

# Control Systems

## HTS Controls

HTS Controls deliver Process Control & Software solutions from consultancy through to a complete engineered system including installation and testing. Our Engineers can develop systems from various PLC and system manufacturers and are highly experienced in fieldbus solutions.

## Reverse Engineering

How do you replace or upgrade your 20 year old control system with little or no documentation?

This is a recurring problem for most of our existing customers. Our engineering team are able to retrieve the software from the existing system and produce a current Functional Design Specification (FDS). This will allow you to see what existing problems there are, what potential you have for modifications and whether a complete replacement is required.

HTS Controls have a wide range of experience in developing migration strategies that allow plant operators to take advantage of the latest technologies and products available.

We can provide a complete system integrator package to include the specification, design, procurement, build and construction activities for the whole of the process control system.

- ◆ Electrical & Instrument Design
- ◆ Control Panel Design & Build
- ◆ Procurement Activities
- ◆ Site Field Installation



## ICSS (Integrated Control Safety System)

I for Integrated or I for Independent?

Whether you require a fully integrated safety (SIS) system and control system i.e. Siemens Simatic PCS 7, or would like to demonstrate independence through implementing a separate safety system, HTS Controls can develop a package to suit your requirements.

If an Independent system is the route for your operations, we can develop a level of integration to the safety and control system by utilising open system standards such as OPC and Modbus links to present a unified system at the operations level.

## CONCEPTION



Every project requires engineering and design at the conception stage. Our dedicated engineering team will develop the Functional Design Specification into a clear, concise document allowing all disciplines to have an input into the design phase.

- ◆ FDS development
- ◆ HAZOP participation
- ◆ PLC or DCS system
- ◆ Fieldbus system of traditional IO

## DEVELOPMENT



HTS Controls develop the initial requirements through to the detailed design of the FDS by applying tried and tested standard structure developed over many industries and applications.

- ◆ Software & SCADA development
- ◆ Control panel design
- ◆ System design and integration
- ◆ Fieldbus engineering

## REALISATION



All our newly developed systems are simulated utilising the latest PC based technologies and can be integrated into the control panel Factory Acceptance Test to ensure a fully developed system to minimise site disruption.

- ◆ Control panel build & testing
- ◆ Process control simulation
- ◆ Site infrastructure for communication links.

## IMPLEMENTATION



HTS Controls appreciate the biggest hurdle to overcome is plant downtime when it comes to installations. For this reason we have developed various methods to ensure minimum disruption by employing current technologies such as Wi-Fi.

- ◆ Software Installation
- ◆ Electrical, Control & Data installation
- ◆ Complete control system commissioning