

GIFA/METEC/THERMPROCESS 2019: With #ENTERABP, ABP Induction opens the door to the digital world in foundry technology

At the world's largest trade fair for foundry technology, the German company based in Dortmund demonstrated with its new solution MyABP how innovations in industry 4.0 lead to more productivity and safety with a better environmental balance

Dortmund, July 8, 2019: An oversized laptop replica with a projection area of over 40 square meters, interaction areas for Virtual Reality and Augmented Reality, plus the latest versions of current production systems from the ABP portfolio: With its booth at the world's largest trade fair for foundry technology - GIFA - the Dortmund-based specialist for inductive melting and heating, ABP Induction Systems GmbH, left a lasting impression on the specialist audience. It was particularly impressed by the innovative approach to digitization and virtualization in the field of foundry technology. Foundry 4.0 - at ABP Induction this slogan is already reality.

People. Technology. Success. That is the claim that ABP has made to itself among its employees. People work for and with people, they develop and work with the latest technology. And this for the greatest possible success of ABP customers and partners. At GIFA/METEC/THERMPROCESS 2019, ABP showed what customers can expect in the near future: "We demonstrated what is possible in plant engineering today. It is about the combination of high-end equipment for melting, casting and heating with new digital developments of the Internet of Things. We are not doing this for our own sake, but because our customers benefit from it," explains Till Schreiter, CEO and President of the ABP Induction Group.

ABP C3: Technically mature systems receive perfect service

"Our induction systems are thoroughly designed and technically mature. Customers can expect the same from our manufacturer-independent service," adds Dr. Marco Rische, CTO at the ABP Induction Group. At ABP, this service offer is called C3 - Complete Customer Care - and was presented to the general public at GIFA/METEC/THERMPROCESS 2019. "Level 1 stands for our service in installation and commissioning. Level 2 means our daily service for repairs and spare parts. Level 3 stands for our service for the modernization of the customer's plant", explains Markus Fournell, Vice President Global Service & Digital Products at ABP Induction.

MyABP: Special manufacturer knowledge meets industry 4.0 and artificial intelligence

The MyABP portal was at the centre of the trade fair presence: "In future we will close the gap between foundry and forging to us as a manufacturer," says Till Schreiter. MyABP is the digital information and maintenance assistant for melting and heating systems. Under the label #ENTERABP special manufacturer knowledge meets industry 4.0 and artificial intelligence.

The platform functions openly, independent of location and time: "It is designed as an open system for all processes and machines involved in the foundry - no matter whether smelting plant, sand machine or moulding plant. Upstream and downstream processes can be easily integrated into the platform. Here

you will find all the documents relating to the systems, from product descriptions and drawings to maintenance manuals and service reports," Markus Fournell explains.

"With MyABP, our experts are always on hand when support is needed to ensure maximum plant availability. MyABP understands the data provided and can provide direct support. And it allows ABP support to see the plant through the eyes of the customer. Augmented Reality makes it possible," explains Dr. Marco Rische, who also sees an important advantage in the fast availability: "The ABP service is available extremely quick, since long waiting times for a service appointment or technician availability are no longer an issue. The new ABP service is not stuck in road traffic on the motorway, but comes to you at lightning speed via the data motorway. This is also in the interest of the environment: if long emergency drives can sometimes be avoided in this way, the loss of production, CO2 and the environment are saved".

At GIFA 2019, ABP presented the newly developed Virtual Training, which is available for all technical areas, at any time, at (almost) any place. With ABP's Virtual Training, every employee can train in a virtual room at a digital twin of your plant if desired. "Regular training of the team is elementary, especially in such a highly sensitive area as your kiln environment. That's why we created this offer," explains Till Schreiter.

MyABP and the C3 service offer complement each other perfectly: "This creates added value for the future - a knowledge database with service protocols, problem solutions and much more, and that freely available, across manufacturer boundaries," explains Markus Fournell. Customers can then go into error analysis and develop new recommendations for action, maintenance orders and training courses. All this is centrally managed via MyABP - customers always have the system status with all available services in mind.

New ideas for the ABP machine and plant portfolio

Even though the topic of digitization was the focus of the trade fair presence, ABP showed a lot of new hardware at GIFA 2019. "An important part of our stand presentation was the 6t-induction crucible furnace FS60, which was exhibited as a sign of our standard product portfolio - with some special features", explains CTO Dr. Marco Rische. The focus is on the use of sensors for predictive maintenance: ABP has installed measuring instruments for monitoring and can thus detect changes in the status parameters during operation. "Customers who use our FS60 furnace also benefit from our patented safety concept. Our motto is 'Keep it simple': we leave out everything that is not needed and thus focus on an improved life cycle time and simplified maintenance".

In the field of new casting technologies, ABP focused on the low-pressure casting process at GIFA 2019 in addition to the Optipour automatic casting system for heated and unheated casting equipment: "We achieve a more cost-effective production of components with existing casting geometries. Studies have shown a cost reduction of up to 15 percent. This is possible for lightweight components, structural and chassis components, turbochargers and exhaust manifolds, transmissions and pumps," explains the CTO. The advantages lie in the lower production costs, but also in the lower CO2 emissions with almost the same life cycle costs.

A further highlight was the demonstration of the Meltshop Designer, which enables the design of a melting plant with regard to material flow and energy consumption. The tool simplifies the identification of bottlenecks in production and provides planning support during plant design for new foundry buildings, extensions and modernizations. This ensures accurate production and investment planning as well as safety in plant design. The environment also benefits because energy loss can be further reduced.

At THERMPROCESS, the latest version of an innovative product, the induction heater type EBS, was also presented. The highlight here is ZoneControl: "Our zone technology ensures a uniform temperature profile of 20 to 100 percent of the nominal throughput. The temperature profiles can be adapted to

different metals. The advantage: No excess temperature with reduced throughput and optimum radial and axial temperature distribution," explains Dr. Marco Rische. This also works with the THERMPROF simulation software, which can be used to optimize the temperature curve. "It allows various possibilities: scale reduction, improvement of energy consumption, optimization of temperature uniformity and reduction of block adhesives," explains Till Schreiter.

GIFA/METEC/THERMPROCESS 2019: ABP draws a positive balance

All in all, the responsible persons at ABP Induction drew a very positive balance of the fair: "The feedback on our exhibited systems and the innovative digitization offers around MyABP were very positive. Our dedicated trade fair team was not only able to show our solutions to the trade visitors, but also let them try them out live in many places - for example in the areas of Virtual and Augmented Reality. Our booth concept has fully paid off," explains ABP Managing Director Till Schreiter. He also praised the overall organisation by Messe Düsseldorf: "GIFA with Thermprocess, Metec and Newcast in combination has confirmed its status as the most important trade fair for foundry technology. As a globally active company, we were particularly pleased with the high degree of internationality among the more than 70,000 visitors. This also contributed to the positive overall balance," concludes Till Schreiter.

About ABP Induction

ABP is a leading supplier of induction furnaces and heating systems for the metals and metalworking industries. With design, production, assembly and aftermarket services for foundries, forging and steel plants, we are experts in melting, pouring, holding and heating of iron, steel and nonferrous metals. With over 400 highly skilled employees worldwide as well as sales, manufacturing and aftermarket locations in the United States, Germany, Sweden, Mexico, Thailand, India, China, South Africa and Russia, ABP can supply products and services to all regions of the globe. Regardless of where your company is located, ABP's dedicated and experienced team stands ready to support you anytime, anywhere.

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