



Soldering Steel Housing

Objective To heat a special steel housing to 500(260) °F(°C) for a soldering application

Material Steel housing
Solder wire and flux

Temperature 500(260) - 550(287.8) °F(°C)

Frequency 200 kHz

Equipment Ameritherm 2 kW, 150-400 kHz solid state induction power supply with a remote heat station containing two 0.33 μ F capacitors (total capacitance 0.66 μ F). A custom-designed induction heating coil.

Process A two-turn induction coil is used to deliver the heat energy into the steel housing. A small diameter solder wire is used to form a solder ring for the assembly process. Solder flux is applied generously to the joint area. Induction power is applied to the assembly until the solder ring flows into the joint. The same coil is used to solder multiple locations on the housing.

Results/Benefits

- Ability to solder multiple locations with one coil. No need to change coils.



Download and print our Applications Lab Process Sheet (<http://www.ameritherm.com/PDFs/4110038b.pdf>). Answer the questions on the form to help us understand your process and performance requirements. Call with the info on the form to see if you should send us your parts for a free evaluation. If you have questions, call or e-mail us (info@ameritherm.com). We'll be in touch!