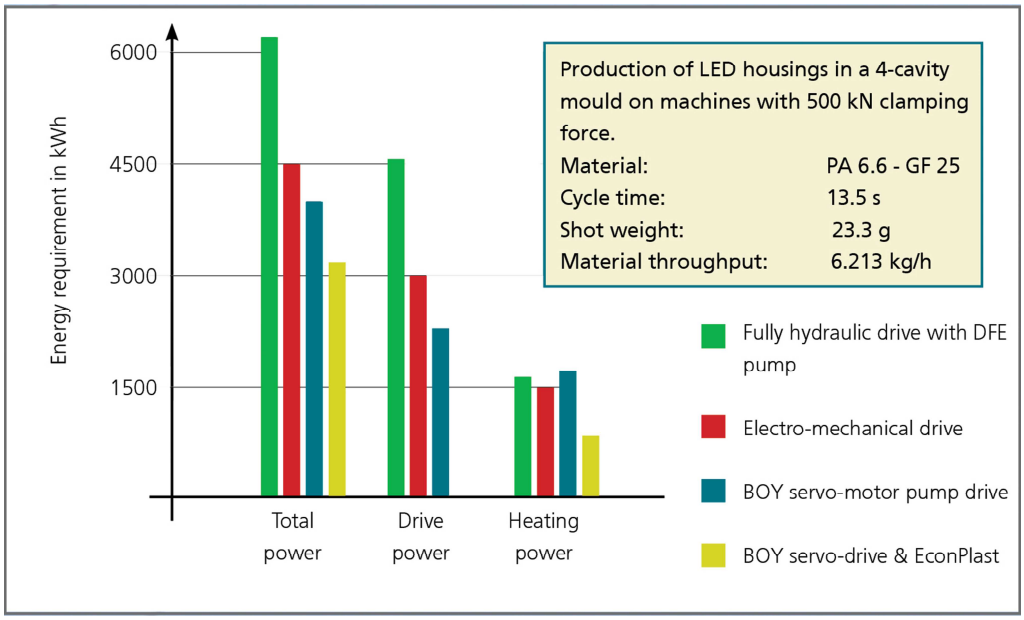
BOY Servo-drive and EconPlast are increasing the efficiency of every plastic-processing company

BOY E-series convinces with many advantages

According to the most recent findings the servo-motor pump drive (servo drive) as drive technology, is predominant in the energy-comparison with electromechanical or so-called "all-electric" injection moulding machines. The drive system of the E-series, which has been used by BOY for many years, has already convinced a large number of users with energy savings of up to 50%.



It is the optimum combination!

The combination of servo drive of the BOY E series, the compact cantilevered two-platen clamping unit and patented pressure intensifier with valve function as well as the plasticizing technology EconPlast significantly increase the energy- and production-efficiency in injection moulding. EconPlast saves up to 50% on heat input when melting plastics - the lion's share of the total energy consumption of an injection moulding machine. Start-up and warm-up times can be minimized and the temperature control is more direct and precise. Finally, the rejection rate in production and the parts costs are reduced.

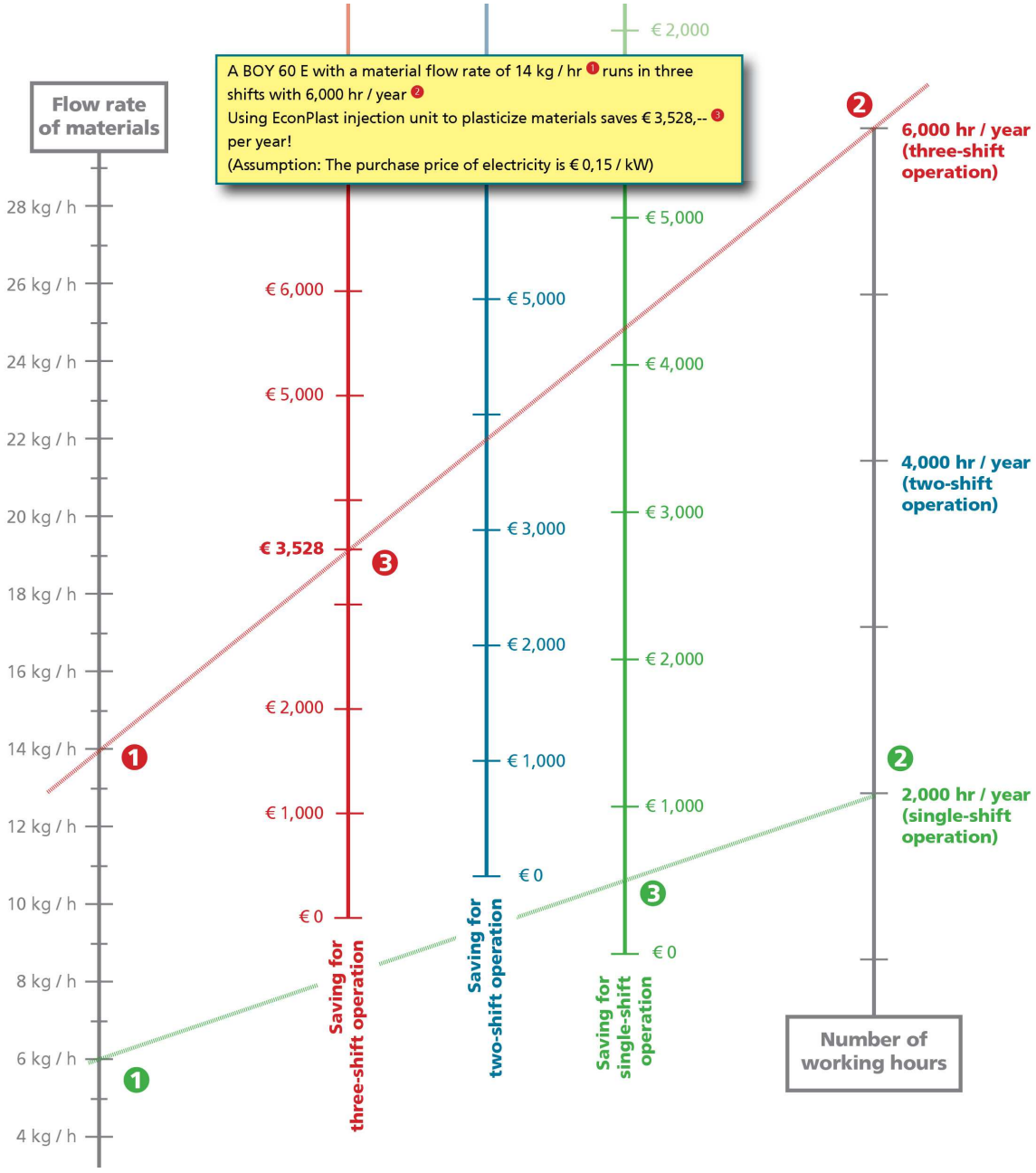
Additional BOY machine-options for further cycle time optimization are available; e.g. the servo-electric screw drive or a servo double-pump, allowing simultaneous movements for the reduction of cycle times.

Significant energy savings

On request, BOY offers its customers the option of an energy comparison between the production equipment on site with that of the BOY E series. Thus, the measurement of a so-called "endurance runner" resulted in an annual energy cost saving of up to 10,000 Euros. Precisely, the BOY 100 E with servo drive requires around 68,000 kWh less drive energy per 8,400 operating hours per year than a competitor in the same clamping force class. At a current electricity price of approx. 0.15 € / kWh - per year, this means around 10,200 Euros less energy costs.

In addition to this, the following information: With each kilowatt-hour saved, about 600 g less CO_2 is produced - in the example mentioned above this adds up to 40,800 kg of saved CO_2 emissions.

With the following graphic, the potential savings can be quickly determined when using the EconPlast technology. Depending on the material throughput (item 1) and capacity of the machines in single or multi-shift operation (item 2) the amount of the saved costs can be seen on the middle axes (item 3).



Less expensive piece by piece

The lower the energy consumption of the injection moulding machine and the higher the output rate of parts the lower the actual unit costs. According to BOY, the hourly rate calculation of the machines of the E series - in which all economic factors are taken into account - is at a very low level in direct comparison. It has turned out that a changeover to machines with servo drive will quickly pay off for the user.

Success story

In 2008, BOY was the first European injection moulding machine manufacturer that introduced the servo motor pump drive (servo drive). Since then, this drive technology has convinced a growing number of customers, so that many of them ordered further E-Series machines shortly after acquiring their first servo-driven injection moulding machine.

The meanwhile patented EconPlast plasticizing technology, which the manufacturer of injection moulding machines with a clamping force of up to 1,000 kN presented at the K trade fair in 2013, also makes a decisive contribution to increasing efficiency. For example, a BOY 60 E with EconPlast unit has the very high Euromap classification 9+.

Worte: 468

Zeichen: 3729

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