



SYSTEM SOFTWARE INTEGRATION

TURNKEY SOLUTIONS

From enquiry, through design, manufacture, software integration, installation, and commissioning, CXControls provides engineered turnkey solutions to manufacturing, process, and regulated industries.

CXControls designs, manufactures, and commissions plant and equipment to meet the highest industry standards, with full documentation to client requirements, using digital solutions to enhance delivery and provide auditable trails. CXControls can also accommodate client designs or “build to print” requirements.

CXControls delivers solutions with:

- ✓

High Quality Standards.
- ✓

Optimised Performance.
- ✓

Improved Reliability.
- ✓

Full Industry Compliance.
- ✓

Structured Documentation.
- ✓

Full Lifecycle Support.

TURNKEY BENEFITS:

- Efficiency.
- Accountability.
- Reduced cost & risk.
- Simplified management.
- Parallel activities / Shorter project duration.
- Fixed accurate budgets.
- Integrated quality control.
- Reduce client burden & stress.



SHEQ INTEGRATED MANAGEMENT SYSTEM

CXControls operates an Integrated Management System and is certified to the following standards:

- ISO 9001:

2015 Quality Management System
- ISO 14001:

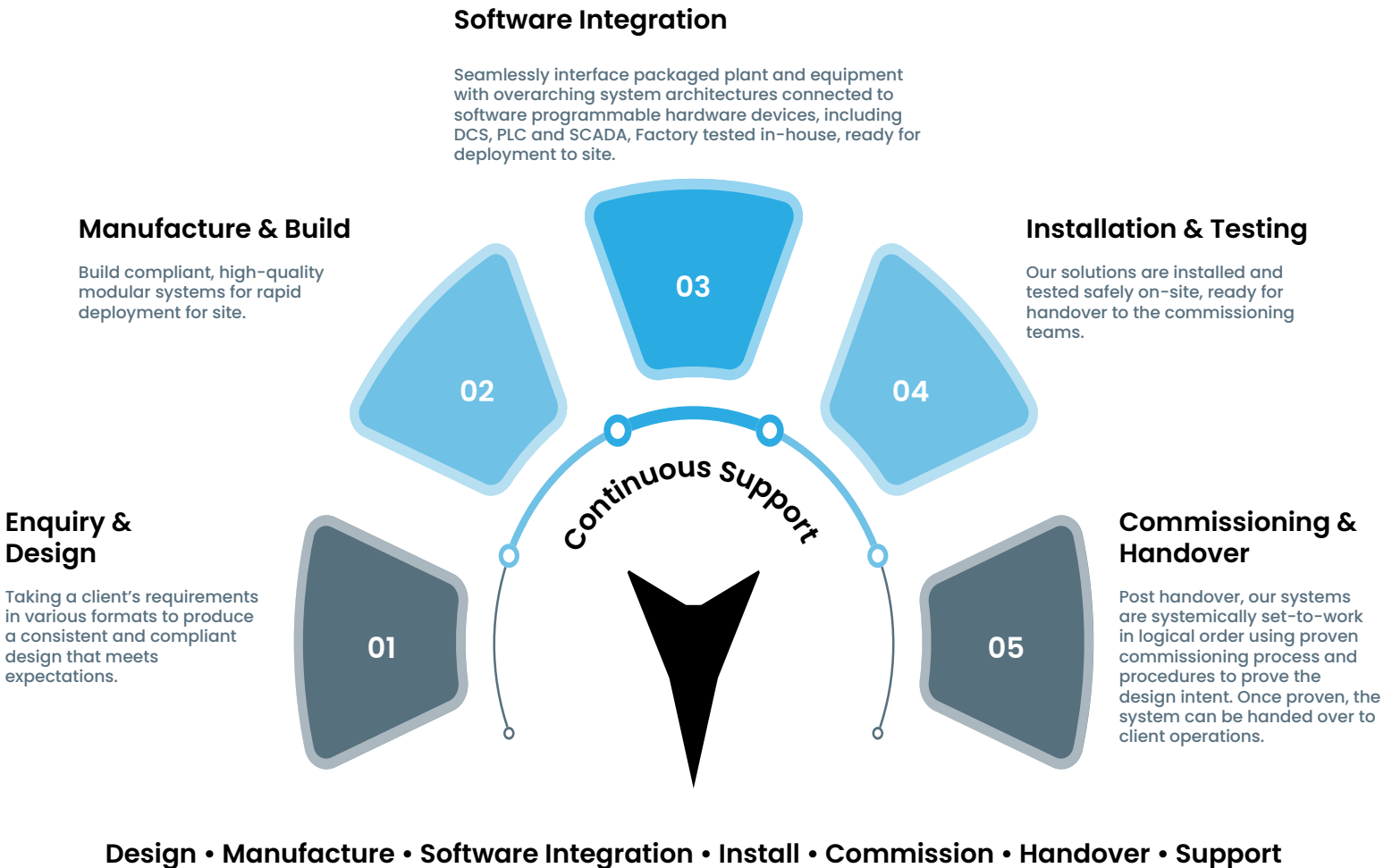
2015 Environmental Management System
- EN ISO 45001:

2018 Occupational Health and Safety Management System



Cert No. 11635
ISO 14001 , ISO 45001,
ISO 9001

FULL TURNKEY PROCESS



CONTROL SYSTEM INTEGRATION

PLC, DCS, SCADA/HMI SYSTEMS

Our team has exceptional multi-sector experience in integrating a range of process plant and equipment, utilising DCS, PLC, SCADA, and other programmable software solutions.

PLC (Programmable Logic Controllers) and DCS (Distributed Control Systems) are used extensively in manufacturing and process plants and equipment to automate processes and optimise plant operations.

CXControls can specify, design, and develop your PLC hardware and software application for use across most industries, including Energy, Nuclear, Oil and Gas, Chemical, Pharmaceutical, Manufacturing, Water, and Waste.

Our experts work closely with our clients to deliver best-in-class technology and solutions that exceed expectations.

Supervisory Control and Data Acquisition (SCADA) or Human Machine Interfaces (HMIs) provide a visual interface between humans and plant processes.



Key features include:

- ✓ **Real-Time Visibility**
Ensuring operators and management are up to date with:
 - Plant system safety.
 - Plant performance.
 - Alarm statuses.
- ✓ **Centralised & Remote Control**
Execute control commands or sequences from a centralised or decentralised location.
- ✓ **Remote Monitoring & Analytics**
Utilising secure gateways, VPNs and remote access to support and maintain systems remotely, providing valuable stakeholder data analytics and reports.
- ✓ **Enterprise Solutions**
Extracting data from control systems and other sensors provides real value to various stakeholders. CXControls are specialists in migrating control system data into cloud-based enterprise solutions to provide data, reports and metrics for analysis and to generate business workflows to improve consumption, plant performance, and efficiency.

INTEGRATION SERVICES

- Control panel design to print service or design and build.
- Full DCS, PLC and SCADA Turnkey packages, including manufacturing & commissioning.
- Legacy System Migration or full replacement.
- Application code reviews, retrospective system validation and documentation.
- Hardware and software Service Level Agreements (SLA)
- Recommending spare parts control and holding.
- B2B manpower supply contracts for PLC, DCS, SCADA engineers.
- Full MEICA & Process Project Management.

HARDWARE & SOFTWARE PLATFORMS

INDUSTRIAL/REGULATED



Enterprise Solutions



WHY CXCONTROLS



Our Capabilities lie 'In House'

CUSTOMISED, INDEPENDENT SOLUTIONS

Independent designs to meet clients requirements exactly:

All our projects are independently engineered based on stakeholder input and project objectives, ensuring the final solution aligns with each client's unique needs and expectations whilst meeting the most stringent industry standards.

Use the latest technology with no ties to specific manufacturers:

We maintain complete independence from hardware and software vendors, giving us the freedom to choose the most suitable and advanced technology for each application. Delivering unbiased, industry-ready solutions without compromise.

INTEGRATED ENGINEERING & DEVELOPMENT

We build the Hardware in parallel with Software development:

Our team develops hardware & software solutions in parallel, ensuring seamless integration and reducing risk.

We test Hardware & Software Factory Acceptance Testing (FAT) in-house:

All our manufactured control systems are FAT tested to rigorous standards to ensure alignment with our quality systems and industry standards. This is done in two stages with our in-house team, and then it is client-witnessed prior to deployment to the site.

DATA & OPERATIONAL OPTIMISATION

We extract valuable data and make it available to stakeholders to optimise operations:

CXControls capture, organise, analyse, and optimise operational data, providing organisations with meaningful insights into a client's business and assets.

The data can be streamlined to be relevant to each stakeholder, providing only the information they need to see and generating automated workflows driven by data analysis. This ensures that business efficiency is driven by automatically received data and workflows.



[See more in our Business Transformation Brochure.](#)

CONTROL PANEL & SYSTEMS

CXControls designs, builds, and installs a range of standard and specialist control panels for the operation and control of most manufacturing and process plants, including those in high-hazard (COMAH) & explosive (ATEX) environments.



CXControls can supply a range of hardware solutions to meet your requirements, including:

MOTOR & DRIVE CONTROL

- ☐ Single and three-phase direct-on-line and soft-start motor controls.
- ☐ Transformer motor starters.
- ☐ Variable Speed Drives.
- ☐ Pumping Controllers.

PROCESS & AUTOMATION SYSTEMS

- ☐ Process Control Panels and Systems.
- ☐ Remote PLC Stations.
- ☐ Data Acquisition and Building Asset Monitoring.
- ☐ Level, Flow Pressure, etc. Stand-alone PID Controllers.

SAFETY & SPECIALIST SYSTEMS

- ☐ Emergency Shutdown Systems.
- ☐ Gas detection systems.
- ☐ Chemical dosing or batching panels.
- ☐ Pneumatic control cubicles for on / off control or valve routing.
- ☐ Pneumatic pump control panels.
- ☐ Machine Panel Building (SIL rated).

COMMUNICATION & TELEMETRY

- ☐ Remote Telemetry Stations – industrial Ethernet, Profibus, wireless, etc.
- ☐ Building Management Systems – BMS.



[See more in our Control Panel Brochure.](#)

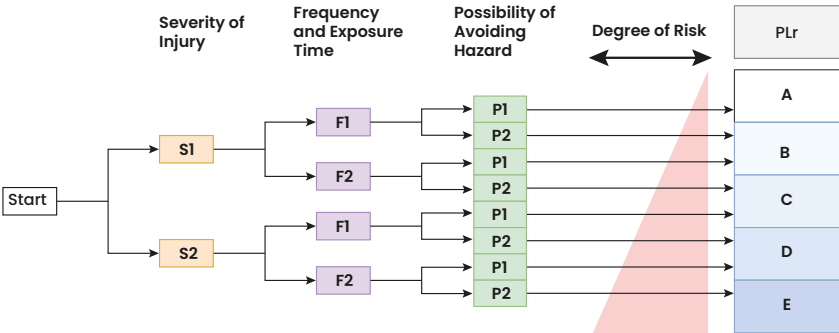
FUNCTIONAL SAFETY

CXControls is an expert in Functional safety for the Machine, Process, and Manufacturing industries. All system designs are compliant with UK and European harmonised standards.

FUNCTIONAL SAFETY

Process safety is fundamental to control system design. CXControls assesses plant hazards and operations to determine a safety system architecture that meets your needs.

LOPA analysis identifies the layers of protection, remaining gaps and necessary Safety Instrumented Function (SIF).



DESIGN & RISK ASSESSMENT

- Plant Performance Optimisation.
- Assets Monitor and Maintain.
- Decommissioning.



Safety Instrumented System (SIS) design and Safety Integrity Level (SIL) Verification and gap closure. SISs are designed to utilise both hardwired safety relays and fail-safe electronic systems, such as safety PLCs, fail-safe drives, and fail-safe communications.

A failsafe and highly fault-tolerant design can be achieved to meet SIL3 utilising dual sensors and devices.

Process safety systems are designed, built, installed, and commissioned to IEC 61508 and IEC 61511, and to Machinery Safety solutions to IEC/EN 62061 and ISO 13849, to close all LOPA gaps.

HAZARDOUS AREAS

Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) are in place to ensure the safe control of flammable vapours and dusts.

CXControls designs, builds, and commissions systems to meet the requirements of ATEX Directive 99/92/EC, including Zones 1-2 for gas and Zones 20-22 for dust.



PUWER

(Provision and Use of Work Equipment Regulation)

- PUWER regulations.
- Assets Monitor and Maintain.
- Defect risk assessment.

MACHINE SAFETY

- Machine Safety Design to: ISO 13849
- CE compliance and UK CA marking.
- Operating manuals and procedures.

TÜV ACCREDITED

CXControls boasts, amongst its workforce, TÜV Accredited:



- ✓ Functional safety professionals.
- ✓ Functional safety engineers.



Full Services list:

System Software Integration

Business Transformation

Process & MEICA Project Consultancy

Modular Manufacturing

Control Panels

Specialist Engineering Resources

Offices & Workshop:

Units 12/14
Cartrefi Conwy Business Park,
Mochdre, Conwy,
LL28 5EF, UK.

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Learn more on
our website.

