

Lucrative early start – the "synchronous motion" of KraussMaffei Automation

- Gripper starts at the same time as the injection molding process
- Demolding time up to 35 percent lower, cycle time up to 6 percent faster
- Synchronous motion with the ejector means less need for pneumatic systems

(Munich, January 31 2, 2022) Ready, set – already in motion. Normally, the gripper waits for an enable signal from the injection molding machine before it moves into the open mold. With the "synchronous motion" function from KraussMaffei Automation, it starts faster, saving valuable cycle time.

Injection, holding pressure, cooling phase – injection molding is a sequential process with individual steps that are usually optimized. Therefore, they offer little more potential for improving the cycle time. But what about the automation system? Though the proportion of the total process time is less, it is the parts removal that provides leverage for reducing the cycle time in most applications.

Early entry provides valuable time savings

Normally, the robot does not receive the enable signal until the mold is open all the way. The "synchronous motion" function permits early entry of the robot. The robot thus already reaches the removal position of the component during the remaining opening movements. Thus the movements of mold and handling system overlap – saving valuable time.

The goal is to keep nonproductive time as short as possible. To do so, this technology synchronizes component demolding and the opening movement of the machine. Sometimes, this also makes it possible to do away with expensive gripper hardware. After all, the ejector movement is often used for

KraussMaffei Technologies GmbH
Marketing
Krauss-Maffei-Strasse 2
80997 Munich, Germany

Phone +49 89 8899 2334
Press@kraussmaffei.com
www.kraussmaffei.com

difficult-to-demold parts. This means that the robot grips the finished part during the demolding process and the ejector pushes the component onto the gripper. This requires a costly pneumatic system at the handling (for the "depressurize" step).

However, if the gripper moves along with the ejector, no pneumatic system is required. Depending on the complexity of the application, the synchronization can take place relative to the clamp, part or ejector movement. This lets the customer defines the degree of optimization.

35 percent faster demolding time

The synchronous motion enables the demolding time to be reduced by approximately 35 percent. In the production of trash containers, for example, this means a six percent reduction in the complete cycle time – and thus a corresponding increase in total annual volume. The increase in turnover can be up to five percent for pallets and up to four percent for crates.

KraussMaffei offers synchronous motion both for new machines and in the form of an update for the MC6 machine control system for existing machines and complete systems. As a result, the investment pays for itself quickly. Synchronous motion provides its advantages for the linear robots of the LRX series and the IR industrial robots from KraussMaffei. This way, the desired early start pays for itself quickly.

PM_2022_01_AUT Synchronfahrt.jpg

Lucrative early start: With the synchronous motion function from KraussMaffei, the gripper of the robot starts faster, saving valuable cycle time.

PM_2022_01_AUT Application trash container.jpg

PM_2022_01_AUT Application pallet.jpg

KraussMaffei Technologies GmbH
Marketing
Krauss-Maffei-Strasse 2
80997 Munich, Germany

Phone +49 89 8899 2334
Press@kraussmaffei.com
www.kraussmaffei.com

More turnover thanks to short cycle times: For large logistics packaging items such as trash containers, crates or pallets, synchronous motion is an easy way to boost total annual volume by up to 6 percent

Photos: KraussMaffei

For further information and photos in print quality, visit:

www.kraussmaffei.com

Press contact:

Petra Rehmet

Content & Campaign Manager / Press Officer Injection Molding Machinery

Phone: +49 (0) 89 8899 2334

E-mail: Petra.Rehmet@kraussmaffei.com

Mathias Künstner

Head of Corporate Marketing Global

Phone: +49 (0) 89 8899 2217

E-mail: Mathias.Kuenstner@kraussmaffei.com

(words: 320/ characters 2.731)

KraussMaffei – Pioneering Plastics

KraussMaffei is one of the world's leading manufacturers of machinery and systems for producing and processing plastics and rubber. Our brand has been synonymous with cutting-edge technology for over 180 years. Our product range includes all technologies in injection molding, extrusion and reaction process machinery. As a result, KraussMaffei has a unique selling proposition in the industry. By drawing on our proven innovative capacity, we can guarantee our customers sustained additional value over their entire value-adding chain through our standardized and individual product, process, digital and service solutions. The range of our products and services allows us to serve customers in many sectors including the automotive, packaging, medical and construction industries. We also supply manufacturers of electrical and electronic products and household appliances. KraussMaffei employs about 4,700 people worldwide. KraussMaffei is represented internationally in proximity to our customers with more than 30 subsidiaries and over 10 production plants, as well as about 570 commercial and service partners. Headquarters in Munich since 1838.

Since April of 2016, the majority of KraussMaffei's shares has been held by China National Chemical Corp. Ltd. ("ChemChina"), one of the largest chemical companies in China. In late 2018, ChemChina listed the KraussMaffei Group on the Shanghai stock exchange as KraussMaffei Company Ltd. The listing opened the access to the Chinese capital market and Chinese investors.

Further information: www.kraussmaffei.com

KraussMaffei Technologies GmbH
Marketing
Krauss-Maffei-Strasse 2
80997 Munich, Germany

Phone +49 89 8899 2334
Press@kraussmaffei.com
www.kraussmaffei.com