

Press Release 25/2011

Neustadt-Fernthal, November 18, 2011

BOY at the Fakuma 2011 – fully in line with the trend

“It was clear to us that we would hit the mark with our E-series and with the introduction of the BOY 22 E during the energy-efficient oriented Fakuma. But the tremendous interest in our new generation of E-Series machines surprised even us.” That’s how Alfred Schiffer, BOY managing partner, summarized their very successful participation at the fair.

With the extremely efficient servo motor pump drive, BOY is setting a trend in the area of energy-efficient injection moulding. In addition to the advantages of saving energy, the E-Series with servo drive also offers, in contrast to machines using conventional technologies, a higher production rate. For the user, this means “less energy consumption and more machine power.”

New: The BOY 22 E

At the centre of the BOY booth stood the newly designed BOY 22 E. Within a very short cycle time, thin-walled airline-cups were produced from PS. Alfred Schiffer commented: “With the introduction of the BOY 22 E we are presenting the ninth generation of our most popular injection moulding machine. The well-proven design has been maintained but further improved with the latest technologies. In comparison to the BOY 22 S, which was introduced in 1986, the BOY 22 E consumes 70% less energy and increases production output by 25%.”

Flexible two-component injection moulding

The BOY solution for two-component injection moulding generated great interest. A BOY 90 E, in combination with a BOY **XS** injection unit, demonstrated the technique during the production of safety goggles. The BOY 90 E made lenses from LyondellBasell supplied highly transparent PP. The second injection unit, which was mounted vertically to the tool, moulded the goggle body from coloured PP.

The second injection unit was equipped with a reciprocating screw plasticizing unit, which is very well suited for continuous industrial operation. The processing of standard sized plastic pellets creates special demands on the geometry, surface and sensors of very small screw diameters. BOY has many years of experience concerning this matter and was proven by how even difficult materials were processed without problems.

The entire control and hydraulic unit of the second injection unit is designed for placement next to the basic machine. The unit is transportable and thus can also be used with other injection moulding machines. The controls for both machines communicate with each other via a simple interface and ensure that the injection moulding cycle runs smoothly.

A fast BOY 55 E for the production of plastic cups

With a cycle time of only 4.8 seconds, the BOY 55 E, equipped with a servo-electric screw-drive and a two-cavity mould, demonstrated the production of thin-walled, tulip-shaped plastic cups moulded from polystyrol (PS). In addition to its low energy consumption, the BOY 55 E further impressed prospective customers with its low sound level and brief cycle time.

Insert moulding on a BOY 35 E VV

A BOY 35 E VV demonstrated the over moulding of stamped metal parts with ABS. Using a six-axis-robot, the metal part was taken from the stock magazine and inserted into the tool. In the same work step, the robot then removed the part that had been over moulded during the previous cycle and transferred it to a pad printer. The newly produced and very popular bottle openers were presented to attendees via a slide. Müller Maschinentechnik GmbH developed the entire automation process.

Single-cavity injection moulding in a clean room

A BOY **XS**, optioned to comply with clean room conditions, produced osteosynthesis plates in mini-format. The plates, weighing only 0.1 cm³, were produced by direct injection into the cavity via the machine nozzle. Sprues were eliminated. The ultra-compact ionisation box, which was built and supplied by Alpha Ionstatex GmbH, has an installation surface of only 0.8m² and can be placed on top of the safety gate without requiring any additional space. With a clamping force of 100 kN and ideally suited for continuous industrial operation, the BOY XS can be counted among the most powerful machines in its tonnage range.



Photo(s): > BOY-Stand at Fakuma