FAKUMA — September 2018

Herausgeber: Dr. Boy GmbH & Co. KG





BOY 125 E with 25% more clamping force

1.250kN is now the new limit for BOY injection moulding machines

One of the highlights at the Fakuma is the premiere of the new BOY 125 E in hall A7 / 7101. With this new model BOY increases its previous clamping force limit to 1.250kN.

Despite significant larger tie-bar distances of 470 x 430 mm, and the installation of moulds up to max. 680kg on the moving side, the machine dimensions of the BOY 125 E have hardly changed compared to the BOY 100 E:

- Lengths and widths of the two machines are almost identical. The width of the BOY 125 E has grown to 1,357 mm - due to the increased horizontal tiebar distance
- With a small footprint of only 5.22 m², the BOY 125 E is one of the most compact machines in this clamping force class worldwide
- The maximum platen distance has been increased to 825 mm

Further advantages of the new BOY top model, which will be fully integrated into the BOY series production from spring 2019,

- optimized support for large / heavy moulds
- compact injection unit with high efficiency (SP 420)
- Material-hopper / -conveyor manually electrically movable
- available as fully automatic solution with Linear-Robot LR5

Editorial



Michael Kleinebrahm Manager **Process Engineering** Dr. Boy GmbH & Co. KG

An established company turns 50, and the first thing it does is breaking a "long-maintained credo". The specialist of machines with a clamping force of up to 1.000 kN builds now a machine with 1.250 kN, after having achieved great success with small injection moulding machines up to 250 kN in recent vears.

It was almost overlooked that even the larger BOY-series have a very satisfied group of customers with many repeat buyers, who very much appreciate the efficiency, the robustness and the accuracy of the BOY machines.

Especially these customers expressed more and more frequently their demand for a larger clamping unit. An increasing part complexity means more space for gate valves and 2K-moulds with rotary table.

Now the new and larger BOY 125 E will be presented at the Fakuma 2018 and as a "small thank-you" for the suggestion of our customers, we have additionally added a little bit more clamping force.

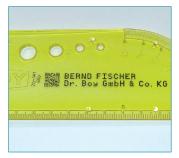


Further Fakuma-Highlights from BOY

Interesting applications for digitization and automation

A complete production unit consisting of the **BOY 60E** injection moulding machine, the **BOY LR5** removal-handling system and an integrated scanner and printer will attract the attention of trade fair visitors.

The **BOY 60E** is equipped with two parallel-working servo-pumps, which allow simultaneous injection and clamping force build-up. Multifunctional rulers are produced, which are transported from the integrated BOY-Handling LR 5 to a printer after removal from the mould. Here, a QR-code is provided with the current production data. In this way, order-related data can be retrieved and assigned on every part produced.



Part-coding and on request with personalized labelling

If requested by the visitor, the name and the company can also be printed on the ruler. The business card of the visitor is scanned and the data is sent to the printer via a host computer. The entire production cell is fully digitized and connected to a central host computer. Via an online data line, an external transfer of the data or a connection to a **Status-APP** (https://status.drboy.de) or to a **BDE-System** is also possible.

The **BOY 125E** celebrates its first trade fair premiere in Friedrichshafen with a **two-component** application that is very interesting in terms of application technology.



A cup made of NAS 30 is produced. In a second step the cup is partially overmoulded with a second material-component by a BOY 2CS injection unit. The cup is removed with the gripper head of the implementation-/ removal handling **LR5**. After having been placed on a conveyor belt, the cups of food-safe material are available for the visitors.

The steadily growing demand for a higher level of automation in the plastics industry is also reflected on the BOY booth: in total, three **LR5** are presented in various sizes. For the first time a telescope-handling on a BOY 35 E can be seen. In addition to the three linear robots, an integrated sprue picker will be presented on a BOY 25 E. Pneumatic feeding- and removal-devices (BOY XS and BOY 35 EVV) and a five-axis-robot with an attractive price-performance ratio are completing the automation portfolio.

The digital networking of injection moulding machines, peripheral devices and host computers via the **Euromap 77 / 83** interface is increasingly finding its way into the plastics industry.

At the BOY booth, the new and innovative processing capability of two-component liquid-Silicone (LSR) will be demonstrated. Michael Kleinebrahm, Manager of BOY Process Engineering, comments: "We will produce on a BOY XS with a new 8 mm diameter Silicone-unit small-size LSR-sealing rings, which will cross-link in the mould under the influence of UV-light within the shortest time. With this kind of application long flow channels or thin-walled components do problem." not pose



The lower temperature level during the processing paves the way to exploit additional areas of use and product applications with new additives. For example, in the medical field, materials can be processed that normally cannot be exposed to high temperatures for a longer period of time. In cooperation with the University of Kassel, the company EMT Dosiertechnik and BOY a sealing ring mould for this "cool" process has been optimized for the UV-cross-linking in the mould. The transparent mould cavities are surrounded by a UV-lamp. Only when the radiator is switched on the cross-linking of the two-component Silicone in the mould willstart. The application is completed by a micro-needle valve nozzle of **Emde** MouldTecGmbH. This part is specially designed for the Silicone processing.



Spritzgiessautomaten





16th – 19th October 9:00 – 17:00

20th October 9:00 – 15:00











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