

SMART MANUFACTURING: END-TO-END BUILDING AUTOMATION FOR A GLOBAL FACTORY



Business Need

A major manufacturing entity planned a next-gen smart facility focused on energy optimization, interoperability, and future-ready automation. The aim: full-scale integration of HVAC, fire, and utility systems into a centralized, standards-based open BMS.

Solution Implemented

- Advanced Building Management System
- Addressable Fire Alarm Panels
- Gas-Based Suppression Systems with VESDA
- Digital PA Systems
- IP Video Surveillance Integrated with VMS

Enhanced Outcomes



Configured **14 Direct Digital Controllers (DDCs)** and **16 Protocol Integrators**



Over **12,000 Hard & Soft Data Points** captured via BACnet, Modbus, and proprietary protocols



12+ third-party system integrations including Chillers, UPTs, MCCB, Transformers, VRFs



Intelligent dashboards with **RBAC (Role-Based Access Control)** and customized views



Real-time energy monitoring system delivering **~8% reduction from baseline energy design**



Alerts, alarms, report logs, and SMS-based escalations for preventive maintenance and compliance



Comprehensive operational control through **central command interface**, tailored for engineers and operators