AN AMBRELL COMPANY

Annealing Brazing Wire

Objective Anneal a brazing wire for preform production.

Material Copper Nickel Silver 2774 Alloy rod 0.070" (1.8mm) diameter.

Temperature 650° F(343.3 $^{\circ}$ C)

Frequency 281 kHz

Equipment

- Ambrell 3 kW induction heating system equipped with a remote workhead with one 1.0 μF capacitor, and a 4-20 mA input controller to aid in voltage ramping.
- An induction heating coil designed and developed specifically for this application.

Process

A unique helical coil consisting of four consecutive coils connected in parallel with a quartz tube lining is used to heat the wire to 650°F (343.3°C) for annealing.

Results/Benefits

Induction heating provides:

- Higher productivity of 27' (8.2m) per minute
- Reduction in surface oxidation & scaling
- Consistent, repeatable results

