

## BKT IR- Heizsysteme



### 1. What goals are achieved with the use of infrared (IR) heating bands?

The aim of these systems **is to reduce energy consumption and costs in production processes**. This also directly improves the competitiveness of the user.

### 2. How do infrared heating bands work?

The quartz-halogen tubes in the alloy metal heating bands emit infrared rays ("optical waves") with high temperature control accuracy are directed at the plasticizing cylinder to heat the plastic.

A very high efficiency (more than 99%) leads to a dramatic energy-energy saving effect and also produces a very low surface temperature compared to conventional heating tapes of max. only 65°C - and thus also directly improves the This also directly improves the working environment in the production area.



### 3. Where are the fields of application of this technology?

The IR heating systems are used on plastic injection molding machines and other plastic processing machines.

Each project is precisely coordinated and special details are taken into account in advance - thus the best possible solution is finally worked out.

### 4. Can the installation be done if "standard" (ceramic) heating tapes are to be exchanged for IR heating tapes?

An exchange is usually possible as a "plug & play" solution.

We need various technical information (such as dimensions and heating capacities, etc.) used for the current (ceramic) heaters and the individual heating zones in order to design our systems accordingly.

The existing connection situation and the temperature sensors of the processing machine to be converted are still used, which reduces the acquisition costs.

### 5. and information showing the advantage of IR heating systems:

The surface temperature and thus also the temperature radiation and an energy loss "to the outside" are greatly reduced compared to conventional heating tape systems.

Depending on the type, IR heating tapes generate low surface temperatures of max. 65°C. Heating times are reduced by 50%, thus extending machine running times.

Depending on the processing machine, the type of plastic processed and the respective processing procedure, the user can achieve...



**...energy saving potential during plasticizing and melt preparation of 25% to 70% in injection molding applications!**