

Custom-made networking with Plastics 4.0

- KraussMaffei Group promotes the implementation of Industry 4.0 in plastics processing under the umbrella term "Plastics 4.0"
- Focus on intelligent machines, networked production processes and interactive services
- Numerous live demonstrations at K 2016

(Munich, June 15, 2016) Everybody is talking about Industry 4.0. This technology makes it possible to network machines and production processes. Under the umbrella term Plastics 4.0, the KraussMaffei Group is promoting the implementation of the fourth industrial revolution with its three brands KraussMaffei, KraussMaffei Berstorff and Netstal. Visitors at the trade show booth at K 2016 in Düsseldorf (October 19 to 26, Hall 15, Booths B27/C24/C27/D24) can see the benefits firsthand in numerous live demonstrations.

Live presentations at K 2016

"Industry 4.0 gives plastics processors of any size tremendous opportunities to optimize their value chain and production reliability, increase output and take advantage of potential savings. At K 2016, we are presenting our customers with numerous solutions and the newest developments from the areas of Intelligent Machines, Networked Production Processes and Interactive Services that help them use the potential of Industry 4.0 to their own advantage," says Dr. Hans Ulrich Golz, President of the Injection Molding Machinery segment of the KraussMaffei Group and Managing Director of Krauss-Maffei.

Intelligent machines

An example from the Intelligent Machines area is the new expanded function APC Plus. A great advantage of the APC function (Adaptive Process Control) introduced at the Fakuma trade show in 2014: It detects process fluctuations that can be caused by changing ambient conditions or

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fluctuating viscosity, and takes countermeasures automatically. Along with the processing of thermoplastics, the APC function is now also suitable for multi-component injection molding and processing silicone. In the enhanced version, APC Plus, it provides numerous new, intelligent features, such as taking into account the specific behavior of the raw material.

Networked production processes increase productivity

In the "Integrated Production" category, KraussMaffei, KraussMaffei Berstorff and Netstal are presenting new and intelligent solutions for seamless networking in manufacturing. The best example is the KraussMaffei CX 300 FiberForm system. All quality-oriented process data, for example, organic sheet heating curves or injection pressure and mold cavity pressure curves, is not only recorded in a KraussMaffei database, but also documented individually using a QR code on the component. A printer integrated into the machine housing prints the QR codes immediately during manufacturing; the respective QR code is affixed to the component. This makes it possible to seamlessly trace all product and process data for each component globally, online via mobile phone, tablet or PC. "This allows us to provide our customers a valuable tool for controlling and documenting the quality of their production in a sustainable manner. Potential troubleshooting, quality analysis and many other evaluations are possible regardless of location and beyond company boundaries," says Dr. Reinhard Schiffers, Head of Machine Technology at KraussMaffei.

The DataXplorer, developed by KraussMaffei, is an additional new system for boosting productivity in plastics processing. It is an open system for detecting, analyzing and documenting comprehensive process data in injection molding production and up- and downstream processes. "The modular design and easy configurability allows the system to adapt to all tasks and to be scalable in size. The system is used to boost productivity and reduce system downtimes in the long term, while improving quality and providing documentation at the same time," adds Schiffers. Visitors can see the functions and advantages of the new system firsthand in person demonstrated by the KraussMaffei injection molding machines set up at the trade show booth as an example.

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Under the concept of Plastics 4.0, KraussMaffei Berstorff is presenting various tools at K 2016 for monitoring machines, evaluating actual data and various service functions. Additional highlights include various webcam applications and a central computer interface standardized for networking machines based on the OPC-UA report.

New interactive service platform

To be able to offer customers professional support quickly and globally, KraussMaffei Group is developing a new service tool based on the Euromap 77 and OPC-UA master computer interface. The E-Service platform, which can be reached at any time using the KraussMaffei, KraussMaffei Berstorff and Netstal websites, provides the customer with all relevant machine data centrally, providing easy handling of any service processes. A userconfigurable dashboard provides a clearly arranged overview including machine documentation and guides the user deeper into the respective areas. "Thus, the customer can access the current machine and production data at any time using the live monitoring function. Information available immediately about the machine history and diagnostic reports enables the smooth flow of communication with the after-sales service department in case of a problem, which contributes to finding a solution more quickly," explains Renzo Davatz, Vice President Service at Netstal. A ticketing and optional remote maintenance system is integrated directly into the platform to optimally design the handling of service cases. Because diagnostic and machine reports cannot always be transmitted directly online, there is also the option to transfer the most important information via QR code and smartphone app. In this way, required spare parts can be identified reliably. In the integrated online store, the spare parts can then be checked for their availability and then ordered.

Three strong pillars for implementing Industry 4.0

Under the name Plastics 4.0, the KraussMaffei Group bundles its solutions into three categories: Intelligent Machines, Integrated Production and Interactive Services. Intelligent Machines represents intelligent, self-optimizing machines, which improve productivity and quality. Integrated Production symbolizes seamlessly networked production, in which the

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individual machines and components communicate with each other and autonomously control the processes accordingly. Interactive Services must in turn be equated with systems and services based on state-of-the-art communication technologies in the environment of fast and globally active service.

KraussMaffei Group at K 2017 Hall 15, Booth B27/C24/C27/D24

Enclosure: Pictures and more information can be found at

www.kraussmaffeigroup.com

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About KraussMaffei Group

The KraussMaffei Group is among the world's leading suppliers of machinery and systems for producing and processing plastics and rubber. Its products and services cover the whole spectrum of injection and reaction molding and extrusion technology, giving the company a unique position in the industry. The KraussMaffei Group is innovation-powered, supplying its products, processes and services as standard or custom solutions which deliver sustained added value along the customer's value-adding chain. The company markets its offering under the KraussMaffei, KraussMaffei Berstorff and Netstal brands to customers in the automotive, packaging, medical, construction, electrical, electronics and home appliance industries. Continuing a long tradition of engineering excellence, the international KraussMaffei Group currently employs around 4,500 people. With a global network of more than 30 subsidiaries and more than 10 production plants, supported by around 570 sales and service partners, the company is close to customers around the world. KraussMaffei has been headquartered in Munich since 1838.

For more information: www.kraussmaffeigroup.com

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