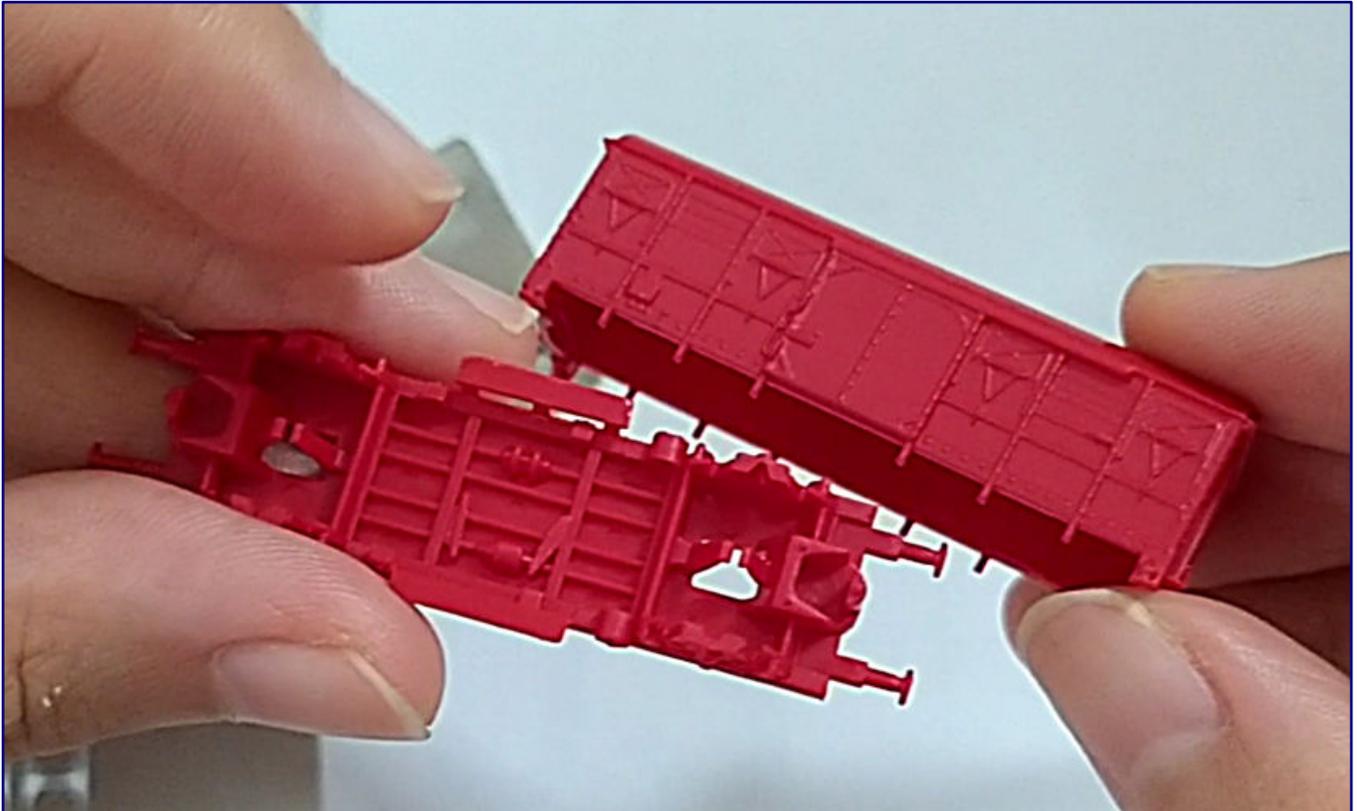
Answer from the editors board: As far as we know, a direct purchase from the manufacturer is not possible. These are probably leftover stocks from an earlier subscription series of floor models that appear from time to time on auction platforms. These were and are possibly still being sold (cheaply) by various dealers. The number of available units and possible dealers are beyond our knowledge.

New models from Azar Models:

A major problem with the beautiful products from Azar Models, which we had presented in test reports in **Trainini®** 7/2022, is the availability of the locomotives and wagons. Since the first models were delivered, demand has consistently exceeded production capacity.



Moïse Rogez has now reacted to this in such a way that a manufacturing process using plastic injection moulding is currently being prepared for the Gs 40.2 boxcar, thus making higher batch sizes possible.



The production process of the SNCF covered freight wagons that we presented in July is currently being switched to plastic injection moulding due to strong demand. Photo: Azar Models

For all interested parties who have been left empty-handed so far or who are constantly seeing a red product light at the German sales partner 1zu220-Shop, the only thing to do is to remain patient and wait for the new production to start.

Kleine Schritte bei Micro-Trains:

Most of the new wagons announced for delivery last month are still waiting, but MTL has posted two pieces of news on its website: The Railroad Magazine wagon number 7 (item no. 502 00 646) with the motif "The Old One Spot" is now to be delivered.

The four flat cars with end walls of the BNSF from the former Procor stock (994 05 282) look very appealing. The scope of delivery of the grey painted specialists for heavy loads also includes laser-manufactured shelves with the plank replicas of the prototype.

Important Märklin model on the way:

On its way to the dealers and thus their customers is now the Insider Annual Model 2021 in the form of the double diesel locomotive of the V 188 series (item no. 88150). We were able to hold the strikingly heavy model, already manufactured from series parts, in our hands in Altenbeken and it left a very good impression.

With warm white-red light change on the basis of SMD-LEDs, bell-shaped armature motor, drive on all eight axles, close coupling between the two vehicle parts, (two-dimensional) engine room replica and engine room lighting, it is technically up to date.



The Insider Model 2021 in the form of V 188 001 a/b of the Bundesbahn (item no. 88150) was finally delivered. Photo: Jörg Erkel / 1zu220-Shop

In the assortment, this popular splinter type closes a gap in the documentation of the history of large diesel locomotives. The prototype and model will be presented in detail in separate articles, probably in the next issue.



The Insider Annual Wagon 2022 (80332) designed for Era I serves a very small circle of interested parties. Photo: Jörg Erkel / 1zu220-Shop

Also delivered is the Märklin magazine car 2022 (80832). The model is based on a German Federal Railways Tbis 871 sliding roof/sliding wall car, painted in the blue identification colour of the magazine. For this model, the latest mould innovation from Göppingen for freight wagons was used.

Shortly before the editorial deadline, the Insider Annual Wagon 2022 (80332) was added to the list. The light grey freight car G 10 with brakeman's cab is based on a private car of the Salach paper factory, used by the K.W.St.E. (Era I).

Not everything is over at some point:

“You should stop when it's at its best” is the statement of Spur Z Ladegut Josephine Küpper (<https://spur-z-ladegut.de>) from Aachen in her last customer letter, which was sent electronically at the end of August. Before that, the creative couple had already withdrawn from the trade fair and exhibition business.

But the shock that this sentence gave loyal customers was soon to evaporate: It is not the business that is being discontinued, but only the sending of the customer letter that is produced every one to two months. The response to it is steadily decreasing, it is simply no longer a medium of this time, Helmut Küpper said when asked.

The much-appreciated range of loads, spare parts and new and used models will remain, and the friendly couple will stay with us Zetties. With a load for the Green Cargo pack from FR Freudenreich Feinwerktechnik, we were even referred to a current novelty.

Anniversary congratulations tender extended:

This year's holiday season is clearly noticeable, which has also drawn those at home outdoors in view of the warm and dry weather. This year's summer slump seems to have affected not only the ongoing deliveries but also Zetties themselves, as many things have become noticeably quieter.

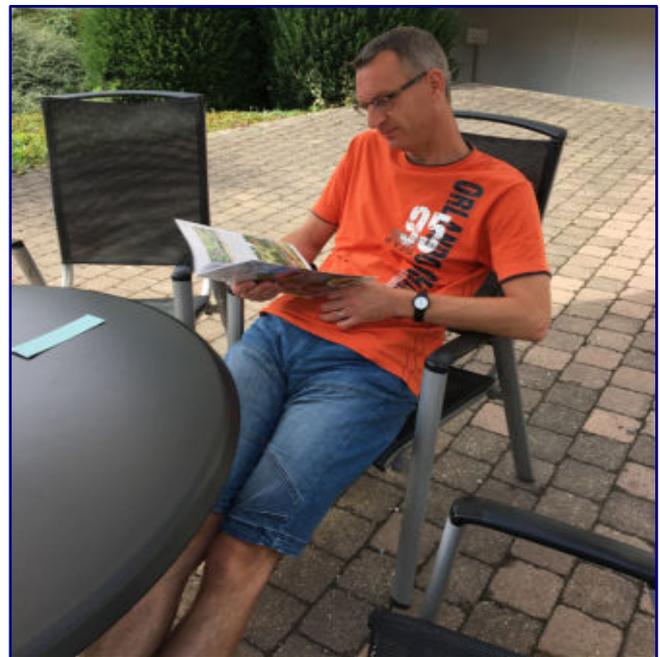
We have also received comments from readers that our call for congratulations, experiences or expressions of passion for our jubilee this year, Z gauge, was too tightly timed because it would not reach enthusiasts from the south of Germany, in particular, in time.

In the interest of broad participation, impressions that are as representative as possible and equal opportunities for all those willing to participate, we are therefore extending the final submission date by one month to 31 October 2022.

Until then, write in (preferably) three to five sentences on one of the following questions:

- What words would you like to use to congratulate Z gauge on its 50th anniversary?
- What special experience do you associate with Märklin Mini-Club when you think of this year's anniversary?
- What is it that fascinates you so much about our small gauge?

We would like to publish your contribution in this magazine together with the other letters, in order to impressively show how colourful and multifaceted our common hobby is on the smallest scale.



The ten winners of our current competition can read the anniversary book as relaxed as our editor-in-chief Holger Späing.

50
Years
of Z Gauge

Please submit your entry to [redaktion\[at\]trainini.de](mailto:redaktion[at]trainini.de) and include your full address in addition to your first and last name (this will not be published). Your data will only be stored and processed for the purpose of this competition. If you do not wish to take part, please state this explicitly in your entry.

For the raffle among the participants, Märklin has provided a total of ten anniversary books "Alles über die Spur Z" (Everything about Z Gauge), each worth EUR 22.90, which will serve as a chronicle to remind us for a long time of this special year and will present many impressions of our size in a collected form.

Current and future AZL new products to be added:

Due to our special editorial situation in August, the new models announced by American Z Line at the end of last month are still pending. We combine these with the models that are currently reported for delivery.

To be added are the ALCO PA1 in the popular Santa Fe livery (art. nos. 64401-4 / -5), which are also offered as an A-B duo (64401-1_SET to -3_SET), as well as the EMD SW1500 in the colour and address of the Frisco (62716-1 / -2).



The ALCO PA1 and PB1 (art. no. 64401-1_SET; photo on the right, compare photo on page 77 below) are among the current AZL deliveries, as is the EMD SW1500 in the "Kodachrome" finish (62719-2; photo on the right). Photos: AZL / Ztrack

Both designs also appear in September with further variants: the ALCO locomotive for the Cotton Belt (64411-1 / -2), as well as the Gulf Mobile & Ohio (64412-1 / -2), and the shunting locomotive in the Kodachrome livery of the Southern Pacific (62719-2) as well as in the green-yellow of the MKT (62718-1 / -2).

Manufacturer photos of the current deliveries can be found at <https://www.americanzline.com>.

In a video (<https://youtu.be/r1deprtNxGA>) AZL also announces further new products for the near future and gives updates on already existing announcements. Among others, the following models are discussed in the video: EMD SD40T-2 with "tunnel engines," column wagons with truck trailers, MAXI-IV sets, heavy half luggage wagons with two- and three-axle bogies and the long-distance train "City of Los Angeles."

Dream layout from Miba 10/22:

Miba 10/2022 promises to be an exciting read. The model railway magazine, which is available in specialist and railway bookshops as well as directly from the publisher, now presents Jürgen Walther's Hirschsprung layout as part of its 50 years of Z gauge reports.

This beautifully and lovingly designed layout with many authentic details was presented in its first state of construction a few years ago in Altenbeken, and then completed in 2019 at Märklin Days.

The reader learns a lot about the construction, the background and the operation of the masterpiece. The well-crafted and perfectly staged photos are also taken by no stranger: Stephan Fuchs also regularly shares his photos with our readers.

Review of a model railway summer festival:

On 10 September 2022, the specialist retailer Modellbahnunion (<https://www.modellbahnunion.com>) invited visitors to its summer party at its Kamen location (Unna area) from 10:00 am. Under the motto "End open," people talked shop, marvelled and took photos until about 6:00 pm. The fact that it didn't go later was only due to the rainy weather, because the anticipation was all the greater after a few years of compulsory pandemic break.



Abbildung: VGB / Geramond

On more than 2,000 m² of exhibition space with more than 15 manufacturers' stands, there was a lot to see, especially since idealistic participants from the surrounding area also took part in this festival. Food and drink were also well catered for, while raffle prizes worth over EUR 10,000 awaited the visitors.



Abbildung: Modellbahnunion

The fans of H0 gauge could also look forward to a newly presented wagon novelty for the retailer's Eggen brand. Those who could not or did not want to come because of a long journey or bad weather could at least be there virtually, because the new format "Live Shopping" with product presentations and manufacturer discussions also ran on this occasion from 12:00.

A summary of the event can be accessed via the following link:

<https://www.youtube.com/watch?v=WGGv0R4Cjwk>

Audio clip with Sebastian Topp:

Spielwarenmesse has published its tenth episode of a series of audio contributions. This time, Gats is joined by Noch Managing Director Sebastian Topp. In conversation with Celine Koch, he tells us how he came to the hobby of model railways and how he explains the momentum that model railways experienced in the Corona pandemic.

He looks at the community and the nature of model railway enthusiasts and explains how he wants to take the momentum with him into the next era. Other topics include the impact of strong demand on production processes and opening up the model building section of the Spielwarenmesse to end consumers.

Anyone who is curious can listen to the contribution at the following address:

<https://spielwarenmesse.imageplant.de/media/category/200>

Märklin advertising wagons on sale:

Märklin had to cancel its Open House Day in September, but the special cars for this event had long been produced and should now find their buyers. Märklin is therefore selling the models in its own electronic distribution while stocks last.



The special car (82179) produced for the cancelled open day is now going on sale to the public by the manufacturer. Photo: Märklin

For the Z gauge, a covered goods wagon of the Dresden association type with a white basic colour was selected as the later GI 11. It has an elaborate print with motifs and tools of the casting finishing, and a note on the doors about the cancelled event (item no. 82179).

The last EtchIT new products of the summer:

A two-axle tractor unit, similar to the Ford Transcontinental 4 x 2 (art. no. XD081_Z), is the current kit novelty from EtchIT-Modellbau (<http://etchit.de>). The excellently printed model was presented at the end of August and can be seen on the supplier's pages in various views as well as the individual parts as they are supplied.

New products finally available from Z Dream Collection:

In February, we announced that ZDC Z Dream Collection from Austria would also have new products, but that these would only be announced when they were ready for production. Now the time has finally come.

Two different Vectron versions are now being presented, both of which have their origin in Austria. One locomotive bears the lettering Voestalpine (for the Linz steelworks), the second Vectron belongs to the Wiener Lokalbahn (WLC).



WLC's Siemens Vectron, equipped with only two pantographs, is one of the two ZDC new releases now available for order. Photo: Z Dream Collection

As a special feature compared to the Märklin models on which they are based, they carry only two pantographs. Both locomotives will again only be offered in a limited number of units, ten copies each are planned. However, they will only be built after orders have been placed.

If you are interested in a ZDC model, please write to [zdc.austria\[at\]gmail.com](mailto:zdc.austria[at]gmail.com) or [zdreamcollection\[at\]aon.at](mailto:zdreamcollection[at]aon.at). According to the manufacturer, it is also advisable to check their website (<http://z-dream-collection.jimdosite.com>) from time to time for the latest information.

Winners wanted at Messe Dortmund:

Messe Dortmund is looking for a person and their project that will prove suitable to become the focus of the next Intermodellbau advertising campaign. The search is on in the categories "on the water," "on the rails," "in the air," and "on the road."

Anyone who would like to become an advertising face of the fair should submit their request to participate by 15 October 2022 at the following Internet address:

<https://t95f6a95e.emailsys1a.net/c/153/5664601/2871/0/6445917/3327/525187/77ba40e7f5.html>

Some news from the Miniatur Wunderland:

The Miniatur Wunderland Hamburg has several success stories to announce: Already on its 21st birthday on 16 August 2022, the operators reported a total of 1 million hours of work completed on the world's largest model railway layout.

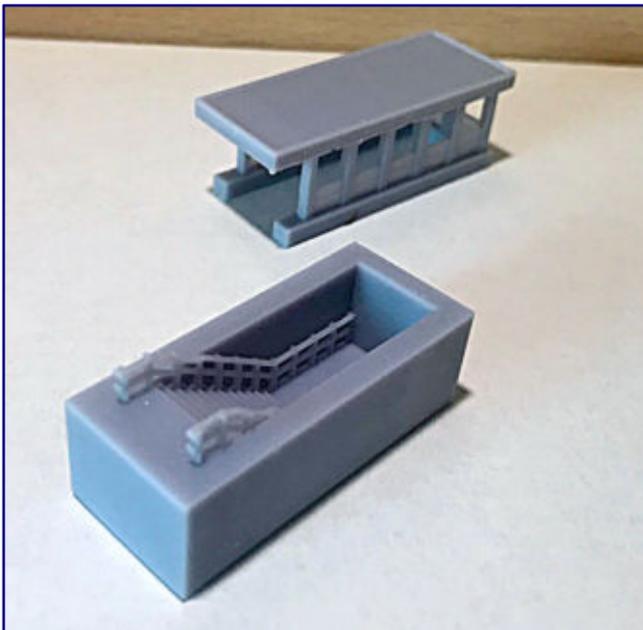
Around three weeks earlier, the 21 millionth visitor had been welcomed on site. This series of events and superlatives also includes the third success story: This year, the German National Tourist Board (DZT) once again asked 15,000 tourists to Germany from all over the world about their favourite sights.

And now for the 5th time in a row, the Miniatur Wunderland was voted Germany's most popular sight (<https://www.germany.travel/de/top-100/sehenswuerdigkeiten.html>). In the meantime, there is no longer a blank spot on the world map. Without exception, at least one person from every country in the world has visited the Hamburg attraction.

NoBa-Modelle re-enters the market:

In mid-October 2022, NoBa-Modelle (<https://www.noba-modelle.de>) will resume production after the summer break and will immediately start with some new products. The focus is particularly on the area around the track.

The subway stairs (art. no. 4132R), for example, will certainly ensure on many self-build platforms that the little figures get to the train safely without having to cross the tracks. Meanwhile, the scale house (4131R) protects commercial vehicles from overloading and broken axles. Also, the VW Multivan 5-seater (6208R) and the T5 with flatbed and double cab (6202R) will enhance the roads as relative lightweights.



The new subway stairs (art. no. 4132R; photo left) can be used universally and will certainly find a home on many layouts. The small harbour crane (3202R; photo right) can also be used flexibly depending on the era. Photos: NoBa-Modelle

At the beginning of the last quarter, two cranes form a focus that is small in terms of quantity but huge in its dimensions. The small harbour crane (3202R) is a museum piece on the quay, which can also be used on Epoch I and Epoch II layouts, but certainly still in daily service.

The Ardel 57-ton steam crane (5318R) is a heavyweight in prototype, but, as a miniature, it can easily be transported with a locomotive. Its parts are so mobile that it can be used in transport as well as in working position and will definitely be a highlight on any layout. A finished model is planned for this and will probably follow soon.



Many Zetties will have been waiting for such a model: the Ardel steam crane 57 to (5318R) in working order, shown here as the first model without its crane hooks. Photo: NoBa-Modelle

We plan to present this important new products in more detail and to take a look at the exciting details that make up its unmistakable appearance. We have been told that in the future we can expect to see escort vehicles for this giant from the era before telescopic cranes.

Two models at Full Throttle:

WDW Full Throttle (<http://www.wdwfullthrottle.com>) announces two new wagon models on its pages. For the Rio Grande, a double pack of bulk freight wagons with cylindrical hopper (Item No. FT-1014B) is released in orange livery.

The open 33-foot bulk freight wagons with front side heap shields as a duo of the NYC & St.L / NKP (FT-3602) are described as a form novelty. These wagons are painted black.

Major changes at Herpa:

The car and aircraft model supplier Herpa from Diethenhofen in Franconia has informed its subscribers and members that it will discontinue its customer club at the end of the year and will no longer publish the print magazines "Wings World" (aircraft) and "Der Maßstab" (car models).

For the coming year, digital formats are being worked on as a substitute, with which the customers are to be informed comprehensively and more up-to-date. To what extent this will influence our reports on new models in the scales 1:220 and 1:200, we cannot yet determine.

Märklin autumn new products presented:

On 16 September 2022 Märklin presented its autumn new products 2022. According to these announcements, the following four models will be available in the anniversary year of the Z gauge: a "Wiebe" train set with the 320 001-1 diesel locomotive of the track construction company (item no. 81320), a class 212 diesel locomotive (88697) in ocean blue/ivory of the German Federal Railroad.

A freight wagon package (82596) is based on models from European countries, but leaves a queasy feeling with regard to the product illustration supplied, because it shows the single-unit running gear from 1972 without steps, which had to serve here as the basis for a container wagon.



The V 320 in Wiebe design was already to be expected, just not so close in time to the Insider Model 2022. It now follows this together with four freight cars as a construction train (item no. 81320). Photo: Märklin

Christmas Wagon 2022 (80632) has a green base colour, which is why it makes a particularly nice photo together with its previous year's cousin and establishes a small series within the series, which otherwise consisted of freight wagons.





The three-piece freight car set (82596; photo on page 91 below) is intended to complement the ocean blue-ivory coloured class 212 (88697; photo on the right). The Christmas Wagon (80632; photo on the left) continues the design of last year's motif. All photos: Märklin

The Federal Mail Coach 6276:

Hagen von Ortloff was on board the historic railway mail wagon 6276 and had Philipp Zipf and Eberhard Valtinke, two members of the historical working group, explain to him how the nightly work on these mobile offices once went.

Platform visitors were not allowed to see them because of the secrecy of letters and mail, and the wagons were not accessible to passengers. What remained publicly perceptible were only the loading and unloading processes at the train stops and the free access to the car mailbox.

But now the "secret" processes inside are revealed and Philipp Zipf also explains to "HvO" why the job definitely had stress potential. In **Trainini**® 11/2021 and 6/2022 we also dealt with railway mail in prototype and model, which is why this topic should be particularly interesting for our readers.

In the following video contribution by Hagen von Ortloff, you can now experience what has been explained:

https://youtube.com/watch?v=jt_qJvhEKhs&feature=share&utm_source=EKLEiJECCKjOmKnC5liRIQ.

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