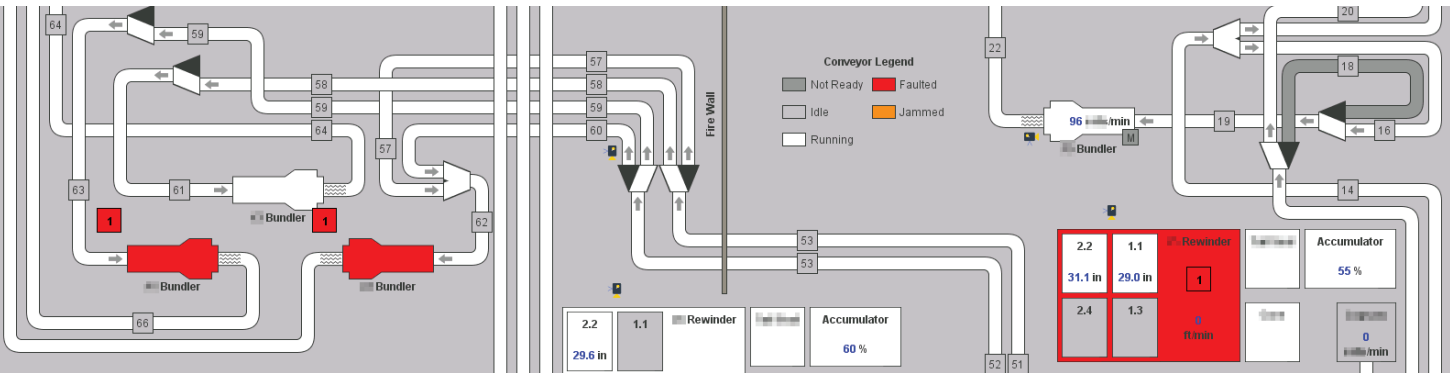




# PAPER CONVERTING SCADA SYSTEM UPGRADE



**CLIENT**  
Georgia Pacific

**LOCATION**  
Halsey, OR

**TIMELINE**  
Nov 2015 to  
June 2018

**DIVISION**  
Controls &  
Engineering

**VALUE**  
\$844,201

## HIGHLIGHTS

- New system operated in parallel with old system for lengthy, thorough debugging period
- SCADA system upgrade was completed with no planned outages

## OVERVIEW

OS Engineering completed a large-scale SCADA migration from the initial feasibility study and preliminary design, to the development of the new system, all the way through final startup and commissioning. A powerful but outdated system that was originally developed by in-house staff was replaced using a heavily customized implementation of Ignition software.

The new system was built on a large architecture consisting of more than ten new virtualized servers, and relied heavily on “High Performance HMI” graphical standards that were developed in partnership with mill engineering staff.

## SCOPE

- Developed a communication architecture supporting more than 150 PLCs and other control system devices from many manufacturers and spanning several generations.
- Migrated more than 100,000 tags, many of which were packaged into custom data formats
- Identified and replaced interfaces with business systems, reporting applications, and product labeling and scanning systems
- Established interfaces with several SQL-based databases and a PI historian
- Worked closely with mill staff to create detailed graphical standards, documented in a style guide
- Developed nearly 200 graphical screens, created from a library of dozens of custom template objects, allowing for consistent graphics throughout the facility
- Created custom graphical tools allowing for rapid classification and categorization of system alarms
- Worked closely with mill and corporate IT staff to ensure compliance with company IT policies and industry best practices for cyber security
- Provided nearly three weeks of hands-on and classroom training to operations, maintenance, and engineering staff