



News Release

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Master Builders Solutions[®] presents innovative admixture solutions and their BIM portfolio in influential trade congresses

- » **MasterEase improves rheological properties of high-performance concrete**
- » **Up to ten times faster concrete hardening with Master X-Seed**
- » **Master Builders Solutions with the broadest BIM portfolio in the construction chemicals industry**

Master Builders Solutions[®] will present its innovative admixtures as sponsor of the upcoming influential trade congresses: From September 8 to 11 the Master Builders Solutions experts will take part at the 2nd International Conference on Rheology and Processing of Construction Materials (RheoCon2) in Dresden, Germany on booth 15. Aim of the conference is to exchange ideas and experience about the development, testing, and applications of cement-based and other building materials with their specific rheological properties.

From September 16 to 20, the Master Builders Solutions experts will meet the visitors of the 15th International Congress on the Chemistry of Cement (ICCC) in Prague, Czech Republic, on booth 1. The renowned global platform summarizes the state of art of cement chemistry as well as major trends in cement and concrete applications.

The solutions presented include the new MasterEase range of plasticizers: based on an innovative molecule structure, MasterEase products deliver concretes of low viscosity and improved workability. The new technology facilitates the optimization of concrete mix-designs, making the installation process more time-efficient and producing concrete surfaces of exceptionally high quality. Notably, the mixing, pumping, installation and troweling of mixes with high proportions of supplementary cementitious materials and/or difficult aggregates become much more straightforward. MasterEase was used for the recently finished high-rise building “Marienturm” in Frankfurt, Germany. “It enabled us to reduce the viscosity of the concrete – its stickiness – and to improve its workability,” explains Sebastian Dittmar, Head of Application Technology Germany at the Construction Chemicals unit of Master Builders Solutions. “So, we could easily pump the concrete up to the required height.” Andreas Arbeiter, Managing Director of ready-mix producer Sehring Beton, adds: “We are highly satisfied with the result. MasterEase is the ideal plasticizer for extreme pumping heights, as in the case of the Marienturm: The admixture reduces viscosity by up to 30 percent and provides a precise early strength that remains available even during extended work cycles.” The reduction in viscosity also facilitates surface troweling – an added benefit for ready-mix producers, but likewise in precast production or the casting of concrete slabs. In this way, MasterEase saves time and costs in each construction project, increases the utilization of vehicles and machinery, and reduces the wear-and-tear of mixers, pumps and piping.

Up to ten times faster concrete hardening with Master X-Seed

Another product used for the construction of the Marienturm is Master X-Seed, which will also be in the focus of the ICCC and the RheoCon2. With Master X-Seed, a liquid hardening accelerator, concrete hardens up to ten times faster than without admixture. Sebastian Dittmar, Head of Application Technology Germany at the Construction Chemicals unit of BASF, considers Master X-Seed one of Master Builders Solutions’ key innovations in recent years: “Its unique effect really sets Master X-Seed apart, and it has become a reliable essential across a wide variety of application areas. Constructing the Marienturm, Master X-Seed enabled us to obtain significantly earlier formwork removal and thus contributed to a faster construction progress.”

Reduced production energy

Another customer success story enabled by the usage of Master X-Seed is the example of fdu Betonwerke: this German precast manufacturer was able to achieve a 50 percent reduction in concrete hardening time through the use of Master X-Seed*. The high early strength of the concrete enables fdu to reduce the energy-intensive heat treatment of the fresh concrete, reducing production energy costs by up to 15 percent per site. Thomas Beike, Managing Director fdu Betonwerke, explains: "The formworks for concrete elements usually have to remain in the heat chamber for 12 hours to harden. That is time-, energy- and cost-intensive. With Master X-Seed, we have reduced curing time from 12 to six hours. The elements can be demolded earlier to be delivered to the construction sites much faster. The CO₂ footprint has also been reduced significantly," he adds. This case study is part of the Europe-wide ongoing sustainability campaign "Quantified Sustainable Benefits" launched in 2017. The campaign showcases projects where customers were able to increase their productivity, while at the same time reducing both costs and emissions, thanks to the advanced technology from Master Builders Solutions. It has been awarded with German Award for Online Communications in 2018 for the best microsite and German Brand Award in 2019 for storytelling and content marketing.

Largest BIM portfolio in the construction chemicals industry

Visitors of the ICCC and the RheoCon can also get informed on the current BIM portfolio of Master Builders Solutions which is the largest in the construction chemicals industry: It is comprising, as of today, of more than 600 BIM objects from 15 different industry segments. "For us, virtual building models represent a key technology for the future conception and design of built structures," comments Philipp Kley, Senior Vice President Construction Chemicals Europe at Master Builders Solutions. "We want to leverage innovative software technologies to play a leading role with regard to Industry 4.0 in the construction industry."

For more details on the products of Master Builders Solutions, please visit: www.master-builders-solutions.basf.com

*Figures provided are based on an actual case from the precast concrete element factory fdu Betonwerke, Germany

Success stories of the Master Builders Solutions sustainability campaign can be found at: www.sustainability.master-builders-solutions.basf.com/en

New BASF Construction Chemicals landing page: www.virtual-design.basf.com

BimObject library: www.bimobject.com/en/product?brand=basf

About the Construction Chemicals division

BASF's Construction Chemicals division offers advanced chemical solutions under the global umbrella brand Master Builders Solutions for the construction, maintenance, repair and renovation of structures. The brand is built on more than 100 years of experience in the construction industry. Our comprehensive portfolio encompasses concrete admixtures, cement additives, chemical solutions for underground construction, waterproofing systems, sealants, concrete repair & protection systems, performance grouts, performance flooring systems, tile-fixing systems, expansion joints & control systems and wood protection solutions.

The Construction Chemicals division's approximately 7,000 employees form a global community of building experts. To solve our customers' specific construction challenges from conception through to completion of a project, we draw on our specialist know-how, regional expertise and the experience gained in countless constructions projects worldwide. We leverage global BASF technologies and our in-depth knowledge of local building needs to develop innovations that help make our customers more successful and drive sustainable construction.

The division operates production sites and sales offices in more than 60 countries and achieved sales of about €2.5 billion in 2018.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 122,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of around €63 billion in 2018. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information at www.basf.com.