

CERAMIC

HEATLOCK®



The diagram shows the different heat losses of the manifold to the mould of in one case supported by 4 iron spacers and in the other with 4 ceramic spacers of same dimensions. In our case the contact surface of the spacers was 450mm².

The result shows a difference of 0,33Wh/mm² between steel and ceramics. Ceramics save 0,33Wh for every mm² of contact surface as respects to steel each working hour.

Example:

Our ceramic spacers KE0200305 (surface=490mm²) save approx. 160 Wh when compared with steel.

Summerising:

- remarkable energy saving
- less heat loss in mould means less works for your chiller

Ceramic Insulation Parts

Ceramic parts specially designed for the plastic industry. Forms a barrier between the hot and cold parts resulting in reduction in heat losses. The main benefit from this is that it will be easier to control and to get even heat on the heated parts. They are produced of an material which has only 7% of the heat conducting capacity of steel.

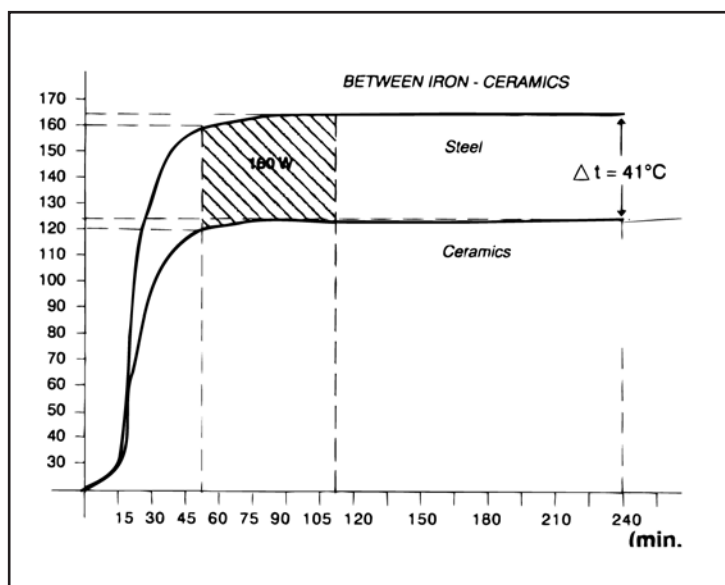
The ceramic compression strength is 2100N/mm², and it is capable of withstanding temperatures of about 1400°C. Special design made upon request.

Micro Ceramic with tolerances within $\pm 2,5\mu\text{m}$

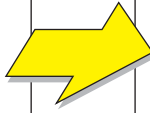
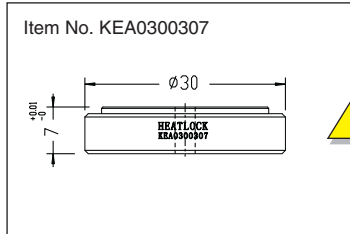
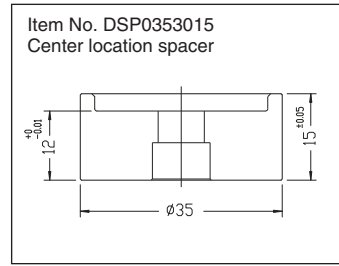
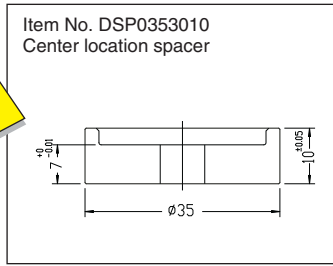
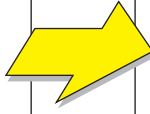
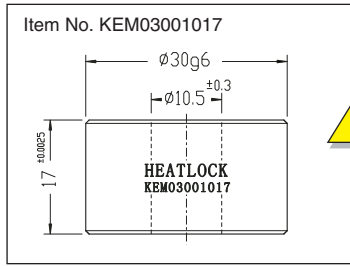
The "Micro" series are all supplied with a build up tolerance within $\pm 2,5\mu\text{m}$. This makes them suitable for the high cavitation market where tight tolerances are needed in order to make the hot runner systems leak free. This series also makes the ceramic insulator exchangeable in multi cavity moulds.

Heat transfer capacity is around 2-3 of a certain value where titanium is 14-15 and stainless steel is 22-24.

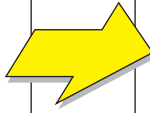
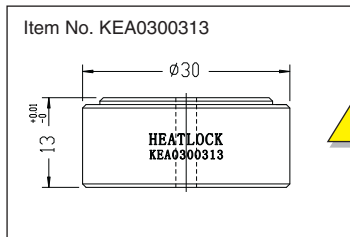
Since temperature is kept within the heated parts, the energy-losses from hot-runner to the mould are reduced. Tests done comparing the energy losses between steel spacers and ceramic spacers show an energy saving of 0,33 Wh/mm² contact surface.



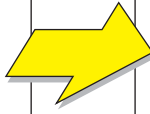
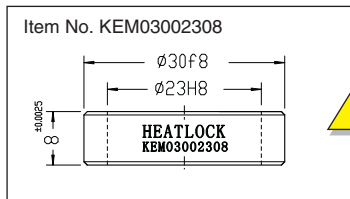
Mirco ceramic



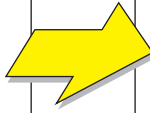
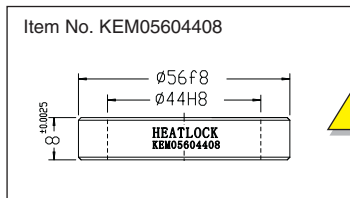
Back spacer



Back spacer



This Micro Ceramic ring fits :
All size 1 nozzle



This Micro Ceramic ring fits :
All size 4 nozzels

