

# Distributed Control System Design

The construction of a greenfield, A\$165M paint batching facility.

**Industry**  
Manufacturing

**Sector**  
Paint Manufacturer

## Project

- The client is an international manufacturer and marketer of premium branded water based decorative paint products.
- To better serve the Australasian market a greenfield, A\$165M paint batching facility destined to be one of the largest coatings plants in Australia and New Zealand, with an annual capacity in excess of 100 million litres was proposed.
- The client identified that a key component required when designing the facility was to have a 'state of the art', secure, reliable, and extensible Distributed Control System (DCS).
- The network design needed to be based on best practice and be able to communicate with the ERP system, provide an operator interface to manage the process, communicate with 3rd party systems, store process data in an historian and provide Overall Equipment Efficiency (OEE) information.
- The client engaged Cromarty to assist the project by developing a network specification for the plant to provide a framework for a secure, consistent, reliable and extensible network and to produce Expression of Interest documents for preselection of tenders to deliver the DCS system.



## Solution

Firstly, Cromarty engaged with the client to develop a requirements analysis for the DCS followed by the development of an assessment matrix to compare vendor's technical capabilities.

After receiving the completed submissions Cromarty then conducted an Assessment Process of potential vendors which included:

- Reviewing the conformance of the vendors to the requirements.
- Assessment of vendor responses.
- Shortlisting of vendors.
- Attending shortlisted vendor presentations with the client's project team members.
- Conducting field assessment of existing example installations.
- Final assessment, review, and recommendations.

Cromarty then developed a network specification using best practice to define a network implementation that met the project goals of security, reliability, and flexibility.



## Outcome

Cromarty successfully produced network specification to meet all the project requirements and also worked effectively in partnership with the client to select the correct DCS vendor with the right skills and experience to deliver the optimum solution.