

The Turtle project: KraussMaffei presents a high-quality sandwich application with recyclate at Fakuma

- All-electric PXZ Multinject impresses with high precision and efficiency
- Premiere for new LRXplus linear robot with new MC7 control
- Even more efficient: APCplus database uses individual material properties from ELIX Polymers

(Parsdorf, September 2nd 2024). Lightweight, with a glossy surface and a sustainable message - this is the small blue turtle that will be produced on an all-electric PXZ 121-380-180 Multinject using the sandwich process at the KraussMaffei stand at Fakuma (October 15 - 19, Hall A7, Stand 7303). It has a black core made of mechanically recycled PC/ABS and a high-quality outer layer made of chemically recycled ABS. Numerous features of the PXZ 121, such as the new sandwich panel, near-contour mold temperature control from partner CONTURA MTC and the APCplus machine function, which now also uses individual characteristic values of different material types, make the multi-component process even more efficient and economical.

"The increased use of recyclates has brought sandwich technology back into focus in multi-component technology and offers great potential. Thanks to its precision, efficiency and flexibility, our all-electric PX series in the Multinject version as PXZ is ideally suited for this. We will be demonstrating this impressively here at Fakuma using the example of the Turtle project, which we have implemented with CONTURA MTC and other partners," says Manuel von Varchmin, responsible for sales of injection molding technology and automation at KraussMaffei. The Turtle project combines a high-quality mold with a high-performance, all-electric injection molding machine from the PX series and the new LRXplus linear robot. This combination brings clear

KraussMaffei Technologies GmbH
Marketing
Krauss-Maffei-Strasse 1
85599 Parsdorf/Germany

Phone +49 (0) 89 8899 2334
www.kraussmaffei.com

economic benefits with an early ROI, while at the same time using valuable resources responsibly.

The core material of the durable turtle at Fakuma consists of mechanically recycled PC/ABS E-LOOP 5120MR from ELIX Polymers. However, a foamed or reinforced core made from recycled material is also conceivable and offers further potential for sustainable production. The visible, high-quality outer skin is made of chemically recycled and processed ABS E-LOOP P2H-AT CR, which can be supplied in various colors.

Another sustainable aspect: the cold runner sprue is removed, shredded and fed directly back into the production process for the core material. This is done with the new mini sprue mill from partner Getecha, which is being used for the first time. This also creates a closed material cycle.

More flexibility thanks to new sandwich platen

The all-electric PXZ 121 Multinject with a clamping force of 1200 kN impresses with its compact, space-saving Z-position with electric injection units. In addition, the attached, removable sandwich platen offers a high degree of flexibility in production. This means that the PXZ 121 can be used as a single-component, two-component or sandwich machine - without any additional effort.

Another advantage: The simple switchover from skin to core melt flow ensures flexibility and high quality at the same time. On the one hand, the skin material can be added in order to seal the sprue point. On the other hand, it is possible to switch between component A and B several times. This also allows marbling effects to be achieved for an individual design, for example.

Perfect surfaces - optimum cycle times

The right mold and the dynamic mold temperature control come from our partner CONTURA MTC. They are characterized by near-contour temperature control and thus optimize the entire production process. Near-contour mold temperature control is particularly important in order to achieve the required high-quality surface of the turtle with economic cycle times.

KraussMaffei Technologies GmbH
Marketing
Krauss-Maffei-Strasse 1
85599 Parsdorf/Germany

Phone +49 (0) 89 8899 2334
www.kraussmaffei.com

Always a perfect fit - the new LRXplus linear robot

Part removal, separation from the sprue, separation into the grinder and depositing on the belt are the automation tasks of the new LRXplus linear robot, which is celebrating its premiere at Fakuma together with the MC7 control system. The new LRXplus from KraussMaffei offers numerous new functions that make production even more flexible and economical. Thanks to its compatible interfaces, the LRXplus can be combined with almost any system - whether with KraussMaffei injection molding machines, injection molding machines from other manufacturers or as a standalone solution for all other automation tasks.

Even more efficient - APCplus uses individual material characteristics

Thanks to its patent, APCplus (Adaptive Process Control) from KraussMaffei is the only machine function on the market that uses material-specific compression curves for process control. The APCplus database contains all common material types that can be selected by customers for process control.

KraussMaffei is going one step further at Fakuma: all materials for use on the PXZ 121 Multinject come from ELIX Polymers, which, like KraussMaffei, is also a Sinochem Group company. With the specific material parameters from ELIX Polymers, which are integrated into the APCplus database, the machine function is precisely adjusted to the material being processed, making the injection molding process even more precise and efficient overall.

Why a turtle?

Turtles have always been a symbol of wisdom, longevity and wealth. At the same time, the plastics industry faces the challenge of developing sustainable solutions to prevent the destruction of these reptiles' habitats. Innovative processes and materials are needed to ensure a balance between industrial progress and the preservation of natural habitats.

KraussMaffei Technologies GmbH
Marketing
Krauss-Maffei-Strasse 1
85599 Parsdorf/Germany

Phone +49 (0) 89 8899 2334
www.kraussmaffei.com

KraussMaffei's Turtle project together with its partner CONTURA MTC sends a strong signal for a sustainable future and will impressively demonstrate at Fakuma 2024 what innovative partnerships in conjunction with technological excellence - such as the all-electric PXZ 121 Multinject, the new LRXplus linear robot or the new APCplus function - can achieve in the field of recycling and resource conservation while maintaining quality and cost-effectiveness in plastics processing.

Other partners at the trade fair exhibit are A&E Produktionstechnik, CONSTAB Polyolefines Additives, CycleTemp, Formconsult Werkzeugbau, Konstruktionsbüro Hein, Motan, Jurke Engineering, SimpaTec Simulation & Technology Consulting, Reichle Technologiezentrum and technotrans solutions.

01_PM_2024_09_PXZ 121.jpg

Power meets sustainability: The all-electric PXZ 121 Multinject presents a high-quality sandwich application with a high proportion of recycled material at Fakuma

02_PM_2024_09_APCplus.jpg

Even more efficient injection molding: The patented APCplus machine function now also records individual material-specific characteristic values - at Fakuma from partner ELIX Polymers

03_PM_2024_09_PXZ 121 turtle.jpg

Combines resource conservation with quality: The turtle consists of a core made of mechanically recycled PC/ABS and a high-quality outer layer made of chemically recycled ABS

Photos: KraussMaffei

Further information and images in print quality are available at:

www.kraussmaffei.com

KraussMaffei Technologies GmbH
Marketing
Krauss-Maffei-Strasse 1
85599 Parsdorf/Germany

Phone +49 (0) 89 8899 2334
www.kraussmaffei.com

Press contact:

Petra Rehmet

Marketing Manager Injection Molding Machinery

Phone: +49 (0) 89 8899 2334

Email: Petra.Rehmet@kraussmaffei.com

(words: 910 / characters 6,077)

KraussMaffei - Pioneering Plastics

KraussMaffei is one of the world's leading manufacturers of machines and systems for the production and processing of plastics and rubber. Our brand has been synonymous with cutting-edge technology for more than 180 years. Our range of products and services covers all technologies in injection molding, extrusion and reaction process machinery. This gives KraussMaffei a unique selling point in the industry. With a high level of innovation, we ensure sustainable added value for our customers along their entire value chain with standardized and individual product, process, digital and service solutions. With our range of services, we serve customers from the automotive, packaging, medical and construction industries, as well as manufacturers of electrical and electronic products and household appliances. KraussMaffei employs around 4,700 people worldwide. With more than 30 subsidiaries and over 10 production sites as well as around 570 sales and service partners, KraussMaffei is represented close to its customers internationally. KraussMaffei has been headquartered in Munich since its foundation in 1838.

Since April 2016, KraussMaffei has been majority-owned by China National Chemical Corp. Ltd ("ChemChina"), one of the largest chemical companies in China. At the end of 2018, ChemChina listed the KraussMaffei Group as KraussMaffei Company Ltd. in Shanghai. The listing opened up access to the Chinese capital market and investors there.

Further information: www.kraussmaffei.com

KraussMaffei Technologies GmbH

Marketing

Krauss-Maffei-Strasse 1
85599 Parsdorf/Germany

Phone +49 (0) 89 8899 2334
www.kraussmaffei.com