Laster & Bagger

Laster & Bagger

Fr. 14.– / € 12.– (D), € 13.– (andere Länder)

English text at lasterundbagger.net

Ausgabe 5-2021

Modelle von Lastwagen, Baumaschinen und Kran

Mit Wettbewerb

Diecast Masters 1:50

Cat 352 UHD

Eigenbau 1:50

Iveco Eurostar

English text

WSI 1:50
Neue Generation bei DAF

Sammlerporträt
Andreas Zisslsberger

NZG 1:50
Link-Belt 175AT

05
4 191830 312008

Editorial

I would like to give a heartfelt thank you to all subscribers who have voluntarily rounded up their subscription fees. You are making an important contribution towards "unbiased reporting".

Amazed

While arranging the countless parts for the photo above, I had some deep philosophical thoughts on model-building. I admire model builders who build these kinds of kits because, so far, I have only dared to make modifications to assembled models. Additional complicating factors are that this kit is made up from many different materials: resin castings, nickel-silver etched parts, and metal as well as transparent foil for the windows. All must be assembled to end up with a complete lorry. Then follows painting and finally, the lettering. Nevertheless, just a week following the release of the kit, the first pictures of top-quality completed models assembled by collectors appeared in social media.

If one considers how much effort is required to complete the models a completely different fact comes to mind. I refer to the price which fully finished models command. To produce these, the hands assembling them not only have to work very precisely but must also work at a very cheap wage in their mainly Asian model-assembly factories!

The discussion about the price development among collectors is a hot topic and I am trying to stay out of it on purpose. Every collector needs to decide for themselves how much they want to invest in their hobby. Even so, once in a while one is amazed when admiring the handiwork of the many anonymous factory workers, male and female, and must give them the respect they are due.

However, I am a little bit concerned about the recent developments regarding the cost of mailing. The reason given for increasing the postage rates by a quarter of the previous rate is that because of the pandemic, transport costs have increased substantially. This especially impacts publishers who offer magazines by subscription. Having observed the situation very closely, I now have to conclude that an increase in the cost of the annual subscriptions for 2022 is probable.

Even so, all of this cannot diminish the enjoyment of our hobby! I hope you all enjoy reading this issue.

Daniel

Laster & Bagger online:

www.lasterundbagger.net
www.facebook.com/lasterundbagger
www.twitter.com/lasterundbagger
www.youtube.com/lasterbagger

Andreas Zisslsberger collects choice items

`Modellsammler.1`

by Daniel Wietlisbach

Using the handle 'modellsammler.1' Andreas Zisslsberger has over 14,000 followers on Instagram. While underlining the popularity of our hobby, Andreas's Instagram is mainly about his collection ...

Andreas Zisslsberger grew up in the Bavarian county town of Deggendorf and still lives there. His mother was a homemaker and his father a construction machine operator for the Max Streicher Company for 43 years. While his older brother was not interested in following his father's footsteps, Andreas was magically attracted. If his father's excavator moved from one construction site to another then Andreas was there too, whenever possible. At five years of age, he sat at the joysticks of an O&K excavator for the first time, however, because the construction company was active all over Germany, and later on even across close borders, that pleasure was, sadly, not a regular occurrence. Andreas missed his father on weekdays because most of the time his father left home on Sundays only arriving back home late on Friday evenings.

Of course, it was his father who brought home the first models for Andreas. As was customary at the time, they were promotional gifts for customers and Andreas was happy with every new wheel loader or excavator from O&K. Today, the collector regrets having played with the models until they fell apart, but on the other hand, the joy of playing with them was the main thing.

One part of the garden was available as a playground where he moved real soil with the models. A sandbox also was available. He had only a few 1:50 vehicles. These he kept separate to be played with exclusively by his brother and himself. It was especially interesting when friends came to play and almost the whole assortment of models was put to use.

Later on, the football club where Andreas played superseded the playground and other activities with friends became more important. Then the choice of a profession came to the fore and it was clear to Andreas that he wanted to apprentice at the Streicher Company where his father worked. Even though his mother would have preferred him to pursue a formal education path, she let him have his choice. Because Andreas did not want to be away from home as much as his father was, he choose an apprenticeship as a sheet metal fabricator as his professional pathway. His apprenticeship began in 1989 in the company shop where machines were maintained and special, customized parts for mixing plants and conveyor belts were made. There was plenty of work for a sheet metal worker making machinery, compressed air tanks and pipe construction.

He liked the training and found learning how to work with metal very enjoyable. It was possible for Andreas to remain in the company after completing this apprenticeship and he was glad to stay because he was offered further training to become a welder. When it became clear that the training was not for welding metal but for welding rigid plastic tube, he first thought that it must be a mistake. The company calmed him down and so the young man learned how to weld the plastic pipes used in civic engineering and, before he knew it, he was back at digging up soil on construction sites. The change of jobs inside the company pleased him; he increased his professional knowledge and later trained to be a foreman for civic engineering sites and went on to be a site manager. Since he has a site manager diploma from the state, he is now supervising construction sites that have gas lines for local distribution.

The Streicher company employs around 3,600 workers and covers

all aspects of the construction trade. In addition to its head office in Deggendorf, there are eleven other offices in Germany and abroad, from Norway to Tunisia and from Spain to Austria. Andreas has been on site from Monday through Thursday since 1996; his area of operation stretches from Chiemsee to Berchtesgaden thus he can be home in two to three hours, should the need arise.

He met his wife Elke in 1993 and they married in 2001, before their son Christian was born. Daughter Eva arrived in 2005. The family has lived in a detached family home since 2007.

The collection

Andreas received his first model in 1993 during a company party. It was a Cat D9N from NZG but it languished for the next six years. In 1999 the collector started being interested in where the models came from and how many others were available. With his newly-awakened passion, he bought all models that he could find and the extensive collection soon had all brands and makers represented, from Norscot to NZG and from Conrad to Joal.

But the more he compared the models, the young collector noticed the differences in quality and so very soon his expectations increased. Because of this, after only two years he sold a large part of the collection. During the last twenty years he has chosen models very carefully. Included in this exclusive list are excavators from Liebherr and many of the very colourful company liveries. The love for Liebherr is certainly influenced by the fact that he lives close to the Passau branch of the company where he likes to go and pick up his models in person and where he almost belongs to the inventory, as he laughingly explains.

Models with special paint schemes that have limited series he either orders directly from the company or from his specialized dealers. Every year, about 20 or so models arrive to be placed in the display cases. At its high point the collection numbered around 300 pieces but currently there are about 260.

He always found that his family supported his hobby. In the beginning, his children even defended and protected his models against too-curious children. His wife gave him a few very nice pieces for his collection. In addition to excavators, cranes and low-deck transporters are well represented. All Liebherr wheel loaders from the L 566 up to the L586 in the factory paint scheme grace the collection. Of course, there are also models that sport decals from his place of employment. Streicher logo decals in 1:50 scale were custom made for the company in large numbers; with them, standard models were customized and given away as customer promotion items.

So, it was easy for Andreas to get the decals., He purchased all other company models with finished custom paint jobs and lettering. For example, all Arbogast models are in the display cases, all, except the Cat 994 which never existed in the original. It is important to the collector that the models are as close as possible to the originals, even if sometimes not exactly the same. For the last 14 years, he has also been excited about the blue models from Kibag.

The whole collection is wonderfully displayed in glass cases the first of which was acquired in 2001 and initially stood in the living room of his rental apartment. By the move into their own home, the number of display cases had grown to three and contained about 120 models.

The Collector

Andreas Zisslsberger (48) apprenticed as a sheet metal fabricator with the internationally-active construction company Streicher. He has worked there for the last 32 years. Over many years and stations, he advanced to site supervisor.

As well as his collecting, he enjoys photography, plays tennis, is a fan of the Deggendorf ice hockey club and also is a volunteer fire fighter. He lives with his wife Elke and their two children Christian (19) and Eva (15) in the Bavarian town of Deggendorf. If you would like to visit him and his collection, please contact him by email to arrange a time: elan-hengersberg@t-online.de

Today they stand in his wife's home office; she is self-employed and offers office services for other companies. Four large showcases, one medium and one small, as well as a shelf for illuminated boxes line one wall. The showcases now number nine. The most favorite excavator models as well as the D9T are individually and lovingly arranged and the mini-lights glowing in every box make them stand out at night.

Weathered models and dioramas

Examples among these specially selected models are those that the collector had weathered by Steffen Drascher from Old Style Manufaktur. A Cat 336 from DM, a rather moderately priced model, was the first to get the weathering treatment and because the results were very convincing, others followed. The models are sent by parcel mail followed up by a telephone consultation about Andreas's ideas for the weathering to be applied and then the finished models are returned. During the consultation process, it is only the degree of weathering that is agreed upon. The rest he leaves in the capable and artistic hands of Steffen.

Weathered models in display cases do look different but they only start to look 'real' when set in a scene that is true to the original. After Andreas received the first weathered models, the desire for a diorama soon followed which led to the construction of one following tips and ideas found on the Internet. Later on, Andreas discovered the work of Mike (Michael) Neshyba and after a while he met the diorama builder in person. Mike custom builds dioramas for clients and now seven of his showpieces have joined the home-built one. Each of them is about 40 x 60 cm in size and depicts a variety of scenes. A demolition site, a storage yard, a construction pit, a small demolition site and, of course, a piece of road for the transports, are some of the themes covered.

To photograph his models optimally, the collector gathers them up and drives to a small hill about 400 m distant from his home. The diorama with the selected model is simply put on top of the car roof. Looking slightly upwards from below gives the right perspective and the inclusion of the landscape in the background can be managed very easily.

'modellsammler.1'

In 2007, the collector began to show off his models on Instagram under this name. When he informed his children that his audience goal was 5,000 followers they laughed heartily. Currently, there are about 15,000 followers thus his account is probably the most successful in the area covering our hobby and without ever having done any advertising at all for it. To have got this far, Andreas followed a very simple concept to which he still adheres: every day a picture! At the beginning, these were only of models, but today pictures of originals find their way on to his page. There are over 15,000 posts, all carefully sorted with few, but succinct hash tags on them, and the site grows day by day.

Iveco Eurostar 26 E 520 & APK 30“ semi-trailer

Heavy Italian

by René Tanner

It is possible to disagree about taste, be it a super expensive racing car from Modena or a heavy lorry from Turin. Both makers have their own circle of fans. Because of personal experiences, my interests are for the heavy Italians ...

At the start of my professional career as a lorry driver I often jumped shifts to fill in for an entrepreneur friend on the night leap line Basel – Rheinböllen with general cargo semi-trailers on behalf of Scansped. Arriving at the lorry stop in Rheinböllen on the A61 just before Koblenz after four hours of driving, I met up with a Dutch driver coming from the opposite direction. Semi-trailer and documents were exchanged. After a short “Hoi” and “Tschüss” greeting we both went our ways. With the time clocked behind the wheel on the road that was easily doable; at that time, kilometer-long traffic jams were unimaginable. The transit checks at the borders were generally done within ten minutes and the semi-trailer and tractor lorry combination was ready again for use at the beginning of the new day.

For a long time, the entrepreneur himself had been busy in the Saudi traffic and put a high value on the fat V8 Turbostars from Italy. A 480er was mine and the second one was a 420er with Fuller gears. The latter too was in regular use for the long-distance freight traffic between Switzerland and Germany for the then still-existing Scansped. This was my first contact with Ivecos and I must I confess that the 480 hp strong V8 moved like a real steam hammer. While Scania with its 143s and Volvo with the F16s were evenly matched, their competitor, the Iveco, as far as its power output didn’t flinch. The really deep-down growl of the engine and the ‘stick-to-it-ness’ on inclines made it a real summit conqueror. The 18-liter engine growled strongly as it climbed, ready to fight on. However, in the manufacturing there were some extreme weaknesses. Rust came along with the sales brochure and the plastic interior was extremely impersonal. The bed, seats and coverings of the cabin interior were susceptible to spotting and on a great many Turbostars, the typical brown felt ceiling was marred by water spots. A shame, actually, because from a technical standpoint, they weren’t bad lorries. On the successor model, the EuroStar, some of the problem areas were patched up and improved but it was never really accepted until the Stralis regained the lost ground.

The EuroStar was offered from 1993 onwards along with the 1991 Eurocargo, the 1992 Eurotech and the new EuroTracker. And so, the whole product line was modernized over only a few years. The EuroStar was offered with a long-distance travel cabin as well as the standard cabin with bed and low roof. As a Premium Version, the EuroStar offered a high roof cabin. For a transmission, a ZF gear box with 16 gears and two reversing gears or the Twin Splitter from Eaton with 12 plus 2 gears were used. Starting in 1995, with the appearance of the 480 hp engine, Iveco offered an automatic transmission called ‘EuroTronic’ which was developed in co-operation with Iveco and ZF. In particular, the automatic transmission on the EuroStar which was available for any engine option, was very popular among drivers and was a pioneering effort in the lorry industry. But, because of the partly undependable performance of the previous Turbostar model, the EuroStar was never as successful as the succeeding Stralis model.

The model from Conrad

Conrad was the only maker to produce both the Iveco EuroTech and EuroStar as 1:50 models. Cursor had the even older TurboTech as a combination lorry and trailer in its program. All these models can now only be found on the usual on-line auction sites and there they are gradually becoming very much harder to find. Of course, I have all three versions in my basic collection but only the EuroStar introduced here has made its way into the display case. Actually, I can find something positive about every one of the models even though the purchased model, when standing in front of me looks a bit on the rough side. The modification of the Conrad EuroStar intrigued me even more, because the model is kept quite plain, therefore, I put a lot of fine detailing into the conversion to return some of the Iveco's rough charm to it.

The stretched chassis accommodates the 6 x 2 configuration and the model is equipped with brake cylinders, stabilizers, steering linkage and shock absorbers, a Telma Cyclone brake and the steerable front axle which means that it is completely re-built. There are new fenders made from aluminum sheet stock, WSI rear axle tires, and, on both front axles, Lion-Toys and Tekno tires make the Iveco driveable. The high exhaust is supposed to underline the low rumble of the V8 acoustics. A large diesel tank from HG and on the other side the Danish tool box fill out the chassis completely. Air lines and work spotlight round out the work on the chassis.

The cabin required substantially more work because the one that comes with the model can really only be used as a starting point as it is very basic. The area around the mounting steps and the rear fenders were improved and given marker and indicator lights on the sides. The exterior received a sun visor as well as a light board, rotating beams with a remote spotlight, air horns and a satellite dish. In addition, on the side panels, I added the tilting and the lock-down mechanism as mock-ups.

I gave free run to the detailing potential inside the cabin. Several communication tools and their screens are made from small plastic sheet stock pieces filed to size and glued in. This way, the driver has access to the complete Datafleet and Dispotrans-Software and has a laptop and phone as well. New stowing boxes above the windscreen as well as new seats and a higher-up bed with additional storage drawers beneath round off the modifications and give the driver all kinds of comforts.

The trailer was built when Lion-Toys was still operating. This producer is now under the Tekno umbrella. Unfortunately, Tekno no longer offers this specialized tipping semi-trailer. A really fine detail is the nicely done tipping mechanism and the dry bulk container which is removable. I replaced the mudguards with brand new ones made from 0.3 mm aluminum sheet stock. I made the spare wheel carrier by bending some 0.8 mm florist wire into the desired shape and then I glued on the white metal castings of the marker lights from HG. Rims and tires came from Tekno.

The colours of the Iveco compliment the Scania Streamline (introduced in issue 3-2018) and both reflect the image of my imaginary hauling company, following the Intertextrans fantasy cargo company of Hans Witte. The models were painted with spray cans beginning with the lightest colour tone as a first layer, followed by the darker ones in several layers. I cut out the light blue decorative lines from self-adhesive foil and then fixed them in place by over spraying them with Microsol clear finish. The yellowing IS Basel lettering in the light box is due to a low-quality decal paper and could not even be made better with a layer of clear lacquer which is why it will be replaced with a new one in the future.

Demolition excavator from DM in 1:50

Caterpillar 352 UHD

by Daniel Wietlisbach

With the 352 UHD, the people in charge at Diecast Masters present an outstanding model. Over the last 18 months, they regularly shared information and pictures of the progress in the development of the new model with the collector community ...

Demolition excavators with UHD equipment (Ultra High Demolition) are fascinating and very complex machines. Because of the trend to build taller, higher-density buildings, these machines have become increasingly widespread over the last decade. To get a better quality of living or office space, it is now more common to de-construct even relatively modern, tall buildings in central locations and to replace them with newer ones.

Caterpillar has also recognized this trend. Earlier on, smaller companies made adaptions to machines for this purpose but now, Caterpillar has developed a series of specific demolition excavators: the 340 SB, the 340F UHD and, as the top-of-the-line 352 UHD. With a working weight of around 65t and tool attachments of up to even 3.7 t, the 352 UHD is able to work at a maximum height of 27.67 m. The power comes from a Cat C13 Acert which produces 316 kW (424 hp).

The model

Like the original, the creation of the UHD excavator model was also a complex undertaking and the list of the less successful models is longer than the successful ones. Conrad has held the 'Blue Ribbon' of success in translating the original to model form since 2015 for its Liebherr R 960 and so it is very exciting to introduce a new challenger here.

The tin box in which the model arrives contains several layers of foam inserts which keep the various components safe. In addition to the basic machine, there are the UHD boom, the so-called aftermarket boom with backhoe bucket, the MP332 demolition jaws, the MP324 universal jaws as well as the storage and transportation rack for storing the boom which is not in use. Furthermore, there are all the necessary screws and bolts, a set of tweezers and Bob, the ever-alert excavator operator.

Excavator, equipment and tools are made to scale and so the model reaches the maximum height of the original without any problems. The basic machine is packaged with the crawler tracks retracted. These extend to the width of the original with no visible buckling detected! The telescopes have been treated with a grease so do check your hands for traces of grease after handling. The very impressive long drive units, 5.77 m on the original, are nicely engraved and show all the details. The steps have been separately applied. The guide wheel is sprung in such a way that the metal crawler tracks turn very easily. The 600 mm-wide grouser track shoes were chosen for the model. Running and support wheels are non-functional.

The majority of parts on the upper chassis are made from metal which gives the model a solid grounding and holds it steady. It has a high degree of functionality; no fewer than five doors and hatches can be opened. They allow for viewing the engine room as well as replicas of radiators and other engine parts. Furthermore, the cabin tilts and the door opens. The upper chassis housing is exactly engraved although the air intake grilles on the sides are only printed on. The very finely-engraved running boards as well as almost all of the handholds

and safety railings are made from a fine, thin metal. The finely-detailed engine is readily seen from above. It is painted in several colours and sports a printed-on Cat logo. The cabin is exactly replicated and has fine plastic roof grilles to protect the operator from falling stones. It is easier to view the interior with the removable roof off. Here too we see the Cat logo printed on the seat and at the side of the dashboard. Rear-view mirrors and even the window wipers are separately applied parts even though the latter are hard to see behind the protection grilles.

The equipment

The basic boom is operated with two hydraulic cylinders which have supply lines. Eight further hydraulic circuit lines run from the upper carriage to the boom; they are made from a yellow rubber material and, as on the original, are partially painted black.

This kind of supply line modeling is continued on the two booms with jib. The two demolition tools can even be connected and the 'short' boom has two spare hydraulic circuits. The three components of the long boom combination are closed in at the sides with very flush fitting filler parts while on the short equipment this is done on the underside. All metal parts are exactly engraved and show many details. As well as the supply lines with the finely detailed hydraulic cylinders mentioned above, there are also some work spotlights. True to the original, the short boom can be attached in the straight or angled position. Unfortunately, and this might be the only minus point on our sample, the hydraulic lines are a few millimeters too short and do not fit in the connection part when the boom is attached in the angled position.

At a glance

+ Accessories
+ Metal content
+ True to scale
− Hydraulic lines are too short on the short boom

The boom(s) not in use can be stored on the rack which has all the necessary brackets to keep them safe. The rack is very finely made from metal and plastic parts. In order to store the UHD boom, the attached tool must be removed first.

The concrete demolition jaws as well as the universal jaws are attached using four Phillips screws. Both of the functional tool attachments are made from finely-engraved metal castings. The MP332 concrete demolition jaws are already known from the Cat 323 so it is very commendable that the maker has given us an alternative with the MP324 universal jaws set. The backhoe bucket is attached to the short boom with a coupler and is made from a very nicely shaped metal part.

As we expect, the paint is faultlessly applied and the lettering detailed and legible. The Cat 352 UHD from Diecast Masters is a visibly successful model with a high degree of functionality and play value.

Elevator Scraper from CCM in 1:48

Caterpillar 633D

by Daniel Wietlisbach

CCM provides us an interesting look at its model of the exotic 633D ...

Behind the development of the Elevator Scraper was the idea that a scraper should to be able to load soil independently in 'easy' ground situations without the help of a dozer or while working in concert with other scrapers. This capability allows the machines to be described as 'self-loaders'. In order for the scraper's cutting edge not to get stuck during the scraping process, an elevator unit called a paddlewheel loader, transported the material continuously up and into the bin. The emptying process was not with an expeller but rather by bottom discharge; opening the bottom hatch.

Caterpillar offered a variety of models: single or double engines. The 633D had a working weight of 47.57 t and a V8 Turbodiesel which produced 450 hp. The scraper was offered from 1975 until 1985. Currently, with the 623K there is only one Elevator Scraper left in the Cat program.

Considering its exotic status, CCM surprised everyone with the announcement of a 633D model. Because none of the existing components could be used, the model was completely newly designed. Comparing the complexity of the original with the model, one can say that it really looks good when transposed into model form. Nobody really expected a functioning elevator unit as the model would have become too expensive. Nevertheless, the rigid replica is very nicely engraved and includes all the supply lines. The bottom discharge hatch is fully functional. Other than that, the model has been made to the same quality standard as the 631E/ 637E models which we introduced in issue 1-2014.

Tinplate

Lattice tower crane

by Robert Bretscher

This lattice tower crane made by VEB Sprio Werke, Holzhausen (former GDR) was enjoyed by children in East Germany during the 50s and 60s ...

This 65 cm-tall harbour crane from the 50s filled children with astonishment, not only because of its size but also because it could do 'real' work. It was not unusual to see two children engaged in working the crane together. Some little tykes needed to stand up it order to crank the lifting winch whilst their playmate operated the lower crank which turned the crane. With this working arrangement, they could move real mountains of sand or soil.

The extraordinarily heavy model made from thick metal parts is screwed together and it is possible to disassemble it completely. Even though mind-boggling assembly instructions are included in the crane's box, it is not very clear how the crane is supposed to function. Children without a parent or friend with some technological know-how would definitely been flummoxed. In particular, the somewhat tricky way the three individual cables for lifting and operating the clam shell bucket are sheared in seems to be a special challenge. The wooden winch spool with three separations for the cables is something special. To hold the lifting cables in position there is an additional cog wheel mounted. When cranked by hand, it rolls over a flat spring thus making an engine-like sound. A lever located in the cabin opens and closes the clamshell by controlling the clamshell grabber's cable.

This very rare crane model was produced by the VEB Sprio Werken in the German town of Holzhausen in the former GDR. Since the factory made mainly paint-spraying equipment, the production of the crane model was discontinued and no further toys were ever made.

New DAFs from WSI in 1:50

XF, XG und XG+

by Daniel Wietlisbach

On the 9th of June in Eindhoven, DAF introduced its newly-developed line of long-distance freight-hauling lorries. And on the same day, the WSI models were released and made available world-wide through the DAF Shops …

Because of the pandemic, DAF made the presentation of the new line virtually; the interested trade public was able to join the presentation live. Because the most relevant features of the new generation were described by Erich Urweider in our last issue (page 56), we shall only summarize them here. Details on the new driver's cabin remind us of competitor's models, but nevertheless, the lorries are easily recognizable as DAFs. Particularly noticeable are the long cabins which remind us of the 'Longliner' cabins. The length compensates for the lower height which improves aerodynamics thus reducing fuel consumption. With the slogan: 'Start the future,' the lorry builder emphasizes that that they want to create vehicles capable of handling the challenges of the future.

Models from WSI

Concurrent with the development of the new lorries, WSI worked on the models and so they were both ready and available at the same time on presentation day and they will be sold out soon. The models shown here were very kindly made available to us by Thomas Stalder who we know from the collector's portrait in the last issue. He purchased them to expand his BigTrans fleet and by now they should all be splendid in their new red paint coat and hard at work in his dream world.

The models are all based on the same 4x2 chassis. They are modeled with air suspension and steerable front wheels, but, as is usual with this producer, the radius is rather limited. The photo-etched hub caps with the DAF logo on the front wheels are especially nice see. The exhaust cleaning plant is identical on all models but the size of the compressed air tanks differs in shape on the two 'large ones.' In addition, they have some wheel chokes at the rear. WSI has replicated the side panel exactly and even technicalities in that the XF has only one small orange light at the side; on the left side the two steps are correctly replicated.

The producer made the greatest effort to replicate the shape of the cabins correctly, and rightfully so. They are constructed in a modular fashion which allows the creation of different versions: the XF has the shortest cabin; the XG and XG+ have the long cabin; the Premium-Model XG+ is further differentiated by having the highest roof. The new design of the line has been successfully translated into model form and the distinctive new DAF front is very convincing. The radiator grille is very finely engraved and is made up from a separately shaped and applied part. There are separate details like treads, door handles, window wipers and three Mirrorcams or rear-view mirrors to be discovered. On the XG models with Mirrorcams the lower, predrilled hole normally used for the rear-view mirror bracket had to be closed in with plug which distracts from the line design. The headlights have mirror inserts and glass lenses while the roof lights have only lenses.

The multi-coloured interior decoration with many details is first class. The driving wheel even has the DAF logo on it. The ladder which the driver needs to reach the upper bunk is especially notable.

Roof spoiler and side panels fit flush so that the driver's cabin looks as if it was made from a sin-

gle casting and the rear wall is exactly engraved. Below the tilting cabin is the mock-up of the Paccar six-cylinder engine which is identical on all models. On the XF it produces between 367 and 530 hp and on the two XGs, between 449 to 530 hp. Engine and flange-mounted gear box are painted in a silver colour and the engine is decorated with the Paccar logo.

All the models come with the same semi-trailer which could be called, maybe somewhat disrespectfully, a box with wheels. It is not new and of course is mainly used to promote the company's advertising message for the new lorries. The axles are sprung and the parking support legs are functional. Most of the details are at the rear: lights, back-up lights, rubber bumper and rear doors.

The paint applied takes one right back to the 70s when we enjoyed seeing metallic paints for the first time. Although the paint has been successfully applied, it was a challenge in model form because the shiny structure of the lacquer paint used on the originals was too coarse for the models. WSI did an excellent job on the paint for the new DAF models. The paint separation edges and the chromed strip on the side window are very clean and crisp.

A few days after the presentation by DAF and WSI, Tekno announced that they too are working on new models for these lorries and it will be interesting to see how the competitor interprets the prototypes.

At a glance

+ Shape design
+ Detailing
+ Paint finish

Models are also available in 1:87

Only the XG and XG+ were made in the smaller scale. The equipment and detailing of the two models are almost identical with the larger one but the XF has Microcams like the XG+ instead of rear-view mirrors. The semi-trailer is also from the standard program.

Italian lorry in 1:50 from Tekno

Iveco S-Way

by Daniel Wietlisbach

In May, Tekno released the first model of the Iveco S-Way in the metallic-green paint scheme of the Rüssel Truck-Show ...

Two years ago, Iveco introduced the S-Way as a vehicle for long-distance and delivery traffic. The Cursor engines built in house are available in several power options from 330 to 570 hp. Also available are the Cursor NP-engines with 340 to 460 hp. NP stands for 'Natural Power' and is a designation for engines that use LNG (methane gas) as a fuel. In Germany, vehicles with this kind of engine are exempt from the road tax until the end of 2023.

Three different basic cabins are available to choose from; among them the AS (Active Space) high cabin has a standing height of 2.15 m. Comfort is also the main focus of this cabin as it is designed to be used generally by long distance drivers.

The model from Tekno

Shortly after Tekno, WSI also announced their planned versions of the S-Way. Here, Tekno is more cautious and refers to their announcements on their website where up to now the 4x2 tractor lorry with AS high cabin and conventional engine is shown exclusively.

When engineers from Tekno are given the CAD data of modern trucks, usually very nice models ensue. This holds true for the S-Way; its proportions are well replicated and leave a favorable impression. The wheel gauge of 3800 mm is correct for the Maximal variant. The model is made up from completely newly-mastered molds and has a favourable large metal content. The matt black chassis is fully loaded with exhaust cleaning plant and the AdBlue container completely fills the room between the axles. The rear axle with air suspension is very nicely detailed and, of course, the front axle is steerable. The turning radius is pleasantly large but the wheels touch the wheel well at the extreme point.

The cabin tilts, is precision guided and clicks softly back into place. That is the way it should always be. The engine with its turbo loader is exactly replicated and even lettered with Iveco. Of course, it is the premium Cursor 13 engine variant.

The lines of the cabin are a first class copy of the original. All edges, recesses and gaps around the doors are correct. The door handles are separately-applied parts. The prominent radiator grille is very finely engraved and even the size and number of holes in the perforated metal sheets are correct. Prototypically, the headlights are made up from a chromed shell and glass. Technology wise, the four additional front lights with the 'jewel glass' inserts between them look a bit faded. The window glass with imitation rubber seals fits very snuggly with no distracting mounting stubs visible. The rail with free-standing window wipers is very nice to see

The Rüssel Truck-Show

Since 2014, Mike Lawson from Tekno and his team run the Rüssel Truck-Show as an event to raise funds for 'krebskranken Kinder Kassel e.V. (children with cancer, registered charity in Kassel). Since then over Euro 100'000 has been raised for this charity. At each event, Tekno releases a suitable exclusive model. Due to the pandemic conditions, the annual meet will probably be held again in 2022. (www.ruessel-truckshow.de).

At a glance

+ Shape design
+ Metal content
+ Metal content

as are the sun-visor, the advertising sign with LED strip lighting and the two Michelin tire men. Four horns and two antennae complete the roof equipment. The roof window was separately inserted but it is not transparent in order to simulate a tinted version,. The interior modeled in a monotone black goes up to the top height of the windows. This tells us that we can expect to see versions with flatter cabins.

The roof spoiler, along with the side fenders is made from a single part that fits seamlessly on to the cabin shape and shows all the hook-ups. The cabin looks great even when seen from the back where the air intake and the supply lines can be made out.

The paint has been very cleanly applied as has the multi-coloured lettering. As with all special-release models for the Rüssel Truck-Show, the S-Way shown is a fantasy paint scheme which is done very well.

New 'old' Swedes from Tekno in 1:50

Volvo L495 Titan / N88

by Daniel Wietlisbach

They just go together; the Scania L110 and the Volvo N88. They are from the same generation of 60s long-nose lorries. But it is not quite as simple as Tekno sees it ...

The Volvo L495 was built between 1959 and 1965. Its turbo-diesel of the TD06 type produced 185 hp. At that time, Volvo was struggling to keep up with their competitors so they asked for new ideas. With the new lorries of the 'System 8', so-called because 8 important, completely new components were developed, the lorry builders from Göteborg managed to get the company back on track. The L495 Titan became the N88 with the identical torpedo-nose cab but got the same components as the cab-over F88 which was introduced at the same time. Included was a completely new chassis, a synchronized eight-gear drive as well as new engines. The D100 produced 200 hp; with a turbo loader as the TD100, even 260 hp.

When in 2017 Tekno released the Scania L110 (much praised in these pages) they stormed in and conquered the hearts of the collectors. Hopes for a Volvo N88 were raised and when the model was announced in 2020 collectors' joy rose accordingly. To save on costs in producing molds, Tekno used a peculiarity of the times: Scania, as well as Volvo, delivered lorries without cabins and buyers could choose from a variety of products from cabin builders. One of the best-known ones was Be-Ge, located in the Swedish town of Oskarshamm and so it was not at all unusual that lorries from Scania or Volvo got the same cabins or different ones from other builders. Later on, Volvo bought the cabin builder Nyström, located in Swedish town of Umea and so the Nyström cabin became the Volvo factory cabin. Therefore, it was a common sight on Volvo N88s and the model would feel much better with the Volvo factory cabin.

However, the chassis of the Scania was also taken over and it falsifies the optics of the Volvo very much because the cabin sits visibly too high between the tires and mudguards which is especially noticeable when viewed at a distance. This problem is not very easy to understand as on the Tekno Facebook

page, pictures of the prototype with better proportions can be seen.

But let us look at the positives. For example, the BeGe cabin is correct for the two models shown here and the hood and mudguards impress with their well-executed lines and rounded surfaces. The radiator grille is a great match and includes the raised modeled Volvo logo. The free-standing headlights and fog lights are very nicely done and have the correct clear or yellow glass lenses.

The Volvo from Braas is a L495 Titan. The model from B&G is the successor N88. Its indicator lights sit on the mudguards while on the Titan, instead of the old-fashioned semaphore hand indicators, new indicator lights were added but they are too far forward. The distance finders and rear-view mirrors differ on each model. Tekno should be commended for taking great pains with their detailing including the recess in the cabin wall for the fuel intake on the right-hand side of the Braas. The green N88 is especially richly detailed with roof rack, rolled up canvas, ladder and Michelin man.

The wheels were again taken from the Scania which is especially annoying on the rear axles. The tires are just too narrow which is something we will have to mention often in the next while.

The paint job is faultless, as usual, and this producer's lettering is top notch. We continue to hope that at least the cabin on the tractor lorry will get its own correct chassis. Nevertheless, the announced N88 with reefer box looks impressive.

At a glance

+ Metal content
+ Fittings
− Wrong chassis and so the cabin sits too high

All-terrain crane from NZG in 1:50

Link-Belt 175 AT

by Carsten Bengs

With the 100 RT and the 175 AT, NZG is finally releasing two models of this US maker once again. The first AT crane produced by Link-Belt was based on the Tadano Faun but the 175 AT is a completely newly-designed model …

This model convinces with its perfect functionality and high degree of detailing. All measurements were nicely converted into model form. The crane is shipped in a solid box made from Styropor parts. The simple assembly instructions guide us through all the assembly steps without any problems.

The massive five-axle chassis rolls very easily; all axles are steerable and have sufficient steering radii. To make it even better, the axle springing was done very realistically by using small springs. The drive train was modeled, including the prop shaft. At the sides, the rear mounting ladders are incorporated into the bottom chassis casting. The hinted-at headlights are easy to recognize and the side dirt protectors are made from real rubber.

Behind the cabin of the lower chassis is the engine room. The grille that covers the engine radiator is made from very nice photo-etched parts. On the original, a Cummins diesel engine provides 432 kW. Plenty of power.

The massive supports hold the model securely, even without the tires making contact with the ground!

Very nicely done here are the printed-on warning labels on the supports which, of course, are threaded on the inside of the legs, however, crane mats are not included in the accessories. The small support feet can be stowed away inside the width of the vehicle during travel but when in use are securely bolted in place.

A joy to see is the way the roomy cabin was replicated. It is a showpiece with fine window wipers, mirrors that plug in and authentic-looking work spotlights. Small steps as well as warning beacons round out the details on the cabin.

As a nice touch, the massive upper chassis has a fully-functional safety rail on the cabin side. It folds down during driving and so remains inside the transport height. Small steps in the upper chassis would make access simpler. Here too is an anti-skid surface as well as finely photo-etched cover grilles.

True to the original, the upper chassis was modeled with hinted-at flaps and handholds. The upper chassis cabin tilts and includes the small hydraulic cylinder required. Very fine handrails, window wipers and hinted-at tank-filler caps round out the details. On the opposite side, the slewing motors are visible and further handrails are also present.

The 175 AT is ballasted with 41 t, whereas 17 t would be standard. All ballast plates on the model are single pieces and can be attached prototypically correctly using grub screws. All ballast elements have especially nicely done eyelets on the side elements. Very nice to see is that NZG has also modeled the vertical connecting bolts. After the ballast has been mounted, small cover plates with warning beacons are placed in the holes for the grub screws so that the screws do not show.

The boom, made completely from white metal, is securely held in place with a grub screw; the dimensions of the uppermost telescope are due to the choice of material. With all five telescope segments in place, the crane reaches around 1.17 m measured at the top sheave. On all telescoping segments, the telescoping steps of 50 and 100% are present. Here too on the boom, the detailing with lifting eyes and cable guides as well as the Link-Belt logo is very convincing. Small spotlights on the base element have also been included.

The model is delivered with a two-part boom extension and so can reach a 1.48 m height at the top sheave. The two segments are mounted with the usual M1 screws; tools are included. Using the two small hydraulic cylinders, the angle is easy to adjust. The necessary hose roll is on the one side of the boom.

The maximum carrying capacity of the Link-Belt 175 AT is around 150 t. Except for the rigid sheaves on the hook block and on the front pulley head, all other sheaves are made as singles and move very easily. The five-sheave block and hook assembly descends very smoothly and, on the original, would have a carrying capacity of 79.8 t. Using a second winch, the model can also be shown in twin hook operation mode. As a nice detail, there are even some small hydraulic hoses on the second winch. The small hook would have a 9-t lifting capability.

The lettering on this AT crane by NZG is richly detailed and very intricate. There are warning and operation decals on many of the model's surfaces. Even small load-bearing panels have teeny tiny lettering printed on at the engine cover. Further instruction signs can be found on the upper carriage. The type designation for the crane has been printed on both sides and is very legible. There is even an angle indicator simulated at the boom.

With the 175 AT, NZG has made an absolutely convincing model. The massive, heavy model scores high on details, functionality and lettering. The replication of the crane has been perfectly done although the prototype will rarely be seen on European roads.

At a glance

+ Metal content
+ Ballasting system
+ Detailing and lettering

Tom's truck log

by Tom Blase

Lorry Premiere– or, "How was your first time behind the wheel?"

I often pay attention with only one ear when the news is on the radio while I am driving my lorry. That is why I do not remember the introduction to the story, but the gist of it was that there was a lack of lorry driver trainees and steps should be taken to make the drivers' licenses more affordable and the profession as a whole more attractive.

Immediately, my thoughts flew back to the second of January, 1991, the date of my first trip in a lorry. Having a few days of his annual vacation left, my father wanted to join me as a sort of co-pilot.

I got my very first trip from the hauler I was working for at the time. It was a call to pick up 28 pallets of cleaning material from Werner & Metz (Erdal) in Mainz then transport and deliver them to the Rewe-Zentral-Lager in Hungen, at the border to the Wetterau.

The trip didn't begin well as my old 1632 refused to start. "Well, that is a great start," commented co-driver Werner who suggested that we try to start the vehicle using my car which had a new battery. "Because the truck almost started, it will not take much to get the engine turning over." He was correct because after two tries with the starter, the Daimler began to run. I was able to commence the first trip of my life as a lorry driver. "How was your first day?", I asked my old man and Blase Senior began his recollections.

On his 18th birthday, a Krupp Mustang with a total weight of 14 t was waiting for him; the set was completed with a 16-t trailer made by Schäfer, Worms.

He had to travel on the Bundesstrasse #9 to Weissenthurm near Koblenz to take on a load of concrete cinder blocks. The Autobahn 61 was not built until years later. He stopped several times on the road to ensure that the trailer coupling was still working properly. At the same time, he walked around the lorry and trailer combination and hoped against hope that he wouldn't get a flat tire because there was no spare on board.

Then, grinning widely, said that he 'found' the missing tire the following day when he dumped out his first load of sand (the spare was on the chassis underneath the dumping bin, as it was usually on tippers).

He drove his first load of cinder blocks to the company yard in Gau-Bishofsheim.

When he negotiated the 12% hill down to the village entrance with a roaring engine brake, it was already past 9:00 p.m. All those who know the engine brake of a Mustang lorry will know that the young Werner was not very popular among the town's inhabitants.

It was not until a day later that he noticed the small factory-mounted sign in his cab which read: The engine brake should only be activated outside of populated areas.

58 years on the road, part II

Beck Transport AG

by Eric Urweider

After the yard in Amlikon was enlarged, lorries also became bigger. However, quite a few more steps were required before the hauler arrived to where it is today …

The first Volvo F89 for the fleet arrived in 1972 in the classic configuration of a two-axle lorry with a three-axle trailer. With this began a long-lasting relationship with the Swedish brand.

Large engines and large cabins

Five years later, the first Mercedes-Benz, a NG 2632 with a V 10 engine, joined the fleet. It did not prove itself well because, among other things, it was too thirsty. The amount of fuel used is difficult to believe today considering that the power produced was almost half of what the average lorry produces today.

In 1980, the first Volvo F1220, still with a flat roof, was purchased. Shortly thereafter, in 1982, the first F12 with a Globetrotter cabin followed. The Volvo and Mercedes combinations were used to drive all the way to Poland with food and aid goods for an aid campaign by the Swiss magazine 'Schweizer Illustrierten.'

The vehicle fleet of the contract drivers grew along with the vehicle fleet of the company. Contract drivers are independent haulers; however, they have to paint their vehicles in the company livery and work exclusively for the hauling company. Basically, the vehicles are dispatched like those in the company fleet but the contractors assume the risks for the vehicle and pay for fuel, road toll, taxes and so forth themselves. But, at the end of the trip, a larger payout beckons. In this manner, the Beck vehicle fleet expanded up to 60 vehicles, 30 of them company owned. In 1994, Scania lorries joined the vehicle fleet and the first DAF arrived in 1996.

Staying innovative

The company not only remained innovative in vehicle technology but early on invested in modern communications tools. Telematics was also used early on to stay up-to-date with the industry. In 1995, Beck Transport took over the customs broker Diggelmann AG. In 1996, Urs Beck took over the company and founded Beck AG. Three short years later, to get a foothold in Europe, Beck opened a branch office in Schaan, in the Principality of Liechtenstein. At the turn of the millennium, current General Manager Urs Beck, son of Hans Beck, was able to purchase the site in Mauren from Greyhound which had financial troubles. In the same year, that customs brokerage which was founded in the 70s moved to the communal customs office situated at the Autobahn (highway) Kreuzlingen/Konstanz. In 2001, the custom-built office building in Mauren was occupied; the warehouse in Mauren is still used today for storing goods in transit. In 2004, the paint scheme changed. The grey canvas tarps were a thorn in Urs Beck's side as they looked soiled very quickly. On one occasion he had to pick up a new Porsche at the factory in Nuremberg for an acquaintance. He really liked the 'Black Olive' paint on the car and decided to use it on the company's lorries. Initially, father Hans Beck

Beck Transport AG

Founded in	1963
Activities	International Transports
Lorries	20
Employees	40 (including management)
Homepage	www.becktransport.ch

was not happy about the choice and remarked, "We drive lorries, not hearses!" Over time the change of colour became less of an issue and, gradually, over the 17 years that the cabins have been black olive, Hans has warmed up to them. Only the canvas sides are really black; logo and lettering are white/opal green and as a contrast colour, opal green is also seen on the tractor lorries.

Since 2005, temperature-controlled transports have been offered for which a few vehicles are exclusively on the road for Aldi Suisse. But there are also some international customers who want to ship goods that cannot be exposed to extremely high or low temperatures. As well as the reefer combinations, there are also vehicles with canvas sides on the road; these can accommodate loads that are up to 3 m wide. Ramps and side extensions for secure vehicle transports are standard and so is the automatic air pressure monitoring of all trailer tires.

Partnerships

With only 20 lorries, a small transport company like Beck plays a very minor role in the Swiss or European market. Realizing this situation, early on Beck began to co-operate with other partners. Urs Beck, the current general manager, was president of the Cargopool Suisse, which is a special association for small, internationally-active transport companies.

When he heard about E.L.V.I.S. he wanted to hear more. This co-operative is the European loading consortium. Beck and a partner travelled to Germany and were received with open arms. The association had searched for a partner in Switzerland for a long time and so E.L.V.I.S Suisse was born. Using the Swiss portal of the co-operative, more than 900 vehicles are available for prospective customers. It is therefore no surprise that from wherever the load originates, an E.L.V.I.S. partner will have a vehicle available not too far away.

A classic machine with a checkered past

International TD-25 C

by Ulf Böge

It was relatively late in the game when in 1931 International Harvester IHC began to develop tracked dozers ...

By that time, competitor Benjamin Holt had already been gathering experience in that segment of machines for over 20 years with his Caterpillar tracked dozers. Despite this starting position, the tracked machines from IHC managed to forge ahead and the company produced successful machines for the agricultural and construction sectors. Among these machines was the TD-25C which for some time was second-largest IHC bulldozer.

The first IHC tracked vehicles were nothing more than modified tractors. The company sought to impress the agricultural business in the United States with more or less success. At the beginning of the 1930s, the 'TracTracTor,' which was the first 'real' crawler of the T-20 type, initiated a completely new area. In the beginning, these machines were powered exclusively by gasoline but, commencing in 1932, they were also available with diesel engines and from then on had the 'TD' designation. As more and more of these crawlers found uses in the construction industry, IHC started to

offer matching grading blades as equipment. Very quickly it became clear that earth-moving requirements in agriculture were much different from those in the construction trade. It took some major changes to the frames and running gear in order to ensure trouble-free working in the demanding conditions of a construction site. The introduction in 1938 of the TD-65 (TD-18) bulldozer announced for the first time a machine designed especially for the needs of the construction industry.

The program of crawlers produced by IHC was then permanently developed with the focal point of the developers increasingly on the construction industry. A further milestone was reached in 1947 with the 20 t TD-24. For its time, it was a gigantic machine and was supposed to stand up to the competition of Caterpillar's D8 as well as the HD-20 from Allis Chalmers. With this crawler, IHC established itself as a producer of heavy construction machines. But the TD-24 was in no way perfect; because of the rush in getting the machine into production, the engineers had dispensed with the extensive testing that was usually the norm. The results were that damage to gears and engine were common problems when these components were over taxed.

Its successor, the TD-25 which was introduced in 1959, was supposed to be different. It was a completely re-designed machine but it quickly became apparent that there were still one or more weak points that had to be fixed in a hurry. Nevertheless, the new IHC crawler was directly comparable to the DH as well as the then relatively new HD-41. Therefore, in the relatively short time of three years, the upgraded TD-25B machine appeared and was destined to become a big sales hit.

The next C-series construction appeared in 1968. Then the total weight was around 31.3 t and the engine output was near 315 hp which meant that this new unit would also replace the TD-30 which was previously the largest machine. The TD-25-C was the direct successor because the TD-25B was offered concurrently. The TD-25C was first powered by the six-cylinder IHC DT 817 B diesel engine with turbo charger and aftercooler. Later versions had the new DT 817 C engine type. A full Powershift gear box made quick manoeuvering possible with rapid change of driving direction and speeds. Top speeds were 10.3 km/h forwards and 11.6 km/h in reverse. A planetary gear box with two separate transmissions for each of the two crawler tracks was installed for power-saving driving in curves without loss. Despite sounding complicated, the gear boxes were constructed in a very easily comprehended manner: two double multi-disc clutches, three shafts and seven cog wheels made it one of the most advanced ones on large dozers. This was also an advantage for servicing and maintenance because, compared with other planetary gear boxes, it used only about a third of the parts used by others. The fitters found it comfortable to work on this machine and the operator found comfort in the upholstered seat. The two steering levers were easy to operate with a touch of the fingers and the hydraulic-assisted gear changer made the work as pleasant as possible. On top of that, the TD-25C had an elastic cross beam which allowed very exact guiding of the blade; it also operated very quietly. For the first time, a ROPS roof was also available for the TD-25C. But, especially in Europe, many crawlers were equipped with a closed cabin that had heating and air conditioning installed. A semi-U blade as well as an angling blade were the choices available for the machine. Of course, for a bulldozer of this size there was the possibility of attaching a rear-ripping attachment. The ripping attachment tool came from ATECO.

In the full construction series of the HD-25C the 3,500 units of the US-built ones sold made it the highest selling machine, only being replaced in 1979 by the TD-25E. It was the last bulldozer in the series that was developed directly by IHC prior to the construction machine part of the company going to Dresser. Two years later, the TD-25G with now almost 34 t of working weight appeared; it remained in the program until the end of the Dresser era. In 1987, Komatsu bought part of the construction machine business but had little interest in the bulldozers which they farmed out to the Polish maker Huta Stalowa Wola (HSW) which had been licensed since 1972 to build IHC crawlers. Under the Dressta logo the TD-25G was continuously upgraded and developed. Since 2012, Dressta has belonged completely to the Chinese LiuGong Conglomerate but the TD-25 is still being built. Its 60-year-long history will continue for a while yet.

Mercedes-Benz LKW Kurzhauber

by Achim Geier, published by Motorbuch Verlag, 272 pages, 280 photos, format 27.5 x 24 cm, bound, ISBN 978-3-613-04371-8

If there was something like the VW beetle in popularity for utility vehicles then this short hood vehicle is most deserving of that designation. It was built between 1959 and the decade following 2010. This book starts where the long hood lorries book finishes. The history of the short hood lorries is told on about 250 pages. They were developed as a construction kit system, underwent engine developments, had a few face lifts and changes to create widely divergent variations of the original. But the story also includes how the kit was changed. Initially, front-steered lorries had to be made from the short hood ones and afterwards the whole process was reversed. The end of the book is dedicated to emergency vehicles and lorries produced outside Germany. (eu)

Unimog alle Typen, alle Daten seit 1946

by Peter Schneider, published by Motorbuch Verlag, format 27.2 x 24 cm, 440 pages, div. photos und tables, hard cover, ISBN 978-3-613-04373-2

75 years ago, the Unimog (universal motorized vehicle) saw the light of the world for the first time. The initial design was as an agricultural vehicle. In the meantime, many construction series and just as many uses for this all-round vehicle have been created. The book covers all the construction series, which were built in the works at Göppingen, Gaggenau and Wörth. In addition to many pictures, about 300 tables supplement the texts. Each construction series gets a short overview of its history and price development over the time of construction. While this volume does not claim to be complete, it provides a good overview of the Unimog and its history from the U 70200 (Böhringer) up to the highly manoeuvrable off-road U 5000. (eu)

Die Geschichte der Baggerlader Band 1

by Rudi Heppe, published by Podszun Verlag, 156 pages, format 21 x 28 cm, ca. 480 illustrations, bound, ISBN 978-386133-964-9

There are and where many manufacturers of backhoe loaders in Germany. Rudi Heppe presents the history and the manifold types of German backhoe loaders. The first one was built by the British maker JCB. Beginning in the 60s, other well-known makers such as Atlas, Ahlmann, Kramer, Schaeff or Weidemann built a variety of backhoe loaders. Introduced in alphabetical and chronological order with many pictures and technical information, machines from 20 different makers are presented. While the first backhoe loaders were still based on agricultural tractors, the new machines were made with all-wheel steering and an excavator boom that could be adjusted sideways. (up)

My 50 years life in transport

by Rinus Rynart, Paul Rowlands published by Pombo, 273 pages, 280 photos, format 17 x 24 cm, soft cover, ISBN 9789464061673 www.rinus-rynart.nl www.boekenbestellen.nl

Rinus Rynart will be well-known to our readers. In this book, written in English, he takes us through the highs and lows of his career in hauling which led him all the way to Karachi in Pakistan. All countries of the Near East and all that end with Stan were serviced by Rynart Trucks. Later on, came Russia and adjoining countries. This book would not have been possible without the author having one of his best ideas ever. He gave a compass and a cheap camera to every driver for their trips. While some had already run out of film by the Austrian border, others brought back pictures that are impossible to duplicate today. (eu)

History and building a DD9G kit, part I

Peterson's tractor

by Thomas Wilk

Building a kit from ATM for the Peterson Cat DD9G prototype has pushed the limits of my model construction ...

We are undertaking a time-travel trip back to the year of 1936. After working for several years for LeTourneau, Howard Peterson founded the Peterson Tractor & Equipment Co. in San Francisco. There was plenty of work available in the Bay Area as a Caterpillar dealer. His younger brother Robert A. Peterson (Buster) joined the company in 1948. He started the department of 'Special Equipment Services' after the company had moved to San Leandro. This department analyzed, developed and produced what construction companies needed for their jobs. The first commercially viable invention was what is today the ubiquitous, U blade and more patented items followed. To load increasingly larger scrapers economically, ever larger bulldozers with a size greater than the existing Caterpillar D9 were required. And thus the huge, iconic machines of this era were created. These were the Cat D9G Quad-Trac and the Side-by-Side D9G. At the end of 1963, the first prototype of the 770 hp Pushdozer was built. Two Cat D9Gs were connected with a ball and socket joint. The combination was steered by an operator on the foremost tractor. This development did not go unnoticed in Europe and many collectors dreamed of a scale model of the DD9G, as the unit was called, after Caterpillar took over the patent in 1968.

Francis Pierre founded a construction machine club in the 80s and it had its own magazine. It was black and white and focused on construction, mining, cranes and heavy-duty transports. Models from diverse makers were shown. Actually, it was a little bit like our own magazine Truck & Construction (Laster & Bagger) today. The magazine was a stapled collection of pages in which the quality of picture reproduction varied greatly and had nothing in common with the exclusive standard of today. But, at that time, it was read by around 200 interested enthusiasts worldwide. With some basic French or English knowledge, the short text for the pictures could be understood.

In the middle of the 90s the French kit producer Francis Pierre ATM (Art Technique et Machines) had several different white metal/resin kits of different manufacturers in 1:50 scale in their program. These were very fine, highly detailed models that even today leave no wishes unfilled. It was possible to see them at the Modelshow in the Netherlands or in magazine advertisements. Big dreams and desires were kindled from them. The first early Caterpillar D9G Dozers with double air filters were developed and released. The operational crawler tracks were a real novelty at the time. The models were available assembled, or in kit form for the experienced model builder. They were very detailed, correct to scale, cleanly painted and lettered and, even today, can be put on the same level as models from CCM. When purchasing a model, one almost had to disregard the price otherwise it would take a long time to consider all the advantages or disadvantages of such a purchase. Fortunately, the kit form was available at half the price of the finished model, and had the advantage in that parts could be modified or more details added during the building process.

So, after a long thought process, I bought a white and grey cardboard box measuring 20 x 10 x 10 cm from Francis. In it were many nice parts of the Caterpillar DD9G with a somewhat short assembly instruction sheet in French and English. Upon opening the box, my emotions swung from extreme joy to frozen shock, when I saw the many parts and the very sparse instructions enclosed. During the last twenty years I have unpacked and re-packed the little box over and over again countless times!

In 2012, after a lot of back and forth, CCM finally released their DD9H in 1:48 scale for $400. It went smoother and better six years later with the release of the DD9G, which then cost $600 from CCM; it was in a limited series of only 250 units. After these two versions were on the market, I decided to build the prototype, the ancestor or the Quad-Trac from Peterson, using the ATM-kit that had sat on the shelf for a very long time.

The construction

The first step was to search for some pictorial material of the original machine. All parts of the kit were sorted by construction steps such as running gear, engine, operator's platform, blade and coupling. After cleaning and removing casting ridges from the parts I embarked upon the basic chassis of the front dozer. First a resin cast of the correct diesel tank was required as the one included with the kit was substantially wider than the D9G. The white metal cylinder brackets on the radiator sides had to be made smaller to corresponded with the original.

All parts were only loosely attached to each other using bolts so that they could easily be taken apart to prime and paint later. Very intensive scrutiny of the instruction leaflet was always required. The slightly elevated operator's seat, positioned 45° to the right also required modification. It was refined to be more like the prototype with the two brake pedals, among other things. The operator's platform received two compressed air tanks, including the matching piping, to assist with the steering of the rear tractor. Numerous kit parts were primed several times during the assembly process and smoothed out with wet 400 grit sand paper before additional details were added. This allowed for complete control over an even finish at the end. The sprung Push-Blade and the brackets for its lifting cylinders as well the free-standing hydraulic lines were also re-worked.

Finally, all the kit parts, according to their grouping, were primed and then the final layer of lacquer applied. After everything was dry, drilled holes were carefully reamed out and the step-by-step assembly of the model's parts began. Several parts, for example the seat and operating levers had already been painted in the appropriate colours and now were added bit by bit to the model.

Tunnel construction in 1:50 – part III

Mühlbergtunnel

by Markus Lindner

The extensive construction camp is set up concurrent with the first excavation work in the area of the tunnel approach ...

Because of the limited space available directly near the tunnel portal, the construction camp is not set up there but on a flat space nearby.

From a modeling standpoint, this is advantage because a completely separate diorama can be built independent of the rest of the construction site. Of course, both dioramas remain small enough that they are easy to handle, transport and, finally, to photograph. With a small trick, both share the same background scene. At the actual tunnel portal, the landscaping is made so high that only the sky and some clouds of the background picture are visible.

The construction camp is set in front of the same background positioned with its landscape ending

lower so that the landscape elements of the Mittelgebirge make up the background of the diorama when pictures are taken.

The task of the construction camp is to store construction materials and tools as well as to maintain the extensive fleet of machinery used during construction. The spoils of the construction site are stored temporarily and then re-used or removed from site and recycled. The construction site requires extensive buildings. Since all of this can never fit on a 100 x 65 cm base plate, like the tunnel portal, this diorama is open at the front so that not everything need be seen on the modeled section.

Included in the infrastructure of the camp is a large engineering office housed in two tiers of stacked containers. Concrete strip footings (Balsa wood strips painted concrete grey) were laid down for the office. With the help of a mobile crane (Liebherr LTM 1050-3.1, WSI), a number of 20-foot office containers (made from 1:50 Zapf-Modelle kits) were stacked on these footings. The upper story needs an accessible set of stairs and a walkway, including railings. These were scratch-built from plastic parts.

The construction of a complete shop building was considerably more complex. It will house the ongoing maintenance of the strenuously-used machines. Such a shop building is the main feature of any large tunnel construction site. Usually, quick-built steel factory buildings with insulated walls and roof are used. A gantry crane is put to good use. Normally, these buildings are dismantled at the end of the project and are re-used on other sites.

To translate this into model form, a single berth steel shop building in kit form was developed from milled plastic parts and brass shapes. In theory, it is easy just to connect each section and to extend by as many sections as required. This way, it is possible to show the step-by-step construction of the shop building.

The replication of the concrete foundation was a special challenge for modeling. Because the base sits on sifted-on earth, it could not be made completely level. To make single foundation walls was not possible because of the difference in height. The solution was to mill out a piece of MDF sheet in such a way that it could be buried in the ground and leveled.

The foundations for the construction of the hall were excavated first. Among other machines, a Kobelco ED160 short tail excavator (Ros) went to work; it had previously been employed for earth-moving tasks on the construction camp site. Next, foundation form elements from the Zapf-Modell program were installed.

After the completion of the foundations and the addition of the gravel sub floor, the installation of the pre-fabricated steel sections began. For this a Faun ATF70G-4 mobile crane (WSI) was used. After the completion of the basic steel frame, and before the exterior walls were added, the 1.5 t capacity gantry crane with its track and bridge had to be installed. It was scratch-build from plastic parts using a unit from Abus as a prototype.

A few days later the shop building was completed with the addition of the wall and roof panels as well as the door at the front of the building with the help of a Fassi F1300 crane mounted on a lorry.

Roof and wall panels are made from corrugated cardboard sections glued to plastic sheet stock. Front door and side door are made from plastic parts, the rail on which the doors run are U-shaped plastic profiles from Evergreen.

With this, the most important work on the construction camp is completed and now piece by piece, the necessary construction machines needed for the further earth moving work at the tunnel mouth of the south side can be delivered and made ready. How the work at the area of the south portal of the tunnel has progressed, will be shown in the next issue.

Do you know this truck? Recognize it and win a model!

by Remo Stoll

Some time ago, this lorry was at home on the highways where it clocked a few kilometers. The long-distance driving cabin provided the operator a bit of luxury. Production of this particular type began in 1988 and at the time it was the second-most-powerful lorry in the program of this maker. With its heydays unfortunately long gone, it is only allowed to run around on the factory site.

Recognize the lorry? Please send us the exact name and type designations. The contest deadline is October 15th, 2021. We will hold a draw to select winners if there are more correct answers than prizes. Please note that only entries with complete mailing address information can be considered so that we can mail the prizes out correctly.

This time the winners will receive a prize chosen from: the Klemm KR 806-3GS from NZG, the Iveco S-Way from Tekno and the Kobelco SK 140SRLC from Conrad.

Solution from Trucks & Construction 4-2021

The articulated dumper in question was a Swedish Volvo BM 860 S. The winners this time are: Marc Maly from Hamburg (D) who won the Liebherr A 922 Rail from NZG, Armin Moretti from Klosters (CH) who received the MAN TGS 6x4 Winter Service/ Municipal service, and Father Ervin Bauer from Eslarn (D) who won the Cat D11 in 1:87 from Diecast Masters. Hearty congratulations to all winners!

Our partner page

The first blocks have been mined

In the last issue we introduced you to our new cross-cut saw. A few weeks have passed and we have had our first experience with this machine. The cutting speed of around 5 m^2 per hour is still a little below our expectations. Using a different kind of diamond segment on the cross-cut chain, the performance can be further optimized. We have quarried over 100 m^3 of blocks with this new technology. Because a model of the Fantini machine was needed for the personal model collection of the VR-President, an Italian model builder made a 1:50 model. Thanks a lot Dario!

Hunter's rifle range Bülach

A new Hunter's rifle range for the Canton of Zürich is being built in the 'Büligrube' near Bülach, where the 'Gebrüder Eberhard' have been quarrying gravel since 1966. The placement of the range at Widstud makes it possible to locate the whole installation below the natural contours of the surrounding landscape. This reduces noise emissions considerably.

The civil engineering work began in March of 2021 . In a first step, a total of 7,100 m^3 of surface and substrate had to be removed. For the construction pit, excavators triaged and loaded 59,000 m^3 of material, mostly fill, that had been dumped over the decades and is now classified as contaminated soil. The shaping of the six outdoor ranges required the filling and compacting of around 145,000 m^3 of clean fill. For the basic landscaping around the site, a further 28,000 m^3 of substrate materials like gravely mud, clay and loam was deposited. The first Caterpillar Excavator of the Next Generation, a 32.5 t heavy 330, began to work on site at the beginning of August.

New on the market

MSM 1:50

This maker from the Principality of Liechtenstein is continuously expanding its 3D-printed offerings. The models are very stable, come printed in the correct colours and are lettered with decals. The 3,000-liter construction site tank from Kibag is a new development; it is clearly different in shape from the other tanks and comes in a variety of sizes. New too are some pivoting rotators in two sizes for 20 t and 50 t excavators. They especially suit Conrad models, are functional and come with the bolts necessary to attach them. The crane mats are available in five sizes for cranes from 100 to 500 tons and the sets include the transport racks with give additional display opportunities (www.msm-modelle.com).

Conrad 1:50

The MAN TGX 41.640 in the 8x4 heavy hauling version for 'Truck & Bus Service Sangernhausen' is a chunky tractor lorry in an attractive, colourful livery with extensive, printed-on details, but also with new parts. Especially noticeable is the spoiler behind the heavy-duty shoring tower with lights and the MAN logo. Additionally, and for the first time, very fine protective grilles in front of the headlights are printed on. They are very fine and replicate the impression of the original very well. The completely black lacquer on the chassis with extensive, printed-on detailing is a great match with the grey cabin.

GMTS 1:50

The Saurer D290B 4x4 resin model was released in many colour variants. It is not the first Saurer from GMTS, but maybe the nicest one! To replicate the intricate lines of the cabin was a real challenge. As seen here, this has been achieved with excellence. The rounded shapes

are correctly done and many details make the model even finer. The engravings on the wheel hubs are excellent and there are many different photo-etched parts like stepping boards, window wipers and the radiator grille which are really convincingly done. It can be said that the paint and finish of our sample are faultless. Because of requests from many model builders, for the first time, this model is also offered as a kit. Included in the set are parts for different versions, for example, four different exhaust systems (see also the Editorial). The model will be available later on in the flagship 6x6 version of the Saurer lorries which we will look at in detail in the future.

Collector's guide

Here is a list in short form of all the new construction and heavy haulage models announced since our last issue. For truck transport models we recommend that you consult the newsletters of the manufacturers.

Type	Scale	Maker	Available from	Infos
Liebherr R 960 demolition «Montalbetti»	1:50	Conrad	Dealers	www.conrad-modelle.de
Komatsu PC220-10 / HB205	1:50	China	E-Bay	—
Caterpillar 798AC	1:50	Diecast Masters	Dealers	diecastmasterseurope.com
Caterpillar 320GX and 323GX	1:50	Diecast Masters	Dealers	diecastmasters.com
Mack DM800 6x4, resin, 6 different colours	1:50	Fire Replicas	Dealers	www.nzg.de
Kaelble PR660, yellow and green, resin	1:50	GMTS	Dealers	www.gmts.de
Kaelble PR663B, yellow, resin	1:50	GMTS	Dealers	www.gmts.de
Krupp Dolberg D600, resin	1:50	GMTS	Dealers	www.gmts.de
Liebherr LTM 1450-8.1 «Strele Logistics»	1:50	IMC	Dealers	www.imcmodels.eu
Demag AC700-9 «Mediaco», «Dufour»	1:50	IMC	Dealers	www.imcmodels.eu
Demag AC45 City «Wiesbauer»	1:50	IMC	Dealers	www.imcmodels.eu
Fassi F32A crane	1:50	IMC	Dealers	www.imcmodels.eu
MB Actros 6x4 / Nooteboom semi lowloader «Doosan»	1:50	IMC	Dealers	www.imcmodels.eu
MB Actros 6x4 / Nooteboom semi lowloader «Cadzow»	1:50	IMC	Dealers	www.imcmodels.eu
MB Actros 6x4 «Capelle»	1:50	IMC	Dealers	www.imcmodels.eu
MB Arocs 6x4 / ballast trailer «Aertssen»	1:50	IMC	Dealers	www.imcmodels.eu
Mack Cruise-Liner 6x4 «Demofarben», resin	1:50	IMC	Dealers	www.imcmodels.eu
DAF95 8x4 «Sarens Curtis», resin	1:50	IMC	Sarens	www.sarensshop.com
Liebherr LTM 11200-9.1 «Max Cranes»	1:50	NZG	Dealers	www.nzg.de
Scania P 8x4 «Jorgen Nielsen»	1:50	Tekno	Dealers	www.tekno.nl
Volvo FH04 10x4 / crane / trailer «Senn»	1:50	Tekno	Dealers	www.tekno.nl
Hiab XS800 crane	1:50	Tekno	Dealers	www.tekno.nl
Liebherr LTM 1750-9.1 «Wiesbauer»,	1:50	WSI	Dealers	www.wsi-collectors.com
«Borger», «Peinemann»				
Liebherr PR776 «Russland»	1:50	WSI	Dealers	www.wsi-collectors.com
Tadano ATF 60G-3 «Weiland»	1:50	WSI	Dealers	www.wsi-collectors.com
Scania S 6x2 / lowloader «Duarig»	1:50	WSI	Dealers	www.wsi-collectors.com
Scania S 6x4 / semi lowloader «Vallem»	1:50	WSI	Dealers	www.wsi-collectors.com
Scania Hauber 6x2 / semi lowloader «Wernsen»	1:50	WSI	Dealers	www.wsi-collectors.com
Scania R 6x4 / semi lowloader «Adams»	1:50	WSI	Dealers	www.wsi-collectors.com
Scania R 6x2 / lowloader «Leloup»	1:50	WSI	Dealers	www.wsi-collectors.com
Scania R 8x2 «Tenden»	1:50	WSI	Dealers	www.wsi-collectors.com
Scania 142E 6x4 «Prangl»	1:50	WSI	Dealers	www.wsi-collectors.com
Volvo FH4 6x4 / Nooteboom MCO-PX «Colonia»	1:50	WSI	Dealers	www.wsi-collectors.com
Volvo FH4 8x4 / Nooteboom lowloader «Tage E. Nielsen»	1:50	WSI	Dealers	www.wsi-collectors.com
Volvo FH2 8x4 / lowloader «Van Wijgerden»	1:50	WSI	Dealers	www.wsi-collectors.com
Volvo F89 6x4 / ballast box «Sunters»	1:50	WSI	Dealers	www.wsi-collectors.com
MB Actros 8x4 / Broshuis 100 T «Wiesbauer»	1:50	WSI	Dealers	www.wsi-collectors.com
MB Actros 8x4 / lowloader «André Voss»	1:50	WSI	Dealers	www.wsi-collectors.com
MB Actros 6x2 / Nooteboom Euro «Rensink»	1:50	WSI	Dealers	www.wsi-collectors.com
MB Arocs 6x4 / Nooteboom MCO PX «BMS»	1:50	WSI	Dealers	www.wsi-collectors.com
DAF XF 6x2 / Nooteboom Euro «Multiwheels»	1:50	WSI	Dealers	www.wsi-collectors.com
DAF XF 4x2 / stone trailer «Jaco Stam»	1:50	WSI	Dealers	www.wsi-collectors.com
Mack F700 6x4 / ballast box «Lastra»	1:50	WSI	Dealers	www.wsi-collectors.com
Liebherr LTM 1450-8.1 «Van der Tol»	1:87	IMC	Dealers	www.imcmodels.eu

News in brief

Astra-Bridge unit announced

The Schweizerisches Bundesamt für Strassen (Astra) (Federal Swiss Road Department) announced a world premiere at the end of July: the Astra-Bridge. The 260-m long Astra-Bridge is a modified mobile Flyover bridge which is self-driving. While two lanes of traffic rolls over the bridge at 60 km/h, the construction beneath proceeds; the paved strip on the side of the road is used to supply the construction site.

It is supposed to take only a weekend to put the bridge in place. It runs on Cometto axles and so can be made to follow the construction as it progresses or change from the left to the right lane. Taking geometrics into consideration, the Astra-Bridge can be used on about 13% of the Swiss highway system. The goal for the Astra is to keep highway drivers on the road and not in a traffic jam. (eu)

Tunnel excavator TEC TB20

This new tunnel excavator of the 20-ton class was created through co-operation between the Swiss Caterpillar dealer, Avesco, and the walking excavator producer, Kaiser, in the Principality of Liechtenstein.

With the TB20, tunnel constructors will receive high-performance and technologically-advanced solutions for smaller bore tunnels. The tunnel excavator has a working weight of 18 t and produces 140 kW of power. It is especially designed for the challenging construction of connecting cross tunnels, tunnel enlargements as well as for milling and can be used with a jack hammer attachment.

Currently, three units have been produced. The Swiss company of Frutiger AG is using a TB20 for a tunnel project in the canton of Grisons. (up)

Irizar ie Truck

This Spanish maker should be familiar to modellers because of a bus model from Joal. In addition to their ie Tram, the Spaniards announced the ie Truck a while ago. It is now available as a 4x2 and 6x2 versions. The ie Truck has been given a very futuristic looking cabin with a good all-around vision for city logistics. The first intended use for the fully-electric vehicle is supposed to be as a garbage collection lorry. According to Irizar, the battery capacity should be between 100 and 400 kWh and can be re-charged with a rapid-charging unit in one to three hours. An Asynchrony engine with 160 or 340 kW and 3000 or 3600 Nm provides the power for the unit. Irizar is promising a range of 250 km for the vehicle which should be sufficient for City logistics. (eu)

Wolff 1250B high in the Alps

At the Grimmselsee, the Kraftwerke (Power plants) Oberhasli (KWO) is building a new wall for a water reservoir in front of the old one which requires repairs. For this large project, there are two imposing Wolff 1250Bs with luffing jibs measuring 87.1 and 92.1 m in height in use. The slewing part stands on a tower erected from TV33 elements which in turn stand on TV60 elements that have a foundation measuring 6 x 6 m and which was created especially for this use. Furthermore, for the extreme weather in this location, with winds expected of over 200 km/h, a special connecting module from the TV60 to the TV33 had to be developed. Right over the connecting module another newly-designed TV33S module is used. It is a static re-enforced TV33 element. (eu)

Caterpillar R1700 XE electric

At the 2019 Bauma in Munich, Caterpillar presented the first version of the R 1700 XE as the first battery-operated below-ground wheel loader. An updated version of the R 1700 XE electric, together with the MEC500 mobile equipment charger was seen at the Minexpo, Las Vegas, in the middle of September 2021. The wheel loader (LHD) fills its 15 t capacity bucket in the mining gallery and after a short drive, drops it into the crusher, all with 0 emissions. The bucket capacity of the only 2540 mm

high R1700 XE is the same as on the 988K XE wheel loader.

The 1600 kg heavy MEC500 (Mobile Equipment Charger) is capable of completely re-charging the battery of the R1700 XE in around 30 minutes. (up)

New York bets on the Mack LR Electric

The 'New York City Department of Sanitation' (DSNY) is considering buying seven Mack LR Electrics. The refuse-collecting vehicles are to work in seven New York districts: Bronx, Brooklyn North, Brooklyn South, Manhattan, Queens East, Queens West and Staten Island. To re-charge these electric trucks, the DSNY will use a DC rapid charge unit. Before the decision to purchase the seven units was made, a demonstration vehicle was used in the Brooklyn District; it surpassed the expectations of the DSNY by a large margin. The Mack LR will be equipped with a twin 167 kW engine producing 448 hp. To achieve maximum efficiency over all operating speeds, the units have a gear box with two gears. The logo to recognize an electric Mack by is a copper-coloured bulldog. The DSNY has a fleet of 6,000 vehicles which collect 12,000 tons of refuse and recyclable material. Mack Trucks make up the largest component of the fleet. (eu)

Laster & Bagger

U1-publishing GmbH
Postfach 135
CH-3322 Schönbühl
+41 (0)78 601 74 44
www.lasterundbagger.net
redaktion@lasterundbagger.net

Redaktion Daniel Wietlisbach (dw)

Ständige freie Mitarbeiter
Carsten Bengs (cb), Tom Blase, Ulf Böge, Robert Bretscher, Markus Lindner, Urs Peyer (up), Wilfried Schreiber, Remo Stoll, René Tanner, Erich Urweider (eu), Thomas Wilk (tw), Hans Witte (hw)

Druck D+L Printpartner GmbH, D-46395 Bocholt

English translation
Daniel von Kaenel, Canada, Steven Downes (sjd), UK

Erscheinungsweise / Bezug
Laster & Bagger erscheint alle zwei Monate – 6 Ausgaben pro Jahr. Bezug über Abonnemente, den Fachhandel und Bahnhofbuchhandel.

Das Jahresabo kostet CHF 75.– / € 65.– (Deutschland) / € 68.– (übrige Länder). Die Rechnungsstellung erfolgt für ein Jahr. Schriftliche Kündigung spätestens acht Wochen vor Ablauf des Abonnements, ansonsten erfolgt automatische Verlängerung für ein weiteres Bezugsjahr. Preis Einzelheft CHF 14.– / € 12.– (Deutschland) / € 13.– (übrige Länder).

Bankverbindung
Schweiz: PC-Konto IBAN CH83 0900 0000 6015 5685 9
Deutschland: Postbank Leipzig, BLZ 860 100 90
IBAN DE86 8601 0090 0332 3049 03

ISSN 2504-0405

Imprint