

# ADVANCED SAFETY SYSTEMS IN EXPLOSIVE MANUFACTURING ENVIRONMENTS

## Intrinsically Safe Systems for Hazardous Facilities

A global beverage manufacturer's new European facility required high-level safety controls for explosive environments.

### Addressing Hazardous Area Safety

In the new European facility with nearly all areas classified as hazardous, the project team was tasked with implementing intrinsically safe instrumentation to meet stringent ATEX safety standards.

The setup needed to ensure that all devices were safe for use in explosive atmospheres, minimizing ignition risks. Rockwell's 1718 Ex I/O system provided the necessary safety and connectivity, allowing the plant to operate safely and reliably without compromising functionality.

### Implementing Intrinsically Safe Controls

By selecting prebuilt enclosures and using Rockwell's Ethernet/IP connectivity, the team minimized the space needed for control panels and reduced installation time. These enclosures, equipped with built-in grounding and rated cable glands, allowed for safe and easy access to field devices.

This solution avoided the complexity of additional barriers, streamlining installation in the confined spaces typical of European facilities and ensuring the system met operational and safety requirements efficiently.

### Enhanced Safety and Reduced Installation Time

The intrinsically safe system not only met European ATEX standards but also improved maintenance accessibility and operational safety.

With a distributed, low-maintenance design, the facility now operates safely and efficiently, overcoming space constraints and safety challenges inherent to hazardous environments.

### KEY OUTCOMES

- Met ATEX standards with Rockwell's 1718 Ex I/O system
- Reduced installation time with prebuilt enclosures, meeting tight project timeline
- The completed system was highly distributed, safe, and easily maintained



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