

SOLUTION OVERVIEW



Food & Beverage

Real-time Data, Alarming, and Reporting Solution on the way to a Smart Factory

A manufacturer of consumer food products wanted to work towards a smart factory to visualize machine operations, monitor key alarm values, utilize OEE and downtime metrics, and perform reporting analysis across machine groups. Flexware developed an Ignition 8.0 Perspective application accessible from phone, tablet, or desktop environments. This solution also provides the framework for further enhancements such as predictive maintenance and predictive process monitoring.

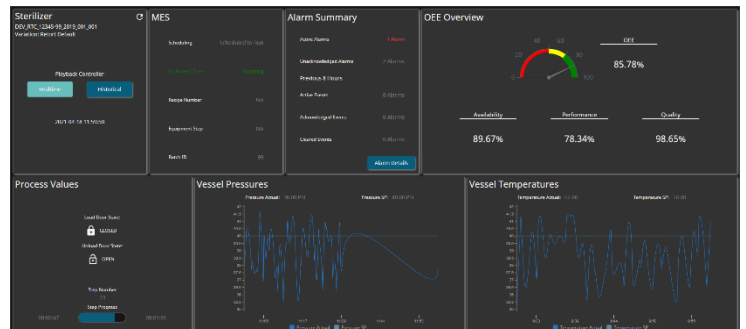
The Challenge | Aggregating Distributed Data Slows Analysis

The facilities conduct a 24/7 operation which requires constant monitoring of key data points to meet regulatory requirements. The only way to access real-time data from the equipment is from the plant floor which can cause problems when decisions need to be made quickly. In addition, the enterprise is spread across multiple locations that perform similar process. Aggregating the data across locations to perform analysis and inform business decisions previously had been a tedious task.

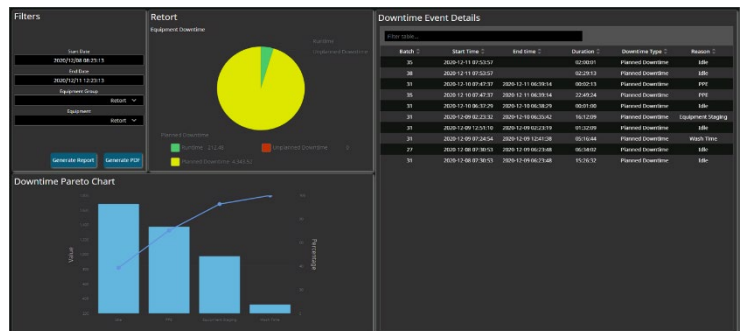
The Solution | Collect Data and Make Visible for Plant Floor and Business Operations

The Flexware team created a Perspective application that would not only connect Ignition to the data on the plant floor but also expose that data to the end user for real-time monitoring and reporting analysis from anywhere. The key project requirements are listed below.

- Fully Redundant SCADA System
 - Ignition
 - SQL
 - Kepware
- Integrating with other systems using a custom Ignition Kafka Module
- Machine Dashboards
- Tracking OEE and Downtime
- Reporting
 - OEE
 - Downtime
 - Yield
 - Quality
- Location Overview
- Alarming and notification on key equipment parameters
- Active Directory User Security



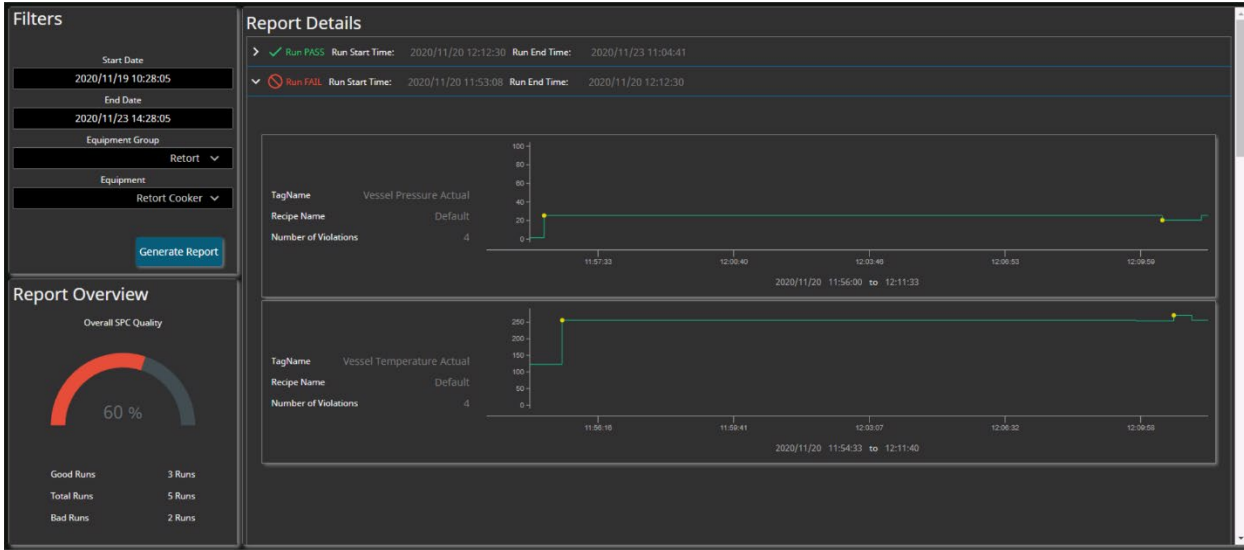
Machine Dashboard



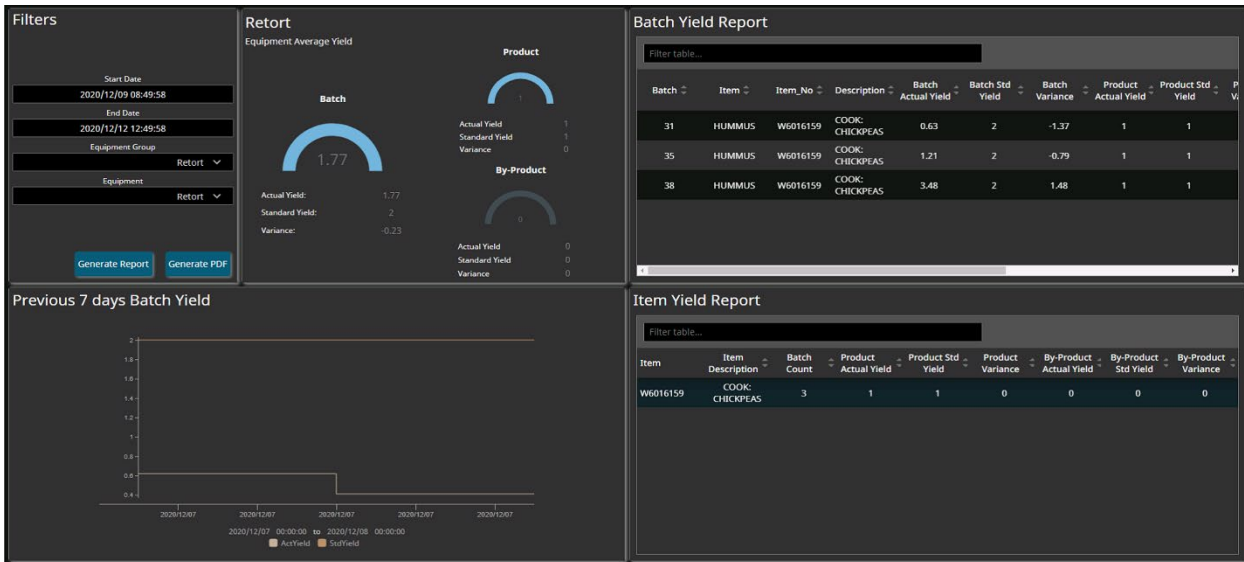
Tracking OEE and Downtime

The Outcome | Reliable, Timely Data Provides Improved Production and Efficiency

The new system has been rolled out to 5 sites across the US. Since then, the personnel have been able to access the equipment data in real-time from all locations whether inside the plant or remotely using company devices. Before it was implemented, personnel had limited access to real-time data from the plant floor. The process of comparing equipment from location to location to improve results across the business was very time-consuming and inefficient. The ability to monitor equipment in real-time and compare equipment across the company has greatly enhanced the ability to make educated business decisions. This has improved production and efficiency across the enterprise.



Quality Report



Yield Report

