Paper Mill Sets New Benchmark for Migration Project Start-up

As a key step of the full replacement program of the 1980s vintage DCS and PLC systems, new primary and secondary Rockwell ControlLogix processors for the paper machine were programmed and installed along with new Rockwell drive systems and Emerson DCS. The new systems will reduce unscheduled downtime due to equipment failure, reduce cost and mean time to repair, and provide a solid, supportable control platform for the next 20 years.

Main Objective
As a component of the full control systems modernization and replacement program on a coated fine paper machine, new primary and secondary Rockwell ControlLogix PLCs were engineered, programmed, commissioned and started-up. Critical objectives included no impact to the planned length of the outage and a quick start-up.

Customer Feedback
“I have personally been involved in several controls upgrade projects that have been very well executed. It is extremely unusual not to have a handful of issues that get resolved through the startup curve. This project was lacking the typical list of issues. This is truly one of those unique times that I can honestly feel comfortable using the words ‘flawless implementation’ to describe a project.” – Process Control Manager

Application Description
- The customer was notified by the legacy DCS and PLC vendors that their installed systems would no longer be supported. This notification prompted the justification of the project.
- The MAVERICK team programmed new redundant Rockwell ControlLogix processors and associated I/O.
- In order to optimize the segmentation between the DCS, PLCs and other systems, the team reviewed and reallocated various control requirements.
- New HMI graphics were developed so as to take advantage of new features and capabilities, resulting in improved effectiveness of the operators.
- Enhanced operator alarming was implemented to improve reaction times and responsiveness to process upsets.
- The MAVERICK team assured there was a proper balance of DCS and PLC functionality to optimize installed cost, functionality and maintainability.
- The final installation established a solid platform for future development of enhanced diagnostics displays and visibility for the operators to all control systems.
- MAVERICK provided a solid, knowledgable team familiar with the various hardware platforms to support the engineering, commissioning and start-up activities.
- The installation enables full integration of information with mill information and historian systems.

The MAVERICK Difference
MAVERICK’s platform independence and mulit-platform expertise assured that systems from various vendors were fully integrated and the implementation was consistent and seamless. The customer set a new benchmark for a smooth, streamlined startup that was on schedule.