



## 800xA Saves Time, Money; Provides Increased Flexibility and Uptime for Eka Chile S.A.

Chlorate producer in Concepcion, Chile saves time and money by making good use of 800xA's optimization, flexibility and visibility of information.

**Client:** Eka Chile S.A.  
**Location:** Concepcion, Chile, S.A.  
**Scope of Work:** ABB's System 800xA Extended Automation

*"What one is looking for is an optimization of processes through the information that is provided by all plants in to one central location. For example, if we had difficulties in operating certain equipment that is installed in Norway, and if we analyze it and compare the advantages of one against the other, the lessons learned from such analysis allow us to optimize the operating process of this plant (in Concepcion)."*

Sergio Sandoval  
 Supervisor of Instrumentation  
 Eka Chile S.A.



### Usage of ABB's System 800xA

Extended Automation has enabled Eka Chile S.A. to optimize availability and performance of assets, to integrate information for improved visibility and to have the flexibility they required in order to choose their preferred communications protocols.

### The Background

Eka Chile S.A. (Eka) is a bleaching chemical reagents producer in Concepcion, Chile. It is part of the Swedish Dutch consortium AKZO NOBEL which has plants in Europe, as well as in the Americas. The facility in Concepcion produces chlorate for cellulose (wood pulp) bleaching.

### The Solution

As a result of the growth of the company, Eka was now installing a fifth process area. They chose to add ABB's latest technology - System 800xA Extended Automation in the new area. The system includes three Process Portal workstations, four AC800M controllers, and 1,000 I/O.

"It was a very good decision we made," said Sergio Sandoval, Eka Instrumentation Supervisor. "It didn't generate any disorder in our process from either the operations or security points of view. It has been an excellent project - non traumatic. This is because of how friendly the system is. It's been about a year, and, in my opinion, it's been successful."

## Flexibility Saves Money

When Eka made the decision to install 800xA, they sent the project out for quotes. "What we found was that, with competitive systems, if we were going to use Foundation Fieldbus, we had to replace ALL our instrumentation with "smart," Foundation Fieldbus enabled instruments – all at one time and at a very high cost," Sandoval said. "The ABB solution allows usage of all fieldbus communications protocols, so we know we can use smart devices when we choose to in the future, but we were not bound to only that option with the ABB solution. My experience over many years has been that working with the instrumentation is not easy for operators who interact directly with the process. Our plant operations are sometimes very delicate, and we didn't want to take the risk of replacing all instrumentation and going with Foundation Fieldbus all at once. Also the technical support from the engineering group of ABB Chile is very good."

## Integrating Information for Improved Visibility

The Information Management functions of 800xA have been useful as far as enabling Eka to carry out an analysis of the trends of the critical variables of their process. Sandoval again: "In particular, we handle liquids and gasses such as hydrogen gas, which is one of the most critical variables to handle. At Eka, every plant generates hydrogen and we have to take it to one common point, manage it, control it and then use it at the boilers - we actually use it as fuel. Information Manager allows us to manage this very efficiently." The tools in Information Manager made it feasible for Eka to make an analysis of the dynamic behavior of the process and its interaction between plants, in order to optimize the collection and usage of the hydrogen gas.

## Optimizing Plant Asset Availability and Performance

"We are also using our 800xA system in order to transfer all process variable data to our central facility located in Sweden," Sandoval explained. "The objective of this process information network of different plants worldwide is to allow for a comparison analysis and evaluation of advantages and disadvantages of each plant - from the productivity point of view - relative to energy consumption costs and raw materials.

## Why Choose ABB?

- Optimizing Plant Asset Availability and Performance
- Integrating Information for Improved Visibility
- Flexibility to Choose Your Preferred Communications Protocols

"In other words, what one is looking for is an optimization of processes through the information that is provided by all plants in to one central location. For example, if we had difficulties in operating certain equipment that is installed in Norway, and if we analyze it and compare the advantages of one against the other, the lessons learned from such analysis allows us to optimize the operating process of this plant (in Concepcion)."

## The Future

Sandoval again: "What I see in the future is that we will continue maintaining our ABB platforms. I can imagine new tools will be coming up which will allow us to optimize further and rationalize further the use of our control platform and also optimize our process, in order to improve quality, the environment and operational costs."

For more information on how ABB's System 800xA Extended Automation can be employed to solve your control issues, visit us at [www.abb.com/controlsystems](http://www.abb.com/controlsystems).

For more information on how ABB's Industrial IT technology can be employed to solve your chemical processing issues, visit us at [www.abb.com/chemical](http://www.abb.com/chemical).



29801 Euclid Avenue  
Wickliffe, Ohio 44092  
Telephone: 440.585.8500  
Fax: 440.585.8656

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