



INDUSTRY BRIEF

Pharmaceutical

Control systems that run every batch as approved and keep your data beyond question.



Control system engineering, integration and analytics since 1997
ISO 9001 certified • Cyber Essentials • CHAS • Constructionline • SafeContractor

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YOUR PRIORITIES

What matters most

Pharmaceutical manufacturers answer to regulators, Qualified Persons and, in the end, patients. Their control systems must run each batch as approved, keep records whose integrity is beyond question and stay validated through years of change, with every step documented for an MHRA or FDA inspector.

Validated, and staying so

Computerised systems must be validated before use and kept in a validated state through every upgrade and change, with documents an inspector can follow from requirement to test.

Data integrity

Records must be attributable, legible, contemporaneous, original and accurate, with audit trails, controlled access and electronic signatures that will stand up to an MHRA or FDA inspection.

Right first time, every batch

Every batch has to follow the approved recipe and procedure, with deviations caught, alarmed and recorded so they can be reviewed before the batch is released.

Change under control

New products, upgrades and fixes have to be introduced through your change control, without putting qualified equipment, licensed processes or the supply of medicines at risk.

WHAT WE WORK ON

Systems we engineer

- Batch process control and recipes
- Weighing, dispensing and blending
- Purified water and clean utilities
- CIP and SIP control
- Electronic batch records and audit trails
- Environmental and equipment monitoring

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

What this means on your project

We work within your quality system: your validation plan, change control and document templates. Specifications trace through to tests, and our factory and site acceptance tests are written to support your IQ, OQ and PQ. Logic is proven against a simulation first, so time on site goes on qualification, not debugging.

STANDARDS

The standards that shape your project

Customers ask us first about standards. These are the ones we meet most often in this sector, and what they mean in practice.

Standard	What it covers	How we work with it
ISPE GAMP 5 (Second Edition)	A risk-based approach to compliant GxP computerised systems, from specification to retirement.	Lifecycle documents, risk assessments and testing structured the GAMP way and scaled to each system's risk.
EU GMP Annex 11 and Annex 15	GMP rules for computerised systems and for qualification and validation, applied in the UK by the MHRA.	Specifications, traceability and test evidence that fit your qualification and validation plans.
FDA 21 CFR Part 11	US rules for electronic records and electronic signatures, for sites that supply the US market.	Audit trails, user access and electronic signatures configured to Part 11 where your products need it.
MHRA GXP Data Integrity Guidance	The MHRA's expectations for complete, consistent and accurate data, summed up as ALCOA+.	Secure, time-stamped records, audit trails and controlled access designed in from the start, not added later.
ISA-88 (IEC 61512) batch control	Models and terms for batch control: recipes, procedures and the equipment that runs them.	Approved recipes kept separate from equipment logic, so they change under control, not through code.
IEC 62443	Security for industrial automation and control systems.	Its zone-and-conduit model shapes how we segment control networks and control remote access.

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.

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

ABOUT MATRIX

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

Matrix International (UK) Ltd has designed, built and supported industrial control systems since 1997. We take projects from specification and electrical design, through PLC, DCS and SCADA software, to installation, commissioning and long-term support, and we build the analysis software that shows how a plant is really performing. We are ISO 9001 certified and hold Cyber Essentials, CHAS, Constructionline and SafeContractor accreditation.

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HOW WE DELIVER

From specification to long-term support

01 Specify

Requirements, applicable standards and risks agreed with you up front, itemised into a clear plan.

02 Design

Electrical and control design, PLC/DCS and SCADA software, to your standards and ours.

03 Test

Logic proven against a simulated plant, then factory acceptance testing before anything reaches site.

04 Commission

Installation, commissioning and site acceptance testing, planned around your operation.

05 Hand over

Full documentation, method statements for common faults, and training for your team.

06 Support

Maintenance, upgrades and analysis for the life of the system, with 24/7 cover under a support agreement.

WHY MATRIX

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

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Talk to us about your project

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