

Induction Brazing Steel to Steel

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 To braze O-ring Face (ORFS) sleeve or male connector to a steel tube.

Material • Steel tube, 1 inch (2.54 cm) OD

- O-ring Face Seal sleeve and a male connector fittings
- Preform braze rings
- White SureFlow flux
- Steel support mandrel

Temperature 1300 °F (704 °C)

Frequency 163 kHz

Equipment • Power of 10 kW induction heating system, equipped with a remote workhead containing two (2) 1.5 µF capacitors (for a total of 0.75 µF).

• An induction heating coil designed and developed specifically for this application. Process A four-turn 2.75 inch (7.0 cm) ID helical coil is used for heating both the steel tube and the ORFS sleeve or the ORFS male connector. This coil is designed to braze either the sleeve or male connector to the tube. The parts to be brazed are assembled with flux and heated for 45 seconds. Pressure is applied to the tube to make sure it is inserted fully into the fittings as the braze ring flows.

Results/Benefits Advantages :

- Large Inner diameter of coil allows for easy loading and unloading of parts
- With efficient energy coupling of the coil to the fittings
overheating is avoided.

brazing-steel-to-steel

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