

MC

aktiv

MAGAZINE

MC-BAUCHEMIE 2-2022

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Ladies and Gentlemen,

We are currently experiencing one of the greatest sea changes since the fall of the Iron Curtain in 1989/90. The consequences of the Russo-Ukrainian war are immense: World politics is divided, supply chains have been disrupted, prices are exploding, and inflation is at an all-time high. But even in a difficult period such as this, you will find that you can still safely put your trust in MC.

Despite everything, we have been able to secure our supply capability for our customers. We are proud of this and grateful for the special commitment that our employees have shown. We will continue to do everything possible in order to ensure that we remain as dependable a trading partner as ever for those who rely on us.

Industrial floors, especially in the food industry, also have to show extreme resilience. With MC-DUR PowerCoat, we have launched a heavy-duty flooring system that can withstand the toughest of operating, load and stress conditions. Read more about this in our main feature in this edition of MC aktiv – once again accompanied by a colourful array of news, innovation reports, inspirational applications and project descriptions.

I wish you all the best and – as always – an enjoyable read!

With kind regards,

Nicolaus M. Müller

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Proud team: Group picture with all employees of MC-India



MC OPENS NEW SITE IN INDIA

Dr. Ekkehard zur Mühlen officially opens the new factory.



View of the new factory building of MC-India in Halol



MC employees in traditional Indian dress



As part of the employee awards ceremony, Wolfgang Litz, Business Development Manager of MC, honoured Siddhesh Rangnekar.

MC-Bauchemie India Ltd. officially opened a new site in Halol on 6 April 2022. It includes a production facility for powder products, concrete admixtures, polymers and resins, plus warehousing, logistics and office areas, and a laboratory.

In forming MC-Bauchemie India in 1985, MC became one of the first western building chemicals companies to make the move to the Indian subcontinent. It has since established itself as a manufacturer of high-quality chemical products in the Indian construction sector. The last four years following a restructuring have been especially

successful. For the occasion, MC-India invited its most important customers from all over India to join with the full complement of its employees in celebrating the inauguration of the new site in Halol. In keeping with Hindu custom, the proceedings opened with a traditional Puja ceremony, "puja" meaning "worship" or "honouring". After-

wards there were guided tours through the new premises before the day ended with a splendid gala dinner. The new MC plant in Halol is approx. 40 km northeast of the city of Vadodra in the federal state of Gujarat and boasts a total expanse of more than 8,500 m² with around 3,300 m² of production, logistics, laboratory and warehousing space as well as 600 m² of office area and various other developed zones.



For further information, please go to:
<https://bit.ly/3c9CAY3>





Bird's eye view of the new MC-Ghana factory premises during the grand opening



Side view of the new office building of MC-Ghana with the creatively designed façade

MC INAUGURATES NEW PLANT IN GHANA



Francis Asenso-Boakyie (centre), Minister for Construction and Housing in Ghana, officially inaugurates MC's new site in Accra.



Noble Bediako, Managing Director of MC-Ghana, welcomes the more than 200 guests.



Group picture of the invited dignitaries

On 11 May 2022, MC-Bauchemie Ghana Ltd. officially opened its new site in Accra, with 210 representatives from politics, business and academia, as well as customers and business partners, in attendance.



Presiding at the grand opening, Noble Bediako, Managing Director of MC-Bauchemie Ghana, took the opportunity to share the history of MC-Ghana with the industry professionals and dignitaries present. "We want to show what can be achieved with hard work, team spirit, commitment, integrity, determination and courage," Bediako emphasized in his address

on behalf of both his team and the MC Group as he welcomed the more than 200 guests present. MC-Ghana was established in 2016 in order to provide the Group with a foothold in the growing West African market. Since then, it has evolved from having two to having 40 full-time employees. More than 30 products are now manufactured in Ghana, with over 75% being sourced

from local raw materials – a success story to which another wonderful chapter has been added with the inauguration of the new plant.



For further information, please go to: <https://bit.ly/3K9oTFg>



NEW ADMIXTURE PRODUCTION FACILITY AT MC-PHILIPPINES RECEIVES BLESSING



Photo of the MC-Philippines teams with Father Gilbert presiding over the blessing ceremony for the new production facility in Manila

On 2 June 2022, MC-Bauchemie Philippines Inc. celebrated the inauguration of its new admixture production plant, enabling it to become independent of local contract manufacturing in this segment. As an integral part of the proceedings, Father Gilbert V. Vidanes, priest of the Catholic parish "Our Lady of the Poor", blessed all factory premises including the new production facility during a joint tour of the site. Shirley Laurel

(seated, centre), Managing Director of MC-Philippines, welcomed the guests and thanked Lothar Hellenkamp (2nd from the left), Regional Manager of MC, for the support received from HQ in Bottrop.

MC in demand for major projects

MC currently has seven full-time employees working in the Philippines and is on track to generate significant growth in the years to come. One of

many major projects is the new airport serving Manila, where the Dutch company Boskalis has already started with the ground and consolidation works using an array of MC products.



Group picture of the managing directors and division heads of MC at the Senior Management Meeting

"MC-CAFETERIA" & SENIOR MANAGEMENT MEETING

From 27 June to 1 July 2022, after two years of Covid-19 restrictions, we welcomed MC managing directors and sales managers from more than 30 countries to the "MC-Cafeteria", an international conference combined with an in-house fair at our training centre in Müllerstrasse. This was followed by the Senior Management Meeting in Düsseldorf

on 2 July 2022, attended by the managing directors of all MC country subsidiaries as well as the German divisional managers. The MC Award, which is determined on the basis of revenue and earnings development, was once again presented to MC-Croatia for 2021, closely followed by MC-Denmark in second place, and then MC-Brazil.

JUDICIAL REVIEW UPDATE

The judicial review of the product-related parts of the Technical Rules (DIBt) Maintenance of Concrete Structures ("TR Maintenance") and the DAfStb Code of Practice – Protection and Repair of Concrete Structures ("Maintenance Guideline") in Bavaria and North Rhine-Westphalia (as previously reported in MC aktiv 3/2021) has been welcomed by the European Commission. In a recent statement, it confirmed once again that it considers the product-related parts of "TR Maintenance" to be inadmissible.



For the full news release (German only), please go to: <https://bit.ly/3PRm1P7>



Rehabilitation success GERMAN SEWAGE TREAT- MENT PLANT REFURB

After 30 years of use, the basins of the Duisburg-Rheinhausen sewage treatment plant have, since April 2021, been undergoing successive repairs with MC products. The first phase of the project was completed in December 2021 with special refurbishment products from MC-Bauchemie that have, for decades, been extending concrete lifetimes and ensuring the permanent protection of heavy-duty components in wastewater structures. MC employees have also been providing support to both the client and the contractor throughout the project, ensuring that each operation is executed to optimum effect and assisting with quality assurance. The basin walls of the Rheinhausen plant were first reprofiled with MC Nafufill mortars. Maximum protection of the repaired surfaces was then ensured through application of products from the MC-RIM PROTECT family, a proven system that has been especially developed for use in the wastewater sector and has an exceptional track record as a coating complex for rainwater overflow basins, primary and secondary clarification basins, aeration basins, intake structures and digestion towers.

Since the successful, on-schedule completion of the first part of the refurb campaign in December 2021, the low-load activation facility and secondary sedimentation tank 1 with a total capacity of 5,800 m² have been rehabilitated at the treatment plant. Final completion is planned for October 2022.



For a detailed project report,
please go to:
<https://bit.ly/3RfUoMN>







NEW 1-COMPONENT TUNNEL COATING

With its new development MC-Color T 21, MC has launched the first 1c tunnel coating onto the market to have been tested and approved as a surface protection product compliant with the requirements of the European standards and codes ÖBV, ASTRA, and ZTV-ING Part 5 Tunnel, and also as a component of OS 2 and OS 4 structures. It is in no way inferior to 2c coatings based on reactive resins, yet additionally offers improved light yield with an optimum gloss level, simplified, faster cleaning, lower operating costs, higher resilience and very good environmental compatibility. It also meets all fire protection requirements.



For further information, please go to:
<https://bit.ly/3K9Saj0>



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NEW SLUMP BOOSTERS

New MC-PowerFlow Perma concrete superplasticisers are based on the latest PCE polymer technology. As slump-retaining and consistency-enhancing admixtures, they counteract the tendency of ready-mix concrete to stiffen, e.g. due high temperatures, the use of CO₂-optimised binders and/or the addition of recycled materials, thus ensuring longer-lasting workability. With these slump boosters, ready-mix concrete producers will be able to better respond to the present-day challenges.



For further information, please go to:
<https://bit.ly/3P0mHUY>



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NEW RELEASE AGENT

With Ortolan Premium 766, MC has launched a new solvent-free concrete release agent based on renewable raw materials and the latest in advanced technology. The product meets the high sustainability requirements of relevant DGNB and LEED codes, requires no hazard labelling and is both environmentally compatible and harmless

to human health. It enables residue-free stripping of formwork to leave high-quality, low-porosity precast concrete and fair-faced concrete surfaces.



For more information, please go to:
<https://bit.ly/3T9usr4>



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NEW PRIMER

New from MC, Colusal Speed Primer is suitable for all steel structures both indoors and out. With its KineticBoost-Technology®, it provides the basis for regulatory compliant corrosion protection. Colusal Speed Primer cures quickly and reliably, even under adverse weather conditions, i.e. in the presence of moisture and at temperatures between 2 and 35 °C, and becomes overcoatable after just two hours.



For further information, please go to:
<https://bit.ly/3T4hrPI>



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NEW VERSION: LASOFT 4.1

MC has launched a new version of its Lasoft software, which includes a structural analysis program in addition to the design package.



For further information, please go to:
<https://bit.ly/3dRFaCM>



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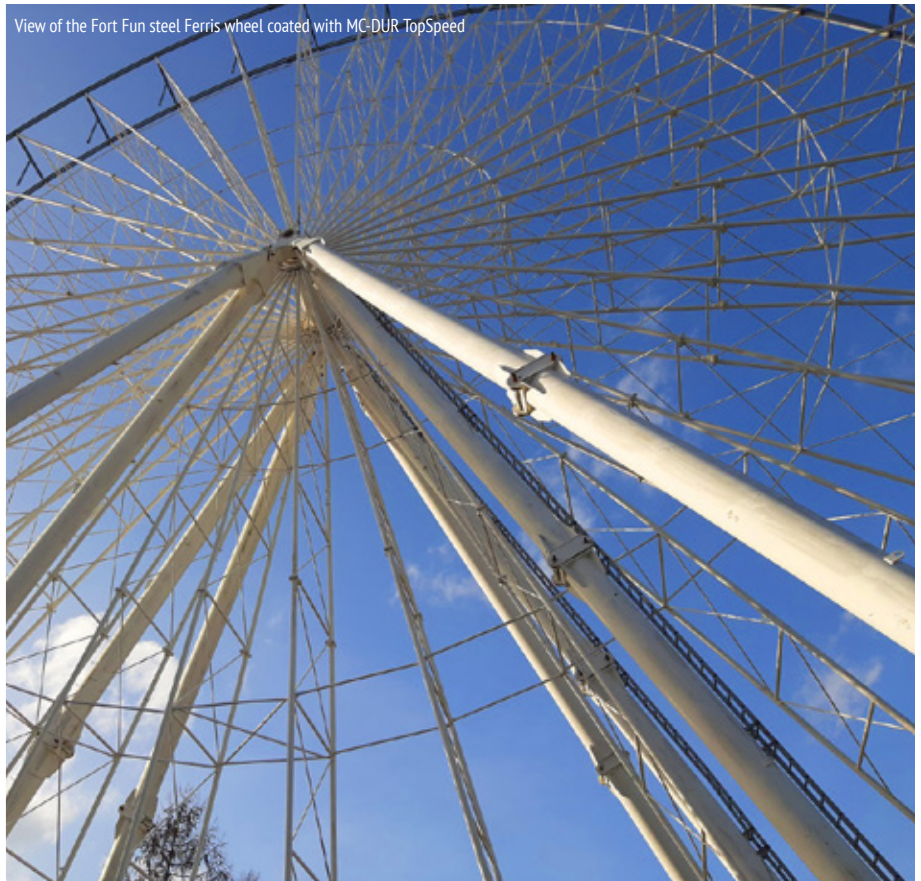


Work in progress: MC-DUR TopSpeed in combination with the polyester nonwoven MC-Floor Tex



First ride down the white-water flume after successful repairs

View of the Fort Fun steel Ferris wheel coated with MC-DUR TopSpeed



CREATIVE COATING SOLUTIONS FOR AN AMUSEMENT PARK

The following example of the Fort Fun amusement park in Bestwig in Germany's Sauerland region (NRW) shows the extent to which creativity, too, is valued in the construction industry. Offering precisely the properties required for the work specified, our industrial floor coating MC-DUR TopSpeed was "misappropriated" here for use in the repair and surface protection of a Ferris wheel and the white-water flume.

Amusement parks like Fort Fun are not open all year round – they usually operate from April to October in northern climes. The autumn and winter period is used, among other things, to repair the attractions – the structures and the rides themselves. In outdoor areas particularly, the products applied have to be suitable for the conditions that prevail in winter, i.e. low temperatures and high levels of ambient moisture. And there are not many repair and refurb systems that meet this requirement. Our high-performance coating MC-DUR TopSpeed, on the other hand, ensures fast and reliable protection even under critical environmental conditions such as low temperatures down to 2 °C, high humidity, and moisture in the substrate. Marcel Schirmer, MC field sales representative, was well aware of this when he received an enquiry from painting contractor Becker, commissioned by Fort Fun, asking whether MC also had coatings in its portfolio for the repair in mid-winter of a Ferris wheel and the white-water flume.

Ferris wheel and white-water flume successfully recoated in winter

The coating of the steel Ferris wheel had to be renewed because its grip had gone. In addition to application suitability in wintry conditions, the material used needed to exhibit very high resistance to mechanical stress, abrasion and UV. Both the client and the painting professionals accepted Marcel Schirmer's suggestion and



MC-DUR TopSpeed being applied to the steel of the Ferris wheel

replaced the coating in February 2021 with MC-DUR TopSpeed. The white-water flume consisted of an old GRP laminate that, due to the constant and high mechanical stresses of the ride, was well past its best. Here, too, the coating needed to offer a very high level of resistance to mechanical stress and UV; it also had to dry quickly due to the rapid changes in weather that typify the Sauerland region. MC's highly flexible and tear-resistant polyester nonwoven MC-Floor Tex was used together with MC-DUR TopSpeed to fill and cover the cracks. The entire flume of the white-water ride was subsequently reprofiled with MC-DUR TopSpeed in a hand lay-up process, and with very good results. So, once again, MC was able to demonstrate its ability to combine materials, know-how and creativity in an innovative solution that was thoroughly fit for purpose!



Marcel Schirmer

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THE ULTIMATE PERFORMER: MC-DUR POWERCOAT THE INDUSTRIAL FLOOR FOR EXCEPTIONAL RESILIENCE

Industrial floors are subjected to the toughest of operating conditions: They are driven on with heavy machinery, are exposed to aggressive chemicals and often have to withstand major temperature fluctuations – with all three stress factors frequently coinciding. But now, with MC-DUR PowerCoat, MC-Bauchemie has launched a new industrial floor coating system onto the market that withstands exceptionally high chemical attack and mechanical stress while retaining its bond with the substrate – even under thermal loads of up to 120 °C. The PU/mineral or PU-cement hybrid floor covering is a safe, durable and hygienic solution for floor surfaces such as those encountered in the food industry, where resistance to significant loads and stresses occurring simultaneously is an essential requirement.

Especially in the food industry, the metal and chemical industries and in washing and tank cleaning facilities, industrial floors have to withstand a variety of aggressive loads on a daily basis, be it hot steam cleaning, mechanical stress from forklift trucks, impact loads from falling tools or chemical attack from alkalis, oils, strong cleaners or acids (CIP cleaning). Such conditions exceed the resilience of conventional industrial floors, especially when several or even all of these stresses and loads act simultaneously on the surface.

The PU/mineral hybrid floor coating MC-DUR PowerCoat, on the other hand, has been especially developed to withstand such extreme loads, remaining largely unscathed even in the presence of highly aggressive chemicals, very high mechanical loads and thermal stress values up to 120 °C. It is even resistant to aggressive organic acids. MC-DUR PowerCoat is a four-component system consisting of a base, a hardener and a mineral powder constituent. The fourth component is the colour pigment, which is simply added

to the mixture on site in the form of a paste to achieve the desired shade.

Extremely high resistance paired with particularly good application properties

It is not just its extremely high resistance to chemical, mechanical and thermal stress that sets MC-DUR PowerCoat apart, but also its particularly good application properties. MC's new industrial flooring system consists of MC-DUR PowerCoat 200 as a primer and final sealer, a self-levelling



The Polish food producer FRUCTON opted for the exceptionally resilient MC-DUR PowerCoat 280 industrial floor in green, capable of withstanding temperatures of up to 120 °C.



The plinths and pillars in the FRUCTON production facility are likewise protected with MC products.

coating in the form of MC-DUR PowerCoat 240 and the thick-layer mortar coating MC-DUR PowerCoat 280. With its very high density, the industrial flooring provides no breeding ground for fungi or bacteria and is easy to clean, enabling the highest standards of hygiene to be achieved.

MC-DUR PowerCoat 240 for exceptional floor resilience at temperatures up to 80 °C

MC-DUR PowerCoat 240 is applied with a squeegee in a layer thickness of 4 to 6 mm. It offers high

impact resistance and remains fully functional even at thermal loads of up to 80 °C. The MC-DUR PowerCoat 240 system is therefore suitable for heavily stressed floors subjected to high-pressure cleaning at temperatures up to 85 °C.

MC-DUR PowerCoat 280 for exceptional floor resilience at temperatures up to 120 °C

MC-DUR PowerCoat 280, on the other hand, is applied in a layer thickness of 8 to 12 mm, again using a squeegee. This PU/mineral hybrid floor coating offers even higher thermal and mechanical resilience due to its ability to withstand temperatures up to 120 °C.

MC-DUR PowerCoat 280 ensures maximum safety in areas exposed to highly aggressive chemical attack coupled with significant mechanical loads. In addition, MC-DUR PowerCoat 280 is also suitable for high-pressure steam cleaning. Offering very high impact resistance as well, this industrial floor coating delivers unsurpassed durability. The non-slip properties of both systems can be

individually adjusted as required. With an additional top sealer, the slip resistance can be raised to R 13 according to EN 16165:2021-12 Annex B. After installation, the new coating can be walked over and fully loaded after just 24 hours, so minimising facility downtimes. MC-DUR PowerCoat thus offers a reliably safe, durable and hygienic solution for all demanding industrial floors required to permanently withstand the simultaneous occurrence of a variety of extreme loads – as has already been confirmed in trials performed in a specially designed test facility.

Methods for the thermal stress testing of industrial floor coatings

Given that a method for simulating and testing for the effects of years of repeated extreme thermal loads on a floor system had not yet been developed, Ulrich Lange, long-standing Floor Coatings Product Manager at MC-Bauchemie, himself designed a novel testing process including the requisite test bed facility for automatically determining the durability of a flooring composite

Main Feature



The dirt-repellent high-performance coating MC-Color LE was applied to the walls of the FRUCTON production facility.

under cyclic temperature exposure with hot liquids. In a procedure that is unique and unparalleled in the industry, a specimen slab is cyclically heated with approx. 35 litres of water at 98 °C and then subjected to forced cooling to 25 °C. This achieves a realistic level of alternating thermal stress under reproducible conditions, with all parameters being duly documented.

Unique test with 2,500 alternating cycles

In the absence of an external or otherwise standardised specification for fatigue strength under cyclic thermal loading, the following requirement was derived based on commercial kitchen operations: Assuming a kitchen floor is exposed to hot liquids twice a day on 250 days of use per year for five years, the bond between the top layer and the substrate can be appropriately assessed on the basis of 2,500 alternating thermal loads. The number of cycles withstood is then regarded as the fatigue strength. After completion of the stress cycles, the adhesive tensile strength is determined according to EN ISO 4624:2016-08 as the primary criterion and compared with an unexposed control slab having the same structure. Any changes on the surface are examined microscopically in surface and cross-sectional views.

MC-DUR PowerCoat passes the stress test

The first system to be tested was MC DUR PowerCoat 280 in a layer thickness of 8 mm without a sand scattering. Each stress cycle lasted approx. 40 minutes, so that after 70 days the specified 2,500 cycles had been completed. The result was utterly compelling: Apart from minor superficial visual defects, no other changes had occurred on the tested slabs. Although the adhesive tensile strength of 2.4 N/mm² measured after the cyclic test was below the value of the unstressed reference specimen due to exposure to the thermal loading, it was still far above the 1.5 N/mm² required in the relevant regulations. The test served to convincingly demonstrate that MC-DUR PowerCoat 280 in a minimum layer thickness of 8 mm is capable of

permanently withstanding an alternating thermal load of up to 98 °C with subsequent rapid cooling.

Highly resilient floor for Polish food producer FRUCTON

FRUCTON is based in Kalisz, Poland, a city that has been associated with food production for 100 years and is currently home to other internationally active food companies. FRUCTON has been in the market for 30 years as a producer of food products distributed in Poland under nationally known brand names such as KOTLIN. In order to be able to meet increasing capacity requirements, FRUCTON has built a new facility at its Kalisz site for the production of vegetable-based products for the hospitality sector. The processing steps include cleaning, sorting, grinding, cooking and blanching, as well as final packaging.

Good experience with MC product systems

For FRUCTON, the construction of a particularly resilient industrial floor in the new production facility was an important criterion in the contract award. The clients felt that the issue of flooring would be crucial to the operation of the facility, which is why they removed the floors and wall protection from the general contract, instead dealing directly with prospective providers. FRUCTON's owner, Piotr Grzegorzczak, and his technical staff have extensive experience in using various flooring solutions in their facilities. And they had already had good experience with MC in a number of projects, also involving various high-performance, durable products for heavy-duty industrial floors installed at different times since 2002 – solutions that have continued to impress with their durability despite the heavy wear and tear to which they have been subjected. Darosław Demski, Sales Manager of MC-Bauchemie in Poland, remembers: "FRUCTON is an interesting story for me. We have been in contact with the company for 26 years. Back at the beginning, I personally delivered two containers of MC-DUR 1200 VK in the boot of my Ford Orion for the first

test areas in FRUCTON's production facilities." And it appears this personal commitment paid off. Since then, more extensive contacts have been systematically established and consolidated, with MC field sales representative Wojciech Kucner also having successfully served the company since 2002. The relationship of trust that has lasted over 26 years was a major factor in FRUCTON choosing MC and its products for the floor of the new production facility. However, rather than merely relying on reputation and experience gained from these many years of successful engagement in order to win over the clients in Poland, MC also presented them with a compelling set of hard facts relating to the new MC-PowerCoat 280 product system. Those responsible at FRUCTON were duly convinced in every respect, so that the contractor chosen, DORTEX, was able to start work with the system mid-April 2022.

Outstanding protection for walls and floors with MC-Color LE and MC-DUR PowerCoat 280

Before the industrial floor could be installed, other MC products were first used for the walls and pillars of the new production facility. Initially, approximately 1,200 m² of plinths and pillars on the ground floor were smoothed over with the cementitious fine filler Nafufill SF and then protected with an OS system. This involved the application of MC-DUR 1177 WV-A as a primer in the wall areas, followed by the high-performance coating MC-Color LE to give a smooth, hydrophobic and dirt-repellent surface.

In the particularly stressed areas of the subsequently tackled warehouse storing the cleaning chemicals, a surface of approx. 400 m² was protected with the special sealant MC-DUR 2496 CTP, a coating that is very easy to maintain and also highly resistant to even aggressive chemicals. Thereafter an extremely resilient industrial floor coating of MC-DUR PowerCoat 280 was applied to cover an area of approx. 4,200 m² of the ground floor, thus creating a demonstrably safe and reliable underfoot surface for FRUCTON's future food production.

The MC-DUR PowerCoat 280 industrial floor can currently be considered the most durable coating of its type available – not just based on confidence in the high quality of the product system, but also proven through cyclic thermal stress testing at the specially designed MC test facility.



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TOP OF THE CLASS IN APPLICATION AND PERFORMANCE EXCELLENCE

“Our MC-DUR PowerCoat floors are the easiest to lay of any PU-cement hybrid system.”

Dr. Joachim Käßler

Dr. Joachim Käßler has been working for MC-Bauchemie since 2014 as Technical Director for Infrastructure, Industry & Buildings and as Head of the Flooring, Refurbishment and Protection segments. The professional chemist, previously a building surveyor of many years' experience, accompanied the development process of the new MC-DUR PowerCoat product system and kindly agreed to provide a few answers to our questions on the subject.

What were the reasons behind the development of this new industrial floor coating?

PU-cement hybrid floorings are highly resilient synthetic resin screeds which I first encountered during my work as a specialist planning engineer and building surveyor. The floors offer the maximum mechanical and thermal resilience that can be achieved with synthetic resin or synthetic resin-modified coating systems based on the current state of the art. Their chemical resistance is also very good. The combination of materials is extremely challenging, yet the coatings are right at the top of the class from the point of view of chemical development and formulation as well as in terms of their ease of installation and performance excellence. So our Research & Development people have done an outstanding job.

Who were the “mothers and fathers” of this invention?

First and foremost I again have to mention our Research & Development team at our HQ in Bottrop, working under the overall guidance of head of department John van Diemen. Dr. Wolfgang Karl, who is responsible for the Polymers & Resin Laboratory, was in charge of the development concept and of

managing the development process. The project work, including coordination with our Application Technology and Production people, i.e. the scale-up, was carried out by Marcel Giebkes. We enjoyed extensive Application Technology support as the development phase progressed. This was provided under the direction of Robert Schnell and his team, and also under the technical supervision of Ulrich Lange, an engineer who has worked with PU-cement hybrid coatings for almost 20 years now and is able to provide invaluable technical expertise in relation to formulation, production and, above all, on-site application. Coordination of the overall process, product testing, staff training and technical advice are all crucial to ensuring a successful market entry. These aspects were managed and implemented by Dr. Jonas Tendyck, Dr. Patricia Steffen and Peter Schmidt, the Product Managers or Product Line Managers of our Resin Flooring division. All these colleagues deserve our thanks in getting this outstanding industrial flooring system launched.

What benefits does it offer?

The focus has been on ensuring the excellent flowability of our formulations. Our MC-DUR PowerCoat

screeds are the easiest PU-cement systems on the market to install. They cure with a flawlessly even surface. Plus, the new MC-DUR PowerCoat line comes with a comprehensive package of technical performance certificates covering everything from occupational health and safety (e.g. pertaining to VOC emissions and slip resistance during the in-use phase) to cleanability and hygiene, impact resistance, abrasion resistance and durability, e.g. determined on the basis of the new DAT [editor's note: driving abrasion test].

Where do you hope the journey will lead?

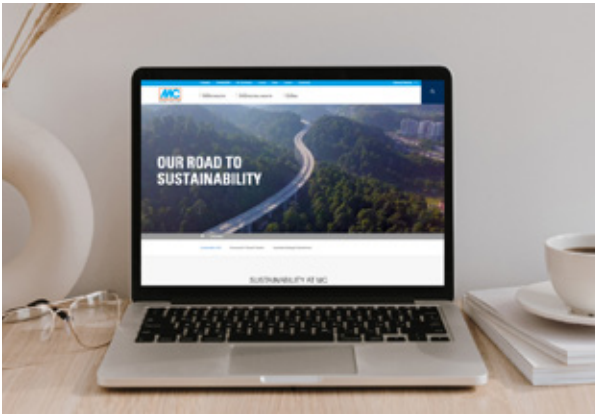
According to our research, PU-cement hybrid systems have the highest growth rates of any synthetic resin flooring type across the global market. And we expect this trend to continue. That's why we were so quick in investing in the latest cutting-edge formulae and in establishing our own production lines. MC-DUR PowerCoat is destined to become the third pillar of our Resin Flooring business, alongside our epoxy resin coatings, which we now produce at eight sites worldwide, and our ultra-modern MC-DUR TopSpeed line with its high-performance roller coatings that can be installed under virtually any climatic condition.



In the spotlight

“**According to our research, PU-cement hybrid systems have the highest growth rates of any synthetic resin flooring type across the global market.**”

SUSTAINABILITY WEBPAGE NOW ONLINE



In August 2022, we added a sustainability page to our website. There you will find information under various subheadings about the role sustainability plays at MC, the contribution we make to protecting the climate and the environment with ecologically sound and climate-friendly products and manufacturing processes, and our approach to sustainable management.



You will find our sustainability webpage here:

<https://bit.ly/3wGulnZ>



310 METRIC TONS

Reduction in greenhouse gas emissions in 2021

RESOURCES SAVED IN 2021

**THE WEIGHT OF
5,285 APPLE TREES**

MC'S CONTRIBUTION TO ENVIRONMENTAL AND CLIMATE PROTECTION THROUGH RECYCLING

By returning plastics, paper, cardboard, wood and kraft paper bags to the recycling process in 2021, MC-Bauchemie in Germany was able to save a calculated 2,241 metric tons of resources, that is to say primary raw materials taken from nature to produce the above-mentioned materials, and cut its greenhouse gas emissions by more than 310 metric tons. In this way, MC is also making an important contribution to environmental and climate protection.*

*Source: Resources SAVED certificate for 2021 / Calculation methodology: Fraunhofer UMSICHT based on data for 2021

LEAK-TIGHT THANKS TO INJECTION TECHNOLOGY FROM MC

SÃO PAULO SEWERS SEALED



Performing the injection work to seal the São Paulo sewer

Sewage treatment and disposal infrastructure serving the Brazilian metropolitan region of São Paulo has continually expanded over the years. And in one of the country's largest undertakings involving the "Interceptor Tietê Project – ITI 2" sewer, MC-Brazil's expertise in injection technology was very much in demand.



The Tietê Project is considered one of the largest wastewater infrastructure development undertakings in Brazil. Since 1992, 1.8 million sewage connections have been installed in the São Paulo metropolitan region, with some 5,000 km of pipes and channels having been laid to collect wastewater underground and transport it to the region's sewage treatment plants. As part of this network, the second section of an interceptor sewer was installed along the banks of the Tietê River in São Paulo in the mid-2000s. However, this was only connected to the main system in 2021 as part of the ITI 2 project phase. The remit included the construction of new manholes and sewers and their connection to the main interceptor, as well as the sealing of all leakages between the concrete joints.

The client and planner was the company SABESP, which is responsible for both water supply and sewage disposal in 375 municipalities in the state of São Paulo. SABESP is regarded as one of the largest sewage utilities in the world. The construction and refurb work was entrusted to the AEE ITI 2 consortium comprising three São Paulo companies specialising in wastewater infrastructure: Aliter, Enpasa and Etesco. SABESP's main concern was, firstly, to prevent any leakage of wastewater into the subsoil in order to ensure the long-term stability of the sewer pipes and the road above, and secondly, to stop the infiltration of groundwater

into the sewers and thus reduce the amount of wastewater requiring treatment.

Permanent sealing achieved with two-stage injection

To this end, two sewer pipes, both with a length of around 1,500 m but with a diameter of 1.5 and 1.2 m respectively, had to be sealed. MC was able not only to offer a package of high-performance products, but also to provide a fast, practical, two-stage injection process for the permanent waterproofing of cracks and joints in the sewer pipes – without impacting on the road traffic above.

Using MC's proprietary injection technology, MC-Injekt 2133 was injected in the first of the two stages. This single-component, rapid-expansion injection resin is used to stop fast-flowing water and so temporarily seal water-bearing cracks. And it met this remit perfectly in the ITI 2 project. MC-Injekt 2133 is characterised by its fast reaction on contact with water and stops pressing water almost immediately due to a high-volume swell achieved within a few seconds. The second phase involved injecting the ductile resin MC-Injekt 2300 NV. This low-viscosity elastomer compound is easy to apply at low injection pressures. Due to its low surface tension, it is highly penetrative while maintaining a high degree of elasticity within the crack once fully cured,

ensuring permanent watertightness of the injected areas. The project in São Paulo began in February 2020 and was completed in December 2021. Around 70,000 litres of MC injection resin were ultimately applied to around 30,000 linear metres of transverse and longitudinal joints and cracks.



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SUBSOIL CONSOLIDATION IN CANADA

During the installation of a new sewer system in the Canadian city of Kitchener, new concrete pipes had to be driven from manhole to manhole using the technique of microtunneling. To save on expensive dewatering works, a waterproofing curtain was injected around the manhole shafts using the acrylate gel MC-Injekt GL-95. This successfully prevented the entry of groundwater, soil and spoil in the shafts as the tunnel boring machine approached.



You can see the video here:

<https://youtu.be/U--Wdg0ne8>





BRIDGE BUILT IN RECORD TIME AFTER 2021 FLOODWATERS

Wintertime bridge waterproofing in just one day with MC-DUR LF 680

Devastating storms caused floods and landslides in western Germany in July 2021, resulting in massive damage to the transport infrastructure. The remedial work included the construction in record time of two new bridges. Because these needed to be waterproofed in the depths of winter, the authorities opted for MC's special-purpose resin MC-DUR LF 680.

In the western regions of Germany affected by the flood disaster, reconstruction of the transport infrastructure was a high priority. In mid-August 2021, the roads and transport agency of the state of North Rhine-Westphalia, "Straßen NRW", commissioned the company Gebr. Echterhoff with the reconstruction of two destroyed bridge structures, the Lommersum Bridge in Weilerswist and a cycle path bridge near Blankenheim, where repairs were no longer possible. It was important to those responsible to remedy the traffic disruptions as quickly as possible and, in particular, to complete the new bridges before Christmas.

New bridges opened within four months

The planning and approval work for both new bridge projects began in mid-August 2021. Thanks to the Echterhoff Express Bridge System, in which fully prestressed, precast concrete elements are manufactured off-site for on-site assembly as building blocks, the new bridges were successfully completed and released for use by December 2021.

Bridge waterproofing in the depths of winter
Echterhoff commissioned the company KEMNA



BAU Andreae GmbH & Co. KG – ZN Sonderbau West with the waterproofing and mastic asphalt work, which had to be carried out in December 2021 at temperatures below 8 °C and in the presence of high air humidity and component moisture levels. Since the epoxy resin products usually specified for such work cannot be used in such adverse weather conditions without negative side reactions, the special-purpose resin MC-DUR LF 680 was selected for the waterproofing work, with the public authority client, the Federal Highway Research Institute, and MC working in close collaboration. The MC

resin can be used as a primer, scratch filler and sealer at temperatures as low as 2 °C and, above all, under conditions of high air humidity and component moisture. The translucent red resin cures very quickly and is resistant to high temperatures, making it ideal for use in conjunction with welding membranes. At 20 °C and a relative humidity of 50 %, MC-DUR LF 680 has an overworking time of one hour, while at 2 °C it is approximately two and a half hours, which means that sealing and waterproofing work can also be performed in autumn and winter.

Huge time savings

The waterproofing work on the new Lommersum bridge in Weilerswist took place on 8 December 2021, with the previously shot-blasted and cleaned surface area of approximately 300 m² being covered in just one day, despite the terrible weather. The situation was similar on the new cycle path bridge over the River Ahrbach in Blankenheim. Here, under the most difficult of conditions, an area of around 60 m² was completely waterproofed from start to finish on 15 December 2021. Both bridges were therefore ready for opening to traffic before Christmas, to the great delight of the residents and all those involved.



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MC-DUR TOPSPEED IMPRESSES EVEN ON THE HIGH SEAS HELIPAD SUCCESSFULLY COATED



The helipad of a production platform located off the Dutch coast near Scheveningen was in need of repair. An unusual challenge for the advanced MC-DUR TopSpeed coating system, and one which once again provided proof positive of the exceptional performance range and flexibility of this product line.



Off the coast of Scheveningen in the Netherlands lies a group of gas and oil production platforms owned by Alkmaar-based energy company Taqa Energy BV. Since the employees of the production platforms only have access to their workplaces by air, extreme demands are placed on the helipad. Needless to say, highly visible and colour-fast markings are of great importance for a safe landing and take-off. However, the provision of durable protection for the steel deck is just as important.

Coating work with operations ongoing

Taqa Energy BV turned to MC-Bouwchemie in the Netherlands for the platform coating work. For the flooring structure of the helicopter deck, the MC specialists recommended a corrosion protection coating of fast-curing Colusal Speed Primer as the initial covering, followed by a coating of fast, roller-applied MC-DUR TopSpeed, a proven high-end, moisture-tolerant product. The application work was carried out by Muehlhan

BV of Vlaardingen. The operator's requirement that the platform should still be available for helicopter usage each day during the coating work represented a significant challenge and meant that particularly fast application and curing times had to be guaranteed. Hence, the only solution was to use these two MC products based on MC's KineticBoost-Technology®, a technology that ensures that products can be applied quickly even in damp conditions, have short overcoating times and offer fast walk-on accessibility.

Adverse application conditions

The corrosion protection coating of Colusal Speed Primer offers accelerated application times with fast curing, largely independent of humidity and temperature influences, and so was ideal for the adverse climatic conditions encountered in the middle of the North Sea. The fast, moisture-tolerant roller coating MC-DUR TopSpeed comes with a similar performance profile. This low-solvent

and UV-stable special-purpose resin is characterised by its high abrasion and scratch resistance combined with impressive resistance to dilute acids, alkalis and salt solutions. Thanks to MC, helicopter landings on and take offs from the deck continued every day without problem, with the coating work being carried out simultaneously at maximum speed. Yet this was not the only aspect of the work that impressed the client and the contractor: The removal of an existing coating and the application of a completely new one normally takes about three weeks on helipads such as this, and then only if the weather conditions are good. With MC's products, the refurbishment work took just seven days – despite the challenging location in the middle of the Dutch North Sea.



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ALL-ROUND PROTECTION FOR PRECAST CONCRETE SWITCHGEAR ENCLOSURES

Manufactured in the Dutch town of Zutphen, nine precast concrete switchgear stations destined for the Belgian railway network had to be waterproofed and protected prior to installation. Due to their envisaged siting in contact with the ground, the waterproofing work was carried out in accordance with DIN 18533 using the fast-setting, highly flexible and bitumen-free reactive sealant MC-Proof eco. The joints were closed off with the new MC-FastTape line

of sealing tapes – ideal for wall and floor connection joints as well as for building separation joints and construction, expansion and movement joints. And MC-Color Flair vision was the first choice for enhancing and protecting the exterior concrete surfaces.



For a more detailed project report, please go to:
<https://bit.ly/3T6Pmav>



BRIDGE CONSTRUCTION IN BOSNIA & HERZEGOVINA

Smart solution for waterproofing and surface protection saves time and cuts cost



The bridge caps, cycle paths and the pedestrian walkway were coated with the fast-curing high-performance coating MC-DUR TopSpeed.

May 2022 saw completion of a new bridge over the river Sava which marks part of the frontier between Bosnia & Herzegovina and Croatia. MC not only supplied the product system for the waterproofing and long-term protection of the approximately 460-metre-long steel structure, but also introduced a smart solution to enable significantly faster and more cost-effective implementation of the project.

The new bridge over the river Sava west of Gradiška is part of European route E-661, which is currently under construction. Once completed, it will connect the port city of Split on the Dalmatian coast with Banja Luka in the north of Bosnia & Herzegovina, as well as Virovitica in Croatia and Lake Balaton in Hungary. The structure was designed as a continuous, single-cell hollow steel box girder with brackets on both sides. The length of the bridge is 462.25 m and its width is 22.60 m. The costs, estimated at around 23 million euros, are to be borne to the tune of 59% by Bosnia & Herzegovina and 41% by Croatia.

The contractor chosen for the protection and waterproofing work, BERSIA d.o.o. of Sarajevo, was supposed to start work at the beginning of 2022. However, an originally scheduled and rather complex waterproofing system involving polyurethane-based products in combination with the subsequent covering of the roadways with mastic asphalt had to be shelved due to the associated high costs and the lack of technical experience and equipment in the region. The construction manager of the main contractor, Integral Inženjering PLC, therefore turned to MC to come up with a viable alternative.



Application of the epoxy resin-based sealant MC-DUR LF 490

MC's compelling solution

As the entire bridge is made of steel, the MC experts proposed a heat-resistant system consisting of Colusal SP, the corrosion protection primer for steel substrates, epoxy resin-based MC-DUR LF 490 for the deck, and the roller coating MC-DUR TopSpeed for protection of the bridge caps. The decisive advantages of this solution: high impermeability combined with ease of application. The system had already been tested at MC's HQ in Botrop – and the client was immediately convinced.

The work began in March 2022. The primer Colusal SP, which is also approved as a corrosion inhibitor according to EN 12944-6, was applied in two layers. The road surfaces were then covered with two coats of MC-DUR LF 490. This two-component, translucent red epoxy resin has been developed and tested for waterproofing road surfaces, parking decks, ramps, basins and similar under welded membranes. Finally, bituminous membranes were welded onto the substrate thus prepared, and the surface was covered with rolled asphalt using the standard procedure. The pedestrian walkway and the cycle paths were waterproofed with two coats of MC-DUR TopSpeed, the fast-curing reactive resin based on KineticBoost-Technology® with a full sprinkling of 0.4 to 0.8 mm quartz sand between the layers. The work covered a total area of around 8,000 m² and was successfully completed by the end of May. The clients were more than satisfied: Thanks to MC, they were able to benefit from a safely tested, established system that was more effective than the originally planned solution, with high-cost investments in special equipment and time delays also being successfully averted.



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MC-FLOOR TURBOCEM SCREED – MATCHING THE MEAN MACHINES

AMG PERFORMANCE CENTRE IN ESSEN



The showroom of the Mercedes-Benz AMG Performance Centre in Essen is designed to set every car lover's heart racing.

LUEG's Mercedes dealership in Essen has been converted into an AMG Performance Centre – the first of its kind in Germany. And to ensure a dimensionally stable, particularly resilient screed on the construction site, the clients opted for the ternary rapid-curing cement MC-Floor TurboCem.

LUEG is one of the largest Mercedes dealers in Germany. Now, the company's premises on Altendorfer Strasse in Essen have been expanded through the addition of 1,100 m², transforming the facility into an AMG Performance Centre. Offering more than just a large selection of exclusive AMG vehicles, it also provides visitors with a unique first-hand experience of the brand's motorsport DNA through its luxuriant showroom design and the presence of AMG experts specially trained on the racetrack.

For the floor of the extension, the tender specified a quick-setting screed that had to be dimensionally stable and low in residual stress in order to enable the provision of large jointless areas of covering and minimise the risk of cracking. The screed also had to allow early walk-on access and loading so that the subsequent trades could quickly complete



View of the freshly laid screed in the building shell

their own tasks. A high level of surface strength was also required to allow the laying of a planned epoxy resin-based stone carpet.

MC-Floor TurboCem for a dimensionally stable and quickly loadable screed

The screed work was carried out at the beginning of 2022. Ljiljzim Murati, owner of the screed-laying firm Murati Betonbodentechnik, had recommended MC-Floor TurboCem fast-setting cement to the clients for this application after having had an in-depth consultation with Chris Schöneich, North Rhine-Westphalia Area Manager for Screed Projects at MC-Bauchemie. With this ternary rapid-curing cement, which was launched in 2020, MC-Bauchemie is able to offer to the market a one-for-all screed product. It is suitable for commercial, industrial and residential applications, will always keep its shape and yet can be quickly overworked. With its

inherent low shrinkage and low stress behaviour, MC-Floor TurboCem can be used to produce screeds compliant with shrinkage class SW1 according to DIN 18560, i.e. capable of remaining dimensionally stable as setting proceeds. Specifically, an MC-Floor TurboCem screed quickly achieves high strengths up to CT-C50-F6, can be accessed by pedestrian traffic after just 6 hours and can be overworked after 24 hours. Yet the products still offers sufficiently long working and smoothing times of ≥ 45 minutes.

Simple handling, assured quality, on-schedule construction progress

The good workability and easy handling of MC-Floor TurboCem meant that the screed for this project could be installed and completed on time in February 2022, allowing the subsequent trades to continue without delay in performing the further work required for the new centre expansion. Area Manager Chris Schöneich also accompanied the screed-laying work and took samples from the site to ensure and document the high quality of the installed material for both the contractor Murati and the principle client. Thus MC was able to deliver a performance very much worthy of the AMG label.



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DURABLE, AESTHETICALLY ATTRACTIVE PROTECTIVE COATING

Shiny bright red bridge in Dublin built to impress



The bold red of the bridge matches the Poolbeg lighthouse in Dublin Bay.

Construction of the Alexandra Road Bridge in the port of the Irish capital Dublin was completed in November 2021. And application of the high-quality surface protection system MC-Color Flex pro ensured that the exacting specifications governing the protection and aesthetics of the structure were duly met.

Dublin Port is the largest cargo and passenger port in Ireland. And the Dublin Port Company (DPC), a state-owned commercial enterprise, is responsible for the operation and development of this important transshipment hub. In 2020, the DPC prepared plans to connect two dockyard areas with a new bridge over Alexandra Road. The project involved the construction of a 150m long and 13m wide two-lane vehicular overpass with access ramps, to be used exclusively for port-related commercial and service traffic.

Darmody Architects was commissioned to design the structure, taking into account the industrial heritage of the port and its connection to the city of Dublin and its inhabitants. Thus the key elements of the bridge came into being: a central span finished in a bold red to match the Poolbeg lighthouse in Dublin Bay, adorned with a pattern reminiscent of the waterfront.

High-quality surface protection with the MC-Color system

The long-established construction company John Sisk & Son was engaged as the project's general contractor, and the application of the protection system was finally entrusted to Silicon Systems. Corrosion Solutions & Inspection Services were also called in as consultants to advise on matters relating to corrosion protection and protective coatings. All these companies have been working successfully with MC



MC-Color Flex pro also protects the underside of the bridge.

for many years. In order to provide the bridge with permanent protection while ensuring that the aesthetic effect of the structure is maintained for years to come, the highly flexible surface protection system MC-Color Flex pro was used. MC's system has often shown that it can withstand the aggressive weather conditions of a marine environment and effectively bridge any micro-cracks in the concrete, thus extending the life of the structures involved. In addition, it is available in a wide range of colours and was therefore also able to meet the specification of exactly matching the Poolbeg lighthouse's red shade.

Savings and benefits from beginning to end

The surface protection coating system in the form of MC-Color Primer and two coats of MC-Color Flex pro was applied to the bridge in the summer of 2021. The highly flexible MC-Color Flex pro coating provides excellent

crack-bridging concrete protection for outdoor surfaces exposed to the elements and at the same time prevents the growth of algae, thus guarding against staining and ageing effects. An additional application benefit is the short wait between coats, which, unlike conventional systems, allows the application of multiple coats in a single layer, offering significant time and cost savings. In contrast to conventional systems, MC Color Primer needs just one hour to dry rather than the usual eight or more. This meant that the first coat of MC-Color Flex pro could be applied very quickly after the primer, thus again saving a lot of time.

In summary, it can be said that the decision in favour of MC-Color Flex pro was due to a number of compelling attributes: the crack-bridging properties of the product, the speed of application between coats, the low dirt pick-up inherent in the system, the integrated greening protection, tangible cost efficiency, compliance with the specifications contained in EN 1504 Part 2 – and last but not least, the track record of MC systems successfully used on thousands and thousands of square metres of Irish transport infrastructure in the course of more than 40 years.



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MC PRODUCTS ADD VALUE IN MAJOR BUILD

REGENERATION OF BERLIN'S "AM TACHELES"



MC's concrete cosmetics and waterproofing expertise were in great demand on the site of Berlin's "Am Tacheles" reconstruction project.

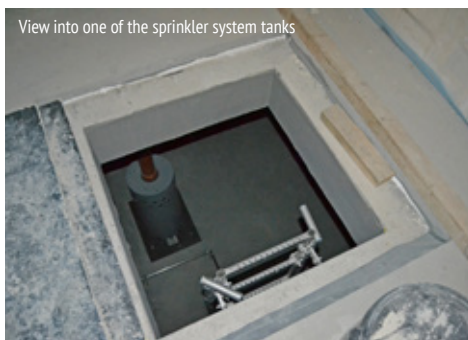
2019 saw the start of a truly bold construction project, the regeneration of the "Am Tacheles" quarter in the heart of Berlin. The site along Friedrichstrasse has a proud heritage – and now a variety of MC products are being deployed there to help ensure that the new buildings and amenities enjoy a bright future.

The exclusive corner site in Berlin-Mitte had its heyday in the early 20th century. In 1908, the impressive, monumental mall known as Friedrichstrassenpassage opened here, revolutionising the high street retail experience in Germany with a mix of shops, cultural institutions, restaurants and cafés and quickly becoming a top Berlin attraction. In the period between the Second World War and the fall of the Berlin Wall, however, the quarter fell into disrepair. With the site again becoming largely abandoned at the beginning of the 2010s, Berlin-based pwr development GmbH acquired the area with the idea of reviving the charm of Germany's roaring twenties. The renowned architectural firm Herzog & de Meuron was commissioned to design a new quarter of international class, combining living, working and shopping with art and culture.

MC has since been heavily involved in the project, with almost the entire range of its high-quality concrete cosmetics having been applied to produce the impressive, homogeneous exposed concrete surfaces that characterise the complex.

MC-Proof eco for the internal waterproofing of sprinkler system tanks

When general contractor Hochtief Infrastructure GmbH was looking for a suitable material to seal



the inside of the sprinkler system tanks, the MC team, together with applicator BWA-Bauwerksabdichtungen GmbH, proposed MC-Proof eco. As a fast-setting, highly flexible and high-yield reactive waterproofing compound, it quickly impressed the site managers and supervisors responsible for its application. Given the scale of the Berlin site, any interior waterproofing of concrete building components has to meet some pretty exacting crack-bridging standards. MC-Proof eco comes with all the approvals necessary in this regard: The polymer-modified thick-layer coating has an ETA rating and is certified as a waterproofing solution for tanks and basins in accordance with DIN 18535 for water impact classes W1-B and W2-B. As indicated above, the waterproofing work was carried out by BWA.

Pre-treatment with MC-Injekt 2300 top injection resin for permanent impermeability

The initial injection work required was performed by DMI Injektionstechnik using MC-Injekt 2300 top, a permanently ductile, flexible resin-based sealant that penetrates and fills cracks, construction joints and cavities in concrete and masonry. It is suitable for injection work governed by EN 1504-5, and also Germany's DAFStb Maintenance Guideline and ZTV-ING code of practice. It offers excellent injectability with controlled reaction time variability.

The "Am Tacheles" project is possibly the most exciting of all those underway in the federal capital. According to current planning (as of July 2022), the first buildings should be ready for occupation in the second half of 2022, with completion of the entire urban redevelopment scheduled for mid-2023.



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PORTRAIT



**DR. MAX-FABIAN VOLHARD –
COMMITTED TO HELPING PEOPLE IN NEED**

Although he only joined MC-Bauchemie at the start of 2021 as a laboratory associate researching and analysing mineral building materials, Dr. Max-Fabian Volhard (34) has been volunteering with the Federal Disaster Relief Agency (THW) in Detmold for around 15 years. After the flood disaster of the summer of 2021, he was deployed for the THW in two missions in the flood regions around Euskirchen and in Bad Neuenahr-Ahrweiler.

After graduating from secondary school, Max-Fabian Volhard first completed an apprenticeship as a chemical laboratory technician. Following some four years in that role, he was inspired to go into research. He embarked on Germany's "third-way" educational path leading to the successful completion of a bachelor's degree, a master's and finally his doctorate. Since the beginning of 2021, he has been working in Dr. Karsten Koppe's laboratory for mineral building materials, specialising in mortar products and is primarily responsible for researching and developing sustainable alternatives.

"Perceived gratitude is a real motivator"

In addition to this engrossing professional activity, the chemist has, for the last 15 years, been a

volunteer with the Federal Disaster Relief Agency (THW) in his hometown of Detmold. His affinity for technology and the relief agency's remit to help those most in need were among the reasons why he signed up for six years there rather than do military service after his apprenticeship. Following his basic practical and theoretical training, he joined the specialist Floods Relief Group ("WP"), for which he is still active today. "I was attracted by the family atmosphere and the banter with my colleagues at THW, so once the period of my alternative military service had ended, I decided to commit long-term to this voluntary work," says Dr. Volhard. He already has many missions under his belt, helping people in dire situations with the aid of the THW's advanced pumping

equipment – as was the case in the summer of 2021 after the flood disaster in Germany, when he was deployed for the relief agency in July and August of that year to assist residents of both Euskirchen and Bad Neuenahr-Ahrweiler. Such extreme situations, the fates of the people and the devastating destruction exact a price, both physically and mentally, but he performs his duties gladly. "The motivation to help people in emergency situations and the gratitude that I felt during these missions are what keep me as well as many other THW members in voluntary service," explains Dr. Volhard. There is no doubt that the voluntary work of our colleague and indeed all THW members in Germany is deserving of the highest recognition!

INTRODUCING: MANFRED POERSCH

OUR OCCUPATIONAL HEALTH AND SAFETY OFFICER

The 57-year-old from Datteln has been working for MC since 1999. After completing his apprenticeship as a machine fitter at RAG, Manfred Poersch worked underground at the Blumenthal/ Haard mine for ten years. During this time he also completed further training as a mechanical engineer. However, with colliery closures looming, he was soon looking for new challenges and finally joined MC-Bauchemie in 1999 – initially as a time and motion study engineer. Since 2010, he has been working for the MC Group in Germany as an occupational health and safety specialist. In this role, he is committed to training and raising awareness among the workforce in relation to occupational safety and health protection in order to help prevent accidents, optimise process flows and eliminate risk in the workplace. In his free time, he enjoys cycling, travelling with his wife and indulging his passion for skiing.



*Keep up
the good work!*

PERSONNEL NEWS



HANS-JÖRG SCHEPERS (51) joined MC as technical operations manager on 1 February 2022. The chemical engineering graduate and industrial economist is involved in projects such as modification work on the powder tower and is responsible for planning new construction measures. He has extensive experience as an industrial engineer and most recently worked as plant manager for a major construction company.

MATTHIAS BRENKEN (50) took over the position of Head of International Finance and Accounting at MC on 1 May 2022. The tax advisor and former auditor comes with 20 years of experience gained from working for two well-known auditing companies and most recently spent four years as Head of Group Accounting in an owner-managed, globally active industrial company.



ARUNABHA DEY (43) joined MC on 1 February 2022 as Product Line Manager Waterproofing. He has more than 16 years of professional experience in the waterproofing and roofing fields, most recently as National Manager in India with a global building chemicals company.

SUMESH SREEDHAR (44) has been Country Sales Manager and Product Manager at MC in the United Arab Emirates for more than ten years and accepted the position of Product Line Manager Injection at the beginning of 2022 with the remit to drive the global expansion of MC's injection business.



MEHRDAD MOHAMMAD SALAMI (39) took up the position of Product Line Manager for Building Boards at the beginning of May 2022. The civil engineer and MBA-holder from Iran previously worked for two German multinational companies as Sales Manager and Product Marketing Manager.

JEANNE FILIPPU (32) joined MC on 13 June 2022 as Online Marketing & Communication Manager. She has many years of experience in online marketing and e-commerce and will be focusing on maintaining and developing MC's global website and international social media channels.



MC WELCOMES 10 NEW APPRENTICES

On 1 August 2022, ten new apprentices arrived for their first day at MC's training and education centre in Müllerstrasse in Bottrop ready to start their development in a variety of commercial, technical and industrial disciplines. We extend a warm welcome to our new recruits and wish them an enjoyable time and every success as they embark on their new careers! ☺

The traditional group picture of MC's new apprentices in front of the training center of MC-Bauchemie in Bottrop; standing from left to right: Dean Jansen (chemical production technician), Neal Rosrodowski (chemical production technician), Timon Reiser (industrial clerk), Simon Sandmeier (paint laboratory assistant), Julian Offel (chemical production technician), Joel Pchalek (warehouse logistics technician), Melissa Brand (industrial clerk) and Alina Althoff (chemical laboratory assistant); seated from left to right: Alexandra Neu (industrial clerk) and Gülşüm Kutluk (industrial clerk).



SLUMP BOOSTERS

MC-PowerFlow Perma

Superplasticisers for flexible slump adjustment and consistency enhancement to combat the stiffening effects of challenging ready-mix constituents and high ambient temperatures:

- Outstanding, extended workability
- Logistical benefits with travel radius adaptability
- Improved CO₂ balance

EXPERTISE
ADMIXTURES & ADDITIVES

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60 YEARS
MC-Bauchemie

MC
BE SURE. BUILD SURE.