



INDUSTRY BRIEF

Wastewater Treatment

Control systems that keep effluent within permit, whatever the weather.

[::]MATRIX



What matters most

Staying within permit

Final effluent has to meet permit limits every day, whatever arrives at the inlet, with monitoring and records that stand up to Environment Agency scrutiny.

Storm overflows under scrutiny

Pumping stations, storm tanks and overflow monitoring have to work together, keep spills to a minimum and report every event accurately to regulators and the public.

Energy and digestion

Aeration and pumping are the biggest energy users on a works, while digestion turns sludge into biogas. Good control cuts running costs and keeps gas areas safe.

Remote, unmanned assets

Networks of unattended pumping stations and small works rely on dependable telemetry, clear alarms and secure remote access to keep running safely around the clock.

The standards that shape your project

Standard	What it covers
Urban Waste Water Treatment Regulations 1994	Collection and treatment of urban waste water in England and Wales, and the treatment standards works must achieve.
Environmental Permitting Regulations 2016	Permits for water discharge activities in England and Wales, including final effluent and storm overflow conditions.
MCERTS	The Environment Agency’s Monitoring Certification Scheme, including its requirements for self-monitoring of effluent flow.
WIMES	Water Industry Mechanical and Electrical Specifications, used across UK water companies.
DSEAR 2002	Fire and explosion risks from dangerous substances, including biogas in digestion and gas handling areas.
IEC 62443	Security of industrial automation and control systems across their lifecycle, for asset 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



A works cannot stop taking flow. We plan changes around it with phased cut-overs, temporary control where needed and agreed fall-back positions, and prove new logic against a simulation of the process before it touches the plant. You get the design, code and method statements to run, maintain and report on the system yourselves.

Systems we engineer

- Inlet works, screening and grit removal
- Aeration and activated sludge control
- Storm tanks and overflow monitoring
- Sewage pumping stations and telemetry
- Sludge treatment and anaerobic digestion
- Biogas handling and energy 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

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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