

# Induction curing coating

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 Curing a coating on both sides of an aluminum piston at a rate of 1" (25.4mm) per second

Material 4 aluminum pistons weighing 1lb (.45kg) each, 3.75" (95.25mm) dia and 2.5" (63.5mm) high

Temperature 225 °F (107.2 °C)

Frequency 6 kHz

Equipment • Power of 70 kW induction heating system, equipped with a remote workhead containing three 26.8µF capacitors for a total of 80µF

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

Process A three turn channel coil 19" (48.26cm) long is used to anneal 4 pistons running through the coil with a distance of 6" (15.24cm) between centers. The parts run at a rate of 1" (25.4mm) per second and the 4 parts reach 225 °F (107.2 °C)

and are annealed in 40 seconds.

Results/Benefits Induction heating provides:

- Hands-free heating that involves no operator skill for manufacturing
- Ideal for in-line production processes because of its ability to produce repeatable, rapid and accurate heating cycles
- Improved throughput

curing-coating

