

Metals & Metallurgy

Precise, safe control for hot, heavy, energy-hungry processes.



Metals plants run hot, heavy and energy-hungry processes, from melting and refining to casting and rolling. Temperature, current and chemistry must be held tightly, while people work near molten metal, high-power supplies and heavy machinery. Customers expect traceable material, and high energy costs expose every inefficiency.

YOUR PRIORITIES

What matters most

Process control and quality

Tight process control, batch after batch.

Safety around heavy plant

Safety functions proven to the level of risk.

Energy use and cost

See where your energy goes, and control it.

Traceable material

Process data linked to every batch and product.

STANDARDS

Standards we work to

BS EN 746-1, BS EN ISO 13577-2 and -4

Safety of industrial furnaces: general requirements, combustion and fuel handling, and protective systems.

BS EN 60204-1

Safety of machinery: electrical equipment of machines, including stopping and emergency stop.

BS EN ISO 13849-1

Design of the safety-related parts of machine control systems, rated by performance level (PL).

ISO 50001

Requirements for an energy management system that measures and improves energy performance.

BS EN 10204

Types of inspection document for metallic products, such as 3.1 and 3.2 certificates.

IEC 62443

Cyber security for industrial automation and control systems, for owners, integrators and suppliers.

HOW WE DELIVER



Systems we engineer

- Melting and holding furnaces
- Electrolysis, electrowinning and refining
- High-power substations and transformers
- Casting, rolling and finishing lines
- Recipe handling and MES part tracking
- Energy monitoring and production reporting

PROJECT EXPERIENCE

Aluminium smelter

Matrix delivered the software, electrical and SCADA system for an aluminium smelter: the electrolytic cells and their anodes and cathodes, a high-power substation and transformers, control of cell current and anode and cathode replacement, with SCADA recipe handling, maintenance reporting, MES part tracking and reporting.

ISO 9001 certified • Cyber Essentials • CHAS • Constructionline • SafeContractor

Talk to us about your project

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