Induction brazing copper to copper

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 http://www.uihm.com

Objective To braze copper to copper bus bar assemblies together

Material • 2 copper bus bars 6" (152.4mm) wide, 2' (609.6mm)long, 2 copper bars 6"(152.4mm) wide, 18" (457.2)long & 3/8" (9.65mm) thick

• braze shim preforms and white flux

Temperature 1292 °F (700 °C)

Frequency 87 kHz

Equipment • Power of 90kW induction heating system, equipped with a remote workhead containing eight 1.0 μ F capacitors for a total of 2.0 μ F.

• An induction heating coil, designed and developed specifically for this application Process A three-turn helical coil is used to heat the assembly. Three braze shim preforms are placed between the plates and white flux is applied to the assembly. It is heated for 5 minutes to evenly flow the braze alloy. A high current capable, aesthetic looking braze zone is produced.

Results/Benefits Induction heating provides:

- Consistently produced, quality parts
- Heat into the part that is divided equally between the copper pieces, allowing for even flow and consistent use of

braze

• Hands-free operation that doesn't require skilled operators brazing copper to copper

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