# Laster Bag

Fr. 14.-/€9.50 (D,A), € 10.50 (other Countries)

Ausgabe 4-2018

English text at lasterundbagger.net

Modelle von Lastwagen, Baumas Wettbewerb

Diecast Masters 1:50 **Next Generation** 

ASG SCHWEDEN

TIR

(

FKW 146

Eigenbau 1:50

Volvo

**FB89** 

# **English text**

CCM 1:48 Cat 992B & 776 RD160



Firmengeschichte 90 Jahre Tekno

Jekno -

Conrad 1:50 Kobelco SK500LC-10

TRANS THERMO AB

SCHWEDEN



## **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".

#### How stories begin

What happened 90 years ago? In 1928, only ten years after the First World War, my grandfather was just nine years old and the world was heading into a bad economic crisis.

In Vanlose, a small village in Denmark, Andreas Siegumfeldt, began to produce tin soldiers and tinplate toys in his basement. They were marketed under the Tekno brand, a name that today represents finely detailed truck models in 1:50. Tekno moved, as we know, to Holland and we are dedicating six pages in this issue to the interesting history of this company.

What did you do 50 years ago? I was only three years old then when the youth of the world rebelled and wanted to break with the past, have more freedoms and achieve world peace.

Betty Hauer and Gerhard Schmid founded the NZG-Modelle GmbH in Nuremberg, in very close quarters in a furniture store. Soon they were able to present their first model, the Weserhütte HW70 mobile excavator.

Both of these producers had a major influence on my childhood since two of my overall favorite models came from Tekno and NZG. While the Tekno models of the Volvo Titan with lowboy trailer and the Åkerman 752 are indeed from my childhood, the Cat 621/ Athey PR 621 was a re-purchase. How much time did I spend admiring the boxes of the models! There was the drawing of the rear dumper, dashing purposefully over the construction site on the NZG box and on the Tekno boxes drawings of other models from the maker could be seen. A childhood dream was to have the Scania with the two globular-shaped cement containers.

Is it not true that memories remain with us all our lives and keep the enjoyment of our hobby alive in our adult years? With this in mind, I wish you a lot of fun in reading this issue.

D. Wulhih

Daniel Wietlisbach

#### Laster & Bagger online:

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

# The history of Tekno 1928 – 2018 90 years young

#### by Hans Witte

One can see an organized, historic view of almost all the models Tekno has produced. This year, there are some additional, very beautiful and rare Tekno items from the first period on display. They are on loan from the Danish Tekno historian and avid collector Peter Frandsen. Andreas Siegumfeldt founded Tekno on the 1st of September, 1928, as 'Tekno Dansk Legetøjs Industri'. It is located in Vanlose, a small village near Copenhagen.

He started production in the basement of his house. The first Tekno product was a line of tin soldiers. Other items included tinplate airplanes and wooden toys. In 1934, he launched the 'Tekno Ingenørset,' a series of metal construction sets that was comparable to those from Meccano, Märklin or Stokys. The first tinplate truck appeared in 1937; it was a Bedford Torpedo painted in the Falck color scheme. Over the following years an untold number of Falck vehicles were produced.

Shortly after the end of the Second World War the first model cars were produced and with them Tekno became a player in that market along with Dinky Toys, Corgi, Schuco, Märklin, Gama and others. To produce this line of model cars Tekno started a close cooperation with H. Langes Legetøj,

### Tekno is celebrating its 90th birthday with a party on the Tekno premises so a visit to their museum this year is doubly worthwhile ...

a company specializing in die casting technology. This co-operation lasted from 1949 to 1969. Tekno then had a long working relationship with Termax, another foundry located in the same building. Termax developed tools and molds for many Tekno vehicles including all Mercedes-Benz, Jaguar E-type, Opel and DKW Junior.

The 25th Jubilee was celebrated in 1953. Tekno could look back at a substantial program including cars, trucks, agricultural tractors and machinery. Besides these, cooking pots with a scale, as well as a few wooden houses, garages and cranes were made. The metal construction sets were still very popular and were subsequently manufactured by the Swedish Company, Brio.

Tekno was among the first makers to letter trucks and cars with company logos. The very first was the VW T1 of 1953; a few years later followed the Ford Transit. The very colorful appearance of these models was attractive for children but also appealed to collectors who wanted to have all variations. In 1956, Tekno introduced a gorgeous Swedish coach model that doubled as a piggy bank. The truck collectors were impressed by the Volvo Titan Torpedo. At first it was released as a car transporter semitrailer truck set; later further trailer variations followed and today a very rare item is a Solo truck with tandem axles.

The yearly production of Die-Cast models from Tekno passed the million pieces mark. Tekno was becoming more and more a trading company with a huge selection of models available, but the development, production and assembly was almost exclusively sub-contracted. Since Tekno mainly concentrated on the Scandinavian market, they also took over the distribution of Corgi toys. It was actually a direct competitor but with a 'European' line of products that were a good match to its Tekno cars. The quality of both makers' productds was about equal. Tekno itself exported to Sweden, Germany, the Benelux countries and Switzerland. These became very important markets for Tekno.

In the meantime, Siegumfeldt continued to lead the company single handed which proved to be a big mistake, as the future showed. Because the lions' share of the production was done by other companies, he slowly lost control over his own firm. This became even clearer when Langes Toys was bought out by Kirk in 1958. Kirk was a wealthy family company that is still active today but in the telecommunication sector. Shortly after the takeover, the name Kirk appeared on models. Despite management problems, Tekno was able to keep on being successful.

The 60s heralded the introduction of dozens of new models, among them the Scania-Vabis L75 with BeGe cabin and flat deck. It was followed later by tractors and trucks with sleeper cabins and trailers. A special creation was the fire engine L75/75 with ladder and later the Honest John missile carrier. In 1964 appeared the now very famous Scania-Vabis LS75 with flat deck/tarp and as tractor semitrailer set.

In the middle of the 60s, Tekno produced more than 2 million models per year; 70% were exported with 40% of those going to Sweden. In 1966 came the well-known Scania-Vabis LS with bulk concrete silos lettered for Interconsult Bulk, followed by a tractor with semi-trailer with Gulf lettering. A year later, the mighty Volvo FB88 tractor trailer set and the Scania-Vabis B76 were introduced.

#### The end

Andreas Siegumfeldt died on June the 10th, 1967 at the age of 72 after a short illness. Tekno was then run by his children Egon and Esther. Since the very domineering father never wanted his children to have anything to do with the running of the company, they had great difficulties in guiding it. The problems mounted up and the cash register was empty.

Lange / Kirk continued with the production, but the later-to-befamous Ford D800 appeared with the Kirk logo. The Ford factory in England was very impressed by the model and purchased a substantial part of the production.

Other cars and trucks were adapted so that they could be taken apart easily and re-assembled using only a small screw driver. These models were sold under the 'Export versions' label. The first one was the Mercedes 230 Roadster; later on, the Ford truck and the Volvo FB88 joined this special niche.

Opposing a trend of the late 60s, Tekno never produced any vehicle models with the 'Superfast' or similar friction wheel mechanics. Despite the knowledge that Tekno was going to lose parts of its brand, the producer decided to

#### **Exhibition and celebration**

The Tekno store and the museum are open every Saturday from 10:00 a.m. until 3:00 p.m. There are usually five to ten Old Timers from the BvB collection on display on the ground floor and the almost endless display cases allow visitors to admire the more than 8,000 Tekno models on display. There is also a large collection of Lion Toys.

The 1st of September is the official day of celebration for the 90th anniversary of Tekno. The annual Tekno event is every Pentecost Saturday.

only make high quality, authentic model vehicles. Looking back, this was the moment when the break between toys and collectors' models occurred.

1969 was the end of the co-operation with Langes Toys which actually was controlled by Kirk. Tekno now had serious problems and was unable to pay its bills. But Kirk also had financial problems and decided to confiscate the most attractive Tekno models and to continue selling them to ensure its survival.

In the meantime, Tekno was now almost bankrupt and Ester Siegumfeldt (Her brother unfortunately had problems with alcohol abuse) decided to sell Tekno. As a savior at the last moment Algrema, a Danish Doll clothing manufacturer bought into the company and beginning on June 1st, 1970, the new company's name became Algrema-Tekno. At the same time, Kirk went into liquidation and Algrema bought that company at the end of 1971.

Thanks to some huge efforts, a few exciting new models like the Scania LBS140 were released in April of 1971. A mighty V8 engine could be seen under the tilting cabin and the matching trailer was in red with white tarps. The Volvo F88 appeared as a 4x2 tractor truck with two different trailers, a dumper and a container chassis with two 20-foot containers. New car models were the Volvo 144 and 164. The last real Tekno model was the Volvo 164. Algrema ended the financial support payments and Tekno went bankrupt in 1972. At the banks' request, the remaining parts, molds, machines and tools were stored at Termax where they remained for two years.

#### A rebirth

Part of the molds and machines were bought by the Dutch importer Vanmin in 1974. The new owner wanted to concentrate production on heavy duty trucks because he saw the possibilities for a growing market in promotional models. The brand was now called Tekno Toys in order to make it clear that the models now came from a new owner. The first Dutch Tekno-Model was the Scania LBS140 with a new radiator grille and new headlights. Shortly afterwards followed the Volvo with the wide F89 radiator grille as a truck and trailer set. The Ford D800 was released in a great variety of styles and color schemes.

As in Denmark, Vanmin only oversaw the development of models while production and assembly were farmed out to a shop in Gorinchem. In a very short time, many collectors used the name 'Tekno Holland' to differentiate the new trucks from the 'old' models from Denmark.

The 80s were marked by a strong production expansion and many new models were developed. Tekno kept a close eye on the trucking industry and little by little developed new upper chassis constructions and new semi-trailer styles. One of the most attractive ones was the compact three-axle tank truck for chemical products. The most impressive trailer was probably the huge Gas Tanker in the color scheme for 'BK Gas' that together with the DAF 95 gave an imposing impression.

The word 'Toys' was deemed no longer suitable, so it was dropped in 1989 and the brand reverted to Tekno only.

With the introduction of the Scania 4 series in 1994, a 1:50 model appeared at the same time. Tekno delivered a first limited series of the yellow Topline tractor trailer units which was given out to the press when the new truck was revealed. This meant that Tekno would have had access to the data for the new line of trucks for over a year and thus the model producer had become a supplier to the industry.

#### **Current times**

Vanmin Tekno was sold to Bas van Buuren in 2001 and since then the company has been located in De Lier. BvB is a well-known company in Holland. It has a huge market share in flower garden soil and soil components for substrata used in market gardening of vegetables, flowers and plants. The director of Tekno is Maarten van Buuren. In addition to the offices and warehouse, a Tekno museum was opened in 2003.

When Lion-Toys, another Dutch manufacturer went out of business in 2010, Tekno bought all the remaining stock, a very clever chesslike move because it eliminated a possible competitor.

In the meantime, production and assembly was moved to China. For the assembly of special small and limited series, Tekno has a small plant in the Czech Republic. Today, brands like DAF, Scania, Volvo, Mercedes-Benz and MAN are regular customers at Tekno. In addition to the different types of trucks for each brand there is an impressive program of more than 20 different semi-trailer and trailers available.

In 2018 alone, we can expect to see three new classic truck series: Mack F700, DAF 2800-3300-3600, as well as the DAF 1600 with the famous cab over cabin.

# Volvo FB 89 AB Malte W. Olsson's Akeri Eket Towards the Land of the Moose

by René Tanner

The initials ASG belong to AB Svenska Godsbilcentraler Rederi Svea AB, founded in 1935 in Stockholm by Rederi Svea AB. The creation of ASG was a forward-looking decision at the time. It called for buying up existing freight haulers that had trans-shipment possibilities so ensuring that the sea freight goods transferred to the land routes were in professional hands.

ASG officially started to work on the 1st of July 1935, as a subsidiary of AB Svea. The ASG logo, designed in 1937, was recognized worldwide and remained until the company was sold to Danzas. In 1939, there were already 35 branch offices with 140 participating companies and around 450 vehicles; in 1940, the number of participating companies rose to 200. In 1946, ASG began to transport freight to the rest of Europe. That was augmented by air freight. Freight transport became available in Eastern Europe from 1952 onwards.

By 1959, the Swedish State Railway Company had 100% ownership of ASG. The transportation route of Göteborg–Stockholm–Leningrad–Moskva became a fixed institution from 1969 onwards. In There is hardly another freight hauler that has such a great, even though post-humus, fan base like the Swedish ASG transport company ...

1978, the AB Svenska Godsbilcentraler was re-named as ASG AB and by 1998, ASG was one of the leading enterprises for transport and logistics in Northern Europe. The Swiss Transport Company, Danzas, that had been co-operating with ASG since 1993 took over ASG in 1999 and was then itself bought out by the German Post AG (Deutsche Post AG). The rest is, unfortunately, history and the impressive ASG logo can now only be seen on nicely restored Old-Timers or as a souvenir like such as a neon sign that graces many a collectors' walls.

#### The Volvo F89 tractor-trailer set

Malte W. Olsson's Akeri was one of the many Utrikes Ägare (Internationally active haulers) that did numerous transports outside Sweden with its own fleet. There are wonderful photos of the heavy Volvo FB89 and GB89 as well as Scania LB140 and 141 available. Over and over again, they give model makers inspiration to launch such replicas for the market and it is perhaps not surprising that these models from Tekno as well as WSI are relatively quickly sold out.

One such set from Tekno contained two of the Olsson's fleet, a 141 as a truck and trailer set, commissioned by Atege and my FB89 as a reefer tractor trailer set which I rebuilt later on. I splurged on the set that cost me the proud price of 315 Euros. When the parcel arrived and I joyfully opened the box it felt like having cold water poured over me. The models were quickly put back into the natty box and then deposited on top of my display case as a dust catcher. There they would remain like Sleeping Beauty for a long time until after intensive research on line to find suitable pictures for a re-build I finally accepted the challenge.

The major change for the Volvo was first and foremost to alter it so it would be correct in all (scale) measurements. The F89 had a 17 m vehicle length and was 4.2 m high at the corners. This meant that neither the optics nor the finished product were correct. Because of the widespread axle assembly and the short rear, more room had to be found to make up the correct distance between the trailer's king pin and the cabin rear wall but not to exceed the 15 m length limitation. The solution was to shorten the trailer chassis at the rear by 15 to 20 mm and then to lengthen the front of the unit by the same measurement using suitable plastic sheet stock. Using scratch-built aluminum fenders and replacing the models tires with older Tekno full rubber tires on Lion-Toys rims gave it that 'fully loaded' look.

The typical Briab rear lights end beam was left out completely on the factory model. Instead of it, a 'one-size-fits-all' beam was bolted on, even though Tekno had a correct one in its production line. I made the Briab beam from scratch using plastic sheet stock that I painted white.

The rear lights are made from 3.00 mm diameter punched-out brass discs. They were first painted in the black rim color then, after drying, were painted in silver and finally with transparent red water color. In a second step, silver strips for the indicators were painted on and then filled in with orange wa-

ter color. Small adjustments like the water tank and a stow-away locker came from my scrap box. The spare tire holder and side position lights were added before painting the unit. The cooling structure, because it looked right, and the clean printed-on detail were left alone; only an access ladder to the cooling unit had to be added on.

The tractor truck was relatively easy to dis-assemble. The interior walls that are generally only lightly glued on were removed and painted in a red color in accordance with the time. The interior was upgraded with curtains made from folded paper strips painted grey. The sleeping bag is made from folded masking tape. On the 6x2 chassis I used the same rims and tires; on the front axle I used the newer Tekno rims with the wider tires. The three quarter/one quarter fenders were made from aluminum stock sheet and so too was the rear light holder. The tool boxes, one at the rear and one underneath the battery box, were either made from scratch or found in my spares box. The new front bumper with the typical framed double front lights is a spare set from Bemomodels.nl. Coming also from Bemomodels is the large 600-liter diesel fuel tank augmented with custom-bent supply lines of 0.6 mm brass wire from my well stocked parts department. The two additional front lights in the lower part of the folding down grille were punched out with a 7-hole punch tool. The frames are two slices of aluminum rod ø 3.00 mm and 1.5 mm thickness. They were painted and then filled with two-component glue to represent a diffuser. I preferred the angular light board of the Scania on the Volvo even though on the original there was an elliptical one.

Both of the chassis were painted with RAL 1007 Daffodil in Motip spray cans. The printed-on cabin pattern was re-painted after masking the rest of the cabin extensively because the original paint had a strong orange tint. The RAL 5003 Sapphire Blue I left as it was. Actually, when choosing the colors I found that there is a very wide selection available that are correct because the trucks had different variations of paint.

Since Hans Witte and I regularly exchange models, he applied the final touches. The closing mechanisms at the rear and side doors, very fine air connection at the fifth wheel coupling and the weathering applied with airbrush were done when the Volvos were on a visit with him. Thanks for that, Mate!

# Cat 323 / 320 / 320GC from DM in 1:50 A gang of three

#### by Daniel Wietlisbach

It was only a year ago that here in this space we introduced you to the F-series of the 20t Caterpillar excavators. After the elimination of serial numbering and type designations, the producer simply describes the new excavators as being of 'The Next Generation' and in the future, the year of production will denote which model you are looking at.

The models arrive well protected and completely assembled in the tin. Bob is included along with a set of plastic tweezers to put him in his place. The cabin can be lifted from the front in order to place the figure. The excavators are to scale and have great functionality. While the maximum mining height and transporting measurements are exactly correct, and that is of the greatest importance for display in the showcase, the maximum digging depth is just shy of what it should be.

The pleasantly hefty feel of the machines results from the high metal content of all main components. That is especially true for two different lower chassis that are convincingly modeled. The easy running metal tracks display the fine three bar segments that have a width of 600 mm on the 320GC and 800 mm on the heavier models.

The upper parts of the chassis are a good representation of the

## Amazingly, Diecast Masters released three new excavator models of the 20 t class all at once. They are similar but not exactly alike. We looked for the differences between them ...

original's shape and are almost identical on all three. Only the Premium-Model 323 has two GPS receivers, service hatches, locks and anti-skid safety surfaces integrated into the castings; the very fine and numerous air exhausts are only printed on. Nice to see that all the handholds are made from metal.

The almost identical cabins are metal castings and the glass for them is a single inserted plastic part that leaves enough room for the detailed interior that has been modeled exactly and has a two-color finish. The Cat logo is visible in two locations. The work spotlights and the handhold with rear-view mirror have been separately applied. The window wipers are only a separate part on the 323. The removable roof on the 320 and 323 is half windows.

All three excavators have been given a 5.7 m outrigger arm and a 2.9 m jib. These are appropriately made castings, but the side pieces are separate snug-fitting parts but with a small gap that is hardly noticeable. A work spotlight and four hydraulic lines are an integral part of the arm. While six flexible rubber supply lines reach the outrigger, two of them do not continue as these were probably thought to be used by alternative attachments. The hydraulic cylinders have simulated supply lines and fittings as details.

It is praise worthy that all three models have been equipped with different size shovels. The Cat underlines its leading position of the trio by having a functioning quick changer. However, it takes some courage to push the shovel at the maximum position using soft force to push in the direction of the cabin until it is released. The shovel itself has seven teeth and is nicely engraved.

While the paint job has been cleanly applied, there is a slight difference in color tone on the engine cover which is a plastic part. The lettering goes from logos to small, multi-coloured decals and is first class.

#### The original

To simplify it, the three excavators differ in price and equipment. The 320GC (General Construction) is the best value model. It has a shorter chassis, narrower tracks and weighs only 21.9 t. The 320 with 22.6 to 23.1 t is considered a standard excavator and the 323 with 23.6 to 25 t is a highperformance machine. Both have the same under carriage; the higher weight on the 323 is due mainly to the heavier grade of all single components. The counterweights can be customized by the custo-

mers. The lightest one weighing 4.2 t is available for all three excavators. Counterweights can be

At a glance + Metal content



- + Functionality + Quick changer on the 323
- Hydraulic lines only cast on

ordered: for the 320 a 4.7 t and for the 323 a 5.4 t. The Cat 320 and 323 have a factory built-in weighing system which is supposed to make the loading of dumpers more efficient.

The two smaller excavators are powered with the Cat C4.4 having 90 and 121 kW. The 323 uses the Cat C7.1 engine that also produces 132 kW.

#### **Translation of page 19**

# Tinplate Bulldozer

#### by Robert Bretscher

his funky, gorgeous bulldozer with the nice rounded edges comes from England and was made in the 50s by the world-renowned toy factory of Tri-ang Toys. This clockwork-powered dozer was made mainly from plastic; only the green dozer shield was made from Tri-ang Tinplate. This was a wise forethought since the machine had to withstand the tough play of children in the living room or outside, without any damage. The powerful mechanism allowed it to push a respectable load around. Tri-ang Toys gave the model automatic forwards - backwards drive to make the play value even more attractive. After the clockwork had run down it changed to neu-

## This clever bulldozer was made in England in the 50s by Tri-ang Toys ...

tral. This made it possible to push the model by hand. The maker was also very clever by including easy-going track wheels so as to give the model smooth rolling even though it was clearly only a toy. Another great feature was that the model was held together with screws thus allowing the possibility of taking the dozer apart completely in case of malfunction of the clockwork. This assured the parents who purchased the toy that they could eventually undertake any repairs needed and so restore happy faces to their offspring.

Tri-ang Toys produced not only toy cars for world-wide distribution but also bicycles, pedal push cars (some already with electric motors,) ships and, for girls, furnishings for doll houses complete down to washing machines. The company, founded by the Lines family, already produced their first toys in 1850. The three Lines brothers continued in the toymaking business after the First World War under the Lines Bros. Ltd. name and right away started to use the triangular logo of Triang Toys.

# Kobelco SK500LC-10 from Conrad in 1:50 Classy Excavator

#### by Daniel Wietlisbach

Of course, the model is available now at the Kobelco-Shop and from dealers. It arrives in the well-known, space-saving protective packaging. First and foremost, it impresses with its weight that gives a fine impression of the original that weighs 50 t. The model was produced to scale and has no problem reaching all the maximum working positions effortlessly with its 7.0 m arm and 3.45 m standard issue jib.

Happily, the maker has produced the model with a mechanically adjustable lower chassis which is correct to scale in its width and length. The two drives have been exactly engraved with details and have integrated running and support wheels in the correct numbers. The two upper steps are separately-applied plastic parts. The guide wheels are sprung and the metal track, taken from the standard production program, turns easily and both are a good match for the model.

The upper carriage has the correct proportions of the prototype and is made up from individuallypainted, single parts, which results in very sharp color edges. The large air intake grilles on the cabin side are made from honeycomb-shaped plastic parts; this looks really smart. The bulky engine is detailed with an air filter and hand grip. The safety railings on the side are made from metal. That is also the place

## After being announced first at the Toy Fair, the first production run was available from the Kobelco stand at the Intermat ...

where two of the mirrors have to be attached. A third one goes on the handrails of the cabin.

The cabin itself is made from metal and has flush-fitting plastic glass applied upon which are printed window partitions, rubber gaskets and window wipers. It is enhanced by antenna, spotlight and a massive rock protection cage. Its square shape corresponds to the original. By the way, the little silver dots represent the screw heads. The interior is polychrome and has many details.

Outrigger arm and jib are engraved to replicate the original. No open places can be seen beneath the arm castings as they are all closed off. Especially noteworthy here are the free-standing supply lines, a total of ten. Of those, two even have a smaller diameter then the rest and that goes for the flexible part and the rigid part of the lines. This is a real first! Only the way the connections have been modeled at the cy-

#### At a glance

- + Metal content
- + Functionality
- + Detailing



linders is still open for discussion. Supply lines for alternative tools as well as for the quick changer have been modeled on the arm. All hollow rivets are colored in the very pleasing-to-look-at Kobelco turquoise. Made from a single casting and also nicely detailed is the shovel with five teeth and wear plates.

Paint and lettering are of a standard expected from a 'Made in Germany' model. Overall, the new Kobelco SK500LC-10 leaves nothing to be wished for. However, it awakens some desires, for example, a demolition version with a long arm and in the quality of the Liebherr R960 from the same maker.

#### Kobelco SK500LC-10

The machine has a working weight from 49.9 t to 52.8 t and shovel volumes of 1.4 to 3.43. The excavator can be ordered with the ME or standard outrigger arm and customized with four jibs of different lengths; the shortest one is designed for the ME version. The water-cooled six-cylinder diesel engine produces 271 kW and complies with the exhaust protocol of EU step IV/ Tier 4 Final.

# Bauer GB 50 from Bymo in 1:50 New Design

#### by Daniel Wietlisbach

or years now, the team of Bau- $\Gamma$  er and Bymo has served collectors with high quality, highly specialized civic construction machine models. The newest kid on the block is a model of the hydraulic diaphragm wall grabber-carrier. It comes with a completely assembled mast and fully hose-equipped grabber right out of the box. Included in the box encased within a clear plastic bag are running board, safety railings, work spotlights and two winch drives. They fit into the same rectangular holes as does the key needed to operate them, a very clever solution. The models are true to scale in all the major measurements. Because of its high metal content it is very heavy. Following Bymo's various milling machines, this is the company's very first diaphragm wall grabber.

The lower carriage has been reproduced exactly and the width is prototypically correct in working and transportation positions. The drive units telescope outwards using massive guide beams. They are very stable and do not sag, even in working position. The metal tracks are made up from single segments and look unified. They can be turned, but not very easily.

The mighty upper carriage part is made from white metal castings and shows all the openings, service hatches, locks, anti-skid sur-

## At the Bauer 'in house' fair in Schrobenhausen, the new model of the GB50 was introduced. At the moment, it is available only in the Bauer-Shop ...

faces and air intake grilles at the right places. The access ladder is made from metal and is separately mounted as are the exhausts and winches. The counterweight slabs are made as single parts that are kept exactly in place with little burls that fit indentations but can be taken off for transporting.

The cabin is standardized and along with its glassing and interior was taken from the original MC96. It has been exactly made and is pleasing to look at. The photo-etched roof protection grille is especially nice.

The massive hydraulic cylinders that keep the mast very stable. are equipped with fittings and supply lines. The mast is made from metal and is a good replica of the original. The very fine hose system is made from plastic and the two large hose wheels keep the hose straight as on the original. The

#### At a glance

- + Metal content
- + Functionality
- + Detailing



white guide dollies are made from metal and guarantee that the hose is precision guided.

The diaphragm wall grabber is a jewel in itself. It is made of metal and accordingly is heavy. The two sides of the grabber are exact copies of the prototype. In order to arrest the grabber despite its weight, Bymo has come up with a special solution. The front winch that contains the control cables of the grabber is mounted at the bottom of the mast, has been given an additional stout rope that is kept in place by resistance to the heavy weight of the grabber.

The paint job is clean and sharp and does not hide any detailing. The very detailed lettering is readable, even under a magnifier.

#### **Bauer GB50**

Because of its hose winch system, the 17.3 m high GB50 is capable to reach wall depths of up to 80 m; wall thickness can be varied from 0.4 to 1.5 m. The empty weight without the grabber is between 71 and 83 t and the built-in Cat C9.3 engine produces 261 kW and complies with Tier 4 exhaust norms.

# Actros StreamSpace 2.5 from NZG in 1:50 The wide one

by Daniel Wietlisbach

Human individuality sometimes bears curious fruits. Everybody would like to have 'a special kind' of car and, if possible, there should be none other like it worldwide. The industry is doing its best to fulfill these wishes and it seems sometimes that it is only the sales people who seem to know all the options. Even utility vehicles, at least it seems that way, have to offer such a wide choice.

For the Actros alone, the Mercedes-Benz website offers 'eleven cabin options' in two widths, five roof shapes and three transmission tunnel variations. Taking a closer look then it seems possible that on the Actros, 11 possible cabin variations are possible! In the NZG catalogue there are now up to four different cabins. They were all made up from current masters which allows them to be combined to make up the desired shapes.

But let us not play with numbers any longer, instead let's have a look at the original of the model from NZG. It is the Actros 4x2 Stream-Space 2.5. To be correct, the cabin is designated as 'L cabin Stream-Space, 2.5 meter with level floor.' The 'standing up' height of 1.97 m and the width of 2.5 m give a lot of room and comfort. The driver's cabin is after GigaSpace and BigSpace, the third highest, and is touted to have low fuel consumption. To further expand the Mercedes-Benz Actros line, the somewhat wider 'StreamSpace 2.5' cabin has been added to the option. Seen here on a 4x2 tractor truck chassis ...

#### The model from NZG

For this test drive a sample of the Actros 1851 4x2 tractor truck in a neutral silver color was given to us. The heavy, full metal model portrays the character of the original very well; it comes with all details applied and has been built true to scale.

The very good-looking cabin is made from a single casting and has all the beading and cracks around the door already engraved in it. Many of the details, some of them very tiny, have been separately applied. For example: red position lights in the fenders; door handles; wind deflectors; steps; headlights with glass, as on the original; and the license plate. The very thin and exactly engraved front cooling radiator is made from a matt black plastic casting and has

#### At a glance

- + Perfectly shaped
- + Detailing
- + High quality finish

the chromed star at the right spot. Further along towards the top, window wipers, rear view mirrors, and antennae complete the area around the flush-fitted front windows.

Side and roof wind deflectors, air intake duct, a hand grip and four fixed supply lines are situated behind the cabin.

The interior of the cabin is spray painted in black and also contains the interior furnishings. These have been painted in the original colors and are very detailed. The light colors favor a close-up look and one can see that in the middle of the steering wheel sits the star!

According to the maker's production philosophy, the cabin cannot be tilted and engine and transmission are only hinted at on the underside of the truck. Also explainable as the maker's production philosophy is that the turning radius conforms to that of the original and that model stands very stable on its tires. The 4x2 tractor truck chassis with 3700 mm wheel base is slightly lower at the front; this comes very close to the original. However, not quite up to date is how the tire rims are modeled.

Gear shaft, differential housing, air cushioning and compressed air reservoir can be seen readily from below. The exactly engraved battery box is located in the frame at the rear and there are also two wheels chocks that are yellow on the outside. With the combined tank for fuel and AdBlue as well as a second fuel tank, the Actros should have an impressive range. Of course, the catalytic converter was not forgotten. The paint job is faultless. The lettering is top-notch and reaches its pinnacle with the almost invisible, printed-on Mercedes-Benz logo on the windscreen.

#### Translation of pages 26 – 27

# New «Golden Oldies» from GMTS in 1:50 Old trucks never die

by Daniel Wietlisbach

With his series of 'Golden Oldies, Line 50s' models cast in resin, the very industrious Heinrich Brinkmeier has resurrected pearls of primarily German trucks. Usually, the models are offered in a variety of colors and company paint schemes. They are offered in limited series of between 60 to 120 pieces. That means that one can quickly lose oversight of all the model variations ever produced. This trend was countered recently with the introduction of the GMTS archive on their website. It also lists all the sold-out models.

At the end of 2017, the Berna 5VM with 'automatic dumping' was released for the first time and in the colors of 'Eberhard Bau AG,' plus as Saurer 5DM in alternative colors (see issue 1-2018.) Now, further versions of this classic truck have been delivered. We are showing the two models for 'Welti-Furrer.' They differ mainly by the extra at-

## Since GMTS released the Saurer 5DM models, its name has become a household name among Swiss utility vehicle enthusiasts ...

tached front plate with hitch and the completely new dumping mould for construction work as specified by the Saurer works. If something looks like it sits crookedly on the chassis, then the spare tire is mostly to blame, usually because it was not attached carefully enough. Our tip: carefully turn the spare tire until it comes off, remove extra glue fragments and re-attach tire.

Until 1968, the Welti-Furrer trucks, and many others, were on the road painted in grey because that color was subsidized by the government. The trucks would have been confiscated by the army in case of a war and so there was no need to re-spray confiscated trucks because they already were painted in army grey. After the end of this regulation, roads in Switzerland became more colorful and Welti-Furrer got themselves a new color scheme, which is still current.

#### **Henschel HS 140**

The classic German truck and trailer set was usually made up from a two-axle truck and a threeaxle trailer. And this is exactly the way the new silo set is represented. The cabin, already known from the dumper models, was made suitable for long distance travel by the addition of a 'Swallows nest' at the rear of the truck cabin. Right underneath it are an extra fuel tank and the pump for the loading and unloading of the silo containers. The model is very finely made. Chassis, silo containers and the trailer are completely new. The main components are resin castings that are augmented by many etched parts. The Silo train is very pleasing to look at in its subdued color scheme of 'Bruno Hoyer.' The HS140 was one of the first post-war trucks from Henschel and was introduced in 1950. The type designation was dependent on how much power the engine could produce, 140 hp in this case.

Hoyer, today one of the world's leaders for the transportation of liquid goods in containers, was founded in 1946 as 'Bruno Hoyer Internationale Fachspedition' in Hamburg, Germany. At the end of 1959, Hoyer made the first transport of chemicals and became, like Bertschi AG, a founder of the combined transportation conglomerate in 1969.

#### Translation of pages 28 - 31

# Cat 992B and 776 RD160 from CCM in 1:48 Dream-Team

by Urs Peyer (original) and Daniel Wietlisbach

Paralleling the lack of good news from the mining industry, the number of new models for this sector has dwindled to only a few. However, two new models from CCM's Diecast series bear witness to a time when the development of machines had only one direction: larger, heavier and more powerful.

#### Caterpillar 992B

50 years have passed since Caterpillar introduced the 992A, the first large wheeled loader for the quarry and surface mining use. With a working weight a bit over 60 t and a shovel capacity of 7.6 m<sup>3</sup> it was for the time, a really huge loading machine.

But the 992B followed by 1973. To supply enough power it still used the massive D348 12 cylinIn quick succession CCM delivered first the impressive 776 RD160 Off-Highway dump truck and then the 992B in two versions. Balm for thirsty souls of mining model collectors ...

der engine with a displacement of 29.3 liters. The massive roll-over protection (ROPS) over the cabin was hard to miss. If the wheeled loader should roll-over then this awkward-looking construction was designed to protect the driver.

If the machine was to be used in a quarrying situation, a rock shovel with V shaped cutting edge and a capacity of 7.65 m3 or 13.6 t was available. Considered as an ideal pairing for the 64.3 t 992B was the rigid frame 773A dumper with a loading capacity of 45.4 t launched in 1970. The famous 777A dumper with a 77.1 t capacity was only presented by Caterpillar in 1975. The 992B equipped with a rock shovel was 11.07 m long, 3.94 m wide and 4.5 m high when measured to the ROPS.

In 1977, Caterpillar designed a further milestone in the development of earthmoving equipment with the successor, the 992C. The power output was increased to 690 hp, the working weight reached 90 t and the shovel capacity increased to 9.6 m<sup>3</sup> or 17 t.

#### Caterpillar 776 RD160

Caterpillar released the first rigid frame dumper in 1962. Number 769 had a payload capacity of

31.8t. The larger 773 followed in 1971 with a capacity of 45.4 t. In 1971, Caterpillar added the two models 768B and 772 to their sales program as Off-Highway Tractors. The two tractors with their power output of 415 and 600 hp were designed so that they could pull a diversity of trailers using a specialized coupling mechanism that moved in four directions. For the most part, the trailers were bottom discharge, transporting soil material or coal. Following the saying, 'a horse can pull more than it can carry,' it almost doubled the capacity of these tractor trailer combinations. The 772 was now able to pull a load of 90 t.

The 776 tractor truck that was based on the 777A followed in 1975. The built-in 12-cylinder engine with a displacement of 29.3 liters produced 870 hp. The tractor with a weight of 49 t could haul coal in bottom discharge trailers with capacities of 136 t or 152 m<sup>3</sup>. In order to solve a transportation problem in a Canadian open pit mining situation, Caterpillar contacted the trailer producer Atlas, today Maxter Mining Products, headquartered in Montreal, Canada. The open pit operation was then using a 777A dumping trailer with a capacity of 85 t for a 12 km long trip from mine face to dumping site. Since this was not economically feasible in the long run, Atlas designed the RD160 rear dumper with a capacity of 145 t or 76 m<sup>3</sup> for the 776 tractor.

The dumping procedure is very interesting as the rear axle is also the pivoting point for the dumping bin. The axle is immobilized then the dumping cylinder and the backingup tractor empty the dumping bin. Currently, in Canada, Caterpillar 777F and 776D tractor trucks are running with attached Maxter rear dumpers. They transport ash from a nearby coal-powered power station to a dumping site inside an open pit mine. Caterpillar discontinued the production of the 768C and 772B in 1995. Ten years later, the 776D was also history. If the need arises, it is not a problem to re-vamp a current 777G dumper into a tractor truck.

#### The models

As with the original, CCM was able to use the 777 model (see issue 5-2014) as a starting point. All changes are mainly to the upper parts of the chassis: the king pin; the stop that prevents trailer over steering; the exhaust plant behind the cabin; the protective Egrille over the rear window.

The huge, hefty dumper was made true to scale and is nicely detailed. The only compromise that the maker did make are the three step instead of four step hydraulic cylinder of the original; despite this, the degree of dumping achievable is satisfactory.

The harness with the supply lines is simply guided over the differential of the 776 into an opening in the frame. The rear of the unit looks very plain and has only the printed-on back up lights. The model was produced in a series of 550 pieces. The 992B, however, is a completely newly constructed model. Those who compare it with the 992C (see issue 1-2012) could perhaps be of the opinion that the producer has made a mathematical error. But the huge size difference is correct; the original brought

40% more weight to the scale. That is why the 992B, when put beside it, looks almost dainty.

The wheeled loader has been released in two versions. The Standard has profiled rubber tires and an open engine compartment. The Beadless tire version is for especially heavy-duty work in a quarry situation and has steel plated tires, additional protection grilles as noise suppression in front of the engine air exhausts and re-enforced fenders at the front. Both have the same kind of shovel attached, designed for the toughest conditions. The maximum dumping height cannot be reached, however it is sufficient for simulating loading scenes with the matching dumpers, as the pictures illustrate.

According to the production philosophy of CCM, the model was constructed from a combination of metal, plastic and etched parts. It is finely detailed and stable. It is an everlasting monument in scale for this legendary machine. Contrary to earlier models, CCM did not include openable cabin doors, furthermore, the only printed-on headlights, especially in these dimensions, are just not current any more.

The model was produced in a series of 575 (Standard) and 425 (Beadless) pieces and is already sold out, says the producer.

Color coat and finish are without any faults on both models. The fact that there are no brand name stickers on the dumper is probably because market leader Caterpillar refuses to acknowledge any 'alien made' products. That is why we can be thankful that this model exists at all.

# Mecalac 15MC and 6MDX by Conrad in 1:50 Small but fine

#### by Daniel Wietlisbach

The originals were also first introduced at the Intermat: the new 15MC based on the 15MWR with a working weight of 15.0 t was introduced in 2017. Besides its compact construction, the excavator also excels with its maximum reach of 8.8 m. The maximum achievable depth reach is 5.0 m and the top working height of 7.12 m is just enough to load the most common dump trucks. The minimum working swing radius is only 2.29 m and the engine has 100 kW (135 hp) of power.

The dumpers come from Mecalac Construction Equipment UK, in Coventry. Until the take-over in 2017 they left the production line under the brand name of Terex. The two types of 6MDX and 9MDX have uniquely shaped cabins and the designation denotes the net carrying capacity. The 6MDX, with an empty weight of 4.65 t can carry a 6 t load. The engine produces 55 kW (74 hp). The cabin is designed to enhance the comfort and safety of the driver.

#### Models

Because Conrad and Mecalac have the same company philosophy, the models were produced with a maximum of prototypical functionality. The tracked excavator with the new sideways adjustable out-

### Three new Mecalac models appeared from the regular supplier, Conrad, in time for the Intermat. We introduce two here ...

rigger arm can reach all maximum working positions without any problems. It would be nice to see the whole model industry adopt the new quick changer. This kind of devotion to modeling makes Mecalac model collectors kindly overlook the not-so-high degree of detailing.

The model was made true to scale, is very attractive because of its nice proportions and has an impressive weight. The lower chassis is made from a single casting; of course, all moveable parts like blade, drive and guide wheels have been separately applied. The rubber tracks are connected in the middle and so give the appearance of single segment tracks. The modern upper chassis is made from metal with inserted air intake grille, exhaust and rear lights made from plastic. The almost fully glass-enclosed cabin with the bowed out side and rear

#### At a glance

- + Metal content
- + Functionality
- Lack of detailing



windows is made from a printed-on plastic casting.

No less than 6 hydraulic cylinders with 14 bolts or hollow rivets guarantee the functioning of outrigger arm, jib and bucket! The quickchange attachment functions well because of the insertion of a red spring that invites the user to change the tools. Therefore, a backhoe, front shovel and pallet fork attachment are included with the model.

The new 6MDX compliments the excavator very well and has been made in a similar fashion. The wheels have been very nicely done and the rigid axle is well engraved to be true to the original. The flexible assembly of the articulation in combination with the soft plastic drive train gives the unit great movability. The dumping bin tilts and swivels 90° on both sides; the hydraulic cylinders are only hinted at. The shape of the rear part of the model is excellent and the interior of the cabin as seen through the large, subtly-tinted windows is easy to spot.

Both models are cleanly painted, sharply lettered and fit seamlessly into any Mecalac collection.

# A legend in the Swiss freight hauling business Setz Gütertransport AG

by Erich Urweider

A fter the acquisition of the first and most important customer, Sony Schweiz (Sony Switzerland), Hanspeter Setz found himself back in the office of Sony's General Manager who demanded that his products be transported exclusively by Setz and that Sony's competitors should not be allowed to ship their products with the same trucks. If that was not possible, Sony would switch to another freight hauler.

Sony appreciated the excellent and very friendly service, but they didn't want the competition to be able to benefit from Setz's service. This was praise indeed, but not the kind of request that Setz understood as being necessary for an efficient logistical operation.

What to do? Therefore, Hanspeter Setz approached the umbrella organization of all the Swiss Electronics importers and invited them to an open house tour of his firm. The participating importers were shown around and he presented them with his concept of 'a comprehensive solution for the electronics importing businesses in Switzerland.' He found open minds and ears and indications of interest, however, the managers of the individual firms gave Hanspeter Setz the advice to approach the managers in charge of logistics of their companies since they did not involve themselves directly with the

In the second part of this article we follow the developments from the 70s up to the sale of Setz Gütertransport AG at the end of the last century in 1997 ...

transportation details. The open house was repeated, but this time with the logistics managers. After the introduction of the concept, a short, silent pause occurred until the manager responsible for the Sony operations said that "we are agreed among us that this concept is indeed in everybody's interest. We will continue to ship with Setz Gütertransport AG's environmentally friendly, fully utilized modern and vehicles." With this, the ice was broken and Setz's market share of transporting home electronics reached a respectable 70 to 80% in the 90s.

It became clear that this was the way forward, otherwise future partners would feel left out and that was not the intended goal. Immediately, he started to concentrate in the same way on importers of sports merchandise, photography, home entertainment electronics and pharmaceutical products.

#### Innovation and technology

Hanspeter Setz was always at the leading edge of inventions, as far as technology was concerned. The vehicle fleet was continuously modernized and specialized technological advances were integrated, if available. The fleet had been equipped with radio communication equipment since the 60s. Also, a so-called 'Hill holder,' a pneumatic functioning device that made starting on inclines easier, was then a piece of standard equipment in its vehicles.

#### Numbers and facts until the sale

Year founded Business activities	1911 Cargo transports till 1997;
	after that Oskar Setz AG as Real Estate Company.
Employees	300 until 1997
Vehicles	120, 100 of them belonging to independent operators.
Homepage	wwww.setz.com

At the start of the 70s, Setz, continuing with its modernization trend, began to equip his trucks with an automatic gear train from Allison. This made the trucks quieter and also optimized fuel consumption by the way they were driven. These upgrades were first done by the contracted Scania dealer but later on by a highly specialized Swiss mechanical company. "This cost us quite a few bucks but gave drivers a more relaxing driving environment that making them happy, reduced damages and of course kept staff turn-over very low," said Hanspeter Setz. In the 80s, a flame starting device was built into the truck fleet to eliminate the unwelcome black exhaust clouds resulting from cold starting the engine.

#### **Cleanliness and precision**

Reliability, safety, quality and friendliness were the hallmarks of the company. The customers appreciated these qualities and a renowned circle of companies were glad to avail themselves of their service. Further features were cleanliness and precision, which could be found everywhere. Some of the most memorable events were the legendary 'Pentecost exhibitions.' Also, the 'annual spring cleaning event' that was obligatory for all of the 'Setzlings,' a friendly nickname, as the employees were called. Hanspeter Setz never lost sight of a single person in his employ and always put them front and center. Very generous company dinners and excursions, but also profit sharing and loyalty bonuses were a way to thank his employees. In 1977, Setz employed 300 people and handled over 5,000 freight items per day using 120 vehicles. One hundred of them were independent contractors that were treated just like his own staff. Hanspeter grinned slightly: "But the contract driver had to obey just the same way the Setzlings had to!" They too were to be the friendliest and most helpful workers in the Swiss Transport sector because this differentiated Setz Gütertransport from other companies. "We had such close relationships with our customers that sometimes they would phone us and ask after a specific driver. In which other industry would you find something like that?"

#### The sale in 1997

At the time of the sale, Setz Gütertransport was among the three or four largest and most productive transport companies in the general cargo delivery segment in Switzerland. The transport from A to B was only a part of the business that very early on included storage, order picking and labeling. Later on, even TVs were converted or ski bindings mounted. Quality was not only a slogan but was underlined by continually centralizing operations. In 1992, Setz was the the first logistics and Transport Company to receive the ISO 9001 certification. This was augmented by the ISO 14001, the first environmental certification for a transport company in Europe.

Despite all the innovations and an exceptional name in the market, a strong growth would have been necessary to compete in the future with the main competitors in the general cargo delivery service. Even then it was obvious that sooner or later the only transport companies that could survive would be those having their own network of branches and able to send goods overnight by train between warehouses. Hanspeter Setz: "I had to decide to grow or give in on the long term. I did not want to grow at any price, and to have branches all over Switzerland was never my goal. Besides that, the constant political demands with ever more rules and regulations and completely political left-leaning, green traffic policies, were making life difficult." The conclusion was: 'better small but high quality,' which was more suitable to his personality and the family as a whole. That is why, at the end of 1996, with a heavy heart he decided to sell his Setz Gütertransport to the Swiss Post Office. They were looking, as were many other European post offices, to get into the general cargo delivery business. After the amalgamation, the Swiss Post Office also bought out, Brechtbühl AG; both companies were re-named as PostLogistics AG.

#### Oskar Setz AG

Today, Oskar Setz AG is purely a real estate company, which after the re-structuring of the 60s managed the real estate holdings and rented them out to Setz Gütertransport AG. In 1990, the logistics center in Dintikon was expanded and then enlarged even further in 1998. It was serviced with more than 80 docking ramps. In 1999, Hanspeter Setz bought the Bally factory compound, a heritage protected building, in Dottikon. Today it has around 50 renters. Among them is Astag Schweiz (Astag Switzerland) that operates a training center there. In 2008, a completely new vehicle hall for the Setz museum was built on the Bally compound.

The museum was named "GHM,"

the (German) abbreviation for Gestern-Heute-Morgen (Yesterday-Today-Tomorrow.) On show are trucks and cars from the time of Setz's predecessors until the 1960s. The part named 'Heute' (today) shows a few samples of the current vehicle fleet from the time the company was active. And in the 'Morgen' (tomorrow) section, there are mainly electric vehicles. From Rauch und Lang of 1914 to the newest Tesla from the US. It is not open to the public but groups can visit at pre-arranged times (see the website.)

#### Models in 1:50 scale

In the 70s, Hanspeter Setz commissioned a whole fleet in 1:50 scale from a gifted model builder. Of course, Scania models from Tekno were the basis of the fleet. A Scania 143M 6x4 truck and trailer set with cargo box was released in 1993 as the first model for collectors. Even then, the Swiss Importer Setec HTM was responsible for it. Twenty years later, Setec released the models shown on this page all at the same time; some of them are still available.

**Translation of page 39** 

# Bomag BW 200 from Kaster in 1:24 **Re-issued**

#### by Daniel Wietlisbach

The BW 200 was a milestone in the company history of Bomag. Introduced in 1960, three years after the founding of the company, it was the first self-propelled double vibration roller world-wide. I had a weight of 7 t and a working width of 2,000 mm. Despite its size, it could be used on small construction sites since it was able to turn around on the spot. The four BW rollers were all powered and each had three forward and three reversing gears.

'It has already been made,' will be what some older and well-informed collectors say when they see the model of the Bomag BW 200. Yes, that is, and at the same time, isn't correct. Indeed, with order # 2950, Conrad

## One rarely treats oneself to anything! Bomag did so in 2017 for its 60th Jubilee by treating itself to a complete re-issue of the classic BW 200 ...

produced a model of the BW 200 in 1:24 scale in the 70s. Even then it was a very convincing model which is where the confusion with the reissue comes. The 'new' BW was commissioned by Bomag in 2017 for the firm's 60th jubilee by Kaster.

The producer has made the model historically correct for the times and because of the large scale used, it is very nicely detailed. Many parts have been applied separately. In particular, the Spartan work space of the roller operator has been copied very well. Underneath the engine hood which opens hides a replica of the air-cooled four-cylinder Deutz Diesel Engine.

The only point that can be given a negative critique is the roof cover that has obviously has been copied from the predecessor Conrad model. Then it was technologically impossible to make it any better. Today, however, great advancement and technological possibilities are available to simulate a more realistic looking tarp cover.

# Historical construction site 1960s road construction

#### by Wilfried Schreiber

The Swedish factory of Åkerman Verkstad AB in Eslö was founded in 1890 by Lars Åkerman to produce steam engines, pumps, distilleries and wrought iron items. In 1928 they began making construction machines and in 1939, the first excavators were produced. The excavator, type 752, shown on our construction site, was built about 1968. The machines in this series could be ordered with a variety of engines from different makers and produced between 45 to 55 hp of power; they were about 14 t heavy.

The Menck M90 was produced in the 50s and 60s in Hamburg-Altona. The Menck factory was founded in 1868 by Johann Adolf Menck and Diedrich Alexander as the Hambrock Metal and Boiler works; later it became the Menck machine factory. In addition to its famous blue cable-controlled excavators, it also Upon looking at the results from today's view the photographer was able to capture some interesting items on his film during a further visit to the road construction site ...

produced scraper dozers. The cablecontrolled excavator that had the highest sales figures was the smaller version of the M90, the M60. In 1966, the US construction machine maker Koehring took over the firm and with it also the production of the Menck-Skooper, shown here with a 2.4 m<sup>3</sup> capacity shovel, a unique looking construction.

A little away from the construction site, a Caterpillar D9 Bulldozer is being serviced; it is also from the mid-50s. These dozers, powered by a Cat diesel engine had a good reputation worldwide because of their high torque power and were considered almost indestructible.

#### **Models**

Like the Demag B406 from the previous issue, the heavily modified Menck M90 from NZG is from the workshop of Peter Veicht. It has also been given a newer, stronger brass outrigger arm and a larger clam-shell bucket. The Åkerman excavator with backhoe shovel is a 60s Tekno model modified by the author. The Menck-Skooper is a functional Swedish metal diecast model from ATM (# C08). The D9 from Conrad was upgraded by the writer with a European cabin and metal tracks.

#### 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), Robert Bretscher, Markus Lindner, Urs Peyer (up), Wilfried Schreiber, Remo Stoll, René Tanner, Erich Urweider, Thomas Wilk (tw), Hans Witte (hw)

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

Druck D+L Printpartner GmbH, D-46395 Bocholt

#### Erscheinungsweise / Bezug

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

Das Jahresabo kostet CHF 72.– / € 52.– (Schweiz, Deutschland und Österreich) / € 58.– (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 Fr. 14.– / € 9.50 (CH, D, A) / € 10.50 (übrige Länder).

#### Bankverbindung

Schweiz: PC-Konto 60-155685-9 Deutschland: Postbank Leipzig Konto 332 304 903, BLZ 860 100 90

**Copyright** Nachdruck, Reproduktion oder sonstige Vervielfältigung – auch auszugsweise und auf elektronischen Datenträgern – nur mit schriftlicher Genehmigung des Verlags. Namentlich gekennzeichnete Artikel geben nicht die Meinung der Redaktion wieder.

Haftung Sämtliche Angaben (technische und sonstige Daten, Preise, Namen, Termine u.ä.) ohne Gewähr.

ISSN 2504-0405

Imprint

## When models were more than just collectors' items Cat D6 9U from Ertl

by Thomas Wilk

Ertl, the model maker who made its name by producing agricultural models in Dyersville, Iowa, US, took over the production line of Reuhl. Ertl continued to produce the models for a few years with some small modifications but without the well-known engraved signature of Andy Reuhl on the models.

In the original, the new Cat D6, with its 10 t heavier working weight, was just a shade lighter than the already aged D7 and therefore was a very attractive machine for a variety of uses.

Considering that Caterpillar ceased production of the D6 series in 1959, the model appeared a bit late. But the reality of producing a model often looks very different. If the complex assembly lines have to be altered to produce a new series, a lot of time is required until everything moves smoothly again. At the same time, their own warehouses and dealers around the globe still have a lot of the predecessor model in stock, enough to cover demand. This is why it takes a while until the first completely new machines find their way to the customers. But even at Ertl it was realized that the time of the Caterpillar D6 9U was very quickly drawing to an end. But more about that in another story.

## Ertl launched its beautifully made model of the Caterpillar D69U in 1961, the same year that they discontinued producing the Reuhl Cat D7 ...

Let us now look closer at the nicely detailed and correctly replicated model that also has a very high play value. Like the first Reuhl models, the Ertl Cat D6 is fully functional and therefore many of these models where completely worn out over the years through play in sandboxes. This is why well-preserved bulldozers of this early release from Ertl are very hard to find.

The biggest drawback on these models were the rubber tracks. Imitation track segments made from rubber had raised burls below in order to help guiding the tracks themselves. Even though everything was made very robustly, after a while, wear and tear through play with the model occurred and the natural aging from heat and UV rays contributed to the resulting track breakage and finally, the whole machine broke as well, very much to the chagrin of the young operators and later on the collection community.

The width of the track segments is 21 mm and is exactly the scale equivalent of the 9U model. The larger gauge of 74 inches on the D6 die cast model was correctly modeled with 78 mm. The track carrier has six running wheels like the original but only hinted at. The guide wheels and fully-toothed driving wheel on each side, are excellent guides for the rubber tracks. They prevent slippage or even the possibility of the tracks jumping out. Two support wheels make sure that the track does not sag.

The whole model has been constructed by being divided in two halves lengthwise. This can easily been seen by looking at the pictures. The two abutting edges can be seen running from the radiator top, to the operator's compartment and the diesel fuel tank. Two strong rivets hold the two half shells safely together. The length of the model is 197 mm when measured from the blade to the attachment hitch, the height to the top rim of the exhaust pipe is 108 mm and both are also correct to scale. The width of the blade at 130 mm is only fractionally more than on the original machine. Both track carriers oscillate minimally and are joined at the front by a cross beam.

Two of the most obviously recognizable features of a Cat D6 from the early Ertl production are the separately applied, so called 'bar grille' and the air filter with a preseparator. The models were sold by the Eska marketing organization and therefore are often called the Eska Ertl models. The dozer blade is a Cat 6S blade; '6' stands for the model designation of the matching dozer and 'S' for straight as the blade stands up-right. The metal blade can be operated with a lever located on the right-hand side and can be lifted and lowered step by step using a bell crank and arrested at the desired position. The blade is attached to the dozer with two screws

that go through the blade pusher arms. How the blade was operated, by wire or hydraulics, was left open by the clever constructors. That left young operators free to imagine.

There are only a few parts that are made from rubber, among them the exhaust pipe, the three operating levers, the bench seat and the previously mentioned tracks. The engine is nicely engraved and has several details of the original.

On the co-driver's side are the exhaust manifold, the starter engine with air filter housing, the two oil filters and the mounting cover modeled raised on the block. The knowledgeable viewer can see that it is a six cylinder engine. On the driver's side one can see the large volume injection pump with the corresponding lines, belt pulleys, the exhaust manifold and the starter engine. A further, very well-made detail is the tool box mounted on the running board.

The hitch at the rear also deserves a mention as it can be adjusted to five different positions.

The model feels hefty in the hand weighing 800 g and so is even a tad heavier than the Cat D7 3T1 from Reuhl. One can say that this Caterpillar D6 9U model has been perfectly made and continues the philosophy behind the earlier Reuhl models.

Those who have such a nice, now already 57-year-old model from the beginning of scale models in their display case can be justifiably happy to have a real Golden Oldie in their collection.

Translation of page 45

#### Weite Strassen – laute Laster

By Ralf Weinrauch, 256 pages, ca. 250 pictures, size 21.0 x 24.0 cm, ISBN: 978-3-613-04072-4

Today 'Ostalgia' is a concept that covers many things and sometimes looks at the past through rose-colored glasses because today's reality is less palatable. But this book has another claim: the author visited all remaining and prototypically correctly-restored trucks from 44

years of GDR production. He tracked down the owners and staged all of them in a first-class manner. Sorted and photographed by brands and types, the treasured items were recorded in carefully chosen locations, for example, a dump truck in a gravel pit. Truck brands such as IFA, Framo, Fleischer Busse, Barkas, Granit, Tatra and many more were photographed. On top of that, a separate chapter has been dedicated to all preserved international trucks remaining East Germany in today. (dw)

#### Roadbuilding Construction Equipment

By Edgar Browning, 278 pages, pictures are mainly black and white with a few in color, size 21.5 x 28.0 cm, English language book, soft cover, ISBN 978-0-578-20361-4

For its jubilee issue #10, Edgar Browning has given us something special. The book has 217% more pages than has its #9! It covers highway construction from 1927 to 1979 in the US state of Rhode Island. On the many color pages, one can spot the Poclain RC 200, a hydraulic excavator shown for the first time in the series. The rest of the pages are devoted to everything else that was needed at the time for road construction from the small two-axle concrete mixer up to the Cat 992A wheeled loader or the Bucyrus-Erie 88B cable-operated excavator. These were the times when Mack built not only

trucks but also real dum-

pers. (up)

# A processing plant in 1:50 part V Gravel fresh from the plant

by Markus Lindner

Different grades of gravel in storage bins are an important place to stage wheeled loaders at work. They make for beautiful loading scenes. And lastly, we are doing some landscaping at the edges of the diorama.

#### Gravel product storage bins

Storage bins for interim storage of different grades of gravel are an interesting detail as they make possible the simulation of the loading cycles of wheeled loaders. They can easily be made up from 6 mm thick MDF scraps that are painted in a concrete grey color. Then they are filled with model train ballast in different sizes, however, care has to be taken that all the ballast is the same kind of rock. Alternatively, real rocks, sieved to size can also be used.

## The large project of building a gravel works diorama is drawing slowly to the end ...

#### Landscaping and grass

The Styrodur base, outside of the concreted flat surfaces, is given a coat of modeling plaster. To avoid the white of the plaster showing if the surface is accidently nicked or chipped, we mixed in a few shots of earth brown latex paint. After this was dry, we painted the lot with the earth brown paint and applied a layer of ground cover from sifted surface material. This was glued on by initially giving the surface a coat of white glue.

The 'greening' is achieved with ready-to-use scenery mats. The hand-made products from Frau Eickhoff are used here and are great for use in 1:50 scale. For this Diorama I used exclusively the scenery mat type, Wildwuchs / Gestrüpp /mittelgrün (wild grass and undergrowth/ middle green). This product, and many other materials are available from the Onlineshop www.der-kleine-modelbahnladen. de . Occasionally, it is also available at model construction exhibitions and swap meets in northern Germany.

Real earth and small stone material 'sourced' from an abandoned quarry near my neighborhood was also used.

The ramp to the crusher is also getting a coat of earth, the edge being, as is customary, secured with large boulders. It is getting a more complex rock wall, the making of which will be shown in detail in one of the next installments. And then, we will also look at the interesting topic of how the rock that is being processed on our diorama was 'quarried.'



#### by Remo Stoll

A dream of a tracked loader! It is in very nice condition with a 'flat roof cover' and rear ripping teeth attachment. It is shown off in front of a wonderful mountain range backdrop. After a long time in hibernation, by a stroke of luck, the 20 t dozer was re-activated to move a large amount of soil for the creation of new dumping site.

Recognize the machine? Send us your solution and the exact designation. The contest deadline is the 15th of August, 2018. We will hold a draw to select winners if there are more correct answers than prizes. Please note that only entries with complete address information can be considered so that we can mail the prizes out correctly.

This time the winners will receive one of the following prizes: a Cat 14M3 Grader from Diecast Masters, a Schwing S 43 SX III concrete pump in the 'Weber' colors by NZG, or a Wiedemann enviro tec Super 2000 Sewer pipe cleaner from Conrad.



#### Solution from Trucks & Construction 3-2018



The well-preserved dumper is a Volvo N1027 cab over. The winners are: Wolfgang Werner from Salzgitter (D) who won the Cat 980M from DM; Frédy Eberhard from Domdidier (CH) winning the Hitachi ZW310-6 from Replicars; Mario Schalbetter from Termen (CH) the winner of the Scania R 8x4 with a Palfinger roll-off dumping container from WSI. Congratulations to all the winners!

## New on the market

#### New DAFs and Macks in 1:50

Tekno announced that they will produce two classic DAF series. First will be the DAF 2800/3300/3600 which were made between 1973 and 1988. The first of these models is an early FT 2088 from 1973 to 1978, also known as 'Type 1.' Later in the year we expect to see some of the earlier versions and also one with a SpaceCab. Depending on when they appear, we will look at them in length in future issues. Firstly, we can only describe the model of the DAF 2800 as almost perfect. We found but a few faults. The most obvious one is the missing hub reduction of the rear axle; all 2800 series had this as a standard feature. In the cabin the seats have been swapped with the driver getting the co-driver's seat with the arm rests. Tekno has also used the Scania LB Chassis for the 2800. This is hardly noticeable and is a consequence of the standardized production line. The battery boxes and the very fine spare wheel carrier are authentic details. Just like on the larger DAFs, the cabins' interiors are on the darkish side, due to the smaller windows. We were also allowed to have a first look at the pre-production samples of the DAF 1600, nicknamed 'Kikkerdaf.' This very first DAF with the slanted front cabin was built in large numbers in the 50s and 60s. The picture shows the T 1600 tractor truck as well the A 1600 with flat deck and tarp cover. It will be released with a matching trailer and in the 'Zijderlaan' livery. Both models are still being revised but already show some very nice details like the rims with 8 holes and the photo-etched radiator grille. Chassis and cabin will be made from metal and the use of resin casting for the upper parts of the truck makes it possible to build many different variations. Also the first models of the Mack F700 were released, first of all as a Middle-East container truck and semi-trailer unit from 'Rynart-Trucks.' A detailed introduction will follow soon.

#### Liebherr LTM 1250-5.1 «Jaromin» in 1:50

New from NZG is the very nicely done Liebherr LTM 1250-5.1 in the attractive colors of the crane rental company 'Jaromin.' NZG has changed the model slightly so that mirrors and ballast mounting screws are now packaged separately and have to be added to the model by the purchaser. Models in the 'Jaromin' livery are sparse but despite this, the color scheme on this model is a very nice addition to the already existing ones. Jaromin is located in Oberhausen, Germany, near the Centro Mall, and so it is not surprising that during the construction of the Mall in 1994 all crane work was coordinated by Jaromin. The middle-class sized company was founded in 1982 and is managed by Olaf Jaromin from the second generation of the family. Currently, the fleet is comprised of AT cranes from Liebherr and Demag, up to a carrying capacity of 250 t, as well as mobile construction cranes from Liebherr and Spierings. Because they own a share of the Rhein Ruhr Kran GmbH, they are able to offer mobile cranes on tracks from Spiering for rent. A further high point since 2002 are the Mini-Tracked cranes from Maeda, Jekko and Giraftrack. Jaromin was one of the first who offered these types for rent in Germany. Sennebogen telescoping tracked cranes round off the very substantial palette of machinery on offer. (cb)

#### **Tools from Engcon in 1:50**

From the workshop of the un-tiring Gaz Evans, further attachment tools from Engcon have reached us. They are suitable for 12 to 19 t heavy excavators. Very fine and functionally made is the EC219 tilt rotator-adaptor with the GR20RR grab. It is designed to be used for erecting wooden poles or for track construction. If the grabber is turned upwards, it is possible to attach a shovel using the included quick changer, for example, the CB15 'Cable Bucket' named aptly for the digging of ditches where cables will be laid. Also fitting the quick changer is the R15 ripping tooth attachment, should the construction site earth be somewhat harder. All tool attachments are made from very clean metal castings and are of the usual high quality. In particular, the GR20RR, with its

tiny cylinders and the many hydraulic lines would be hard to beat. Furthermore, the applied decals are almost not recognizable as such.

#### Liebherr L 509 Stereo in 1:50

Stereo in the little wheeled loaders from Liebherr means that besides being articulated, the steering of the rear axle has been synchronized with the front axle. This gives the unit a superb degree of manoevrability. The Conrad model also has this very clever technology. The unit is also capable of reaching the maximum dumping height so that dumper can be loaded in the display case without any problems. The model has been, as one expects, made with lots of metal parts and less plastic, has sufficient detailing, a cleanly applied color coat and fine lettering.

#### Cifa Energya E9 in 1:50

Behind the futuristic design of the Energya-Series from Cifa hides the first Plug-in Hybrid concrete mixer truck. The drum is turned using and electric induction motor and the power comes from

#### **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.

Туре	Scale	Maker	Available from	Infos
Caterpillar 973 in three versions	1:48	CCM	Dealers	www.ccmodels.com
Caterpillar 666 80-Ton-Scraper	1:48	CCM	Dealers	www.ccmodels.com
Caterpillar PR660 rear dump	1:48	CCM	Dealers	www.ccmodels.com
Delmag RH18/200 green/grey	1:50	Conrad	Dealers	www.conrad-modelle.de
Bucher Municipal CityCat 5006 white	1:50	Conrad	Dealers	www.conrad-modelle.de
Zoeller X2 on MAN TGS Euro 6 red	1:50	Conrad	Dealers	www.conrad-modelle.de
Liebherr R920 «Petring»	1:50	Conrad	exclusive	www.fmb-shop.de
Liebherr R922 demolition «Oetjen»	1:50	Conrad	exclusive	www.fmb-shop.de
MAN TGS M 6x2 dumper with crane «kommunal»	1:50	Conrad	exclusive	www.man-shop.eu
MAN TGE «Feuerlöwe»	1:50	Conrad	exclusive	www.man-shop.eu
LiuGong CLG 950E excavator	1:50	China	Dealers	—
LiuGong CLG 8128H wheel loader	1:50	China	Dealers	—
Scania S 6x2 / flatbed «Blue Crown»	1:50	IMC	Dealers	www.imcmodels.eu
Volvo FH04 8x4 / lowloader «Wonico»	1:50	IMC	Dealers	www.imcmodels.eu
Scheuerle Intercombi / windmill adapter «Wiesbauer»	1:50	IMC	Dealers	www.imcmodels.eu
Claas Torion 639-635	1:50	NZG	Dealers	www.nzg.de
Volvo BM LM 841	1:50	SMW	Direkt	www.swedishmodelworks.se
MB Arocs 6x4 / Hiab crane «Black Star Edition»	1:50	Tekno	Dealers	www.tekno.nl
Liebherr LTM 1500-8.1 «Schot»	1:50	WSI	Dealers	www.collector.wsi-models.com
Liebherr LTM 1500-8.1 «Crane Hire LTD»	1:50	WSI	Dealers	www.collector.wsi-models.com
Liebherr LTM 1500-8.1 «Bernard Hunter»	1:50	WSI	Dealers	www.collector.wsi-models.com
Liebherr LTM 1050-3.1 «Skaks»	1:50	WSI	Dealers	www.collector.wsi-models.com
Tadano ATF220G-5 «Davies Crane Hire»	1:50	WSI	Dealers	www.collector.wsi-models.com
Tadano ATF220G-5 «Royal Transport»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania R5 8x4 / Nooteboom Euro-PX «O'Neills»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania S 6x2 / semi lowloader «Rensink»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania Streamline 6x2 / lowloader «Midstol»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania S 6x4 / stone trailer «H. van Toorn & Zn»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania S 6x4 / flatbed trailer «Bring»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania Streamline 8x4 / roll-off bin dumper «Blue Shine»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania Streamline 4x2 / stone trailer «Lampe»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania R 4x2 / semi tipper trailer «TGC Bern»	1:50	WSI	Dealers	www.collector.wsi-models.com
Scania 141 6x2 / stone trailer «T. Klaassen»	1:50	WSI	Dealers	www.collector.wsi-models.com
Volvo FH4 10x4 / lowloader / Dolly «Beelen»	1:50	WSI	Dealers	www.collector.wsi-models.com
Volvo FH4 8x4 / crane / lowloader «SCT Transport»	1:50	WSI	Dealers	www.collector.wsi-models.com
Volvo FMX 8x4 / flat bed / crane «Mediaco»	1:50	WSI	Dealers	www.collector.wsi-models.com
Volvo FH4 8x4 / flatbed / crane «Norrtransport AB»	1:50	WSI	Dealers	www.collector.wsi-models.com
Volvo FH4 8x4 / flatbed / crane «Silvasti»	1:50	WSI	Dealers	www.collector.wsi-models.com
Volvo FMX 10x4 tipper «Volvo»	1:50	WSI	Dealers	www.collector.wsi-models.com
MB Actros MP4 SLT 8x4 / Intercombi «Wasel»	1:50	WSI	Dealers	www.collector.wsi-models.com

a Lithium-Ion battery. This battery can be charged from the integrated generator, or from a wall plug (Plug-in). Energy from the braking of the vehicle is fed back into the system. The loading capacity of the E9 is around 9m3. The Conrad model has as its base the chassis of a MAN TGS Euro 6 and copies the eye-catching design of the concrete mixer. It has been made up from almost all metal parts which have been pre-painted prior to assembling; this technique has led to almost perfect color separation at the edges. The chute at the rear is moveable while the somewhat coarse ladder has been modeled rigidly in its folded-down position.

#### Caterpillar 735B in 1:48

CCM has released a series of 400 pieces of the Cat 735 in the earlier

B version. The die-cast model has a high degree of detailing and this can be seen especially at the articulated joint. There is a real jumble of different kinds of supply lines that ensures adherence to the original; nothing seems to have been missed. The difference between the more affordable, yet made to the same high standard, regular models is indeed in the details. At CCM, the radiator and all air intake grilles are made from very fine photo-etched parts. There are many more moveable parts like cabin doors and engine hood and the lettering, down to very small decals on the engine is extensive. Especially nicely engraved is the dumping bin with rear opening gate, that is plain looking at first glance.

#### Crane pads in 1:50

As loads and of course as supports for cranes and cable-operated excavators, IMC is offering a set of five crane pads. It includes a chain with hooks so that they can be loaded correctly.

#### Kobelco SK140SRLC-5 yellow, in 1:50

In the US, Kobelco excavators are offered in yellow. That is a color that is also liked by many European collectors which is why during the summer, different models in this color will be available in the Kobelco-Shop and from dealers. Indeed, the finely detailed model from Motorart in yellow looks different, even though it is identical to the turquoise one discussed in issue 2-2018.

## **Trucks & Construction**

Sisu M 162 CZT 8x214 Johu's big day

> The temperature gauge outside the kitches window shows -28 degrees Celsius as John house his cop of celler. Today is his hig day --

of collers from the term for rest, quictly closes from and quick formula from collers for term for come down for the term for collers for term for term of the term for term of term for term for term of term for term for term of term for term f

The definition of the second second

Studie & Construction 1 2018

and a second sec

Fully-translated, digital English version of Laster & Bagger magazine.

#### Get your copy today:

For Apple iOS please download our "Laster & Bagger" App from App Store

For Android please get the "Keosk" App from Google play and search for "Trucks & Construction"

For PC please visit keosk.de and search for "Trucks & Construction"

For direct links visit our website www.trucksandconstruction.net Or Facebook www.facebook.com/ trucksandconstruction

## Our partner page

#### **Further Education is important**

Each year our area managers receive further education and this year we visited a number of quarries in Switzerland to learn some lessons from otherss. On the program were stops at Bernese Sandstone, Jura limesto-

ne and especially, a visit to the Juracement quarry. We were interested to watch different quarrying methods and the machinery used, from the very simple quarry operation using diamond-studded sawing machines up to large surface area mining with large milling cutter machines. This exercise greatly increased our knowledge of quarrying techniques.

#### Hydraulic engineering – Eberhard

The Canton of Solothurn has set its goal with the slogan: 'More safety – more nature – more recreation.' Accordingly, since 2016, the project of flood protection and re-vitalization of the river Emme from the weir at Biberist all the way to the confluence with the Aare in Zuchwil has been under way. Responsible for the contractors' lots 4, 5 and 6, with a total length of 4.9 km, is the ARGE Emme 2017 made up from Marti AG, Gebr. Jetzer AG, wsb ag and Eberhard Bau AG. To increase the flow capacity to 650 m<sup>3</sup>/s in case of 'the flood of the century' event, the width of the waterway was increased from 25 to a maximum of 40 m. To achieve this, large amounts of material containing mainly gravel had to be moved. On both sides of the Emme River new dams are being installed. Embankment reinforcements are being renewed and new hydraulic-block-covered fish ramps are being installed to facilitate fish migration in the river. The delivery of the 80,000 hydraulic construction stones necessary is done mainly by rail. The plan is to conclude the work by the end of 2020.

## News in brief

#### MAN over length-trucks in Finland

Finland is the European leader when it comes to sizes and weights allowed for freight traffic. No other European country allows such long and heavy truck and trailer combos. Among the reasons given is the argument that these regulations will contribute to the reduction of CO2 gases and also increase transportation efficiency. The challenge to come up with a design to maximize the allowable size and measurements was taken up by the Kesko-Group.

Since March of this year, two new MAN TGX 35.580s have been added to the 'rich-on-traditions' company's 'Ecotruck' fleet. The 31 m long 'trains' made up from an 8x4 truck, Dolly and a four-axle semi-trailer service the stores in the western part of the country. The two MANs are equipped with the D38 Euro 6c six-cylinder engine. (dw)

#### Volvo rigid frame dumper

Translation of pages 56 – 57

During the 2018 Volvo Days in Eskilstuna, Sweden, Volvo presented two new dumping trucks, the R70D and R100E in the 90 t class for the first time to the international public. The R70D with a 65 t load capacity is based on the TR70 from Terex, while the R100E in the 90 t class is a new development. Visually, the new V-shaped dumping bin makes it easy to recognize the R100E, but the R70D still uses the flat bottom bin from Terex. The MTU 2000TA with a net power output of 511 kW (695 hp) is used on the R70D and a R100E uses a Cummins QST30 engine producing 726kW (987 hp). Since the engines are only compliant to Tier 2 exhaust protocols, both dumpers are not currently available for the European Market. (up)

#### Caterpillar 793 and 797 dump truck

Caterpillar was able to celebrate two milestones in its dumping truck production: the 5,000th 793 and 1,000th 797. The first 793 left the factory assembly line in Decatur, Illinois in 1991. The five generations of 793s are the most often sold dumpers of the 227 mt class. The 793 with the most operating hours is currently running in Arizona: 173,000 hrs.

The 797F with a carrying capacity of 400 sht (363 mt) is currently still the world's largest mechanically powered dump truck. Since 1999 when the first 797 began operation in the Canadian oil sands mines, it has clocked 130,000 hours of operation and is still hard at work! World-wide, Caterpillar has sold double the number of dumpers in the 400 sht class than all its competitors combined. (up)

#### 25 Years Volvo FH

Volvo introduced the FH series first in 1993 and during the next quarter century developed it into to one of the most successful lines of trucks over all. During the course of this year, the one millionth vehicle of this series will be on the road. For this occasion, an issue of the FH and FH16 in the '25 year' special edition livery of silver-grey and red has been made available. The look can best be described as a mixture of tradition and modern. The orangesilver stripes hint at the beginnings of the FH-Line and the red pays homage to the first driver's cabin of 1993. And of course, the design is continued in the cabin interior where many of the details are accentuated with orange. (dw)

#### 500 DAF XF or Girteka

Once again, DAF can note a large order in their books. This time, 500 new XF trucks are going to the internationally-active freight hauler Girteka Logistics in Lithuania. Their fleet is made up of 4,400 trucks with 4,700 semi-trailers that are operated by 9,000 drivers. The decision to go with DAF was made because of the low operating costs and high fuel efficiencies. The tractor truck units will be powered by the 12.9-liter Paccar MX-13 engines producing 365 kW (480 hp) and the TraXon automatic gear system. It is expected that they will be delivered during the second half of 2018. (dw)

#### Spectacular bridge de-construction

During the enlargement construction of the Nordring highway around Zurich, from four to six lanes, a few of the bridges needed to be replaced. After the removal of the bridges in the spring of 2017, the new segments for the four bridges were installed in June 2018 for the direction towards Winterthur. For the de-construction work on the bridges, a Liebherr LR 1750/2 from Fanger Kran AG was in use. The 1,100 t behemoth was rigged with an 84 m long main outrigger arm and a 38.5m derrick arm. It took 12 all-night shifts, but the crane had to change position only once to remove the bridges that had been divided into 25 segments. Overall, 2,893 t of bridge was lifted and deposited on the works yard. During the day shift, a 100 t excavator from Eberhard Bau AG crushed and shredded the removed bridge segments. (up)