

Heating Four Inserts Simultaneously

- Objective:** To determine the time required to simultaneously heat four (4) brass inserts to the following temperatures: 400°F, 500°F, 600°F, 700°F, 800°F, and 1000°F. The brass inserts are to be heated prior to insertion into a plastic automotive sub assembly.
- Material:** Brass Inserts measuring 3/8" OD and 3/8" long.
- Temperature:** 400°F, 500°F, 600°F, 700°F, 800°F, and 1000°F.
- Application:** By using the Ameritherm SP 2.5, 2.5 kW output solid state induction power supply, the following results were obtained:
- Times to temperatures were recorded as follows:
 - 2.0 seconds to 400°F
 - 3.0 seconds to 500°F
 - 3.5 seconds to 600°F
 - 4.0 seconds to 700°F
 - 4.5 seconds to 800°F
 - 5.0 seconds to 1000°F
 - Uniform heating was observed between all four inserts.
- Equipment:** Ameritherm SP 2.5, 2.5 kW output solid state induction power supply including one (1) remote heat station, and a unique coil designed to simultaneously heat four inserts.
- Frequency:** 145 kHz