

AN AMBRELL COMPANY

Braze four copper bus bars together

Objective To braze bus bar assemblies together

- Material 2 copper bus bars 6" (152.4mm) wide, 2' (609.6mm)long, 2 copper bars 6"(152.4mm) wide, 18" (457.2)long & 3/8" (9.65mm) thick
 - braze shim preforms and white flux

Temperature 1292 °F (700 °C)

Frequency 87 kHz

- Equipment Ambrell 45 kW induction heating system, equipped with a remote workhead containing eight 1.0 μ F capacitors for a total of 2.0 μ F.
 - An induction heating coil, designed and developed specifically for this application
 - **Process** A three-turn helical coil is used to heat the assembly. Three braze shim preforms are placed between the plates and white flux is applied to the assembly. It is heated for 5 minutes to evenly flow the braze alloy. A high current capable, aesthetic looking braze zone is produced.

Results/Benefits Induction heating provides:

- Consistently produced, quality parts
- Heat into the part that is divided equally between the copper pieces, allowing for even flow and consistent use of braze
- Hands-free operation that doesn't require skilled operators



Precision Induction Heating

AN AMBRELL COMPANY



Completed bus bar assembly



Top of part



Bottom of part

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