

Brazing brass faucet assembly

Objective Brazing two joints on a brass bathroom faucet assembly

Material Brass bathroom fittings 1" OD, brazing rings, flux

Temperature 1148 °F (620 °C)

Frequency 90 kHz

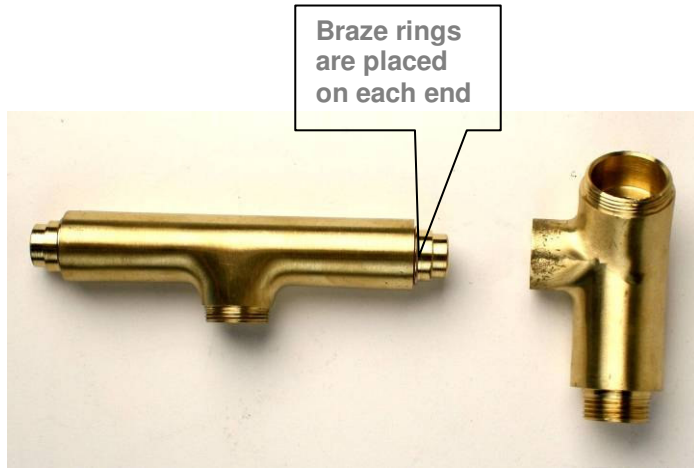
Equipment

- Ambrell 30 kW induction heating system, equipped with a remote workhead containing eight 1.0 μ F capacitors for a total of 8.0 μ F
- An induction heating coil designed and developed specifically for this application.

Process A two turn C shaped coil is used to braze the faucet assembly. The braze rings are placed at the joint, the parts assembled and fluxed. The first braze joint is heated for 30 seconds and the braze ring flows. The assembly is rotated & the second joint is heated for 30 seconds to flow the braze ring. The two brazes are completed in 60 seconds.

Results/Benefits Induction heating provides:

- Faster, repeatable and consistent results
- Localized heat produces neat and clean joints
- Hands-free heating that involves no operator skill for manufacturing
- Even distribution of heating



Assembly prior to brazing



Faucet assembly in coil brazing 2nd joint



Completed brazed assembly, assembly on right brazed with induction, left assembly by flame