Brazing a Copper Strip Assembly

Objective: Heat copper strip assemblies for a brazing application

Equipment: Ambrell EKOHEAT® 30 kW, 50-150 kHz induction heating system with a workhead and coil specifically designed for this application

Frequency: 83 kHz

Material: Various copper strip assemblies

Temperature: 1400 °F (760 °C)

Testing: A single position multi-turn split helical coil was used for the application. Braze alloy wire was placed between the copper strips and the power was turned on. The assemblies required 15 to 20 seconds of heating in order for the braze alloy to flow.

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 EKOHEAT easily did, boosting the client’s throughput  
- **Footprint:** A 30 kW EKOHEAT and a workhead require a minimal footprint, saving the client floor space compared to heating alternatives  
- **Integration:** The EKOHEAT with a workhead that can be placed 100’ (30 m) from the power supply can be easily integrated into the client’s manufacturing process
The copper strip assembly inside the multi-turn split helical coil.