

Press Release 21/2013

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BOY clearly optimizes the plasticizing process

BOY, the manufacturer of injection moulding machines with clamping forces up to 1,000 kN presented EconPlast as its fair highlight at K 2013 in Dusseldorf. With energy savings of up to 50 % during plasticizing, **EconPlast** is much more economical than conventional plasticizing systems.

Since 2008 BOY has considerably lowered the energy requirement on the drive side with the introduction of the servo-motor pump drive. The new **EconPlast** system, which has been applied for a patent, now makes plasticizing much more energy-efficient. Martin Kaiser, BOY Head of Mechanical and Hydraulic Design explains: *“For the processing of plastic during injection moulding, considerable amounts of energy is needed, since plastic first has to be melted (“plasticized”). The lion’s shares of the energy requirement of an injection moulding machine are the cylinder heating and the dosing. Therefore, it makes sense to subject the plasticizing process to an energy optimization environment.”*

Through a number of measures, BOY succeeded to clearly reduce the energy losses during plasticizing. In extensive tests according to the Euromap cycle, 40% energy savings for the heating power as well as 60% less energy during dosing was achieved with the EconPlast units. Thereby the efficiency factor of the heat transfer has been optimized and the temperature control is achieved faster, more direct and even more precise.

Besides the increased energy-saving during plasticizing, **EconPlast** offers a number of other advantages. Starting and heating times are significantly shorter. In addition the reject rate is lower due to less material usage and more low-friction processing of different thermoplastics. Improved control of the feeding zone cooling with clearly lower energy losses completes the special package. The high wear-resistant **EconPlast** units are optionally available for all BOY injection moulding machines from a screw diameter of 24 mm.

According to Euromap 60.1, the use of an **EconPlast** unit has also made an immediate impact on the energy classification of injection moulding machines. It has also made the comparability of injection moulding machines more transparent. The new BOY 60 E with a 600 kN clamping force has already achieved the top classification 9+ with the **EconPlast** option. The new BOY 100 E (1,000 kN clamping force) is even with a higher material throughput per hour very close to the limit of the energy consumption dream mark of 10+.

Learn all the information about **EconPlast** by going to the new BOY website

www.econplast.de