



Heating lead battery terminal for removal from plastic cover for recycling

Objective Heat a lead battery terminal to 400 °F (204 °C) to release it from plastic cover for recycling

Material Battery terminals 0.84"OD (21.3mm) x 0.45" ID (11.4mm) x 1.3" (33mm) long

Temperature 400 °F (204 °C)

Frequency 318 kHz

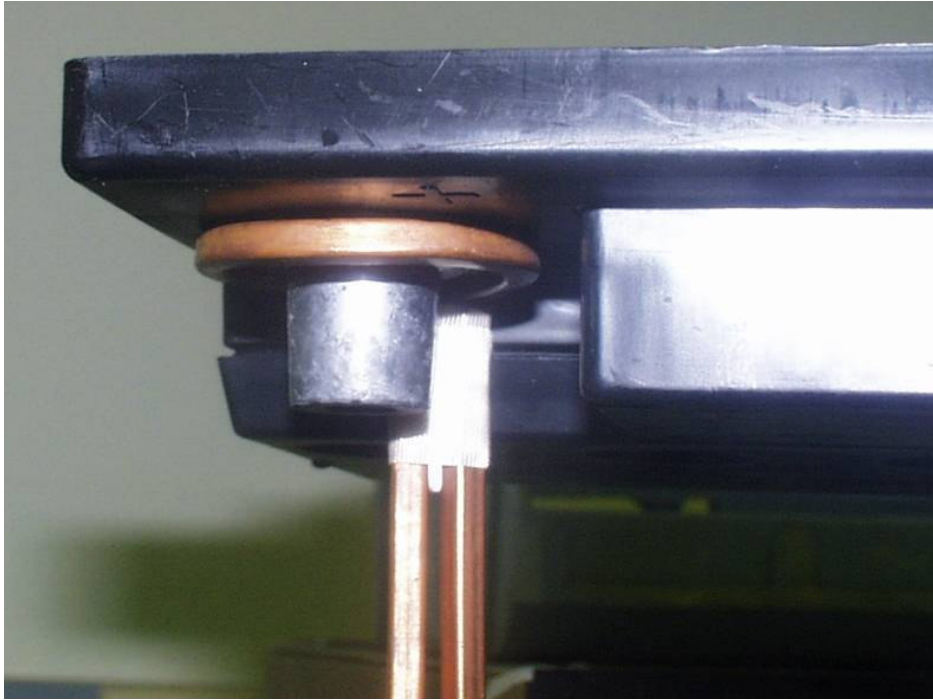
Equipment

- Ambrell 2.0 kW induction heating system, equipped with a remote workhead containing two 0.33µF capacitors for a total of 0.66 µF
- An induction heating coil designed and developed specifically for this application.

Process A single turn helical coil is used for this heating application. The lead terminal is placed inside the coil and is heated for 20 seconds. The terminal become hot enough to separate from the plastic. The terminal and plastic are separated and the lead is cleanly removed.

Results/Benefits Induction heating provides:

- Controllable and repeatable heat
- Efficient and faster production
- Hands-free heating that involves no operator skill for manufacturing
- Even distribution of heating



Terminal in place for heating



Terminal after it has been heated and removed