DCSNext® Migration Program for Polystyrene Manufacturer

A polystyrene manufacturer partnered with MAVERICK on an ongoing, multi-phase DCS migration program for replacement of obsolete Honeywell® TDC 2000 DCS with TDC 3000 DCS.

Objective
The objective of this program was to plan and implement a migration program that streamlined corporate budget approvals and resulted in an actively-supported DCS successfully migrated on time and within the approved budget.

Results
While the program is ongoing, the customer readily obtained corporate approval for all expenditure authorizations and is extremely happy the team completed Phase I and Phase II under budget and on time. Phase III DCS migration is in process and moving along well.

Solution
The program was initiated with FEL2-level budgeting and planning of a three-phase program that was approved by the customer’s corporate capital review board.

The three-phase program included detailed FEL3-level budgeting and planning for each phase, followed by execution of the DCS migration for each phase.

The legacy system consisted of Honeywell TDC 2000 DCS including US and GUS stations controlling three areas with a partially integrated TDC 3000 DCS controlling a more recently installed process area. The program includes a novel combination of used TDC 3000 components obtained from a sister facility along with new components.

The initial DCSNext effort was execution of an FEL2 project assessing the obsolete elements of the existing control system, identifying the customer’s needs and desires for migration, planning of a multi-phase migration program and estimation of a ±25% accurate total installed cost (TIC) budget.

The results of the FEL2 project were reported in a detailed formal report and reviewed via formal presentation. Elements of the final presentation were directly incorporated into the customer’s authorization for expenditure (AFE) package submitted to and approved by the corporate capital review board. After approval of the FEL2-defined migration program, MAVERICK commenced detailed planning of the Phase I, II and III migrations via area-specific FEL3 projects.

The Phase I and II FEL3 projects focused on the production of area-specific project execution plans (PEP) and ±10% accurate TIC budgets. The PEP included detailed planning accounting for available installation / retrofit space, conduit and cable tray routing, outage planning and overall migration scheduling. Preparation of the TIC budget included solicitation of requests for quotations (RFQ) from the supplemental DCS OEM for hardware and from a customer-specified installation contractor.

The results of the Phase I and II FEL3 projects, which were supplied via a detailed final report and final presentation, were approved by the customer’s review board. Upon approval, MAVERICK continued with the project to execute all design and development tasks as well as manage the installation effort. Phase I and II were successfully completed on time and under budget.