

## Press Release 26/2009

### Once again, BOY sets standards at Fakuma 2009

#### Solutions for flexible, efficient production

Neustadt-Fernthal, November 2, 2009

At Fakuma 2009, which took place from October 13 to 17 in Friedrichshafen, BOY, the manufacturer of injection moulding machines, presented top solutions for an even more flexible, more efficient production. Among the 13 machines in production, the centre of attention was the new BOY **XS** series, as well as the BOY "E" series machines equipped with servo-motor pump drives.

The exhibition attendees were given visible proof that an entire fleet of the BOY **XS** machines, each requiring no more than 0.8 m<sup>2</sup> of floor space, hardly took up any more room than one larger competitive machine with an identical clamping force. Attendees also noticed that because of the ultra-compact design of the BOY **XS**, the machines remain easily accessible from all sides even when placed close together.

#### **Single-cavity injection moulding**

Custom-made solutions for automation and peripheral equipment illustrate the advantages of the **XS** series, which has been designed for fully automatic single-cavity injection moulding. The **XS** machines offer a high level of quality assurance, little downtime due to machine or mould failure, fewer or no mould

changes, and reduced set-up times. A further advantage of this modular production concept is being capable of adapting to many various production requirements.

A further important advantage is that single-cavity parts can largely be produced without a sprue and without a hot runner system. This means the corresponding cost factor becomes negligible. In addition, the entire production process, from pellet to the packaged product, can be produced automatically and efficiently on or near the vicinity of the machine.

### **Colouring, drying, and conveying**

Applications on the BOY **XS** also demonstrated that automation can be a lot more cost-effective by using compact as well as functional solutions that do not require complex peripheral and automation equipment. For example, a material dryer and conveying unit were placed below the safety gate in a space-saving way. In addition, a colouring unit with a specially designed, protective hood with extension was used.

### **Micro injection moulding**

The production of gear wheels with a weight of only 0.001 g showed that the BOY **XS** is ideally suited for micro injection moulding. The parts were sucked from the two-cavity mould by a demoulding unit newly designed by BOY and then air-ejected into containers according to cavity. To achieve this, the gripper enters the mould from the side. Depending on the application, the system is also suitable for evacuating sprues or inserting parts to be overmoulded.

This example highlights another advantage of the intelligent construction.

Because of the diagonal arrangement of the tie bars, the gripper can access the cavities directly. The handling unit, fully integrated below the safety gate, can be mounted either on the fixed or on the moving platen as needed.

### **LSR cartridge system**

Less is more. Acting on this principle, BOY used for the metering of two-component liquid silicones a simply designed plunger for LSR cartridges with cooling adapter. The unit is driven by a pneumatic cylinder and operated by the machine control. This means that costly and bulky mix-metering units can be eliminated.

### **Insert moulding machine BOY XS V**

The smallest of the BOY insert moulding machines with 100 kN clamping force gave proof that it also offers easy access to the clamping unit and thus offers ideal possibilities for automation. And despite its footprint of only 0.6 m<sup>2</sup>, it sets new standards with regard to micro and sprueless single-cavity injection moulding.

### **Servo-motor pump drive**

BOYs largest model - the BOY 90 E - illustrated the assets of the servo-motor pump drive by producing cable binders on a 24-cavity mould. This new technology exceeds the performance of electro-mechanical drive systems regarding energy consumption, as well as dynamics, precision, and quietness of operation.

### **Two-platen clamping system**

Another attention grabber for the attendees was the BOY 35 A, which produced business card boxes without sprues on a hot runner mould. This machine, the most compact in the range of 350 kN clamping force, is also equipped with a two-platen clamping system which contributes to significantly reducing energy consumption and machine hour rates.

BOYs presence at the exhibition was supplemented by applications shown in the booths of partner companies. For example, in the booth of the Giesel publishing company a holographically designed bookmark was moulded on a BOY **XS** and handed out to the attendees. Practical applications in two further booths demonstrated the potential of the new **XS** series with regard to efficiency and optimum integration of automation equipment.

A thermoset application on a BOY 22 A completed the wide range of application examples BOY had on offer at the plastics exhibition in Friedrichshafen.

"With the applications shown, we once again proved our instincts for customer requirements and our technological leadership regarding injection moulding machines below 1,000 kN clamping force", says Klaus Geimer, Director of Sales and Marketing at BOY. "Given the success of the exhibition, as well as an increasing number of orders during the past months, we have a very optimistic outlook for the future. We are convinced that we will be able to acquire further market shares."



Spritzgiessautomaten



Photo(s): > BOY booth