



Soldering stainless steel connector to wire harness

Objective Heat Stainless steel connector for soldering application in automotive wire harness manufacturing

Material Stainless steel connector 1.57" (40mm) long, 0.6" (15mm) OD & 0.4" (10mm) thick. Lead free solder

Temperature 392 °F (200 °C)

Frequency 352 kHz

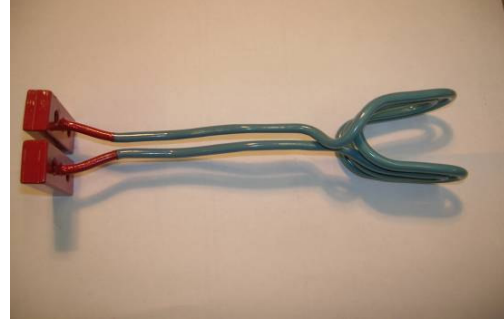
Equipment

- Ambrell 4.2 kW induction heating system, equipped with a remote workhead containing one 1 μ F capacitor.
- An induction heating coil designed and developed specifically for this application.

Process A two turn channel coil is used for soldering the connector to the wire harness. The stainless steel connector and wire harness are placed in the coil for 20 seconds for the solder to fill just the top of the connector.

Results/Benefits Induction heating provides:

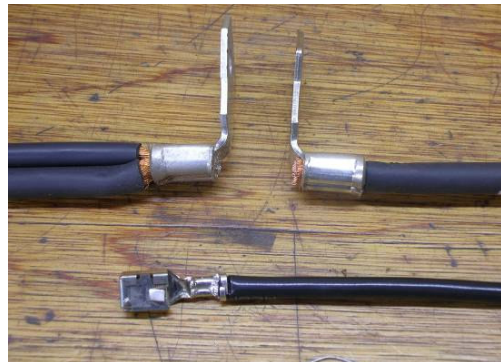
- By precisely heating the metal, the plastic shroud is not directly heated
- Reduced production cost
- Faster process time, reduced production cost
- Hands-free heating that involves no operator skill for manufacturing
- Even distribution of heating



Two turn channel coil used for soldering application



Stainless steel connector



Finished Product