ODS PROCESS SYSTEMS

Optimize the production, conversion, storage and use of energy

ODS Energy Solutions

klöckner & co

WE ARE **ODS ENERGY SOLUTIONS**

Welcome at ODS Process Systems!

At ODS Energy Solutions, we offer the unique combination of business units for Custody Transfer Metering Systems and Process Systems (PWT, HPU, and Chemical Injection Packages), providing industry-leading solutions tailored to meet the specific needs of the energy sector.

ODS Process Systems is a dedicated division specializing in Hydraulic Packages, Process Water Treatment (PWT), and Chemical Injection Systems. With our skilled team and highly specialized engineers, combined with global manufacturing and service capabilities, we aim to be your trusted partner for your project needs.

With our independent project approach towards technologies and manufacturers we are able to make the best choices for your project based on the regulatory framework, performance requirements, commercial conditions and client preferences.

You can count on our team to be available, responsive and ready to support you!

Erwin Hogendoorn
CEO

WHAT SETS US APART

- **Focused** on providing industry-leading solutions
- **Independent** system design
- **Global** presence
- Since **1950**
- **Local** fabrication & support
- **Approved** by all major oil & gas companies
- **24/7** maintenance support
- On-site and lab **calibration** services

OUR MAIN ACTIVITIES

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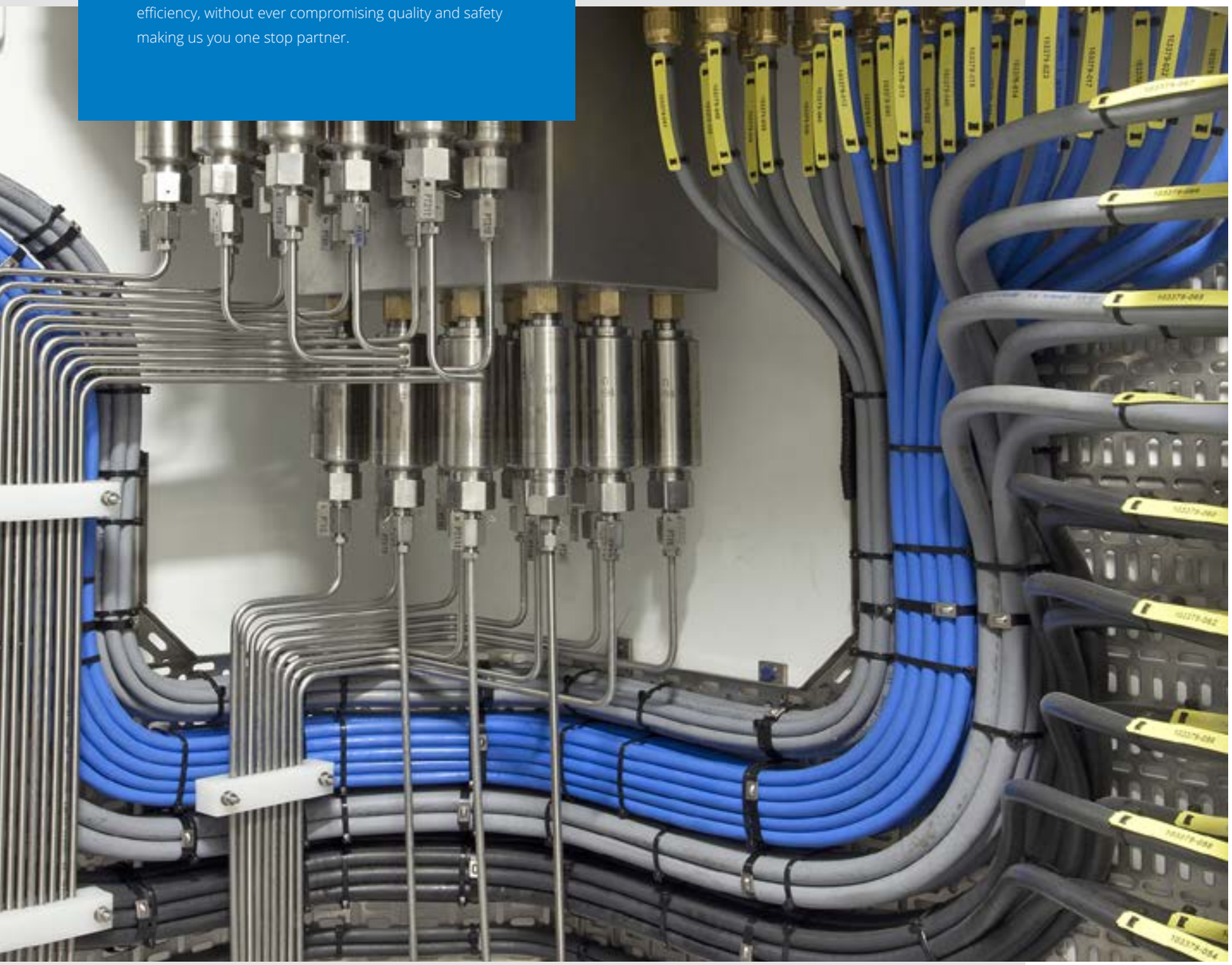
ODS can offer a wide range of hydraulic products to suit all your needs, inlcuding (Hydraulic Power Units (HPU's), Wellhead Control Panels (WHCP's), Topside Umbilical Temrination Units (TUTU's) and Chemical Injection Units (CIU's)
From project inception, the ODS experts work with you to minimise costs, meet tight deadlines and improve efficiency, without ever compromising quality and safety making us you one stop partner.

Did you know?

1/3 of all FPSOs are equipped with ODS packages.



HYDRAULIC PACKAGES

The ODS Process and Energy packages are used in the energy distribution market in various applications.

Hydraulic Power Unit (HPU)
Our Topside & Subsea Hydraulic Power Unit (HPU) solutions are designed with working pressures up to 20,000psig and beyond. HPUs are designed to provide pressurised filtered hydraulic fluid to (often safety critical) control valves. In the event of a loss of power, stored volume is provided via accumulators to ensure continued safe and effective operation.
Typical offshore (FPSO) applications for HPU's are:

- Production systems incorporating topside and/or subsea control valves
- Barrier fluid valves
- Turret actuated valves and disconnect systems
- Ballast control valves

Topside Umbilical Termination Unit (TUTU)
Typically situated next to the umbilical hang-off, the TUTU interfaces with other hydraulic and control units, TUTUs enable the controlled isolation and bleeding of systems.
ODS offer Topside Umbilical Termination Unit (TUTU) solutions with working pressures up to 20,000psig and beyond, compatible with a wide range of fluids and gasses, client specific isolation philosophies and junction boxes for electrical terminations.

Wellhead Control Panel (WHCP)
ODS can design, assemble and install wellhead control panels (WHCP) with working pressures up to 20,000psig and beyond that are designed for monitoring, controlling and shutdown of various subsurface and surface valves for the safe operation of oil and gas production wells.

PRODUCED WATER TREATMENT

Minimizing risk to the environment while enhancing operational efficiency is becoming more crucial. ODS can design, manufacture and install primary, secondary and tertiary solutions to meet your discharge requirement.

Technologies available:

Hydrocyclones (primary & secondary)

- Deoiling Hydrocyclones
- Desanding Hydrocyclones

Compact Flotation Units (primary & secondary)

For significant process performance on a minimal footprint, our Compact Flotation Units (CFUs) have from 50 seconds to 10-minute resonance time, in the rite conditions can achieve 30 mg/L.

Induced Gas Flotation (secondary)

Enhanced conditioning of produced water and solids in preparation for discharge, reuse or further treatment.

- Standardised or customised
- High performance separation
- Fully integrated solutions

Filtration (secondary & tertiary)

We combine a variety of technologies including adsorption, coalescing, solids filtration, media filters and nutshell filters to achieve the strictest international reinjection and/or discharge requirements, can achieve 15 mg/L. d

Types of filter available:

- Guard Filters
- Solids Filtration
- Adsorption Filters
- Nutshell and Media Filters

Did you know?

Hydrocyclones can contain over a 150 installed liners.

CFUs are generally for offshore applications.

Surge relief packages have a similar design to ODS metering packages, with straight length requirements and spare stream capacity. Surge relief packages are rigid structure design with the isolation valves bolted directly to the structure.

SURGE RELIEF & PRESSURE PROTECTION SKIDS

ODS design surge relief and pressure protection systems with both accident prevention and equipment longevity in mind, responding quickly yet smoothly in an emergency.

Transient pressure waves are generated in piping system whenever there is a sudden change in flow/velocity. This highpressure wave is commonly referred to as surge pressure.
This typically occurs when:

- Pump power failure
- Loading stations
- Rapid valve opening and closing

Pressure surges arise from sudden events occurring along the pipeline, including pump power failure, loading stations or rapid valve opening and closing.

The installation of an appropriate Surge Relief System, which swiftly opens relief valves to release the excess pressure into a dedicated safety outlet, reliably prevents detrimental incidents that put your people, surroundings and equipment at risk.

Through clear specification and correct installation, which proves crucial to the dependable functionality of the system, our experienced engineers can design and manufacture Surge Relief Systems for pipelines, storage terminals and marine loading and offloading that will prevent accidents, while limiting damage to equipment.

Did you know?

Surge relief & pressure protection skids can be used for handling different liquids such as crude oil, LPG, refined products, petrochemical and various chemicals.

CHEMICAL
INJECTION UNITS

ODS can offer Chemical Injection Skids ranging from single tank single pump skids to multi story, multi tank & pump skids "ideal for FPSO applications"with dosing rates from below 0.01 l/min to more than 400 l/min and working pressures up to 20,000psig.

Chemical injection involves the controlled injection of chemicals into a system or process. It is used to achieve a range of objectives, including corrosion inhibition, foam reduction, flow improvement enhancing oil recovery, and various other chemical processes. The technique offers a precise and measured way to introduce the chemicals into the system, ensuring performance and waste mitigation.

Components of a Chemical Injection Skid:

Storage Tanks: To hold the chemicals to be injected into the process. They come in various sizes, materials and shapes and can be atmospheric or pressurized and certified.

Pumps: Responsible for the precise transfer from storage tanks to the injection point. They ensure a consistent and controlled flow rate of the chemicals into the system, commonly API-675 certified pumps.

Metering and Monitoring Devices: These devices measure and monitor the flow rate and pressure of the chemicals being injected. They provide real-time feedback and data to ensure accurate dosing and system performance.

Valves and Control System: Valves control the flow of chemicals to the injection point.

Safety Features: Chemical injection skids are equipped with safety features, such as pressure relief valves, leak detection systems, and emergency shutdown capabilities, to prevent accidents and ensure operator safety.

Instrumentation: Various sensors and instruments are integrated into the skid to measure parameters like temperature, pressure, and chemical levels, providing valuable information for process control and optimization.

Piping and Tubing: These can be in a wide array of materials to suit the flowing process medium ensuring system longevity.

Did you know?

ODS can develop the CIU system with onboard or remote PLC and MCC to suit your control and monitoring needs.

Process construction materials can range from CPVC, 316 st.st through to exotics such as Alloy 625 and 6MO.

Process medium can range from methanol to sodium hypochlorite.

LET'S TALK!

Contact your local office now

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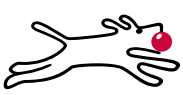

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