

Incorporating accuracy and efficiency into their electroplating processes



Challenges:

- Our customer was experiencing various issues with their electroplating operations that were affecting their production quality and cost-effectiveness.
- By decreasing manual interventions, the customer hoped to simplify their electroplating operations.
- It was necessary to ensure that the correct kind of plating was used for each SKU.
- Inadvertent mismatches resulted in product problems and consumer displeasure.
- It was difficult to determine the exact thickness of plating applied on each SKU following the plating procedure.
- Meeting quality requirements required accurate thickness.

Our Solutions

- With an accuracy of 1 mA, Xtrakt™ Compact implementation digitally tracked the entire current travelled through the metal electrode. This thorough surveillance verified that the electroplating procedure satisfied all of the requirements.
- Xtrakt™ Compact supplied the management team with a dashboard that allowed them to see the percentage usage of each station in real time. This degree of control enabled them to better manage the raw material supply chain.
- Xtrakt™ Compact incorporated plating validation by preventing the operator from starting electroplating if the work card scanned did not match the kind of electroplating solution.

Benefits

- The approach enables voltage-based electroplating to start and stop in sub-seconds, assuring accuracy and lowering the chance of mistakes.
- Accidental electroplating mix-ups were prevented, improving product quality and customer satisfaction.
- Each batch was time-stamped, allowing for a comprehensive record of production timings and improved process control.
- Xtrakt™ Compact included a low concentration interlock to reduce the danger of utilizing plating solutions that did not satisfy the specified criteria.
- By comparing actual current to desired current, the customer could guarantee that the plating thickness fulfilled quality standards.