## Induction Bonding plastic sleeve to stainless steel handle

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 Heating end of a stainless steel handle with a plastic sleeve coated with heat adhesive for a bonding application

Material 1" (25mm) OD stainless steel handle 0.30" (7.6) thick covered with a plastic sleeve that is coated with a heat adhesive between the tube & plastic cover

Temperature 250 °F (121 °C)

Frequency 170 kHz

Equipment • Power of 5kW induction heating system, equipped with a remote workhead containing one  $1.2\mu F$  capacitor.

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

Process A three turn helical coil is used to heat the handle assembly.

The assembly is placed in the coil and heat is applied for 10 seconds at the end of the handle to reach the required

temperature of 250 °F (121 °C) to adhere the plastic sleeve to the handle.

Results/Benefits Induction heating provides:

- Increased production rates
- Increased energy savings
- Highly accurate placement of heat, no effect to surrounding components
- Even distribution of heating

