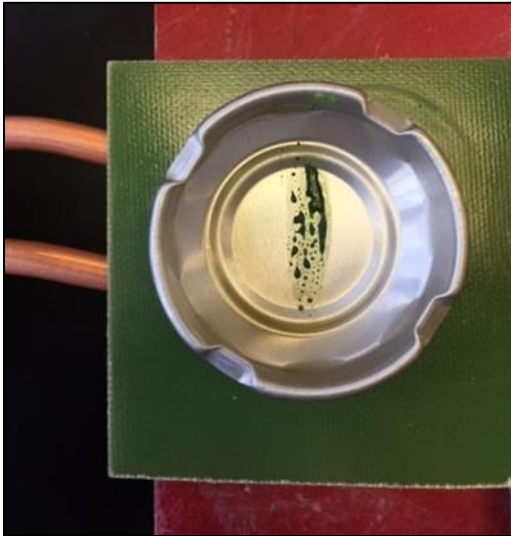


## Sealing Aluminum Caps for the Beverage Industry

- Objective:** To heat aluminum caps for a cap sealing application in the beverage industry; the application involves reusable caps on aluminum cans
- Equipment:** Ambrell EKOHEAT<sup>®</sup> 45 kW 50-150 kHz induction heating system with a workhead and coil specifically designed for this application
- Temperature:** 204 °C (400 °F)
- Frequency:** 115 kHz
- Material:** Aluminum
- Testing:** A custom-designed single position hairpin coil was built to generate the required heating for this cap sealing application. Initial tests were conducted to optimize the power delivered to the part. Temperature indicating paint was then applied to the part, which dissolves when the part reaches the target temperature. It took 1.25 seconds to heat the 9 samples to temperature. This meets the client's required production rate.
- Benefits:**
- **Speed:** This is a new application for the client, and they turned to induction due to its speed for cap sealing applications
  - **Repeatability:** Induction delivers the same result time after time, making it ideal for this high-volume manufacturing process
  - **Footprint:** The space-efficient 45 kW EKOHEAT fits nicely into the client's floor plan



The cap with temperature indicating paint activated after heating.