A leading designer and manufacturer of bespoke packages for the onshore and offshore oil and gas industry.
We provide world class services and products that add value to our customers within the oil and gas industry. We invest in our people, in facilities, in technologies and in market awareness.

We believe in making a difference, being open to change, meeting challenges and learning from our experiences. In the eyes of our customers, Alderley Group stands for partnership, technical excellence, safety, quality and service.

For details on accreditations and registrations for the Alderley operating companies visit www.alderley.com
Alderley Group

The largest dedicated systems integration capability

Alderley is a leading international supplier of modular packages for oil and gas onshore and offshore applications. With our headquarters in Gloucestershire, UK, our global facilities provide the largest dedicated systems integration capability for the oil and gas industry.

As an independent systems integrator, Alderley provides you with the technology that best fits your application. We have no bias to any particular technology or manufacturer and, as such, can bring you solutions that are best in class, best for the application and best for your business.

Our multi-disciplined engineering group provides expertly designed and manufactured solutions along with front end and through-life support services.

We have total focus on integrating systems to meet the demands of the oil, gas and petrochemical industries
A world of experience
Wherever you are, whatever your application – our experience will help you

Alderley has successfully delivered over 750 systems specifically for the oil, gas and petrochemical industries. We pride ourselves on our record of meeting the specification, delivery and budget expectations of major oil and gas companies and contractors throughout the world.

But don’t just take our word for it... here are just a few examples of the companies, projects and technologies that have made us a leading force in oil and gas modular packages including metering, hydraulic control systems and produced water treatment solutions.

- Saudi Aramco • BP • ExxonMobil • Maersk • Shell • Total • Cameron • ADNOC Gas Processing • ConocoPhillips • Apache • Petrofac • Qatargas • Fairfield Energy • Marafiq • Kuwait Oil Company • CNOOC •

Customer/Contractor: Ras Laffan Liquefied Natural Gas Co. Fluor Transworld Services Inc.

Project: Ras Laffan 3 Common Offplots Project, Qatar

Description: 4 x Cryogenic LNG metering systems utilising ultrasonic flow meter technology. Walk in analyser shelter with gas sampling and chromatograph. Operating temperature -161°C.

Customer/Contractor: BP Exploration

Project: Quad 204, North Sea

Description: Oil metering system with 4 x 33% export streams, 12” ultrasonic meters with a 30” bi-directional prover and sample system. Gas metering system with 2 x 100% export meter streams, 4” ultrasonic meters and one import meter stream. Includes gas analyser house, gas chromatographs and associated control systems.
Customer/Contractor: Total E&P Qatar
Project: Halul PWT Modification Project, Qatar
Description: 1 x Hydrocyclone skid consisting of 2 x 28” Hydrocyclone vessels with ‘quick opening’ closures and associated equipment. 1 x CFU skid consisting of 1 x CFU vessel and associated equipment including oil-in-water analysers. 1 x Chemical Injection skid to support both the CFU skid and other equipment.

Customer/Contractor: Saudi Arabian Oil Company
Project: Rehabilitation of Al-Mu’ajjiz Terminal, Saudi Arabia
Description: Surge Relief Systems (SRSs) consisting of a High Pressure Surge System and Low Pressure Surge System, each with 5 streams. Replacement of 12 streams consisting of block valves, surge relief valves, piping and associated instruments.

Customer/Contractor: Total Angola
Project: Kaombo FPSO Project, Angola
Description: 2 x Hydraulic Power Units (HPUs) with a unique hydraulic lifting arm designed to safely unseat and remove accumulators. Designed to be located in Zone 1 area, with 2 x 5000L Reservoir. 380 barg design pressure. Sil2 PLC hardware system with dual redundant processors. Structure capable of withstanding a blast overpressure of up to 0.5 barg.
Modular Packages
From single to multi-level integrated modular packages

Alderley designs and manufactures bespoke single to multi-level integrated modular packages for oil and gas onshore and offshore applications. This includes simple Chemical Injection Systems to more complex applications such as HIPPS, Metering and Produced Water Treatment Systems.

Wellhead Gas Conditioning
Unconventional gas refers to the deposits of natural gas trapped in shale and tight sands. This gas was not commercially viable to produce until recently. Alderley has the expertise to provide skid mounted wellhead packages for these applications along with for example - fuel gas conditioning, amine sweetening, odorization and sampling.

Surge Relief Systems
Alderley can design and manufacture Surge Relief Systems for pipelines, storage terminals and marine loading and offloading that will respond quickly yet smoothly in an emergency. Through clear specification and correct installation, an Alderley Surge Relief System will prevent accidents and damage to equipment and personnel.

Wellhead Control Panels
Safe operation of manned and unmanned platforms is vital for any oil and gas production field. Alderley has the knowledge and expertise to design and engineer Wellhead Control Panels for the monitoring, control and safe shutdown of Subsurface Controlled Safety Valves (SCSSV), Surface Safety Valves (SSV), Master Valves (MV), Wing Valves (WV) and other wellhead safety valves (e.g. Choke, ESD, HIPPS).
Emergency Shut Down (ESD) Control Systems

Alderley provides Emergency Shutdown/Isolation Valve packages. These systems form part of the Safety Instrumented System (SIS). The valves are capable of being functionally tested while in service (partial stroke-test) and can be supplied SIL rated.

High-Integrity Pressure Protection System (HIPPS)

HIPPS provide a solution to protect equipment in cases where:

- High-pressures and / or flow rates are processed
- The environment is to be protected
- Economic viability of a development needs enhancement
- Risk profile of the plant must be reduced

Alderley has the capability to provide both mechanical and electronically controlled HIPPS packages for inclusion in clients’ SIS. All HIPPS designed by Alderley are done in accordance to IEC 61508 and IEC 61511 by a global team of certified staff.

Chemical Injection Systems

Alderley specialises in the engineering and manufacture of all types of skid mounted Chemical Injection Systems. All Alderley systems are designed in accordance with applicable standards and regulations as well as to the client's specifications to ensure that a precise and accurate amount is injected into the system.

A typical package would include associated tanks, controlled volume pumps, gauges, strainers, pressure relief valves, calibration tube and instrumentation to control and protect the pump.

Our focus is on performance, reliability and safety in all modular packages.
Metering Systems

Your metering system should be designed and built to protect your bottom line

Alderley has been engineering fiscal metering systems for over 50 years and is best known for its quality, reliability and expertise in metering technologies, regulations and standards.

Our experience includes all metering techniques in varied applications along with analytical systems, provers and control panels. Our on-going dedication to the oil and gas industry means that we are continuously helping to develop new techniques and standards. We have supplied some of the largest metering systems in the world, including cryogenic liquid ethylene.

Gas and Liquid Metering Systems

We have the experience and knowledge to deliver high accuracy gas and liquid metering, proving, master metering and calibration packages whatever the technique required. Different technologies have different benefits and we can help you to make the right choice for your application.

Technologies include:

- Ultrasonic Meters
- Orifice Meters
- Turbine Meters
- Venturi Meters
- Coriolis Meters
- PD Meters
- Proving and calibration

Our knowledge, combined with engineering and fabrication expertise, ensures that your accuracy, reliability, safety and cost requirements are met. Having total control over our in-house fabrication, ensures you will get your system when you need it.
Sampling and Analysis
All high accuracy metering requires representative product quality measurement by sampling and analysis.

Our design and engineering expertise ensures that every component is carefully integrated to maximise accuracy and reliability. Our thorough understanding of technologies, applications and standards enables us to meet your technical specifications and gives you confidence in a measurement solution that delivers all of your project requirements.

- Vast experience in all areas of metering
- Independent advice on selection of best technology
- Complete integrated solutions - reduced risk, improved accuracy and reliability
- Innovative solutions for the most demanding application

Control Systems
A high accuracy metering system requires a comprehensive, reliable and workable control system to collect and process metering data. Alderley has designed, engineered, tested and delivered hundreds of control systems – from simple, standalone flow computers to sophisticated panels incorporating dual redundancy and the latest in supervisory systems.

- A choice of flow computer technology
- Supervisory systems and HMIs
- Flexible reporting
- Commissioning
- Operator training
- Systems upgrades

Software Applications
Providing an integrated suite of fiscal metering management software, designed to manage all key measurement activities.

- Flow measurement calculation package
- Instrument management system
- Turbine meter tracking
- Electronic logbook
- Meter proving management
Produced Water Treatment
Providing clear solutions with innovative design

However stringent your produced water treatment requirements, we can design and supply a system that meets your needs and surpasses environmental constraints, while maximising the income from the oil/gas field assets.

The challenges of ever more stringent water discharge specification levels to meet the tighter re-injection requirements and lower environmental limits on discharge, can have a significant effect on the hydrocarbon process train. If discharged prior to suitable processing, it can be detrimental to the environment.

At Alderley, we have a long experience in the management and processing of produced water, together with handling some of the more difficult applications. We can offer you advice and guidance through a range of services and technologies to ensure you meet production and produced water treatment goals.
A complete range, a complete solution

No single piece of equipment can tackle the complex process of treating produced water to meet increasingly stringent regulations for discharge or re-use. We offer a full range of solutions covering primary, secondary and tertiary water treatment with proven and advanced technologies such as our market-leading, high efficiency deoiling hydrocyclone.

- Highly efficient and compact solutions
- Guaranteed to meet your compliance levels
- High reliability
- Over 40 years’ experience and understanding of processes and issues
- In-house design and fabrication ensures high quality and fast deliveries

Supplied as either stand-alone or fully integrated skid-mounted systems, our produced water treatment units can be manufactured in-house, using one of our international fabrication locations. Alderley can provide anything from ancillary separation equipment to pre-conditioning and final polishing solutions.

Our complete produced water treatment capability supported by an experienced process and mechanical design service, provides a total solution for your separation needs. Our extensive fabrication facilities and expertise guarantee we will meet or exceed your expectations for a technically superior solution, delivered to you on time and within budget.

However stringent your requirements, we can design and supply a system that meets your needs.
SMS is a specialist in the design and manufacture of hydraulic, pneumatic and electrical control systems and a leading provider of Offshore and Onshore Hydraulic and Electrical services.

All systems are designed and tailored to suit the individual project specifications or client/SMS developed standardised design philosophies always incorporating safety, environmental and statutory requirements.

Hydraulic Power Units (HPUs)

The Hydraulic Power Unit (HPU) is designed to provide low and high pressure filtered hydraulic fluid to topside and subsea control valves and stored volume will be provided via accumulators in the event of loss of power.

Intervention and Workover Control Systems (IWOCSs)

SMS’s Intervention Workover Control Systems (IWOCSs) are designed to enable intervention and completion work on wells through existing subsea systems or control of customer specific intervention tooling.

Chemical Injection Units (CIUs)

Chemical Injection Units (CIUs) can deliver a highly accurate and repeatable dosage of a wide range of chemicals; they can deliver at a fixed pressure or to a required flow rate with closed loop feedback.
Wellhead Control Panels (WHCPs)

Wellhead Control Panels (WHCPs) are designed for monitoring, controlling and shutdown of Subsurface Controlled Safety Valves (SCSSV), Surface Safety Valves (SSV), Master Valves (MV), Wing Valves (WV) and other wellhead safety valves, (e.g. Choke, ESD, HIPPS) to ensure safe operation of manned and unmanned platforms.

Testing and Flushing HPUs (TFHPUs)

Testing and Flushing Hydraulic Power Units (TFHPUs) are designed to provide test fluid at the required pressures for leak, proof, and functional testing as required and flushing fluid at variable flow rates to clean external systems.

Topside Umbilical Termination Units (TUTUs)

A Topside Umbilical Termination Unit (TUTU) interfaces with the Hydraulic Power Unit (HPU), Master Control System (MCS) and Electrical Power Unit (EPU) to the Subsea Distribution Unit (SDU) via hydraulic / electrical power & signal and fibre optic communications. SMS has the technical expertise to design this standalone module for liquids or gases to all standards, including NORSOK if required.

Pressurised Control Cabins (PCCs)

Pressurised Control Cabins (PCCs) create a safe area office environment for personnel and equipment, with built-in HVAC and power control systems. SMS can design the PCCs to any size to contain the varied equipment and personnel numbers to suit each application.

Electrical Control Panels

SMS can design and manufacture an extensive range of electrical control panels for a variety of industries and environments, including zone 0/1/2 and non-hazardous areas. The panels can be designed to many industrial standards including ATEX, IECEx, NORSOK and NEC.

We work with our clients to drive down costs and increase efficiencies through smarter working practices and engineering excellence.
Services
Focusing on through-life support care for our customers

From project execution, installation and commissioning to through-life support care, our service packages can be tailored to your exact requirements. We have decades of experience and a total focus on the oil and gas industry – so you can rest assured that you will be dealing with people who fully understand your application, process and the challenges that you face.

Our commitment to our customers and to the oil and gas industry is absolute. We are always happy to discuss specific requirements and advise on the best support package for you. We have invested in the facilities and people to bring the services you need closer to you.

Installation and Commissioning
In the early stages of your system’s life, we want to ensure you get everything you need to meet project timelines and site needs. Along with providing support for installation and commissioning, Alderley also provide Factory Acceptance Testing (FAT) at our manufacturing locations or Site Acceptance Tests (SAT) on-site across all our product offerings.

Brownfield Upgrades and Modifications
Through our team of multi-disciplined, experienced engineers, Alderley can provide solutions for all brownfield modifications and upgrades across all our product offerings. Our integrated solutions look to maximise performance from existing assets and extend the life of production facilities.

Spares Management
Through planned maintenance schedules, management of spares, repair services and obsolescence support, we help customers plan their Operational Expenditure (OPEX) as well as assist in reducing costs associated with downtime and carrying excess inventory.

Consultancy and Audit Services
Our services include flow measurement consultancy, UKAS certified independent audits and uncertainty calculations.
Training

Alderley’s training programmes offer best in class courses that can meet the needs of your staff, whether training for a specific project or piece of equipment. Courses can be held at any of Alderley’s facilities or on-site.

Condition Based Monitoring (CBM)

Helping operators to reduce operating costs, Alderley offer Condition Based Monitoring (CBM). This CBM approach allows Alderley to spot upcoming equipment failure and proactively schedule maintenance when it is needed - and not before.

Care and Maintenance

Understanding that it is more efficient to prevent a problem than to repair it once it has happened, Alderley’s customer care ensures that you get the maximum value from your assets. All customer care contracts are as bespoke as our applications, but can typically include a guaranteed call out time, telephone support, periodic system health checks, off-site software backups and electrical and instrumentation site audits.

Calibration and Certification Services

A full Certification Service is offered by our service specialists. From meters to test equipment, Alderley can supply calibration certificates from internationally or nationally accredited laboratories.

Hydraulic Services

Hydraulic specialists are available 24/7 providing services such as pressure testing and flushing, surveys and remedial works, modifications, small bore tube inspections and preventative and corrective maintenance routines.

Hazardous Area Inspection and Design Services

For all our product offerings we can provide ongoing hazardous area inspection, maintenance, testing and design services to ensure you remain compliant with industry regulations. Whether onshore or offshore, Alderley have the equipment and experience of CompEx or IECEx Certified Inspectors to support your internal technical services department.

When you choose Alderley as your project partner we will stay with you every step of the way.