

## Press Release 18/2014

Neustadt-Fernthal, July 11, 2014

## BOY again premiers technical applications at Fakuma

During this year's Fakuma (October 14 – 18 in Friedrichshafen) BOY again will present twelve injection moulding machines. In the BOY booth no. 7101 in hall A7, machines with clamping forces from 100 kN up to 1,000 kN will be shown and demonstrated.

"We will demonstrate extremely attractive technical applications on our machines," says Alfred Schiffer, BOY Managing Partner. "On a BOY 35 E we will show the moulding of thin-walled business cards with grid structures. The visitors in the BOY booth will become a part of Industry 4.0 (project in the high-tech strategy), when they place their business card in a scanner. The data will be sent online to a laser printer. A newly-moulded plastic business card will be removed from the mould and then immediately printed with each participant's individualized information. Lot sizes of only one piece in serial production – one characteristic of Industry 4.0 – will be accomplished".

With this application, the new BOY differential injection technique will be demonstrated. It provides the operator with maximum flexibility since the injection moulding machine can be optimally adjusted to the required part parameters by simply loading constant lists. On the one hand fast injection for thin-walled parts or on the other hand very high injection pressures for difficult-to-fill part geometries.

BOY will demonstrate thin-wall moulding with the production of model railway frames on a BOY 100 E. After moulding the parts, the preforms will be removed with the BOY SL 30



industrial robot and brought to a printing station. There, the ICE will be printed with its typical red longitudinal stripe.

A BOY 60 E will produce pipettes in a 32 cavity mould with a cycle time of less than 6 seconds. On a BOY 25 E VV, adhesion modified PA ice scrapers will be over-moulded with a silicone lip. The prefabricated ice scrapers will be removed from the magazine with a handling device that is integrated on the machine table. Using the two-stage movement of the robot hand, which is controlled by the Procan ALPHA 2 control, new preforms will be inserted into the mould, and the finished over-moulded ice scrapers with a LSR lip will be removed from the mould and provided to the fair visitors.

A BOY 25 E will demonstrate the reproducible marbling of plastic parts and a BOY **XS** will be shown with nearly all available optional equipment including a dryer, material conveyor equipment and integrated removal picker. Visitors will be impressed by how little space is required for this moulding cell.

Six additional exhibits in the booths of partner companies will complete the claim that BOY is the specialist for the most efficient injection moulding machines with clamping forces up to 1,000 kN. The BOY E-Series machines will equipped with the standard servo drive and Procan ALPHA <sup>®</sup> 2 control and with the new, optional EconPlast plasticizing technology. With this development, BOY makes the plasticizing of plastics considerably more energy efficient (up to class 9+ according to Euromap 60.1) and protects materials better than ever before.



Photo(s): > Thin-walled business cards that will be individually lasered on site.