MAGMA GmbH Press Release

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“The Digital Foundry Process”

“The Digital Foundry Process” – at GIFA 2019, MAGMA GmbH presents a new generation of trendsetting solutions for virtual casting, tooling and process optimization.

Simulation Evolves into Autonomous Engineering

In Hall 12 at Booth A19/20, MAGMA will demonstrate how Autonomous Engineering is replacing conventional casting process simulation. MAGMASOFT® autonomous engineering supports casting design, robust process layout and optimized casting evaluation even before the first part is produced. By making use of the fully integrated capabilities of virtual Design of Experiments and genetic optimization, MAGMASOFT® easily and reliably finds the best solutions – from the first casting design to improvement of a running production layout.

As a world premiere, visitors will experience Autonomous Engineering live in 4D in a captivating Holo-Theater performance.

“MAGMASOFT® - The Digital Foundry Process!”

MAGMA has been developing powerful solutions for digitizing foundry processes for over 30 years. With the “Virtual Core Shooting Machine”, the company showcases an innovative Industry 4.0 application together with

leading industry partners. A direct coupling between process simulation, core box design, molding material and core shooting machine enables the real-time optimization of the complete core shooting system for the first time.

With the “Virtual Die Casting Die”, MAGMA demonstrates how to simultaneously realize and reliably evaluate a robust tooling design and an optimized production window simultaneously within the shortest possible time for high pressure die casting processes.

Moreover, MAGMA introduces numerous new capabilities for virtual optimization of all casting processes and alloys, heat treatment and the complete core production process. In cooperation with leading partners from the supplying industry, new developments for digitizing molding materials and for quantitative prediction of core distortion, degradation behavior of binder systems and core gas related defects during the casting process will be presented. Through new solutions, accessing databases for feeding system components in MAGMASOFT® has become even easier.

Ease of Communication Internally and with Customers

MAGMAinteract, the new and innovative visualization program for MAGMASOFT® results, supports communication internally within a company as well as a fast exchange of information with both customers and suppliers. Using real castings as examples, MAGMA will interactively show how easy it is to use information from MAGMASOFT® with MAGMAinteract.

MAGMAacademy Understand – Implement – Benefit

The MAGMAacademy will present its offering of comprehensive opportunities for further education for foundrymen, casting designers and casting consumers. The “Foundrymen’s Playground 2.0” will playfully show how easy

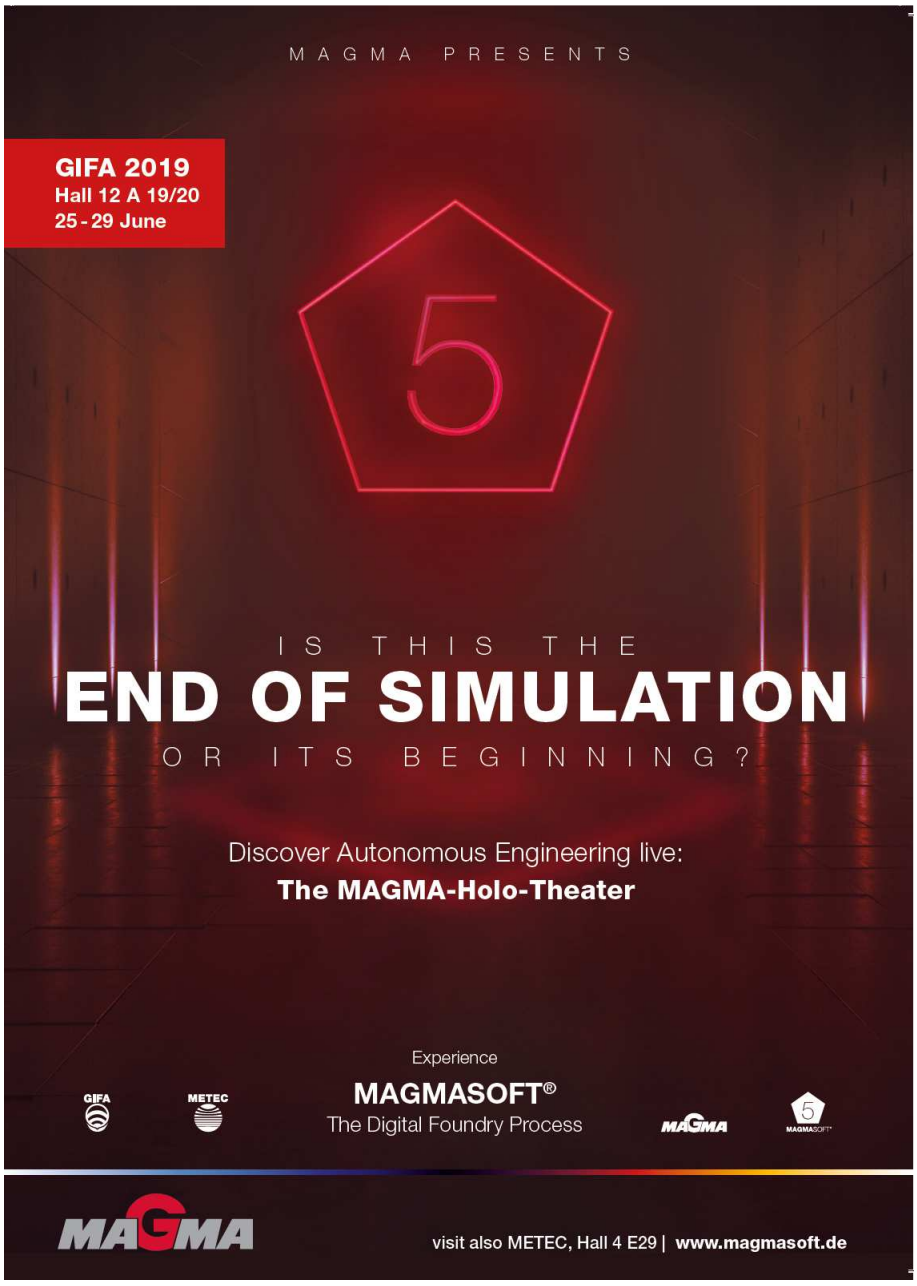
it is to virtually optimize casting designs today. Here, visitors can interactively run their own simulations in a virtual test field, while simultaneously pursuing different quality and cost-related objectives. As part of a competition against MAGMASOFT® autonomous engineering, visitors will lay out their own casting on an electronic drawing board in just a few minutes.

MAGMA – First-Time Exhibitor at the METEC Trade Fair

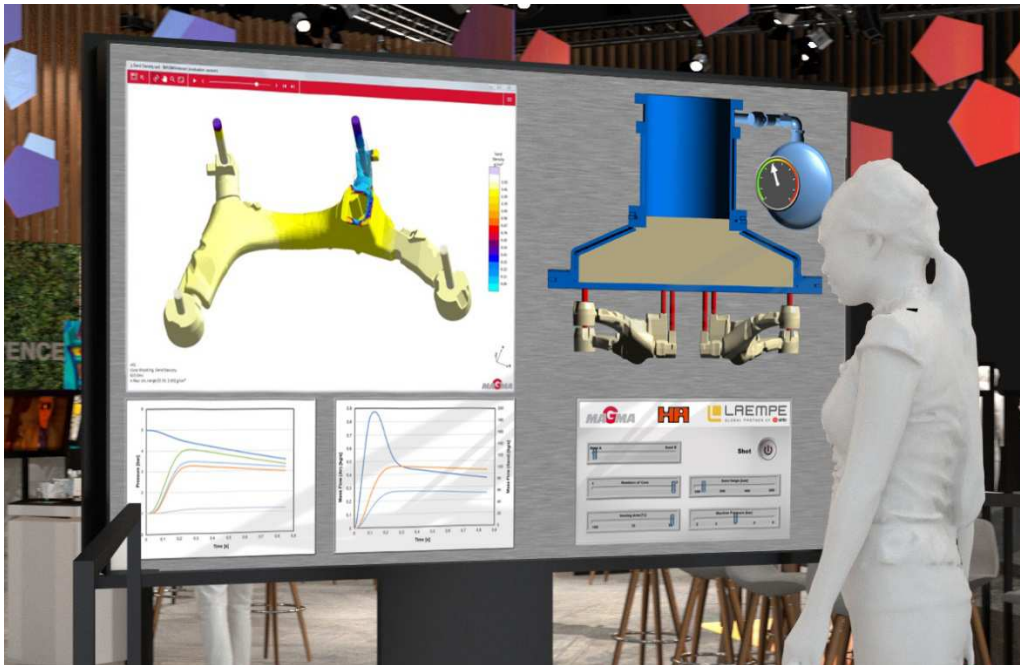
MAGMA will also be presenting its innovative solutions for process optimization in continuous and ingot casting at its own booth at METEC (Hall 4, Booth E 29). Here, too, the company will showcase state-of-the-art solutions for the virtual optimization of conflicting objectives regarding productivity and quality, as well as for establishing robust process windows.

With its Student Camp, MAGMA once more shows its commitment to recruiting young professionals for the foundry industry. The young visitors will be shown in a fun and playful manner how interesting and innovative the foundry world is.

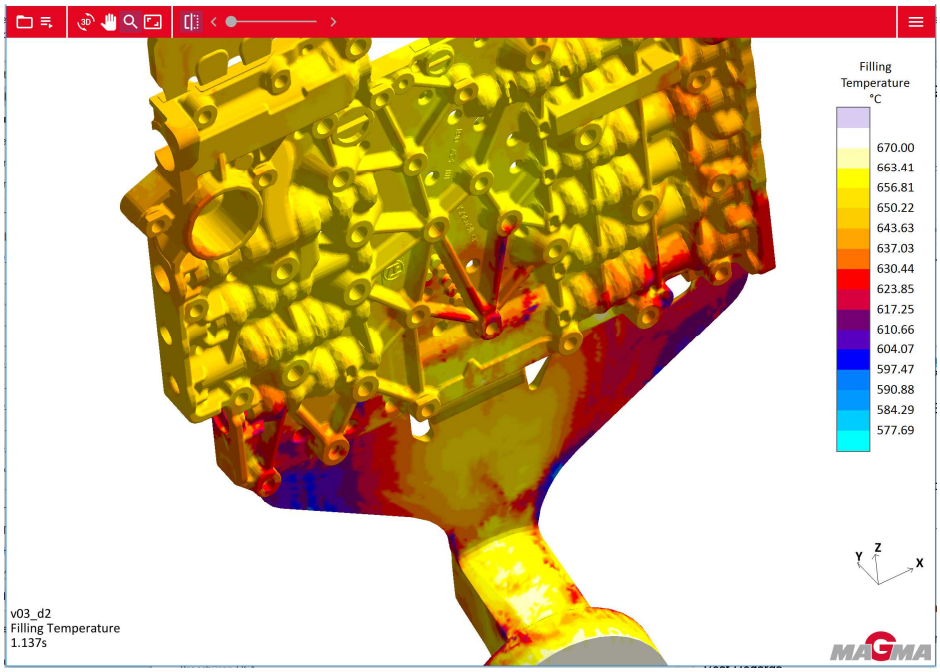
Be inspired by the fascinating world of “MAGMASOFT® - The Digital Foundry Process”!



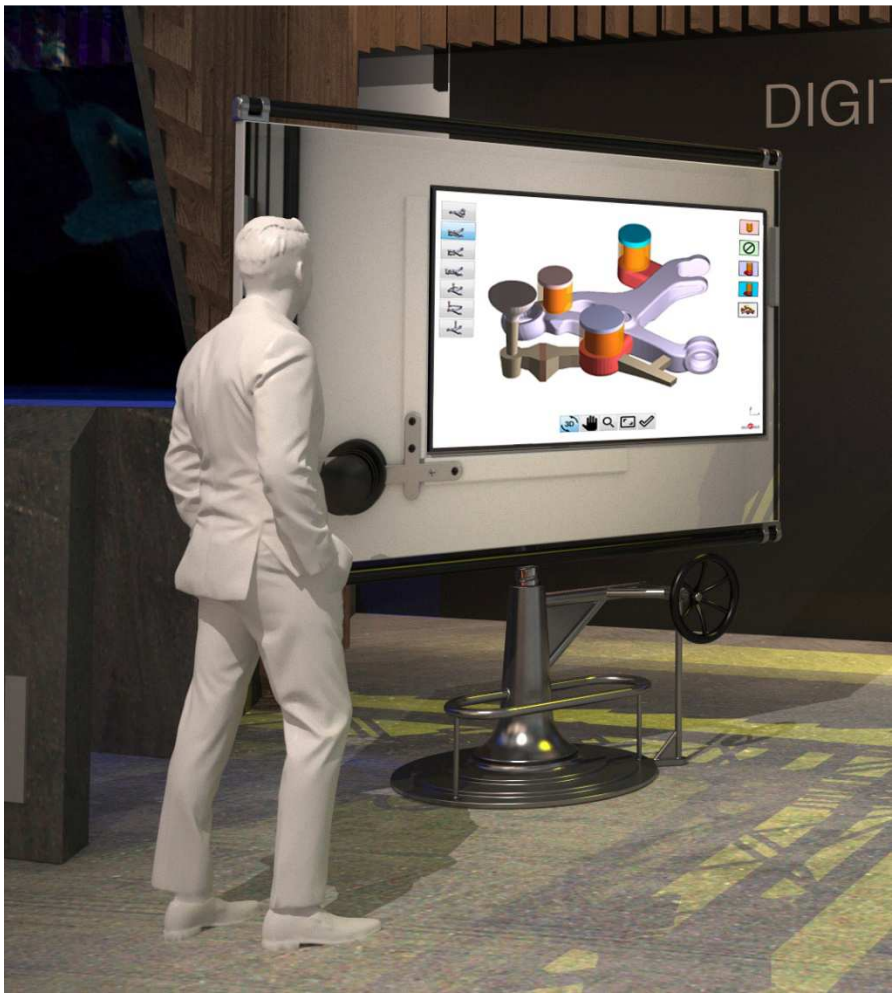
MAGMA will present Autonomous Engineering live at its unique Holo-Theater, in a performance entitled “MAGMASOFT® - The Digital Foundry Process”.



The virtual core shooting machine – a real Industry 4.0 application



MAGMAinteract – easy communication of results – internally within the company and with customers



Foundrymen’s Playground 2.0 – playfully learn how to optimize casting designs with the MAGMAacademy

About MAGMA

MAGMA is a worldwide leader in developing and providing software for casting process simulation and virtual optimization. MAGMA stands for robust, innovative cast solutions and for reliable partnerships with the metal casting industry, including casting designers and buyers. MAGMA's products unite the complexity of the casting process with user-friendliness to create economical solutions for its customers. MAGMA partners with its customers in the integration and effective use of the software, helping them to realize clear cost advantages.

MAGMA's range of products and services includes the simulation software MAGMASOFT® autonomous engineering, for virtual designs of experiments and autonomous optimization of casting processes, as well as comprehensive engineering services for casting design and process optimization. Today, MAGMA's software is used by more than 2000 companies all over the world for cost-effective casting production, reduced quality costs and for establishing robust processes for all applications, particularly in the automotive industry and mechanical engineering.

With the MAGMAacademy, MAGMA provides extensive implementation and educational offerings for all topics associated with casting process simulation. MAGMASOFT® users, together with their colleagues and managers, learn in trainings, workshops and seminars how they can use simulation and virtual optimization for optimizing casting design processes, lowering production costs and increasing resource efficiency.

MAGMA Giessereitechnologie GmbH was founded in 1988 and is headquartered in Aachen, Germany. A global presence and support are guaranteed by offices and subsidiaries in the USA, Singapore, Brazil, Korea, Turkey, India, China and the Czech Republic. Additionally, more than 30 qualified partners represent MAGMA around the world.

www.magmasoft.de/en

560 words, 3.962 characters including spaces

Contact

You are welcome to use the information to update and inform your readers about MAGMA, free of charge. For feedback, comments and more information, please contact:

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