



Technical excellence: delivered

Forms Part of

Alderley



Electrical and Instrumentation Services

The single-source for all your E&I system supply, installation, inspection, maintenance and upgrade requirements

Aftermarket Services

Asset Inspection and Management



Ensure the ongoing integrity, safety and performance of your electrical systems and instrumentation with our specialist solutions, underpinned by certified inspection and service experts.



Next generation inspection

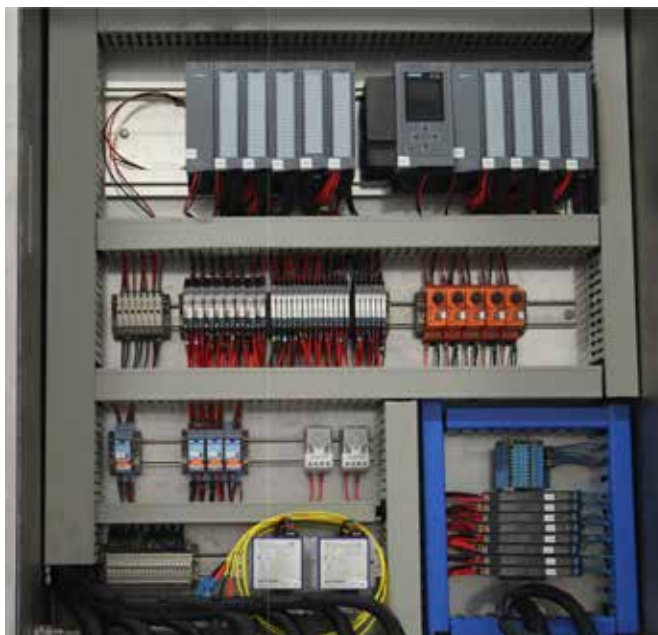
Inspection Manager is an intuitive, fully digital application used to support inspectors and administrators in completing their inspection tasks.

Developed in-house and used exclusively by the SMS Services team, Inspection Manager enhances the benefits of a traditional inspection by enabling our experts to deliver a more efficient, faster and more reliable inspection service.

Using a tablet application for inspectors and a desktop application for administrators, Inspection Manager provides near real-time inspection results through a secure syncing mechanism.

This provides:

- Rapid feedback from the inspectors
- Prompt and actionable insight for any faults
- Secure, traceable and auditable data
- Completion rates to track progress and support better forward planning
- Dashboard reporting to reduce administration and support decision-making



Ongoing performance and compliance

Failure to properly inspect and maintain your ATEX equipment leaves you exposed to the risk of explosion/combustion.

Giving you complete peace of mind, our team of inspection experts can manage your ATEX inspection and maintenance process for you, aligned to IEC 60079-17.

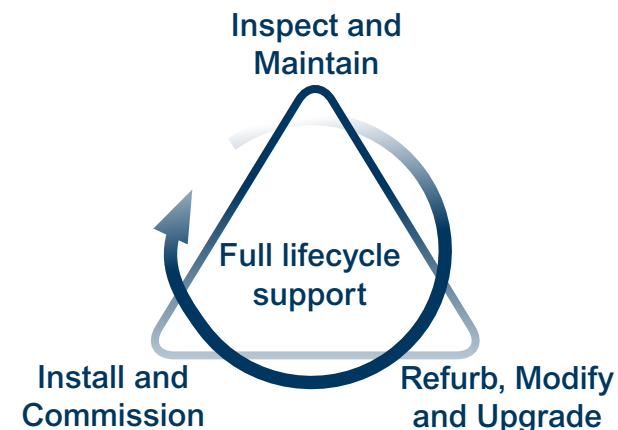


Maintenance and Integrity Management

With CompEx certified Technicians supported by our digital inspection tool, Inspection Manager, SMS can provide fast, secure and auditable inspection records to prove compliance, and prompt support in the event of any remedial actions.

Services include:

- HV, LV and instrumentation cable installations
- Cable management installations
- Electrical design, installation and commissioning in hazardous areas
- Ex audits or/and Ex registers to conform with European ATEX directive ATEX 95 & 137
- Electrical surveys
- Preparation and upkeep of client Ex equipment register
- Installation and maintenance of all Ex rated electrical equipment
- Visual, close and detailed inspection of Ex (hazardous areas) equipment using CompEx certified technicians
- Constructing installation and maintenance procedures
- Fire and gas installations



The cost of ageing equipment

As equipment ages, it requires an increased frequency of proactive and reactive maintenance to sustain performance.

The primary reasons for upgrading any Electrical or PLC system is obsolescence, or a requirement to add additional features which the existing system cannot support.

Scheduling maintenance, modifications and upgrades at pre-planned intervals helps to:

- Maintain asset performance
- Prevent unplanned downtime
- Negate the high costs associated with reactive measures.

System upgrade services

SMS can provide upgrades for various PLC systems from various manufacturers; for example Allen-Bradley PLC5 and Siemens S5 PLCs, to newer systems such as S7-300s – and can fully advise on the performance enhancing solution best suited to your needs, including:

- Innovative solutions to enhance efficiency and performance
- System re-rates and modifications to best suit the latest process conditions
- Modifications to retro-fit the latest technologies, such as IoT and remote monitoring.

In-house built electrical systems

SMS design and manufacture an extensive range of Instrumentation, Control, and Automation panels for a wide range of industries - with all systems developed and built in-house.

All SMS systems can also be developed for multiple process areas and environments, from industrial to Zone 0 hazardous areas (including dual certification to ATEX & IECEx, and also NEC500 Class I Division 2).



Expertise, quality and control

All of our panels are designed by time-served engineers to industry standards using the latest software and are built to exacting specifications by trained electricians and CompEx engineers.

Operating as a Bartec-Technor partner, our hazardous area offering includes the largest 316L Ex d enclosures on the market, up to 944x1594x509 mm (465 litres), and custom, made-to-measure, Ex e / LCP panels.

Key control system examples include:

- Programmable Logic Controllers (PLC); Siemens, Allen-Bradley and others.
- Master Control Systems (MCS)
- LV Switchboards / MCCs / Distribution Panels
- Fire and Gas Panels
- Local Control Panels (LCPs)
- Junction Boxes
- ESD/Shutdown Panels
- Consoles and Control Desks
- Generator Control Systems
- Navigational Aids

Ensuring a fast start-up

As an important part of project delivery, our engineers will ensure that your system is installed correctly and ready for use with maximum efficiency.

Working collaboratively with your project manager and engineers, SMS' technicians have the experience to provide you with all the advice you will require while your new system or system upgrade is being installed.

SMS' technicians provide a full range of services from installation to pre-commissioning and commissioning, site acceptance testing and personnel introductory training.

We will also advise on operating and maintenance documentation, spares and fault finding.

Visit www.sms-alderley.com/electrical-and-instrumentation for more information.

Case Studies

Electrical & Instrumentation

Freshwater Pumping Station

Our client specialises in the design and construction of water processing and management projects.

At a key site in the East of England, their high-voltage pumps, originally installed between 1968 and 1972, were no longer performing as required and there was a need to increase pumping capacity.

The challenge: remove, refurbish, modify and reinstall the water pumping equipment to meet today's water pumping requirements.

The solution: SMS provided electrical services relating to the refurbishment and construction of freshwater pumping stations. Using CompEx approved electrical technicians, our scope included small power & lighting, pump & control room switchgear, LV & MV switchgear, instrumentation and power cable installation & termination.

The project was supported by our experienced back-office team of engineers and coordinators.

The result: The refurbished equipment provides continued, long-term service, ensuring high volume demand for water pumping is available, when required, and in an efficient manner.

Fire and Gas E&I Installation

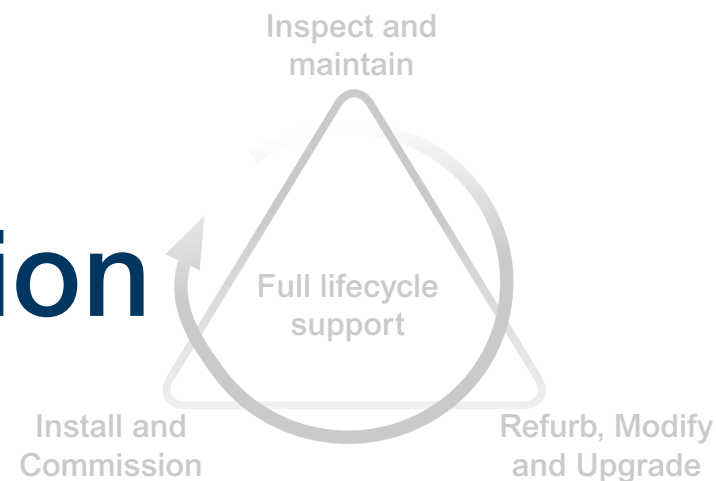
Our client is a leading operator in the UK North Sea, operating dozens of manned and unmanned offshore installations as well as two onshore terminals where gas is received, treated, metered and then exported into the UK National Grid.

The challenge: install fire and gas detection system to meet HSE requirements at a gas processing plant of strategic national importance.

The solution: SMS utilised both our design and installation capabilities to complete this scope. Our engineering team completed the design of the electrical cable runs, whilst our CompEx approved electrical technicians completed the site installation, testing and commissioning of power & instrumentation cables and control equipment, much of which was in a Zone 1 Hazardous Area.

Our on-site technicians also completed the fabrication and erection of cable support and management systems, with the cable supply undertaken by our global supply chain network, ensuring all items were compliant to the latest standards and available on-time and at the best value.

The result: The installation was completed on schedule and in accordance with client and legislative requirements.



Choke and Kill Skids E&I Installation

SMS was contracted by a specialist provider of high-specification pressure-control equipment. The end user is a leading global provider of drilling solutions and services.

The challenge: complete E&I installation on Choke and Kill skids for an offshore oil and gas project.

The solution: SMS provided a full turnkey E&I installation service, encompassing procurement of materials, project management, installation and commissioning.

Utilising our global supply chain network, we were able to procure materials in a prompt manner to ensure we kept to the strict project deadlines.

Project management was undertaken by our in-house E&I team with on-site installation and commissioning completed by our CompEx approved electrical technicians.

The result: The installation was completed on schedule in an extremely tight project timeline, and we are now working with them to undertake the E&I installation on a second project.

About SMS

The leading provider of hydraulic and electrical control systems for the global energy industry.

Initially established as a single-source hydraulic services provider for operators in the Southern North Sea, SMS' extensive range of solutions are now utilised on offshore, floating and onshore developments around the world.

Repeatedly partnering with some of the biggest names in the energy industry, our customers benefit from unrivalled customer service, market-leading solutions and complete through-life support.

From front-end engineering, manufacturing and testing at our state-of-the-art facilities, to installation, commissioning and aftermarket services to optimise asset performance, SMS is your trusted partner for hydraulic and electrical control systems.



A single-source provider



Delivering innovative engineering solutions



Best-for-application and best-for-business solutions



Ensuring asset integrity and optimised performance



Throughout the life of your assets



Technical excellence: delivered

Forms Part of

Alderley



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