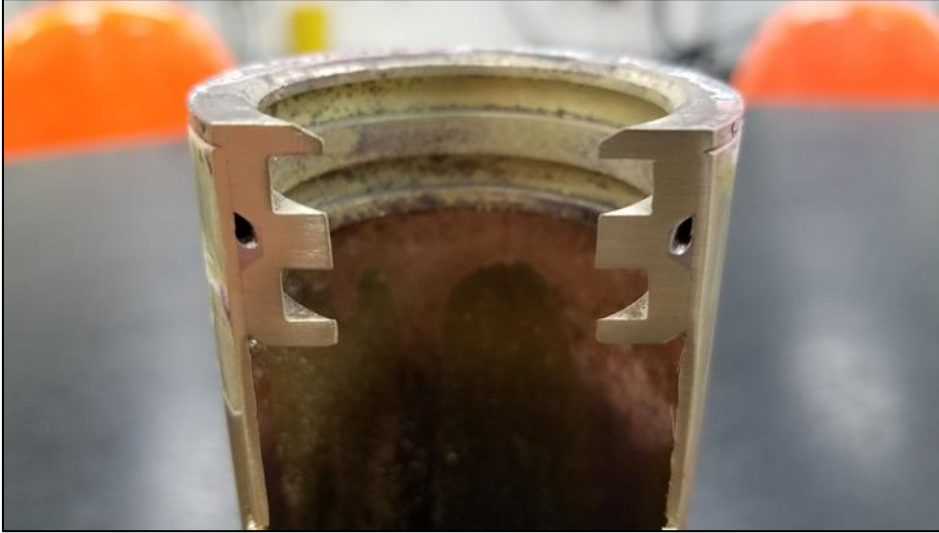


## Application Note

### Brazing Brass Assemblies for a Sink Manufacturer

- Objective:** To heat brass assemblies for a brazing application; the client had been using a torch and is a manufacturer of sink products.
- Equipment:** Ambrell EASYHEAT™ 6 kW, 150-400 kHz induction heating power supply with a workhead and coil specifically designed for this application.
- Frequency:** 316 kHz
- Material:** Brass assemblies (2"/51 mm OD)
- Temperature:** 1425 °F (773 °C)
- Testing:** A custom-designed single position multiple-turn helical coil was built to generate the required heating for the application. Initial tests were conducted to optimize the power delivered to the part. It took two minutes to heat the 2"/51 mm OD brass assembly to temperature.
- Benefits:**
- **Speed:** Induction heated the assembly to temperature and met the client's time requirements.
  - **Repeatability:** The client can expect the same result in the same amount of time every single time, whereas with a torch they saw inconsistent quality that was highly dependent upon the operator.
  - **Work Environment:** With induction there is no open flame and with induction's instant on/off capabilities, it introduces less heat into the work environment.



A cut cross-section of the assembly to show the braze flow.