



INDUSTRY BRIEF

Mining & Quarrying

Keeping people safe and material moving,
shift after shift.

[::]MATRIX



What matters most

Safe stopping and isolation

Emergency stops, pull-wire switches, guard interlocks and safe isolation have to work every time, and be designed, tested and recorded to the performance level your risk assessment demands.

Throughput and availability

An unplanned stop on a crusher or main conveyor can halt the whole site. Blockage, belt drift and overload detection, with clear alarms, help your team fix problems before they become breakdowns.

Explosive atmospheres

Where combustible dust, fuel vapour or, underground, flammable gas can form an explosive atmosphere, equipment and control design must match your hazardous area classification and DSEAR risk assessment.

Remote and dispersed sites

Pits, processing plant and stockpiles are often spread out and lightly staffed. Managers need reliable remote monitoring, clear alarms and production data they can trust, wherever they are.

The standards that shape your project

Standard	What it covers
Quarries Regulations 1999	Health and safety duties for quarry operators in Great Britain, including plant and excavations.
Mines Regulations 2014	Health and safety duties for mine operators in Great Britain, including ventilation and explosion risks.
DSEAR 2002 and IEC 60079 series	Explosive atmosphere risk assessment and zoning, and the protection concepts for equipment in hazardous areas.
BS EN 620	Safety requirements for fixed belt conveyors that carry loose bulk materials.
BS EN ISO 13849-1	Design of the safety-related parts of machine control systems, rated by performance level (PL).
PUWER 1998	Duties to keep work equipment safe and maintained, with effective start, stop and emergency stop controls.

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



Downtime on a quarry or mine costs production every hour. We plan changes around your shifts and shutdowns, prove new logic against a simulation of the plant before it reaches site, and test every safety function at commissioning. You get the design, code and documentation to run and maintain the system yourselves.

WHAT WE WORK ON

Systems we engineer

- Primary, secondary and tertiary crushing
- Screening, washing and classification
- Conveyor networks and stockpile control
- Ventilation, pumping and dewatering
- Load-out, weighing and dispatch
- Production reporting and remote 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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