MC aktiv

THE MAGAZINE OF
MC-BAUCHEMIE **2-2025**

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BE SURE. BUILD SURE.

Dear Readers,

Every customer is unique – with individual requirements that arise from their daily work. Whether concrete manufacturer, architect, planner, client or contractor – MC is always personally at its customers' side.

This is not just an empty phrase – we prove it every day: With strong commitment, in-depth expertise and outstanding service, we support our partners in successfully implementing their tasks and projects. We emphasize this again and again with current projects and reports in which our personalized support played a key role.

Building protection specialists also play a particularly important role: As versatile all-rounders, they must master a wide range of sealing and repair measures. You can find out how MC specifically supports them in our Main Feature on page 8.

In addition, you can once again look forward to a mix of current and inspiring topics: from the renovation of a velodrome and the innovative use of MC-DUR TopSpeed in the top-down construction method, to the sealing of a subway station and the creation of artificial natural-looking environments – MC's expertise, product systems and service continue to impress worldwide.

As always, we conclude the current issue with internal news and personnel updates.

I wish you an inspiring read!

Yours
Nicolaus M. Müller

CONTENT

Credits and legal

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Timur Rönnert, Managing Director of MC Switzerland and Nicolaus M. Müller, Managing Director of the MC-Bauchemie Group, officially open the new production plant in Switzerland.

INAUGURATION OF A NEW PRODUCTION PLANT IN SWITZERLAND

After about two years of planning and construction, MC-Bauchemie Switzerland inaugurated a new production plant for concrete admixtures in Dintikon on 25 April 2025. Around 50 customers and partners, including Nicolaus M. Müller, Managing Director of the MC-Bauchemie Group, attended the opening ceremony.

Selling concrete admixtures in the saturated Swiss market has long been considered difficult, but active local demand and increasing sales suggest otherwise. With local production now in place, transport routes will shorten, emissions will be reduced and a significant contribution to sustainability will be achieved. At the same time, the geographical proximity to the place of use ensures high delivery reliability and short response times. In addition, the new facility also enables targeted adaptation to specific conditions in Switzerland – such as climatic conditions, available raw materials, national standards and typical construction methods. The result is an efficient, environmentally friendly and reliable solution that meets the needs of the Swiss construction market.

Focus on the Swiss market and shared perspectives

"We don't want to be a German company in Switzerland; we want to be a Swiss company in Switzerland," emphasised Nicolaus M. Müller, Managing Director of the MC-Bauchemie Group, at the opening ceremony. Timur Rönnert, Managing Director of MC-Bauchemie AG in Switzerland, concluded: "The foundation stone has been laid – now it's a matter of collaborating with our customers and the prevailing conditions in the Swiss construction market to develop additional sustainable solutions alongside the existing product portfolio."

MC-BAUCHEMIE ESTABLISHES JOINT VENTURE IN EGYPT

In February 2025, MC-Bauchemie entered a strategic joint venture with SwissChem Construction Chemicals, an established Egyptian supplier of high-quality construction solutions. The joint venture officially commenced operations on 1 April 2025. This strategic alliance brings together two family-owned companies that share common values such as quality, innovation, technological leadership and long-term partnerships. MC and SwissChem aim to strengthen their market presence in Egypt and throughout the North African region and tap into new potential.

Group photo after the signing in Bottrop in February 2025 (from left to right): Dr Ekkehard zur Mühlen (Managing Director of the MC-Group), Johannes Linder (Managing Director of MC-Ireland), Nicolaus M. Müller (Managing Director of the MC-Group), Abdel Rahman Shorosh, Ali Shorosh (both shareholders of SwissChem), Jens Morgenstern (M&A Project Manager at MC) and Yassine Ben Ayada (Regional Director Africa at MC).

Big Picture

Manuel Gallardo Velodrome

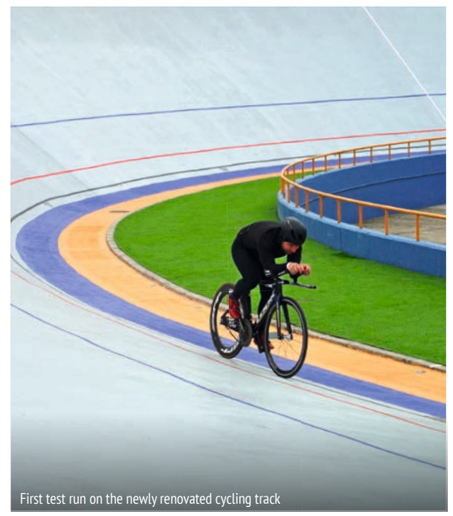
COMPREHENSIVE RENOVATION IN RECORD TIME

As part of the preparations for the binational games "Maule 2025," the Manuel Gallardo Velodrome in Curicó, Chile, was completely renovated with MC-Bauchemie's technology. The project was commissioned by the National Sports Institute (IND), executed by Constructora ABC, with coating applications carried out by the specialized company Pisos Industriales, and technical support provided by the team of MC-Bauchemie Chile.

The work included the complete renovation of the over 2,800 m² large jointless concrete track, with slopes of up to 40°. Due to surface temperatures reaching up to 50°C during the day, all applications had to be performed at night, under a tight project schedule. The solution applied was the MC-DUR TopSpeed system, with its KineticBoost® technology enabling accelerated curing while ensuring high adhesion, abrasion resistance and fast application. It consisted of a primer and scratch coat as well as the final coating with MC-DUR TopSpeed and H-32 quartz sand to achieve a slip-resistant and durable surface. In addition, Nafufill F100 was used for structural surface repairs and MC-Injekt 1264 for crack sealing.

This is a milestone that demonstrates how technology, planning and collaborative work can transform sports infrastructure in Chile.

You can find the detailed project report on our website:
https://bit.ly/4lkxfLb



First test run on the newly renovated cycling track

TRANSPARENT 1C PROTECTIVE SEALANT FOR MINERAL SUBSTRATES

MC-Floor Finish AC significantly increases the stain resistance of mineral substrates.

With the introduction of MC-Floor Finish AC, MC-Bauchemie is expanding its screed portfolio with a transparent, one-component protective sealant that has been specially developed for mineral substrates.

The rollable and brushable acrylic dispersion is characterised by excellent processing properties and a silk matte surface. It offers high stain and UV resistance and meets the requirements of EN 1504-2, including physical resistance. It is also suitable for mineral design and visible surfaces and as a smoothing aid for mineral levelling compounds (marble cosmetics) – a versatile solution for the protection and care of screed and concrete floors in various areas of application.

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NEW REPAIR MORTAR: NAFUFILL RM 10 RAPID

Also suitable for the precise formation of hollow mouldings.

Nafufill RM 10 rapid is a fast-setting repair mortar from MC-Bauchemie for the rapid repair of concrete and masonry surfaces. Ready for recoating after approx. 30 minutes, it minimises downtime on the construction site.

The mortar is frost-resistant, can be used indoors and outdoors and achieves a compressive strength of 3.7 N/mm² after only two hours. It is ideal for repairs to non-load-bearing components, levelling layers, joints and coving, even in adverse weather conditions.

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THE FAST EPOXY RESIN FILLER

Konudur Robopox 20 fast is a new, fast-curing epoxy resin filler from MC-Bauchemie for the force-fit renovation of non-accessible sewers using robot technology.

This high-viscosity, two-component resin is specifically developed for pipe rehabilitation. It enables fast processing without the need for thermal curing. It is thixotropic and cures quickly, even under water. It adheres to dry, damp-matte and wet mineral surfaces, as well as GRP laminates. Once cured, it offers high mechanical strength and chemical resistance. Konudur Robopox 20 fast is ideal for rapidly and flexibly rehabilitating and integrating inlets and connections made of concrete and ceramic in wastewater pipelines using PE formwork technology.

Your contact

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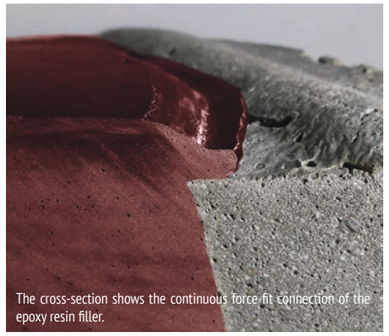


The cross-section shows the continuous force-fit connection of the epoxy resin filler.

View of the construction site of the FOUR Quarter in Frankfurt am Main, which was built using the top-down construction method.

MC-DUR TOPSPEED – SMART MATERIAL SOLUTION FOR TOP-DOWN CONSTRUCTION

In times of increasing urbanization and ever-scarcer inner-city space, the top-down construction method is gaining importance in high-rise construction. It allows for the simultaneous use of the construction area both above and below a "top slab" that is cast at an early stage. In this method, MC-Bauchemie's specialty resin MC-DUR TopSpeed is used in a unique way of application, offering crucial advantages for scheduling and construction progress.

For high-rise projects in densely built-up urban locations, the conventional construction method – where the entire excavation is completed first – reaches its limits. It requires a complex bracing concept with drilled piles and sheet pile walls, resulting in high setup costs. In addition, it involves significant time and effort: a large amount of material must be installed and later removed – an effort that can be significantly reduced with the top-down method. In this approach, a load-bearing slab is first cast on the site before excavation and construction of the floors beneath begin. The slab not only serves as a working platform but also takes on structural functions. By being firmly anchored to diaphragm or drilled pile walls, it stabilizes the excavation pit, reduces deformations and often eliminates the need for costly tie-backs – a clear advantage in dense urban settings where neighbouring properties cannot be used.

The challenge of the separation layer

A critical aspect of the top-down method is creating a reliable separation layer between the so-called blinding layer – a roughly 15 cm thick, smoothed concrete layer – and the slab cast above it. This layer must function reliably, be easily removable from the concrete later and not hinder construction progress. Typically, PVC sheets or smooth timber formwork are used for this purpose. However, in the major FOUR development project in Frankfurt (as previously reported in MC aktiv 2/2024) – one of the most significant high-rise construction projects currently underway in Germany – MC-DUR TopSpeed was deliberately chosen. And for good reason.

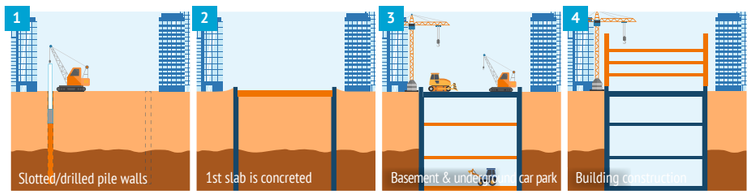
MC-DUR TopSpeed quickly creates a reliable separation layer

With its unique properties, MC-DUR TopSpeed is very impressive. It cures extremely quickly, even in cold and damp conditions and becomes walkable within a very short time, allowing the reinforcement for the main slab to be laid without delay. At the same time, the resin forms a thin, smooth and reliable separation layer that enables easy excavation of the blinding layer from below using an excavator. This makes it ideal for use in top-down construction, where any delay can have serious consequences for the construction schedule.

Smart solution for an innovative method

Top-down construction is an innovative method with great potential for complex urban building projects, though it also poses high demands on planning and execution. The targeted use of MC-DUR TopSpeed as a separation layer between the blinding layer and the slab represents a smart material solution that not only meets technical requirements but also significantly accelerates construction progress. Whether as a roller-applied coating for heavy-duty floors, as part of surface protection systems for trafficable structures such as parking facilities, or – as in this case – as a strategic component in an unconventional yet highly effective application: MC-DUR TopSpeed once again demonstrates its versatility and performance on the construction site.

Schematic presentation of the top-down construction



Watch the video on the top-down construction method used at the FOUR Quarter in Frankfurt (in German only).
https://bit.ly/3ICSb24

Main Feature

SEALING IS A MUST – MC AT THE SIDE OF BUILDING PROTECTION EXPERTS

Commitment to safety, health and preservation of value

Damp basements, leaky floors, walls and balconies are a nuisance for building owners and can even pose a health risk. For building protection experts, however, they are part of everyday life. They repair, protect and preserve buildings with expertise, sensitivity and the right product systems. MC-Bauchemie supports them with proven practical solutions, personal on-site consultation, in-depth training and fast delivery of high-quality products.

Building protection experts – all-rounders in the private sector

The profession of the building protection specialist has only recently been recognized as an official trade with a promising future. These specialists are skilled tradespeople tasked with identifying damage to buildings and structures, carrying out proper repairs and preventing future deterioration. Their work ensures that buildings remain safe, stable and habitable for the long term – turning damage into healthy and functional living spaces.

Their role includes making accurate diagnoses – for example, identifying moisture issues or structural deficiencies – and selecting and implementing the appropriate remediation measures. As the need for renovation in the existing building stock rises, along with increasing moisture damage and growing sustainability demands, building protection is becoming more important. Effective building protection extends the lifespan of structures and plays a key role in maintaining their value.

More than products: solutions and partnerships

Those working in building protection face individual challenges every day – from damage analysis to selecting suitable materials and carrying out the work properly. To handle these tasks effectively and efficiently, more is needed than just a functioning product. What matters most are product systems tailored to actual on-site conditions and reliable contacts who can provide assistance when needed. That's why MC-Bauchemie relies on a direct, personal and specialized sales force focused on building protection. There are no agents – customers are supported directly by dedicated field representatives familiar with the demands of the profession. This ensures closer coordination, whether it's selecting the right products, resolving technical questions or offering on-site support.

Direct contact – direct benefit

Especially with complex applications – such as injection technology or multilayer sealing systems – it is helpful to have access to in-depth experience and reliable support. In these situations, MC's direct sales model provides real added value to building protection specialists. Direct exchange, personal dialogue and hands-on training designed around real-world requirements support professionals in their day-to-day work.

MC's high-quality and proven product systems, combined with fast delivery times, also contribute to reliable planning for building protection professionals across Germany. Many applicators appreciate having a dedicated contact person and receiving their materials directly from MC.

System solutions for everyday building protection

Renovation projects in existing buildings often come with unexpected challenges. When dealing with moisture damage or leaks, a quick yet structured approach is essential – not least to ensure economical and sustainable outcomes. That's why MC relies on clearly defined system solutions that combine compatible components and processes that have proven themselves in practice – from interior and exterior sealing to injection systems, balcony, garage and basement floor renovation, as well as systems for utility basements and joint/concrete repair.

Interior sealing of damaged basement walls

When basement walls are inaccessible from the outside due to surrounding buildings or overbuilds, interior sealing is the only practical alternative. By cleverly combining compatible products, high-quality living spaces can be created. These systems are applied in multiple steps and are designed to work together reliably.

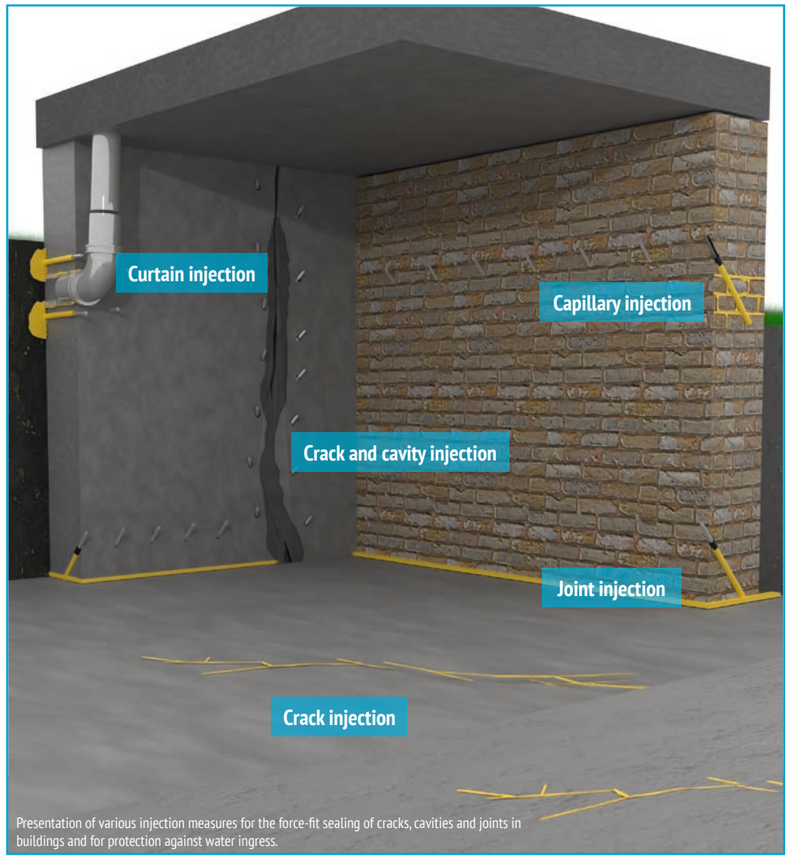
The process for sealing basement walls against non-pressing water starts with surface preparation and removal of the existing plaster. This is followed by a hydrophobic horizontal barrier using either Emcephob HSC or Emcephob HSL-W. The substrate is then levelled and smoothed, for example with Nafufill RM 10 as a levelling mortar and to create a cove joint. For sealing against

APPRENTICESHIP IN BUILDING PROTECTION TECHNOLOGY

Building protection technicians in Germany specialize in the preservation, repair, and sealing of buildings and structures. The apprenticeship provides hands-on knowledge in construction chemistry, waterproofing systems, substrate preparation and damage analysis. It follows the dual training system and offers diverse career opportunities in both structural and finishing construction trades.

The German Association for Wood and Building Preservation (DHBV) is the central professional body for the structural preservation trade. It supports apprenticeship, promotes quality assurance and represents the interests of specialist companies, trainees and certified experts at the national level.

For more information, visit (German available only):
https://www.dhbv.de/



Presentation of various injection measures for the force-fit sealing of cracks, cavities and joints in buildings and for protection against water ingress.

negative water pressure, a mineral slurry like MC-Proof 101 HS is applied in multiple layers and the walls are finished with the MC-Plaster renovation render system.

Depending on the structure-specific conditions, MC-Bauchemie's wide product range enables targeted, object-specific sealing solutions tailored to individual needs, ensuring maximum reliability and durability, whether using injection systems, reactive sealants or repair mortars.

Sealing the exterior against moisture using PMBC and FPD technologies

Exterior sealing remains one of the most effective methods of basement waterproofing, typically carried out by qualified building protection experts. Depending on the application, two technologies are available: PMBC (polymer modified bituminous thick coatings) and FPD (flexible polymer modified thick coatings). MC-Bauchemie offers a wide range of solutions for both systems.

In summer, for instance, the new reactive waterproofing product MC-Proof 800 next is ideal – its extended working time ensures safe application even at higher temperatures. Alternatively, tried-and-tested products like MC-Proof eco or the single-component MC-Proof one can be used depending on the project. Various bitumen-based sealing options are also available – including polystyrene-filled, single-component or two-component systems that can be sprayed or trowelled on to suit a wide range of site conditions. The sealing systems are complemented by coordinated components such as Nafufill RM 10 rapid for cove joints or Nafuflex GIP as a bonding primer. These complete systems ensure practical, long-lasting and secure waterproofing, while also contributing to the building's energy performance.

Reliable waterproofing with injection technology

In the field of injection technology, MC-Bauchemie offers world-leading injection systems for targeted repair of cracks, joints, voids and capillary-damp masonry – systems valued by building protection experts for their lasting sealing and stabilizing effects. For sealing voids inside a structure, various injection resins and systems are used. A standout product is MC-Injekt PowerSeal G – a single-component, highly elastic injection resin that is easy to handle and quickly and permanently stops water ingress. MC-Injekt 2300 flow, a ductile-elastic resin, is suitable for flexible, long-term sealing in concrete and masonry. For small, quick jobs, MC-Fastpack is the solution of choice – this injection and adhesive system includes various reactive resins ideal for sealing cracks and joints, bonding packers and components and immediate sealing in case of water ingress. All systems allow for targeted, material-appropriate repair and help ensure the long-term integrity of the structure.

Solutions for balcony, garage and basement and joint repairs

For balcony renovations, MC-Bauchemie provides coordinated sealing and coating systems based on MC-DUR TopSpeed technology. These systems allow for rapid application with high protection and design flexibility. For basement and garage floors, tough, coloured coatings are available that offer moisture resistance and slip resistance. In utility basements, depending on moisture or salt exposure, special plaster systems are used that regulate moisture or resist salt damage. MC also offers certified joint sealing systems and durable concrete repair solutions – from elastic joint tapes to fibre-reinforced repair mortars for load-bearing components.

Conclusion and outlook

Building protection is a demanding field characterized by unique damage scenarios, complex structures and high client expectations. Success here requires not only technical expertise but also trust in the materials and systems used.

MC takes a clear approach: not the most products, but well-structured systems that have proven themselves in practice. These are applied consistently – in dialogue with customers. Because what matters isn't just the product, but the interplay of application, support and reliability. MC's close ties to the market, hands-on training and short communication paths make it easier to find solutions – even for challenging construction sites.

MC's direct sales model is not an end in itself but reflects a mindset to show commitment, not only to the materials, but also to ensuring successful on-site outcomes. Feedback from building protection specialists shows that the goal isn't to reinvent everything, but to support quality work with well-thought-out solutions, technical know-how and a listening ear.

Follow us on Instagram!

Get insights into waterproofing, construction sites and products, as well as into everyday life in building protection. Follow @dichtistpflicht.mc (German only) to stay close to the action!

Click here to visit this Instagram profile:
instagram.com/dichtistpflicht.mc

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Practical insights into the world of building protection

INTERVIEW WITH DENNIS KOX

„You need solid technical understanding and practical skills."

Dennis Kox

Dennis Kox (40) has been successfully leading Kox Abdichtungstechnik GmbH based in Krefeld, Germany, for 15 years. The experienced building protection specialist sees himself as a passionate problem solver and has built a strong market position in the Krefeld region with his seven-member team. In the following interview, he offers insights into the multiple challenges and special features of his daily work.

Mr. Kox, what does a typical workday look like for you?

Our day starts at 7:30 a.m. with a team meeting at the company. Since we've digitized our workflows, all employees receive the relevant information for the next workday via a special app the evening before. While the teams head out to their respective construction sites, I coordinate ongoing projects, handle correspondence and coordinate with our office. I also regularly visit the construction sites in person to exchange ideas with my employees and our customers. This personal presence is indispensable. It's the only way to find optimal solutions together.

What challenges do you face in your profession?

The most demanding task is often an accurate diagnosis of the problem. Where exactly is the moisture penetrating? What is the customer's goal with the renovation: is it simply to dry out a basement for storage purposes or is high-quality living space to be created? Since architects or planners are often not involved, we take on this advisory role ourselves. That requires in-depth technical expertise. Additionally, every step of the work must be executed perfectly to achieve a lasting solution – whether it's basement waterproofing, balcony refurbishment or repairing underground garages.

What personally motivates you in your daily work?

I see myself as a problem solver– and I do it with great passion. When people suffer from moisture damage or mold in their homes and it affects their quality of life, we can offer concrete help. It goes far beyond craftsmanship. It's about real responsibility for our customers' well-being.

I still find my job exciting because it's so diverse: You need solid technical understanding and practical skills, you have daily contact with customers, and every day brings new challenges.

What do you particularly value about working with MC-Bauchemie?

The personal and collaborative support from MC-Bauchemie is something special and clearly sets them apart from other providers. I have a close, direct relationship with my contact person and can call him anytime to discuss an issue. At MC, you're not just a number – you experience real partnership and work on the same level. This reliability is not a given in our industry.

The specialized training courses are also especially valuable, such as those on injection techniques. In the past, we avoided injection work due to a lack of expertise. Thanks to MC's training, these demanding methods are now part of our standard repertoire and open new business areas for us.

How do you view the future prospects for building protection?

I'm extremely optimistic. The steadily rising cost of new construction makes existing properties increasingly attractive – but many of these buildings require extensive renovation. There's especially a huge need for improvement in waterproofing and building protection, whether for balcony refurbishments or repairing underground garages.

At the same time, our profession comes with physical demands, and we are also affected by the general shortage of skilled workers. Nevertheless, building protection offers a secure career path: While modern technology can replace many things, mortar and sealing materials still have to be applied on-site by qualified professionals.

Modern technology can replace many things, but mortar and sealing materials still need to be applied on-site by skilled professionals.

TOFFEE project

RESEARCH INTO SUSTAINABLE BUILDING MATERIALS

As part of the project funded by the German Federal Ministry of Education and Research (BMBF) 'TOFFEE – Processing and activation of clay soils for resource-efficient geopolymer building materials', MC-Bauchemie has been working intensively on the use of regional clay soils from 2022 to 2024 together with several partners from research and industry, including the Technical University of Cologne.

Construction projects regularly generate mineral excavated soil. While sand and gravel can already be processed and used, for example, as aggregate in concrete, cohesive soils with a high clay and silt content have so far mostly been landfilled. The aim was to process and activate these natural raw materials to develop resource-saving and sustainable alternatives to conventional building materials.

MIRO Sustainability Award

The project was part of the BMBF strategy 'Research for Sustainability – FONA'. The Technical University of Cologne submitted the TOFFEE project on behalf of all partners for the MIRO Sustainability Award. Although the project did not win an award at the ceremony, each participating partner received a certificate of participation in recognition of their commitment to sustainable construction. MC was also delighted to receive this recognition.

The TOFFEE project is a prime example of successful cooperation between science and practice in the development of sustainable innovations in the construction industry.

© Adobe Stock

As part of the TOFFEE project, MC worked with partners to process excavated soil with a high clay and silt content and use it as a sustainable alternative to conventional building materials instead of sending it to landfill.

RECYCLING, CLIMATE AND RESOURCE PROTECTION AT MC

By recycling materials such as plastics, paper, cardboard, wood and kraft paper bags, MC-Bauchemie in Germany, in cooperation with Interzero Holding GmbH & Co. KG, was able to save 1,684 t of resources (i.e. primary raw materials extracted from nature for the production of the above-mentioned materials) and over 221 t of greenhouse gases in 2024. Once again, MC-Bauchemie made an important contribution to climate and resource protection.*

* Source: Certificate resources SAVED 2024 / Calculation methodology Fraunhofer UMSICHT based on data for 2023

MC solutions help maintain construction schedule at Toronto's Finch West Station

EFFICIENT INJECTION TECHNOLOGY STOPS WATER INGRESS AT SUBWAY STATION

The packers are in place, and the injection is in full swing.

Water ingress threatened the opening of the new Finch West Subway Station in Toronto. Thanks to the targeted use of injection technology from MC-Bauchemie, the issue was resolved quickly and sustainably.

View of the construction site of the underground station in Toronto

The newly built Finch West Subway Station at 3939 Keele Street in Toronto, Ontario, represents an important infrastructure investment for the metropolitan region. As a central transport hub in the expanded public transit network, the station plays a key role in the city's mobility strategy. Shortly before commissioning, however, unexpected water ingress raised structural concerns. Water penetrated the shotcrete surface behind a thick concrete wall on the platform level – posing risks to the long-term integrity of the structure.

Challenging conditions at a major transit node

In winter, the penetrating water froze inside the wall, causing expansion and resulting in cracks over time. The Mosaic Transit Group, responsible for delivering the project, had to act quickly to prevent delays. The repair situation was particularly demanding. The water ingress occurred behind a shotcrete wall with integrated drainage systems, which had to remain functional during remediation. In addition, the work had to be completed within a tight time frame due to rail network constraints.

MC was brought in for its technical expertise, fast availability, and on-site training support. Work began on 3 March 2025. Within two days, crews were trained in drill pattern layout, packer installation, pumping equipment and injection methods.

The solution: targeted injection systems

To address the issue, two MC systems were applied: the two-component acrylate gel MC-Injekt GL-95 TX, which reacts with water and expands to seal cracks and stop further ingress; and MC-Fast ST, a system designed for added stability and rapid response to pressurized water.

A key factor in the approach was selecting a reaction time that allowed a sealing barrier ("cut-off wall") to form around the existing drainage system without impairing its function. This enabled controlled waterproofing while maintaining drainage performance.

Successful implementation and future use

The injection work was completed successfully with support from MC's on-site specialists. The solution helped restore structural stability and kept the construction schedule on track. The combination of system performance, fast response, and technical support led the project partners to consider this approach for similar applications in the Greater Toronto Area.

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The fallen tree is not real: like the rock supporting it, it was recreated using MC sculpting mortar.

Lifelike landscapes created with MC's specialty mortars

REAL NATURE FROM MORTARS AT THE MANDAI WILDLIFE RESERVE IN SINGAPORE

As part of the comprehensive transformation of the Mandai Wildlife Reserve in Singapore, MC-Bauchemie made a significant contribution with its customized sculpting and modelling mortar systems, enabling the creation of highly detailed rock formations and deceptively realistic natural landscapes and experiences.


This deceptively realistic landscape was also constructed using MC-RockMortar.

The Mandai Wildlife Reserve is considered Singapore's flagship destination for nature tourism and wildlife conservation. With over 4.4 million annual visitors – including one million at the 2023 opening of "Bird Paradise" – it ranks among Southeast Asia's most important zoological attractions.

A holistic transformation for new animal worlds

The 126-hectare site is being redeveloped with a holistic concept that blends nature experience, education, and inclusion. Key milestones in this transformation include the "Bird Paradise" park, opened in 2023, which features eight thematic zones representing global ecosystems – from African rainforests to South American wetlands – and "Rainforest Wild Asia," Southeast Asia's first adventure-style zoo, which opened in April 2025. Visitors can explore immersive animal habitats via suspension bridges, cave passages, and accessible forest trails with sensory stations – offering a unique mix of adventure, learning, and sustainability.

High technical demands and design ambitions

A project of this scale comes with substantial construction challenges. The realistic design of rock structures and surfaces had to withstand the tropical climate and heavy foot traffic. Complex terrain profiles, steep pathways, and diverse requirements for texture, slip resistance, and visual consistency had to be addressed, all while meeting high aesthetic standards.

Tailored solutions from MC-Bauchemie

To meet these diverse needs, MC-Bauchemie recommended a mortar system tailored to each park zone. For large, sculptural rock features, the dimensionally stable MasterPlas MW G and MW F modelling mortars were used, offering extended working times ideal for detailed shaping. For intricate elements and quick repairs, the easy-to-apply MC-EasyGRC 3050 fine mortar proved effective. Highly water-exposed areas were built with the durable, sulphate-resistant MC-RockMortar HS, while the adhesive mortar Botament M 21 with integrated waterproofing was used in consistently damp zones.

This combination allowed for robust, weather-resistant, and visually cohesive structures – from the ten-meter-high waterfall to the fully accessible pathways in Bird Paradise. The coordinated system solution also improved logistics and reduced interface issues between trades.

Sustainable value for people and the environment

The use of MC products enabled shorter construction times, fewer reworks and greater long-term durability of the structures. For visitors, this translates into safe pathways and immersive natural environments that foster environmental awareness. For the operator, the low-maintenance systems lead to lower operating costs and increased efficiency, delivering long-term value in sustainability, visitor experience, and operational performance.

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Optimal flooring for municipal utility's vocational training workshop

TAILOR-MADE FLOORING SYSTEMS FROM MC IMPRESS


A mineral system was installed in the welding booth using Emcefloor PCC pro to prevent combustions from flying sparks.

In 2022, the City of Bochum modernized its vocational training workshop with specially adapted flooring systems from MC-Bauchemie to sustainably improve safety, ergonomics and functionality in the workshop's various areas.

The vocational training workshop of the City of Bochum's utility company (Stadtwerke Bochum) is a central hub for the practical training of future professionals – especially in the fields of mechanical engineering and electronics. As part of a comprehensive modernization project in 2022, the City of Bochum decided to completely renew the flooring to meet increased demands for occupational safety, ergonomics and technical equipment.

Customised flooring concept for diverse usage requirements

In collaboration with the experienced local applicator Steden GmbH & Co. KG and the responsible parties at the City of Bochum, MC-Bauchemie developed a customized flooring concept precisely tailored to the individual usage profiles. Close coordination with the trainers played a key role in selecting the appropriate systems. During a sample presentation, they were able to see the advantages of the flooring systems for themselves.

Implementing the project presented several technical challenges: varying levels of mechanical stress, high demands on slip resistance and fire protection, ergonomic requirements, and the need for protection against electrostatic discharge all required differentiated, functional solutions. For example, floors in the welding area needed to be not only durable but also resistant to sparks. In contrast, at the workbenches, cushioning underfoot was essential to make prolonged standing more comfortable. In the electronics area, the flooring had to be conductive to protect sensitive electronic components from electrostatic discharge damage.


Highly wear-resistant epoxy resin-based coatings were used in the corridors.

Specialised flooring systems for technical challenges

Different MC flooring systems were used for the respective application areas. For the workbench zones, MC-DUR TopSpeed flex was selected – a highly flexible floor coating that offers ergonomic cushioning and excellent slip resistance. In the welding booths, the mineral-based Emcefloor PCC pro system was installed. It was specially developed to protect against sparks and reduce potential fire hazards. The main work areas were coated with a durable polyurethane topcoat that withstands mechanical stress while also providing walking comfort. Highly wear-resistant epoxy coatings were chosen for the heavily trafficked corridors. In the electronics workshop, a conductive floor covering ensures the required ESD safety.

Thanks to close and detailed collaboration between the client, the applicator, and MC, a holistic solution was created that is impressive both in terms of functionality as well as design and ergonomics. Feedback from trainees and supervising staff has been consistently positive.

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MC supplies special solution for major project in Slovakia

RELIABLE CONCRETE TECHNOLOGY FOR A MILITARY HOSPITAL IN PREŠOV

Two concrete pumps with long boom arms pump concrete from the truck mixers onto the construction site.

A modern military hospital is being built in Prešov in eastern Slovakia, which is scheduled for completion in 2027. Construction work began in March 2025 with the construction of a substructure consisting of around 23,000 m³ of concrete with a crystalline admixture – the largest order of its kind in Slovakia in 20 years. MC-Bauchemie is supporting the construction with a technically tailored admixture solution for the enormous substructure.

The Slovak Ministry of Defence commissioned Danucem, the leading concrete producer in Slovakia and part of the international CRH Group, to produce the concrete. When selecting crystalline concrete admixtures, the client opted for MC-Bauchemie, not least because of its early technical advice and a tailor-made solution for the specific project requirements.

Large-scale concreting under a bright blue sky.

Complex planning and execution requirements
The focus of the first construction phase was on the load-bearing substructure, which was completed between March and August 2025. More than 130 t of concrete admixtures were required for the foundations and load-bearing components – a logistical challenge for MC and Danucem. MC took over the planning at an early stage together with Danucem with the aim of ensuring the continuous availability of the admixtures in consistently high quality – which proved to be a key success factor for the rapid progress of construction.

Centrament Proof CL1 concrete admixture proves its worth
Even before construction began, MC succeeded in convincing both Danucem and the client of the technical and economic performance of the MC solution. The decisive factors here were not only the quality of the product, but also its long-term efficiency when used on a large scale.

Centrament Proof CL1, a crystalline concrete admixture for integral waterproofing, was ultimately used. MC-Bauchemie Slovakia developed this admixture based on its experience and the requirements of its clients. Centrament Proof CL1 impressed with its excellent compatibility with various types of cement and aggregates, which enabled rapid construction progress without compromising on quality. At the same time, Centrament Proof CL1 ensures long-term water impermeability of the concrete, eliminating the need for additional waterproofing measures. The product also performed reliably under widely fluctuating temperatures.

The combination of technical expertise, logistical precision and product quality from MC and Danucem ensured that the project could be implemented on schedule and without disruption. With this showcase project, MC Slovakia underlines its expertise as a reliable partner for the concrete industry in demanding large-scale infrastructure projects.

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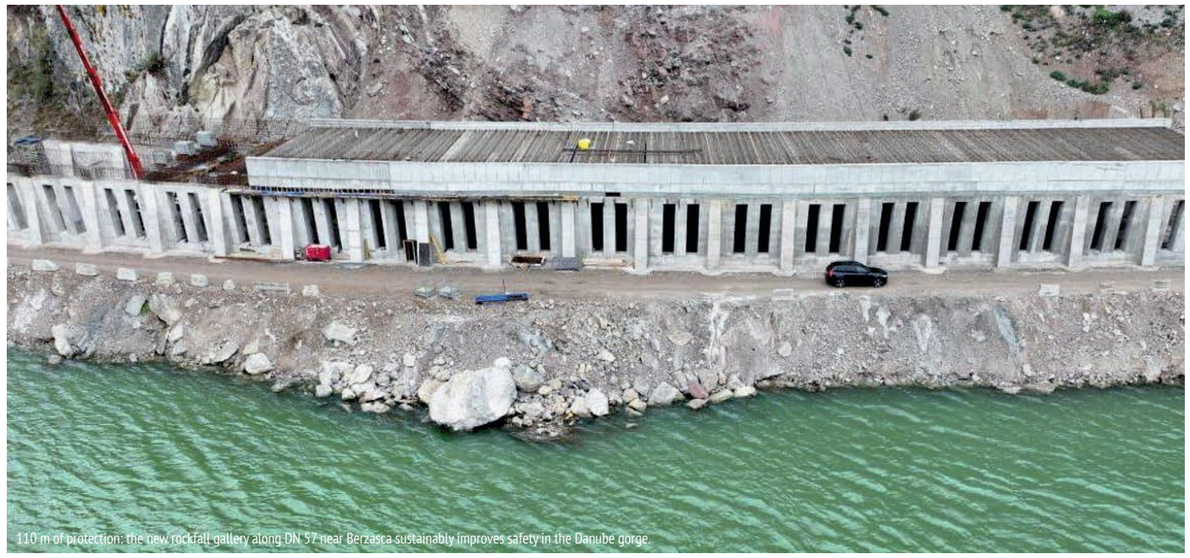
Rockfall gallery protects national road DN 57 in Romania

SAFE PASSAGE THROUGH THE DANUBE GORGE



110 m of protection: the new rockfall gallery along DN 57 near Berzasca sustainably improves safety in the Danube gorge.

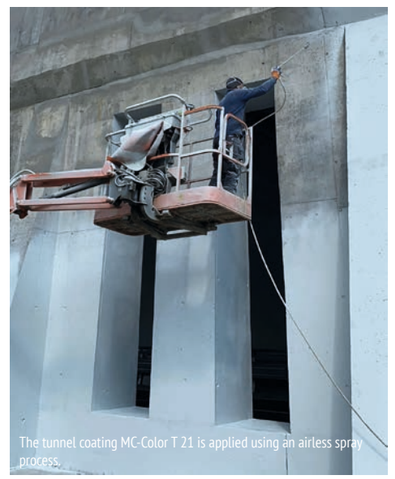
In the Romanian town of Berzasca, a central infrastructure project to improve road safety was implemented with the construction of a rockfall gallery on national road DN 57. MC-Bauchemie supported the project by providing proven product systems – from concrete admixtures and injection products to concrete cosmetics and surface protection for the tunnel interior.

The national road DN 57 runs through the spectacular Clisura Dunării region in southwestern Romania. This scenic but geologically challenging route is an important link for passenger and freight traffic as well as tourism.

Due to the rocky terrain, rockfalls repeatedly led to road closures and safety risks. The authorities therefore initiated the construction of a 110-meter-long rockfall gallery – a tunnel-like protective structure that permanently secures the road. In addition, a more than 200-meter-long retaining wall was built to stabilize the slope. Work began in February 2023 and was completed in spring 2025. The main contractor MARISTAR consciously chose MC-Bauchemie due to positive past experience and the high quality of the products. The execution was carried out by the company EdilKam & Art.

Major challenges: narrow space, steep slope, time pressure
The key technical challenge was the combination of a narrow construction site, a steep slope, and the requirement to build a durable, load-bearing structure – largely without closing DN 57. This placed high demands on concrete technology: the material not only had to meet the highest structural standards but also be easy to work with and develop strength quickly. A specially tailored concrete mix was therefore used, produced at the Liati Turnu Severin plant, incorporating two MC concrete admixtures: Muraplast FK 19 and MC-PowerFlow 5395.

Tailor-made concrete with MC admixtures
Muraplast FK 19 is a high-performance plasticizer that reduces internal friction in the concrete mix, thereby improving workability – especially for densely reinforced elements like the gallery beams. It also ensures consistency and homogeneity, making it easier to place and compact the concrete. MC-PowerFlow 5395 is a high-performance superplasticizer based on the latest MC polymer technology and additionally promotes accelerated strength development. This combination was instrumental in shortening formwork times and completing the construction within the planned schedule.



The tunnel coating MC-Color T 21 is applied using an airless spray process.

Comprehensive protection with MC products
For local leakages, MC-Injekt 1264 compact and MC-Injekt 2700 L were used – two injection resins that reliably seal cracks and leaks to ensure the long-term watertightness of the structure. In addition, cosmetic concrete repair products from MC provided a uniform appearance.

To protect the inner shells and portals of the tunnel from wear and tear, the client opted for MC-Color T 21, an innovative one-component tunnel coating from MC that is easy-to-apply and provides a matt shiny, colour-stable surface with high light reflectance (LRV ⩾ 70). This improves visibility inside the tunnel and enhances energy efficiency. Thanks to its high resistance to UV radiation, weathering, frost, and de-icing salts as well as its excellent cleanability, MC-Color T 21 also provides long-term protection and reduces maintenance costs.

Thus, MC products contribute to the safety and stability of the infrastructure in the Clisura Dunării region, ensuring year-round accessibility for local freight traffic and tourism.

Your contact

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Family man: Nermin Zečić on holiday with his wife and children


Nermin is a passionate cyclist

Since July 2021, Nermin Zečić (44) has been part of MC-Bauchemie in Bosnia and Herzegovina. As a dedicated sales expert, he oversees projects on site, builds strong customer relationships, offers technical support and explores new business opportunities. He's also active on social media to enhance MC's visibility and showcase its diverse applications.

Born in Sarajevo in 1981, where he also attended school, the married father of two children, graduated from high school in electrical engineering. He then decided to change direction and pursued a degree in business administration at the Business Academy in the Bosnian capital.

From food retail to construction chemicals

Nermin started his career in 2004 at one of the world's largest food and beverage distributors, representing major international brands such as Milka, Toblerone, Jacobs and Heineken. There, he gained valuable direct sales experience and gradually built a solid foundation of expertise. He later moved into building distribution, but he found greater satisfaction in direct sales at construction sites. In July 2021, this led him to MC-Bauchemie – a decision he has never regretted.

Professional highlights

What he enjoys most at MC is the variety: "Each day brings new people, topics and challenges." One standout project was "Roof Gardens" in Sarajevo, one of the largest residential and commercial developments built in Bosnia and Herzegovina in recent years, where MC supplied a range of water-proofing products. Another milestone was the refurbishment of the Ilijaš stadium stands, earning his team first place in MC's 2023 global project ranking for MC-DUR TopSpeed. In early 2024, Nermin developed a new application using the MC-DUR 1200 epoxy resin system to create marble-like decorative floors – now in use not only in Bosnia but in neighbouring countries too. He proudly shares project results on social media, receiving a lot of positive feedback.

Driven by dedication

Nermin values the respectful and reliable culture at MC: "What's agreed upon counts – and I really appreciate that. I also have the freedom to develop both personally and professionally here." His personal motto is both grounded and powerful: "Just be a good person, do your work with care and passion – the results will follow naturally."

In his free time, Nermin enjoys staying active. He likes hiking, cycling and has an interest in football, basketball and archery. For him, exercise and being in nature are the perfect balance to everyday working life.

INTRODUCING: SABINE WEBER

The voice of the MC headquarters in Bottrop

Sabine Weber (53) began her professional career after finishing high school in August 1990 with an apprenticeship as a wholesale and foreign trade clerk at Minolta in Essen/Mülheim. After completing her training, she initially worked in accounting there, but moved to MC on 1 January 1994, where she first worked as a commercial employee in areas including human resources and marketing. After the birth of her first daughter in 1997, she remained with MC as a holiday and sick leave replacement but withdrew from her career for several years after the birth of her second daughter in 2001. However, her connection to MC never broke. In 2014, she returned, initially as a temporary replacement at the head office, and then as a permanent part-time employee from August 2015. Today, she is a permanent fixture at the head office in Bottrop and the first point of contact for many people – whether on the phone, by email or in person. Sabine lives with her husband and dog Fiete in Essen, and her two adult daughters are now independent. She enjoys travelling, hiking in the Alps and loves music and concerts – especially those by Chris de Burgh, for whom she once flew to the Maldives. She also sings in a choir and lives by the motto: 'We cannot increase the time we have, but we can fill it with happiness and life.'

Wishing you continued success and enjoyment!

PERSONNEL AT A GLANCE

New employees

ARKADIUSZ RĄCZKA, (51) was appointed to the management board of MC Bauchemie Sp. z o.o. in Poland with effect from 1 April 2025. In this role, he will be responsible for the operational and administrative management of the Polish subsidiary of the MC-Bauchemie Group, which includes the production, logistics, purchasing, finance and accounting departments, and will be responsible for the strategic development of these areas. He reports directly to Tomasz Falkowski, Regional COO for Central Eastern Europe, Central Asia, Middle East & India at MC-Bauchemie. The graduate electrical engineer with an Executive MBA degree has many years of management experience in international industrial companies, particularly in the areas of production, supply chain management and plant organisation, and has held senior positions in companies in the coatings and lighting industries.

ALMIN ORUĆ (35) has been Managing Director of MC-Bauchemie d.o.o. in Bosnia and Herzegovina since 1 November 2024. He is overall responsible for the operational and strategic management of the local company, which was founded in 2007. His key tasks include the strategic management and continuous optimisation of business processes, the targeted development of the company's market position, the professional management of customer relationships, and the monitoring and control of economic development to ensure sustainable growth and competitiveness. The chemical engineer has more than seven years of management experience in the concrete and construction chemicals industry in Bosnia and Herzegovina and has held positions including plant manager and member of the management board.

ROGÉRIO BELHOT (41) took over the position of Finance Director at MC-Bauchemie Brazil on 19 May 2025. In his new role, he is responsible for finance and legal affairs and reports directly to Jacques Pinto, Managing Director of MC-Bauchemie Brazil and Regional Manager for Latin America. The business economist began his career at one of the world's leading auditing firms and moved into the industrial sector in 2015. There, he focused on financial planning and analysis, controlling, treasury, accounting, pricing and internal controls and held management positions in international industrial companies.

MC Award 2024: And the winners are ...

Group photo with MC's group management of this year's award winners (from left to right): Dr Ekkehard zur Mühlen, Johannes Linder, Steve McCormack and Greg Burton (MC-UK), Hafiz Alshaban (MC-UAE), Noble Bediako (MC-Ghana) and Nicolaus M. Müller.

This year's MC-Bauchemie Senior Management Meeting took place on 24 and 25 June 2025 at the training centre in Bottrop. The meeting was attended by the managing directors of all national subsidiaries, regional and segment managers, heads of central departments and the German management team. The agenda focused on strategic developments within the MC Group, the implementation of Vision 2030 and the progress of regional initiatives. Once again, a highlight of the meeting was the presentation of the MC Award for the most successful national subsidiary. The MC Award 2024 went to MC United Arab Emirates (UAE), followed by MC Great Britain in second place and MC Ghana in third place. The assessment was based, among other things, on various key figures relating to economic development, such as growth rates, earnings figures and earnings performance.

We congratulate the winners and wish everyone continued success!

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Nafuquick eCO2

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- Colour: pebble grey
- Max. grain size: 0.35 mm

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