

### Ice Machine Evaporator Assemblies

- Objective:** To heat a section of 3/8" copper tubing along with a 90° elbow for soldering. The copper tubing is to be used in Ice Machine Evaporator Assemblies, and soldering takes place after the tubes have been placed within the assembly. Heating must take place in a channel type coil to provide easy access, once the tubing has been installed. Solder can be manually fed after temperature has been reached.
- Material:** 3/8" Thin Walled Copper Tubing and 90° Elbow
- Temperature:** 600°F
- Application:** Through the use of the Ameritherm Nova 1, 1kW output solid state induction power supply and a unique three (3) turn channel coil, the following results were achieved:
- 600°F was reached in 10 seconds.
  - A quality solder joint was observed with adequate flow and surface texture.
- Equipment:** Ameritherm Nova 1, 1kW output solid state induction power supply including one (1) remote heat station containing one (1) 1.2 μF capacitor, and a unique three (3) turn channel coil.
- Frequency:** 200 kHz

\*Application Illustration Located on Reverse

# Induction Heating Application Notes

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