



Square Cartridge Heaters for application in heating plates

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 are engineered for installation in welding bars, heating plates, or similar applications. Their flexible, bendable design, featuring a stainless steel or nickel sheath, allows tight bending radii and 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 heating surface. The desired temperature profile can optionally be further optimized through an integrated thermocouple and power distribution.

By using square cartridge heaters to heat tool surfaces and heating plates, you achieve process improvements, while saving time and money in tool manufacturing and heater assembly.

Your benefits at a glance

- Easy heater assembly – no potting with thermal conductive cement
- Precise heat distribution through variable groove design
- Flexible temperature profiles due to optional power distribution
- Process temperatures up to 750°C in standard version
- Improved process reliability with optional integrated thermocouple
- Available cross-sections [mm]: 4,5 x 4,5 , 6 x 6, 8 x 8, 10 x 10



Proven in Practice: Stamping tool

Requirements:

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

Freek solution:

2x Square Cartridge Heater 4,5 x 4,5 x 600 mm, 1500 W / 230 V, Nickel sheath up to 850°C surface temperature, leads up to 500°C



Any questions? I'm happy to advise you personally!



Michael Ablas

+49 2373 9590 14
m.ablas@freek.de



Direct Comparison

Advantages over flexible tubular heaters

- 75% contact surface instead of 50%
- Direct heat transfer without additional ceramic
- Durability due to larger heating conductor diameters
- Single-sided connection

Advantages over round cartridge heaters

- Flexible design through milled grooves
- Cost reduction by eliminating deep-hole drilling
- Non-destructive maintenance and disassembly