

Press Release 17/2016

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BOY at the K 2016 – Meeting point for innovations

BOY will be exhibiting at the upcoming K trade fair in Düsseldorf/Germany (19 - 26 Oct. 2016) with the largest number of injection moulding machines so far. At the leading trade fair for plastics, the specialist for injection moulding machines up to 1,000 kN clamping force will also address the topics “Internet of things – networked machines” and “Individual automation solutions” at booth A43 in hall 13 and will be demonstrating these to trade visitors with interesting applications.

Almost “multitasking capability”

The call for more versatile machines has also arrived in the plastics processing industry. This becomes evident in the increasingly varied requirements for the machine manufacturers. Klaus Geimer, Deputy Managing Director at BOY, has been seeing an increased demand for more versatile machines for a while. “Where injection moulding machines used to be designed for special processes or only for certain applications, today's machine configurations offer more versatile application options. Standard machines with multifunctional features – some with individually tailored automation solutions or packages for optimising set-up times – are the focus of customer interest. We have reacted to this trend with the current machines from our product range.”

Hand in hand

At the K 2016, two robots will be working in cooperation on a BOY 35 E VV. Collaborative robot technology makes the human-machine interface an exciting trade fair experience for the visitors. The BOY 35 E VV is used to manufacture transparent glasses which are then removed from the mould by a 6-axis robot. On request, the glasses are individually labelled with a name and filled. Then the second robot – in this case working collaboratively – hands the filled glass directly to the trade fair visitor. The special feature of this new type of robot technology is the omission of enclosures or safety fences at this transfer point.

Networked machine data

The company BOY from Neustadt-Fernthal takes a step towards industry 4.0 with the option of connecting their machines to the Internet. At the BOY trade fair booth, data from the trade fair machines are collected and sent to a server via an Internet connection. The Status app (<http://status.dr-boy.de>) can be used to view the current machine data of the exhibits at the BOY trade fair stand online on mobile devices during the K trade fair. BOY is offering this technology and the app as part of their range, allowing users to always keep an eye on the current status of their machines – even when they are not directly on site. The often cited “Internet of things” is a fixed component of the future standard Industry 4.0 and is therefore also increasingly finding its way into the world of plastics processing machines. This is made possible by the Procan ALPHA control of the BOY injection moulding machines. The “heart of the machine” is equipped with a digital output to the online word.

Fast screw with only 1.9 cm³ channel volume

Another trade fair highlight at the K 2016 is the presentation of the processional competence of BOY in the field of micro injection moulding. The exhibit is a BOY XS which produces parts of a micro rotary engine (Wankel) with a shot weight of only 0.08 g using an 8 mm screw. Shorter dwell times of the material in the plasticising unit or a faster flow rate of the material (following the first in/first out principle) through the extremely small 8 mm unit offer the option of processing even materials which are sensitive to temperature. BOY will be showing an interesting automation set-up tailored to this application on this exhibit as well.

3D inserts with larger format

Printing of 3D mould inserts and their use on a BOY 25 E within a short time are demonstrated in an impressive manner. Different mould inserts with different geometrical parts will be printed during the trade fair. This shows the advantage of this 3D technology – very different parts can be injection moulded on the BOY 25 E within a very short period of time. The tool changing system for accommodating the 3D printed mould inserts, which was previously only used on the BOY XS, is now also available for the larger BOY 25 E and BOY 35 E.

Versatility in hall 13

As always when travelling to the K trade fair in Düsseldorf, the family-run company from Neustadt-Fernthal has a large number of interesting and sophisticated application examples on board.

Klaus Geimer explains: “We will also be presenting applications for multi-component technology, for injection blow moulding process and for medical technology on our

injection moulding machines at the K 2016. Another application requires active help from the visitors at the stand. They can help to manufacture their own handy torque wrench. Just come to our trade fair booth and see for yourself.”



- Photo(s): >
- 1) The BOY Status app gives users an overview of their injection moulding machines
 - 2) 3D inserts with larger format
 - 3) BOY injection moulding machine with multi-functional features