Leading Global Provider of Specialty Food Ingredients and Solutions Automates KPI Generation

MAVERICK worked with the customer to develop a solution to automate the generation and monitoring of major key performance indicators (KPIs) for supervisors and operators, enabling real-time decision making.

Objective

The customer wanted to automate KPI generation for production, quality, electricity and gas consumption KPIs. They wanted the KPIs displayed in OSIsoft® PI ProcessBook using SQC charts.

Results

The solution provided by MAVERICK reduced the manual efforts needed to generate the KPIs at any given time. The automation helped the customer visualize the KPIs as well as monitor and compare the production, all in real time. The solution reduced the number of PI ProcessBook screens from three per product (the customer had approximately 200 products) to three screens in total.

Solution

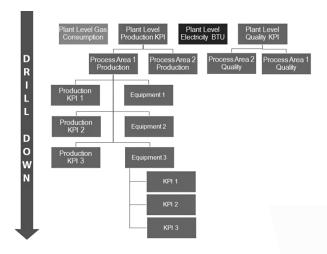
MAVERICK created an OSIsoft Asset Framework (AF) database for production, quality, electricity and gas consumption KPIs.

The team created templates for the various KPIs. The base template was used to generate generic KPIs where a target value could be compared with the KPI.

MAVERICK developed specific templates for complex KPI calculations such gas and electricity consumption.

Each of the KPI templates has attributes to read the SQC control limits based on the current product running in production. The SQC control limits are stored in an AF table that is linked to a Microsoft® Excel® spreadsheet on a network share.

Users are granted access to update the KPI targets and other control limits as required by the customer.



The MAVERICK team created three PI ProcessBook displays. These displays provide a drill-down functionality to visualize KPIs at different levels.

The team achieved drill-down functionality and context preservation using Visual Basic for Applications (VBA) code.

One specific customer request was to be able to load different control limits for the same KPIs based on the current product running in production. This was achieved using the lookup functionality in Asset Framework.

Having the capability to visualize the KPIs based on the product eliminated the need for additional displays for each product. This reduced the number of screens from three per product (for a total of 600) to three screens total.

In addition, the PI ProcessBook displays support KPI visualization for different process areas based on the context selected by the user.

The MAVERICK Difference

MAVERICK expertise helped resolve this complex problem of looking up the product-based control limits and using them in Asset Framework templates/analytics. The customer had a vision for which MAVERICK matched a solution with customers' existing software.



A Rockwell Automation Company

MAVERICK Technologies, LLC

265 Admiral Trost Drive | Columbia, IL 62236 USA +1.888.917.9100 | Fax +1.618.281.9191 info@mavtechglobal.com | mavtechglobal.com