

# Induction Annealing metal stamp sets

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 Heat the opposite end of a metal stamp so that it mushrooms instead of cracks/splits when struck by a hammer.

Material S-7 steel of varying rectangular cross sectional sizes

Temperature 1400-1800 °F (760-982) °C

Frequency 204-165 kHz

Equipment 25 kW, induction heating system, equipped with a remote heat station containing two 1.5 µF capacitors for a total of 0.75 µF and three different induction heating coils designed and developed specifically for this application.

Process One five-turn and two four-turn helical coils are used to heat the end of stamps to the required temperature. Two part sizes can be run in each of coils, using the same machine settings except for cycle time. Cycle rates dependent upon the crosssection size. The 3/8" (0.9525 cm) square size is has a rate of below 10 seconds. The rate for the middle size, 1/2" – 1 1/2" (1.27 – 3.81 cm) is 30 to 60 seconds. A 1" (2.54 cm) square part takes approximately two minutes. Fixturing can influence the length of the cycle time required. For shorter heat times a larger power supply may be used.

Results/Benefits Precise heat only to the area that needs annealing is more efficient and repeatable than heating with a torch

Stamps-of-varying-geometries

Induction Annealing metal stamp sets 2

Induction Annealing metal stamp sets 1



