

## Press Release

### Title:

### **MAGMA HPDC Conference 2022: Intelligent Mould Temperature Control Technology for High Quality Die Casting Process & Component Optimization**

The HPDC Conference 2022 was jointly organised by MAGMA Singapore and its partners, voestalpine, Chem-Trend and Frech Asia virtually on 30th March 2022, from 13:00 to 17:30 Singapore time.

The objective of the conference is to advance the technical knowledge and showcase innovative, effective solutions for the mould temperature control technology for high pressure die casting (HPDC) process and component optimization. There were total of six presentations being delivered with the aim to share valuable insight to the industry players whom are with experiences ranging from technical & production management, product & mould designers, moulding & tooling manufacturers, QA/QC, CAD/CAE specialists and R&D personnel.

The event started with a welcome speech delivered by Mr. Jan Eilers, General Manager of MAGMA Engineering Asia-Pacific. "We are all on the road to an endemic situation and looking back on the last 2 years, Covid-19 was and still is affecting all of us, some more than others. The disruption to global supply chains, chip shortages, work-from-home, travel restrictions and uncertainties make this a challenging time for businesses and employees alike. That's also one of the reasons why we're organizing this event as a virtual live conference today." said Mr. Jan Eilers.

"The terms 'Industry 4.0' and 'Digitalization' have become quite dominant in recent years and most companies have realized that the way forward to grow in our competitive landscape is to invest into technology. May it be into selecting the right mould steels and tools, additive manufacturing for prototypes and metal 3D printing or advanced spraying technologies and top notch machinery. And of course, digitalizing the metal and plastic injection moulding processes with the help of simulation." enthused Mr. Jan Eilers in his welcome speech to kick start the presentations.

Dr. David Wang, Managing Director from voestalpine Technology Institute (Asia) had the honor to be our first presenter and illustrated how vTI enables Additive Manufacturing to emerge as the main part of the tooling solution, via innovative material solutions and processing to high-value industrial applications. During his presentation, he emphasized how the company delivers solutions to their customers by combining design and simulation in digital space with "Reality" - the manufacturing process including performance testing before the actual production.

Following next, Mr. John Belyk, Global Business Development Director from Chem-Trend, the most proven partner in the world for release agents, shared about how they partnered with their customers to help unleash product quality, effectiveness and productivity. His presentation also gave insights on how Chem-Trend creates solutions for a sustainable world with their HERA™ Micro-Spray Technology.

The third presenter, Ms. Luciana Stuewe, Technical Director from MAGMA Engineering Asia-Pacific, delivered on the subject: "HPDC Virtual Temperature Control Optimization". She shared some interesting case studies on how MAGMASOFT® minimized cycle time and improved die life with conformal cooling anvil of a structural part mould and compared different mould manufacturing technologies to improve the cooling in a runner block insert.

Then Mr. Jason Ye, Technical Director from voestalpine High Performance Metals Pacific, presented how voestalpine delivered solutions to optimize die performance and elevates success economically. He also shared several insightful case studies about heat checking and a joint study about reduction in CO<sub>2</sub> emissions with Dievar steel - which, in no doubt, evidently portrayed their position being the world's leading supplier in delivering high quality mould and die steel.

After the fourth presentation, we had Mr. Rene Hordijk, Managing Director from Frech Asia, introducing the ways to efficient mould temperature control, including Overall Equipment Effectiveness (OEE) and die design in relation to efficient die temperature control.

Lastly, Mr. Vimalanand Devadass, Technical Manager from SIGMASOFT® Singapore, wrapped up the event by presenting on how the simulation software is specifically developed to overcome today's challenges for mould materials and cooling system optimization for plastic moulding. He emphasized on the importance of understanding the temperature distribution in the mould and showcased the impact of productivity by achieving homogeneous temperature with the SIGMASOFT® Virtual Moulding approach.

The conference has successfully attracted sign-ups for more than 300 registrants from 18 countries although the focus of the conference was for the Asia market. If you have missed the live conference, you may scan the code to view the conference program and watch the recording.



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## **About MAGMA**

The name **MAGMA** stands for robust and innovative casting solutions as well as a strong partnership with the metal casting industry. By combining casting process knowledge with simulation competence, MAGMA partners with our customers to use our expertise to their advantage in the profitable optimization of castings and casting processes. With a commitment to casting excellence, we actively work with our customers to integrate the progressive technology of simulation into their operations.

MAGMA's product and service portfolio includes the powerful, modular software MAGMASOFT® , with the newest release MAGMASOFT® , as well as engineering services for casting design and optimization. Today, MAGMASOFT® is used throughout the metal casting industry, especially for the robust design and optimization of cast components in automotive and heavy industry applications.

With its MAGMAacademy, MAGMA offers a wide array of opportunities for further education through training courses, workshops and seminars. The MAGMAacademy offers various opportunities both for personal and for professional continuing education to MAGMASOFT® users as well as to those who want to understand and make use of casting simulation results.

Worldwide, MAGMA employs more than 240 people in development, support, sales and training, of which 105 are located in Aachen, Germany. 50 software developers, and more foundry engineers than in most foundries, build one of the industry's most powerful "casting competence centers".

**MAGMA Giessereitechnologie GmbH** was founded in 1988 and is headquartered in Aachen, Germany. A global presence and support of its customers in more than 60 countries 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.

**MAGMA's operation in Asia** started with the foundation of **MAGMA Engineering Asia-Pacific Pte Ltd** in Singapore in the year 1996. It acts as headquarter of MAGMA in Asia and is located at the German Centre in the International Business Park at Jurong in Singapore.

**MAGMA Asia** delivers not only our products MAGMASOFT® and SIGMASOFT® but well established localized training courses, customer support, project engineering services, and continues to strive to offer the best and most comprehensive services and casting process knowledge as a solution provider to support our customers for casting design and optimization.

For more information about MAGMA Engineering Asia-Pacific, please visit [www.magmasoft.com.sg](http://www.magmasoft.com.sg)

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***For press release inquiries, please contact:***

**MAGMA Engineering Asia-Pacific Pte Ltd**

Ms. Anna Yeoh / Mr. Jan Eilers

Email: [press@magmasoft.com.sg](mailto:press@magmasoft.com.sg)

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