

Soldering two copper wires to a copper buss bar

Objective Soldering two copper wires to pre-installed turrets on a copper buss bar

Material Solder dipped copper/nickel buss bar, 2 tinned stranded copper wires, brazing stick

Temperature 446 °F (230 °C)

Frequency 230 kHz

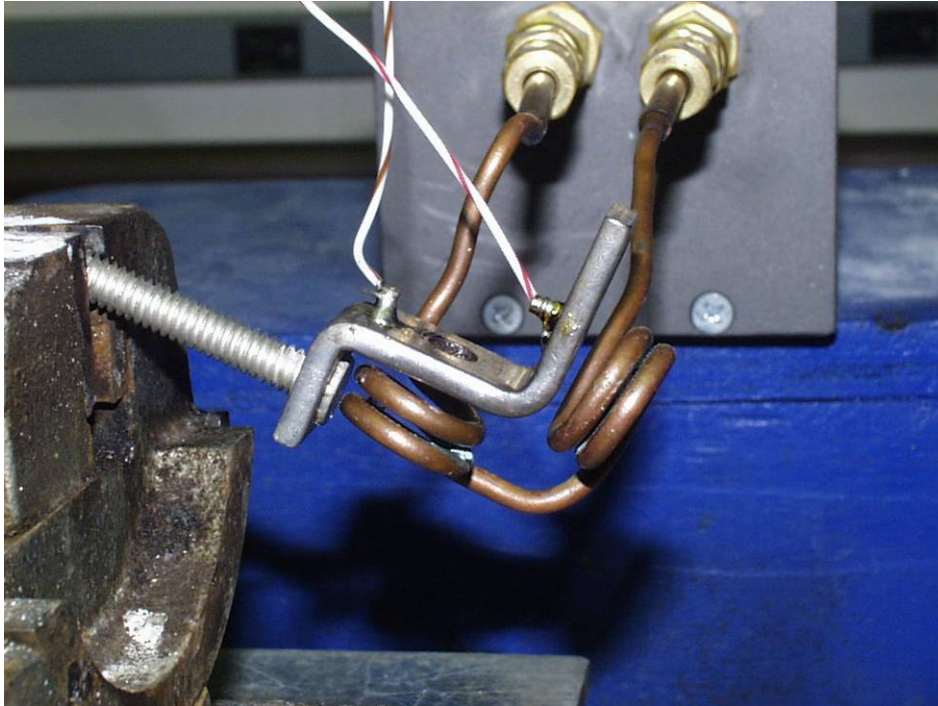
Equipment

- Ambrell 1 kW induction heating system, equipped with a remote workhead containing one 1.2 μ F capacitor.
- An induction heating coil designed and developed specifically for this application.

Process A four turn split helical coil is used to solder the buss bar assembly. The 2 copper wires are applied to the turrets and power is applied for 30 seconds. The brazing stick is fed by hand to the heated parts and the braze flows evenly, creating the joint.

Results/Benefits Induction heating provides:

- Reduced solder time
- Even distribution of heating
- Joint to joint consistency



Buss bar showing coil placement and wires soldered to turrets