

Soldering Steel Connectors to a Brass Block

Objective Heat an assembly of small, gold-plated steel connectors to a brass block.

Material Approx. 1/8" (3.2mm) diameter gold-plated steel connectors, 1"(25.4mm) square x 1/4" thick brass block

Temperature 600°F(315.6°C)

Frequency 240 kHz

Equipment

- Ambrell 1 kW induction heating system equipped with a remote workhead.
- An induction heating coil designed and developed specifically for this application.

Process A two-turn helical coil is used to provide uniform heat to parts assembly. Solder paste and flux are applied to the joint area and power is applied for 20 seconds to solder the parts. Proper fixturing is needed to hold the parts in position.

Results/Benefits Induction heating provides:

- Rapid, localized heating to specific regions of part
- Neat and clean joints
- Flameless processing

