Tulip’s Apps Accelerate Time to Market for Major Apparel Manufacturer by 50%

CUSTOMER
Tulip teamed up with a leading global athletic apparel brand producing hundreds of new product variations across multiple value streams. The customer used Tulip’s IoT enabled apps to combine machine and operator data making it easy to quickly identify and control key drivers of quality.

SITUATION
Quickly stabilizing new product lines means constantly assessing the impact of dozens of different quality drivers to isolate the root-cause of defects. Potential sources of defects spanned both manual and automated operations. It often took weeks of analysis before a process was considered validated and ready for production.

“\nI used Tulip’s apps to communicate quality issues to upstream operators in real-time. This feedback loop enabled the operators to take immediate corrective action and prevent additional defects from occurring.\n- Quality Engineer\n
CHALLENGE
Paper-based quality control processes, and manual audits slowed the collection and analysis of production data. Paper-based forms are difficult to fill in, error-prone, and allowed for the collection of only a limited number of quality variables. Identifying and resolving product quality issues was both challenging and time intensive as form data had to be transcribed from paper to spreadsheets. The inability to quickly isolate quality drivers delayed product introduction.
SOLUTION

Tulip’s tablet-based production and quality assurance stations quietly gathered operator, machine and sensor data. Connecting shop floor equipment through Tulip’s IoT gateway allowed for an integrated analysis of manual and machine data. Real-time analysis of defective products and visualization through shop floor dashboards enabled root cause analysis of production line errors and decreased the time required to establish accurate process parameters.

“With Tulip, the data visualizations were live-updated, which allowed me to discover and respond to problems in real-time. It was effortless compared to the old method of using paper-based data collection, and next-day review. Moreover, real-time production insights could be viewed remotely which allowed quality engineers, and plant management to respond to problems when they arose which got me the help I needed without taking me away from the line.
- Team Leader, NPI

RESULTS

With Tulip, the customer was able to reduce defect rates and stabilize the new product line, enabling 50% faster time to market, and a decrease of quality errors from 50% to 15% in two weeks. Additionally, line supervisors saved an hour a day on audits by using digital quality control forms instead of paper.