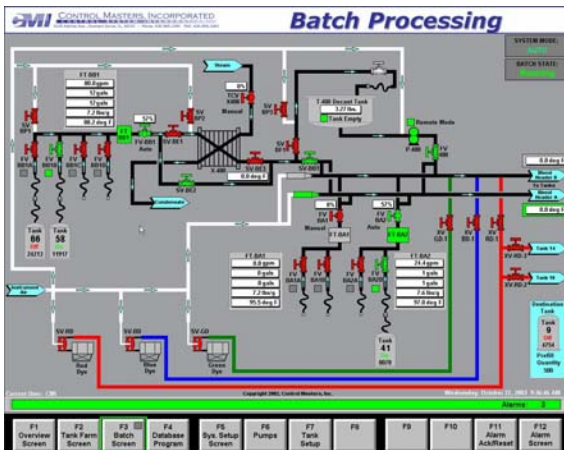


Control Masters Application Case Study

Batch Processing



Technologies

ControlLogix PLC
RSView 32

Recipe Management via Microsoft Access
Intellicenter MCC with DeviceNet
Modbus RS-485 Communications

Services Provided

Functional Specification Document
PLC Integration
Electrical Engineering
Network Design
Control Panel Design & Fabrication

Project Description

This project controls the batching on an oil blending skid. Various base oils and additives oils are stored in a tank farm and are pumped through the skid and back out to the tank farm based upon a recipe/formulation. Batch sizes vary from 1000 to 31000 gallons. The tank farm has 41 tanks ranging in size from 2,000 to 31,000 gallons.

The system has two ControlLogix PLC's. One performs the batching on the skid and the other controls the tank farm pumps. This second PLC connects to an Intellicenter MCC via DeviceNet. The oils are metered at the skid through one of three Micromotion flow meters connected to the PLC via a RS-485 cable tied into a Prosoft communication card.

The system uses RSView32 to interface to the PLC. Recipes are stored on the computer in a Microsoft Access database. Through RSView32, the operator selects the recipe to execute and downloads it to the PLC. The computer is connected to the PLC and the rest of the plant network via Ethernet. Recipes can be added or modified directly in the Access database from any other authorized user on the network.