

NEWS

Emerson Users Gather for Technology Exchange

WEB EXCLUSIVE: Automation professionals convene in Dallas to discuss emerging technologies, solutions and security.

Jane Gerold, Editorial Director

The newly opened Gaylord Texan Resort and Convention Center, near Dallas, was the site of the 2004 Emerson Global Users Exchange Conference, held Oct. 25-29. The event drew a record attendance of more than 1,500 industry professionals from a broad range of industries, representing users, contractors, Emerson's local business partners, suppliers and Emerson employees.

As chairperson of the Emerson Exchange Board of Directors, Marion Dawson-Sutton, of Cabot Corp. in Albuquerque, N.M., kicked off the opening session with a broad overview of the forum, whose theme of "Bringing the Best Together" provided a free exchange of information among process manufacturing end-users and Emerson Process Management personnel. Over four days, attendees could participate in more than 500 technical workshops, 56 hours of short courses, business forums and product roadmap sessions, and visit 40,000 square feet of technology exhibits.

A noble profession

In his opening remarks, John Berra, president, Emerson Process Management, spoke of automation professionals as the "unsung heroes" in their companies. "Thirty-five years ago today, I was on my first start-up as an instrumentation technician. We were migrating pneumatic controls to electronic analog controls, 10-50 mA loops and 2-wire instruments," said Berra.

And while technology has changed, the goal today is the same as it was 35 years ago, noted Berra. "The work automation professionals do is some of the most important work done at our companies.

We harness technology to make our plants run better and safer, and we improve the business results of the company. Ours is a noble profession."

Terry Krouth, Vice President, PlantWeb Technology, for Emerson reviewed the company's technology plans for PlantWeb—its digital architecture that deploys field intelligence to improve plant performance. Among the highlights of future developments are: embedded technologies for Abnormal Situation Prevention (ASP), wireless digital connectivity, Enhanced Electronic Device Description Language (EDDL), safety instrumented systems and "Always in Control" adaptive tuning algorithms.

Survival of the swift

In his keynote presentation, Steve Cousins, vice president, Refining, at Lion Oil Co., in El Dorado, Ark., addressed how smart automation decisions have allowed Lion Oil, which refines 68,000 barrels of oil a day, to compete with the major oil refineries, such as ExxonMobil, which produces 8 million barrels of oil a day. "In 1978, there were 344 refineries in the United States. In 2004, there are 149 refineries," said Cousins. "A select minority of companies have been swift enough to survive. Our smart decisions have kept us in business."

Lion Oil uses a high-sulfur crude to produce gasoline—1.83 percent sulfur content versus an industry standard of 1.45 percent. The higher sulfur oil is less expensive, but requires a very sophisticated refining process. The company has invested millions of dollars in automation technology, initially deploying a distributed control system in the early 1980s, which ran pretty much as installed for 20 years.

"Fast forward to 2001," said Cousins, "and we found that our automation vendor could no longer support us. They had a migration path, but we had not been following it, and it was time for us to

make a new selection.”

In choosing a new platform, Lion Oil needed a supplier committed to long-term support, and a system with no loss of reliability or performance from the previous system. As well, Lion Oil wanted to maximize value, minimize total cost of ownership and maximize operator performance.

“A strong indicator of how committed a supplier is to the market is the way it treats the smaller manufacturers. We chose Emerson because it treated us like a major player,” said Cousins. Another deciding factor was that Emerson had deployed new technology in its DeltaV platform all the way down to the component level. Said Cousins, “We broke the installation into four parts. The first installation went live in March 2004. We are now looking at deploying the technology in two small refineries owned by our parent company, Ergon Inc. (based in Jackson, Miss.).”

Real threats

Rounding out the keynote speakers at the event was Julio Rodriguez, department manager, Critical

Infrastructure Assurance Program, Idaho National Engineering and Environmental Laboratory. Speaking on the importance of security, Rodriguez said, “The threats are real—both internal and external. Control systems are vulnerable because they lack security.”

The Department of Homeland Security (DHS) and the Department of Energy (DOE) have jointly invested in the Control System Security and Test Center (CSSTC) at the Idaho Lab, which operates test beds for wireless networks, the electric power grid and supervisory control and data acquisition systems. Contact Rodriguez at ju2@inel.gov for more information on these programs.

- Cabot Corporation.
<http://www.cabot-corp.com>
- Emerson Process Management
<http://www.emersonprocess.com>
- Idaho National Engineering and Environmental Laboratory
<http://www.inel.gov>
- Lion Oil Co.
<http://www.ergon.com>