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Exhibition-highlights in the BOY-Technical Center

With the presentation of six interesting applications, the manufacturer of injection moulding machines with clamping forces of up to 1250 kN will present its innovative performance diversity. Starting on 28 September 2020, the six planned Fakuma-highlights will be available to interested visitors in the BOY-Technical Center. BOY asks for a prior registration in order to consequently implement and adhere to the Corona-related behaviour.

The presentation will start with a BOY XXS and a BOY XS, which will demonstrate with injection units of different sizes the entire performance range of the two compact injection moulding machines. The BOY XXS with an 8 mm diameter reciprocating plasticizing screw produces a small toothed gear with 0.2 g part weight made of PA 6.

In contrast, the even more compact BOY XS is equipped with the largest possible injection unit. Sprueless, beautifully shaped egg cups are made of biologically degradable Fibrolon with wood-fibre optics.

A compact production line - consisting of a BOY 35 E, the specially developed linear handling system BOY LR 5 and a protective housing according to Euromap 78 - demonstrates the automated production of delicatessen trays made of a PLA which is 75 % biologically degradable. The delicatessen trays produced with this material are removed from the open mould by the BOY-Handling LR 5 and then placed on a conveyor belt. The entire production unit only requires a footprint of less than 4.8 m².

A BOY 60 E with the integrated handling device LR 5 presents the marking of the manufactured parts - rulers made of a NAS 30 - by means of a laser. Via a sliding table, the rulers enter a light-protected housing, where the vernier scale of the ruler is burned in by a laser. The entire production line with protective fence and conveyor belts stands on a footprint of only 9 m².

The technical highlight in the BOY-Technical Center - a BOY 80 E **hybrid** with an electromechanically driven injection unit (E - Drive) - produces beautifully shaped design plates made of so-called "Ocean-Plastic" by Tide Ocean SA. The Swiss company has cooperation partners collect used plastic parts - mainly empty PET-bottles - from the world's oceans, islands, and coastal areas. The plastic products thus collected are sorted, washed, shredded and then transported to Switzerland. In a multi-stage process, the material is prepared without additives in a mechanical process for reprocessing.

The new two-pump-technology enables the parallel functions of "closing mould" and "injection" of the melted plastic material into the locking mould.

The perfect interplay of a BOY injection moulding machine, an additional injection unit BOY 2C S, the linear handling BOY LR 5, a collaborating 7-axis robot and other peripheral equipment such as a printer and a coffee machine becomes clear with the application on the BOY 125 E. The machine produces 2-component drinking cups, which are printed with an individual QR-code. Filled with the selected hot beverage, the cup is served directly into the visitor's hand by the collaborating robot.

In total, BOY produces five interesting product videos of the exhibition applications in the BOY-Technical Center. These will be published on many online platforms and on the BOY YouTube channel in the next weeks.

(<https://www.youtube.com/channel/UCN4HPDN2eSc7uF-wGVxVtxQ>)



