



CASE STUDY

“We delivered a complete automation solution for a greenfield chemical plant specializing in advanced chemical production. The project was implemented using a modern Control system, designed to handle critical processes such as hydrogenator operations with H₂ gas, solvent handling, crystallizers, ETP, utility systems, and process vessels. Our solution ensured safe operations, reliable process control, and seamless plant-wide integration.”



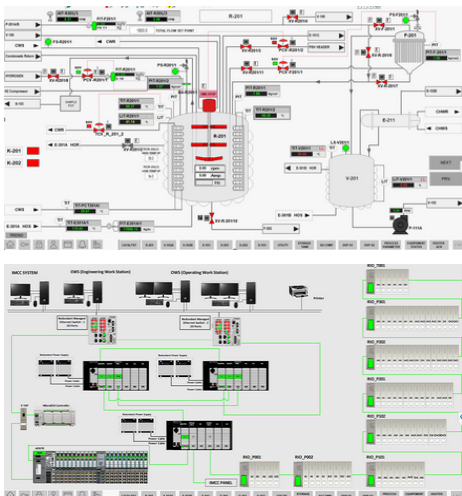
KEY FEATURE

- Technology: Continuous/Batch Hydrogenation with automated process control
- Compliance: **ATEX**-certified equipment, adherence to local and global safety norms
- Energy Efficiency: Optimized utilities for minimum hydrogen loss and reduced power consumption
“Seamless Industrial Automation that Boosts Efficiency and Reliability.”



“For over 14 years, we have been delivering cutting-edge automation and instrumentation solutions to enterprises of all sizes.”

“Our mission is to deliver advanced instrumentation and automation solutions that empower companies to operate more efficiently, while enabling employees to work smarter, safer, and better.”



OBJECTIVES

- Streamline and automate operations of the hydrogenator, ETP area, utility system, crystallizers, dryers, and distillation columns to improve efficiency and consistency.
- Implement **ATEX Zone-1 I/Os** to ensure robust and secure performance in hazardous areas, minimizing risk and enhancing overall system reliability.
- Integrate the central control system with **IMCC panels** for unified monitoring and control, enabling seamless and efficient management of all motors and agitators.

SOLUTIONS

- Allen-Bradley ControlLogix L8x Series Controller with Redundancy – ensuring high availability and reliable performance.
- Network Redundancy – Delivering continuous operation with minimal downtime
- Zone-1 Profibus I/Os – Robust solution for hazardous area integration.
- IMCC Panels – Centralized motor control with seamless system connectivity.
- Rockwell FactoryTalk View SE v13 – Advanced SCADA for intuitive monitoring and control.
- ProSoft Profibus Module – Enabling smooth communication between ControlLogix and Profibus devices
- Customized Library – Developed for Profibus I/Os and IMCC panels to simplify engineering and maintenance.
- Shift-Wise Reporting – Ensuring transparent operations and data-driven decision-making.

M/s Instrumentation and Control Solutions