

Press Release **Bex**te Kunststoff-Technik – BKT –

Energy savings potential of 25% to 70% in injection moulding applications when plasticising the melt

Properly heated - energy savings during plasticising - BKT launches Infrared heating system for injection unit

Essen, Germany, September 2023: Just in time for FAKUMA, Bex

te Kunststoff-Technik - BKT- is introducing a new type of infrared heating system for screw barrels. Andreas Bex

te (CEO): "We offer injection moulders a system that reduces energy costs - when heating up the injection unit – and which allows them to start production much faster. The quartz halogen tubes in the alloy metal heater bands emits infrared rays (optical waves) with high temperature control precision onto the barrel during the plasticising process. The surface temperature of the installed heater bands does not exceed 65 °C. You can feel directly that the energy is effective where the process needs it and is not radiated into the environment. The energy loss to the outside is therefore extremely low. Furthermore, the shop floor staff finds an improved working environment since it is not additionally heated up in an uncontrollable way.

This applies to all injection moulding machines and all thermoplastic materials, since the installation of the IR system is "plug-and-play" as Bex

te puts it: "We use it to control the plasticising processes of polyolefins (PE/PP) and up to temperatures of 400 °C, i.e., also the perfect plasticising of super-engineering plastics without deviations".

A significant additional advantage is the heating time: BKT's IR system reaches the appropriate process temperature in about half the time required by conventional heater bands - a money-saving plus in terms of injection moulding machine availability.

Also, rather significant in the price/performance ratio is ROI: according to A. Bex

te's calculations, the IR system amortises within about two months in one of the numerous projects - related to a 600-ton injection moulding machine with a typical injection unit when processing polypropylene in 24*7 operation.

The installation is easy: replacing typical ceramic heater bands with a BKT IR heating system is not witchcraft: "We need the usual technical information such as dimensions and heating capacities, etc., which are available for the current heating system and the

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individual heating zones in order to design our system precisely," says project manager Kevin Bexte. The existing connection situation and the temperature sensors can be further used in the injection moulding machine undergoing conversion, which reduces the costs even further.

All in all - with BKT's IR heating system alone - energy savings potentials of 25% to 70% can be realised in injection moulding applications when plasticising and preparing the melt.

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BKT's infrared heating system for the injection unit.



Further Information

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