

Honeywell Chemicals Plant Migrates from Bailey to Experion in Six Weeks



“No one wants to have a plant outage. However, when faced with this, we partnered with Honeywell Process Solutions and successfully and safely started up the Baton Rouge site with a complete DCS replacement in six weeks.”

Lee Hunsucker, Plant Manager, Honeywell Chemicals, Baton Rouge

Benefits

On July 20, 2003 a plant failure rendered Honeywell Chemicals' Baton Rouge plant's Bailey control system unusable. The plant partnered with Honeywell Process Solutions and by September 8, an Experion® Process Knowledge System (PKS) was installed, operators were trained, and the plant was operational. The plant now has a platform to drive better process efficiency and to improve the effectiveness of its assets, people and business decisions.

After the system failure, Honeywell Chemicals had two options. It could replace the existing Bailey system in kind or move to Experion PKS.

Honeywell Chemicals chose to go with an Experion system because:

- The site could get a state-of-the-art DCS system while minimizing downtime.
- Honeywell's 98 percent on-time, on-budget delivery, and best-in-class safety record was better than other suppliers.
- A 40 percent improvement in operator response during abnormal situations could result from the use of Abnormal Situation Management (ASM) tools and techniques.
- Partial replacement of the legacy system in kind could have resulted in an unreliable system and more downtime.
- Experion PKS could serve as a basis for a potential 2-8 percent production increase by utilizing Experion applications.



Honeywell offers a cost-effective path from existing systems to the unified Experion Process Knowledge System. Experion integrates advanced applications that work together across the entire facility to increase productivity and decrease maintenance costs.

Challenge

Honeywell Chemicals is a world leader in fluorine technology and is committed to safety, customer satisfaction, the development of new technology, and the manufacture and supply of fluorochemicals worldwide. The Baton Rouge site produces non-ozone depleting HFC refrigerants and refrigerant blends.

When faced with downtime, the primary challenge is to get the plant operating safely in a minimum amount of time. The challenge for Honeywell Process Solutions was to replace a legacy system in six weeks that consisted of 10 operator stations, 19 control cabinets and 1,700 I/O points.

Other challenges included no up-front engineering, a large amount of out-of-service configuration contained in the legacy

DCS, inaccuracies in the legacy DCS configuration, and the need for field verification and identification of equipment and process documentation.

Solution

Once the decision was made to install an Experion system at the Baton Rouge plant, an experienced global team was formed to drive this project to completion.

Some key statistics for the project:

- Project start: July 28
- System startup: September 8
- Safe system startup
- Hardware began to arrive 10 days after project start.

New system statistics:

- 1,700 I/O points (as before)
- 10 operator stations
- Nine cabinets (as opposed to 19 in the original system)

Operators at the site, with minimal training, were able to assist in loop checking and graphics check-out. Experion's ease-of use and alarming features have led the site toward the use of ASM tools to make their operators more effective.

For More Information

To learn more about how Experion can improve business performance and peace of mind, visit www.honeywell.com/ps or contact your Honeywell account manager.

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"This project showed the depth of Honeywell's engineering capabilities. I would not have thought a complete DCS replacement was possible in six weeks. I can see why Engineering News-Record (ENR) has ranked Honeywell as one of the top 20 design firms in the world," said Steve Cottrell, Engineering Leader, Honeywell Chemicals, Baton Rouge.

ENR Recognizes Honeywell

In May 2004, ENR recognized Honeywell as one of its top 500 Design Firms. Honeywell was ranked:

- 20th in the Top 500 Design Firms
- Fourth in the Top 100 Pure Designers category
- Eighth in the Top 20 Industrial Process/Petrochemical category
- 13th in the Top Designers/International Markets category

ENR's recognition affirms Honeywell's global leadership in delivering process automation solutions and services. Honeywell's expertise in integrating field instruments, systems and advanced applications on time and on budget is unmatched.

