



INDUSTRY BRIEF

Clean Water Treatment & Supply

Control systems that keep water safe,
compliant and flowing, around the clock.

 MATRIX



What matters most

Water quality you can prove

Turbidity, disinfection and pH have to stay within limits at every stage, with alarms that act early and records the Drinking Water Inspectorate will accept.

Continuity of supply

Abstraction, treatment, storage and pumping must ride through faults, maintenance and power loss without interrupting customers.

Remote, unmanned sites

Works spread across a region rely on dependable telemetry, clear alarms and control rooms that see a problem before customers do.

Cyber security

As an operator of an essential service you must show NIS compliance, and control systems and remote access sit at the heart of that.

The standards that shape your project

Standard	What it covers
Water Supply (Water Quality) Regulations 2016	Drinking water standards, sampling and monitoring in England, enforced by the DWI (Wales has equivalent regulations).
WIMES	Water Industry Mechanical and Electrical Specifications, used across UK water companies.
NIS Regulations 2018 and NCSC CAF	Cyber security duties for operators of essential services, assessed against the Cyber Assessment Framework.
IEC 62443	Security for industrial automation and control systems.
SEMD 2022	The Security and Emergency Measures Direction for water undertakers.
IEC 62682 / ISA-18.2	Management of alarm systems for the process industries.

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 works, supply comes first. We plan changes around it with phased cut-overs 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 and maintain the system yourselves.

Systems we engineer

- Raw water abstraction and intake pumping
- Clarification, filtration and disinfection
- Chemical dosing and pH control
- Treated water storage and booster pumping
- Telemetry and regional SCADA
- Maintenance reporting and asset data

PROJECT EXPERIENCE

Water treatment and supply

Matrix delivered the software, electrical and SCADA system for a water treatment and supply scheme: storage reservoirs with sand filtration, pumps, valves, dosing and pressure systems, pH control, clarification, filtration and disinfection, with maintenance reporting built in.

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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