

Liquid Processing Control System in Mexico – Effective and Efficient



Malisko Engineering, Inc (MEI) was asked to provide a **Control, Data Acquisition and Reporting System** for a new dairy-based liquids processing facility in Mexico owned by a global manufacturer of infant and adult nutritional products.

GOALS:

- Provide a complete control, data acquisition and reporting system utilizing the most cost-effective technologies available for process automation and reporting, including -
 - Formula Management System,
 - ANSI/ISA S88 Batch,
 - Phase Manager-based PLC Programming,
 - Standard Device Control PLC Programming with Spanish-based tag name nomenclature,
 - Event and Data Archiving,
 - Production and Cleaning Reporting.
- Provide a System where all documentation, nomenclature and programming is in Spanish,
- Provide the facility with corporate-directed System guidelines to follow on future projects,
- Reduce product variability due to manual intervention,
- Reduce production and cleaning cycle times,
- Reduce time to implement new products.

DESIGN TASKS AND SERVICES:

- Developed bilingual Functional Descriptions of Operation and User Manual,
- Integrated Event Tracking, Alarming, Reporting, and Historical Data Archiving,
- Created all documentation for System qualification and verification,
- Provided All System Configuration and Programming:
 - Configured PC's, File Servers, Remote Operator Stations, Networking,

- Implemented ANSI/ISA S88 Batch System Standards within Rockwell FactoryTalk® Batch across 8 units (50 Phases),
- Configured Rockwell FactoryTalk® View SE Server,
- Developed all HMI screens in Spanish including Spanish naming conventions,
- Programmed and Integrated Rockwell Allen-Bradley ControlLogix® PLC with Spanish annotation, which included 38 PID Loops,
- Configured Multiple DeviceNet Networks: IntelliCenters, Tuchenhagen PMO 24/7 Mixproof Valves, and Remote Analog/Digital IO,
- Configured Rockwell FactoryTalk® Historian Server for historical process data collection,
- Developed historical and real-time process trends visible within the HMI,
- Configured SQL Server and Data Tables for Rockwell FactoryTalk® Batch Event data, HMI Alarms and Events, Automatically triggered snapshots of process data, and Product formula management,
- Developed Spanish-based detailed Batch Process, Ingredient usage, and CIP reporting using Microsoft SQL Server Reporting Services, viewable via Internet Explorer, all designed to meet the customer's specific requirements,
- Performed Off-Site and On-Site full equipment checkout, startup, and system verification,
- Provided Operator and Maintenance Training,
- Provided 24/7 post-startup support,
- Provided 'Record Set' System documentation.

PROJECT SUCCESSES:

- Delivered a fully integrated Rockwell/Allen-Bradley Solution on time per the Project Schedule,
- System is 'intuitive' for the Operators,
- Successfully deployed the project in Spanish providing a maintainable System to the local engineering/technical staff in Mexico.
- Met both Plant and Corporate Engineering, Production and Management's needs and expectations.

For More Information, please contact:

Warren Perry – Business Development Manager

Phone: 303.776.2466

Email: wperry@malisko.com

Website: www.malisko.com