CLIENT
CASE
STUDY

simeco

Litum

Simeco Streamlines Teka Oven Line Assembly with RFID

Process Tracking System

Overview

Manufacturing the world famous Teka brand, Simeco has streamlined workflow and reduced human error for its kitchen appliances line by leveraging custom Litum process tracking system powered by UHF Radio Frequency Identification (RFID) technology.

Objective

Full visibility in production from the onset of assembly to quality assurance and testing.

Technology

Supported by Litum software designed to integrate with brand's ERP system, RFID tags, readers, and sensors are installed in the manufacturing area.

Integration

Integrated with ERP software and quality testing.

The Company

Simeco is the manufacturer of Teka premium cooking appliances. Teka strives to combine quality, convenience and efficiency in everything the brand does, to achieve the best solution for its customers. The joint effort to provide "meaningful experiences" for their customers begins at Simeco's 24,000 square meter manufacturing facility, which has the capacity to build 500,000 units a year, on its six production lines.

While OEE is recognized as the single best metric for identifying losses, benchmarking progress, and improving the productivity, collecting reliable data is the key for success.

The Business Problem

In order to gain real time visibility into processes as well as the ability to manage the overall OEE, it was necessary to monitor the receipt and consumption of materials and the work on production lines while automatically detecting and preventing any errors in the testing and control processes.

The Solutions

Litum UHF RFID has been deployed at the production line where RFID readers, antennas and sensors capture key information about the production process while industrial Panel PCs display the information workers need on the assembly floor.

Litum designed its middleware to retrieve work orders from the ERP and link that data with reusable RFID tags as they are attached to a new product. This is called Simeco Traceability Software and it is where the automated tracking begins.

As the operators affix these labels on the main assembly of the oven, the system begins capturing data to enrich the Teka traceability database with real-time information.

The solution calculates the cycle time automatically, collecting operators' KPIs by measuring the time products dwell in each station.

Operators using the panel PCs also serve for inputting information to provide OEE parameters, which are then reported in the executive dashboard as activity charts, OEE reports, shift and target reports; all to be reviewed in real time or historically.

Challenges

There's an expression in the automation industry: to control, you first must measure. Simeco needed help with this first step.

Simeco needed an automated system to be able to detect and identify when an error could be made in mounting components.

Providing support for assembly workers by displaying relevant instructions on the assembly floor was also vital.

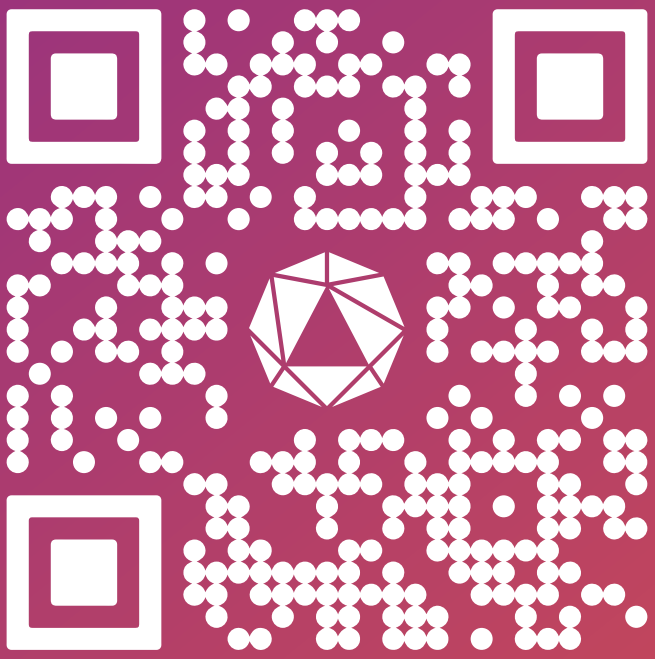
The technology also needed to be able to capture analytical data so the company could continue to improve its processes.

The Results

Product meets quality Workers meet accountability

Simeco achieved full visibility with specialized reusable tags, ruggedized RFID readers and antennas, middleware to manage the data, as well as panel PCs to gain a real time input into the production of each Simeco product.

The company is assured that every product meets the quality requirements, improved worker efficiency and elevated accountability.



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