Atanor maintains competitive edge with System 800xA High Integrity

ABB’s integrated control and safety system provides peace of mind in Atanor’s Rio Tercero plant

“System 800xA has demonstrated its great reliability and versatility. It shows us tendencies, graphics and lists of events happening at any given time. It gives us many tools with which we are able to solve problems that may be occurring in the process. We wanted to introduce improvements, and the 800xA system allowed us to make them.”

Odel Protti
General Manager, AOA1, AOA2 & Acetic Acid Plants, Atanor, Rio Tercero
Mutual trust is key

The relationship between ABB and Argentina’s chemical manufacturer Atanor began around 1989, when Atanor’s acetic acid plant in Bardero updated its instrumentation. Several projects later, ABB was again called upon by Atanor, this time to provide System 800xA Extended Automation for Atanor’s new hydrogen peroxide plant in its Rio Tercero facility.

Mutual trust is very important to Atanor and key to any good business relationship. “From my perspective as manager of the Rio Tercero Plant, the existing good relations between ABB and Atanor are very important. They are based on the reliability of the control system implemented in the hydrogen peroxide plant, the way ABB’s people respond to our needs, the ready availability of spare parts and above all, the mutual trust shown by both companies’ personnel,” said Ricardo Sani, General Manager of Atanor, Rio Tercero.

Odel Protti, an AOA Manager at Rio Tercero added this: “What greatly influenced the decision to select ABB was the fact that ABB had already participated in projects in other Atanor factories. ABB’s track record was an influence. The cooperation between Atanor and ABB practically a whole year before the plant went into operation was excellent in every way. I learned a great deal from ABB as to the best way to utilize System 800xA’s functionality. And I wish to emphasize the quality of ABB’s people. I mean, they truly do work for customer satisfaction.”

About Atanor

The pioneering businessmen and scientists who started Atanor endowed it with that name in remembrance of the small furnace used by alchemists of yore. It represents both the tradition of a science, and the constant search for new technologies.

The roots of Atanor can be traced back to 1938, when production was started in the Munro Province of Buenos Aires. Today, agro-chemicals are Atanor’s main products, representing over one quarter of their sales volume. Atanor’s sales to labor cost ratio is significantly lower than the industry average. Their flexible and integrated operations enable them to achieve cost-effective production in response to demand and market conditions. The company has always been interested in adapting production to remain competitive in international markets through continuous technology improvement.

Atanor is one of the largest Argentine producers of hydrogen peroxide, which is manufactured at their Rio Tercero plant in Argentina’s Cordoba province. Atanor began operations at Rio Tercero in 1949, where a new plant was inaugurated in October, 2005. The Rio Tercero facility, which presently employs approximately 300 personnel, is expected eventually to increase Atanor’s production capacity to 14,200 MT/Year, quite enough to cover Argentina’s total domestic demand. Any eventual surplus will be exported to neighboring countries.
Atanor’s 800xA Control and Safety System

In mid 2005, Atanor’s Rio Tercero plant installed an System 800xA for integrated control and safety in its recently inaugurated AOA2 area. System 800xA High Integrity is a complete, scalable TÜV certified IEC 61508 and IEC 61511 compliant Safety Instrumented System (SIS) that spans the entire safety loop, including SIL rated AC 800M controllers, field input devices, I/O modules, and field actuators. The AOA2 control and safety system includes five workstations with local and remote screens for operations, engineering, information management and maintenance. AC800M and AC800HI controllers utilize more than 2,000 S800 I/O at multiple remote locations. Over 300 field devices utilizing Profibus® and HART® communications are integrated into the system.

Integrating information for improved visibility

“System 800xA has demonstrated its great reliability and versatility,” said Odel Protti. “We can use a lot of information offered by the system. It shows us tendencies, graphics and lists of the events happening at any given time. It gives us many tools with which we are able to solve problems that may be occurring in the process. The system is flexible and able to adapt to changes. We wanted to introduce improvements, and the 800xA system allowed us to make them. What I like the most about ABB’s control system is the information it offers me, as well as the speed of operation.”

Why choose ABB?

- Reduced time to shut down
- Control system reliability
- Responsive ABB personnel
- Increased uptime, lower cost; due to quicker start-up and shut-down
- Integrated Information enables improvements
- Maximum performance due to optimized engineering

Engineering for maximum performance

Atanor’s integrated 800xA Safety and Control system cuts the hardware installation in half – Atanor needs only one - not two of everything, including one set of engineering tools. This saves time and money. Engineers and operators need only be trained to operate one system, decreasing training time and enhancing safety.

Whereas engineers used to leave their offices with a briefcase in order to set up, configure or calibrate instrumentation in the field, with System 800xA they can do all of this at their workstation. “ABB’s 800xA system provides us with very ample information. Ample and complete. It allows us to analyze conditions and tendencies that occur prior to a problem. The tools the 800xA system offers allow us to make the right decisions,” Protti said.
AC800HI offers peace of mind

Many visitors come to Atanor’s Rio Tercero plant. Protti again: “Many local industries are interested in learning more about our control system. The combined control and safety system gives peace of mind to our entire work team. We have the assurance of knowing that there’s a safety system that will kick in during an emergency.

Measurable results

The 800xA system has allowed Atanor to notably reduce the time it takes to start up and shut down the plant. The integrated control and safety system enables the plant to be shut down in less than five minutes if needed. A single operator can complete a plant start-up in less than ten minutes.

As previously mentioned, Atanor’s integrated 800xA Safety and Control system cuts the hardware installation in half – Atanor needs only one - not two of everything. Plant safety is enhanced because engineers and operators need only be trained to operate one system. All of this saves Atanor time and money.

For more information on ABB solutions for the chemical industry, visit: www.abb.com/chemicals. For more control system solutions, visit www.abb.com/controlsystems.