Major Oil Refiner Increases Longevity of Blender DCS by Migrating High Contrast Graphic Displays to Next-Gen Interface

By migrating to a next generation graphics interface using MAVERICK’s proprietary development procedure, an oil refiner increased the utilization time of its older hardware and DCS configuration.

Objective
A blending unit at a refinery migrated from legacy Honeywell Native Window to Honeywell Experion, a next generation human machine interface (HMI). During the migration, the customer selected MAVERICK to evaluate the legacy displays for their blending facility and redesign them based on the site’s new graphics standard. Instead of migrating to new controllers, the newer graphics increased the lifespan of the old distributed control system (DCS) hardware.

Results
Operations transitioned from legacy high contrast screens to a new graphics standard. MAVERICK allowed the refinery resources originally intended for the migration to support day-to-day operations. The customer experienced no quality compromises, high value results and fast implementation of the new screens.

Solution
Project execution occurred at one of the largest refineries in the Pacific Northwest.

The scope included graphics development, remote factory acceptance testing (FAT) via Webex and site acceptance testing (SAT).

The project team navigated the line between reverse engineering and leaning on expert analysis. This approach migrated comprehensive functionality of old displays in a timely and cost-effective manner.

MAVERICK’s proprietary graphic development process engaged plant personnel continually throughout the project. This execution process achieved a high level of ownership and enthusiasm from the customer prior to commissioning the new graphics.

The MAVERICK team implemented a graphics progress tracking tool. This tool monitored cost efficiency closely and provided accurate percent complete (POC) reports throughout the project’s lifespan.

The project team migrated and redesigned a number of Honeywell Storage Data Management (SDM) graphics to Experion. As a result, only a few choice displays migrated away from SDM rather than the entire control system. This cost effective strategy extended the legacy hardware’s lifespan.

The MAVERICK team engaged with operations to ensure all functionality from previous displays migrated to their satisfaction. In addition, the converted displays removed previously unnecessary functionality and reduced screen clutter.

MAVERICK developed and performed SAT on 60 out of 80 graphics within the first three months after project kickoff.

The project team utilized graphical solution best practices while migrating complicated, script-heavy legacy functionality.

MAVERICK guided the customer to find and remove obsolete graphics and consolidated graphics to improve operational procedures.

MAVERICK built trust with the customer so day-to-day plant operations could be given their full attention during the migration.

The MAVERICK Difference
MAVERICK’s graphics development work process reduced cost and resulted in high quality and value for the blending unit. MAVERICK’s team of developers worked extensively with operations and site personnel to not only meet their requirements but also provide solutions to hidden inefficiencies at the customer site.