## Induction Annealing aluminum lip

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 Annealing a 1" lip on aluminum cryogenic dewar that has been work hardened during the process of spin forming.

Material Aluminum dewar, lip has a 3.24'' (82.3mm) ID and is 0.05'' (1.3mm) thick Temperature 800 °F (427 °C)

Frequency 303 kHz

Equipment • 25 kW induction heating system, equipped with a remote workhead containing one 1.0  $\mu$ F capacitor.

• An induction heating coil designed and developed specifically for this application. Process A two turn helical coil is used to heat the lip on the cryogenic dewar. The dewar is placed in the coil and power is applied for 2 minutes to anneal the required 1" heat zone.

Results/Benefits Induction heating provides:

- Hands-free heating that involves no operator skill for manufacturing
- Fast, controllable, accurate heating
- High efficiency, low energy cost
   Even distribution of heating
   \* dewar is a glass or metal container for storing liquefied gases
   annealing-cryogenic-dewar

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