

Dr. Boy at the Fakuma 2017

Compact and automated

For the medium-sized injection moulding machine manufacturer, Dr. Boy, Neustadt-Fernthal, the participation in the 25th Fakuma was a success. The specialist of machines with a clamping force of 1,000 kN is satisfied with the high number of business transactions and „many promising discussions“ at the trade fair booth. In Friedrichshafen the company's focus was aimed on applicable robotic- and handling-solutions.



Bildquelle: Redaktion Plasteurbeiter, Ralf Mayer

Alfred Schiffer, Boy Managing Partner presents the company-developed linear-robot.

"The increasing individualization of components and the reduction in batch sizes call for multifunctional injection moulding machines," says Alfred Schiffer, Managing Partner of Boy. "Customers are also looking for attractively priced and versatile automation solutions. These demands increase the attractiveness of compact injection moulding machines.

The company, located in Neustadt-Fernthal, is now introducing in its sales programme a self-developed handling device with three servo-driven linear-axes. The linear robot LR 5 is available in different sizes.

The Procan LR 5 control of the handling works together with the control of the Boy injection moulding machines via Euromap-Interfaces. With a flexibly designable protective fence the requirements of the CE-conformity and DIN EN 201 are performed.

On a Boy 35 VV the company demonstrated a four axes robot of the company Igus, Cologne. According to Boy the purchase price of the compact device is less expensive than that of the handling devices of many competitors, but nevertheless ideal for a variety of applications. On the 35 VV the robot was placed on the rear machine table in a space-saving manner. With the gripper hand it removed the injected cake moulds from the opened mould and placed the hot moulds on a conveyor belt for cooling purposes.

From the plastic to the metal form

Furthermore the production of injection-moulded parts by means of 3D-printed mould inserts on a compact machine XXS was demonstrated.

New at the Fakuma 2017 was the use of 3D-printed metal inserts, which have a higher durability than comparable inserts made from printed plastic. In addition, tempering channels are realizable when printing the metal mould, with which the mould can be tempered accordingly – a further advantage in comparison to plastic inserts.

Simultaneously to a higher Performance

A BOY 100 E equipped with a double servo-drive produced dosing caps of insulin pens on a 48-fold mould in just 4,8 seconds. At the beginning of the injection moulding cycle the two servo-pumps of the machine enable the parallel build-up of nozzle-contact-pressure and clamping force. Due to the servo-double-pumps the two functions mould opening and ejector movement are possible in parallel at the end of the cycle.