



COMPASS

ENGINEERING GROUP

Case Study: Schering-Plough

Memphis, TN Distribution Center

A restructured and updated control system was needed for this distribution center to ensure a reduction of costs, increase in efficiency, and increase in production for Schering-Plough.

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COMPANY OVERVIEW:

During the past five years, Schering-Plough has been building a new kind of health care company. Throughout Schering-Plough, there's a desire to build long-term



Schering-Plough

relationships with their stakeholders based on mutual confidence. This is evident in many ways. Their scientists are earning trust through the discovery and development of innovative, science-based medicines and services that improve the health and well-being of people around the world. Their sales professionals, marketing teams, colleagues working at our plants and others throughout the organization at all levels of responsibility take each day as a fresh opportunity to earn trust.¹

THE CHALLENGE:

The Memphis, TN Schering-Plough distribution center required a comprehensive modernization and upgrade of the existing conveyor control system in their facility. The upgrade was utilized to address some potentially serious problems with system maintenance. The following deficiencies existed in the previous control system:

- Many computer critical components were obsolete, and difficult (or impossible) to purchase
- Unsupported operating system software and hardware components increased the risk of extended downtime
- Case record accountability did not exist
- Equipment performance reporting did not exist

THE STRATEGY:

As the system aged, these issues contributed to reduced reliability and higher maintenance costs. To combat this problem, Compass Engineering Group created a control system upgrade that offered the elimination of the obsolete PC hardware and communications, as well as any system enhancements to improve the operation of the sortation system. The benefits of the proposed system upgrade were:

- New PC Server hardware
- Advantages of using Windows Server 2003 and Microsoft Server 2005
- Added CORS client to allow for greater visibility to conveyor systems operation
- Simplified design to allow customer self-sufficiency
- Better connectivity to the plant network
- Additional production report capability (export to Excel, etc.) with plant network connection
- Flexible design to allow future enhancements and expansion
- One year of warranty service support
- Remote Support available through VPN for PLC and PC monitoring and diagnostics
- Continued system support from the Compass Engineering Group

THE SOLUTION:

Compass Engineering Group furnished the engineering services and computer equipment to replace the existing QNX based system. An upgrade to the standard Microsoft Windows based CORS software package, integrated with Schering-Plough's infrastructure facilitated an efficient communications solution between the WMS and PLCs. The update proposed and created by Compass Engineering Group succeeded in accomplishing the following goals:

- Replace the existing QNX supervisory PC with a new supervisory system for providing sort destinations, sorter statistics, diagnostics, and interfaces to the RDS system.
- Provide a solution that will allow data synchronization between the primary CORS and backup CORS server.
- Facilitate a future solution which can support a 'hot' backup in the event of a hardware failure.
- Keep existing functionality and external computer interfaces and update it using newer technology.
- Provide a new Web based client that allows full control of the existing system through the browser interface.
- Allow for the new interface to provide debugging capabilities as well as being able to view system statuses anywhere on the plant network.

**THE END RESULT:**

Upon project completion, the distribution center in Memphis, TN had a newly updated software package. This modernized technology enabled personnel at the facility to view a more sophisticated system diagnosis and granted them a higher level of supervisory control. As always, adhering to the highest and best practices in the control and software design industry, Compass Engineering Group provided Schering-Plough a restructured and simplified system capable of adapting to the progress of technology in today's society.

¹ Information from www.schering-plough.com