

Heating Automotive Battery Cables for Adhesive Melting

- Objective:** To heat eight different automotive battery cables to melt adhesive in order to provide extra sealing around the end of the shrink cables
- Equipment:** Ambrell EKOHEAT[®] 15 kW, 50-150 kHz induction heating system with a workhead and coil specifically designed for this application
- Temperature:** 288 °C (550 °F)
- Frequency:** 112 kHz
- Material:** Aluminum cable with copper ends
- Testing:** THE LAB at Ambrell designed and built a U-shaped coil for this application. Temperature indicating paint was applied to the parts, and it took 10 seconds to heat the various styles of the part to the targeted temperature. This testing achieved the client's time and quality objectives.
- Benefits:**
- **Speed:** The client wanted a ten-second heat time, which was achieved during testing
 - **Repeatability:** Induction delivers the same result time after time, making it ideal for their high-volume manufacturing process
 - **Footprint:** The space-efficient EKOHEAT worked perfectly in their manufacturing process



One of the cable samples after heating.