

Case Study

Sweet Results for Nirani Sugar Industries with PlantCruise by Experion®



Sugarcane is the world's largest crop, and India is the world's largest consumer of sugar. Nirani Sugar Industries processes 15,000 tons of cane per day with the help of PlantCruise by Experion.

Background

Although it is uncertain when cane juice was first extracted from sugar cane, the invention of manufactured cane sugar granules from sugar cane juice began in India a little over two thousand years ago. The sugar industry began around 1830 in China.

Today, India is the largest consumer and second largest producer of sugar in the world.



Nirani Sugar Industries Ltd. is located in Mudhol, in the Bagalkot district. The installation processes 15,000 tons of sugarcane per day and has a 67 MW Co-Generation Plant.

Benefits

Nirani Sugar was already using a competitive system in their co-generation facility, so were seriously considering using the same company to automate their sugar manufacturing process. Two other automation companies were also proposing solutions.

However, Nirani Sugar had received positive feedback from the market that SPA Instruments possesses very good technical knowledge of the sugar process and has implemented a number of successful DCS projects.

Initially the Honeywell team offered the C200 controller but as the project details unfolded, the team offered the more suitable PlantCruise by Experion®, which is equipped with a C300 controller in the second stage.

Honeywell and their channel partner, SPA Instruments, were selected based on their outstanding track record in the sugar process industry in India, a front-end engineering tool that was far superior to that of the competitors, the technical suitability of PlantCruise by Experion for this application, and an overall cost that was more competitive.

Challenge

Standalone sugar mills, even with viable capacity, may find it difficult to operate profitably on a sustained basis due to exposure to the international market. The industry has to withstand the pressures of the global market, which fluctuates depending on the sugar scenario in different parts of the world.

Nirani Sugar was focusing on ways to expand and grow their business. However, they were facing shortages in cane supply, water, power, and manpower.

They were able to determine that the primary requirement was to increase plant efficiency. A solution to this requirement is automation for efficient use of plant equipment, energy savings, and better production to manpower ratio.

Solution

Honeywell channel partner, SPA Instruments, proposed and implemented PlantCruise by Experion at the Nirani Sugar Industries Ltd. site in Mudhol.



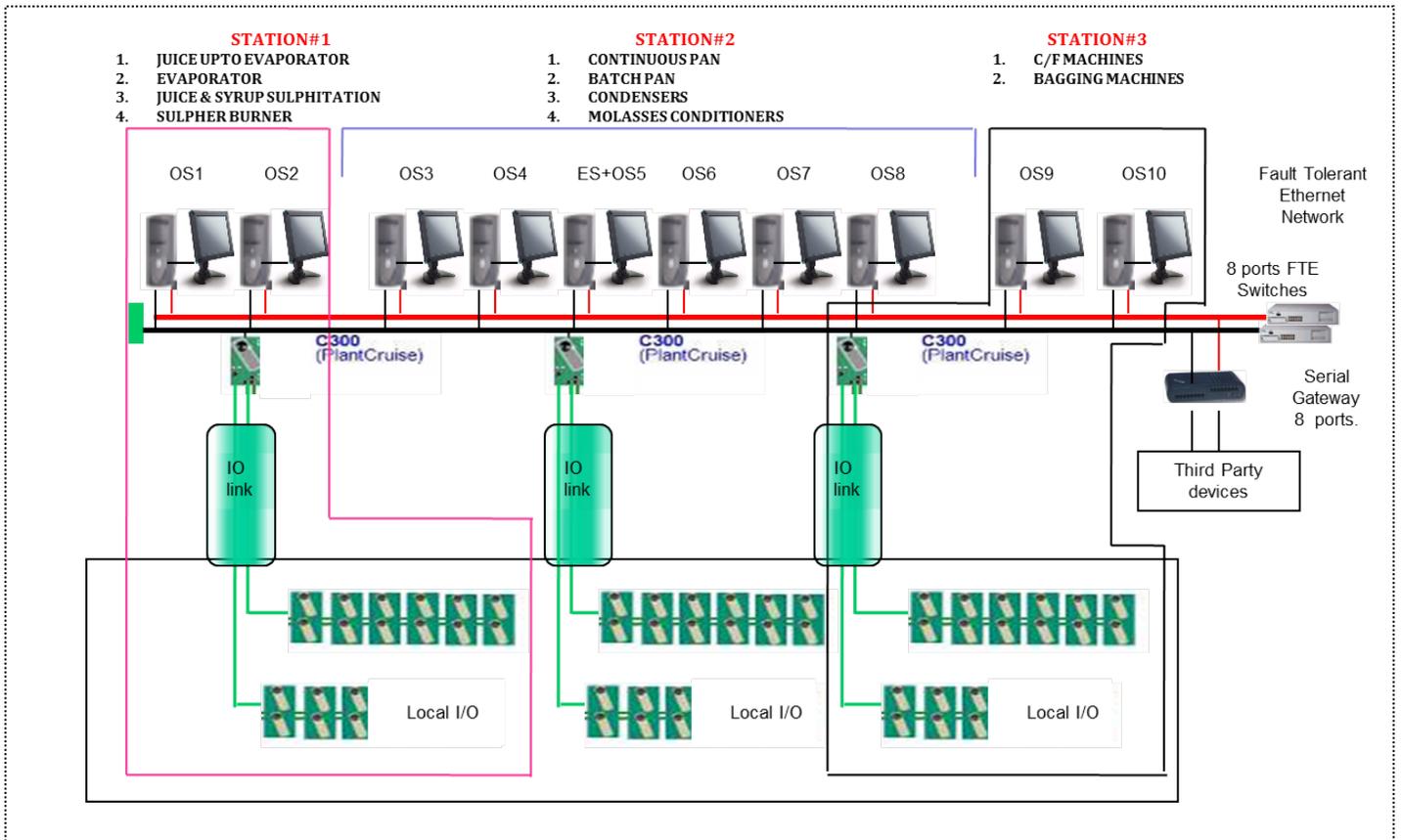
Nirani Sugar considers PlantCruise by Experion a user-friendly system that is easy to program.

PlantCruise is a modern, advanced, and reliable distributed control system (DCS) specifically designed for small and medium enterprises. It helps maximize users' production uptime, improves safety, reliability, and efficiency, and reduces investments and operating costs. This Honeywell-designed product is engineered, maintained and sold through local system integrators, such as SPA Instruments.

Results

Implementation was completed in October 2012 and Nirani Sugar is satisfied with the results. The system has led to savings in water consumption and manpower.

After two successful crushing seasons, Nirani Sugar is satisfied with the system benefits and is investigating adding extra Function Blocks for certain applications.



This diagram provides an overview of the system architecture installed at Nirani Sugar.

PlantCruise by Experion® is a registered trademark of Honeywell International Inc.

For More Information

Learn more about how Honeywell's PlantCruise by Experion can help address your small to medium enterprise automation challenges, visit our website www.honeywellprocess.com or contact your Honeywell account manager.

Honeywell Process Solutions

Honeywell

1250 West Sam Houston Parkway South
Houston, TX 77042

Honeywell House, Arlington Business Park
Bracknell, Berkshire, England RG12 1EB

Shanghai City Centre, 100 Junyi Road
Shanghai, China 20051

www.honeywellprocess.com

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