**Meccano Nieuws 42.2 – Summer 2024**

**Page 02**

**Photo frontpage**:

*Peter Duijff’s Portal Crane after all the lights went out, proudly glowing on the portal crane day.*

**Page 02**

**From the editor**

It was another exciting time to put together this Meccano Nieuws. Until the very last moment, information came in that really needed to be included (see page 22).

Once again the call to give the Funda chair a new home, and thus save the chair from destruction (see page 4). This had already been discussed during the AGM during the survey. Hopefully someone here an lend a helping hand.

This edition once again attemps to collect a diversity of articles. Unfortunately, some articles did not appear properly on the page, meaning that an article only starts and ends halfway through the page. In my opinion, these texts could not be shortened, so this time it is just a fact.

Due to a cold, we were unable to attend Peter Duijff’s portal crane day. Fortunately, he was willing to write a beautiful story about this himself, with Janneke. See the beautiful results of this efforts from page 14.

The editor hopes to offer you some nice reading hours with this copy of Meccano Nieuws.

*Your editor,*

*Bea Brouwer*

**Page 04**

**Looking for a new home**

In Harderwijk I, Bea, was approached by Rolf Roozeboom and Karst Quast. As is known, see MN40.1, they were the saviors of the now well-known Funda Chair.

This has been in the communal hall in the apartment complex of Karst since the rescue. However, it must be removed by order of the fire department; the chair should no longer be here!

CALL: Who has a place for this Funda chair? You can report to the editors. Hopefully the chair can once again be saved from destruction.

**Pages 05-06**

**Visiting Charles and Greetje Spierdijk**

**Or: part 3 of the Fokker Technical Construction kit**

*Text & Photo: Wilbert Swinkels*

As you may know, Timothy Edwards from England has been developing a database on metal building systems for years. The counter has now passed 1.200 and in the Netherlands alone there have been no fewer than 40 manufacturers of metal construction sets over the years! The result of research can be found on the following website: https://www.meccanoindex.co.uk. I noticed that information about the Fokker technical kit was missing. Our (some former) members Henk van de Woerd, Charles Spierdijk and Jan Ringnalda have already paid extensive attention to the Fokker Technical Construction Box (FTB) in MN 22.4 page 12 (part 1) and MN 23.2 pages 14 and 15 (part 2).

The writer of this article therefore set himself the task of collecting more information for the Meccano index and in the next article you will read the account of his search. For those who do not have the aforementioned numbers of the MN at hand, here is a brief history.

*Fokker is under construction again in 1948. The majority of the tools and workshops have been ‘on their way’ to Germany by inland shipping, have been recovered and are being rebuilt. The staff association was founded the year before and is very active. During summer time, one comes to the conclusion that organizing a Sinterklaas party for the young children between 6 and 12 years old of the employees would be a good task. About 150 boys and girls are eligible for this. The management has promised its cooperation. In addition to sewing boxes, blocks and cranes, homemade metal construction boxes are also made. Many employees contributed and production took place after working hours. It must have taken weeks, if not months, to complete this job. Just before Sinterklaas Day [December 5, BB] in 1948, the Fokker party started with the children and their parents. The management had made chocolate milk and cookies available at a time of scarcity and food stamps.*

*The location was the Fokker staff canteen, which was decorated for the occasion in a fairytale setting. It was perhaps the most beautiful Sinterklaas party during Fokker’s existence.*

Back to the present. After email communication with various people within the MGN, Charles Spierdijk, editor-in-chief of the ‘Meccano Nieuws’ for many years, turned out to be in possession of an FTB. After contacting Greetje Spierdijk by telephone, an appointment at their home was quickly made. This happened and at the beginning of May 2023 I was neatly met by Charles, who stood in the opening of the front door. After a warm welcome by Charles upon arrival, I was immediately introduced to Greetje, Charles’ wife.

During a tour of the house on the way to the living room, a collage of carefully framed photographs of posterity caught my eye. These were family photos of important and lively events involving their children, where the people involved are very dear to you. Although the images are snapshots of the past, the collage looks like a landscape of lasting memory.

Once settled in the living room, Greetje served the coffee and Charles started talking cheerfully about the FTB. In his memory, we have to go back 20 years, he received the FTB from the late member Hijmen Stronkhorst. Hijmen had once acquired the FTB under the assumption that it was Meccano. Once in his possession, he realized that it was not the original Meccano after all and did not actually want to build with it. The late member Henk van de Woerd, co-writer of the article in MN 22.4, was familiar with the history of the FTB as a former Fokker employee, but Charles could not remember whether Henk actually owned such a kit.

After coffee, Charles took out the FTB. As far as I could tell, it appears to be a complete box. To my surprise, after further analysis, the manual turned out to be an extract from a pre-war Märklin Metal manual.

But it remains special, especially considering the fact that only approximately 20 construction sets were made.

Charles was pleasantly surprised that after so many years someone inquired about the FTB. I indicated my intentions, namely to document the box in detail and submit the results to the Meccano index, which is accessible to everyone. Charles then spontaneously decided to donate the FTB to me. Although it was not the intention of my visit, I accepted the donation with thanksgiving. I see myself more as a patron of this special piece of Fokker heritage.

The working drawings of all parts later surfaced after a search by Charles with the help of Greetje, so that it could be investigated to what extent the box was complete. The result of the research and all documents, including drawings of all parts, can be found on the Timothy Edwards website.

At the end of the afternoon it was time to leave again. In the run-up to our farewell, my eye fell once more on the family photos mentioned earlier and my thoughts wandered to the Fokker children. The photos undeniably reminded me of the unconditional love that parents have for their children. In a period when humanity has shown its darkest side, the Fokker party must have been a real relief and a lot of joy for both parents and children. I don’t know about you, but I would have loved to have been there.

**Pages 06-08**

A Meccano meeting with: Harrie Meeusen

*Text: Bea Brouwer & Photos: Bea Brouwer & Harrie Meeusen*

On February 16, we (Pim and Bea) travelled in the evening to Heteren, a village located in the province of Gelderland, northwest of Nijmegen and southwest of Arnhem. This Meccano meeting has a dual purpose, firstly a further Meccano introduction and secondly getting to know the VirtualMEC expert.

We arrive at the specified address in the dark in a swampy landscape, where we are promptly stuck in the opposite meadow due to heavy rainfall. Fortunately, with the help of our appointment, we are pulled out of the mud and 25 minutes later we can officially start our visit with coffee and tea and delicious homemade cake. We present to you: Harrie Meeusen.

**Introduction**

Harrie was born in Winterswijk in 1958 and lived there until he was 27. He married Dorine in November 1984, so this year marks 40 years of marriage. Because of his work they moved to Zevenaar. They have three children; two daughters and a son. Two years ago, at the back of one of the daughter’s yards in Heteren, they started building a beautiful chalet with lots of space. During construction they lived in a caravan with an awning for about one year. It has become a beautiful construction that they both clearly enjoy.

**Education**

After MAVO [Dutch type of secondary education, BB], Harrie started studying mechanical engineering at the MTS [Secondairy Technical School, BB]. He practiced milling a lot at school, but the computer-controlled programs are (still) weak. During his working period, Harrie learned the most, such as programming CNC punching machines and laser cutting machines and later in his career also 3D drawing.

**Employment history**

Harrie has ‘worn out’ some bosses. His first job from 1980 was at Sorba in Winterswijk. There he was a punching machine programmer. This company bought the first laser cutting machine in the Netherlands, 500 Watt, but there were no computer programs for this. So he had to manually make a ‘result’ based on the customer’s drawing, or create a punching program. The important question was which holes should be punched. For example, a punched tape of 300 meters had to be made, which meant putting it together in time and putting a new punch roll on it. It was hard work here, pretty much 24/7.

He has worked with laser programs and CNC-controlled machines. *CNC: Computer Numerical Control, concerns the computer-controlled control of machine tools, usually in machining technology, that must quickly and accurately produce parts in metal, plastic or wood. These pieces can be made using a milling machine. Nowadays there are also many machines that can handle sheet material, such as laser cutting and punching machines, as well as lasering 3D tubes and press brakes to chamfer the sheet blanks.*

He learned from drawing to laser plate cutting at Sorba, among others. The sheet metal workers on the shop floor were regularly consulted, and he also learned a lot from them.

After 1985, Harrie worked at ASM-FICO (subsidiary of ASM International) in Herwen, a chip industry with tools for, for example, ASML in Veldhoven.

He then worked at ‘Jansen Metaalwerking’ in Zevenaar, from 1990-1995, for sheet metal work with a CAD system and also programming a laser cutting machine. The Jansen company was the main supplier of sheet metal for ASM-FICO, also supplied ASML and for X-ray equipment, to Philips, medicine-related companies, and the like. Everything was drawn in 3D with Pro-Engineer, although producing a result was a challenge. Harrie was put to the test here; the sheet metal had to be polished on both sides, it had to be welded, for a machine in which silicon disks were vapor-deposited for the computer chips. There were fun projects that were worked on.

From 1995-2000 he worked at Kaak in Terborg, as a laser cutting machine programmer.

Harrie then returned to the Jansen company, which unfortunately went bankrupts in 1998. So Harrie started working as an oven builder for a few years at Probat, a company that produces bakery ovens. At the company JAZO Zevenaar BV, as of 2008, he resumed the drawing program ‘Pro-Engineer’ for fan systems. Think of Arnhem Station (look at the grilles), doors on the 2nd *Maasvlakte*, the tunnel box of the A14 (grid walls of 50 meters in length, with many specifications, for example grounding system and emergency exits).

From November 2016 to the present, Harrie works at the company Kroftman Structures BV in Babberich near Zevenaar, responsible for self-produced storage halls: light weight, steel plate in C-shape, whether of not combined into H-shape, insulated, not insulated, possibly including doors – determined by the customer. The largest hall measures 12 x 43 meters and 4 meters of gutter height with a gable roof. It is a modular event with interesting challenges over and over again.

The intention is that he will stop working on January 1, 2026.

**Meccano**

His brother received a box of Temsi when he was younger and Harrie later took it over. Harrie enjoyed looking at all those beautiful (Meccano) pictures. During his school years, from about the age of 14 to 18, he collected waste paper to earn some extra money. At the time it was very lucrative; it once even fetched Fl 0.25 per kilo!

In Winterswijk he once bought box 5X from Meccano, with two gears, which offered perspective for building. He has always bought something extra with the money from the waste paper.

He made models for the supplier to place in the shop window. Much has been built in accordance with photos, using various techniques. For example, Meccano engine in combination with Fischertechnik. After school, however, things became diluted.

Introductions to René Mikkers and Co Stevens have brought Meccano back into his life. In 1992, with MGN’s 10th anniversary, Harrie became a member of MGN. Some models he built are: a harbour crane (from box 9), the Coletippler (box 10), derrick crane, trucks, shovel, and much more.

**Dickano**

As early as 1978, Harrie made a caterpillar track himself, from a large aluminum U-profile and copper connecting links. Made a 6-sided aluminum drive wheel myself (was round) on a milling machine with a 4 mm hole in it. Furthermore, an axle within an axle is self-made, resulting in left and right rotating movements.

Harrie made a homemade variant of Meccano for his youngest son Dick; the so-called Dickano. With M5 screws, 15 mm hole spacing, everything in stainless steel, and also a gear ring, for example. Together they built a crane: the Dickano crane.

**VirtualMEC**

In 2005, Harrie was able to arrange for MGN members to register for a license for VirtualMEC. It is a 3D CAD application for drawing Meccano models with about 750 Meccano parts.

The special price at the time was €100 instead of the original €200, which was very interesting and around 25 licenses were purchased. A license was also purchased for the Meccano Guild, as a result of which the drawing team was born: Cor Stevens (†) and Harrie Meeusen were busy with it.

Nowadays there is no longer any update and the program can be downloaded for free. Harrie still has the role of source of information with his knowledge. If you have a question about VirtualMEC, you can contact Harrie via our MGN website.

**Future**

Harrie has recently built a beautiful crane and he is also busy drawing in VirtualMEC (you will be informed about this in the future). Last year they cycled 850 km around the IJsselmeer in three weeks; that was quite enjoyable. But there are no real plans for the future yet.

Thank you Harrie for your hospitality and for allowing us to peek into your private life.

**Page 09**

**Goes, Februari 24 & 25, 2024**

*Text & Photos: Bea Brouwer*

It is unbelievable that so many people always come to this Model Building Show that has been organized for years. So many models are shown, from trains to trucks, countless tools, everything to change things into the desired colour, boats and planes, lots of Lego, but of course naturally also Meccano. The Meccano Gilde Nederland is represented by 6 people with a variety of models.

Below is a small impression.

***Photos page 9:***

***Top Left****: Erik Beek shows a young man how the ball whisk works.*

***Top Middle Left****: The merry-go-round of the Mignon brand turns happily in circles, according to Erik Beek.*

***Top Middle Right****: Jan Bressinck’s polishing machine is working overtime today.*

***Top Right****: Lamp by Henri Goovaerts, because sometimes something simply needs to be highlighted.*

***Top Left****: ‘Improved Fifteen Ton Crane’, by Jan Bressinck, an impressive model.*

***Top Right****: This dinosaur is from the brand SES Creative. It is an affordable gift for a children’s birthday, for example. However, only one model can be built per box, according to Geert Vanhove.*

*Bottom Left: Geert proudly poses with his 25 ton crane truck.*

*Bottom Right: Leo van de Herik poses with his Lego in the other hall. Let’s just assume that the M stands for Meccano instead of Mario.*

**Pages 10-11**

**Sassenheim, March 9, 2024**

*Text: Bea Brouwer & Photos: Bea Brouwer & Jan de Goede*

The gathering in Sassenheim was once again a great success, a beautiful day. Around noon we were heard live on the local broadcaster, a reporter from ‘blik op Lisse’ was present and very interested. This article contains many photos, take a look at <https://tinyurl.com/399nktun>

Not only did the residents of the ‘Sint-Bernardus’ residential center enjoy it, but the exhibitors present also had a great time. Look at some of the models they brought and enjoy (or again enjoy).

***Photos page 10:***

***Top Left and Top Middle****: Ben van den Hoogen proudly shows his car in yellow-blue with white Meccano from the 1970s. It is his own design, which he now has time for after his retirement. Everything still needs to be put on a scaffold, the gearbox still needs to be connected, the bench still needs to be installed, he wants to be able to operate everything… In short, there is still a lot to be done.*

***Top Middle Below****: Differential by Bertus Jongste.*

***Bottom Left 3x****: Sibo de Jong brought his 4-4-0 Passenger Locomotive and Tender, according to Model 10.12.*

***Bottom Right Top****: Dinosaur by Henk Verhoef.*

***Bottom Right Below****: Ger Voois came with the truck. Note the detail on the passenger door, where it says ‘Voois’.*

***Photos page 11:***

***Top****: Pim Brouwer built a whole series of train sets. In the background on the right is an abstract ‘painting’ by Bea Brouwer.*

***Middle Left 2x****: This mobile crane is a new project by René Muijen, according to his own design. After advice from Bertus Jongste, the caterpillar tracks still need to be adjusted, because they should touch the ground.*

***Top Middle****: Cor Albers’ daughter plays drums, so a drum set was built. Next to it there was a piano that caused ‘pinging’ all day long.*

***Middle Right****: Hans de Graaf smiles looking through his Lemniscaat Trestle Steam Engine 1833.*

***Bottom Left****: Crane Nellen 1965 with a workload of 10k, from manufacturer ‘Nellen’, according to Eugene Bonefaas.*

***Bottom Middle and Right****: Andries de Weerd brought a guest, Wouter Neut, who brought three different clocks. Shown is one of the clocks as he designed it himself, with a unique second-hand! The photo on the right shows a little more detail.*

**Page 12**

Ede Model Show Europe, March 16, 2024

*Text: Karst Quast & Photos: Jan de Goede*

Compared to the previous 31 years, 11 of which were in Ede, not much has changed. The design of only allowing models of earth-moving vehicles, cranes and trucks makes it a very special exhibition. All visitors and traders have the same background that related to this target group, everyone has more or less an understanding of the subject. People are more likely to ask about a Meccano model: “Was it built based on crane model X” and hardly “Is it still for sale?”. And then very technical conversations arise between the model owners and the viewers about the details.

The Meccano builders were represented with 12 meters of tables and two large crane with a base. You could see Fokke’s crane from afar. There was also a large ‘Scherlast Truck Crane’ by Ulrich Peters, made entirely of Eitech. Renë Muijen brought a Jeep and a Backhoe under construction. Bertus Jonges had made a beautiful material handling crane and brought one of his cranes with him, built with Constructor. Peter Jonges had brought the huge lifting block of his now dismantled giant crane, Henri Goovaerts had, among other things, displayed his modern Blocksetter ‘Maasvlakte’ model. Geert Vanhove brought his special crane models, one of which was built with Cruson. Many different metal construction brands were already represented. Alex Teunissen had further rebuilt the JCB Backhoe tractor. In addition to a few models, Frans Dullemeijer had a demonstrative stand with an explanation about controlling motors with block pulsation. Jan and Ans de Goede brought various beautiful models to the table, Chris Blitz let the children experience wonderful moments using his Blocksetter. I had built a backhoe myself that was not motorized, the beautifully shaped back looked exactly like the back of Herbert van Schaik’s backhoe, but it could work completely.

Much of the model show is about the same every year, but every year there are always beautiful and more modern models. The number of meters of tables also remains the same, over a kilometre of tables!

About 750 traders and exhibitors display their merchandise and models. The number of visitors was slightly over 2000 and slightly more than in 2023. You quickly look at what is the most beautiful or largest, the last was of course a Meccano crane. The best part is of course a matter of taste. The biggest?

The scale in which a model is built is also very important, the birthday cake in honour of the 30th edition of the ‘Schrauber und Sammler’ magazine, in a scale 1 to 1, was a great success and remains a model to use. During the show, a 1 to 2 scale model suddenly arrived! This made me pause for a moment, it was a huge model of a 10 x 4 Ginaf truck. This arrived under his own power with a driver in the cab. It remains a nice one-day-event; try to be there sometime!!

***Photos page 12:***

***Top Left*** *: Overview of the Meccano builders.*

***Top Middle****: Alex Teunissen with a jeep and the text: ‘He can do his homework when he’s finished building his Meccano'.*

***Right****: Peter Jonges’ lifting block.*

***Bottom Left & Middle****: Chris Blitz’s Blocksetter that kept the children entertained.*

**Page 13**

**Documentation Center MGN**

*Text: Jan de Vries*

**AGM**

As indicated during the AGM, I was stuck in a traffic jam and Bea Brouwer gave an impromptu story. We do not want to withhold the complete story from you.

Not much will change for your use of the documentation center after the move to the attic of Pim and Bea Brouwer in Dongen.

Jan Ringnalda will remain the intermediate station for users of the documentation center for as long as he wishes, for people with technical questions, for mediation in searching for information for those who do not have a computer or cannot use one, as well as for passing on desired documents. You can continue as usual in this area.

You can preferably ask your questions by email to documentatie@meccanogilde.nl or by telephone 0031 (0)30-229 1942.

**New arrangement**

All documents have now been moved to Dongen and the most and most important of them have been stored in the attic by Pim Brouwer according to a new arrangement. Books, foreign magazines, and Model Plans are ready and included in an overview. You can view these overviews in Excel spreadsheets via the MGN website. In any case, one copy of English and Dutch documents is kept.

What remains of documents now consists of 12 crates with mainly leaflets in various languages. The question is whether all of that shout be kept or given another destination. Availability of this material on foreign websites plays a major role in this. This will be investigated in the coming months.

The decision was made not to come up with a search system ourselves. That would be very labor intensive and also quite unnecessary, because extensive search options for magazines, Model Plans, etc. are already available on various foreign websites. The MGN website contains many links to those websites in a recently updated and almost complete overview.

If you have found documents this way, you can often print or download them yourself from those websites, or you can contact the MGN documentation center.

To support your search for information, I try to describe my experience with searching for Meccano information in a short article in MN every quarter.

**‘Meccano Nieuws’**

The episodes of Meccano Nieuws 1982-2018, so up to 5 years ago, can now be read and downloaded via the MGN website. A volume is added every year.

Working group member Gerhard Riesthuis is currently compiling the registers for the years after 1998, with the aim that with a little help from others, completion can take place around October 2024.

**Photo archive**

The opening up of the photo archive, in principle a next project within the documentation center, has not yet started. Given the size, this requires an even greater time investment than printed documents. For the time being, the working group is of the opinion that this project will be overtaken by time, and it is pointless to spend too much time on it.

**Website**

The MGN website, faithfully and expertly maintained by Kees Trommel for years, has already been mentioned here a few times and is an indispensable tool for searching for information. All relevant information about the documentation center now or in the near future can be found here.

Recent additions: order lists from the CAMN for replenishing your parts, updating links to other Meccano websites, the issues of ‘Meccano Nieuws’, the inventory lists of books. Foreign magazines and Model Plans, which are included in the documentation center.

It is in your interest to visit the website regularly to stay informed of new developments.

**Workgroup**

The Documentation Working Group is coordinated by Bea Brouwer and also consists of Pim Brouwer, Gerhard Riesthuis and Jan de Vries.

**Finally**

We owe many thanks to Peter Duijff, who had to resign as chairman of the working group for health reasons. What he put on paper around 2022 as a starting point for the further development of the documentation center still forms a guideline for the working group. His input is sorely missed.

The same thanks go to Jan Ringnalda, the current documentation center would have been difficult to get off the ground without his many years of dedication.

**Pages 14-17**

**Peters Gantry Crane**

**A generous look back at the living room gatherings of March 23.**

*Text and photos: Peter Duijff & Janneke van der Veer*

**From harbour crane to gantry crane**

In the early 1980s, Peter Duijff (Alkmaar, 1953) was a mechanical engineering teacher in Leeuwarden. In his scarce free time, he built the harbour crane he had in mind: a crane that was higher than himself, namely 1.95 meters at the top. Henk Elema spoke in his report in Meccano Nieuws about a hobby exhibition in the ‘Frieslandhal’ about a fantasy crane. The crane was placed in the staff room in such a way that students passing by could see the crane. Elema was right: all the Meccano colours mixed together, everything worked, but there was no perfection.

When I changed work and home, the crane was demolished with the firm intention to build a better, different crane: a gantry crane. No coincidence, because while studying mechanical engineering, Peter Duijff had read an article in the Polytechnic Magazine (May 1977) about an enormous gantry crane under construction for unloading and loading bulk and general cargo in Amsterdam’s Westhaven.

This crane still exists, just look at <https://www.hesinternational.eu/en/terminals/hes-amsterdam> No less than 90 meters high and with the lift (the clap) down, the rail on which the cat rides up and down is 145 meters long.

Good idea, a new crane, but there was no time for hours of undisturbed construction in a budding family. It is sufficient to build prototypes in red/green Meccano for the pylons (uprights), the dimensions of the lift, the suspension of the cat and the drive of the wheels on the quay. But the actual building? No, that was postponed for the after retirement.

**Cat and crane house**

Over the past thirty years, the red/green Meccano has been sold and the English yellow and zinc Meccano has been purchased at the annual MGN gatherings, on ‘Marktplaats.nl’ and from friendly colleagues. Especially angle girders and strips, because you quickly run out of these in a spatial structure. Why? Peter thought these colours had more of an appearance of technology and design.

The retirement age was reached in March 2020, but continuing to work as a self-employed person is not such a bad idea. This changed when it was determined in May 2023 that Peter had prostate cancer with a high volume of metastases. He briefly considered quitting, but no, it was precisely the reason to continue. The portal crane was worked on for 3 to 5 hours every day in the attic room, with the only source being the article from 1977. The dimensions of the Meccano model were not fixed. Scale unknown. The cat was central with the crane house hanging below it.

The following about the cat. According to safety standards, it can be built 15% lighter if the cat is equipped with springs to absorb the impact forces during the gripper mechanism and the cat’s travel. Well, how do you recreate something like that with Meccano? The solution was to support the hinged flanged wheels (20b with 27) on each other with a heavy compression spring in between and to use the hinge pin as a central drive shaft. The cat thus got 4 x 2 driven wheels.

The four wheelsets were then connected to the engine with universal joints and axles with slowing gears. This created a cat 31 holes wide and 25 holes long.

The crane in Amsterdam mainly picks up coal and ore with a 50-ton grab. Peter chose a polyp grab (spider head grab) based on a model by MGN member Bertus Jongste, because it opens and closes so beautifully in 3D. Then the crane house was the challenge: the (black) cables for hoisting and lowering the polyp grab were ‘double’, so with two drums. In between a right differential (according to the model of MGN member Huib van Wijngaarden). Not a necessity, but a challenge for aligning and adjusting gears and axle rods.

On the polyp grab, the (yellow) cables for opening and closing the grab are also doubled. And it works: during hoisting and lowering, all pulleys of the polyp grab stand still with occasional minimal movement. Wrapping up the cables crookedly? Everything is corrected.

**The gantries**

During construction it emerged that this type of crane has different names: overhead crane, bridge crane and gantry crane. That aside. Both the front and rear gantries are built with yellow plates and zinc angle girders. When building the uprights (pylons) and cross connections (bridges), accessories were needed to hold the nuts when tightening. Sometimes the fingertip was first dipped in ‘Pritt’ glue on a stick, to get the nut into place. “The tip of my little finger regularly turned blue due to pinching”, says Peter.

Because the width of the cat and therefore the track width of the rail was fixed, the Meccano crane first grew in width (122 cm) and gradually in height.

At the rear gantry the pylons are in a V-shape and therefore have a double bend. That was a bit of a puzzle with all that straight Meccano. The solution is that the 103 series flat girders have slotted holes with clearance, allowing a natural tilt. The pylons of both the front and rear gantries are on connecting bridges. Each bridge has swing sets at the bottom for driving along the quay.

A swing set contains two nacelles containing two composite flange wheels (27b/133b + 137). One nacelle has a vertical motor with slowing gears, the other nacelle is a runner to distribute the weight. The crane thus has 4 x 4 wheels, 8 of which are driven.

A problem occurred during testing: the zinc version of 137 slipped on the smooth Meccano rail like a steam train on a wet inclined rail. The solution was simple: wide rubber bands were cut from a bicycle inner tube and placed around the flange.

**The base and the lift**

The photo of the portal crane in Amsterdam shows that the entire construction is made of box profiles. However, on Peter’s crane the base and the lift (the jib) are designed as a half-timbered structure. There is a story to that, says Peter. Until well into the 1960s, large steel structures such as boats, cranes and bridges had sheet metal and profiles held together by rivets or nuts and bolts. Autogenous welding had existed for years, but this joining technique was expensive because heating and melting metal takes time and an lot of energy. Spot welding did exist, but arc welding with or without powder coating was not a common good in the metal industry. The engineers from Conrad-Stork (Haarlem), responsible for the calculations on this crane, came to the conclusion that the dead weight of the crane would make movement along the quay almost impossible. It was therefore decided to work with box profiles, build them in segments and connect them on location with arc welding techniques (MIG, MAG, TIG). An innovation for that time (1978). Peter had the choice to also build the jib and the lift with box profiles, but yes, Meccano is now just as striking and fun because of the girders and strips, bolts and nuts. This created a hybrid Meccano model with both box profiles and half-timbered constructions. This also makes the model more accessible to the viewer. When joining the gantries, the jib and the lift, it became apparent that the alignment was a matter of pushing, pulling, measuring and a lot of patience. Spirit level and laser beam were indispensable tools.

**Some sizes**

The lift actually has a length of 54 meters, with Peter’s model this is 98 cm. Raising the lift actually takes 7 minutes, with Peter’s model it takes 5 more. When the lift is raised, the crane in Amsterdam has a height of approximately 90 meters, with Peters crane this is 205 cm. The capped/unfolded linkage and the beam together have a length of 145 meters, for the Meccano model this is 245 cm. In short, the shape is correct, the scaling is slightly different each time. Peter unknowingly used the dimensions of the grandchildren’s guest room, a room with a sloping roof, as an assembly hall, and used the dimensions as a maximum…

**Drive and control**

Builders of large Meccano models all know it: the original Meccano engines have too little power (speed and torque) to get models moving. Collegial advice has led to the Swiss Bühler motors of maximum 18 Volt, 2 Ampere that are equipped with silent bearings. These engines, large and small, are used in the industrial world, but also in Lego and LGB trains. 20 Volt Activ Energy batteries from ‘Aldi’ ([supermarket, BB] were used as a voltage source. Friend Jaap Bruijn built and configured the controller with Arduino. Arduino is the Italian electronics sister of Meccano. To make the control 100% wireless and demountable, Jaap built micro-parts, programmable ICs and three mini computers: one for the front gantry, one for the rear gantry and one for the cat with the crane house.

The mini computers have protocols for hoisting and lowering, opening and closing, topping and unloading, loading and unloading and driving along the quay, all in three speeds and of course clockwise or counterclockwise.

These control protocols are then transferred to a smartphone. When the crane is started, the smartphone uses Bluetooth to contact the three mini computers. After that, anything is possible. Everything, including a continuous yet varied demonstration (show) of Peter’s gantry crane. Jaap and Peter have chosen not to continue this digitalization. There are no microswitches built into the crane to take over the human part of sensing and responding and, for example, to make the cat stop automatically. That’s how toys are and will remain, so keep paying attention.

**Living room gatherings**

Due to the circumstances described, Peter Duijff was unable to show the gantry crane to Meccano colleagues in Harderwijk on April 6, 2024. Shame. However, based on an idea from his wife Janneke, two living room gatherings were organized on March 23. Gatherings of an hour and half for the crane builders and the enthusiasts that Peter had met in the meantime. The move from the attic to the living room, the construction and the presentation to the local press and family took place on Friday, March 22. The time to repair minor defects…

The gatherings had the character of a collegial explanation, explanation and demonstration by Jaap and Peter. Eight people each in the morning and afternoon, with or without a partner. Coffee/tea, cake and cookies. Watching each other, talking, asking questions, giving tips and sharing experiences. The participants were all impressed and enthusiastic.

In the evening, when everyone had left, the lights went out. The gantry crane glowed proudly red. Later in the month the crane was dismantled and stored in five parts dust-free in the garage, waiting for the uncertain sequel. That ‘uncertainty’ is not only related to Peter’s health. No, the 1977 article also mentions a little-known crane movement: traversing. Traversing means that the grab of the crane can move slightly to the left or right in order to reach all corners of the cargo hold, while the ship or gantry crane remains in place. This means that two more engines have to be added to the overcrowded crane house. A challenge that Peter Duijff and Jaap Bruijn do not shy away from.

See more?

Go to FaceBook: <https://www.inschalkhaar.nl/jongensdroom-peter-duijff-70-komen-uit/>

or https://tinyurl.com/2f57t295.

Indeed a generous retrospective, THANK YOU!

***Photos page 14:***

***Top****: The Meccano model of the HES gantry crane.*

***Bottom****: Suspended wheels of the cat with central drive.*

***Photos page 15:***

***Top Left****: The polyp grabber.*

***Middle Left****: The hoisting drums with black cable for hoisting/lowering and yellow cables for opening/closing.*

***Bottom Left****: Cable routing to get to the top.*

***Right****: Box profile with adapted keys and Pritt glue stick.*

***Photos page 16:***

***Top Left****: Swing set with engine nacelle.*

***Bottom Left****: The bridge between the pylons with battery and control.*

***Right****: The laser beam for horizontal and vertical adjustment & Aligning the rear portal with the console for the V-shape.*

***Photos page 17:***

***Top Left****: Arduino minicomputers, left power supply and Bluetooth, right the ICs.*

***Bottom Left****: Jaap with smartphone (left) and Peter (right) demonstrate the drive.*

***Top Right****: PowerPoint, grabber and explanation.*

***Middle Right****: The portal crane (without crane housing) in 5 parts in the garage.*

***Bottom Right****: Grandson Axel enjoys when a cuddly toy (neighbour and neighbour) is lifted up.*

**Pages 18-19**

**Harderwijk, April 6, 2024**

*Text: Bea Brouwer & Photos: Bea Brouwer & Jan de Goede*

The gathering in Harderwijk, including the General Members Meeting, took place a little later than usual this year (usually in March) due to the occupancy rate of the ‘Bouw & Infra Park’. The turnout, also with models brought along, was again overwhelming. Information was exchanged frequently, everyone was talking to everyone. It would be impossible to show something from everybody, so below only a small overview to get an impression of what was shown.

***Photos page 18:***

***Top Left****: Piet van Bemmel had brought a number of special models. On the left the ‘turning tower’, for lack of a better name.*

***Top Middle****: Piet’s clock with marble track. The marble track replaces the pendulum, left is up and right is down, this is the movement that makes the clock run.*

*Top Right: A ‘doll on pole’ balancing on the pole.*

*> > On the MGN website videos can be seen of the ‘turning tower’ and the doll. < <*

***Right Middle****: The ’20-parts Meccano Clock’, by Jo Stienen.*

***Left Middle****: The Lemniscate Portal Grab Crane that Bertus Jongste is building for someone else.*

***Bottom Left****: Rinze van Slooten brought many models from the Elmec brand. For example, a winding machine (for winding electric coils), electrifier, electric crank, armature block, and much more.*

***Right Top****: Peter Jonges asks Hans Kuijl on stage for an official farewell.*

***Right Bottom****: Bertus Jongste and Karst Quast were surprised with the Golden Angle Girder.*

***Photos page 19:***

***Top Left****: Jan Bressinck’s JCB Teletruck.*

***Top Right****: Tractor with cart, with another mini copy on top, by René Mikkers.*

***Middle Left 2x****: Herbert van Schaik is the builder of this gigantic open-pit excavator. The 12 caterpillars alone took him 2.5 months.*

***Right Middle Top****: Rolls Royce Armoured Car, with rotating gun turret, shooting sound, turning the wheel is opening the door, with real clutch pedal and 2x forward and 1x reverse gear. WWI model, by Hans van Olst.*

***Right Middle****: Magic Designer by Karst Quast.*

***Right Middle Bottom****: Jos Jacobs completed this Konkoly carriage with horse.*

***Left****: VW bus and Rolls Royce by Ger Voois.*

***Bottom Left****: Tram set by Gerard Doornekamp.*

***Bottom Middle & Right****: Henk de Koning’s cycling man round and round.*

**Page 20**

**Information from the Documentation Center**

*Text: Jan de Vries*

**YouTube**

Let’s see what can be found on YouTube, I thought to myself, and found a wealth of Meccano information via www.youtube.com and typing in the keyword ‘meccano’. If you have never done this before, I advise you to take a look at the overwhelming selection of mainly moving images.

If you have a specific address for a video, you can use it to go directly to that specific video. These addresses are announced everywhere in the Meccano magazines and on websites, including those of the MGN. But that is often quite a search and not all of them are there.

It van be addictive, but using the keyword ‘meccano’ you will be guided through the entire offering in a sequence that is always clear. And before you know it, you’ll be sitting in front of the computer for hours. But it will be well spent, because it will give you countless ideas about models made by Meccano from all over the world that can be a great source of inspiration and motivation. In particular, video reports from the various Meccano gatherings abroad provide a variety of models, especially those from SkegEx, all of which you can view.

Various Meccano clubs and private individuals have their own channels on YouTube to which you can in some cases subscribe. This way you are directly at the complete offer on such a channel and you are automatically kept informed of current additions.

It makes little sense to map out the entire offering on YouTube for you. After investing a few hours of time, you will already have a large offering that you can also administrate for later use.

It all has one disadvantage: it can be at the expense of the time you could spend on making models yourself. On the other hand, it is a lot of fun to do.

**Page 24**

**Your voice is heard**

**Update website MGN overview Meccano suppliers**

Kees Trommel reports that sometime this year Ashok from India suddenly stopped. Although Ashok did not have many Dutch customers, it was a valued supplier of special parts and replica Meccano parts. His website is still accessible, but ordering is no longer possible.

A new supplier is now known as G-world.

This website contains a price list for you to download and order.

**Meccano cabinet**

Bertus Jongste shows how he has organized his Meccano cabinet. On the door various pennants and buttons of attended events. The cabinet has 8 sliding shelves on rails, with 3 mm welding wire pins over which the Meccano slides. In the middle there is a box 10, in which a compartment division has been made for small materials. The cabinet used to be on wheels, but due to undisclosed facts, it is now on the ground.

**Meccano coil winding machine**

Wilbert Swinkels reports on Facebook, among other things:

This Meccano coil winding machine has been designed and built by Gjalt van Slooten (1927-1992). Gjalt van Slooten lived in Drachtstercompagnie and was a well-known MGN member. The prototype of the machine started in 1985 and took two years to finish. A VirtualMEC file can be downloaded from: <https://virtualmec.com>

Orthocyclic winding is a method for obtaining coils whose turns are stacked in the most compact fashion possible. Such coils have certain particularly good properties including good heat conduction, even distribution of electric field strengths and the highest possible space factor. The Meccano orthocyclic coil winding machine in the vision of Gjalt van Slooten is capable of making such coils. It’s not perfect, partly due to a wrongly attached copper wire, but the result is quite impressive. The model has entirely been made with Meccano except for the motor, magnets and small analog electronics. These are all available online. More info about the orthocyclic coil winding machine can soon be found on my website <https://meccanokinematics.net>

See YOUTUBE.COM Meccano Orthocyclic Coil Winding Machine.