

# Induction Heating Aluminum Auto Trim

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 :** To heat various sizes of aluminum auto trim to 500°F (260°C) at a rate of 30 ft. (9.1m) per minute for curing an adhesive.

**Material:** Magnetic steel and aluminum auto trim parts, coated with adhesive; 1.85" (47mm) ID ceramic tube

**Temperature :** 500 °F (260°C)

**Frequency :** 152 kHz

**Equipment**

- HF 25kW induction heating system equipped with a remote workhead with six 0.75μF capacitors for a total capacitance of 0.5 μF
- An induction heating coil designed and developed specifically for this application.

**Process :** To simulate continuous production, a slide table/stepping motor arrangement and ceramic tube are used to move the parts through the eight turn helical coil at 30 ft. (9.1m) per minute. In continuous production, an infrared sensor can be used to measure the temperature of the aluminum after exiting the coil and adjust output of the power supply to maintain the required 500 °F (260°C).

**Results/Benefits:**

- Consistent, controllable heat
- Hands free operation
- Reliable, repeatable results

