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German Magazine for Z Gauge



Winter in Schneeweiler

Short Autumn of Trade Fairs
Ratimo with a new Focus

Introduction

Dear Readers,

I think this is a very colourful edition with many likewise varied topics. With a lot of input from our many helpers, the result is something that brings together many aspects of our hobby.

There are novelties and technologies, about which we report for the first time. I think now of a small garage kit, which is discussed right in the very first article. Redutex foils are just as new to many model rail-roaders and have only just begun to conquer the Z-gauge market.

And in the news, as you are used to from us, you will again find a lot of interesting information, that is just as newsworthy. All this characterizes the current part of this edition. But we have also looked at what makes up and has made up our community in the fall of 2021.

After all, two exhibitions have taken place again, although with restrictions, while, for example, the Advent meeting in Zell an der Mosel, eagerly awaited by many, had to be cancelled in regard to our health. Similarly, other exhibitions around the Model Railroad Day had to be cancelled once again.

How the visitors and exhibitors in Friedrichshafen and Dortmund felt, therefore, kept us very busy. Our correspondents at both events kept watch and summarized their impressions.

The third focus of this edition is the upcoming Christmas season. Traditionally, it is the highlight of every model railroad year. Wishes come true, a layout provides a festive setting, while for others it is an opportunity to dream and escape from the hustle and bustle of everyday life.

Our translator Christoph Maier shows us how his first winter layout came into reality, and how it made even his less model train interested family go into rhapsodies. Günter Falkus has tried to combine his experience in model shipbuilding with his passion for model railroading and pay tribute to his favourite humourist at the same time. Here, too, you can be curious!

On behalf of all editors and translators, I would like to take this opportunity to wish you a merry and blessed Christmas! We are approaching the end of the year in strides. But before we enter the anniversary year of Z gauge, we still have one more article to write about our focus for the year.

Rainer Tielke lets us know how his Ratimo-Z brand is currently developing and changing enormously. We can be there first-hand when he does not only break new ground, but also continues to perfect his techniques.

Join me in looking forward to a worthy final to the outgoing year of 2021!

Sin-Z-erely,

Holger Späing



Holger Späing
Editor-in-chief

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We would like to thank our guest authors Günter Falkus, Rainer Tielke and Heribert Tönnies for their contributions and Ralf Junius and Jörg Landau for photos.

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Cover photo:
Branch line in winter - material for romantic stories and exciting photos. Just how atmospheric a red hummer can look in the thick snow is what we are experiencing as it enters Schnee-weiler station.
Photo: Christoph Maier

American Garages from Archistories

Getting started made easy

It does not always have to be large building models that deserve a detailed article. Even small kits can give pleasure, provide experience and make for beautiful scenes on the layout. In this case, all that is given and we have also found a good start for all those who want to practice working with hard cardboard for the first time.

Archistories has produced a small kit exclusively for the US Ztrack Magazine, which its subscribers received as a free gift with the June edition. Contained in a small paper envelope, the "American Garage" matches the farmhouses from the 19th century.

For this reason, the small building was also produced in the same colours and can also be purchased separately in the colour of your choice. Together with the house kit, this allows for an even larger number of possible variations.



The American Garage from Archistories is also quite conceivable on German layouts. Here it can serve as a shelter for a friend of American life, or it can be designed in a Scandinavian style and converted into a garden shed.

The small kit can be ordered from Ztrack directly or from the 1zu220 store by German as well as non-EU customers. The small kit can be ordered directly from Ztrack, or by German, as well as non-EU customers,



The small kit is packaged in a paper envelope, which is also often used for CD or DVD inserts in magazines. Only a few tools and aids are required to construct a small garage.

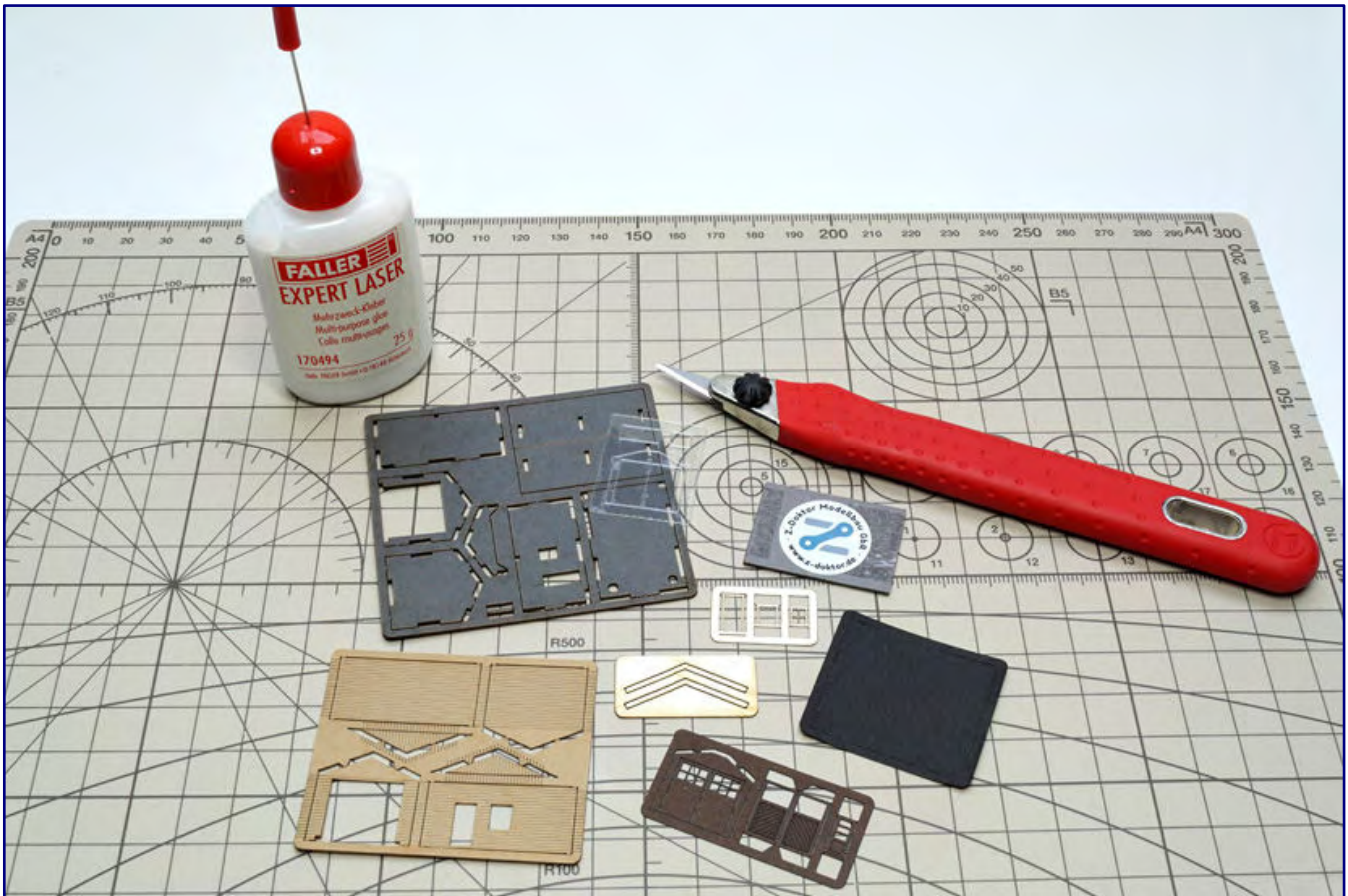
from the 1zu220-Shop. Because of these options and in view of the excellent learning aspect of practicing the handling of hard cardboard, we decided to briefly present the easy assembly here.

The garage building, which is probably typical for many regions of the United States, was very familiar to us in its basic dimensions, design and also colour: Viessmann marketed a very similar, two-colour moulded model under its Kibri brand, which was also placed as an entry-level model.

Offered also in a Falun red variant with white applications (for Scandinavia) and with exchange parts for designing as a garden shed, it offered a considerable variety that made it credibly usable also in Germany. This also motivated us to write this article, because for seasoned model railroaders there are finally options for personal modifications.

After the paper envelope is unpacked, the project is ready to go: The manual gets by almost without words and works with easy-to-understand illustrations. Their scope also includes clearly assigned part numbers for all cardboard sheets. The only tools needed are a cutting mat (Tamiya), a sharp craft knife (Mozart) and tweezers. A small nail file and a toothpick can help additionally on a case-by-case basis.

A fine hair brush and suitable paints (Noch, Oesling Modellbau and Revell) are also required for a tool bracket. This is to be mounted on the outside, including garden tools, which was created using 3D printing and supplied by Z-Doktor Modellbau. To hold the workpiece securely, we additionally had recourse to a pair of clamping tweezers (Tamiya). The necessary adhesives are supplied by Bindulin, Faller and Uhu.



All sheets, including the pre-engraved window foils, are placed in front of us: the number of parts stays manageable and so does the time required.

And off we go

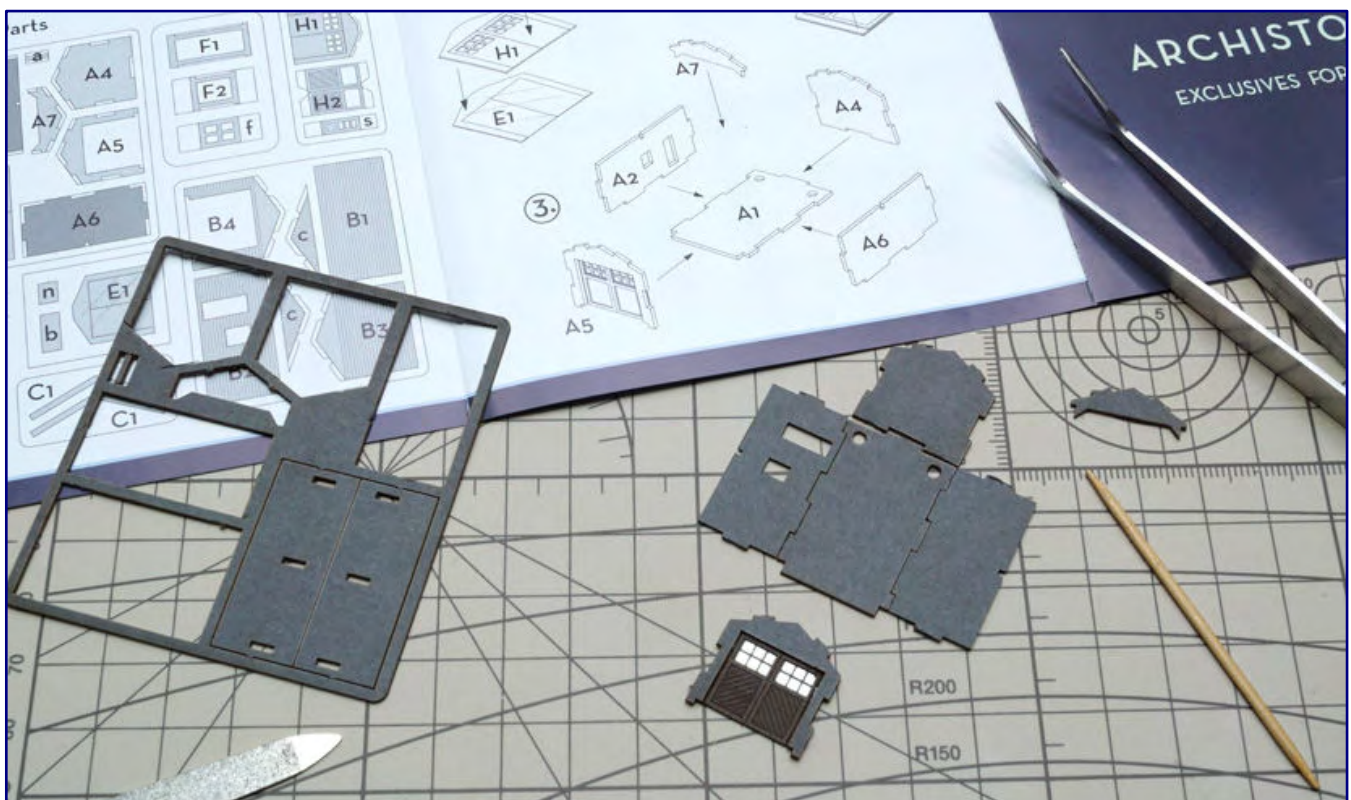
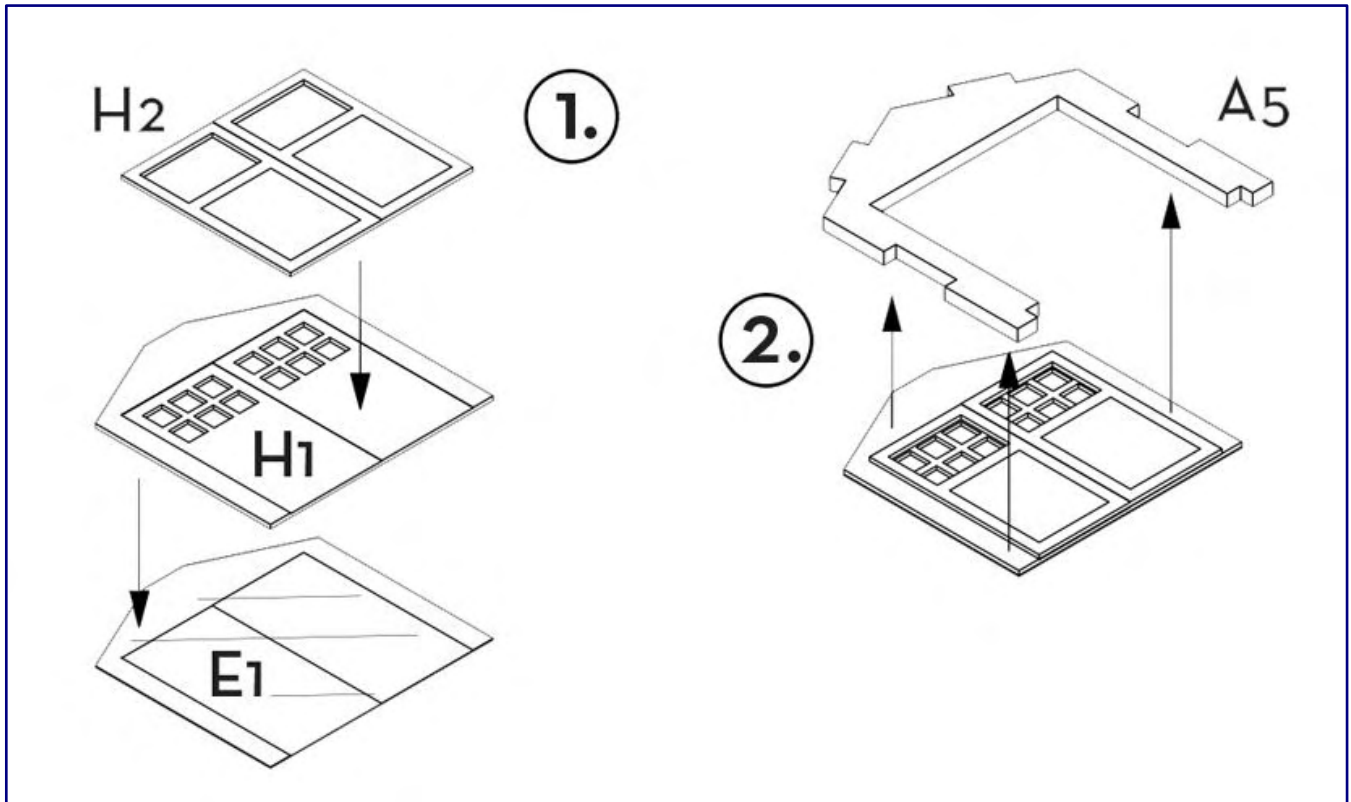
In a deviation from previous practices with Archistories kits, the start of construction here is not marked by the creation of the stable corpus from thick hard cardboard. Instead, we start with the construction of the double-door garage door from three parts, including a window foil as the bottom layer.

Once this has been completed, the element is placed in the hard cardboard frame, which is part of the already mentioned building core. It consists of the four outer walls, a base plate with openings for cable feeds and an additional transverse stiffener in the roof area.

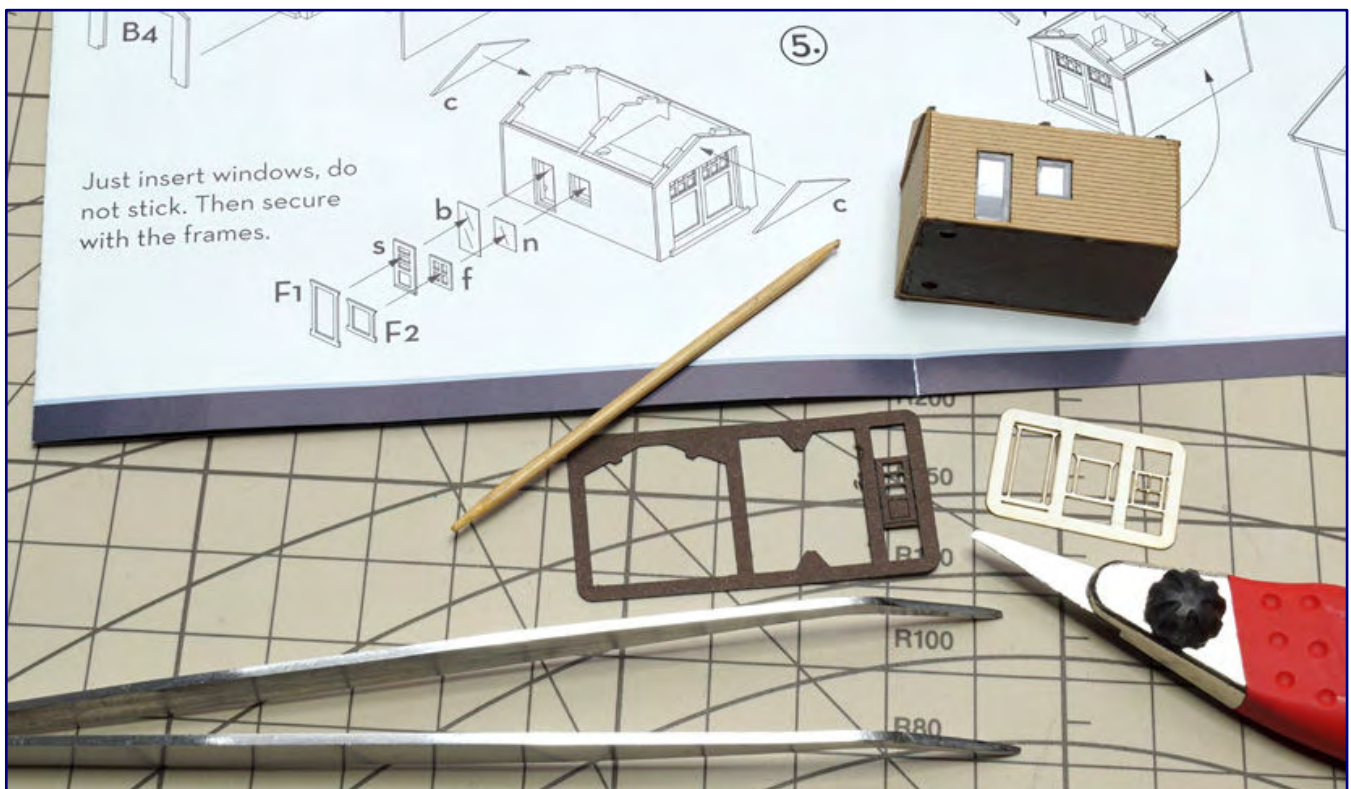
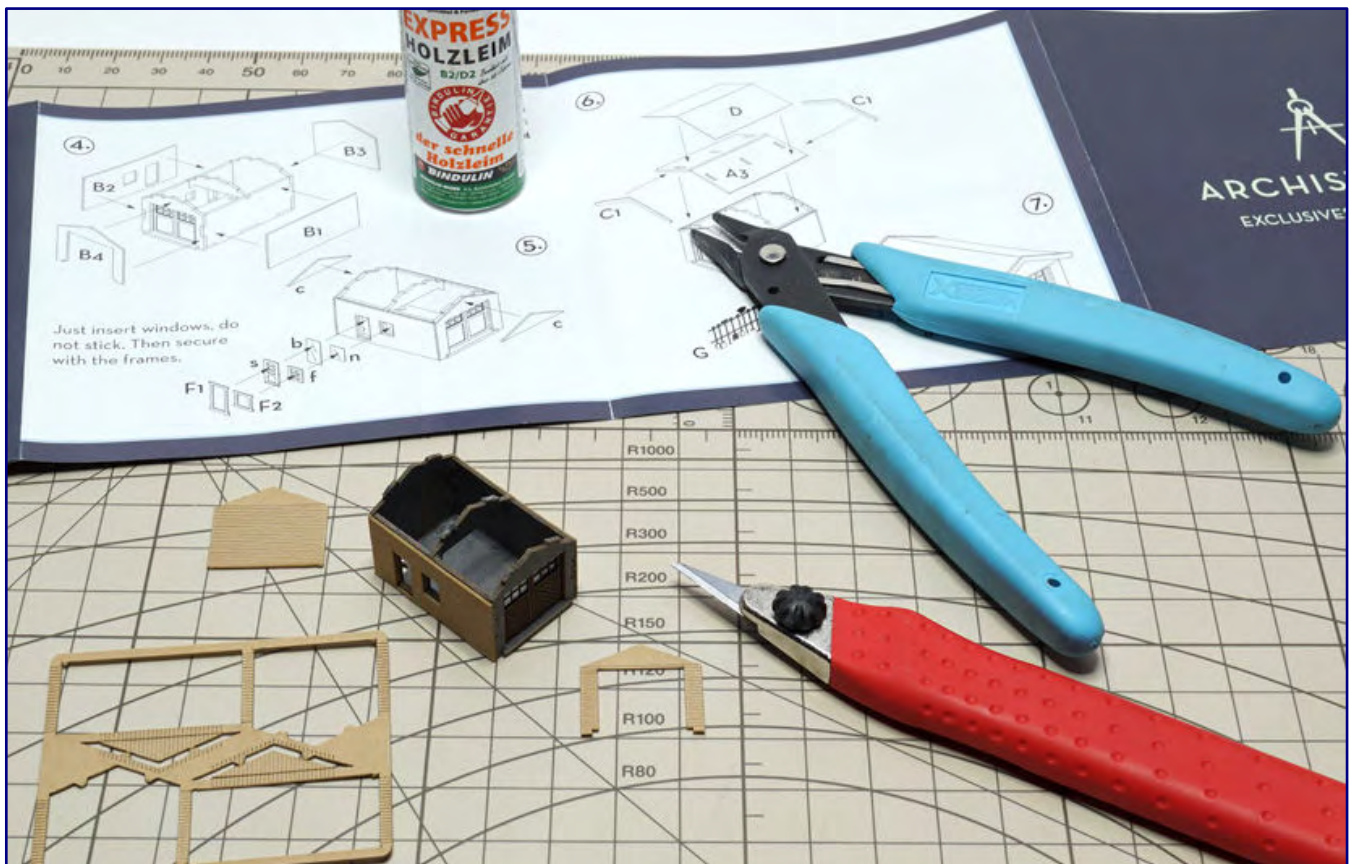
The following three steps now correspond again to what we already know from earlier kits: The core is followed by the outer walls, further applications and the roof. With a thick base and a thin layer of sandpaper to simulate a tar paper covering, there are no surprises here either.

When gluing the outer walls to the body, the sequence determines success or failure: Since the parts are glued butt to butt, it is important to note that the long sides are glued on first. Only after that, the two front sides follow.

continues on page 9



As with other cardboard kits, the first step is to create a stable body as a substructure. For the garage door (picture above), three parts, including the window foil, must first be joined together according to the instructions and inserted into the front body part. Then, all five parts plus the cross bracing are undergoing a dry fit test (photo below) and then glued together according to step 3 of the manual. Photo (above): Archistories



The assembly is progressing, the outer walls follow. Since they are to be glued butt to butt, it is important to process the two long sides first and only then the end walls (picture above). The insertion of the windows is special in this case, because no glue is to be used here (picture below), as also explained in step 5 of the instructions lying on the work surface. They are only fixed in place after the outer frames are glued on.

This remark is one of the few pieces of information that are provided as text in the manual – however, in view of the target market, only in English. Customers outside this linguistic area may refer to our article or use translation tools from the internet.

Step 5 of the manufacturer's document also contains a text note with a special feature unknown to us so far: The windows are now to be plugged in and not glued. The window foil and the cardboard window cross are therefore placed with the help of tweezers and carefully pressed in.

They are to be held in place solely by the outer frame, which is the third and last part to be glued onto the wooden facade structure. However, we don't quite trust this technique because there will be a gap between the two crucial parts.

That's why we use a toothpick to position at least tiny glue dots with the Lasercut-Expert (Faller) in each of the four corners after inserting the clear parts. The window cross invisibly carries this along when it is inserted and thus gets additional support without leaving any traces anywhere.



The work on the building is completed with the laying of the hard roof substructure, the gluing on of the roofing felt made of fine sandpaper and the fitting of the fillets on the two pediment walls.

The last step on the building, after putting on the roof and attaching its front panelling, is a small step at the side entrance. The smallest of all cardboard parts is to be attached with two tiny drops of Faller glue. The garage should be placed on a smooth and firm surface so that there is no gap between the step and the ground.

Thinking of the details

We have still left out one small but exquisite detail. It is however not negligible for the overall effect, which is why Archistories certainly did not want to omit it. It is about a tool bracket for garden tools, which is mounted on one long side of the garage.

We are also familiar with such organisational elements from Germany, where, however, they tend to be attached to a wall inside the building. A laser-cut cardboard part was ruled out here because the garden tools, including rakes and hedge trimmers, should stand out structurally from the holder. A separate mounting was deliberately avoided.

So, the choice fell on a 3D printed part from Z-Doktor Modellbau that is included in the kit – a cooperation that has already proven itself many times before. This part comes from the factory in a dark grey colour.

If you don't want to paint it by hand, you could also apply it unpainted, but this would probably not be very attractive. We have therefore chosen the following procedure: First, the printed part is fixed in the clamp tweezers so that the largest part remains accessible for paint.



The 3D printed part of the tool bracket holding garden tools still needs a triple colour treatment before it can be attached to the side wall of the garage with Uhu power glue.

We then protected the wooden parts on the handle of the Tamiya clamp tweezers from paint mists with masking tape. Then we carefully apply a base coat of Noch acrylic spray in the colour ochre (art. no. 61172). After the paint has dried, reposition the tweezers and repeat the process so that the part is evenly and completely primed.

Then use the brush. All metal parts of the tools get a coat of paint with Revell enamel paint "iron-coloured metallic" (91), handles are painted with acrylic paint from Oesling-Modellbau gentian blue (RAL 5010). In doing so, we basically follow the suggestions shown in the photos on the back of the manual.

After the bracket has dried completely and been glued on with a few drops of Uhu power glue, carefully placed with the tip of a toothpick, the building is ready. Before using the glue, however, we recommend a dry test against a miniature figure, because the mounting height should certainly be suitable for the staff!



This is the effect of the side wall with appliance holder and adjacent end wall with the double-door garage door, which is no longer common in Germany.

So, now it's time for a short review and a conclusion: If we disregard the necessary drying times, the small kit is a perfect way to relax in the evening. Depending on ability, leisure and working speed, 30 to 60 minutes of building time should be estimated.

The number of parts and steps remains more than manageable. And even in view of quite delicate and small parts that are among them, we come to the conclusion that here is a perfect entry into the world of hardboard kits.

The financial expense remains manageable, which is why not even a complete failure will make a big hole in your finances. At the same time, we see no reason to seriously expect such a failure. But it is precisely such worries that often prevent model railway fans from trying out something completely new.



And this is how the opposite side looks, which seems very familiar to us in a function as a garden shed. It could easily be built from two identical kits, otherwise creativity and handicraft skills are required.

There is probably only one kit that could hopefully be priced even lower and would be even easier to build to gain initial experience: That would be one of the typical bus shelters that we have seen in rural areas for decades, made of both concrete and wood. But those who still don't dare to do so will have to wait for this a little longer.

- Manufacturer of the hard cardboard kit:**
<https://www.archistories.com>
- Client and source of supply:**
<https://ztrackcenter.com>
- Other providers mentioned in the text:**
<https://www.bindulin.de>
<https://www.faller.de>
<https://www.noch.de>
<http://www.oesling-modellbau.com>
<http://www.peter-post-werkzeuge.de>
<https://www.revell.de>
<https://www.tamiya.de>
<https://www.uhu.de>
<https://www.1zu220-shop.de>

A magic built on cardboard Winter in Schneeweiler

Just in time for this year's Christmas season our reader and translator Christoph Maier presents his small Winter layout "Schneeweiler" (Snowville). In addition to its harmonious design and loving details, the layout surprises with a special feature: Instead of the usual wooden or hard foam base board, its substructure is made entirely of cardboard. The snowy landscape was also designed with the help of unconventional materials.

By Christoph Maier. As a great fan of micro layouts, I had been toying for quite some time with the idea of building a small nostalgic winter layout which could be placed in the living room during Christmas season and entertain the family with one or two trains running in circles.

The project finally got off to a start when reading the online reader forum of the French model railway magazine "Loco-Revue," and coming across building reports about the magazine's "Train'in Box" model railway modelling beginners set, which was on the market a few years ago.

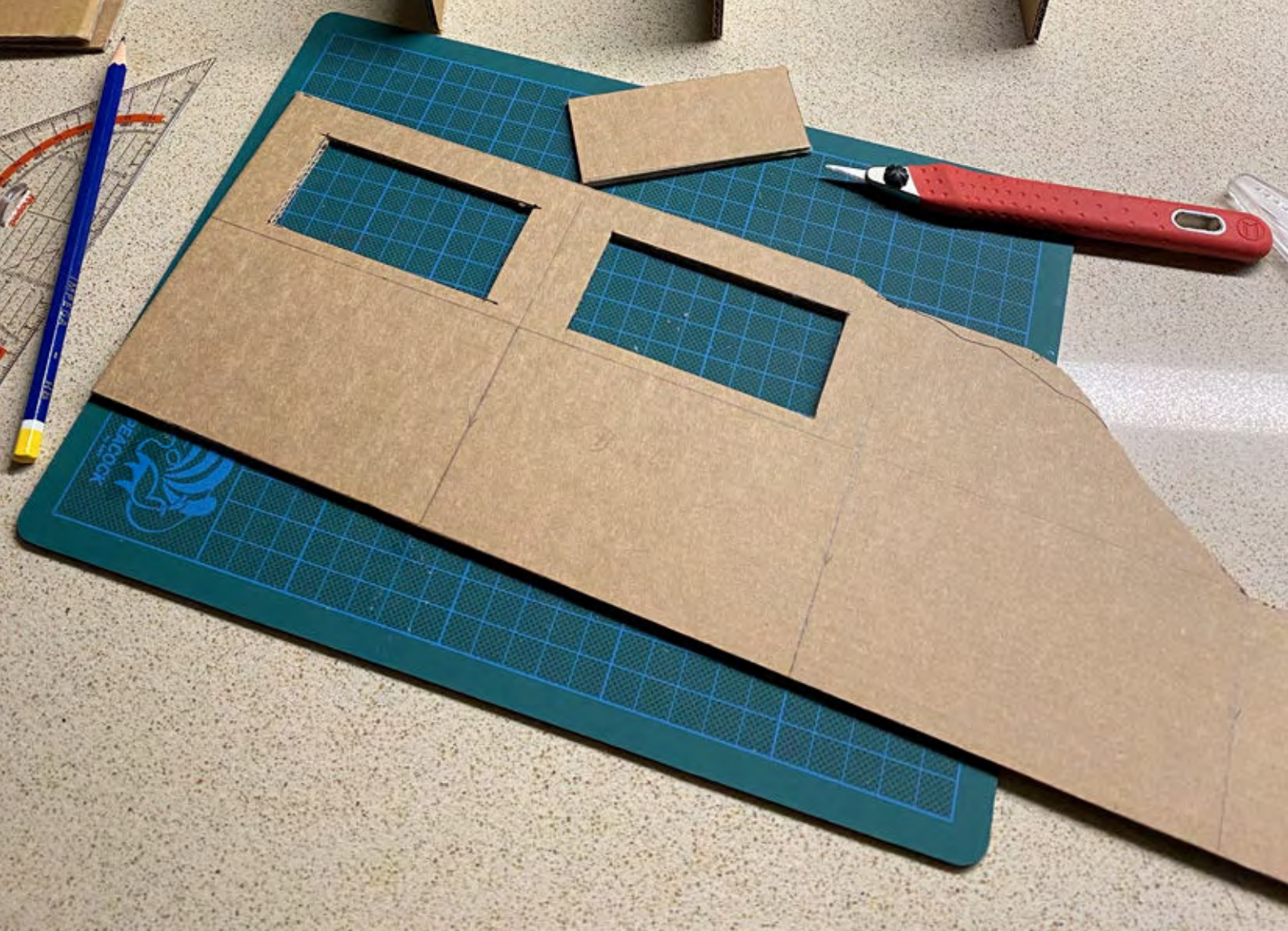


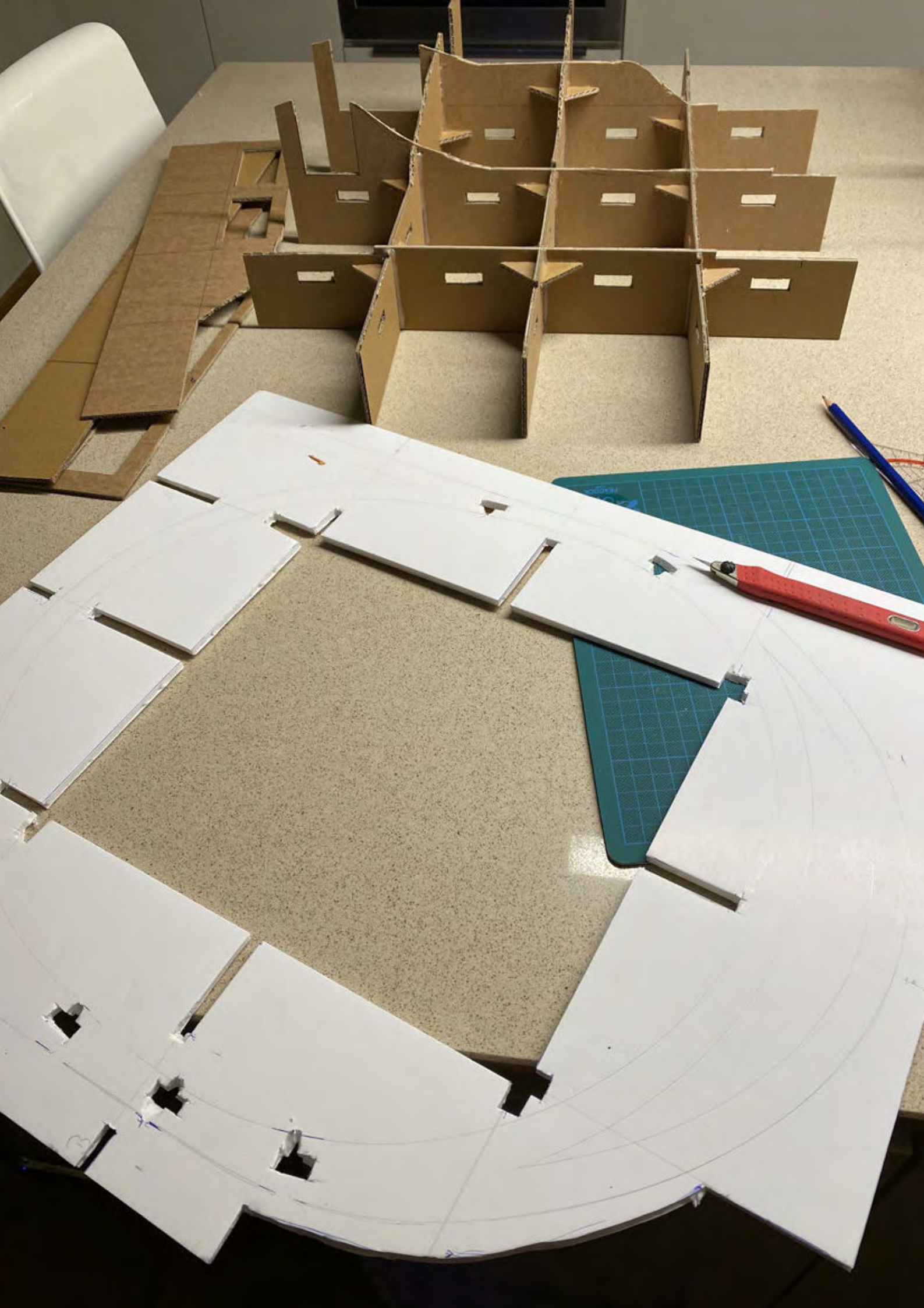
Small layout, big effect: "Schneeweiler" is our translator's first layout build with wintery motifs.

What fascinated me about the "Train'in Box" layout was its simple, yet attractive concept: an oval with some basic operational possibilities, train station, little village, road, mountain and tunnel – all key elements for an archetypal model railway layout concentrated in one little space!

From a practical point of view, I also liked the idea of building the baseboard from cardboard. As somebody who does all his modelling work at the kitchen table, I always try to avoid as much as possible any dusty and complex woodworking operations.

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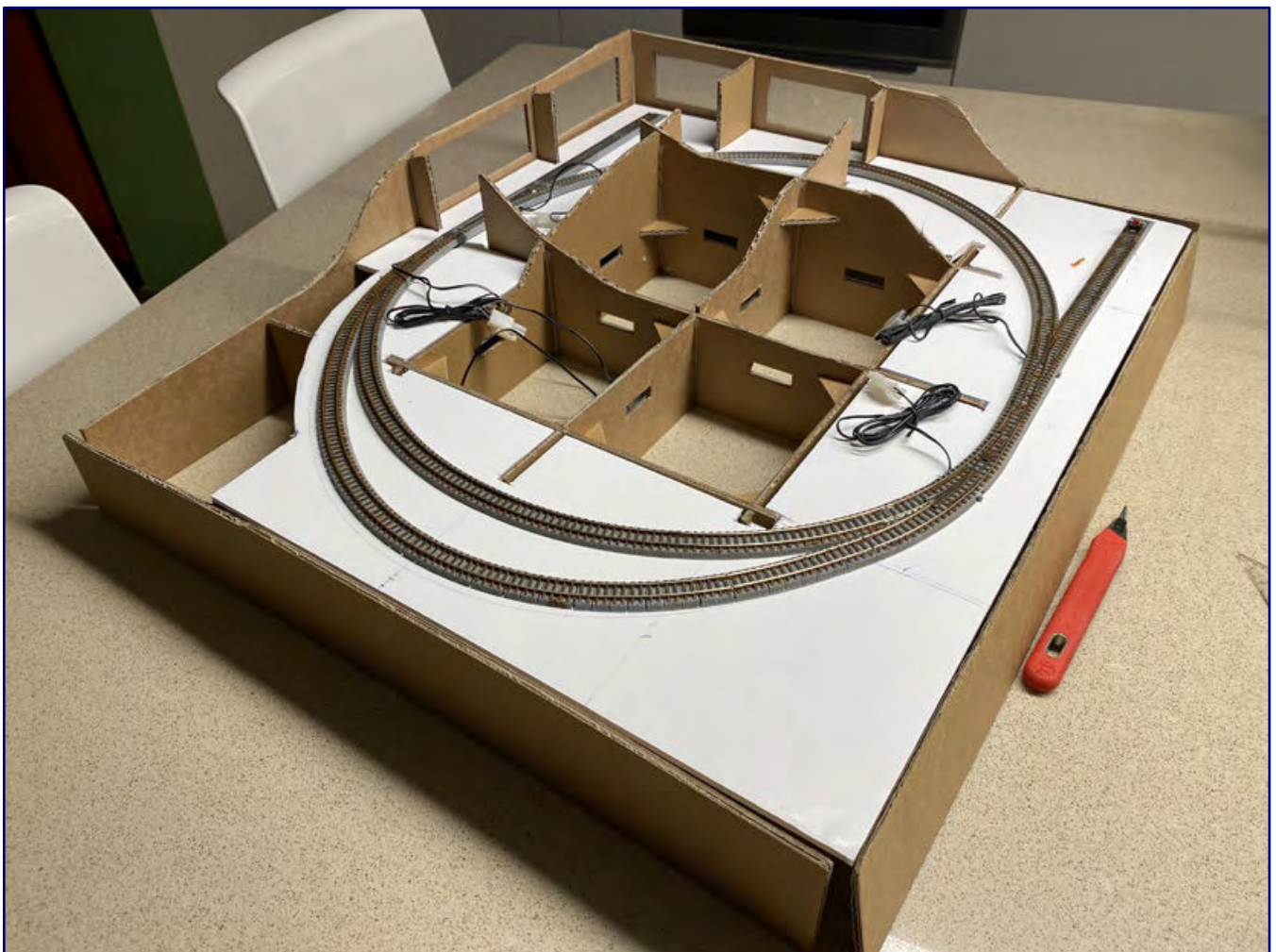


Cardboard and track works

The outer dimensions of the layout – 48 x 56 cm – were determined by the translation of the Train'in Box track plan into scale 1:220: curved track with a 195 mm radius plus two turnouts on each side and a bit of extra space for landscape.

The baseboard is made of 3 mm double wall corrugated cardboard. I used Noch's "Panzerkarton" of which I had a pack laying around, but any double wall cardboard used for packaging should work as well as long as it is strong enough.

The mountain with the tunnel was to be placed in the left back quarter of the layout, and was therefore taken into account when cutting to size the cardboard panels. I also cut holes for the wiring of the layout.



Top and pages 14/15:

Piece by piece the baseboard is assembled from panels made of double-sided corrugated cardboard. The horizontal base plate made from 5mm foam board will support the track and a small village.

After testing their correct fit and some small adjustments, the panels were glued together piece by piece with a hot glue gun and reinforced with small cardboard triangles. Visible cutting edges were smoothed out with filler and sanded. All four sides were later painted with grey acrylic paint.

The horizontal base for the track was cut from a single sheet of 5 mm foam board and glued onto the cardboard structure.

I must admit that I was initially sceptical to build the baseboard from cardboard instead of plywood or hard foam, but the finished layout is surprisingly strong and torsion-resistant.

This construction principle is perhaps not best suited for exhibition layouts, but for home use, and, in particular, for such a small layout seems to be a good alternative which can be implemented easily, quickly and with the most basic tools.

The next step was to install the track: I opted for Z-scale track from the Japanese manufacturer Rokuhan. After feeding the cables for the electrical turnouts and power through the baseboard, several test drives and some adjustments, the track was super-glued to the base and weathered with rust-coloured acrylic paint. This is a bit of a tedious process that requires extreme care, especially with the turnouts, in order to avoid contact problems.

Scenery works

The rough shapes of the landscape were built with landscape modelling foil from Noch (although sheets of packaging paper would have done the same job, especially on such a small surface) and some pre-cast plaster rock faces.



Before the landscape is designed, paint is applied in some places and the mountain road is cut to size from cardboard.

The small frozen village pond was created by painting a piece of foam board blue-grey and covering it with a transparent plastic sheet that had been sandpapered in order to render it opaque.



Landscape modelling foil from Noch and some plaster rocks (top) are used to create main features of the landscape. This is also the moment to test the future position of the buildings. The final shape of the landscape is modelled with Sculptamold (bottom).

The tunnel portals are from Faller and were slightly weathered with weathering powder, before being installed. Several test drives were necessary to determine the exact position of the portal that was placed in the curve in order to ensure a free passage of the trains.

The mountain road was built from two layers of thin cardboard from a cereal box and glued into place before being painted with dark grey acrylic paint. The station road, village square, level crossing, and platforms were built from 1.5 mm and 3 mm foam board and 1 mm polystyrene sheets.

The fine contours of the landscape were modelled with sculptamold, a dry modelling compound which is mixed with water to the desired consistency.

It is easily applied with a spatula or just with ones fingers, dries with hardly any loss of volume, and makes for a strong, but lightweight surface. One additional advantage for this project was its white colour which made an additional coat of white paint unnecessary before applying snow.

Let it snow...

The biggest challenge with this project was to model a convincing looking snowy landscape. This is my first winter layout, and I therefore started with using commercially available snow paste and snow flakes. I quickly realised, however, that this did not produce the natural look I was after.





A detailed scene of the small layout should illustrate how successful the design of snow blankets, piles and small drifts looks.

Photo on page 19:
Snow always falls from above – also in the model. That is why the view from above is worthwhile.

The few deciduous trees around the pond and next to the village were made from sea foam which is available from Noch and other manufacturers.

The fine details

The train station, main buildings, chapel and mountain barn are from Noch's new range of Z-scale laser-cut kits. The other buildings are from Modelbahnmanufaktur Beckert (transformer building) and Modellbau Laffont.

All buildings were slightly weathered with weathering powder and equipped with interior lighting. Together with the street lights they are hooked up to a 9 V battery, with on/off switches hidden in the opening to the tunnel area at the back of the layout.

Firstly, the consistency of these materials is almost too coarse for 1:220 scale. Secondly, I did not like the glitter effect of the material.

An additional problem with the snowflakes is that they do not adhere well to even a generous coat of glue. Just one blow of air, and most of the snow will be gone.

After some experiments with other materials, I finally used a white and very light synthetic filler material from the DIY store (e.g., from Polyfilla).

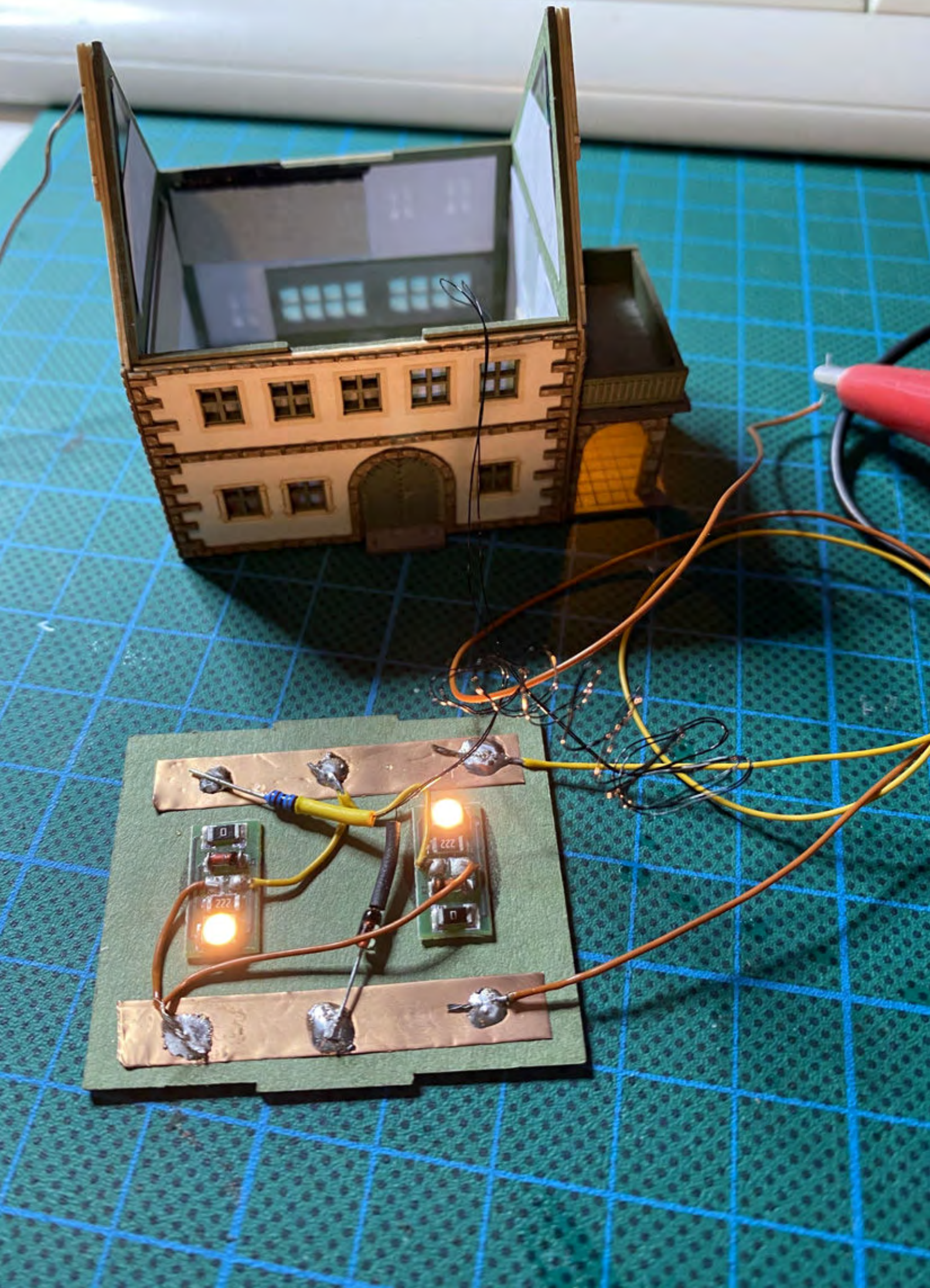
It can be easily mixed with water to any desired consistency and applied to the landscape with a spatula or brush, for small patches of snow also with a toothpick.

Once applied and with a bit of extra water added with the help of a soft brush, the material spreads out naturally and dries quickly.

With some patience, this technique produces very natural and realistic looking snowy surfaces.

The pine trees, over 60 of them, are all from Busch. Although they are available as ready-made winter versions, I found that taking the summer version and applying matt titan white acrylic paint makes for a more natural winter look.

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The figures as well as the two Christmas market booths are from Trafofuchs, a small German manufacturer that produces a wide variety of Z and N scale figures. Most of the other accessories such as street lights, traffic signs, guard rails, and the diesel fuelling station are from HOS-Modellbahntechnik.



Part of the detailing is the lighting of buildings (see page 23) and the installation of street lights (top). All this contributes to an atmospheric ambience during night operations (bottom).

In this context I really would like to propose a toast to the small series manufacturers without whom the Z scale hobby would be only half the fun due to the limited choice of Z scale products from large scale producers.

I started working on the Schneeweiler layout in early autumn last year and the original intention was to have it finished by Christmas 2020. As so often with this hobby, there were unplanned interruptions and it finally took around a year to get it all done.



The work is finished, even if it is late compared to the original schedule, and knows how to convince. Its creator truly deserves an after-work beer for this!

But now the layout is ready for this year's Christmas season, adorns the living room and waits to be played with until it will be put into hibernation after Three Kings, to be awoken again next winter.

All photos: Christoph Maier

Manufacturer websites:

<https://www.busch-model.info>
<http://www.hos-modellbahntechnik.de>
<https://www.modellbau-laffont.de>

<http://www.modellmanufaktur-beckert.de>
<https://www.noch.de>
<http://www.trafofuchs.de>

Layout videos:

<https://youtu.be/c-rKMwcu7bk>

Lots of Humour for Christmas

Every Year, again?

After 50 years of ship modelling, Günter Falkus has discovered his passion for our Z gauge. He describes himself as a border crosser in the Z-gauge world, because he wants to integrate new impulses from other branches and technical areas. This is also the case with his model-making gem for Father Christmas, which was finished in time for our Christmas edition.

By Günter Falkus. Today, I would like to tell a story that fits in with the upcoming Christmas. It happened at a time when a virus called Corona ruled the world, and I had a lot of time to think.

Memories of a carefree post-war childhood ran through my mind. I was very proud of my first railway back in 1954: steam locomotive class 44 from Märklin H0, a once sinfully expensive model. With it my time as a model railway enthusiast began.



Humorous celebration: This year's Christmas article revolves around this little exhibition layout, which was created during the sorrowful Corona period.

Back then, Christmas meant a fir tree, a circle of rails on the floor, two wagons, a locomotive and a transformer – and my father playing with them. So, in view of the memories of my youth, I had the idea of rebuilding all of this in Z-gauge. I wanted to do it in as original and original a setting as possible. The humourist Lorient, whom I greatly admire, set a standard here with his Christmas at Hoppenstedt's.

I was taken with his film and chose it as the idea for my small building project. The vision quickly became a plan. The track was to run on a scale of 1:4000. I had them as laser-cut plates on 4.4 mm flight plywood, the technology should not be a problem.

I had a slow-running gear motor and my friend – the technical wizard Hermann Kammler. He'll fix it! But then Corona came along, and Hermann was 250 km away – how was that supposed to work?

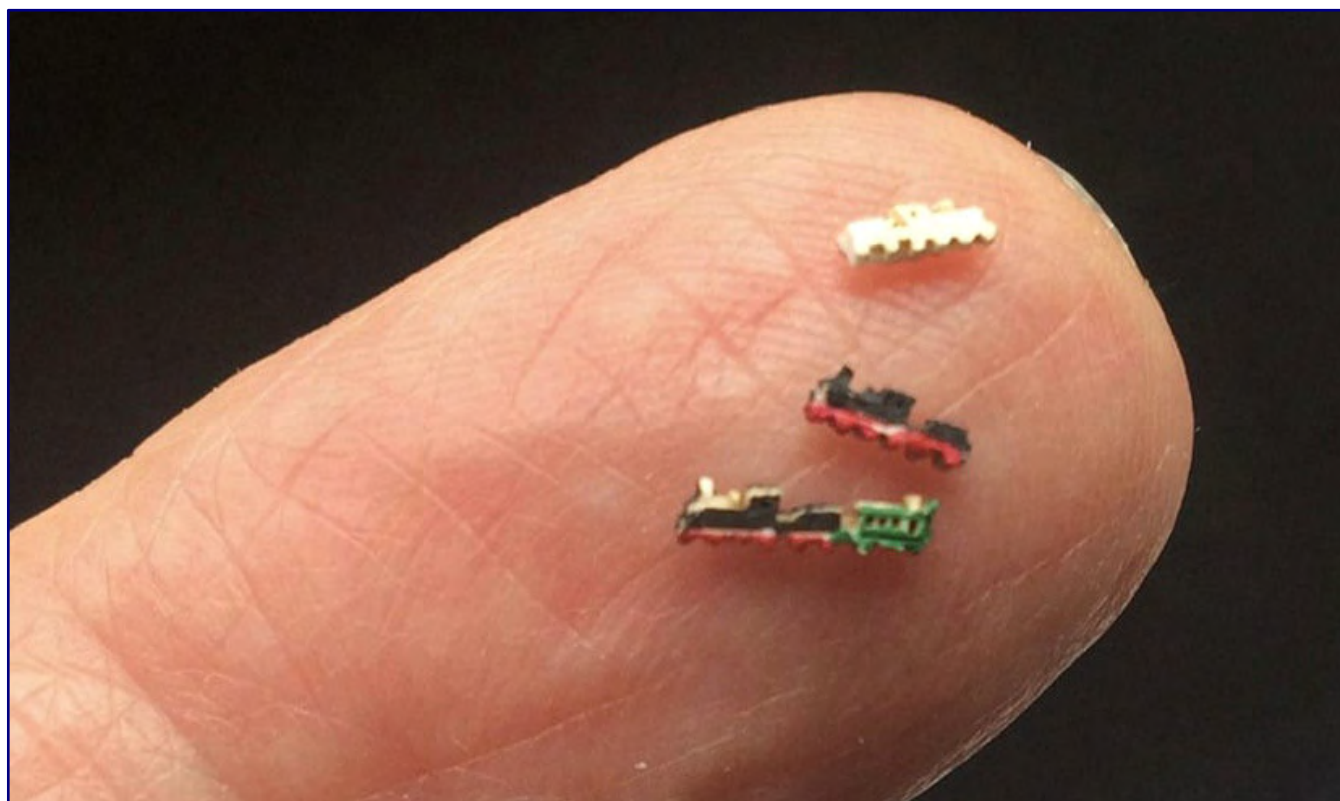
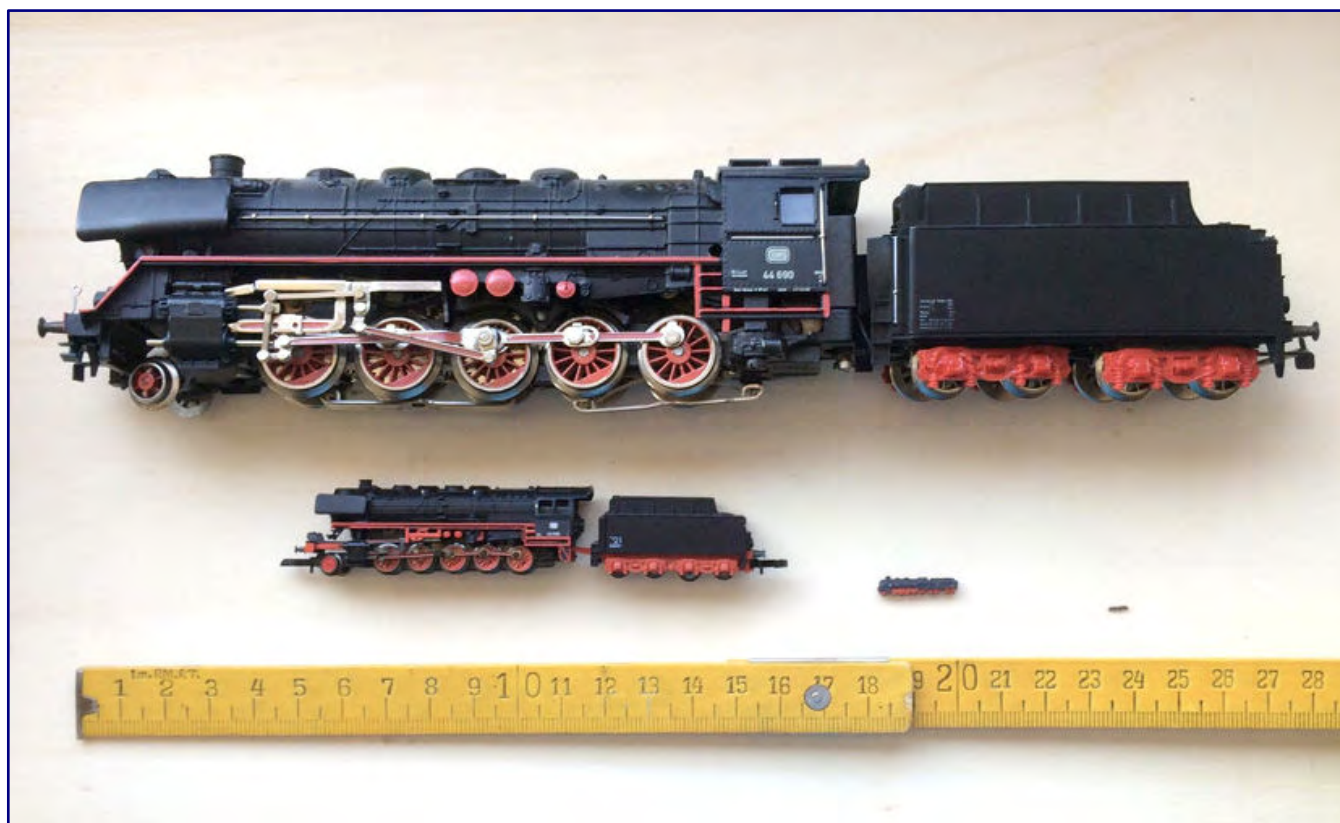


Model making under Corona conditions: Hermann Kammler ("Bagger-Hermann.") in the car park of the rest area testing electrical functions.

Well, we talked on the phone and exchanged sketches as well as photos, many virtual meetings brought the desired structure. The final meeting took place in the summer at the Autorasthof Gießen with the restaurant closed in the car park. There we tested the function and finished the shell.

Now Birgit Foken-Brock from Trafofuchs was faced with the task of creating the right figures. I presented my concept to her and her spontaneous reaction was: "How crazy do you have to be for something like that!"

continues on page 28



Märklin's class 44 in H0 scale (photo above) started a passion. This can be seen in comparison to the Z-gauge model and the own replica in the appropriate scale of 1:4000, which would be required for the exhibition layout portrayed here. The model used in the Hoppenstedt house, however, has a much smaller prototype (photo below).



The integration of the two chess players (photo above) into the building and the particularly humorous “self-realisation” of the two friendly model builders as psychiatric patients (photo below) can be traced back to remarks made by Birgit Foken-Brock of Trafofuchs.



All three scenes presented were integrated into "Hoppenstedt House", which is now a Christmas diorama.

This has led me to another extension: Two more chess players have taken up residence in the Hoppenstedt house. And the two "crazy builders" have since moved into the psychiatric emergency room on the ground floor. Hermann was immediately present with the house from his 3D printer. A sound card then moved in there, as well.



And, so that the model railway in the model is also visible to everyone, there is an (apparent) public broadcast for Santa's on a large screen next to the building.

When everything was ready, I subjected my little Christmas diorama to a field test with my granddaughters – with an unfortunately devastating result: “The model railway is so small, no one can see it properly.”

Then, after a sleepless night, the idea for publicity was born: The Christmas railway will be broadcast on a large screen so that everyone can see the show. Of course, Birgit Foken-Brock had to work again to find the right audience.

And here is the result: Hoppenstedt on a scale of 1:220, loosely based on the famous humorist Loriot. The tracks have an unbelievably small gauge of 0.4 mm in a track radius of just 4 mm.

Model-appropriate speed, the train made by light-cutting technique, and Grandpa Hoppenstedt enthroned in the background, where the two wall lamps shine in a warm Christmas glow. In addition, there is the fir tree full of candles (simulated by LED), the gift box and the well-known Helen's March on a modern mobile phone.

Now I am very happy with the project, it opens borders in model making, and that is exactly what I want to contribute as a late called Zettie. The video can be seen on my web pages, the address of which you will find in the info box.

All photos: Günter Falkus

The Builder's Webpages:
<http://www.kleinergehtsnicht.de>

Christmas greetings



Dear Readers,

The entire team of our magazine wishes you happy holidays! In these turbulent times full of restrictions, our special wishes go out to a hopefully better year 2022, characterized by contentment, happiness, and above all health.

We would like to thank you for your many suggestions, ideas and your loyalty to our magazine.

A reader's experience report

Working with Redutex Foils

Our reader and book author Heribert Tönnies has studied the Redutex foils, which are also widely used in Z gauge, as an alternative for many other techniques. Today, he reports in particular detail on his experiences, which should also be of benefit to newcomers and those returning to the railways.

By Heribert Tönnies. Various, mostly surface-textured products are available for replicating walls, roof surfaces or even road surfaces. These also include embossed, sprayed plastic sheets in various thicknesses, printed cardboard with lasered or embossed structure, printed special crepe paper as well as types of foils.



The sample fan shows the variety of Redutex foils that we would like to introduce to our readers today as an alternative building material.

Many of them also have a self-adhesive coating. Especially for road surfaces, for the sake of completeness, the so-called stamp/carrier rollers should also be mentioned, such as those offered by Modellbahn-Union or Microrama.

In addition to a different appearance, the individual materials have advantages and disadvantages, both in terms of processing and durability. Later changes cannot be ruled out, especially if the layout is used for a long time.



Design proposal 1: Level crossing with cobblestone road, created by means of a Redutex road foil (Art.-Nr. 160BS124).

In my experience, over the years there has been considerable loss of quality, such as colour changes due to a lack of UV resistance. Incipient chemical processes caused foamed road films to become soft and even sticky-paste-like, and, thus, completely unusable.

Surfaces crumbled or the adhesive, which was partially applied to the back of the material and initially adhered well, changed over the years and led to detachment from the substrate, unless additional special bonding was carried out.

In contrast to the relatively easy processing of cardboard by simply cutting with scissors or knives, the thicker plastic sheets are already more demanding for the beginner without elaborate technical tools or pronounced manual skills, especially when the smallest components have to be worked out, or window openings have to be cut out.

Cardboard, for example, makes special demands on the formation of building corners due to the often-greater thickness of the material, because the thickness of the material, if mitre cuts cannot be used due to the material, remains visible at the edge of the building without later lamination (filling or colour work), which can lead to unwanted effects, especially in a small scale.

Street foils can often not be homogeneously adapted to the course of curves, i.e., pulled around, because a high expansion stress can occur at the outer edge of the curve, depending on the material.

It either impairs the shape of the road or prevents it from sticking to the substrate, while wrinkles form at the inner edge due to the compression. Circular segments must therefore be cut, the butt joints of which remain visible in some road construction materials without the need for time-consuming reworking.



Design proposal 2: Factory relief façade for the plant background using Redutex masonry film for the infill panels. (OFNM064).

These few examples show that special attention should be paid to the choice of suitable materials before construction begins.

The solution is called Redutex

For the self-designed and built objects on my presentation layout “Groß-Bw Herilingen” on a scale of 1:220, I was looking for a material for masonry, roofing and roads that was easy to work with even for beginners, but had an authentic visual effect. After intensive research, I came across so-called 3D foils from the Spanish manufacturer Redutex.

The enormous number of structures offered in the common scales surprised me. Many of these foils are also suitable for Z-gauge, despite the official specification for N gauge. An overview of the 3D foils offered can be found on the company pages, to which a link is included in the info box at the end of this article.

At the time I started building, there were only very few structures available in Germany, so I had them sent directly from Spain. In the meantime, however, the foils are also available in Germany in a large selection, for example, in the 1zu220-Shop.

Because the Redutex 3D foils convinced me in my previous projects in 1:220, I report about my personal experience. I was able to get a comprehensive photo of these structural films on the basis of the objects I have modelled, so far.



The films are approx. 302 to 305 mm long and approx. 123 mm wide. Due to edges that are more or less wide for production reasons, the usable structural area essentially corresponds to the packaging specification of 300 x 120 mm.

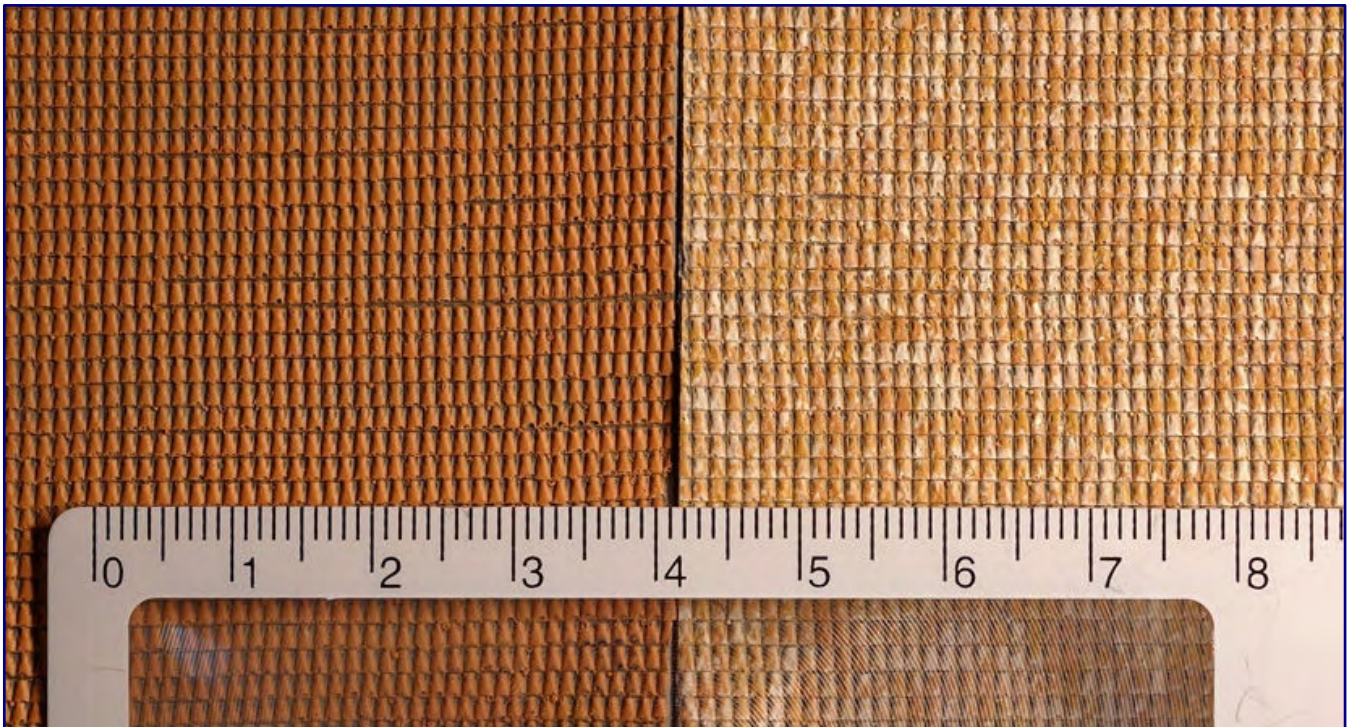
The foils I used for the nominal size Z had a thickness of approx. 0.5 - 0.7 mm, depending on the structure used including the adhesive layer and protective foil (approx. 0.05 mm) of the adhesive lamination. The difference in thickness results from the embossed structure; the finest brickwork is thinner, roof tile structures are regularly thicker. In the H0 scale, the foils are also up to 0.9 mm thick due to the higher embossing depth.

The foils are delivered in a folding bag made of thin cardboard with information about the foil type and scale. The lower and upper pockets created by the folding are ideal for storing leftover pieces in an orderly manner for later use.

In the programme there are muntin windows made of the same material, which already have a transparent foil on the back as an imitation of glass. In terms of scale, these are also suitable for some construction projects in Z scale; I have used them on the signal box.

However, the bars are relatively wide compared to windows made of lasered cardboard. Because the window foils are very soft, they may be more suitable for ambitious modellers.

Two main groups are available, "Standard" (mostly two-coloured; the raised structure in one colour and the joints in another colour) and "Polychrome" (multi-coloured). I have mainly chosen the polychrome version, because the effect is more vivid, the changing colouring looks more authentic and, especially in the scale 1:220, opens up the possibility of concealing any minor inaccuracies that may arise during construction by simple colour work.



A roofing film by Redutex in "Monk and Nun". design on the left in the monochrome (designated as standard), on the right in the polychrome version.

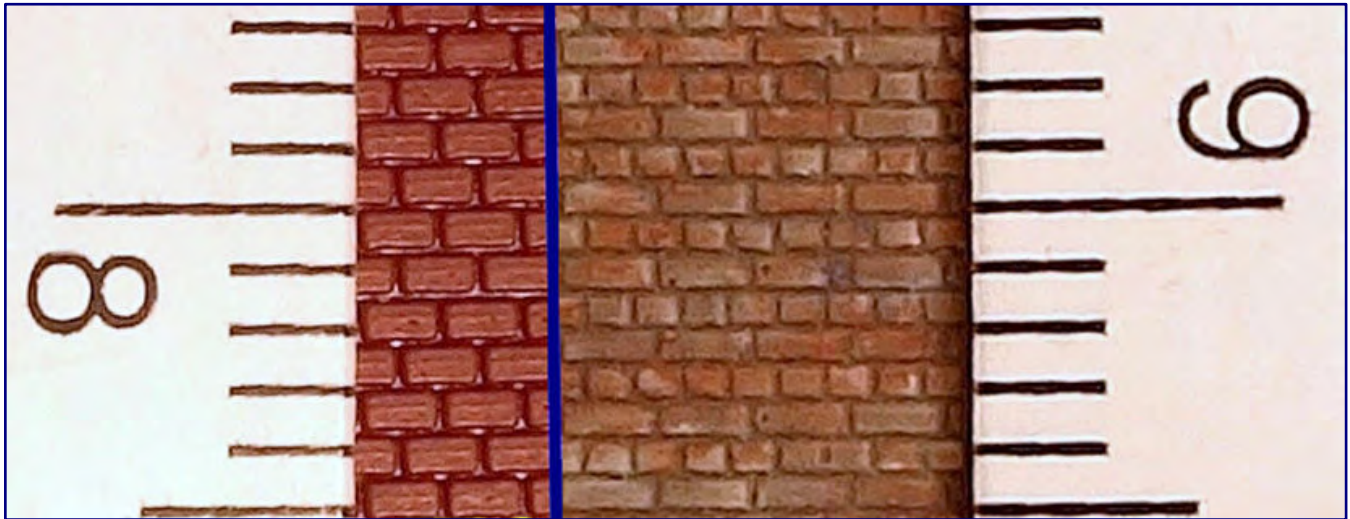
By the way, the foils can be treated very well, e.g., with acrylic paints, sea moss, and water run-off traces on the roof of my signal box or the arcade retaining wall. The surface structure is predominantly clean and distinct, as is the colouring. The appearance of the self-adhesive films is very realistic.

According to the manufacturer, the films are made of an acrylic resin according to company specifications, are EU-certified and, in accordance with the regulations of the European Community, do not contain any components that are harmful to health, and are manufactured in an environmentally friendly way.

One particular point seems to me to be especially important for exhibition installations: According to the manufacturer, the foils have a high fire resistance and can be regarded as "fire-retardant." I cannot verify this information, so I am only passing it on for information purposes.

True to scale and exemplary

Although many foils are officially declared for N scale, they are, nevertheless, also ideally suited for Z gauge. One such example is the foil type OFNM079. Approx. 16.5 stone layers are shown here at a height of 10 mm, which corresponds to a layer height of approx. 13.3 cm.



The brickwork of the old Märklin locomotive sheds made of polystyrene (left) is compared with a Redutex foil type (OFNM079; right).

This is higher than the usual classic masonry bricks in the original with a height of approx. 7 cm plus approx. 1.0 cm joint, but still looks much more authentic than many polystyrene sprayings of earlier years. On the locomotive shed from the earlier Märklin programme I counted comparatively only 13.5 layers at a height of 1.0 cm.



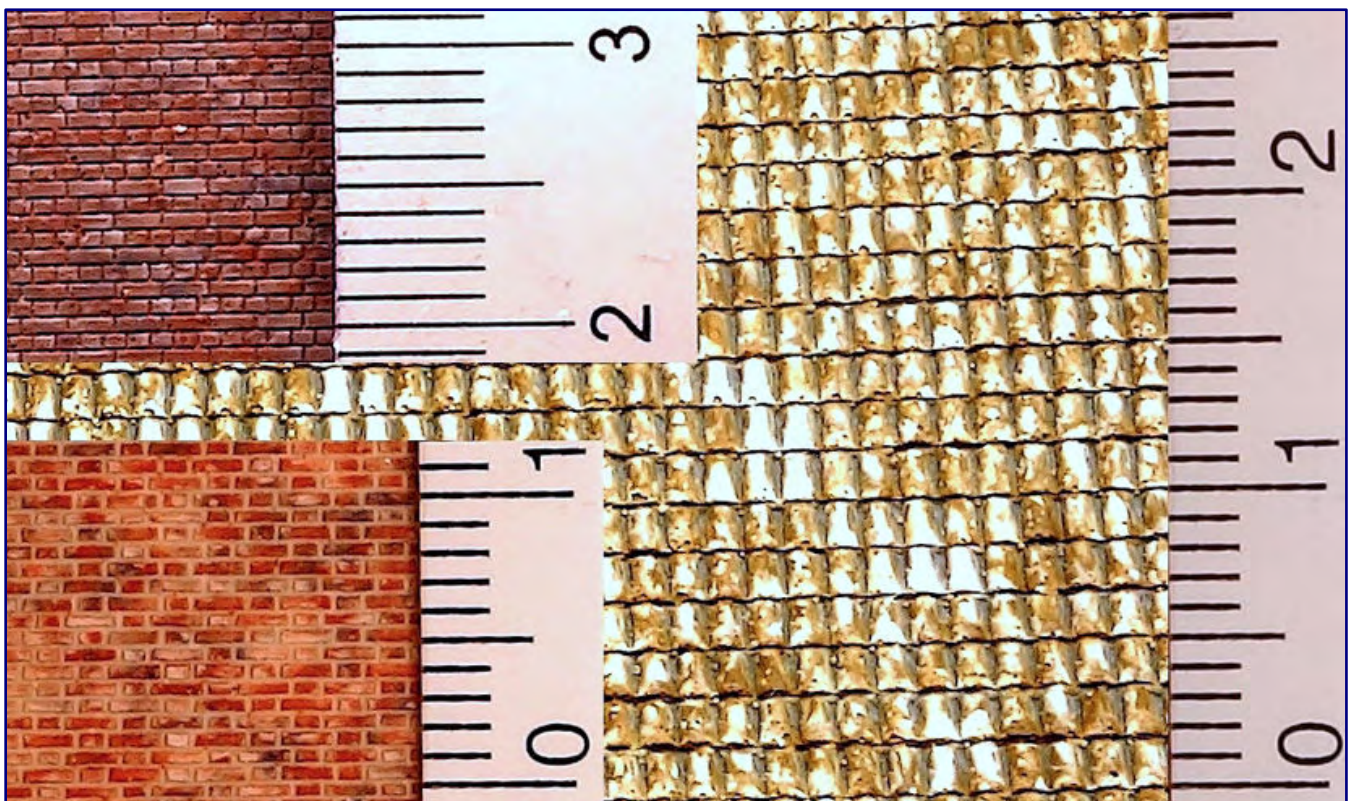
It should also be pointed out that in contrast to its plastic masonry structures, the joints of the Redutex foils are not so deeply imprinted, and thus a more homogeneous and realistic masonry structure is created.

In addition, the structure of the foil is also more prototypical. This concerns that both the length of the bricks – on the plastic model the bricks are much too short, and the masonry bond, which is realistically designed as a cross bond (i.e., with binder and stretcher courses, see photo above).

As a further object of comparison, I show the signal box by Faller (art.-no. 120120) in scale 1:220, which I built, as well as an embossed plastic plate by Schulcz for Z (see page 36 below). This direct comparison shows the strikingly higher closeness to prototype of the Redutex sheet, both regarding structure and its colouring.

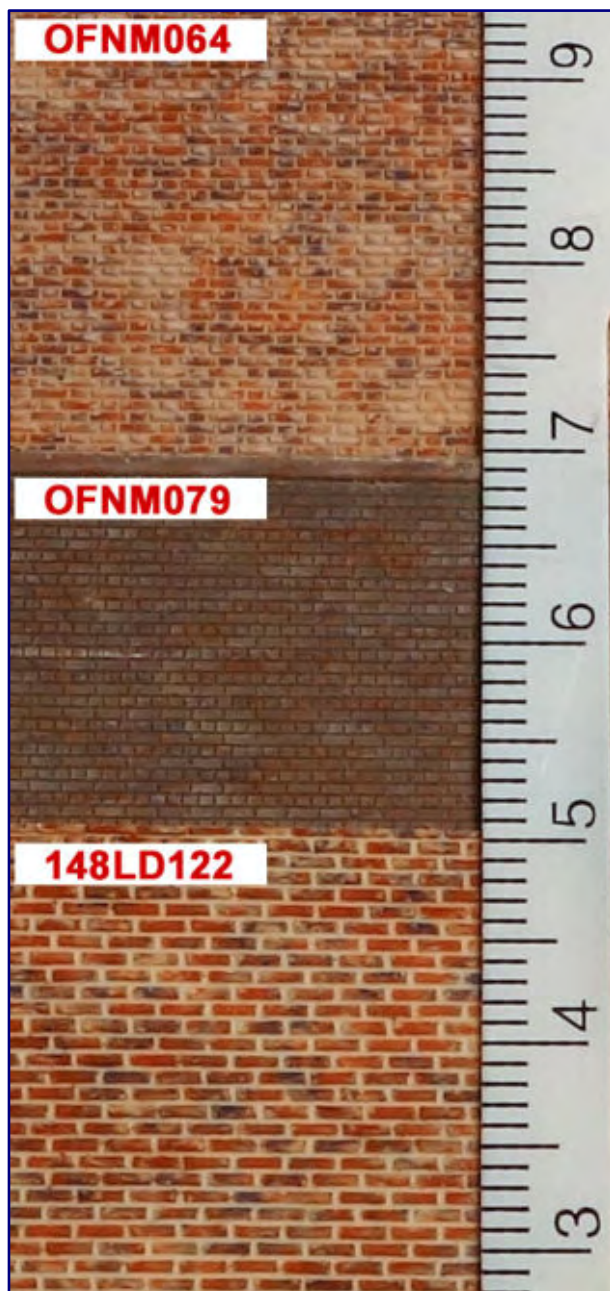
In this context, the distance from which the observer sees a building, usually from the edge of the plant, must also be considered for the individual model. If a structure is chosen that is too small, there is a risk that it will hardly be perceptible from a greater distance. Only for show and photo layouts, as well as ambitious model railway enthusiasts, do other priorities apply, of course.

The structure of the roof foil shown in the photo below is clearly recognisable, even from a greater distance; in the case of the brick masonry structures shown, on the other hand, the realistic, but very small structure, is at some point no longer clearly perceptible from a greater distance.



To illustrate this difference, I superimposed a photo of the structures OFNM079 and OFNM064, each have about 16.5 stone layers at 10 mm height, and 148LD122 has about 12.5 stone layers at 10 mm height (see photo on page 38).

In the case of buildings built with the film with the unscaled greater stone layer heights (148LD122), the stone structure is likely to be more obvious to the lay observer. The more scale-oriented model railroader,



who also wants to put his layout in the right light photographically, will go for the finer structure, even with the risk that the lay viewer will no longer perceive it as brickwork from a distance.

The N gauge roof tile foils, which are carried in the assortment as classic roofing, but also as “monk and nun”, are also very well suited for Z gauge. The comparison to a Kibri plastic roof plate shows that the roof pan sizes of the Redutex foils are almost identical to the dimensions on the Kibri building plate, but also to those on the roof surface of the Faller interlocking.

The 160TT121 foil I used is similar, only deviates slightly in colour and has an authentic-looking appearance on the model. Again, the effect on a photo with extreme magnification is different when viewed with the naked eye, usually more homogeneous and equalising, but not necessarily less realistic.

In this respect, every model railroader should find the right structure in the extensive range of foils. In addition, according to the manufacturer, the range is constantly being expanded and adapted to demand. Special offers often have an individual, exclusive colour scheme.

With the extremely large assortment of different structure and scale foils, it can also happen that individual products do not remain permanently in the range. In the meantime, however, Redutex has started to show suitable foils, especially for Z gauge, in the catalogue, which should simplify the search.

Due to the great flexibility of the foils, they are also very suitable for rounded components such as rounded building edges or curved walls.

For use in curves of model roads, on the other hand, the situation is currently similar to that of other road foils. Only marginal bending radii of the film strips cut to road width are possible. Even prior heating with a hair dryer

does not produce a different result. In this respect, corresponding circular segments or triangular areas must also be produced.

According to information from Redutex, a new type of film is currently in the test phase, with which a two-lane asphalt road can also be adapted to the course of a curve with two approx. 14 mm wide strips. In addition, a narrow, wafer-thin white centre and edge strip for roads is being tested, which should also adhere to porous surfaces.

On individual foils, I noticed minor deviations in the structure pattern, which, however, did not cause any problems in the small scale and the sections that were, therefore, only required in smaller dimensions.

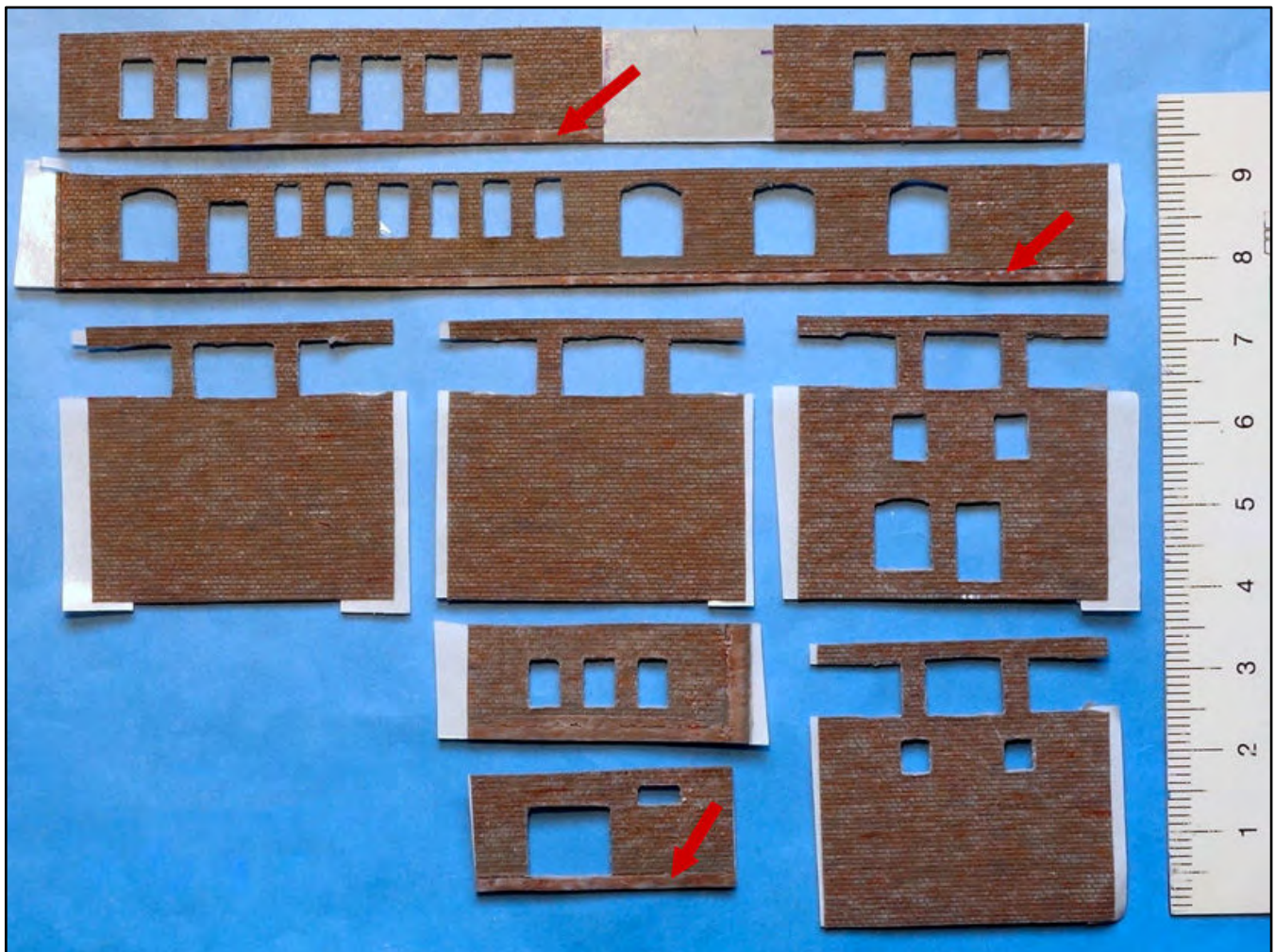
In the meantime, the manufacturer informed me that the final quality controls before delivery would be further improved, so that such films could not be sold in the future.

Foils in road and building construction applications

I now concentrate mainly on the processing of the foils, the construction methods of individual building, and functional models are described, in detail, according to principle and principles in my (electronically available) books. You will also find a link to them at the end of this article.

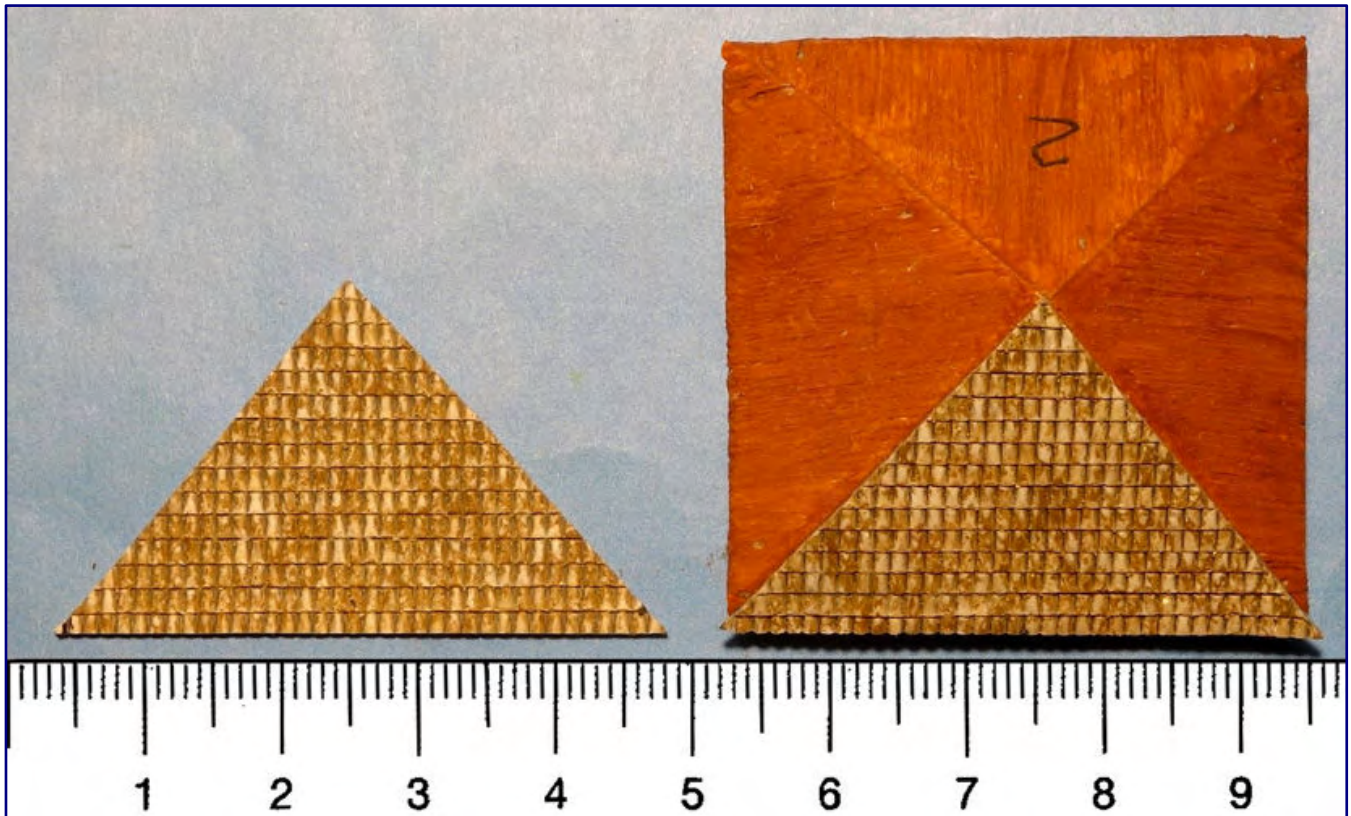
The elastic foils can be cut very easily with scissors or a craft knife. Because the cut can be made more accurately with a knife guided by a (steel) ruler, I have chosen this option throughout.

The surfaces must be free of dust and grease and must adhere well. According to the manufacturer, cardboard, cement, wood, polyethylene foam, polyurethane, and similar materials are suitable.



For building construction, the Redutex film needs a sufficiently stable substrate, here, for example, cardboard. A balsa wood body is also possible.

Immediately after application, the film is still adjustable so that corrections can be made easily. According to the manufacturer, it should be possible to remove and reposition the film for several hours, for example, by heating it with a hair dryer. Permanent adhesion is said to occur after 24 hours.



Joining pieces of foil together is no problem on solid substrates. Such a task had to be accomplished on his roof, for example.

I have not noticed any changes in the durability of the bonding in the last few months, even in critical areas such as narrow corner strips around edges. However, due to the relatively short test period, I am not yet able to make a conclusive statement on the durability.

According to the manufacturer, however, its products have been in use for more than twelve years without any defects. Incidentally, the Miniatur Wunderland Hamburg also uses these foils.

Unlike plastic or cardboard panels, which are usually sufficiently stable, the foils always need a stable substructure due to their flexibility. In the case of roads, this is the prepared substrate to which they are glued.

For my building models, I usually used thin cardboard for wall surfaces in which many window openings had to be cut out, sometimes with stitch bends. For the wall surfaces of the signal box, I was able to make use of the unstructured foil edge by cutting the foil in such a way that the edge is on the lower side of the façade and will thus represent the building base plastered as a splash protection (red arrows in the photo on page 39).

Where a particularly stable base and a permanent fitting accuracy is required, I use balsa wood. The wood is finely sanded until it is smooth. In order to close possible pores and fine cracks, I partly apply an additional base coat of acrylic paint. After drying and dusting, the foil is glued on.

The foils, which are cut to fit exactly, can be easily joined together on the stable base. The elasticity of the foils offers the advantage that the butt edges can be pressed tightly together, so that if they are cut and processed cleanly, a very fine joint is created only by the structured surface.

I glued the brick foil for the arcade supporting wall onto a 1.5 mm thick balsa wood board. The transformer house also has a substructure made of balsa wood. For many models, special attention is paid to the edges of the building. These can be realised with the foil in two ways:

- Either the foil is pulled around the edge of the building, which works very well because of the flexibility. However, with the disadvantage that the edge, especially more visible on a small scale, does not remain sharp-edged but slightly rounded. Here, however, there is the option of carefully “re-sharpening” it by hand or with tweezers.
- The foil is brought right up to the edge and that of the other side of the wall is pushed close to it. This makes the edge very sharp, although a small strip of un-embossed material thickness is often visible.



This narrow strip can be colour-matched to the film surface and, if necessary, the joints can be pressed into the unprofiled surface beforehand with a hard thin sheet metal strip (e.g., the metal strip from a loose-leaf binder) or a fine screwdriver.

In the larger gauges, going around the edges of the buildings will not be so problematic, but in the Z scale the slight curvature is more noticeable in macro photos, less or not at all to the naked eye, i.e., without magnification.



For the level crossing and the field path (above) a somewhat coarser, not quite to scale structure was used, while for the signal box (see photo on page 41) a much finer one was chosen.

Due to the flexibility of the foils and thus a certain softness, narrowest strips can be cut very well. The strips for the lateral edges of the pillar projections of the transformer house are only approx. 1 mm wide. The cornice projection there above the ground floor is also only about 1.5 mm high. This means that narrow strips the width of a roof tile can be cut out of the monk-and-nun structures and glued on as ridge and hip tiles.

In road construction it is also possible, even in Z gauge, to cut off only individual stones to represent a decaying, paved path. In this context I would like to point out that with millimetre-small components the protective foil should be carefully removed from the adhesive layer.

The tip of a craft knife pushed underneath proves useful here, because otherwise there is a danger that the adhesive layer will lift off the film on these tiny areas.

For my level crossing and the field path shown here, I deliberately chose a somewhat coarser and thus not quite to scale structure for reasons of plasticity, but a very fine structure for the pavement at the signal box shown here. The kerbs are made with strips cut from Redutex foils.

Shortly before the editorial deadline for this issue, I received the films with old town cobblestone and cobblestone street structures, newly added to the range under the term "Roman Street." Due to their relevance, I include these 3D structures briefly in my report. For the nominal sizes N and Z, different colours are available, both in standard design and polychrome, each as a continuous square structure and as cobblestone streets.

The surfaces appear relatively even overall, in the darker colours a more vivid structure can be seen, which rather emphasises the character of an old street. In contrast to the more homogeneous-looking



Comparison between a “Roman road” cobblestone sheet for Z gauge (photo above) and one declared for N gauge (photo below).

foils in 1:220 scale, the structures are naturally more visible to the naked eye in the larger 1:160 scale. Here, the modeller must decide on his preference.

Because I have not yet been able to use these foils on the layout, I have alternatively carried out two setting tests with Z-gauge vehicles to illustrate the differences in scale and structure. With these paving foils Redutex has closed an important gap in their programme. With them, the construction of paved plazas and roads is now possible in the early eras, too, but not only.

In summary, because of the enormous choice of different structures, I consider the Redutex 3D films I tested to be very well suited for a wide variety of model building projects due to their realistic appearance in three-dimensional, but not obtrusively strongly emphasised embossing, the nature-identical colouring and especially thanks to the very simple processing, even for beginners. I will increasingly use the foils in my projects in the future.

All photos: Heribert Tönnies

Redutex selection for the 3D foils:
https://redutex.com/index.php?id_category=12&controller=category&id_lang=4

Distribution in Germany:
<https://1zu220-shop.de>

Author's web pages:
<https://bestagernet.de>

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.

Der Einsatz der Baureihe 01 **Standardwerk vervollständigt**

Mit Band 1 hat der EK-Verlag vor knapp einem Jahr bereits ein neues Standardwerk etabliert. Mit dem jetzt vorliegenden Band 2 wird dieses komplett und das Lokportrait der Baureihe 01 vollständig. Bei beiden Büchern wurde nichts dem Zufall überlassen und sie vor allem mit höchstmöglicher Autorenkompetenz unterlegt. Wir sind begeistert.

Frank Lüdecke / Horst Troche
Die Baureihe 01 – Band 2
Der Star unter den Schnellzug-Dampflokomotiven
der Deutschen Reichsbahn-Gesellschaft

EK-Verlag GmbH
Freiburg 2021

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Frank Lüdecke hat das von Dipl.-Ing. Horst Troche begonnene Projekt eines Baureihenportraits zur Null-Eins fortgeführt und seine Materialsammlung zu diesem Zweck übernehmen können. Folgerichtig wird auch der 2014 verstorbene und hoch geschätzte Spezialist, ohne den das 150-Jahre-Jubiläum der deutschen Eisenbahnen 1985 sicher anders verlaufen wäre, als Co-Autor gewürdigt.

Das sich das gesammelte und aufbereitete Wissen nicht in einem einzigen Band unterbringen ließ, spricht eine deutliche Sprache für Akribie und Sorgfalt, die hier anzuerkennen sind. Strukturell sind die beiden Autoren den EK-Baureihenbüchern treu geblieben, nur wissen sie offenbar weitaus mehr Details, Fakten und auch Bilder zu transportieren.

Deshalb freuen wir uns, dass mit dem Band 2 nun auch die noch fehlende Dokumentation des Einsatzes der Schnellzuglokomotiven bei den Bahnbetriebswerken vorliegt. Einbezogen sind alle Dienststellen der Reichsbahn vor und nach 1945 sowie auch der Bundesbahn, die jemals mit einer Lok dieser Baureihe in Berührung gekommen sind. Auch die Kolonnen des deutschen Ostsektors und Trophäenlokomotiven wurden nicht vergessen.

Mit dem vorliegenden Band wird rund, was rund ein Jahr zuvor begonnen wurde: Vor der Kulisse der geschichtlichen Zusammenhänge erhält der Käufer ein umfangreiches Panorama der berühmtesten deutschen Schnellzugloks, mit dem die Autoren diesen Maschinen ein würdiges Denkmal setzen.



Für den Modellbahnfreund bieten Texte und Bilder wieder viele Anregungen, die mit Freude und Leidenschaft in der kleinen Welt umgesetzt werden können. Technikgeschichtsinteressierte und sonstige Vorbildfreunde füllen eine zuvor große Lücke in ihrem Literaturbestand und angesichts des Gesamtseitenumfangs sicher auch in ihren Regalen.

Bildauswahl, Aufbereitung und Reproduktion aller Aufnahmen fügen sich wieder nahtlos in die lange Reihe weiterer Baureihenportraits ein, die ebenso tonangebend und maßstabssetzend sind wie auch dieser: Wir haben es hier mit Band 2 des Standardwerks über die Baureihe 01 zu tun – nicht mehr und nicht weniger. Seltene und auch unveröffentlichte Fotos haben es in dieses Buch geschafft.

Der zeitliche Umfang reicht bis ins Jahr 1982, denn erst dann wanderte diese Dampflokreihe auch bei der Reichsbahn der DDR aufs Abstellgleis. Exakt, präzise und wohl scheinbar auch lückenlos werden die Einsätze auch abseits großer und bekannter Heimatdienststellen wie den Bw Hof (DB) oder Dresden-Altstadt (DR) wiedergegeben.

Erfasst werden neben den Bw-Beständen und Bespannungen im Statistikeil auch noch sämtliche Lebensläufe, die Kesselverzeichnisse, Lieferdaten und Verbleibe, Kohlenverbräuche, Laufleistungen und Erhaltungskosten. So bleibt kein Wunsch offen.

Vor Augen geführt werden durch gezieltes Aufstellen auch Umstände, die sich jeder Freund dieser Baureihe auch selbst hätte erarbeiten können und die ihm oder ihr sicher unbewusst auch bekannt waren: die kurze Nutzungsdauer der Neubaukessel bei der Bundesbahn.

Ein Phänomen, das auch andere Baureihen wie die 03¹⁰ oder besonders auch die 10 und mit einigen Jahren an Abstrichen auch noch die 01¹⁰, die 041 und sogar die 042 trifft, wird hier sehr deutlich herausgearbeitet. Nur rund fünf bis sieben Jahre waren die Kesselneubauten in diesem Fall im Einsatz, bevor sie den Weg alten Eisens gingen.

Es kam hier der Sonderfall hinzu, dass die leistungsfähigeren NK-Maschinen im wichtigsten Heimat-Bw Hof nie sonderlich beliebt waren und deshalb sogar noch vor vielen Lokomotiven mit alten Kesseln abgestellt wurden.

Dieses Extrem wird hier dazu genutzt, dem Leser vorzurechnen und zu belegen, dass sich die Kosten der Umbauten niemals ammortisieren konnten. Betriebswirtschaftliche Vernunft bestimmte also gewiss nicht bestimmend das Ende dieser Maschinen, eher das Streben nach Prestige und Modernität.

Dampflokfreunden mag dies weh tun, aber es nichts zu ändern und leider hinzunehmen. Es trägt sicher aber auch der Würdigung leistungsfähiger und relativ wirtschaftlicher Maschinen bei, die problemlos noch länger ihren Dienst hätten tun können.

Lassen wir es so stehen und gestehen der Baureihe 01 ihren Ruhm als „größte“ deutsche Schnellzugdampflok zu. Sie glänzte mit keinem Superlativ wie andere Pacific-Maschinen im Ausland. Stattdessen waren Entwicklung, Betrieb und Unterhalt vom Streben nach höchster Wirtschaftlichkeit bestimmt. Und auf diesem Feld hat die Berühmtheit gewiss ihre Lorbeeren verdient.

Fakt ist ebenso, dass an diesem Buch niemand mit Dampflokpassion vorbeikommen wird. Und wer Band 1 bereits im Regal stehen hat, möchte das ja auch gar nicht. Alle anderen werden diesen beiden Werken sicher noch erliegen.

Publishing pages:
<http://www.eisenbahn-kurier.de>
<http://www.ekshop.de>

Rundhauber im Portrait

Eine Magirus-Legende

Ist das wirklich schon siebzig Jahre her? 1951 rollte der erste Rundhauber auf die deutschen Straßen! Heute ist seine Ära längst beendet, aber vergessen ist er nicht. Er ist ein Klassiker und es stellt sich die Frage, warum er das wurde. Ein eher kleines, aber feines Buch beleuchtet und erklärt genau das – auch wenn das eher ein Randergebnis eines leidenschaftlichen Portraits ist.

Wolfgang H. Gebhardt
Magirus LKW
Rundhauber 1951-1965

Motorbuch Verlag
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Autor Wolfgang H. Gebhardt aus Bad Homburg mag in unserem Magazin noch nicht als Autor von Büchern in Erscheinung getreten sein, aber das darf seine Kompetenz und seine Bekanntheit nicht schmälern oder gar in Frage stellen.



Es ist einzig der Tatsache geschuldet, dass Autos im Bereich der Modellbahn zwar wichtig sind, aber eben nur ein Randthema darstellen.

In der einschlägigen Szene gilt er als Nutzfahrzeugspezialist mit den Schwerpunkten deutsche Omnibusse, Lastwagen und Traktoren. Dazu publiziert er auch regelmäßig. Mit seinem zweiten dieser drei „Steckenpferde“ hat er es nun auch zu uns geschafft.

Bewegt haben uns bei der Titelauswahl verschiedene Automodelle im Maßstab 1:220 von mindestens zwei unterschiedlichen Herstellern, die teilweise für Diskussionen und grenzenlose Begeisterung gesorgt haben.

So schien uns klar, dass dieses Fachgebiet auch einmal mit einem passenden auch untermauert werden darf, wenn es um die Frage geht, wann und welchen Diensten die Vorbilder unterwegs waren, was sie voneinander unterscheidet und wie sie sich gestalten lassen.

Bewusst haben wir einen Titel ausgewählt, der auch im Preis günstig und damit den Erwartungen eines Modellbahners gerecht wird. Vermeintlich leichte Kost werden die Käufer angesichts des Kaufpreises und eines überschaubaren Umfangs mit umfangreicher Bebilderung erwarten.

Das dürfen sie auch, aber es sollte nicht dazu verleiten, dem Titel seinen fachlichen Anspruch abzusprechen! Zwar haben wir es hier nicht mit einem dicken Wälzer zu tun, der jede Schraube im Detail erläutert und hinterfragt und womöglich dazu befähigt, ein solches Fahrzeug zu zerlegen, wiederzusammensetzen und auch bei Bedarf zu reparieren.

Vielmehr handelt es sich um ein liebevolles Portrait eines markanten Fahrzeugs in sehr unterschiedlichen Erscheinungsformen und Leistungsklassen, geschrieben für Menschen mit durchschnittlichem Sachverstand in diesem Bereich, aber persönlicher Zuneigung zu diesem markanten und auch geschichtsprägenden Nutzfahrzeug.

Dieser Zielgruppe sollten sicher nahezu alle Modellbahnfreunde entsprechen, die nicht nur für die Vitrine sammeln, sondern ihre „guten Stücke“ auch auf einer Anlage fahren sehen wollen – und dorthin gehören natürlich auch Autos und eben der Rundhauber von Magirus.

„Kleider machen Leute“ ist eine bekannte und anerkannte Redensart. Sie gilt durchaus auch im Nutzfahrzeugbereich, wo ein gepflegter und moderner Laster eine Visitenkarte für Kunden darstellt. Der Rundhauber bediente auch genau diese Erwartungen, denn er verband ein damals revolutionäres Triebwerk mit einer geradezu futuristischen Haube.

Auf dem Höhepunkt der Nierentischära waren Lastkraftwagen keineswegs rund und in dieser Hinsicht modern, sondern sie besaßen lange Hauben, Ecken und Kanten. Sie unterschieden sich oft noch wenig von den Fahrzeugen, die für die Wehrmacht gebaut worden waren. Der Magirus mit Luft- statt Wasserkühlung musste da auffallen und das tat er auch sehr ansprechend.

Er besaß ein eindeutiges Identifikationsmerkmal, das ihn im Rückblick leichter der Ulmer Marke Magirus zuordenbar machte als vielleicht alle anderen Konkurrenzprodukte ihrem jeweiligen Hersteller. Das scheinen ja auch die Modellhersteller erkannt zu haben und für sich zu nutzen.

Was also leistet dieses Buch im genannten Kontext? Natürlich würdigt es dieses Fahrzeug und schafft ihm ein zusätzliches Andenken, aber das wäre noch viel zu kurz gegriffen. Begonnen wird bei der Geschichte seines Herstellers und dessen Weg zum Rundhauber.

Seine Rolle als Teil des Wiederaufbaus und des Wirtschaftswunders erfährt eine Würdigung und eine Einordnung. Dazu gehört auch der bereits erwähnte Motor mit Luftkühlung, der hier als Besonderheit verstanden werden darf.

Wolfgang Gebhardt betrachtet dazu in diesem Band alles Magirus-Rundhauben-Baureihen, mit denen der Nutzlastbereich von 3,5 bis 8 Tonnen abgedeckt wurde. Pritschen-, Kipper-, Kasten-, Kommunal- und nicht zuletzt auch Feuerwehraufbauten waren es, die sie im damaligen Verkehrsgeschehen präsent machten.

Die Texte sind leicht verständlich geschrieben und fördern auch den persönlichen Lesefluss, sie sind gewiss keine schwere Kost. Sie liefern punktgenau die Informationen, die ein Käufer aus der beschriebenen Zielgruppe erwartet und für sein Hobby gebrauchen kann. Wer dabei sprichwörtlich „Blut leckt“, wird sich im Nachgang gewiss nach weiteren Büchern mit mehr Umfang umsehen.

Aber wer eher den großen und unverfälschten Überblick einer längst vergangenen Zeit sucht, um diese auch ebenso authentisch und korrekt nachzubilden, der wird hier abschließend fündig. Magirus-Unterlagen und tolle Aufnahmen aus der großen Zeit des Rundhaubers vollenden diesen Anspruch. Technische Daten und natürlich auch die Quellen des Autors schließen das Buch ab.

Publishing pages:
<https://www.motorbuch.de>



Lokomotiven werden überbewertet.

Für manch einen mag dies eine gewagte These sein, aber mit Statistik lässt sich vieles belegen: Zum Jahresende 1938 verfügte die Deutsche Reichsbahn über 27.379 Lokomotiven, Kleinloks und Triebwagen, 90.970 Personen- und Gepäckwagen, 630.319 Güterwagen und 19.910 Bahndienst und Dienstgüterwagen.

Oder anders ausgedrückt: auf eine Lokomotive kamen 23 Güterwagen, wobei zwei Bauarten herausstachen: G Kassel und München sowie Om Breslau und Essen nach Verbandsbauartzeichnungen mit über 120.000 bzw. annähernd 140.000 Wagen – also mehr als alle Lokomotiven und Reisezugwagen zusammen. Und auch wenn heutige

Fahrzeugbestände nicht vergleichbar sind: Aktuell nennt DB Cargo 1.702 Loks und 72.227 Güterwagen.

Was liegt also näher als diese Wagen auch in der Literatur zu würdigen. Seit 1989 erscheint eine Buchreihe über Güterwagen in der Co-Autoren und ich die zugänglichen Informationen zusammentragen und mit Fotos und Zeichnungen aufbereiten. Zusammen mit den etwas anders aufgebauten Büchern über aktuelle Güterwagen sind bislang zwölf Bände sowie vier ergänzende Broschüren erschienen. Viele der Bücher sind, obwohl z.T. bereits mehrfach nachgedruckt, inzwischen vergriffen.

Im Laufe des Erscheinens der Reihe gab es etliche Änderungen in der Verlagslandschaft, was letztendlich dazu geführt hat, dass ich diese Bücher ab 2021 wieder selbst verlege.

Als neue Reihe geplant sind drei Bücher über Bahndienstwagen. Im ersten Band wollen wir die allgemeinen Themen, Nummernsysteme und Dienstgüterwagen sowie einige besondere Bauarten vorstellen. An diesem Buch arbeiten wir bereits und es soll, wenn nichts dazwischenkommt, Ende 2022 fertig werden.

Die beiden Folgebände sollen dann schwerpunktmäßig alle Bauzugwagen, Mess- und Prüfwagen (Band 2) sowie Schneepflüge und Schneeschleudern, Hilfszüge, Krane und Kranzüge (Band 3) beinhalten.

Stefan Carstens, Wolfgang Henn
Bahndienst- und Dienstgüterwagen
Band 1: Spezialwagen für jeden Zweck

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Stefan Carstens, Harald Westermann
Güterwagen Band 9.2
Chemiekesselwagen DB, DR und DB AG

ISBN: 978-3-9823-2221-6
256 Seiten Format 21,8 x 29,7 cm
Hardcover / 49,50 €

Ich bedanke mich bei meinen Vertriebspartnern



Auch mit den Güterwagenbüchern soll es weitergehen. Die Reihenfolge und die Erscheinungstermine hängen aber sehr von der beruflichen Belastung meiner Co-Autoren ab. Konkret in Vorbereitung bzw. im Entstehen sind Güterwagen 2.1 über Klappdeckel-, Schiebe- und Schwenkdachwagen und Band 10 über Tiefladewagen.

Stefan Carstens – Harald Westermann
GÜTERWAGEN
Band 10 Tieflade- und Tragschnabelwagen

EISENBAHN DOKUMENTATION UNION

Staying in the conversation (part 8)

Ratimo-Z – Focus on 3D Printing

Rainer-Tielke-Modellbau has been an established small series manufacturer for milling work for several years. In addition to a fixed programme, individual commissioned work is also always on the agenda here. The focus is now on 3D printing. Before this year's theme comes to an end, let's take a look at what new things have come out of the forced breaks in attendance events.

By Rainer Tielke. For almost twelve years I have been producing articles and spare parts for Z gauge, which are sold by myself. In addition, many individual pieces have been produced on behalf of customers, including several larger stations and locomotive sheds or even a customer's own home.

In the past two years, I have started to familiarise myself with 3D printing. As I had previously only designed in two dimensions with Corel Draw, I first had to get to grips with a programme for computer-aided 3D modelling (CAD programme / "Computer aided Design") and familiarise myself with its logic.



New construction methods and manufacturing techniques enable Rainer-Tielke-Modellbau (Ratimo-Z) to revolutionise its product range. The crane based on the Magirus Jupiter, used by the Bundeswehr and THW, is one of the first results.

After trying out programmes from different companies, I decided on the one from Rhinocerus. Working with the 3rd dimension is quite different from creating buildings on drawing paper. Before I always had big problems with the construction of the roofs with different roof slopes, hipped roofs, etc. That's why I often had to redraw and mill parts because they didn't fit in the two-dimensional construction.

Now, I only draw in the CAD programme. If individual parts are still to be milled, then they are converted into a two-dimensional file and prepared for the milling machine. But this work is becoming less and less, as I am now concentrating more on working with the 3D printer. A particular advantage of this type of manufacturing is to create components that would not be feasible with the milling machine, such as the spire in the photo.

Future technology 3D printing

In the course of the last two years, quite a number of different printers have found their way into my workshop. There are now printers with different print space sizes. As the demands on the required print space grew due to some commissioned work, the dimensions of the printers also grew.

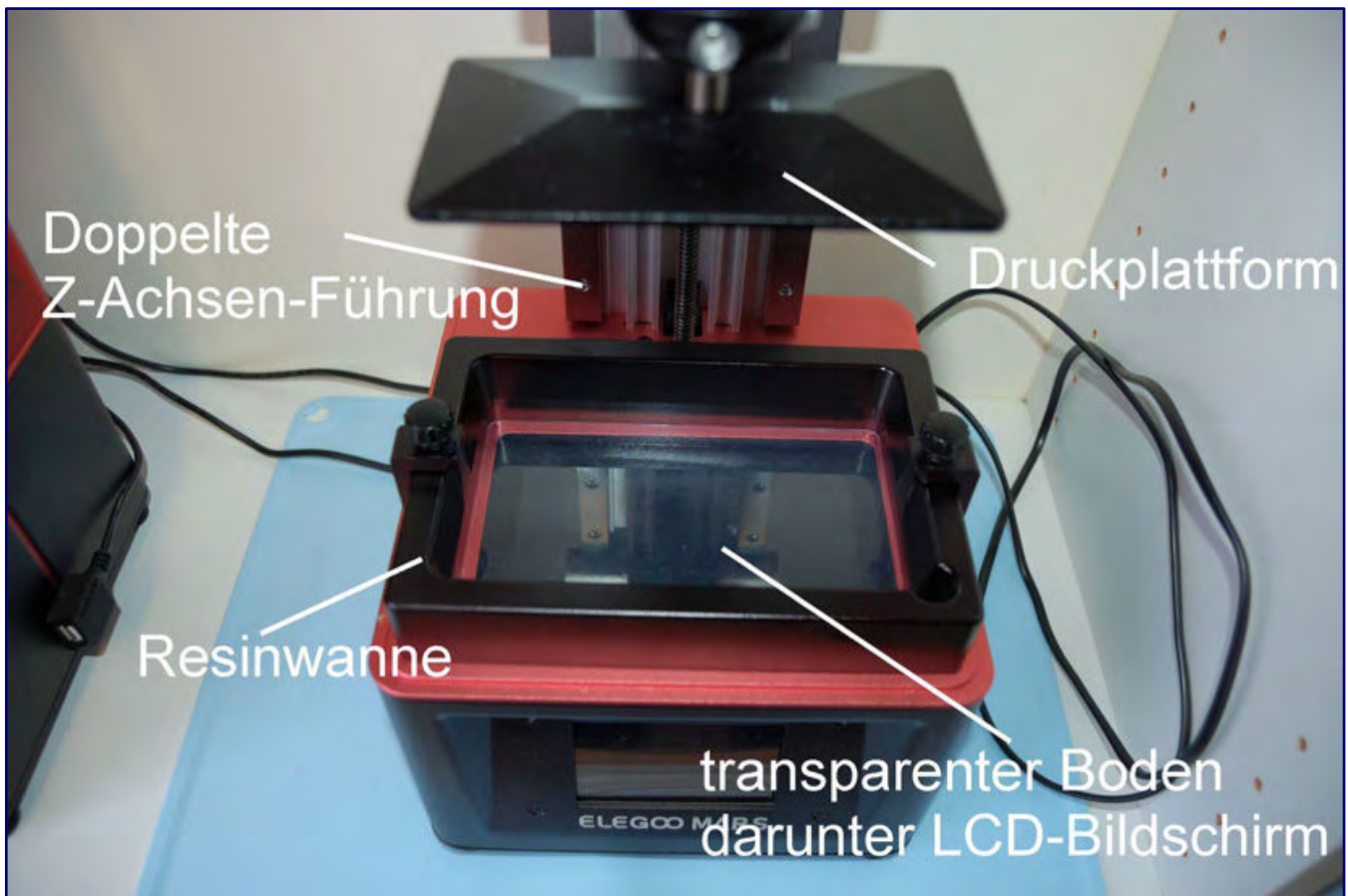
At the moment I have two large printers with print bed dimensions of 120 x 192 mm, a medium printer with 80 x 120 mm and two small printers with 65 x 115 mm. The latter two printers were equipped by me with a more stable, double Z-axis guide and got a mono LCD installed instead of the standard RGB LCD.

This shortens the exposure time required, which then means a shorter time to produce the print. The double Z-axis guide stabilises the print platform better, so it gives a cleaner print image.



A look inside Ratimo-Z's printer room: five 3D printers of different sizes are currently in use, with a sixth due to go into service in January 2022.

However, since the size of the two large printers is not sufficient for all planned projects and the splitting of wall halves is not always advantageous, I am expecting the delivery of a considerably larger building block (156 x 278 mm) in January. This will be used to build larger station buildings, among other things.



The part designation should make it easier for our readers to understand the technical explanations and make them comprehensible.

Using the example of a signal box, I would like to describe the development of a building (see photo series starting on page 52).

As the original version of this signal box has not existed for a long time, the only source available were a few old black and white photographs. In the meantime, I have had some practice in developing the approximate dimensions and proportions of the building from the existing photos. The three-dimensional construction on the computer is very helpful here, because I can already get a feeling for it on the screen.

If the basic proportions match the model photos to a large extent as well as believably, then I can begin with the detailing.

For the roof, I now draw a roof tile, which is then duplicated to form a roof surface. The chimney then gets a brick masonry, and, at the appropriate place, I add the skylight. Finally, I form a gutter.

Something similar is done with the brickwork. Everything that is to be printed must now be made bit by bit. The wall surfaces get their brick structure and can be reproduced with it in 3D printing, even in the depths of the window and door openings, unlike when they were made with the milling machine.

Wall projections now also receive an engraving of the bricks from above. The window sills are also added below the window openings. It is now even possible to create shapes that cannot be produced with the milling machine, see here the roof with attached towers.

continues on page 55

Excursus: Illustration of the construction of an interlocking using a CAD programme



The first step is to develop the dimensions and proportions of the building on the computer. If no (more) drawings with dimensions can be obtained, only reference dimensions, which are or were quasi-standard, can help to mathematically determine all the missing ones. However, the impressions that are perceived by the eye and unconsciously compared with what is experienced are always decisive for the implementation of the model. Only when the basic proportions are right, the work on detailing the surfaces follows.

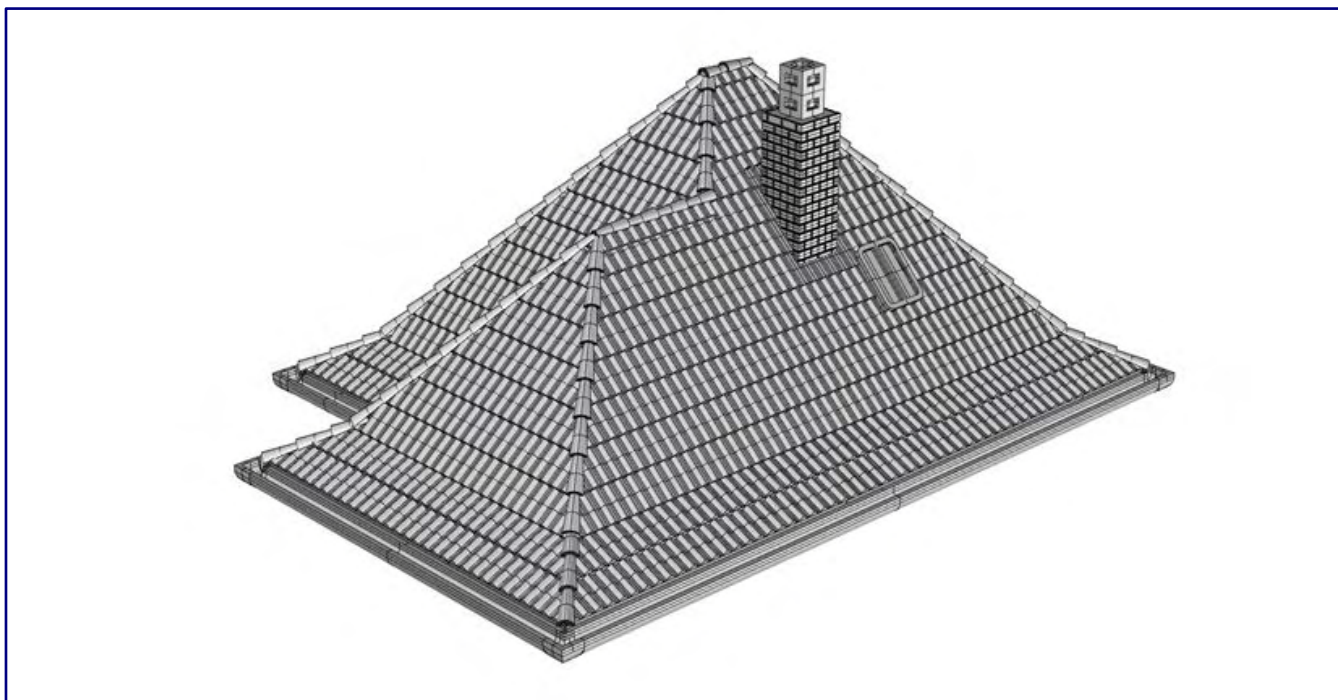


Photo above:

The work of designing the roof begins with drawing a single tile. It is then duplicated to form a roof surface.

In the next step, the chimney stone is given a brick wall and a skylight and the gutters follow at the appropriate places.

This completes the first component of the signal box.

Photo left:

The brickwork will soon follow on the base body as well, because everything that is to be printed later needs structures, little by little.

Unlike when working with the milling machine, engravings can also be made around the corners of the window and door openings.

Before that, however, the wall projections and window frames are drawn, followed by the window sills.



Finally, the masonry structures of the signal box have been added. The simulation as a coloured volume model now gives a good impression of the later building and allows the designer to finally check his work for the intended overall effect before the output processes start.

Ready for output

Once all parts have been designed, a new file must be created with the CAD programme that can give the printer the commands for printing. An STL file is created for this purpose. After a few seconds it is created and loaded into the next programme.

Since the printer cannot print the whole building at once, but only in thin layers of 0.01 mm height, the building has to be prepared for printing one last time.

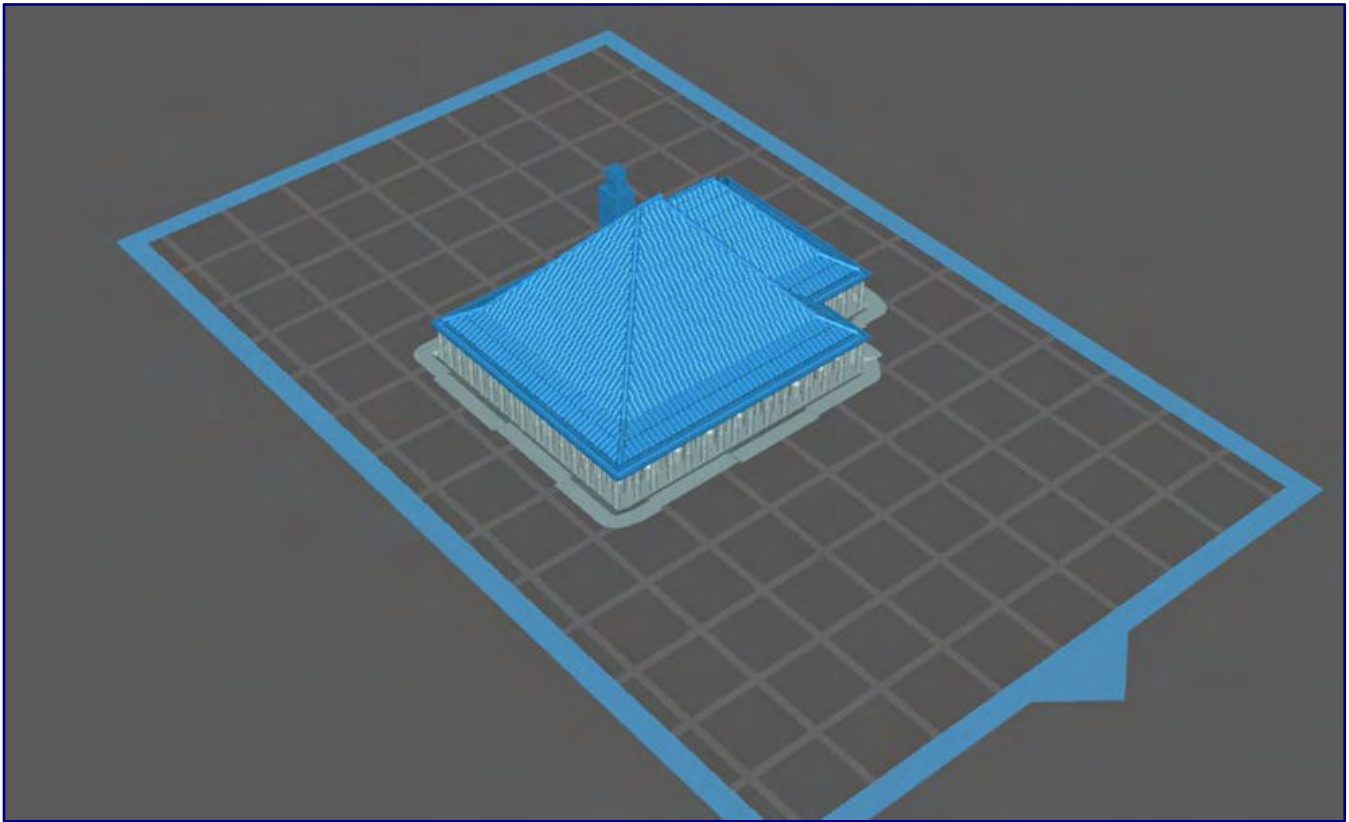


3D printing now also enables construction shapes that could not be produced with a milling machine. This roof with corner towers may express that. Nevertheless, the milling machine is not completely obsolete, because it knows very well how to deliver part supplements.

To prevent damage to the model when it is later detached from the building platform, I provide it with auxiliary supports under the model. I deliberately do not use the automatic function of the programme, but place them individually in the required thickness at the important and necessary points based on experience.

Once all these supports are in place, the programme can divide the model to be printed into slices, which are then reassembled layer by layer in a single printing process to form the roof that I mentioned earlier.

In this case there are exactly 2,660 layers from which the roof is created in the printing tank in 8 hours. On the screen, I can look at each individual layer and discover any defects that may still be present in the printed object.



The tiled roof is prepared for printing: The supports required for error-free printing and clean release from the printing plate are completed.

There is liquid resin in the pressure trough, which is transparent at the bottom. Directly underneath the pressure trough is a screen. And below it are several LEDs that emit UV light. The layered structure of the object is created by the fact that the resin reacts to UV light irradiation with hardening and sticks to the printing platform or the last printed resin layer.

The programme now converts each layer of the model in turn into a photo for the screen, which then allows the UV light to pass through for exposure in the shape of the partial layer to be printed. The printing platform is raised a few millimetres after each exposure and then lowered again to the bottom of the printing tray.

In doing so, it remains one layer thicker above the floor. The resin that is now between the printing platform and the bottom of the printing tank is then exposed to UV light at the points to be exposed, solidifies again and sticks to the previously produced layer. This now happens in constant repetition until all layers have been printed, in this case after eight hours.

Then I can take the printing platform with the printed roof out of the printer and clean it. I do this in the first step with an immersion bath. The printing platform with the attached roof is dipped several times into a container of isopropanol. This rinses off the still roughly adhering resin, followed by a bath of several minutes in the washing cleaner, which is also filled with isopropanol.

Here, with the help of a drive at the bottom of the cleaning container, a flow is created in the isopropanol in it, so that the platform immersed in it and the adhering print are cleaned of all unsolidified resin. Smaller printed parts can also be cleaned very effectively in an ultrasonic cleaner.

After cleaning and drying the printed parts, the next step follows. All the previously attached auxiliary supports must now be removed again. For this purpose, I have had an ultrasonic knife for a few weeks now, which solves this work cleanly and without effort and works much better than the previous removal with the help of a side cutter or scalpel.



After cleaning and drying the parts, the auxiliary supports are removed again. Working with an ultrasonic knife has proved to be a good method.

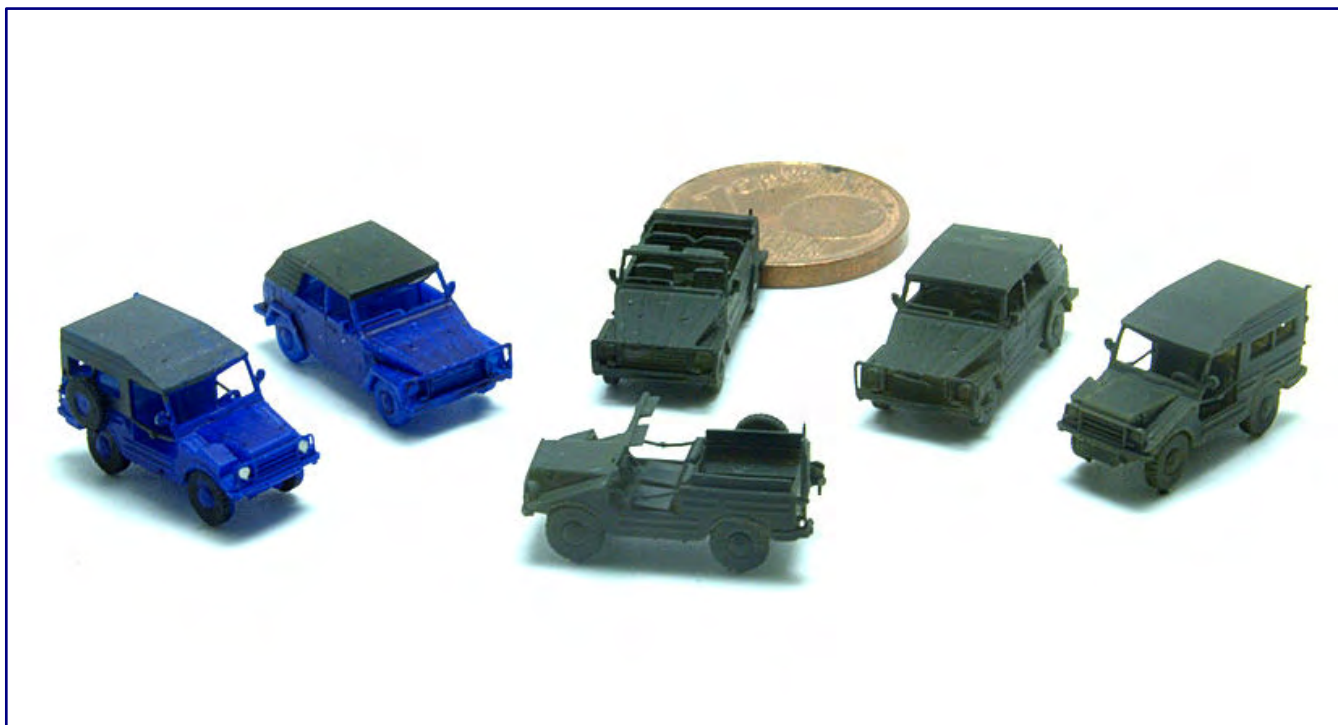
The printed roof is now ready and can be coloured accordingly. I proceed in the same way with the outer walls of the building. After the component has been divided into layers by the processor, the programme displays the expected printing time. In this case, it was divided into 3,526 layers, which will be printed in about 10.5 hours.

Now I can check whether everything turned out as I had planned. This model now gets window frames and doors on the ground floor as well as the window panes, milled out of polystyrene. An intermediate floor for the first floor is also being milled.

At the moment, a large station, which is in production using the 3D printing process, is almost finished. Another station is still waiting to be realised and produced.

More new products

In addition, I have also developed new vehicles in recent weeks. I am continuing the series of Bundeswehr vehicles from the sixties and seventies that I started with the MAN 630. Initially, the small vehicles DKW Munga 8 and VW 181 "Kübel" will be available in both open and closed design.



DKW Munga 8 and VW 181 (photo above) are current new products from Ratimo-Z. In the case of the first-mentioned vehicle, thanks to the 3D printing possibilities, even the chains are reproduced, which should protect the driver and passenger from falling out due to the lack of doors. Rainer Tielke offers the single-axle trailer for the MAN 630 both ready to drive and with offset supports. For all models there is a choice between Bundeswehr and THW design.

The MAN 630 is now supplemented by the characteristic single-axle trailer, which is available in parked form with supports or ready to drive behind the tractor.

Another addition to the programme is the Magirus Jupiter crane. It is available both in the mobile version and in the operational version (see photo on page 49). On this version, the lateral supports are extended and set down on the ground. The crane is supplied separately so that it can be glued to the chassis as desired.

The next new product is very filigree and was quite elaborate in its construction. It is the three-axle Faun 912 as towing vehicle and as trailer a low loader, with which everything from pontoon bridges to light tanks and bulldozers could be transported by the Bundeswehr.



The heavy tractor Faun 912, including low-loader trailer, is also a new product available from January 2022, with which the limits of 3D printing could be explored and exploited. The trailer can be used in two positions.

The low-loader can be dismantled into front and rear chassis as well as the middle beam, plus the associated drive-on ramps. It is also planned to offer these vehicles in the THW livery. The new vehicles can be ordered now. Delivery will then take place from January 2022.

All photos: Rainer Tielke

Manufacturer and own sales pages:
<http://www.rainer-tielke-modellbau.com>

Reports from Friedrichshafen and Dortmund **Only a short Trade Fair Autumn 2021**

After a long period of deprivation, many, exhibitors and visitors alike, were looking forward to the opening of the fairs. But the pandemic is not over yet and it turned out to be a short autumn season of trade fairs that was not free of fears. Stephan Fuchs and Torsten Schubert were on site in Friedrichshafen and Dortmund to share their impressions with all readers.

On 5 November 2021 at 9 a.m. sharp, the time had come: the gates of the trade fair in Friedrichshafen opened for Faszination Modellbau. Apart from smaller exhibitions or meetings, this was the first major model railway fair since the appearance of the virus that has been following us for almost two years.

A new feature in Hall A7 was the “Lego Fan Exhibition”. To say it in advance, you could notice that there was a certain uncertainty in the air. Some exhibitors were missing. To name just one exhibitor outside the narrow model railway sector: We looked in vain for the electronics dealer Conrad.



Many model railway enthusiasts must have longed for a public ride, such as here on Thomas Heß' “Winzlingen” layout at the trade fair in Friedrichshafen. Photo: Stephan Fuchs

The aisles between the stands were certainly wider than usual, not just because of the hygiene concept. The attendance of about 30,000 visitors was also about half as many as before the Covid 19 pandemic. Thus, it was already considerably emptier in the halls from about 2 p.m. onwards.

Regarding the hygiene concept: from my point of view, the rules communicated as 3G were consistently implemented, the obligation to wear masks was almost always observed by the public and the exhibitors. That is certainly unusual, but quite feasible!

But that was it for the negative vibrations. Even the day before, when the ZFI stand was being set up, there was a feeling that everyone was eager to be able to present their hobby to a larger audience again.



A look at the ZFI stand before the exhibition opened makes it clear how the spacing rules were effectively implemented as part of a hygiene concept. Such wide aisles have probably not been seen at an exhibition of this kind before. Photo: Stephan Fuchs

The Z-Freunde International were also a bit shaken, for example Axel Hempelmann was absent, despite vaccination, due to quarantine. But the rest were really “up for showing!” May the readers forgive me for using this casual term, it is the only way to convey the prevailing mood.

I, too, let myself be infected by this atmosphere, not by the virus, so that I got more involved in the overall picture and the mood and went into less detail, for example, when it came to researching new products.

The following people exhibited at the ZFI stand:

- Uli Günther demonstrated two segments of his layout, one not yet finished and the Neuschwanstein Castle. However, the castle was temporarily exchanged for a ruined castle in order to get some variety. He also had three showcases with a wide variety of rolling stock.
- Thomas Heß had a suitcase system and his folding board with him to demonstrate digital control.
- Alois Forstner was represented with a suitcase system. Among other things, a bus and his camera car rode on it. The photo from the camera was transmitted via a beamer to a wall of the booth at the stand.

- Gerhard Maurer presented his autumn layout “Traumschleife.”
- Two smaller layouts came from the Stammtisch Bayern, including a converted tray for breakfast in bed, two hands-on activities for children of all ages and a display case. Another display case came to the stand via Märklin and was equipped with various Christmas carriages and foam modules.



Instead of breakfast in bed, the Z Friends International served a US-style small-scale layout on a tray. Photo: Stephan Fuchs



“Dwarf Ingo” delighted the youngest among the exhibition visitors. Photo: Stephan Fuchs

- Roland Kimmich exhibited his almost obligatory Spur Z television set.
- Ingo Sindermann once again exhibited his fantasy dwarf layout. Even dressed up as a dwarf with a red cap, he found much favour with small children, but also with the “older” ones.
- On Sunday, three exhibition layouts were added by Gotthard Schmidt.

Just as with the exhibitors, it was noticeable among the public that it was generally perceived as a pleasure to be able to get out of the now unloved daily grind and to be able to occupy themselves with the hobby among like-minded people.

Many also just wanted to look around and get some ideas. At the ZFI stand, the camera car, the digital possibilities of Z gauge and the hands-on activities were particularly popular. This resulted in some very intensive and long conversations.



Three exhibits by Gotthard Schmidt completed the stand on Sunday. On one of them, the class 103 was running with an express train of pop colour cars.

The model railways on display ranged from Z gauge to nominal size 1 and 2m (LGB) garden railways. However, some of the layouts and exhibits had already been shown before. I already knew some of the N gauge modular layouts from Stuttgart, and the 1:87 workshop layout was recently reported on again in Eisenbahn-Romantik.

Speaking of Eisenbahn-Romantik: Hagen von Ortloff was again represented with friends at a huge stand with various historical layouts of different nominal sizes. New were two layouts that were operated by cranking a dynamo.

What fun, especially for children! Some of them cranked so hard that the changeover impulse for the locomotives was triggered and everything suddenly shifted into reverse gear to the astonishment of everyone. Several worn cranks, which Hagen then patiently replaced, were the result of this enthusiasm.

There was also a lot of interest in the real steam meeting. There, too, we could gain the following impression: "Finally we are allowed again!" For those who have not yet seen it in person: definitely have a look!

Some of the things the participants come up with are really funny. Just being able to drive your locomotive over a very long distance through two exhibition halls is something very special. You can't enjoy that in this way anywhere else. And the rules are also very simple: whoever drives up is to blame.

In conclusion, I would like to say: We had a lot of fun at the ZFI stand. We can only hope that this will not remain a one-day wonder and that it can continue seamlessly in 2022.

continues on page 65



Two final impressions from Friedrichshafen away from Z gauge: MEC Pirna's TT gauge layout (photo above), and public traffic at the live steam meeting (photo below). Photos: Stephan Fuchs

And I would like to make a personal comment: As model railway enthusiasts we are already somehow “in a funny mood”. Two or three small punctures are no longer important! Vaccination helps us all!

View over Intermodellbau

Everything was different at Intermodellbau this year. After the fair had not occurred in April 2020 and 2021, it should at least work out as a “winter edition” in November 2021. But not only the month was different, but also the days of the week: Wednesday to Saturday (17 to 20 November) instead of Thursday to Sunday.

This is an unusual time slot for the Intermodellbau. If the basic postponement of the date was related to the Corona pandemic, the change in the days of the week was due to the Sunday of the dead, which would have been a silent holiday with a sales ban. But the schedule was also completely different from what trade fair visitors are used to.



That was Intermodellbau 2021 as a “winter edition:” strikingly large open spaces, wide aisles and a noticeably lower visitor turnout.
Photo: Torsten Schubert

Before entering the halls, all visitors and exhibitors were checked for compliance with the 3G rules. After a short waiting period, everyone received a coloured and non-destructively removable wristband as proof of successful testing.

This year the fair also only occupied halls 4 to 8, with model railways as usual in halls 4 and 7. It was also noticeable that many aisles in all halls were significantly wider. On several stand areas we found seating for visitors, which was called the “Intermodellbau Lounge” in the hall plan.

The open spaces in the halls were also much larger during this fair. So, even health requirements and distance bans could not hide the fact that a large number of exhibitors were absent and suspended this Intermodellbau.

The reasons may have been many: low expectations of visitor attendance, a seemingly unfavourable ratio between stand costs and sales potential, or even concerns about one's own health. In most cases, we will probably not know the reasons, but our Z gauge seemed to be particularly shaken this time around.



Due to the lack of Z-gauge participation among the exhibitors, we will take a look at the larger gauges. Photo: Torsten Schubert

Some of our regular dealers and manufacturers, otherwise permanent guests at this fair, were unfortunately not there. This also applied to the entire small series for 1:220 scale, so a visit from the Zetties' point of view might not have been worthwhile just by looking at the list of exhibitors.

But there were also cancellations at short notice: the weekend before, the accessories manufacturer Noch was listed in Hall 4, but unfortunately was not there. Our enquiry confirmed at least here what we had already feared: The steep rise in the number of infections required consideration and led to the cancellation.

One consequence of the cancellations was an unpleasant effect from the visitors' point of view: many stands were set up as island stands and only long, white walls lined the paths through the aisles. This destroyed any atmosphere and made the fair look extremely unattractive.



The special wagon for the Intermodellbau was the one that was actually already planned last year: an open wagon of the type Eaos of the Dortmund railway with scrap load (item no. 80730). Photo: Jörg Landau



The annual car 2022 for the members of the Insider Club was not very well received according to the readers: a covered freight car Gm "Papierfabrik Salach" of era I (80332). Photo: Ralf Junius

One of the few exceptions for the small scale was the Märklin stand. There, in addition to some older and the current museum wagon, the fair wagon was also available, which was already presented for the Intermodellbau 2020.

This is an Eaos 106 type open freight wagon in brown paint with touch-up spots and the green-yellow logo of the Dortmund railway (Item No. 80730), fitted with a scrap load.

Märklin did without the usual Insider Club stand, where a small gift is normally distributed on presentation of the membership card. On the other hand, it was a pleasant premiere that the new Insider models for the following year

were presented for the first time at this fair.

In Z gauge, the insider car 2022 already included in the article is a later G 10 in light grey livery and design of the Papierfabrik Salach (Salach paper factory)(80332), employed by the K.W.St.E., i.e., intended for Era I.



Germany's most powerful diesel-hydraulic locomotive, the V 320 001 (88320), will be the Insider Club model in the anniversary year 2022. Illustration (3D volume model): Märklin

We had already criticised it in the last issue as unimaginative and not promoting membership, after an almost identical model was already available for sale as a museum car 25 years ago.

Much more exciting and impressive is the heavy diesel locomotive V 320 001 (88320), which promises high standards with appealing detailing such as attached grab rails, high weight for good tractive effort, as well as, current LED alternating lighting, and bell-shaped armature motor.

We are still somewhat sceptical about the engine room and driver's cab lighting, which was also announced, because at least the latter was actually switched off during the journey. A hand-made sample of this locomotive has not yet been seen.

Missing is also the keyword for show layouts in our gauge. Only the small model railway case at Eisenbahnreisen Sutter (train travel agency) may be mentioned here. Faller exhibited two dioramas with their current products.

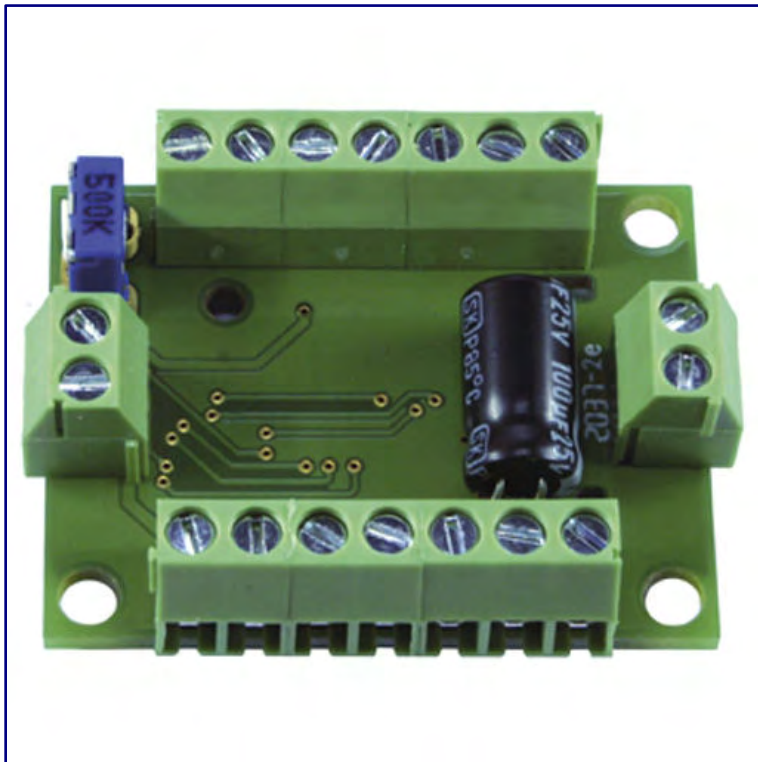
On the H0 gauge industrial layout by Gerd Otto (Otto-Scrap-Design), a Z gauge scrap yard diorama was also exhibited. Corresponding scrap metal was also available for sale there. We had already reported on this once in an earlier issue about an exhibition of the Stammtisch Untereschbach e.V.



The Otto-Scrap-Design stand proved to be a paradise for a wide variety of scrap metal of all scales. Photo: Torsten Schubert

The new series of “Light Computer Next Generation” (LC-NG) was introduced at Tams Elektronik. These electronics have 14 switching outputs, mainly for connecting LEDs or lamps, but in some versions also for servos or loudspeakers. It was available there in 14 differently programmed versions.

The self-observed visitor numbers were about half those of previous editions. According to impressions of commercial exhibitors we spoke to, the first day of the fair was clearly better attended than the two following days, and Saturday was the busiest. Accordingly, the afternoons on Thursdays and Fridays were very poorly frequented.



There were new products at Tams-Elektronik: six more "Next Generation" LC modules were presented. Photo: Tams-Elektronik

As expected, the official figures and exhibitor impressions published by the organiser naturally read more like a success story: despite the pandemic and high incidence levels, around 40,000 visitors would have found their way to Dortmund (usually around 78,000), 9% of whom came from abroad (comparative figure for 2019: 10%). The 325 exhibitors came from 13 different countries (2019: 500 from 19 countries).

According to the press release, the organiser was "very satisfied" with this, although for us the question remains open as to how such a shrunken trade fair can support itself economically at all.

Apparently, the exhibitors' turnover at the fair does not seem to match the widespread reports of success: The per-capita expenditure at the exhibition, which is otherwise so effectively advertised, was withheld from us in this year's financial results.

On the other hand, the discipline of the visitors deserves positive mention: the obligation to wear masks was strictly observed in the halls. Only a very few visitors had not put on their mouth-nose masks, as required. Most of the dealers did not make use of the exemption from the obligation to wear a mask during sales talks, either.

The next Intermodellbau, hopefully again in the usual scope and with Z gauge participation, should not be long in coming. The usual time slot in April is planned again: Thursday, 7 April to Sunday, 10 April 2022. Let's wait and see how the pandemic will develop by then.

Authors:
Stephan Fuchs (Faszination Modellbau)
Torsten Schubert (Intermodellbau)

- **Exhibitor selection with Z-gauge relevance:**
- <https://www.faller.de>
- <https://www.geramond.de>
- <http://www.luetke-modellbahn.de>
- <https://www.maerklin.de>
- <https://www.otto-scrap-design.de>
- <http://www.peter-post-wekzeuge.de>
- <https://tams-online.de>
- <https://viessmann-modell.com>
- <https://www.z-freunde-international.de>
- <https://z-stammtisch-bayern.de>

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.

Z-gauge in the shop window for 40 years:

Already, in October the children ask: "When is the train coming?" Such a little train goes well with our handmade jewellery.



At the push of a button, the Z-gauge train in the shop window of Goldsmith Otterpohl makes a few rounds at Christmas time, and has been doing so for forty years. Photo: Wolfgang Otterpohl.

At the push of a button, it goes a few rounds and everyone looks: the women at the special jewellery, the husband and child at the train. At least the woman has the feeling that "he" is looking in the same direction with interest – at whatever...

Wolfgang Otterpohl, Halle (Westfalen)

Editor's reply: We remember well the days before Christmas when children everywhere would press their noses against shop windows behind which a railway layout could be seen. We would like to take advantage of our reader's letter to remind us of this and perhaps make this an annual custom again.

Welcome Theme "Train Formation":

Once again, we would like to thank you for your valuable work for our hobby. In the November issue you made train formation suggestions. The class 94 was used on the steep Boppard - Buchholz line from 1927 to about 1956, before it was replaced by the VT 98.



Based on a photo template, our reader put together this train as E 3725. Photo: Hans Helbach

In the book "Erinnerungen an den Schienenbus" (Memories of the Rail Bus) by Joachim Seyfert, I found a train consisting of a three-part rail bus set and an attached Silberling. The express train 3725 was photographed near Schenkzell in July 1985 (...). I have reproduced this example briefly and send you another photo.

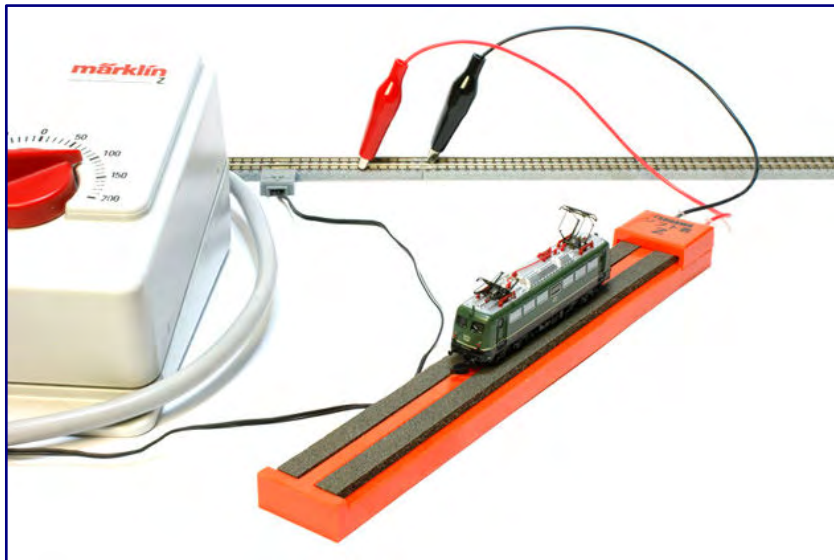
Hans Helbach, Bonn

Editorial response: This letter to the editor is also representative of other positive feedback on the train formation proposals that have reached our editorial team in various ways and through various channels. We would like to thank all those who have given us the opportunity to identify particularly popular reader topics.

Long-term experience with the wheelset cleaner:

I hope you're all well. Thanks for an always fascinating e-magazine. I work in N scale narrow gauge, using a lot of Märklin loco and rolling stock chassis. For a while now I've been using the Tsugawa wheel cleaners and they work very well.

There is a problem that I've just discovered with the powered version that I've been using for some time. It's now not delivering enough current to run a Märklin chassis and it looks like a problem with the foam. Close to the screwed-on wire connections, a short Märklin loco like the 0-6-0 does run. At the opposite end of the cleaner, it will not. I have a chassis which has a low current draw coreless motor and that will run OK at the end furthest from the connections. This indicates that it's a problem with insufficient current (amps).



Our reader Mark Fiedler would like to share his long-term experiences with the wheelset cleaner with us.

Putting a meter across the strips to measure the voltage, it shows around 9 volts using a Märklin Electronic08 controller, and that there is electrical continuity right along the length of the foam. A brand-new powered Tsugawa wheel cleaner fresh out of the packet works as expected, without any problems.

I also have the unpowered wheel cleaner which works as you describe in the magazine, but I've also found the powered wheel cleaner works in the same way.

As a cleaning solvent, I use WD-40 Contact Cleaner, and not the well-known WD lubricant/water dispersant.

There's some interesting discussion of contact cleaners in this article:

<https://s3-us-west-2.amazonaws.com/mrhpublish.com/2019-05-may/online/index.html?page=9>

I hope this is useful information for you. I just love the short train on page 10 of the November issue!

Mark Fiedler (UK), per E-Mail

German translation:

Ich hoffe, es geht Ihnen allen gut. Vielen Dank für ein immer wieder faszinierendes E-Magazin. Ich arbeite in der Schmalspur der Spur N und verwende viele Märklin-Lokomotiven und Rollmaterial-Chassis. Seit einiger Zeit verwende ich die Tsugawa-Radreiniger und sie funktionieren sehr gut.

Allerdings habe ich gerade ein Problem mit der angetriebenen Version entdeckt, die ich seit einiger Zeit verwende. Sie liefert nicht mehr genug Strom, um ein Märklin-Fahrgestell zu betreiben, und es sieht nach einem Problem mit dem Schaumstoff aus. In der Nähe der aufgeschraubten Drahtverbindungen läuft eine kurze Märklin-Lok wie die 0-6-0. Am anderen Ende des Reinigers läuft sie nicht. Ich habe ein Fahrgestell mit einem eisenlosen Motor mit geringer Stromaufnahme, der an dem von den Anschlüssen am weitesten entfernten Ende gut läuft. Das deutet darauf hin, dass es sich um ein Problem mit zu wenig Strom (Ampere) handelt.

Wenn man ein Messgerät über die Leisten legt, um die Spannung zu messen, zeigt es etwa 9 Volt an, wenn man einen Märklin-Electronic08-Transformator verwendet und dass es auf der gesamten Länge des Schaumstoffs elektrischen Durchgang gibt. Ein brandneuer Tsugawa-Radreiniger, frisch aus der Packung, funktioniert wie erwartet ohne Probleme.

Ich habe auch den nicht angetriebenen Radreiniger, der so funktioniert, wie Sie es in der Zeitschrift beschreiben, aber ich habe auch festgestellt, dass der angetriebene Radreiniger auf die gleiche Weise funktioniert.

Als Reinigungsmittel verwende ich den Kontaktreiniger WD-40 - nicht das bekannte WD-Schmiermittel/Wasserdispersiermittel. Dieser Artikel enthält eine interessante Diskussion über Kontaktreiniger:

<https://s3-us-west-2.amazonaws.com/mrhpublish.com/2019-05-may/online/index.html?page=9>

Ich hoffe, dass dies nützliche Informationen für Sie sind. Ich liebe den kurzen Zug auf Seite 10 der November-Ausgabe!

Editor's reply: We have written to the German sales partner and asked whether the phenomenon is known and whether further information can be provided. For our part, however, we would like to remind you that both the cleaning felt and the cleaning pad of the electric cleaner are wearing parts, and are therefore also offered individually as replacements.

Impressive narrow-gauge models in scale 1:220:

Firstly, many thanks and compliments for **Trainini**. It's great what you're doing, it always gives me pleasure.

For the last few years, I have been busy making narrow gauge models in Ze, gauge 3 mm. In the meantime, I have more than 60 passenger and goods wagons and several railcars and locomotives. All my own work.

Would this be something for **Trainini**? I am sending you some photos so that you have an impression. To prevent them from getting stuck in the email, I have reduced their size and compressed them a bit. The resolution of the originals is much higher, and they are in TIFF format.





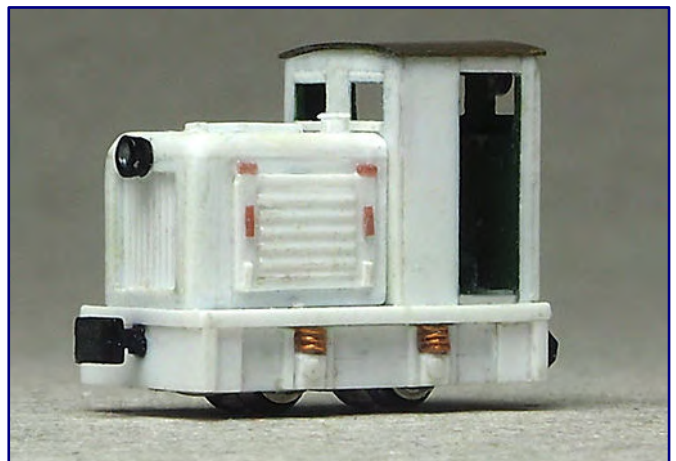
above and on page73:

The selection of narrow gauge Ze models on 3 mm track from our reader's own construction shows mainly powered (locomotives) or photos at least rolling (wagons and diesel locomotive in the last photo) vehicles, partly in comparison to similar standard gauge models. Only the covered wagons in the third photo and the steam locomotive in the fourth photo are purely standing models. The diesel locomotive without drive is moved by a ghost car. All photos: Reinder Rutgers

I have many more photos of my Ze models. I could also write something about how the models were constructed, etc.

Motorisation of the models is by means of T-gauge chassis (done). All four-axle wagons and some two-axle wagons are mobile. There are several standing models for loading roads, sidings, etc. The models have been aged because they are intended for a layout, the 'modern' railcars and conversion wagons least of all because that is prototypical for the early sixties.

I photographed against a white background. This makes the models look like free-standing. I photographed the models under construction against a grey background because the polystyrene is white.



These two photos give an impression of how wagons and locomotives are made mainly from Polystyrol. If readers are interested, we will be happy to report in more detail about our reader's projects. Photo: Reinder Rutgers

You do your work on a voluntary basis. It would be an honour for me, after many years of reading, to be able to contribute something and not just 'consume'.

Reinder Rutgers, Waalre (Netherlands)

Editor's reply: We thank you for the praise and the many great photos. We would also like to publish a more detailed report on this, which would portray further models and hopefully also explain how they came into being.

Bridge to Rio de Janeiro opened:

The bridge over the Fleet in Hamburg's Speicherstadt warehouse district has been opened, adding (initially) 46 m² of layout space to the Miniatur Wunderland. On 1 December 2021, Hamburg's First Mayor Dr. Peter Tschentscher and Frederik Braun sent the first train over the bridge towards the South America section in the presence of Brazil's Ambassador Roberto Jaguaribe.

The milestone of a new section in a new storage block with an almost completely different world was celebrated vigorously in the presence of the press and staff, albeit in a manageable circle due to the nature of Corona.

After a French TGV had crossed the bridge at high speed with the track motifs "The World from Above," the guests of honour and press representatives also crossed the glass bridge high above the water.

Before they reached the entrance area, designed as the gate of a sunken Mayan temple, colourfully dressed samba dancers lined their way.



Dr Peter Tschentscher (left) and Frederik Braun give the go-ahead for the first train to travel from the previous storage block over the glass bridge into the new section. Photo: Miniatur-Wunderland

Once they arrived in the new warehouse in Block L, their gaze first fell on Sugar Loaf Mountain, Copacabana and Corcovado with the statue of Christ, and then on the famous Carnival of Rio de Janeiro. One day later, on 2 December 2021, the "new world" was opened to all visitors of the Miniature Wonderland.

We will report in detail on the many special features and sights of the Rio section as the first part of South America and Antarctica in words and photos in January. Exciting and varied reports can also be expected in the print press in the near future.

A new Viennese Club car:

The Vienna Z Club is once again launching a regulars' car pack in 2021. The partner for the production of the project was once again the small series manufacturer FR Freudenreich Feinwerktechnik from Sanitz in Germany.

Two freight wagons of the Villach type were chosen. After the end of the Second World War and the capitulation of Germany, about 1,500 to 2,000 of the approximately 50,000 wagons are said to have remained in the rebuilt Austria. However, many of them were severely damaged.



The two Villach type open goods wagons for the Vienna Z club are part of the ÖBB stock. Photo: FR Freudenreich Feinwerktechnik

Some were therefore scrapped, immediately; others were converted into different wagon types. The number of Villach type freight wagons in use in Austria was probably around 500.

The wooden walls of the superstructures of many of them were later replaced by sheet metal walls in order to achieve a higher load-bearing capacity. Their use will have ended in the late seventies of the 20th century.

The model corresponds technically to the previous Villach variants with a running gear made of finely etched and soldered sheet metal, a polystyrene superstructure, wheel sets insulated on both sides, and couplings compatible with the Märklin system.

We don't know if there are still copies available for sale. If you are interested, please contact us directly at [zspur.stammtisch\[at\]gmail.com](mailto:zspur.stammtisch[at]gmail.com).

American Z Line's (AZL) deliveries:

AZL, too, does not want to miss out on Christmas business and delights its customers with a whole series of new deliveries. The EMD SW1000 for the D&RGW is one of the first to roll off the production line with three service numbers (item numbers 62601-1SW to -3SW).



EMD SW1000 der D&RGW (Art.-Nr. 62601-1). Foto: AZL / Ztrack.

The EMD E7 is currently on offer in A-B units of the Southern Pacific in Daylight livery (64602-1 / -2). As EMD E8 of the same railway administration it wears at the same time the livery "Bloody Nose" (62616-1 / -2). The already delivered passenger coaches in Loewy design of cult status are now followed by matching EMD F7 A and B of the Northern Pacific as a double pack (63004-3), supplemented by another A unit (63004-4).

Two passenger car sets each for the Southern Pacific are available for the "Cascade" and "Lark" trains (73X46-CascadeA / -CascadeB / 73X46-LarkA / -LarkB). The orange painted R-70-20 refrigerator cars with Tropicana inscriptions are available individually (914812-1) and as double (914842-1) and quad packs (904812-1). Similarly configured are the black 8,000-gallon "Phillips 66" tank cars (915005-1 / 915035-1 / 905005-1).

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

Faller's contribution to the Christmas business:

The Christmas business was already drawing to a close, but Faller knew how to get in on the act with a new products: The new polystyrene kit "Post Office" (art. no. 282787), which had only been introduced as an autumn new product, arrived at the dealers in good time.



R-70-20 refrigerated truck with Tropicana inscription (914812-1).
Photo: AZL / Ztrack

219 parts in 4 colours, plus window foil, curtain mask and building instructions invite model railway enthusiasts to tinker over the holidays. By the way, the building is already known to many years of Zetties in other basic colours.



The new post office (item no. 282787) based on the Güglingen station has already been delivered. Photo: Faller

Its basic forms go back to the Güglingen railway station, which has been modified in the meantime; it was already offered once in a configuration of the same form as the town hall. Its true origin can be guessed at the rear by three doors placed next to each other.

Ongoing projects at NoBa-Modelle:

Before we announce the current deliveries, we would like to point out an ongoing project that will bring an exciting spring new product for friends of epochs V and VI. NoBa-Modelle has discovered one of the larger market gaps for itself, and is already on the home stretch to close it.

In order to slowly build up the suspense and keep it going until late January (announcements on our website) or even the February issue, we will not reveal anything at this point and will observe the requested silence.

In the meantime, the ETA 1505 battery railcar (later class 515) was revised. It is now driven by two Rokuhan Shorty bogies and all housings receive pressed-in threaded bushings for easy and safe mounting of the bogies as well as a magnetic coupling.



Stadler's Regio Shuttle RS1 (item no. 5216R; photo above) is now also available as a drivable Z-gauge model from NoBa-Modelle. In addition, there are two new cars: the MAN 8x4 tow truck (6388R; photo below, right) and the Büssing President (6387R; photo below, left). Photos: NoBa-Modelle

Since the end of November, i.e., shortly after the editorial deadline of the last issue, the Stadler Regio Shuttle RS 1 (art. no. 5216R) is another new Epoch VI model in the range. The one-piece railcar, which is used by many private operators, as well as DB Regio, is one of the frequently requested models for modern local transport.

Furthermore, the MAN 8x4 tow truck (6388R) is now in the range, and the Büssing President (6387R) is a historic bus. These new products and all other offers can be found on the Internet at <https://www.noba-modelle.de>.

Rather lull in Märklin deliveries:

The following sentence from a Märklin dealer information accurately describes a dilemma that many manufacturers currently have to deal with: “Unfortunately, due to the increasingly worsening situation on the procurement markets for electronic components, we are forced to postpone some new products planned before Christmas and expected by you to the first quarter of 2022.”

In gauge, too, quite a few models that were still scheduled for the Christmas season are affected, including the insider model 2021 of the double diesel locomotive V 188, but also the train set “Deutsche Weinstraße”. Updated delivery date lists are now available from the Märklin pages.

Our list of what still made it to the dealers from Göppingen is correspondingly short. A very small subset of the crimson class 218 mainline diesel locomotive (item no. 88792), which was announced together with a silver train set including a new “bunny box”, is among them.



The situation is somewhat better with the sliding roof / sliding wall wagon Tbes-t-68 (82153), whose housing has been newly constructed for an existing chassis.

This wagon will be delivered in a double pack for late epoch III and will follow four times for epoch IV.

This delivery will be examined in detail and with a view to the new releases of the year 2021 in the January issue 2022. In this context we will also briefly present the prototypes.



Class 218 diesel locomotive (88792; photo above) and sliding roof/sliding wall car Tbes-t-68 (82153; photo below).

Herpa changes to new products:

For some years now, Herpa has announced new products four months in advance, but experience has shown that the actual delivery dates have usually been well outside this time window; anyway. Now this manufacturer has reacted and changed its approach with reference to delays in the supply chains across the industry.

Since it is increasingly difficult to date delivery dates exactly, new products will now be announced close to the time of delivery. The idea is to announce one month in advance. For this reason, the aircraft models for late spring 2022, which some readers are surely expecting, are now missing from this issue.

However, we will certainly learn something or other about planned new moulds for 2022 at the Spielwarenmesse (International Toy Fair) and be able to pass it on in the magazine.

Magazine recommendation for Zetties:

A very worthwhile, because lovingly written portrait of the layout "Wiesenthal", which we awarded as layout of the year in 2021, is contained in the current Modelleisenbahner 1/2022.

Editor Andreas Bauer-Portner, who has a passion for especially small model railways because of his passion for N gauge anyway, also knew how to put this especially neat showpiece in the right light.

The author's enthusiasm is clearly noticeable, because he has managed to capture the special features and historical conditions that were implemented there very accurately in conversation with builder Wilfried Pflugbeil and transport them to the reader.

Our recommendation to buy the book could not be clearer. The leading trade magazine in the print sector can be found in model railway shops, but also in publishing houses and in well-run station bookshops.



Abbildung: VGB | Geramond

Ladegut Küpper suitable for the season:

Spur Z Ladegut Josephine Küpper from Aachen currently has beautifully glittering stardust to offer as Christmas-setting inlays for various freight cars from Märklin. The open wagons of the type Omm 52 (Märklin 8622) and Eaos 106 (Märklin 8650) are covered, other models were also supplied in the same way earlier.

Incidentally, anyone who wants to get a personal impression of the effect can do so in Dortmund in the shop window of the Lamers Gallery at Kleppingstraße 8: The low-sided wagon behind the steam locomotive of the Christmas Express, through which the world's smallest Christmas tree is framed there, is also effectively loaded in this way!

Level crossing post from Archistories:

The "barrier post 255" (item no. 106211) produced for the 1zu220-Shop and matching the style of their own building series is about to be delivered. The prototype near Grottenberg in Sauerland was on the line between Messinghausen and Beringhausen.

Archistories has developed a highly detailed kit based on this picturesque model, despite its small size, which can be realistically built 10 mm deep into the railway embankment. The front and the steel staircase on the side are at the level of the track, while the coal cellar at the rear can be reached at ground level.



The barrier post 255, produced by Archistories (art. no. 106211) exclusively for the 1zu220-Shop, will soon be ready for delivery. Photo: Dirk Kuhlmann

With the characteristic slate cladding of the upper floor, the barrier post 255 complements prototypically especially the related station 'Westheim', which also belongs to the exclusive series of the 1zu220-shop.

Micro-Trains also continues to deliver:

MTL has added six more examples to the 61-foot flat cars with fixed end walls reported in the November issue: Two each will pull up for Illinois Central Gulf (Item Nos. 527 00 211 / -212), the NOKL (527 00 221 / -222) and the Union Pacific (527 00 231 / -232). The Sweet Liquid series continues with wagon number 10 (530 00 570), which was leased in bright red livery from adjuster GATX to Union Starch.

Micro-Trains products are sold, among others, by Case-Hobbies (<http://case-hobbies.de>).

Märklin Museum Car 2022:

As we went to press, we also received information about the new Märklin museum car 2022 (art. no. 80033), which can only be purchased at the Märklineum. The prototype this time is a type Ootz 43 self-unloading wagon, which was designed for the Göppingen public utility company (SWG) and is labelled in such a way that it would have been used by the German Federal Railway. The model has a load insert of real coal and the advertising lettering "Göppingen Brechkoks".

New products at EtchIT-Modellbau:

We are pleased to finally be able to present a new model from EtchIT-Modellbau, because these vehicles are certainly among the best that Z gauge currently has to offer. Under the item number XD080_Z, a Fleischer S2 bus is now available as a complete kit. It can be ordered at <http://www.etchit.com>.



The Fleischer S2 bus (art. no. XD080_Z) is published by EtchIT as a complete kit and consequently also includes parts for the glazing, trim elements for the sides of the body and wheel trims with chrome effect. Photo: EtchIT-Modellbau

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