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FormworkPress

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New: MEVA Engineering Kit

For infrastructure and building construction projects – p. 10

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Imprint

Site photos show situations which do not always depict the final assembly of formwork with regard to safety regulations. Imprint: Edition VI/2025. Publisher: MEVA Schalungs-Systeme GmbH, Industriestr. 5, D-72221 Haiterbach. Layout: MEVA.
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"We are already well prepared to face the challenges arising from demanding infrastructure and building construction projects."

Florian F. Dingler,
Owner and Managing Director
of MEVA Schalungs-Systeme GmbH

Dear Readers,

The world is in a state of flux. Unfortunately, these are predominately turbulent times. Wars, hot spots, tensions and trade disputes are shaking the political fabric, with consequences for the global economy. Investments are being put on hold, planning delayed and supply chains disrupted. For companies that do business at an international level this means they need to be cautious, react flexibly and, like our world, never stand still.

The challenges in many countries in Europe are huge. For example in Germany, MEVA's home country, the outcome is stagnating, stalling residential development, bureaucracy and delayed approvals. With regard to infrastructure, there is a massive investment backlog and a lot of existing infrastructure is dilapidated – roads, bridges, tunnels. The new federal government has reacted by announcing an ambitious infrastructure package.

We certainly won't be the reason why anything fails. We are already well prepared to face the challenges arising from demanding infrastructure and building construction projects – and are presenting the new smart MEVA Engineering Kit, or simply MEKit. This modular system is a convincing solution thanks to its simple handling and flexibility in conjunction with wide-ranging potential applications. See page 10 for information about these applications.

Simple, straightforward use of formwork and other systems is one of the key factors for the successful conclusion of projects. An unusual example is described from page 17 onwards: A young woman, who works as an engineering consultant for water resources management and doesn't have a lot of experience as a skilled craftsperson, dared to do something out of the ordinary. In St. Lucia, her home country, she built her dream house herself using a formwork system developed by MEVA specifically for emerging regions in Asia and Latin America. This much we can reveal: the ambitious project was an all-round success. That's what I consider a fantastic story.

And now back to the topic of agility. Simple decision-making processes, flexibility and rapid implementation enable MEVA to offer optimally tailored products for every region and challenge. Technical solutions that provide long-term customer benefits through a high degree of economic efficiency, safety and durability. This has been a key factor since the company was founded in 1970 and will remain so in future. By the way, in 2020 we wanted to celebrate our 50th anniversary in style. Unfortunately, this fell victim to the now almost forgotten COVID-19 pandemic. However, it's only a pleasure deferred. Read more about this on the next page.

I wish you a pleasant read.

News

Information about MEVA

MEVA55 sets the tone

Communication with customers and targeted product development

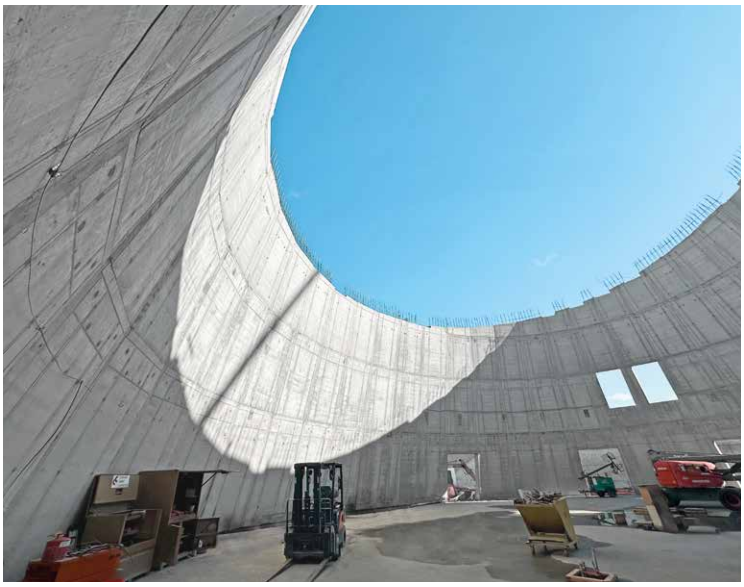
With individual events staged under the slogan MEVA55, MEVA is focusing this year on close customer contacts and product presentations. “We are concentrating our resources on ensuring our quality and service in the long term and placing our focus on the development of innovative solutions that benefit our customers,” explains Florian F. Dingler, MEVA's owner and managing director. “At a time when medium-sized companies like MEVA that operate at an international level are facing huge economic challenges and need to react flexibly to market developments, our focus lies on excellent products and the orientation towards fulfilling our customers’ needs.“

Bringing people together

The idea for MEVA55 came about five years ago. The festivities planned at that time for the company’s 50th anniversary had to be cancelled because of the COVID-19 pandemic. The focus is now on the direct exchange of information and opinions with long-term partners, regular customers and other interested parties during customer events – at our German headquarters in Haiterbach as well as at numerous other locations all over the world. The latest products, innovations and clever developments such as the practical AluFix column panels are being presented in an exclusive setting.

The first events have already taken place. Like those in Hungary (photos above), where three open days in May drew a large number of guests to the new headquarters in Dunakeszi. Among other products, the new MEVA Engineering Kit was on display. At our German headquarters in Haiterbach a staff party will take place in July and then the main event, including a gala evening, will be held on September 20-21.

“We are convinced that even in times of changed market conditions and challenges the continuous exchange of information and opinions with our customers is still exceedingly important,” Dingler emphasises. “We are making allowance for this through our MEVA55 event series.” Because innovation, communication and successful partnership are values that MEVA has stood for since 1970.



Hall of Fame extended

What do Elvis Presley, Buddy Holly, Elton John and Bob Marley have in common? They were included, along with almost 400 other musicians, in the Rock & Roll Hall of Fame that opened in 1986. Space is now being created for more stars and even more visitors as the cult location for music fans in Cleveland, Ohio has been expanded through a spectacular 15 m high annex. An elliptical pavilion comprises event and performance spaces, education centres and a new entrance area close to the shore of Lake Erie. An eye-catcher is the rear wall that tilts inwards at an angle of 15 degrees.

MEVA USA is supporting the construction with technical know-how and the delivery of Imperial wall formwork, the KLK climbing system, MEVA32 shoring towers and Triplex heavy-duty props. One challenge was to produce precise architectural reveals at every vertical and horizontal joint in order to achieve a striking appearance. The project demanded exacting formwork symmetry, uniform tie hole patterns and no additional anchor locations to support external formwork. The MEVA planning team was involved early in the pre-construction phase to evaluate the constructability of this unique building.

MEVA expands its presence

MEVA is further expanding its international presence in Europe. New markets – from Scandinavia to the Iberian Peninsula and the Balkans – are being accessed by means of targeted sales activities and partnerships with local dealers.

New additions include Finland, where initial activities have commenced via the dealer Scandicform and projects in Sweden can also be supplied. On the Iberian Peninsula MEVA is intensifying its presence in Portugal and examining possibilities to establish a foothold in the Spanish market. The same goes for South Tyrol. MEVA Switzerland is undertaking sales activities in the canton Ticino – a further step towards ensuring closer customer ties and service quality in additional regions.

MEVA is also strengthening its position in the Balkans. With the dealer AMV (photo), we have gained an experienced partner who can also support construction companies in neighbouring regions in the Balkans with MEVA formwork and know-how from their base in the heart of Serbia.

With these measures, MEVA is resolutely continuing its growth trajectory and consolidating its position as a reliable partner in the European market.

Precision work below ground

Nine tunnel cross-passages poured using clever special formwork solutions

The Rastatt railway tunnel will form an important element of the European rail freight corridor between Rotterdam on the North Sea and Genoa on the Mediterranean. Two 4,270 m long railway tunnels are connected by eight emergency cross-passages and a service cross-passage. These nine tunnels were constructed using special solutions from MEVA.

The approximately 16 m long cross-passages, located at 500 m intervals, are fundamental for the safety concept. In an emergency people will be able to escape to the other main tunnel. In addition, the cross-passages are equipped with smoke-proof, sealing safety chambers. For their construction, a fold-out formwork carriage was designed. In the supply shaft, by contrast, custom-made wooden boxes were used.

Emergency cross-passages

The eight passageways are not round or rectangular throughout, but rather consist of several stages. A rectangular connection block leads from the first main railway tunnel into the cross-passage. Beyond this, the passageway widens into an intermediate block – also rectangular but designed with a vaulted ceiling – which then connects up to the 9.85-10 m long oval vault.

The complex geometry – round and rectangular, tapered from the inside to the outside – required a special solution in order to be able to transport the formwork into and out of the cross-passage. Working together with its partner for steel formwork, Rúbrica Ingeniería, MEVA developed a flexible formwork carriage that enabled all stages of the construction work to be performed with as few modifications as possible. The construction consists of a rail-mounted transport carriage, hydraulics with a control unit, formwork and working platforms.

The vault has been poured and the transport carriage transports the folded-in formwork for the intermediate and connection blocks into the cross-passage.

© Bauüberwachung INGE Tunnel Rastatt-Michael Smith

Before each tunnel was built, the earth was stabilised by freezing it. Several tubbing rings, i.e. prefabricated concrete elements on the interior walls of the main tunnels, were broken out and the frozen earth removed by a milling excavator. The reinforcement was installed step by step and stabilised using shotcrete. Once the cross-passage had been excavated and sealed against groundwater, the concreting work began.

Formwork carriage

First of all, the floor – up to 1.75 m high – was poured. It was now possible to install the rails, and the transport carriage delivered the first vault formwork segment. In order to be able to move this construction – 5.75 m wide and 5.25 m high when fully extended – through the narrow entrance, the hinged circular formwork sections were folded in hydraulically to 3.65 x 3.29 m. It was now possible to move it through the opening with just millimetres to spare. The transport carriage carried

... continued on page 8

One of three vault formwork segments in the unfolded state. The monolithic formwork for intermediate and connection blocks with formwork for the end face can be seen at the back.

Project data

- **Project**
  - Emergency/supply cross-passages, Rastatt railway tunnel, Germany
- **Contractors**
  - ARGE Tunnel Rastatt, Stuttgart; Construction companies Ed. Züblin AG and HOCHTIEF Solutions AG
- **MEVA systems**
  - Tunnel formwork carriage
  - Special formwork
- **Engineering and support**
  - MEVA Schalungs-Systeme GmbH,
  - Haiterbach, Germany

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the segment into the cross-passage and was then folded out hydraulically to its maximum size.

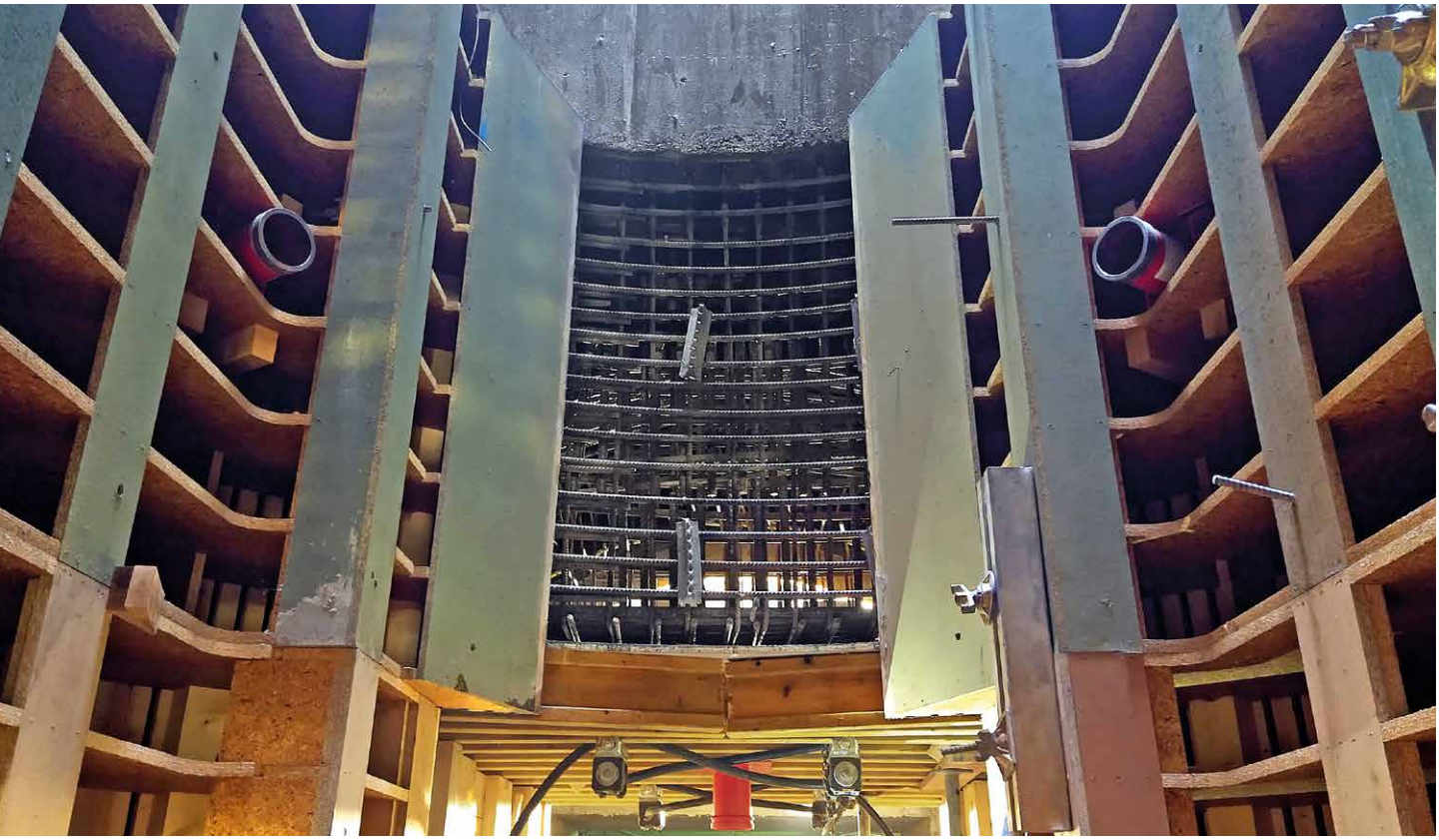
The three-dimensional mobility of the formwork carriage facilitated the exact alignment. Two additional segments were also moved into the cross-passage, connected and equipped with formwork for the end face of the vault. It was now possible to pour the roof and the side walls of the vault over their entire length up to 10 m. Once the vault had hardened, the three segments were folded in one after the other and transported out of the cross-passage.

The rectangular formwork for the intermediate and the connection block was now transported into the tunnel. Both blocks were poured monolithically at the same time. An identical intermediate/connection block was built on the other side of the cross-passage. Once it had hardened, the intermediate-block formwork (3.90 x 4.30 m) "trapped" in the completely concreted cross-passage had to be transported out through the opening that measured only 2.52 x 2.71 m. This was also enabled by a clever folding mechanism.

Wooden formwork for the supply route

The supply cross-passage differs significantly from the emergency cross-passages. It is narrower, has a different design and meets up with the middle of a shaft with a diameter of 3.60 m that leads to the surface. Here, it was necessary to work meticulously in several individual steps using special formwork solutions. After completing the floor, the entrances, the vault and then the junction to the vertical shaft were constructed. The know-how of MEVA's special-formwork department stood out, in particular, during the planning of the complex intersections. Solutions were developed that could be used numerous times and facilitated the construction site logistics.

Following the successful completion of the nine cross-passages, the interior work with extinguishing water pipes, walkways etc. could be carried out.



Top: Special formwork at the intersection between the supply cross-passage and the vertical shaft. Bottom right: The folded-in vault formwork entering the emergency cross-passage – high-precision work! Bottom left: The formwork for the intermediate and connection blocks is ready for use and the transport carriage with hydraulics has been moved back. Bottom right: The formwork for the supply cross-passage required innovative ideas.

Cover story

New: the MEVA Engineering Kit

Modular system for infrastructure and building construction requirements

With the new MEVA Engineering Kit (or simply MEKit), construction companies can now profit from a modular system that, as a versatile and very robust solution, flexibly supports the implementation of challenging infrastructure and building construction projects.

As a manufacturer of clever formwork, shoring towers and safety systems for the construction industry, MEVA presents the MEKit as a cost-effective system for high load requirements during civil engineering projects. By freely combining just a few elements and components, users can produce heavy-duty towers, formwork carriages, truss beams and more besides. Hence, MEKit is ideal for the construction of tunnels, bridges made of in-situ concrete or precast elements and façades, for supporting several or very thick individual slabs and constructing overhanging storeys.

Preassembly saves time and space

Using only four standard components – legs, sections, connecting elements and spindles – all of which can be rented, it is possible to cost-effectively and quickly assemble support structures. This simplifies storage and assembly and reduces the workload required for planning and execution.

MEKit can replace expensive special designs and was developed with an eye to a high level of flexibility and cost-effectiveness, safety and simple handling. Its modular design enables it to be flexibly adapted to suit the prevailing spatial conditions. Legs and complete frames can also be pre-assembled in order to simplify the construction site logistics and save time.

Construction of façades, support towers, tunnel formwork carriages (from left to right): the MEKit is suitable for a wide range of applications.

100-ton load per tower
MEKit can be used for heavy loads above 1,000 kN (= 100 tons) per tower with four legs and can be configured in length and width increments of 1.50, 2.00 and 2.50 m. The double-U channel legs in various lengths are simply connected and stabilised using square and round sections. The MEKit components are made of hot-dip galvanised or power-coated steel to ensure a long service life. Base spindles enable precise height adjustment.

Successful initial applications
The new MEVA Engineering Kit is already being successfully used on numerous construction sites – to support a decrepit pedestrian and cycle bridge, during the construction of office and residential buildings, and also as a formwork carriage for the construction of a cut-and-cover tunnel. The initial feedback from the construction companies has been positive across the board (report on the next page).

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Simple. Clever.

→ **Flexibility**
- Modular system for custom applications
- Load capacity of more than 1,000 kN (100 tons) per tower with four legs
- Configurable length/width increments of 1.50 m, 2.00 m and 2.50 m

→ **Easy to use**
- Only four standard elements: legs, spindles, sections, connecting elements
- Precise height adjustment by means of base spindles
- Simple storage, low workload required for planning and execution

→ **Economic efficiency**
- Replaces expensive special designs
- Rapid construction progress
- All standard components can also be rented
- Can be pre-assembled
- Long service life due to high-quality hot-dip galvanised or powder-coated steel components

Above: The two MEKit support towers were quickly set up on the construction site in Karlsruhe.
Below: The basement with the steel truss beam after completion. Photo on next page: An MEP shoring tower can be seen in the background on the right.

Successful MEKit debut

Support for a steel truss beam created with no problems

The new MEVA Engineering Kit (MEKit) passed its first practical test with flying colours. Using parts from the engineering kit for bespoke applications, two towers were assembled to support a steel truss beam.

The construction company MOSER GmbH & Co. KG had been commissioned to build the underground garage of a new office building in Karlsruhe. The walls were partly poured over two storeys with heights from about 3 m and partly over a single storey up to about 7 m. This was achieved using formwork and support material from MOSER's own stock. The walls were produced using the robust heavy-duty formwork Mammut 350 with a full-surface fresh-concrete pressure capacity of 100 kN/m². The system has already proven its worth during numerous MOSER projects.

"We were surprised how quick and easy it is to assemble and use MEKit."

Trouble-free assembly of the MEKit towers
The MOSER construction site team relied for the first time on MEKit, which was delivered to Karlsruhe on a rental basis, for a special application during this project. A steel truss beam that increases the slab's span like a concrete beam was to be safely supported during the shell construction work and held in place by the in-situ concrete columns.

Once the concrete columns had been constructed and two MEKit support towers set up, the exact height was set using the base and head spindles. "We were surprised how quick and easy it is to assemble and use MEKit," the site foremen reported on their first experiences with the flexible modular system.

MEKit and MEP supplement each other
It was now possible to place and secure the steel truss beam on the MEKit towers and the concrete columns. MEVA's modular MEP shoring tower system was then erected in order to support the construction of the slab. The MEP, which MOSER uses regularly, was also a convincing solution thanks to its simple and rapid assembly. This tried-and-tested system thus optimally complemented the new MEVA Engineering Kit during this project.

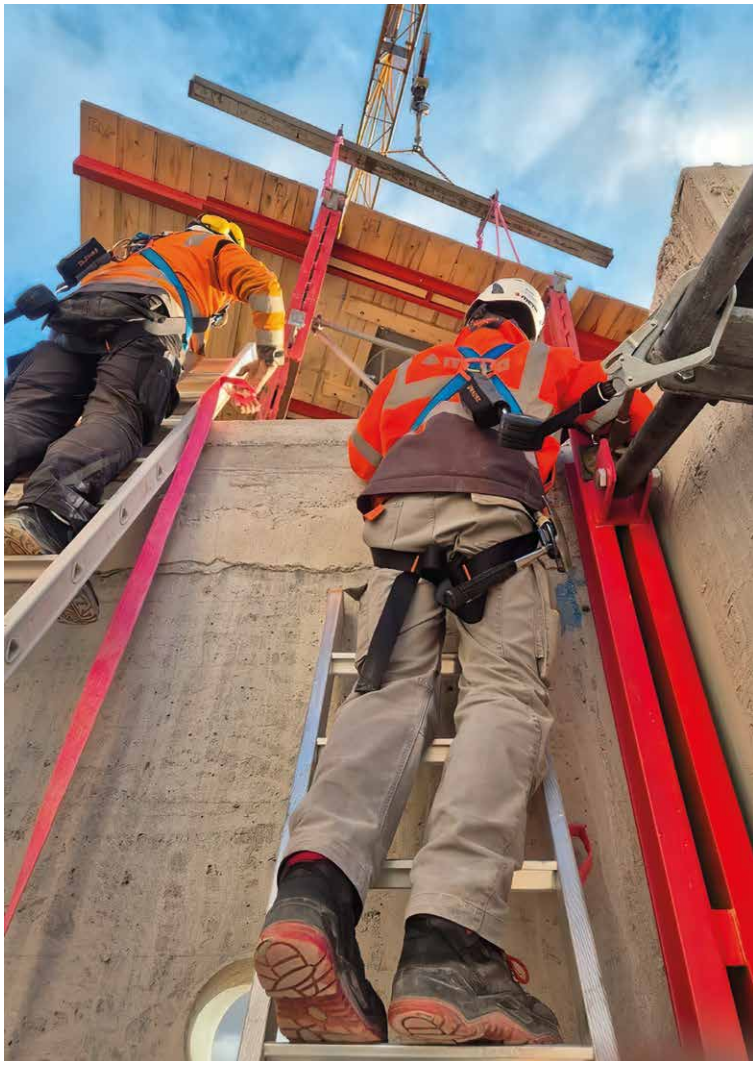
The troubleshooters

MEVA formwork supervisors and support technicians talk about their job

Meet our men for (virtually) all seasons: MEVA formwork supervisors and support technicians Barnabas Balla, Mario Böker, Jürgen Menzler, Martin Rietz, Stefan Schlatter and Adam Szántó. They are called out whenever a seemingly insoluble problem triggers an emergency on site. Speaking on behalf of the team, Jürgen Menzler and Ádám Szántó report on their multi-faceted daily routine.

Regardless of project type – whether high-rise, bridge, tunnel, residential, commercial or demolition scheme – time is money. Nothing is worse than when work is suspended. Here, clever ideas and reliable solutions are needed promptly, whatever the conditions, whether in strong winds blowing 200 m above ground level, at icy underground temperatures or under the blazing sun. “I would describe us as troubleshooters,” says Jürgen Menzler. “Whenever difficulties arise on site or work grinds to a halt, that is when we step in.” The 53-year-old joined MEVA in 2011 as a support technician after working for 20 years as a foreman, having initially trained as a car mechanic and carpenter. Even today, he still draws on his expertise in both these areas. “I owe my skills in the field of construction to my time as a carpenter.”

2023 and 2024 saw him make several trips to the City Tower One site in Dubai. One time, he even had to get there within two days. The MGC-H climbing system being used to erect the 93-storey central core was not working properly. Menzler devised a solution incorporating an additional hydraulic cylinder, which was implemented at a MEVA plant in Haiterbach, “and we managed to make up



Jürgen Menzler (left) and Ádám Szántó (right) have a clear view. A head for heights is a basic requirement for the work of a formworker.

the lost time." The megaproject was then completed on schedule.

"Most of our work is performed on our customers' premises," explains Ádám Szántó. The schedule includes employee and customer training sessions, both in Haiterbach and on site, along with demonstrations on architectural concrete or the repair of alkus facings and, occasionally, even complaint management. Not surprisingly, the support technicians also offer practical, hands-on assistance. Is it a fun job? "Yes," is Jürgen Menzler's answer, "because there's never a dull moment and I get to travel worldwide." Destinations visited on behalf of MEVA include Colombia, Bolivia, the USA, the Caribbean islands, the Philippines and the Middle East. He has also travelled around Romania, Hungary, the UK and the Benelux countries.

The formwork supervisors and support technicians have no fixed office workplaces. Communication is by mobile phone. Szántó occasionally sits in the Engineering department with Jan Schwämmle, who co-ordinates the tasks handled by the formwork supervisors. He spends his time there inspecting drawings, monitoring competitors and working with the Product Development team on analysing the feedback from sites. "External input is vital for our company," Ádám Szántó points out. He also directly collaborates with climbing system expert Stefan Kappler and it is not uncommon for the support technicians' advice to be sought at the site preparation stage.

For both the experienced colleagues, Menzler and Szántó the Fehmarnbelt tunnel project beneath the

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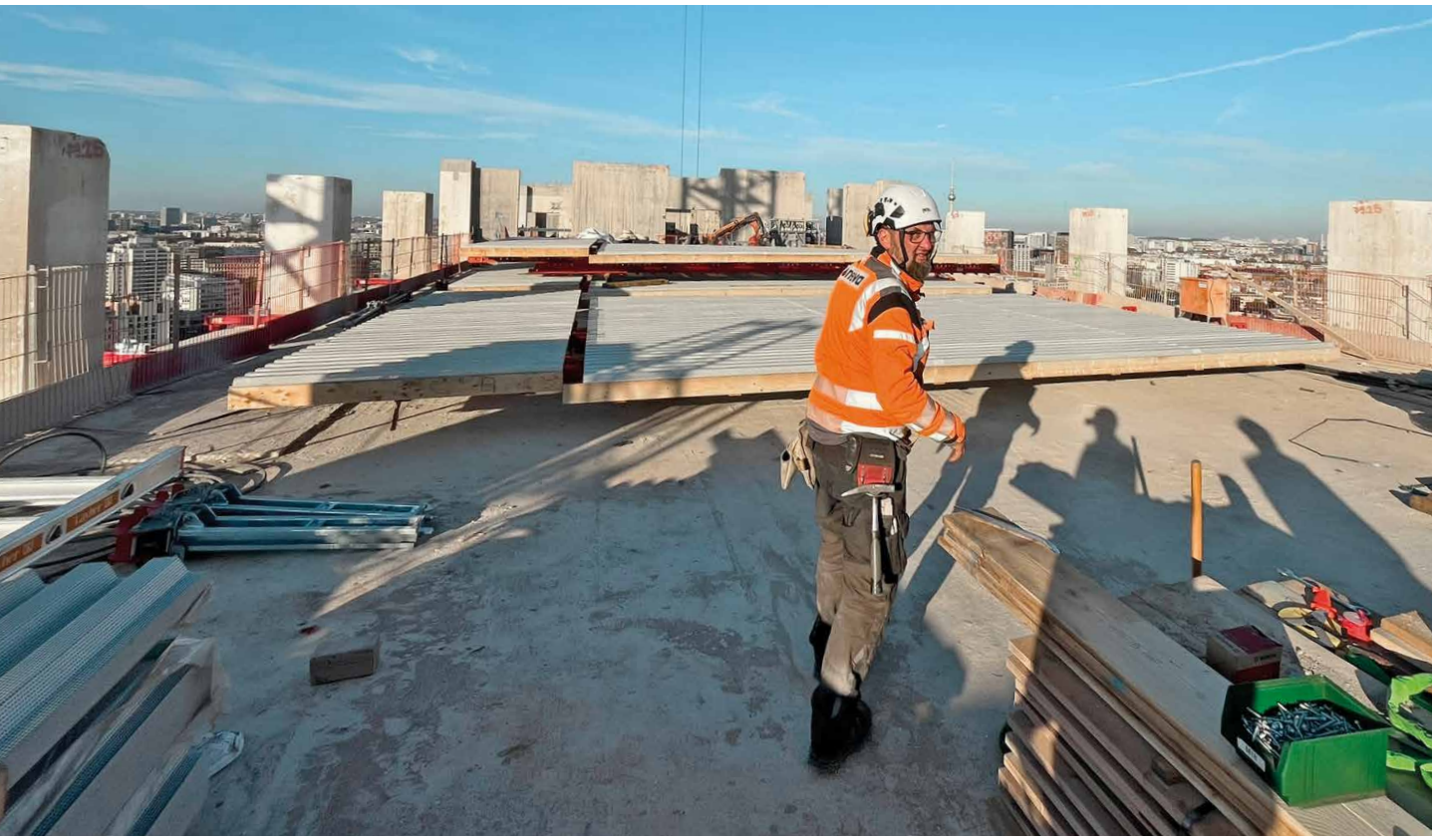
Baltic Sea – with its 3,400-strong workforce – has been the most impressive to date. Yet, Menzler is quick to point out the downside: "The bigger the project, the greater the number of people and hierarchies involved, and the stricter the safety regulations. That doesn't make the job any easier." Particularly when divergent commercial and practical perspectives clash: "Building sites are places where people speak their mind, conversations may get heated and voices raised. Which makes a tactful, sensitive approach to discussions all the more important."

The 41-year-old Ádám Szántó has positive memories of "every project, once successfully concluded, however stressful it was beforehand". And some projects, such as an ongoing high-rise alteration scheme in Berlin, can indeed be really gruelling. Menzler has every sympathy with his colleague Szántó: "It's not much fun when you have to walk up 21 floors with 20 kg of tools and equipment on your back just because the lift has broken down." One of Menzler's highlights was the Roche Tower II in Basel: "It was delivered just-in-time after pre-assembly in Haiterbach by a 10- to 20-strong team working in two shifts."

Ádám Szántó's career path was mapped out in his early life. Even as a five-year-old, when his parents were building a house in Hungary, he took a keen interest in the architect's drawings and the happenings on site. As a youth, he would cycle in and around Budapest to photograph buildings. "I often wondered how they were constructed and later, having taken up my profession, I wanted to know the exact details." At the age of 25, he became a general foreman at one of Hungary's leading contractors at the time, superintending sites with up to 130 workers. "A stressful time," he admits. But that is also how he got to know compatriot Gábor Fejér from MEVA's Engineering department, whom he followed to Germany in 2017.

The job of a formwork supervisor requires flexibility and the ability to grasp things quickly. You need an understanding family that accepts you being called away at short notice. The two colleagues agree on the more annoying aspects of their job: situations on site involving either half-baked or over-complicated solutions. "Just get on and do it!" is the troubleshooters' motto. As Ádám Szántó puts it, "Ultimately, the most important thing for us is to deliver the best results – for the customer and for MEVA."

No construction site is too high up when working for customers.



Nothing beats doing it yourself

Jeanne-Rose René "simply made a start" on building herself a house on St. Lucia

Caribbean islands evoke images of turquoise waters, sun-drenched beaches and picturesque landscapes. But for Dr. Jeanne-Rose René, engineer and managing director of a consulting firm for water resource management, the Caribbean is much more than a holiday destination – it is both home and inspiration. An expert in applied hydrology and flood forecasting, she lives and works in the Bavarian town of Kempten and travels across all continents to support authorities and organisations, and to moderate expert presentations. Yet, for a project close to her heart – construction of a self-designed dream house in St Lucia, where she was born and grew up – she took on an extraordinary challenge. "I actually had no intention of building the house myself at first. But it was difficult to find a really reliable and qualified contractor who also had time. So I decided not only to design the home of my choice, but to roll up my sleeves and build it myself," says Jeanne-Rose René. Laying aside clients' concepts and calculations, she swapped her laptop, desk and conference rooms for a hammer, saw and laser distance meter and set off for St. Lucia to work on her own construction site. And this despite having had no previous training as a craftsperson. "Sadly," she says. She did have an affinity with the building sector after gaining a bachelor's degree in civil engineering. "But I lacked the practical knowledge. I had hardly ever held a

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drill in my hand. So I simply made a start and relied on my logical mindset and systematic, process-oriented approach to work."

Through an acquaintance who runs a construction company on St. Lucia, she was able to borrow some MEVA MonoWal formwork. She personally co-ordinated deliveries to the site, though she had insufficient formwork for monolithic concreting in a single cycle. The walls were cast in several cycles and for the slab formwork she was forced to use laminated plywood. The latter was a compromise solution as she had intended to avoid joints and the potential leakage points that resulted.

Casting the walls, on the other hand, ran smoothly. "Using MonoWal was easy from the word go. Whenever I needed technical support, I rang the MEVA team and they promptly answered all my questions and provided me with the necessary visuals. Assembly and dismantling doesn't require much technical know-how. The instructions fully sufficed. The formwork is lightweight and I was able to manoeuvre and assemble the panels on my own." The first wall was poured in March 2024 and the structural shell completed in September. The result is more than respectable. "At the same time, some things could have been done better," notes the ambitious owner in a self-critical assessment of the workmanship.

Inspired by the Italian-French word for beautiful view, Dr. René has christened her house "Belvedere". With a 111 m² basement and 160 m² ground floor, it is idyllically set on a wooded slope on the Cape Moule-à-Chique hill in the village of Vieux Fort and commands vistas across the bay and sea. Dr. René gave high priority to designing a durable building with a minimum maintenance requirement. The envisaged dream home was to

feature aesthetic, minimalist architectural concrete in a warm, light-coloured tone. For this she ordered a consignment of white cement to be delivered from Turkey by ship. “The resulting concrete surface is very bright and handsome, with black particles from the admixtures showing through. I mostly achieved the desired fair-faced finish – except in isolated areas where the formwork joints were not properly closed or the formwork was either insufficiently or over-generously oiled. There was unfortunately no suitable release agent available on the island and obtaining the right materials was a challenge.”

For the concreting operations, Dr. René needed the help of several workers partly due to the difficulties caused by the terrain. Use of a boom pump was not feasible while a pipeline pump would have wasted too much concrete and not been economical. So the only remaining option was a concrete chute. Around 15 concreting operations were necessary for the realisation of the shell.

At least one worker was always with her on site for safety reasons, e.g. when climbing and to help her carry heavy loads. “Unfortunately, my colleague didn’t have much confidence in me as a woman,” says Dr. René, looking back, “and conflicts sometimes arose. Also because of my single-minded approach – I believe in doing things properly and questioned some of the procedures.” Her overall verdict is nonetheless wholly positive: “I've really enjoyed this work throughout. And to know that I’m doing it all for myself has constantly spurred me on.”

The structural shell was complete in six months. In November 2024, some friends from Germany helped to install the windows and doors. The focus now is on the interior fit-out.

Time saving and safe handling

A UK construction company discovers the advantages of MevaDec

MEVA UK's trading partner Leeds Acro Ltd. was commissioned in October 2024 by one of its customers, P. Colohan & Co. Ltd., to deliver all the formwork and falsework requirements for a large project in the London Borough of Havering, the Harold Hill Family Welcome Centre in Romford. After successfully using MevaDec for the first time, P. Colohan encouraged the formwork dealer to invest in a large stockholding of the slab formwork system.

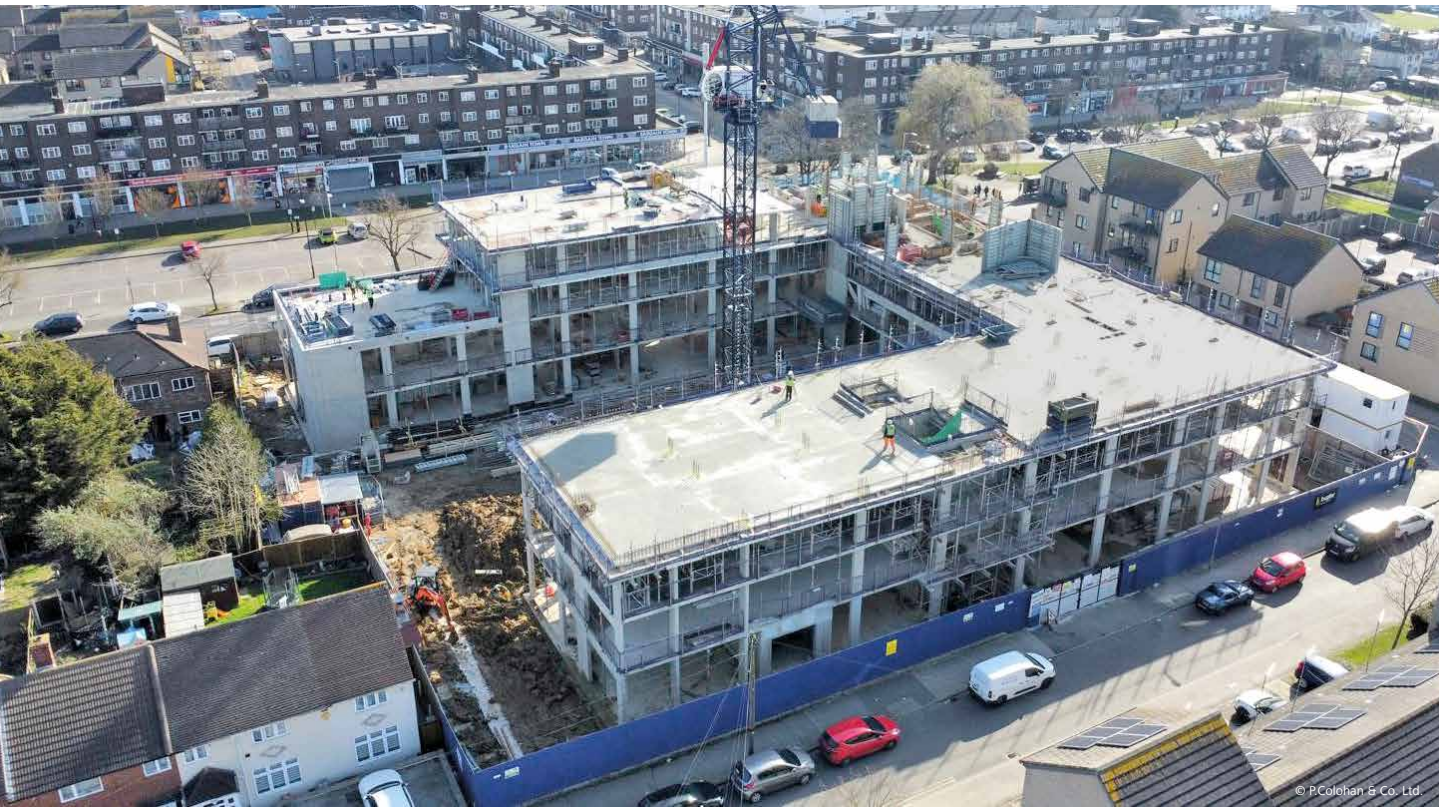
From its Head Office in Tamworth MEVA UK supported Leeds Acro in every aspect of delivering the comprehensive project. Both MEVA and Leeds Acro's planning teams worked together as a partnership. Hence, the formwork planning was performed as a joint effort, the logistics were planned, and the teams agreed on how to fulfil project-specific requirements through efficient processes. The teams integrated all draft designs seamlessly into unified drawings before they were submitted to the customer for approval.

Living space for people in need

The Harold Hill Family Welcome Centre is a pioneering project in Britain. It will offer homeless people and families in need a supportive environment and short-term accommodation until such time as permanent housing is found for them. The construction project, carried out for the Borough of Havering by Bugler Developments, will replace the borough's existing hostels with a central state-of-the-art facility that offers 74 self-contained residential units for families and homeless people. The largest units will offer space for up to eight persons, enabling even large families to stay together in difficult times.

The U-shaped four-storey building will have a landscaped central courtyard with play areas for children as well as shared spaces for everyone, such as common recreational spaces and support facilities. This architectural design is intended to give the inhabitants a sense of community and safety.

The U-shaped Harold Hill Family Welcome Centre will provide homes to disadvantaged people in 74 self-contained residential units.



Successful collaboration: the construction company P. Colohan & Co. Ltd., the formwork suppliers Leeds Acro Ltd. and MEVA UK.

The construction site had to be quickly supplied with large amounts of material to avoid time losses. The first delivery of the MEVA wall formwork Mammut 350 took place in October. In November the slab formwork was ready for use in Romford. MEVA UK and Leeds Acro co-ordinated the deliveries. 1,600 m² of MevaDec panels were delivered for the construction of the first slab in three pouring cycles. A further 570 m² of the lightweight and easy-to-handle slab formwork was also supplied for the second floor.

Leeds Acro's choice of formwork

In order to guarantee a high-quality concrete finish right from the start, in the run-up to this project Leeds Acro invested in new Mammut 350 panels for construction of the stairwell and elevator cores as well as the columns. Furthermore, Leeds Acro rented new MevaDec panels from MEVA UK and had them delivered directly to P. Colohan & Co.

Well on schedule with Mammut 350

The Mammut 350 wall formwork was primarily selected for its high fresh-concrete pressure capacity and robustness, but also for the high-quality concrete finish the system produces. That a robust formwork system was required was due to the fact that the concrete construction work would be carried out during the harsh winter months. It is common knowledge that low temperatures can significantly impair the hardening process of concrete, causing delays and potentially leading to structural problems. Mammut 350 is known for its exceptional strength and efficiency. It can withstand a fresh concrete pressure of 100 kN/m² over the entire panel surface, allowing for shorter pouring cycles, and as such it was the perfect choice with regards to the tight project schedule.

Timeframes are especially short during the dark winter months when the projects can be negatively affected by adverse weather conditions and optimum use needs to be made of the reduced daylight hours. The formwork's simple assembly and handling contributed to short installation and stripping times for the team from P. Colohan & Co. The formwork's efficiency – with a forming area up to 8.75 m² per panel (350 x 250 cm) – accelerated the construction process and reduced the labour costs. The formwork's symmetrical tie hole and joint pattern contributed to the harmonious overall impression of the core walls.

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Attractive concrete surfaces using alkus
As all MEVA formwork systems are equipped with the alkus all-plastic facing as standard, P. Colohan & Co. achieved the exceptional concrete finishes they were hoping for. They found the alkus facing easy to clean and repair on the actual construction site using the same material with no loss of quality. Its superior product characteristics mean it can be used up to 1,500 times and sometimes even longer. Moreover, it is up to 30 times more durable than plywood facing materials.

MevaDec thrills the construction company
During the construction of the Harold Hill Family Welcome Centre, P. Colohan & Co. Ltd. utilised the MevaDec formwork system for the first time during a project instead of a competitor's system. The personnel familiarised themselves with the MEVA slab formwork system in a very short space of time, the transition went smoothly, and the construction company was very enthusiastic about the efficiency of the system. For example, the team discovered that MevaDec is not only faster but also easier to handle than the system they had previously used. One of the system's outstanding features is its lightweight design. The ergonomic aluminium panels have been designed with easy handling in mind. This reduces the physical exertion and fatigue for the construction workers and speeds up installation and stripping. Especially on this construction site in Romford, where time management and work efficiency were of utmost importance, the straightforward handling was a real advantage.

Of the three possible formwork methods using MevaDec, the customer was most impressed with the drop-head beam-panel method. With just a few hammer blows on the drop heads, the formwork panels and primary beams could be lowered by 19 cm and stripped earlier – by only two construction workers – while the props remained in place to support the slab, which had not yet fully hardened. The formwork panels and primary beams could then be used for the next pouring cycle. The optimised material requirements paid off through valuable time savings and simplified construction site logistics. And as the number of props required is optimised by the MevaDec system, the personnel enjoyed ample freedom of movement under the formwork.

P. Colohan & Co. considered the ability to simply and firmly lock multiple MevaDec panels together using MEVA panel connectors to be a major safety benefit. This enabled an entire panel unit to be slid along the primary beams and firmly secured at the free slab edges. For the site operatives this was a huge step forward compared to their previous experience where formwork panels had to be placed individually between castellations on primary beams beyond the slab edge, and there was always a risk that a panel could fall off.

The overwhelming positive feedback received from P. Colohan & Co. provided Leeds Acro with the impetus to convert its rental agreement with MEVA UK into a purchase agreement and thus become the first dealer for MevaDec rental formwork in Britain. The investment in this innovative system underscores Leeds Acro's commitment to offering its customer P. Colohan & Co. the best possible solutions. The Harold Hill residential development project should be completed on schedule in spring 2026.

Left-hand photo: The number of props required is optimised by the MevaDec system itself. The site operatives profit from ample freedom of movement.

Top: The construction company's team became familiar with MevaDec in a very short time.

Below: P. Colohan & Co. appreciated the level of safety provided by MevaDec, even at the slab edges. The columns were formed using Mammut 350.

Project data

- **Project**
  - Harold Hill Family Welcome Centre, residential building, Romford, UK
- **Contractors**
  - P. Colohan & Co., Croydon, UK
- **MEVA dealer**
  - Leeds Acro Ltd., Bradford, UK
- **MEVA systems**
  - MevaDec slab formwork
  - Mammut 350 wall formwork
- **Engineering and support**
  - MEVA Formwork Systems Ltd, Tamworth, UK

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