



INTEGRATED AUTOMATION AND PROCESS CONTROL





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W H Good Automation Ltd specialise in the bespoke design and manufacture of integrated control systems across a broad spectrum of industries and applications.

## Introduction

For almost 30 years we have built an excellent reputation for delivering successful projects for clients in all aspects of automation, utilising leading internationally recognised automation products.

Our quality engineered solutions are second to none in our field, offering high levels of quality and reliability whilst being cost-effective and accessible.

Our experience and reputation has attracted new clients from all around the world, in all types of industry, whose satisfaction means they come back to us time and time again.



### Products & Services

We provide a full range of tailored products and services including:

- · Initial project engineering
- Project specification
- Hardware and software design and development
- Low voltage assembly panel manufacture and test
- Site installation, commissioning and testing
- Project management
- · Training and technical support

We are equally as comfortable developing a large, bespoke, multi-PLC and SCADA based control system as we are building a batch of modestly sized wall-mounted control panels.



## Experience

Our team of engineering professionals has built up experience in a multitude of disciplines, including:

- Batch processing
- Mechanical handling
- · Pneumatic conveying
- PLC systems
- SCADA systems
- Drive systems
- Power distribution
- · Process instrumentation
- · Specialist machinery
- · Production monitoring
- Environmental systems

#### **Client Testimonial**

"We have used W H Good Automation to construct both motor control panels and LV distribution boards over the last seven years ranging from £100k to £1m, all of which came within budget.

They constructed two large back to back Form 2 motor control panels, a primary LV distribution board, and numerous other small floor standing motor control panels for a plastics recycling project. The panels had a selection of starter configurations from DOL to variable speed. The total W H Good Automation order value of this project was circa  $\mathfrak{L}$ 1m.

We have found W H Good Automation's approach to the design and construction of panels both professional and efficient with a good quality of workmanship."

Senior Electrical Engineer

**Engineering Projects Organisation** 





## SYSTEMS INTEGRATION

Our range of systems engineering services includes design and development of bespoke PLC, HMI and SCADA systems from initial functional design specification, through to software design, build, test and commissioning at site.

#### Systems Integration Products and Services

The fully integrated control systems we offer can be supplied as a stand-alone system or as part of a console, wall-mounted / floor-standing wardrobe enclosure or motor control centre.

Depending upon your requirements, we are also able to interface with existing and/or third-party site-based systems as well as offering upgrades or retro-fitting new technologies.

We can specify, design and build complete bespoke systems integration solutions across a broad range of platforms, however, our core experience is with:

- Rockwell (Allen-Bradley) PLC5, SLC, ControlLogix, CompactLogix, MicroLogix, Micro-800
- Siemens S5, S7-200, S7-300, S7-400, S7-1200, S7-1500, ET-200
- Mitsubishi FX, Qn
- Omron CX-ONE
- · Including local and remote I/O architectures
- HMIs Allen-Bradley, Siemens, Mitsubishi (Beijer), Red Lion
- · SCADA FTView, WinCC, InTouch, Citect
- Communications networks Serial (RS232/485), Modbus TCP/RTU/ASCII, CC-Link, MelsecNet, PROFIBUS PA/DP, PROFINET, AS-i, HART, DF-1, Data Highway, DH+, DeviceNet, Controlnet, Ethernet TCP/IP





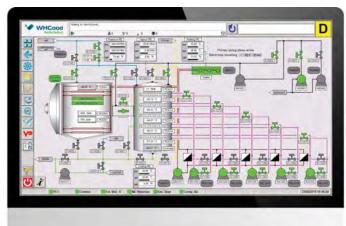
### Experience

We have a vast experience of programming in all IEC 61131 languages as well as integration with script and higher level languages such as C/C#, VB, .Net, Java and many more.

We are able to interface with IT and database systems for archive and reporting functionality using OPC/ODBC as well as proprietary applications such as FT Historian and Simatic Process Historian.

We also have in-house experience and capability for:

- Siemens PCS7 and Rockwell PlantPAx DCS systems
- ATEX Hazardous area, Zones 1 and 2
- 21 CFR documentation
- Nuclear life time quality records
- · Functional Safety (to IEC 61508 and IEC 61511)
- Machinery Safety (to IEC/EN 62061 and ISO 13849)



### **Intelligent Solutions**

In addition to traditional discrete control, such as relay logic and simple PLC based systems, we offer a wide range of experience with intelligent control systems. A typical intelligent motor control system incorporates an intelligent MCC at its core. We are experienced with integration of a range of intelligent overload technologies:

- Rockwell E1+, E3, E3+, E300, E300+
- Siemens Simocode, Simocode Pro V
- Eaton C440

We are able to design and implement bespoke intelligent architectures based on Ethernet/IP, PROFINET and PROFIBUS. We can also integrate these systems with your SCADA, DCS or MES systems to provide live valuable information about your process. This data can also be captured and securely stored for future interrogation as part of your regulatory compliance or process optimisation plans.



Given the availability of system information on these platforms, we are also able to remotely monitor and report from them if required, including issuing email or SMS text messages to advise operational teams of changes in system status.





## **OUR VALUED PARTNERSHIPS**

As an approved partner for both Rockwell Automation and Siemens, we have a proven specialism across a wide range of technologies and industries to suit our customers' needs.

Recognised

Integrator

System

## Rockwell Recognised System Integrator

W H Good Automation Ltd is a Rockwell Recognised System Integrator (RcSI).

This programme ensures that we maintain skilled, up-to-date professional engineers who are conversant with the full range of products. It also ensures that we have an extremely close working relationship with Rockwell and are able to call upon additional knowledge and resource, if required.

This important partnership is truly two-way. We are able to involve Rockwell at a very early stage to ensure that the technical solution offered is the most optimum available from their range. Together, we are able to satisfy even the most challenging of customers' applications.

In addition to our recognition as a control integrator, we are also a Low Voltage Motor Control Centre (LVMCC) Integrator for Rockwell, enabling us to integrate the Allen-Bradley

Centerline range of MCC products.

Rockwell
Automation

Rockwell's recognition means that they recommend us to integrate their products into our clients' solutions.





## Siemens Solution Partner

W H Good Automation is a Siemens Solution Partner for Automation and Drives. As part of this programme, we are able to develop customised solutions of the highest quality, based on Siemens products and systems for factory automation, process automation and drive technology.

Our engineers undergo regular training and must sit rigorous examinations to ensure that they are fully competent and skilled to offer Siemens automation and drive products. The programme is designed so that only experienced and capable Siemens integration engineers are able to gain certification.

Under this partnership, Siemens are able to validate and independently approve partners who have a proven specialism across a range of technologies and industries to suit our customers' needs.

We support Siemens' Totally Integrated Automation (TIA) philosophy in the solutions that we propose, since this offers our customers the best method of integrating the components of the control systems. This approach starts at the discrete component level and seamlessly extends up through the controller and visualisation into the enterprise management system. The benefits of TIA can be realised in terms of improved system security, reliability and efficiency.

In further support of the TIA model, we are also able to integrate Siemens instrumentation into the control systems we offer, integrated either as hard-wired or fieldbus networked devices.

Solution Partner

SIEMENS





# LOW VOLTAGE ASSEMBLY MANUFACTURE

Within our premises in Lancashire, we have fully equipped manufacturing facilities for design, production and testing of low voltage motor control centres, distribution boards and control panels.

## Our Capabilities

Our range includes:

- Fixed, withdrawable and mixed pattern MCC designs available
- Various forms of intelligent MCC; Ethernet, PROFINET, PROFIBUS
- Form 2, Form 3 and Form 4 type 1 to 7 to BS EN 61439-2 and UL508A standards
- Bespoke design and CAD drafting
- · Design and build or build only
- Typically 25kA up to 100kA fault levels
- · Containerised panels
- Site commissioning
- In-line, back-to-back, 'L' and 'U' shape options

REGISTERED MEMBER



All of our assemblies are designed, built and tested in accordance with our ISO 9001 certified Quality Management System.

Every assembly is verified against our internal test criteria, the applicable regulations and the associated design documentation / specification.

### **Industries Served**

Our skilled and experienced workforce is familiar with a wide range of industries and specifications having designed and built assemblies for customers in:

- Aggregates
- Aerospace and automotive
- Chemicals
- Energy and power
- Environmental
- Food and beverage
- Healthcare

- Manufacturing
- Nuclear
- Oil and gas
- Paper, pulp and textiles
- Printing
- Pharmaceuticals
- · Water and utilities

Coupled with our systems integration and instrumentation capabilities, we can offer a one-stop solution to fulfil virtually any control system project requirement.



### Client Testimonial

"I am writing to thank all your staff involved in the new tank farm project. The project was completed on time and within budget.

Throughout every stage of the project, from initial detailed design, through the FAT and the final commissioning phase every member of your team acted professionally and efficiently.

Please pass on my thanks to all your staff who contributed to the successful completion of the project.

We look forward to working with your organisation in the future and trust that all our ventures are as successful."

#### **Lead Process Engineer**

Chemical Organisation



Panel building workshop at W H Good Automation



Carrs Industrial Estate Haslingden Rossendale Lancashire BB4 5JT

**Tel** 01706 211416

Email automation@whgood.co.uk
Web whgood.co.uk