



Square Cartridge Heaters for the packaging industry

High process costs and complex manufacturing processes due to deep hole drilling?

Cut costs now with the implementation of square cartridge heaters from Freek.



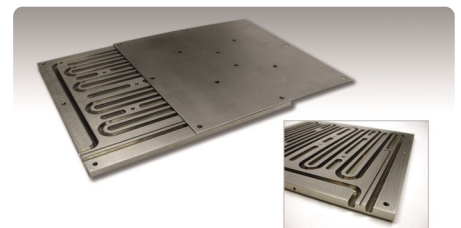
Our square cartridge heaters (QHP) are engineered for installation in welding bars, heating plates, or similar applications. Their **flexible, bendable design**, featuring a stainless steel or nickel sheath, permits tight bending radii and allows easy pressing into grooves. Machining the plates with **common milled grooves replaces costly deep-hole drilling** required for conventional round cartridge heaters. Adaptable shaping ensures optimal heat distribution across the entire surface, both with and without individual power distribution.

By using our square heating cartridges, you achieve process improvement, save time and money on assembly, and also benefit from low material costs and long durability of our heaters.

Your **benefits** at a glance

- Cost-effective plate manufacturing through milled grooves
- Easy heater assembly – no potting with thermal conductive cement
- Non-destructive and easy maintenance and disassembly
- Homogeneous temperature profile due to variable groove shaping
- Process temperatures up to 750°C in standard version
- High process reliability due to integrated thermocouple
- Optimised heat transfer with 75% contact area*

*compared to round cartridge heaters pressed into a groove



Even more **Applications**

- Textile industry
- Thermoforming
- Heating plates

Application example: „Stamping tool“

Requirements:

Stamp diameter = 100 mm, up to 700°C continuous temperature, uniform heat distribution, including recesses for holes

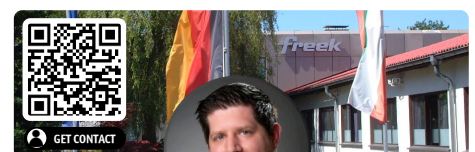
Our solution:

2x QHP 4.5 x 4.5 x 600 mm, 1500 W / 230 V, high-temperature leads up to 500°C, Nickel sheath up to 850°C surface temperature



L_{\max} : 3000 mm (Max. lead length) P_{\max} : limited by max. surface load of 16 W / cm ² and max. current of 16 A					
	4,5 x 4,5 $\pm 0,1$	6 x 6 $\pm 0,1$	8 x 8 $\pm 0,1$	10 x 10 $\pm 0,15$	6 x 12 $\pm 0,15$
\varnothing	4,5 $\pm 0,1$	6 $\pm 0,1$	8 $\pm 0,1$	10 $\pm 0,15$	10 $\pm 0,15$
R _{min}	12 mm	15 mm	20 mm	25 mm	30 mm

We are happy to assist you with your individual project!



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