

SUCCESS STORY

Integrated Automation Solutions / Universal Robina Sugar Manufacturing Corporation, Philippines

Location: Mangjuyod, Negoros Oriental, Philippines

Order Date: 2000

Completion: 2002

Industry: Sugarcane processing and refining

The local sugar industry

Philippine sugar mills have an average age of about 50 years, leaving many of them ripe for the rehabilitation and upgrading of their automation controls. The imminent implementation of the ASEAN Free Trade Agreement (AFTA) and agreements of the World Trade Organization (WTO) also pressure the mills to consider more advanced automation solutions.

The majority of the local mills have capacities that are less than 5,000 tons of cane per day. This poses a limitation and a challenge as to the degree of automation that mills will be able to adopt.

Universal Robina Sugar Manufacturing Corporation (URSUMCO)

URSUMCO is the first to be convinced that an integrated automation solution is needed to face the challenges of the future. The Plant Manager was the champion for the project.

A complete road map was developed to automate as much of the factory as possible. The plan demanded a system with high reliability and high availability and a long-term relationship with the control system vendor. CENTUM CS 1000 and Yokogawa Philippines (YPI) fit the bill nicely.

YPI provided a complete instrument and control solution package which included supply of Brix sensors, valve actuators and control valves.

URSUMCO is currently enjoying the benefits of its integrated automation projects:

- Reduced steam consumption in the boiling house from better Brix control at the evaporators
- Reduced consumption of bagasse from better combustion control; making it available for refinery operations
- Reduced consumption of bunker fuel oil (supplementary fuel)
- Increase daily throughput of massecuite at the raw mill and refinery

- Reduced residual sugar in the final molasses
- Better stability of operations from availability of information

System: CENTUM CS 1000
Total I/O: AIO: 227, DIO: 305
System Configuration: 8x HIS, 7x FCS