High-Performance Enzyme Manufacturer Partners with MAVERICK for a DeltaV Renovation

The manufacturer’s pilot plant was controlled by a proprietary system which limited modifications and new product development. They partnered with MAVERICK to define their existing processes. MAVERICK brought the customer closer to a future upgrade of their DeltaV system.

Objective

The customer needed to define the processes at their pilot plant. The definition would facilitate a renovation of the customer’s DeltaV DCS system. A DeltaV upgrade was needed for research and development of new product processes. Processes proven at the pilot plant could migrate to other global production facilities.

Results

MAVERICK provided the manufacturer with a detailed user requirement specification (URS) and functional requirement specification (FRS) for their existing processes using the ISA-88 batch standard. The results of the project form a solid foundation for a DeltaV DCS upgrade.

Solution

A DeltaV control system operated at the manufacturer site. The existing configuration contained software elements secured as proprietary code and inaccessible for maintenance and revisions. The legacy system also caused timing issues for operations.

The manufacturer opted to re-use the existing DeltaV hardware platform and re-automate the current field hardware. The customer desired an open software configuration with enhanced functionality, updated graphics standards, improved maintainability and superior flexibility.

MAVERICK engaged with the manufacturer for a year and became intimately familiar with the facility’s processes and hardware architecture. MAVERICK interacted closely with employees in the collaboration. By evaluating existing operations and interacting with process personnel, MAVERICK gathered information to develop the FRS, which captured the basic functional requirements.

The FRS defined the processes of the facility and contained a description of the required ISA-88 batch control programming. It was broken down into the building blocks of control modules, equipment modules, phase modules, unit procedures and formulas.

MAVERICK captured the existing process knowledge of the facility by interacting with employees and investigating operations. MAVERICK’s integration of the manufacturer’s corporate standards with subject matter expertise resulted in a successful project.

The MAVERICK Difference

MAVERICK provided a detailed functional specification to give the customer transparency into their current enzyme processes. The customer gained not only the ability to better troubleshoot and support their existing DeltaV control system, but also the blueprints for a future renovation.