

Induction Brazing copper pivot

United Induction Heating Machine Limited

We are experienced in Induction Heating, induction heating machine, Induction Heating equipment. They are widely used in induction heating service, induction heat treatment, induction brazing, induction hardening, induction welding, induction forging, induction quenching, induction soldering, induction melting and induction surface treatment applications
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Objective Brazing a copper pivot assembly

Material Two copper uprights 2" (5cm) wide x 4" (10.2cm) high, copper base 3" (7.6cm) x 2" (5cm) and .5" (1.3mm) thick with 2 channels for the uprights to the slide into, braze shims and black flux

Temperature 1350 °F (732 °C)

Frequency 190 kHz

Equipment • Power of 20kW induction heating system, equipped with a remote workhead containing two 1.0µF capacitors for a total of 0.5µF

- An induction heating coil designed and developed specifically for this application.

Process A three turn helical coil is used to heat the base of the assembly. The copper uprights and two braze shims are placed in the grooves in the base and black flux is applied. The assembly is placed in the coil and power is applied for 4 minutes to braze both the uprights in place.

Results/Benefits Induction heating provides:

- Rapid localized heat which can minimize oxidation and reduce cleaning after joining
- Consistent and repeatable joints
- Hands-free heating that involves no operator skill for manufacturing
- Even distribution of heating

Brazing-copper-pivot

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