Brazing Faucet Components, Assemblies

**Objective**  
Brazing several brass and copper assemblies used in water faucets

**Material**  
braze, white flux

**Temperature**  
1350 °F  730°C

**Frequency**  
160 or 277 kHz (coil dependant)

**Equipment**  
Ambrell 7.5kW induction heating system, remote work head with two 1µF capacitors and a 3-turn helical coil

**Process**  
Three helical coils are used separately to braze a range of provided parts. Parts are assembled with flux and a braze alloy and then heated. The heat time varies from part to part with large parts taking less than 3 minutes and, the smaller parts heated in less than 20 seconds. After heating the parts are quench-cooled.

**Results/Benefits**  
**Repeatability:** the inherent precision of induction heating supports a process which is highly repeatable.  
**Economy:** the process allows for the use of higher temperature braze alloy than a flame process