Meat and Poultry Company Eliminates Paper Lot Tracking System

A major meat and poultry company needed to eliminate paperwork and increase lot release efficiency to increase first-pass quality and reduce rework, losses and waste.

Objective

Lots shipped by the customer require a lot release package that includes quality test results and hazardous analysis and critical control points (HACCP) compliance results. For years, the customer relied on a manual system that was paperwork intensive and significantly delayed lot release. It was an error-prone and reactive approach. They needed a quick and comprehensive solution.

Results

The customer partnered with MAVERICK to implement an automated system that has significantly increased quality and lot release speed and minimized errors and losses. The paper-based lot tracking and release system has been completely eliminated.

Solution

MAVERICK built the solution using a variety of Oracle® ERP components already in use by the customer. The team also provided some custom development using the Oracle SOA environment.

The two major classes of data collected and managed as part of lot tracking and lot release are quality test results and HACCP compliance results.

Specifications for both quality tests and HACCP compliance are managed using the Oracle Spec Management solutions.

All lot tracking and lot release results are recorded in the Oracle ERP system using the Oracle database.

Real-time data from the shop floor is collected automatically using Rockwell Automation® PLCs and the Wonderware® Data Historian. Adobe® forms are used in the Oracle SOA environment to manually collect data.

Custom screens in the Oracle SOA environment support final lot analysis and release, including electronic signatures.

Quality test results are required from each major step in the manufacturing process. Data is both automatically and manually collected as product moves through the process steps and stored in its raw form in the data historian. Summarized data is stored with the lot in the Oracle ERP system.

HACCP compliance data is required from two primary processes in the facility. These processes have specific requirements for variables such as temperature, time and profile within each process. Deviations from these specifications may result in waste product.

The quality test result data and HACCP compliance data are collected in real-time and made available for review at the completion of the processes. The appropriate lot release personnel then review and quickly confirm the data is correct and complete so the lot can be released.

The last step in the release process is the final review of the entire lot release package and the final electronic signature indicating the lot is ready for shipment.

The MAVERICK Difference

MAVERICK experts combined their knowledge of ERP systems, specification systems, quality management systems, lot tracking systems, data historians and PLCs to build a comprehensive solution. The success of this implementation enabled the customer to perform lot tracking release more efficiently, while at the same time increasing quality and reducing rework and losses.