# Heating a Tube Prior to Swaging

**Objective:** Heat the stainless steel tubing prior to forming or swaging

**Equipment:** Ambrell EASYHEAT™ 2.4 kW 150-400 kHz induction heating system with a workhead and coil specifically designed for this application

**Frequency:** 322 kHz

**Material:** Stainless steel tubing (0.06" / 1.5 mm)

**Temperature:** 1950 °F (1066 °C)

**Testing:** THE LAB determined that an EASYHEAT 2.4 kW induction heating system with a multiple-turn helical coil would be optimal for this application. With the process designed by Ambrell's applications engineers, the tubing heated to temperature within five seconds. This result met the client's objective.

**Benefits:**
- **Repeatability:** The client can expect the same result every time with an Ambrell induction heating system, increasing quality
- **Speed:** The client requested a system that would meet their time objectives which the EASYHEAT easily did, boosting the client's throughput
- **Footprint:** An EASYHEAT and its workhead require a minimal footprint, saving the client floor space compared to heating alternatives
- **Energy Efficiency:** Induction heating is more efficient than heating alternatives such as oven and torch heating
The stainless steel tube inside the helical coil.