

# **COMPANY OVERVIEW**



### TIS Manufacturing | Company Overview

TIS Manufacturing is a specialist in the design, manufacture, refurbishment and rental of well service and subsea control equipment for the energy industry.

Our equipment is built to the highest quality and safety standards, and is supported by unrivalled after sales service.



TIS Manufacturing offers comprehensive experience in engineering and operation of well service and subsea control equipment, allowing us to provide superior bespoke solutions to suit the unique requirements of our global client base.

### TIS Manufacturing | Product Lines

#### **SUBSEA**

#### **Umbilical Reeler Equipment**

- ▶ IWOCS Umbilical Reelers
- Drilling Umbilical Reelers
- Lubricator Valve Umbilical Reelers
- Nitrogen Hose Reelers
- Cable Reelers
- Umbilical Arch Sheaves
- Under Roller Spoolers
- Storage Drums

#### **Subsea Controls**

- MQC Stab Plates
- Umbilical Termination Assemblies (UTAs)
- Subsea Distribution Units (SDUs)
- Subsea Accumulator Modules (SAMs)
- ▶ Hydraulic/Electrical Flying Leads
- ROV Panels
- Test Stands
- Deployment Baskets
- Running Tools

#### **Topside Equipment**

- Subsea HPUs
- Subsea Control Units
- Accumulator Skids
- Control Cabins
- ESD Units
- ► Topside Umbilical Termination Units (TUTUs)
- Hydraulic Distribution Panels (HDPs)
- ▶ Flowhead Control Units
- Chemical Injection Units
- ▶ Triplex Pump Units

#### WELL INTERVENTION

#### Wireline Equipment

- Wireline Units
- Wireline Masts
- Powerpacks
- Sheaves & Ancillaries

#### **Pressure Control Equipment**

- Wireline Valves
- ▶ Stuffing Boxes & Grease Injection Heads
- Pump-in Tees
- In-situ Test Subs
- ▶ Tool Traps & Hydraulic Tool Catchers
- Lubricator & Riser Pressure Sections
- Crossovers & Ancillary Pressure Control Sections

#### **Pumps & Panels**

- Wireline Valve Control Panels
- Wellhead Control Units
- Flowhead Control Units
- ▶ Triplex Pumps
- Pressure Test Pumps
- ▶ Grease Injection Units
- ▶ Chemical Injection Units

#### **Coiled Tubing Equipment**

- Coiled Tubing BOPs
- Coiled Tubing Control Units

#### **Capillary Equipment**

- Capillary Winches
- Powered Sheaves
- Powerpacks

### Subsea | Umbilical Reeler Equipment | Umbilical Reelers

TIS Umbilical Reelers are designed to accommodate umbilical products with multiple hydraulic, chemical, electrical and fibre optic power and signal cores.

Bespoke umbilical reelers can be configured.

Bespoke umbilical reelers can be configured to deploy and recover any length and diameter of umbilical product, with standard build types including IWOCS Umbilical Reelers, Drilling Umbilical Reelers, Lubricator Valve Umbilical Reelers, Nitrogen Hose Reelers and Cable Reelers.



### Subsea | Umbilical Reeler Equipment | Sheaves, Spoolers & Drums







TIS Umbilical Arch Sheaves are designed to facilitate the deployment arrangement of umbilical product during well intervention operations

TIS Umbilical Spoolers are designed for controlled transfer of umbilical, hose or cable onto a reeler drum.

TIS Storage Drums & TIS Transportation

Baskets are designed for storage and
handling of umbilical, hose or cable, and
ancillary items.

### Subsea | Topside Equipment | Subsea HPUs

TIS Subsea HPUs are designed to control and monitor subsea trees and associated subsea equipment during well intervention operations, and are typically accompanied by an IWOCS Umbilical Reeler as part of complete Intervention Workover Control Systems (IWOCS).

Bespoke HPUs can be engineered to govern multiple functions including pump control, subsea valve operation, ESD and EQD functions, all from a single containerised unit using a programmable logic controller system.



### Subsea | Topside Equipment | Subsea Control Units

TIS Subsea Control Units are designed to provide control for a range of critical subsea valves including subsea trees, BOPs and other equipment during well intervention operations.

Bespoke units can be engineered to meet specific operational requirements, accommodate 20 or more outlet functions, and retain an operator friendly build that allows for easy maintenance in the field.



### Subsea | Topside Equipment | Subsea Control Units

TIS Control Cabins are designed to accommodate multiple hydraulic electric control stations, monitoring stations, and workstations in a containerised or open console housing.

Bespoke units can be engineered to meet specific operational requirements, accommodate multiple control functions, and retain an operator friendly build that allows for easy maintenance in the field.



### Subsea | Topside Equipment | Well Control



TIS Flowhead Control Units are designed to provide control for the flowhead unit, which supports the test string and provides a means of well control over the flow of wellbore fluids during well intervention operations.



TIS Choke Manifold Control Units are designed to provide control for the choke line valve on the well, which redirects mud and refuse from the well bore to the choke manifold when a kick occurs during well intervention operations.



TIS Lubricator Valve Control Units are designed to provide control to the lubricator system, which isolates pressure or flow above or below its position in the well string during well intervention operations.

### Subsea | Topside Equipment | Well Control



#### **TIS Topside Umbilical Termination Units**

(TUTUs) are designed to provide a conduit between a subsea umbilical and topside control systems such as Subsea HPUs and Chemical Injections Systems.



#### TIS Hydraulics Distribution Panels (HDPs) are

designed to operate critical valves on any offshore or land based installation, and are typically configured to suit a high, medium or low pressure range.



TIS Accumulator Skid Units are designed to provide additional stored volumes of energy to enable changes to BOP Ram functions, speeds, controls, and higher shearing pressures during well intervention operations.

### Subsea | Topside Equipment | ESD & Pump Systems



TIS ESD Control Units are designed to either manually or remotely close a valve in response to a pipe leak or break, malfunction or other similar emergency which involves loss of well control during well intervention operations.



TIS Chemical Injection Units are designed to introduce various chemicals into the well for cleaning blocked perforations, reducing corrosion, improving flow-assurance, and several other critical applications.



TIS Triplex Pumps are designed for high pressure pumping applications that are typically between 20 and 400 bar, and are used in a variation of operations including well intervention.



TIS Pressure Test Pumps are designed as a safe and reliable facility for pressure testing pressure control equipment during well intervention operations.

### Subsea | Subsea Controls | Subsea Intervention Systems

TIS Manufacturing provides fabrication, assembly and integration of proprietary subsea pressure control equipment as part of the delivery of a complete Intervention Workover Control System.

Subsea intervention packages are designed to connect a subsea tree or wellhead to a vessel for tool deployment during wireline or coil tubing well intervention operations.

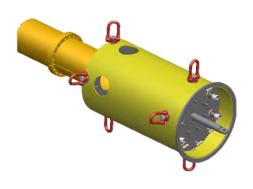
Built to perform multi-disciplinary operations during a single mobilization, subsea well intervention packages are a major asset in increasing time efficiency.



### Subsea | Subsea Controls | SDUs, UTAs & SAMs



TIS Subsea Distribution Units (SDUs) are designed to distribute hydraulic & electric control signals, and are typically configured to suit a high, medium or low pressure range.



TIS Umbilical Termination Assemblies (UTAs) are designed to provide a conduit between a topside umbilical and subsea control equipment such as Trees, UTAs & SDUs.



TIS Subsea Accumulator Modules (SAMs) are designed to provide additional stored volumes of energy required to meet speed, pressure & control functions of subsea equipments.

### Subsea | Subsea Controls | Subsea Modules



TIS Multiple Quick Connect (MQC) Stab

Plates are designed to enabling hydraulic and electrical connection between subsea control equipment such as Trees, UTAs & SDUs.



TIS Flying Leads are designed to provide a conduit for hydraulic, chemical and electrical signals between subsea control equipment such as Trees, UTAs & SDUs.



TIS Subsea Baskets are designed for storage and handling of subsea ancillary equipment, such as flying leads or tools, from surface to subsea.

# Well Intervention | Wireline Equipment | Units, Masts & Powerpacks



TIS Wireline Units are designed for controlled deployment and recovery of slickline, braided line and electric line from an open console or fully containerised unit, during well intervention operations.



TIS Wireline Masts are designed to position a surface well intervention manifold onto the wellhead and assist in the deployment of wireline into the top of the manifold rig-up.



TIS Powerpacks are specifically designed for application with TIS Wireline Units and TIS Wireline Masts during well intervention operations.

### Well Intervention | Pumps & Panels | Wireline Valve Control Units

#### TIS Wireline Valve Control Units are

designed to control wireline valves, which provide a positive seal and retain well pressure around a stationary slickline or braided line during well intervention operations.

Bespoke and standard units can be engineered to meet specific operational requirements, configured to govern single, dual, triple and quad valves, and retain an operator friendly build that allows for easy maintenance in the field.



### Well Intervention | Pumps & Panels | Well Control & Pumps



TIS Wellhead Control Units are designed to control the wellhead, which provides the surface based structural and pressure containing interface with a well during well intervention operations.



TIS Flowhead Control Units are designed to provide control for the flowhead unit, which supports the test string and provides a means of well control over the flow of wellbore fluids during well intervention operations.



TIS Triplex Pumps are designed for high pressure pumping applications that are typically between 20 and 400 bar, and are used in a variation of operations including well intervention.

### Well Intervention | Pumps & Panels | Pump Systems & Ancillaries



TIS Pressure Test Pumps are designed as a safe and reliable facility for pressure testing pressure control equipment during well intervention operations.



TIS Grease Injection Units are designed to introduce grease into a lubricator stack, typically for braided line applications, during well intervention operations.



TIS Chemical Injection Units are designed to introduce various chemicals into the well for cleaning blocked perforations, reducing corrosion, improving flow-assurance, and several other critical applications.



Products comprise a range of equipment designed to assist in the controlled deployment and recovery of wireline during well intervention operations.

TIS Sheaves & Ancillary Wireline

# Well Intervention | Pressure Control Equipment



TIS Wireline Valves are designed to provide a positive seal and retain well pressure around stationary slickline or braided wire during well intervention operations.



TIS Stuffing Boxes are designed to retain well pressure around moving and stationary slickline while guiding it into the top of the surface well intervention manifold.



TIS Grease Injection Heads are designed to retain well pressure around moving and stationary braided or electric line while guiding it into the top of the surface well intervention manifold.

### Well Intervention | Pressure Control Equipment



TIS Pump-in Tees are designed to provide a large flow fluid entry path into the surface well intervention manifold to complete hydrostatic testing or pump fluid into the well.



TIS In-situ Test Subs & TIS In-situ Lift-Test

Caps are designed to provide an economic
and time efficient means for pressure testing
the surface well intervention manifold prior
to exposing it to live well pressure.



TIS Lubricator & Riser Sections are designed to retain well pressure and to accommodate the length of the tool string during wireline well intervention operations.

### Well Intervention | Pressure Control Equipment



TIS Hydraulic Toolcatchers are designed as a safety measure for catching the tool string using collets at the top of the surface well intervention manifold in the event of the wire being stripped from the rope socket during wireline operations.



TIS Tool Traps are designed as a safety measure positioned at the base of the surface well intervention manifold, using a spring loaded flapper mechanism to prevent the tool string from being dropped down the well.



TIS Ancillary Pressure Control Items include
Crossovers & Tubing Adapters, Swabbing Heads,
Hydraulic Line Wipers, Test Caps & Stumps, Lift-Test &
Lifting Caps, Quick Union Rig-up Dollies, Wellhead
Flange Adaptors, and O-Rings & Thread Protectors

# TIS Manufacturing | Global Operations

#### HEAD OFFICE

Aberdeen

#### SERVICE SUPPORT CENTRES

Baku

Doha

Muscat

Port Harcourt

#### EQUIPMENT DEPLOYMENTS

**UK North Sea** 

Scandinavia

Caspian Region

Middle East

North & West Africa

Asia Pacific

Australia & New Zealand

Canada

Gulf of Mexico

South America



# TIS Manufacturing | Manufacturing Facility

#### **Global Headquarters**

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# TIS Manufacturing | Our People

The TIS Manufacturing Team boasts a wealth of experience in engineering of well service and subsea control equipment.

Our application consultants work with the client to develop superior bespoke solutions to meet any wireline or subsea intervention operational requirement.

A department of expert design engineers work together with specialist workshop technicians to turn innovative concepts into field-proven technology.



### TIS Manufacturing | Our Clients



































### TIS Manufacturing | Subsea

### **SUBSEA**

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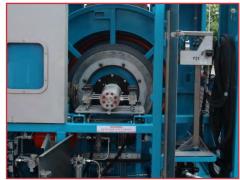




# Case Studies | Drilling Umbilical Reeler Package









# Case Studies | Nitrogen Hose Reeler Package







# Case Studies | Cable Reeler Package





# Case Studies | IWOCS & Subsea Intervention Package













### TIS Manufacturing | Well Intervention

### WELL INTERVENTION

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- Powerpacks
- ▶ Sheaves & Ancillaries

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#### **Coiled Tubing Equipment**

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#### **Capillary Equipment**

- Capillary Winches
- Powered Sheaves
- Powerpacks



# Case Studies | Lynx Containerised Wireline Unit



### Case Studies | Dual Drum Wireline Package





# Case Studies | Wireline Package





# Case Studies | Wireline & Pressure Control Package

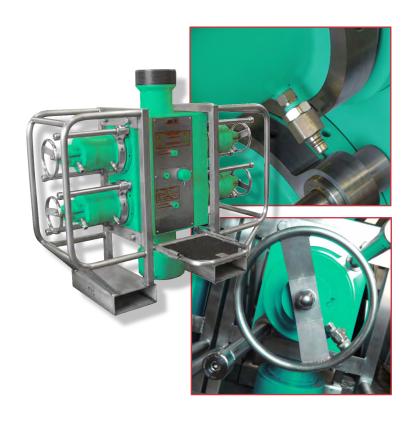




# Case Studies | Pressure Control Package



# Case Studies | Pressure Control Package







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