



INDUSTRY BRIEF

Chemicals

Safe, repeatable control for batch and continuous chemical plant.

 MATRIX



What matters most

Major-accident prevention

On a COMAH site, control and safety systems are vital layers of protection. They must be designed, tested and maintained so that you and the Competent Authority can rely on them when it counts.

Safety instrumented systems

Trips and interlocks on reactors, storage and utilities must meet the SIL your hazard study sets, with proof testing and bypass control your team can manage.

Consistent, traceable batches

Recipes and equipment must run the same way every time, with batch records that show what was made, how and when, so off-spec product is caught early.

Change without disruption

Products, recipes and equipment change often. Each change must go through your management-of-change process, be tested before it reaches the plant and leave your documentation up to date.

The standards that shape your project

Standard	What it covers
IEC 61511	Safety instrumented systems for the process industry, across the whole safety lifecycle.
COMAH Regulations 2015	Duties on operators of sites holding dangerous substances to prevent and limit major accidents.
DSEAR 2002 and IEC 60079 series	Explosive atmosphere risk assessment and zoning, and the protection concepts for equipment in hazardous areas.
ISA-88 (IEC 61512)	Batch control: common models and terms for recipes, procedures and plant equipment.
EEMUA 191 and IEC 62682	Good practice and requirements for designing and managing industrial alarm systems.
IEC 62443	Cyber security for industrial automation and control systems, for owners, integrators and suppliers.

The standards listed are those most often relevant to control-system work in this sector. Which apply to your project, and how, is agreed with you at specification stage.

From specification to long-term support



On a live chemical site, safety and product quality come first. We work within your permit-to-work and management-of-change procedures, prove new logic and recipes against a simulation of the process before they reach site, and plan cut-overs around your campaigns and shutdowns. You get the design, code and safety documentation to run and maintain the system yourselves.

Systems we engineer

- Reactor and batch process control
- Raw material handling and dosing
- Distillation, separation and drying
- Tank farms, storage and transfer
- Safety instrumented and interlock systems
- Batch reporting and control room HMIs

PLATFORMS WE WORK WITH

Siemens TIA Portal, S7 and PCS 7 • Rockwell • ABB • Schneider • Mitsubishi • Beckhoff • Emerson DeltaV • Honeywell • GE • WinCC, Ignition, AVEVA (Wonderware), FactoryTalk, iFIX and Citect SCADA

The evidence you receive at handover

✓ Functional design specification

✓ I/O list and cause-and-effect

✓ Alarm list and HMI interface

✓ FAT and SAT records

✓ As-built drawings and source code

✓ Method statements for common faults

Why customers choose us

Standards first

An ISO 9001 certified quality system, designing to the standards your sector demands, plus any you specify.

You own the system

Clear structure, open interfaces and complete documentation, so you can support it yourself or with any vendor.

Tested before site

Control code is version-controlled and tested against a simulated plant before factory and site acceptance.

Multi-vendor

Siemens, Rockwell, ABB, Schneider, Mitsubishi, Beckhoff, Emerson, Honeywell and GE platforms.

In it for the long term

For us a project is not finished until the control system is decommissioned. 24/7 support is available under a support agreement.

OUR PROMISE

Standards-led, fully documented control systems that you own and can support.

GET IN TOUCH

Talk to us about your project

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