



Reflowing the solder of an area on a circuit board

Objective Heating a solder joint to reflow the solder evenly

Material Soldered contacts two (2 x 2 mm) areas on a circuit board of diesel fuel tank components

Temperature 482° F (250 ° C)

Frequency 240 kHz

Equipment Ambrell 10 kW, induction heating system, equipped with a remote heat station containing four (4) 1.0 μ F capacitors for a total of 1.0 μ F.
An induction heating coil designed and developed specifically for this application.

Process A multi-turn helical coil is used for ease of loading and unloading.

There are sensitive electrical components near the heating area that must not be heated.

An aluminum fixture is a large heat sink to the induction field. In order for solder alloy to wick and run the length of the overlap area, flux is applied to the solder location. To reach the desired temperature heated is applied for 2.5-3 seconds. Heating is very uniform without concern for overheating.

Results/Benefits Induction heating provides:

- Reliable, repeatable even heat
- Better quality (uniformity) which allows the parts to be mechanically inspected by quality assurance.

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!



Left – part before solder reflow, Right – part after.

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