

Induction Brazing stainless 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
<http://www.uihm.com>

Objective

1st Application: Braze hub assembly to needle holder

2nd Application: Braze Large tube to ring joint Material 1st Application: Steel hub assembly and needle 0.1" dia (2.5mm)

2nd Application: Steel tube 1" OD (25.4 mm) and ring

Temperature 1400 °F (760 °C)

Frequency 325 kHz for brazing the needle 0.1" dia (2.5mm) 259 kHz for brazing ring to steel tube 1" OD (25.4 mm)

Equipment • Power of 6kW induction heating system, equipped with a remote workhead containing two .66 µF capacitors for a total of 1.32 µF

- Two induction heating coils, designed and developed specifically for this dual application.

Process 1st application: A two-turn helical coil is used to heat the hub assembly on the needle holder for 10 seconds. The coil concentrates the heat on the hub only, as the needle is magnetic and the hub material is non-magnetic. A small diameter braze wire is used to supply sufficient amount of braze creating a strong aesthetically pleasing bond.

2nd application: A three-turn helical coil is used for brazing the large tube to the ring joint for 3-5 minutes. A braze ring is used to supply sufficient amount of braze to create an aesthetically pleasing bond.

Results/Benefits Induction heating provides:

- Even distribution of heating, provides even flow of braze alloy for an aesthetically pleasing bond

- System flexibility allows for the same unit to be used for two different applications which is a cost saving

brazing-stainless-steel

service@uihm.com

United Induction Heating Machine Limited

