

TRANSFORMING SMT MANUFACTURING TOWARDS INDUSTRY 4.0 READINESS

With Arcstone's smart toolsets, a Tier 1 (OEM) manufacturer of the world's largest digital camera brands moved towards becoming Industry 4.0 ready by embracing digitization. Arcstone helped our client digitalize its entire production process for greater end-to-end visibility.

Challenges

Our client faced two main challenges. The first was that their production process had no real-time visibility of the Surface-Mount Technology (SMT) Manufacturing system in place. Information from 15 SMT lines were manually recorded, taking at least a day, thus leaving gaps in understanding real-time production issues. The second problem was that the production process was not integrated, as disparate systems were used to capture data from various parts of the production process.

Our Solutions

Our software team worked closely with engineers and senior management of our client to understand both issues. Our team of experts worked on the following areas:

Data Acquisition From SMT Lines



We implemented *arcquire*[™], a data aggregation and parsing system, that connected with hardware devices to pull in real-time data. We connected to each machine across the 15 SMT lines to ensure all data was captured automatically and streamed into an open MS SQL database at the client's discretion to control.

Analytic Tools to Improve Decision-Making



We also implemented *arclink*[™], which was designed to easily integrate with other software systems to stream and upload data in real time. Due to the different silos in which various systems exist for our client, this tool was integral in ensuring a full end-to-end understanding of the entire production process.

Integration with ERP, Inventory, & Quality Control Systems



Once the data from the SMT lines and assembly processes were being captured in real time, our suite of dashboard and reporting tools unlocked the client's ability to understand where products in production were sitting idle, determine fault rates, understand pick failures, and have a clean output rate to benchmark against to conduct meaningful internal analysis.

Start your Digitalization Journey with us today!

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