

Visit BOY in Düsseldorf

Digitalisation, the circular economy and climate protection are the leading topics of the internationally oriented K 2022.

As usual - BOY will take the opportunity again and address the leading topics with two **fair premiers** and with other interesting applications at its **booth A 43** in **hall 13**.

„We hope that we can again welcome a large number of visitors at our stand this year - especially our customers and interested parties from home and abroad“, starts Alfred Schiffer his statement on the planned presentation of the specialist of injection moulding machines in the clamping force range up to 1,250 kN. According to the first statements made by the



trade fair team, the nine injection moulding machines at the BOY booth will be supplemented by further four machines at the booths of partner companies.



Just like at K 2019, BOY expects a high daily visitor frequency at its stand this year as well.

The **digitalisation** and increasing networking of the plastics industry is one of the key topics at K 2022. BOY has also taken care of the topic and will be offering its trade fair visitors a whole range of innovative technologies and developments. The new component in the BOY digitalisation package is the **ALPHA 6**.

The machine control in 16:9 screen format is equipped with additional functions as well as a new visualisation and symbolism. After its premiere presentation at the K 2022, the current Procan ALPHA ® 4 will be replaced by the **ALPHA 6** control step by step. Circular economy and the climate protection are the other

key areas at the K 2022. BOY has extremely energy-efficient injection moulding machines of the E-series in its product range for **active climate protection** and sustainability. Significant energy savings compared to machines with older technologies thus reduce the development of CO₂-emissions.

Editorial



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Saving by investing

The responsible use of resources is becoming increasingly important. This applies not only to raw materials, but also to the energy used in their processing.

From an economic point of view, too, it is becoming increasingly interesting to replace injection moulding machines with inefficient drives by ones with servo drives. On the one hand, there are various subsidy programmes to encourage the replacement of old machines. On the other hand, there is a much greater potential in the energy savings that you can achieve through the replacement alone. This is already worthwhile at current energy prices - and will be even more so if they continue to rise.

Your Patrick Messer



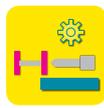
Servo-Drive



Multi Component



Technology



Moulding Assist



Clean Room



Digitalisation

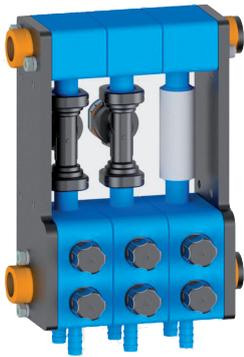


Spritzgiessautomaten

1



Flow meter



Additionally, BOY will present its own development of a new **cooling water distribution system** which will be offered as standard for all injection moulding machines in the future. The set flow rate is digitally recorded and shown on the machine display. Target quantities and tolerances can be set, displayed and monitored. A temperature display with process data monitoring is optionally available.

2



Electric Ejector

Also optionally available is the **electro-mechanical ejector**. In contrast to the previous hydraulic ejectors, the electro-mechanical version offers a main drive **independently operating mode** with synchronised ejector movement.

In the BOY 125 E trade fair exhibit, the electro-mechanical ejector will move **synchronously** to the gripper hand of the BOY-handling device LR 5.

Likewise, an opening of the mould in the opposite direction synchronously to the movement of the ejector is generally possible so that the moulded part does not experience any horizontal acceleration when it is removed from the mould.

3

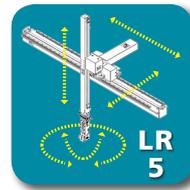


E - Drive

With the **electro-mechanical injection unit (eSP)**, BOY offers a very interesting hybrid version for its injection moulding machines in terms of application technology. The primary advantage of the electro-mechanically driven unit is the possibility of **simultaneous operation**.

Rotational and axial movements of the new electro-mechanically driven unit are carried out **independently** of the machine hydraulics by two servo motors. This is particularly advantageous for short cycle times and high dosing volumes. With an optional second servo pump, all other movements of the injection moulding process can be controlled and performed **simultaneously**.

4



Handling

On the subject of the increasing degree of automation in this industry, BOY will present at its booth a large number of exhibits with integrated handling devices. While the **BOY handling unit LR 5** has so far mainly been used for the parts removal from the mould, BOY will demonstrate at K 2022 that the handling unit can also be used for other applications.

In the interaction between a BOY 35 E VV overmoulding machine, an additional input terminal as well as the LR5 handling device and a further assembly automation, metal insert parts are overmoulded into T-shaped handles, then removed from the mould with the LR 5 and supplied to an assembly automation.

Here, the four Bits individually selected by the visitors are inserted into the plastic grip.

The LR 5 then places the assembled sets on a conveyor belt and the visitor receives his individually assembled tool set.



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