

# Alderley

Technical excellence: delivered



# Systems

Integrated solutions for the global energy industry



Repeatedly partnering with some of the biggest names in the energy industry, our solutions have been installed in offshore, onshore and floating facilities worldwide.

## Flow Control and Safety Systems



- Oil and Gas Modular Wellsite Skids
- Chemical Injection Units
- High-Integrity Pressure Protection Packages
- Emergency Shutdown Systems (ESDs)
- Surge Relief Systems
- Hydraulic Power Units (HPUs)
  - Including HPUs for: LNG Transfer, Barrier fluid (BF), Control fluid (CF), Production and Subsea Control Systems, Swivel Barrier Fluid, Turret SDV and Turret DTM
- Intervention and Workover Control Systems
- Wellhead Control Panels
- Testing and Flushing HPUs
- Topside Umbilical Termination Units
- Hydraulic Reelers
- Hydraulic Control Panels
- Ballast Control Systems
- Bunkering Hose Stations
- Electrical Control Panels
  - Including: LV Switchboards, Motor Control Centres, Generator Control Systems, Master Control Systems, Fire & Gas Control Panels, Programmable Logic Controllers and Main Switchboards
- Pressurised Control Cabins
- Hoses
  - Including: Hydraulic, High Pressure Subsea, Umbilical, Bunkering, Ship-to-Ship, Fire Safe, Drilling, Rotator and Cement Hoses

## Flow Measurement and Transfer Systems



- Gas Metering Systems
  - Including: Hydrogen, Ammonia, Helium, Natural Gas, Bio-gas, Methane, Butane, Propane, Ethane, Boil-off Gas, Flare Gas, Sales Gas and Feed Gas
- LNG Metering Systems
  - Operating at cryogenic temperatures to -162°C
- Liquid Metering Systems
  - Including: Crude, Heavy Oil, Condensate, Diesel, Kerosene, Jet A-1/JP-8, Fuel Oil, Liquid NGL, LPG, Naptha, Propylene, BTX (Benzene, Toulene, and Xylene), Sulphur and Asphalt (operating temperature of +260°C)
- Custody / Fiscal / Allocation Metering Systems
- Truck Loading and Unloading Systems
- Proving Systems
  - Including: Bi-directional Provers, Small Volume and Portable Provers and Water Draw Calibration
- Measurement and Control Instrumentation
- Gas Sampling and Analysis Systems
  - Including: Chromatography, density, Wobbe index, calorific value, dewpoint and sulphur analysis
- Liquid Sampling and Analysis Systems
  - Including: Fast loop or insertion automatic sampling, single or multiple atmospheric or pressurised sample receivers, density and viscosity measurement, water-cut analysis, RVP analysers and LPG chromatographs
- Control and Supervisory Systems
- Condition Based Monitoring System

## Separation and Treatment Systems



- Primary, Secondary and Tertiary Produced Water Treatment Solutions
- Separators
  - Including: 2- and 3-phase separators, and internals only solutions
- Deoiling Hydrocyclones
- Induced Gas Flotation
- Degassers
- Compact Flotation Units
- Filtration
  - Including: Guard Filters, Cartridge Filters, Nutshell Filters, Adsorption Filters and Media Filters
- Coalescence
- Chemical Injection Units
- Desanding Hydrocyclones
- Wellhead Desanders
- Solids and Sand Management

## Global Standards

All systems are developed in-house and can be designed to meet various global standards, including:

- NORSOK
- BP, Shell, Total, Maersk
- Saudi Aramco
- SEGAL
- GOST, IECEX, ATEX, CSA, FM, UL
- ONML
- PED
- ASME
- AISC, ASCE, Eurocode
- ANSI, MSS
- API (Incl. 6A and 17F)
- EN / ISO
- DNV