



## Braze electrical contacts to brass and copper bus

**Objective** Heat silver contacts and brass/copper bus for brazing application

**Material** Silver contact .75 (19mm) diameter, brass and copper bus 2" x 1" (50.8 x 25.4mm), braze shims, white flux

**Temperature** 1300 °F (704 °C)

**Frequency** 320 kHz

**Equipment**

- Ambrell 5 kW induction heating system, equipped with a remote workhead containing two 1.0 $\mu$ F capacitors for a total of 0.5  $\mu$ F
- An induction heating coil designed and developed specifically for this application.

**Process** A five turn split helical coil is used to heat the assembly. The parts are placed 90° to the coil between the top turn and second turn with braze shims and flux. The parts reach 1300 °F (704 °C) in less than 40 seconds to braze the parts together.

**Results/Benefits** Induction heating provides:

- Hands-free heating that involves no operator skill for manufacturing
- Better joint quality
- Faster heating cycles, more consistent results
- Even distribution of heating



Finished brazed contacts and bus