



Soldering fabric to kovar tip assembly

Objective Soldering fabric to kovar tip assembly

Material Kovar cone, base 3/8" (9.5mm) dia, cone 3/8" (9.5mm) high, solder

Temperature 300 °F (149 °C)

Frequency 242 kHz

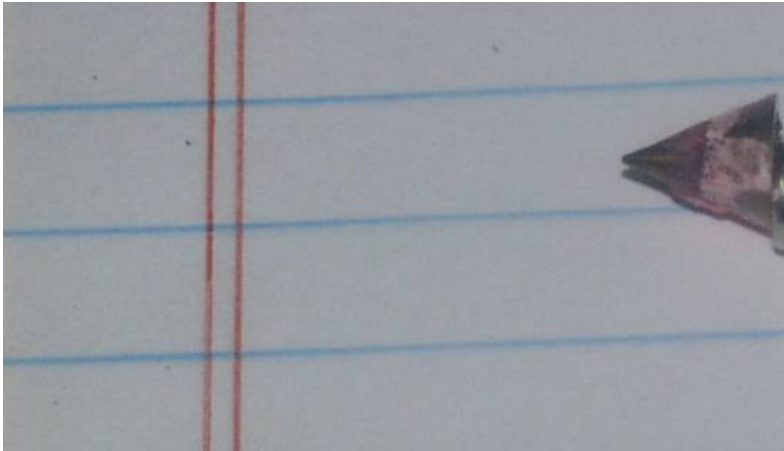
Equipment

- Ambrell 1.0 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.

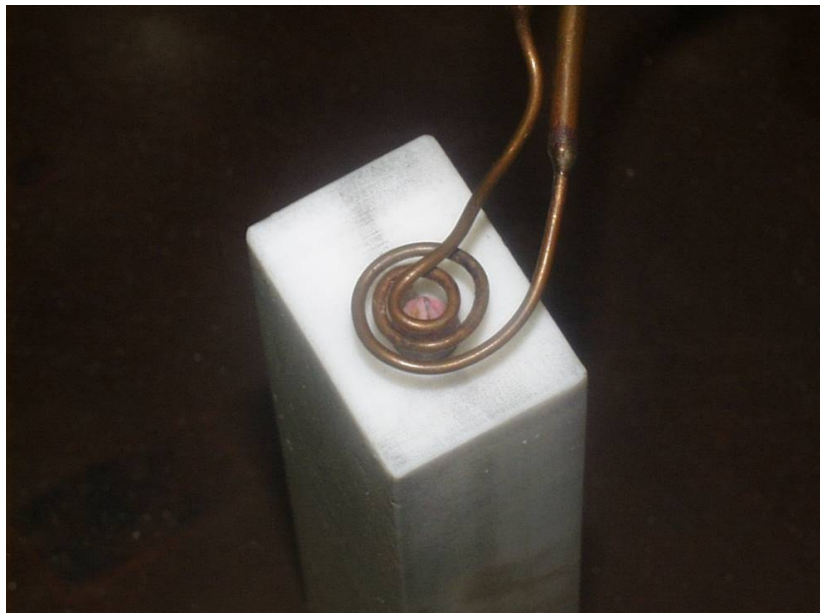
Process A three turn pancake coil is used to heat the tip of the cone to 300 °F (149 °C) in 2-3 seconds. The coil design allows for easy placement of the fiber across the tip of the cone and reduces the heat flow to the bottom of the assembly for the manufacturing process.

Results/Benefits Induction heating provides:

- Hands-free heating that involves minimal operator skill for manufacturing.
- Precise, even heating.
- Repeatable, non-contact clean heat.



Part with temperature
indicating paint
showing reduced heat
flow to bottom of cone



Placement of cone in coil