Excellence in Energy Services for over 100 years

Pressure Control Equipment Catalogue

Pressure Control Equipment Product Catalogue

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Hunting provides products and services to the world’s leading national, international energy companies and oil service companies enabling the extraction of oil and gas.

Manufacturing and sales locations are located in the key energy producing regions of the world.

Global Business Divisions
- Connection Technology
- Dearborn
- Drilling Tools
- Electronics
- Manufacturing
- OCTG
- Specialty Supply
- Subsea Technology
- Titan
- Trenchless Products
- Well Intervention Equipment
- Specialty Supply
- Subsea Technology
- Titan
- Trenchless Products
- Well Intervention Equipment

Proprietary Technology
Hunting owns and develops proprietary patented products with a full range of applications below the wellhead including mud motors, premium connections, well perforating, logging and intervention tools.

Geographic Footprint
In strategic locations around the world Hunting owns and operates plants, properties and equipment, employing people to serve its global customers with local services and products.

Quality Assurance
It is essential that products and services provided by Hunting are designed and manufactured to conform to the agreed API, proprietary licensor, or other specification of the customer, meeting their needs and expectations the first time, every time.

It is the policy of Hunting that only the highest quality products and services, that meet all specification requirements, are provided to customers. Hunting operates a corporate Quality Management System covering all worldwide locations.

Health, Safety and Environment
Hunting is committed to achieving and maintaining the highest standards of safety for its employees, customers, suppliers and the public. All Hunting business units consciously operate in a manner that includes environmental matters as an integral part of its business plan.

Hunting’s aims are no accidents, no harm to people, and no damage to the environment. The Hunting goal is “Total Customer Satisfaction”.

www.huntingplc.com
Hunting designs, manufactures and supports surface Pressure Control Equipment to allow clients to perform successful and safe well interventions in the most arduous conditions.

Equipment is manufactured to the most stringent quality standards comprising a comprehensive range including specialised packages to greatly reduce manual handling and enhance the safety of any intervention operation.

Pressure Control Equipment

Hunting’s extensive product portfolio includes wireline valves, stuffing boxes, grease heads, lubricators and tool catchers.

Hunting’s dedicated and experienced well intervention division is committed to improving well productivity and safety. Our success has been built around knowledge of the industry, correct planning, reliability of equipment and ability to react to client requirements through timely engineering service and teamwork.

Pressure Control Equipment Product and Service Offering

With a proactive approach to the ever increasing market demand for well engineered solutions for on and offshore operations, Hunting does not merely provide tools for sale but also on a rental basis offering design, build, testing and maintenance capabilities.

- In-House Specialist Engineers
- Purpose Built Facilities
- Highly Experienced Technicians
- Various Recertification including Annual and Major
- Pressure Testing
- Hydraulic Flushing
- Flying Squad
- Water Blasting
- Painting Services
- Portable Pressure Test Container

With manufacturing, sales and distribution centres strategically located in all major oil and gas regions of activity. Hunting is able to offer pressure control equipment from stock to support client activity.

Hunting continues to invest in the latest workshop technologies to ensure that a high quality level of service is maintained, including purpose built facilities and highly experienced technicians.
RigUp is a web based application that allows users to build a virtual rig-up which can be submitted directly to the Well Intervention sales team.

RigUp allows customers to select components from a pictorial list and select union type and size, wire size as well as additional accessories such as spares and redress kits.

Once submitted, one of the well intervention technical sales engineers will be in touch to discuss your requirements.

Work on the go
Create and save your pressure control equipment requirements at the rig site, at home or in the office using mobile or tablet devices.

Custom Specification
Choose from a comprehensive specification list - select a union type and size, wire size, repair and redress kits.

Add Accessories
Select and add additional products as accessories to your order such as spares and alternative sizes.

Liaise Direct with Sales Team
After submitted your toolstring, our Well intervention sales team will contact you directly to discuss and finalise your order.
Ezi-Shear Seal Valve

Hunting is revolutionising the well intervention operations with the introduction of an innovative and universal ‘shear and seal’ valve which delivers improved operational safety, reliability and well integrity.

Features
- Wide range of cutting capabilities
- Independent shearing and seal faces
- Compact design, smaller than traditional shear and seal valves
- Dual hydraulic actuators
- Monoblock body
- Highly resistant to wear

Benefits
- Cuts slickline, braided, E-line and coiled tubing
- Improved safety and reliability
- Compact design gives improved wellhead access
- Increased torque through rotational forces
- Reduced leak paths
- Reduced redress frequency

The Technology
The technology provides a compact, reliable and quick mechanism for the shearing of slickline, wireline and coiled tubing then fully closing to establish isolation or sealing of the well bore.

Low volume hydraulic actuators allow rapid closure with standard accumulator type control panels. Intended for installation on or as close to the wellhead as possible. The Ezi-Shear Seal can be operated using existing or remote hydraulic control units.

The Design
The Ezi-Shear Seal compact design, in many cases, allows deployment through a standard offshore intervention hatch cover, negating the need to remove main hatch covers, reducing heavy lifts and potential shutting in of adjacent producing wells.

Its compact nature does not compromise its cutting capabilities and addresses the increasingly stringent industry requirements on shear and seal capabilities during well intervention operations.

The Innovation
Hunting’s Ezi-Shear Seal leads the way in innovation for well intervention shear seal applications. With independent shearing and sealing faces, the Ezi-Shear Seal outperforms the capabilities of any other shear and seal valve currently on the market.

Hunting’s unique Ezi-Shear Seal provides a superior cutting and seal capability for standard, offshore or high pressure applications where an additional level of pressure barrier contingency is required.

Hunting’s Ezi-Shear Seal leads the way in innovation for well intervention shear seal applications
Hunting Wireline Valves

**FEATURES**

- Ram position indicator rods
- Hydraulic cylinder support rods
- Non-rising manual stems
- Xylan coated ram bores
- Can be supplied with flange/hub or quick union connections
- Inconel inlays available

**BENEFITS**

- External indication of the ram position
- Reduced manual handling when accessing the rams
- Stems stay inside the cylinder reducing damage potential
- Bore protection against corrosion
- Connection best suited to client needs
- Ultimate protection in volatile well conditions

Hunting manufacture different ranges of hydraulic WLV’s, all with monoblock bodies and are available to suit standard or H₂S service.

Extreme cold weather options can be requested. The Hunting supplied WLV’s are briefly described below:

**Compact**

The Hunting Compact range was designed to offer low weight and better serviceability with fewer parts. These are available in bore sizes 3” and 4-1/16” with working pressures up to 15,000 psi.

**Conventional**

This range covers 5-1/8” through to 9” wireline valves with working pressures up to 15,000 psi.

**Ezi-Close**

Available with bore sizes from 3” through to 9” with working pressures up to 15,000 psi. Developed to meet changing industry needs. See feature page for detailed description.

Hunting wireline valves are available fitted with all standard industry quick unions or flange/hub connections. WLV’s can be requested with mixed connections.

**OVERVIEW**

Used as a safety device in the event of problems occurring when running wireline into a well, the wireline valve (WLV) provides a positive seal, containing well pressure around stationary slickline or braided cable during well intervention operations.

Working on the principle of horizontally opposed rams coming together to centralise the wire and seal around it, the rams form a seal across the bore of the WLV.

Different WLV configurations are available from a single ram set through to quad ram sets. Ram sets can be fitted with either slickline, braided, multiline or even shear seal rams.
EziClose® Hydraulic Cylinders

Wireline Valves

FEATURES
- Can be retrofitted to conventional and compact type WLV’s
- Complex type equalising assembly
- Ability to close the cylinder manually with WHP’s up to 15,000 psi
- Pressure equalisation across the hydraulic cylinder system

BENEFITS
- WLV can be upgraded with latest design to improve performance
- Allows glycol or grease injection, monitoring and bleed off capabilities
- Should the client deem it required the WLV can be closed manually
- Reduced closure time, hydraulic closure pressure does not have to fight against well pressure

Hunting balanced piston Ezi-Close hydraulic cylinders can now be closed manually against well pressure and, when using accumulated pressure, close at a vastly reduced time compared to industry requirements.

Ezi-Close cylinders can be retrofitted to both Compact and Conventional WLV’s enabling Customers to meet newer industry standards by adapting previously bought WLV’s.

Wireline Valve Equalising Manifolds

Wireline Valves

FEATURES
- Equalisation across individual sets of rams, pairs or the whole system
- Allows glycol and grease injection, separate injection point with integral check valves
- Ports for attaching system monitoring and bleed off manifolds
- Stainless steel legend plate showing circuit diagram

BENEFITS
- Pressure can be guided to or from the required location with full integrity
- Having two separate entry ports in the WLV removes the potential for a separate chemical injection sub. The integral check valve reduces the potential of external damage
- No need for the traditional manifold on the lubricator and also easier to access
- Conveniently placed and easy to follow guide that will not corrode

There are two equalising systems available, basic or enhanced

Basic
An equalising system allowing equalisation across an individual ram set.

Enhanced
The enhanced equalising assembly enables equalisation across individual ram sets, pairs of ram sets and/or the whole system. They also allow for injection of grease and chemicals (two ports), bleed off and monitoring of the well bore fluids.

Basic and Enhanced equalising assemblies use the similar blocks, valves and spools across the whole WLV range allowing customers to keep minimal stock covering their different sized WLV’s.
Work / Protection Frames  
Wireline Valves

Hunting can supply WLV Work Protection Frames for any WLV in their range.

This highly recommended accessory enables crew members to work at lubricator height using the drop down step.

These frames also provide protection to the equalising assembly, hydraulic cylinders and connectors whilst still allowing access to perform routine maintenance. Protection frames are available with certified lifting points.

FEATURES

- Work protection frame encompasses the WLV
- Provides a secure step/footing for crew
- Protect cylinder support rods whilst still allowing access for maintenance

BENEFITS

- Reduced exposure to damage when being rigged-up
- Built in step gives a work platform at the WLV

Cylinders can be opened and rams removed whilst still in the work protection frame

BENEFITS

- Large heavy duty steel frame that allows access by forklift truck or crane
- Provides internal protection with an easy pressure testing facility supplied
- Oil fill and drain system ensures bore parts remain in prime working condition
- All steel frames are supplied fully certified to BSEN12079 and DNV2.7-1 lifting specifications

BENEFITS

- Complete protection when shipping and transporting to the well site
- Can be tested immediately after maintenance
- Ensures bore parts remain in prime working condition
- Built as per industry standards

Shipping Frames  
Wireline Valves

Wireline valves need to be stored appropriately to guarantee longevity and prevent expenditure on spares.

The best way to store and protect an expensive WLV is within a shipping / storage frame. The heavy duty steel frame not only provides external protection but when fitted with a test stump enables pressure testing within the frame.

An oil tank is built into the frame along with a simple hand pump so that WLV’s can be filled with oil. No matter how long the WLV is left idle, and what the climate is, the working parts will remain in good working order. When the WLV is ready to be used the oil is simply returned to the tank.

Wireline Valves Wireline Valves

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Well Intervention | Pressure Control Equipment Catalogue
Wireline Valve Rams
Wireline Valves

Hunting supply WLVs with various ram configurations to best suit the operational needs of the client.

The inner seals can be blind for slick line operations, cable sized for stranded line operations with profile to match line from 3/16” up to 15/32” or multline type where the inner seal can be used across a range of slickline or stranded cables. Below are descriptions of the rams we regularly provide.

Universal Rams:
Designed for use when using Slickline, Cable sized or Multiline Type inner seals along with the correct wire guide.

X-Type Rams:
This ram type is recommended for use with 5-1/8” through to 9” wireline valves. The design was developed to eliminate the difficulties in sealing against broken in wire in large welders. The design ensures that the line will be centralised in the profile with no damage.

Shear Seal Rams:
Shear seal rams are all fitted with blind inner seals to create a barrier with no line present. The cutting blades will cut all lines up to 15/32”.
FEATURES

- Guides the slickline from the bottom hay pulley into the top of the lubricator rig-up
- Contains well pressure whilst the slickline is either moving or stationary
- Upper and lower bushings ensure accurate alignment into the centre of the packing stack
- Brass internal components prevent slickline damage
- Sheave and bracket made from high-quality castings
- Ball type check valve used instead of traditional blow out plunger

BENEFITS

- Light and user-friendly
- Materials used avoids damage
- Hardwearing and reliable
- Excellent seal characteristics
- Elastomers options available to suit specific applications
- Assembly supplied with load test certification

The Hunting hydraulic slickline stuffing box contains well pressure whilst the slickline is either moving or stationary and also guides the slickline from the bottom hay pulley into the top of the lubricator.

Slickline is passed over the sheave wheel and down through a hydraulic packing stack within the stuffing box body. Upper and lower bushings are provided to ensure that the slickline is guided into the centre of the packing stack. The hydraulic packing stack can be compressed from a safe distance should the packing leak due to wear.

The Hunting design philosophy is to create Stuffing Boxes that are rugged and reliable, whilst being as light and user-friendly as possible.

To avoid damaging expensive slicklines, internal components that are in contact with the wire are manufactured from brass, however other materials can be specified. A ball check valve is provided to prevent the escape of well fluids in the event of the slickline breaking.

The standard sheave bracket assembly is made from high-quality castings, a composite or aluminium sheave can be selected. Free movement of the sheave and bracket is enabled by high quality taper roller bearings and each assembly is supplied with load test certification.

The sheave is either manufactured from composite or aluminium, depending on the application. It is available in 16-inch and 20-inch diameters to suit all slicklines up to 0.160-inches and each assembly is supplied with load test certification.

Stuffing boxes are available to suit almost any pressure and any union size, however we will supply equipment to suit customer’s specific requirements.
EziLoad® Slickline Stuffing Box
Stuffing Boxes

FEATURES

- Separate light packing cartridge eliminates the need for the heavy part of the stuffing box to be connected to the upper lubricator
- A cam device simplifies the loading of wire onto the sheave
- Packing cartridge contains four rollers to ensure wires are tracked accurately
- Integral velocity ball check valve prevents the escape of well fluids

BENEFITS

- Overcomes the handling problem of increased weight and awkwardness of conventional slickline stuffing boxes
- Reduces the weight by 30 per cent
- Rollers offer secure wire retention and minimise wear
- Assembly supplied with load test certification

Hunting’s revolutionary EziLoad® Slickline Stuffing Box was designed to overcome the manual handling problems caused by the increasing weight and awkwardness of conventional slickline stuffing boxes. In addition to achieving this goal, many other innovations were also introduced, resulting in the EziLoad® stuffing box being the most advanced stuffing box available.

Leaving the heavy part of the stuffing box connected to the upper lubricator and designing a separate packing cartridge as the only part that needs moving, has resolved the manual handling problem. A conventional stuffing box can weigh 50kg or more, however the removed packing cartridge weighs in at only 14kg. A rope socket can be made up in this packing cartridge and loaded into the lubricator rig-up from the top. The body of the stuffing box offers a 2.750-inch through bore.

To allow the packing cartridge to be inserted or removed, the sheave bracket assembly pivots out of the way. As it does so, a cam device lifts three brass retainer rollers away from the sheave wheel, simplifying the loading of wire.

When returned to position, the rollers provide the most secure wire retention possible. The packing cartridge itself carries four additional rollers to ensure that the wire is perfectly centred at all times, minimising wear on the hydraulic piston, packing glands, packing and of course, the wire itself. The packing is larger than in a conventional stuffing box, resulting in improved sealing and wear characteristics. This is particularly significant as bigger slicklines become more common. To avoid damaging expensive slicklines, internal components that come in contact with the wire are manufactured from brass.

Within the packing cartridge is an integral velocity ball check valve, which prevents the escape of well fluids in the event of the slickline breaking. Additionally, the assembly has an integral injection facility. To compliment the conventional packing cartridge set up, additional clip-on modules can be supplied to provide a chemical injection bath facility, or even a ‘liquid seal’ grease injection facility (for the 15K MWP version).

There is a hydraulic pack off built into the top of the cartridge to allow compression of the packing from a safe distance should they start to leak due to wear.

The EziLoad® sheave is either manufactured from composite or aluminium, depending on the application. It is available in 16-inch and 20-inch diameters to suit all slicklines up to 0.160 inches and each assembly is supplied with load test certification.

The top load facility of the EziLoad® stuffing box can be enhanced through the use of an EziCatch® tool catcher and as such, both components can be supplied as a combined unit – the EziCombo®.
The Hunting Liquid Seal Head is used in conjunction with a conventional hydraulic slickline stuffing box to create the primary seal on a slickline, while maintaining pressure integrity when running in and out of the well.

These devices are particularly effective on high-pressure or hostile wells as they offer a seal with less friction than a conventional stuffing box would on its own.

Pressure control is achieved by passing the wire through several closely-fitting flow tubes and pumping grease into the annulus between the wire and the flow tube, at a pressure slightly above well pressure. The close tolerance between the wire and the flow tubes, combined with the design of the interface between each flow tube, creates a sequential pressure drop such that there is no residual well pressure while the wireline exits the top of the flow tubes. This is exactly the same principle used for a braided line grease injection control head.

The hydraulic slickline stuffing box, which is mounted on top of the liquid seal head, serves mainly as an emergency pack off should the grease injection system fail but also services the duties of wiping the wire and guiding the slickline from the bottom hay pulley into the top of the Liquid Seal Head.

A grease supply system capable of surpassing the expected well pressure is required. However, due to the design of the Hunting liquid seal head, the volume of grease required is minimal if flow tubes are sized correctly.

In order to avoid damaging expensive slicklines and to ensure the minimum possible drag on the wire, the flow tubes are manufactured from materials with very low-friction characteristics.

Hunting liquid seal heads are available to suit any pressure and service, with any quick union, and can be set up to suit any size of wire from 0.032 inches to 0.160 inches. Changing the wire size simply requires the installation of a new set of flow tubes, which can be achieved very quickly.

- Provides primary seal and maintains pressure integrity when running into/out of well
- Effective on high-pressure or hostile wells, offering a seal with less friction
- Manufactured from materials with low-friction characteristics
- Requirement of a grease supply system capable of surpassing the expected well pressure

**BENEFITS**

- Minimal grease requirement
- Less friction than a conventional stuffing box
- Reduces drag on the wire
TOOL CATCHERS

Open Hole Tool Catcher .......................... 27
EziCombo Toolcatcher/Stuffing Box ............. 28
Hunting Ezicatch® Tool Catcher ................. 29

FEATURES
■ Interchangeable collets to suit all industry standard fishing necks
■ Manufactured from light weight material
■ Always in catch position
■ Safe manual release system.

BENEFITS
■ Collets can be changed to suit standards industry fish necks 1.375” – 2.313”
■ Light weight material used to aid manual handling.
■ Eliminate the possibility of a dropped toolstring, preventing injury to personnel within the worksite.
■ Toolstring is broken down and released safely once the open hole tool catcher has been lowered.

The Hunting Open Hole Tool Catcher has been developed to eliminate the possibility of a dropped tool string during wireline open hole operations.

There is a possibility when pulling out of the well of the toolstring striking the top sheave causing wire failure and the toolstring to be released. The Open hole tool catcher has a collet within the top sheave catcher assembly that will latch the fishing neck preventing the toolstring from falling, potentially causing damage or injury to personnel around the worksite.

The captured toolstring can only be released by mechanical means once the system has been lowered to the ground.

Bespoke collet options available upon request.
**EziCombo Toolcatcher/Stuffing Box**

**Tool Catchers**

**FEATURES**
- Combines stuffing box and tool catcher into one short system
- Eliminate the requirement to purchase two separate units
- Removable packing cartridge
- 2.75 thru bore offers top loading facility
- Multi-catch tool catcher

**BENEFITS**
- Overcomes potential rig up height issues and reduced leak paths
- Cost saving solution to acquiring PCE
- Packing cartridge offers rapid and easy redress saving on operational downtime.
- Reduces manual handling issues by allowing the operator to quickly and safely load the toolstring with the stuffing box in situ.
- Catches all standard fishing necks from 1.00” up to 2.313”.

**Hunting’s EziCombo combines the patented EziLoad stuffing box with the EziCatch tool catcher producing an innovative combined assembly**

The two components go hand in hand both offering a 2.75 through bore to allow easy top loading access for toolstring components, reducing the likelihood of manual handling injuries.

The EziCombo eliminates the requirement for the join up quick union, reducing overall height, making it ideal where there are rig up height limitations.

**Hunting Ezicatch® Tool Catcher**

**Tool Catchers**

**FEATURES**
- Ideal for use with the EziLoad® Stuffing Box
- A safety device designed to catch the tool string in the lubricator
- The latch can support the weight of the tool string and prevent it from falling back into the well.

**BENEFITS**
- Allows for top loading of toolstrings when used in conjunction with the EziLoad® Stuffing Box
- Safety feature
- Supports the weight of a tool string up to 500 kilograms.

**Hunting’s Ezicatch® tool catcher has two main benefits; it will catch fishing necks from 1.188” through to 2.313” and the through-bore of 2.75” allows top loading of toolstring**

Six fingers close into the bore when hydraulic pressure is released to catch the fishing neck.

The hydraulic operated function has the fail safe mode designed to stay latched should hydraulic pressure be lost ensuring the safety of the crew and can only be released when pressure is applied.
GREASE HEADS

Cleanline Grease Injection Control Head
Hydraulic Grease Head Cable Cutter
Chemical Injection / Inhibitor Sub

FEATURES

- Hunting grease injection control heads are designed to contain well pressure whilst running braided line or electric line cable operations.

- Grease injection control heads are made up of two main assemblies, the pack off/line wiper assembly and the flow tube assembly.

- The pack off assembly provides sealing capabilities when the wireline is stationary. Dual pack offs are available when higher well pressures are anticipated.

- The line wiper is energised to clean the cable when pulling out of the well. The Hunting cleanline system incorporates an integral line wiper within the pack off assembly eliminating the requirement for a separate drain hose for the line wiper.

- The flow tube assembly is made up of a number of close tolerance flow tubes that are sized to the diameter of the wireline/cable being used. Grease is then pumped into the annular void between the flow tube and the cable creating a pressure drop across each flowtube.

- The number of flow tubes required is dependent on expected well pressures and well fluids.

- An additional flowtube injection assembly can be added to provide more grease volume.

BENEFITS

- Additional flow tubes can be added for high pressure applications.

- Velocity ball prevents the escape of well fluids should the grease injection line or connection fail.

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Hydraulic Grease Head Cable Cutter
Grease Heads

FEATURES
■ Shares same connection as flowtube assembly components
■ Time-saving hydraulically operated system
■ Guillotine type cutting system

BENEFITS
■ Can be placed directly below the grease head
■ Allows easy access for an operator to quickly cut the wireline
■ Cutting system provides a clean cut of the cable to facilitate easier fishing situations

The Hunting hydraulic grease head cable cutter offers a fast and simple way to cut wireline in the event of a stuck wire or birds nest situation in the grease injection control head.

Fitted directly beneath the bottom flow tube of the grease head, the hydraulic cable cutter provides a quick clean cut to allow for easier fishing in stranded armour situations, facilitating faster remedial work.

Chemical Injection / Inhibitor Sub
Grease Heads

FEATURES
■ Removable felt cartridge to change application
■ Integral safety ball check valve

BENEFITS
■ Same assembly can be utilised for both chemical or inhibitor injection
■ Integral ball check valve prevents the escape of well fluid should the injection line or connection fail

Hunting chemical injection and inhibitor subs are specially designed to aid the injection of inhibitor chemicals and de-icing agents onto the wireline or into the wellbore during routine operations.

The inhibitor sub contains felt packings which are soaked with inhibitor, coating the wireline as it passes through the sub.

By removing the felt packing cartridge the same assembly can be used as a chemical injection sub system when injecting de-icing agents.

Both systems incorporate a safety ball check valve to prevent well fluids being able to escape.
LUBRICATORS AND RISERS

Lubricators and Riser sections

Lifting Clamps, Spread Bars and Slings

FEATURES

- Provides Compatibility with most surface pressure control equipment
- Promotes accurate rig up heights for a more manageable working window
- Threaded design allows for change out of quick unions
- Integral design reduces possible leak paths and reduces maintenance
- Offers significant weight saving on conventional lubricator designs
- Fitted with industry standard quick unions
- Can be supplied in various lengths
- Threaded or integral design
- Lightweight design available

BENEFITS

- Provides compatibility with most surface pressure control equipment
- Promotes accurate rig up heights for a more manageable working window
- Threaded design allows for change out of quick unions
- Integral design reduces possible leak paths and reduces maintenance
- Offers significant weight saving on conventional lubricator designs

Crossover adapters are available in various configurations which can include API flanges, quick unions and thread connections.

Hunting lubricator and riser sections are designed to act as chambers for deploying wireline tools into the well whilst under pressure.

Lubricator/riser is available in various constructions:

- Conventional (Riser and Lubricator)
- Integral (Riser and Lubricator)
- Lightweight (Lubricator)
- Flanged (Riser)

Both lubricators and risers are available with quick unions

Lubricators come in standard lengths from 2ft to 12ft and custom lengths are available on request including longer riser sections which are often used between the wellhead and rig floor.

Lubricator and riser can be ported with a ¾” (0.50”) NPT for up to and including 10,000psi WP. For working pressures above 10,000psi, 9/16” (0.56”) Autoclave high pressure ports are supplied. Ports are available with a saver sub (replaceable port) option.
FEATURES

- Available in a range of sizes
- Hunting’s lifting equipment is designed, manufactured, load tested and certified to meet current European legislation. (CE marked)

BENEFITS

- Lubricator lifting clamps and spreader bars are available to client requirements
- Tailored to suit specific applications

Hunting manufactures and supplies a wide range of lubricator lifting clamps and spreader bars, suitable for lifting lubricators and surface pressure control equipment in a safe and controlled manner.

Our lubricator lifting clamps are available for all sizes and type of lubricators in our product range. There is also a spreader bar and/or sling set suitable for every clamp and application, whether intended for slickline or electric line service.

In addition to our standard range, tailored lifting items to suit specific needs or preferences are available.

Each lubricator lifting clamp and spreader bar is designed, manufactured, load tested and certified.

Other sizes, end connections and materials available on request. Properties quoted for sour service materials.
TOOL TRAPS

Hydraulic Tool Trap

FEATURES

■ Small hydraulic chamber allowing efficient hand pump operation
■ Compact assembly height
■ Single flapper designed to accept tool weight from above
■ Large ‘V’ slot to prevent cable damage

BENEFITS

■ Hunting hydraulic tool traps are available to suit various working pressures and manufactured to meet client operational needs.

There are two main operational types that share common features:

■ External visual indication of the tools passing the flapper
■ Either hydraulic open and spring return or hydraulic open and hydraulic close

The flapper that sits across the bore preventing tools from passing have a large ‘V’ slot to allow wire movement with reduced contact when the flapper is closed.
STAND-ALONE PRODUCTS

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**Quick Union Rig Up Dolly**  | 48

**FEATURES**
- Helps to increase the life of the wire by minimising corrosive well fluids
- Suitable for all wire sizes
- Can be fitted quickly to any of the Hunting Slickline range
- Spare rubbers are easily available and inexpensive

**BENEFITS**
- Reduces wire damage
- Inexpensive
- Made of heavy-duty aluminium alloy frame
- Features a loading gate to prevent the wire becoming misplaced during operation
- Full tested and supplied with appropriate documentation

Hunting line wipers are designed to clean the slickline wire of well fluid especially corrosive well completion fluids when retrieving tools from the well. This increases the useful life of the wire by preventing corrosive attack whilst the wire is stored on the drum.

Slickline wipers are suitable for all slickline wire sizes and can be fitted quickly to any of Hunting's range of slickline hay pulleys whilst the wire is in place.

The body bolts to the lug provided on every hay pulley and the rubber wiper is split so that it can be installed around the wire. Once in place, a manual nut is provided, ensuring that the rubber does not become too loose. Spare rubbers are inexpensive and readily available.
Hydraulic Pack Off
Stand-Alone Products

FEATURES
- Quick Union connections
- Single or dual pack off available
- Top funnel
- Brass upper and lower packing adapters
- Split rubber element

BENEFITS
- Dual pack off can be used whilst swabbing operations are being carried out.
- The top funnel is to protect the wire from damage whilst in operations and rigging up/down.
- The upper and lower packing adapters guide the cable through the rubber elements.
- Easy access to remove and refit rubber elements.

The Hunting Pack Off is supplied with a cable protector funnel on top and a quick union or tubing connection at the base. Brass upper and lower packing adapters guide the cable through the rubber element, delivering the wiping effect or seal. When retrieving tools from the well, the wiper seal is gently compressed to tighten against the cable hydraulically.

Although not designed to hold well pressure, the pack off can be used in low-pressure environments to contain pressure during operations such as swabbing. For this purpose and added security, a Dual Pack Off is available.

Turnaround Sheave
Stand-Alone Products

FEATURES
- Reduces the rig-up height of e-line operations by turning the wire 180 degrees so it points downwards rather than upwards.
- Lack of central hub keeps weight to a minimum.
- Use of Finite Element Analysis to ensure reliability, light weight and user-friendliness.

BENEFITS
- Reduces the rig-up height by turning the wire to face downwards rather than upwards.
- The alternative 2-inch 10-flowtube connection removed a quick union connection.

The Hunting Turn-around Sheave offers operators the opportunity to reduce their rig-up height during e-line operations, by turning the wire through 180 degrees whilst still within the pressure control equipment (PCE). This allows for the grease injection control head to be pointing downwards instead of upwards.

Typically, the Turn-around sheave would be mounted on top of a tool catcher with a grease injection control head suspended from the other side. Essentially a pressurised top block, the turn-around sheave consists of a sheave wheel held within a pressure retaining housing. By creating the assembly without a central hub, weight is kept to a minimum. The sheave is a precision-machined ring, which rotates on a large bearing to which grease can be pumped into for lubrication.

Turn-around sheaves can be supplied with any of the standard quick unions in order that it can be assembled directly to a suitably configured tool catcher and grease injection control head. If required, an alternative 2-inch 10-flowtube box connection can be provided on one side of the sheave body to eliminate a quick union.

Accessories available for the turn-around sheave include:
- Grease Injection Control Head Clamps
- Fixed Floor Blocks
- Grease Catchers

As with all Hunting PCE, great effort has been made to create a product that is rugged and reliable, whilst being as light and as user-friendly as possible. To achieve this, extensive use of Finite Element Analysis (FEA) has been used in the design.
In-Situ Pressure Test Sub
Stand-Alone Products

**FEATURES**
- Two O-ring seals to pressure test against via a port
- Multi range of quick union connections and pressure ratings
- Internal bore size range from 3.00” – 9.00”
- Pressure tested hydraulically with a hand pump
- Can be supplied to special order and connected directly to the Wireline Valve
- Hunting In-Situ Test Sub centre connection lifting/test cap available

**BENEFITS**
- Reduces the time spent pressure testing lubricators prior to exposing it to the live well pressure.
- The rig up can be tested whilst pressure sensitive equipment, such as Perforating Guns are in the lubricator.
- In-Situ Test Sub-connected directly to the Wireline Valve will save rig up heights.
- Time saving benefits.

The Hunting In-situ Pressure Test Sub was originally designed to reduce time spent pressure testing the broken lubricator connection after tool changes.

The In-situ Pressure Test Sub takes the place of the bottom connection, effectively becoming the joint that has been broken. As a result of its unique design, it can be tested in isolation to the rest of the rig up, by the simple use of a small hand pump.

The mid joint of an In-situ Pressure Test Sub is like any other quick union, except that it has two O-ring seals with a pressure test port between them. This feature is responsible for easy testing of joint integrity.

As noted, this saves pressure testing the whole lubricator rig up, however there is another added advantage in that it allows for the lubricator system to be pressure tested whilst pressure sensitive equipment (such as perforating guns) are in the lubricator.

In-situ Pressure Test Sub centre connections fitted directly to WLVs or other equipment, saving in rig up height, can be supplied by special order.

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Pump-in Sub
Stand-Alone Products

**FEATURES**
- Large bore 2” through bore on side arm
- Hunting flanged joint that uses elastomer seals or the API flange metal ring gasket types are available

**BENEFITS**
- Effective for large volume hydrostatic testing or pumping high volumes into the well
- Standard industry WECO connections

Hunting Pump in Subs are designed to provide a large flow fluid entry path into the pressure control equipment (PCE) for hydrostatic testing, or for pumping fluid into the well.

Pump in Subs can be supplied to suit any application, with either quick union connections or flanges. The inlet ports are usually 2.00” 1502 Weco type for 10,000psi and below, or 2.00” 2202 Weco type for above 10,000psi.
The Hunting Ball Valve is a fully opening, hydraulically controlled valve, designed to hold pressure from above and below. It can be used:

- In a pressure control string, either above or below the wireline valve (WLV), as an additional wellhead valve
- For testing the pressure control string prior to running tools into the well

The latest Hunting Ball Valves have been redesigned, taking advantage of Finite Element Analysis (FEA) to reduce size and weight, resulting in a product that is 30 per cent lighter than its predecessor, with no loss of strength or functionality.

The design itself is very simple, consisting of a precision-machined ball between two floating seats, operated by a hydraulically actuated shuttle. An equalizing valve has been incorporated into the design to ensure that there is no undue stress on the mechanism when opening the valve. Great thought has been put into making the valves easy to strip and redress, and creating a product that is functional, reliable and user friendly.

Some customers may want the ability to cut wire with a ball valve, for this application Hunting recommend a different ball valve that cuts only but does not seal.

Ball Valves
Stand-Alone Products

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<tr>
<td>- Redesigned and taken advantage of the Finite Element Analysis to reduce size and weight, without losing functionality or strength</td>
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<tr>
<td>- Hydraulically operated</td>
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<td>- Ball valves are available that cut wire</td>
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<table>
<thead>
<tr>
<th>BENEFITS</th>
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<tr>
<td>- 30 per cent reduction in weight</td>
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<tr>
<td>- Functional, reliable and easy to use</td>
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Hay Pulleys / Sheaves
Stand-Alone Products

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<tr>
<td>- Use the same sheaves and bearings as Hunting stuffing boxes which minimizes the need for excessive stocking of spares</td>
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<tr>
<td>- Made of heavy duty aluminium alloy frame</td>
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<tr>
<td>- Features a loading gate to prevent the wire becoming misplaced during operation</td>
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<td>- Full tested and supplied with appropriate documentation</td>
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<th>BENEFITS</th>
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<tbody>
<tr>
<td>- Suitable for all wire sizes and can be fitted to any of the Hunting Pulley’s range</td>
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<tr>
<td>- Minimizes the need for stocking of spares as uses the same bearings and sheaves as other products within the Hunting product line</td>
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<td>- Safety features to ensure wire does not become misplaced during operation</td>
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<tr>
<td>- Made with a heavy duty aluminium alloy frame and featuring precision taper rollers which make it durable</td>
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Hay pulleys are designed and manufactured to withstand the loads of slickline a braided cables, in addition to the ‘wear and tear’ of life at the rig site.

They consist of a heavy-duty aluminium alloy frame and an aluminium or composite sheave wheel. The load is taken up through a swivelling eye at the top, whilst wire is introduced through a loading gate, preventing it from jumping out during operations. The sheave wheel rotates on precision taper roller bearings.

Floor stands are available for all sizes, as are line wipers.

All hay pulley assemblies are fully load tested and supplied complete with the appropriate documentation.
Quick Union Rig Up Dolly
Stand Alone Products

FEATURES
- Threaded to the lower union to ensure it does not move during rig-up process.
- Made with a steel axle and two heavy-duty wheels.
- Eradicates risk of damage to the lower union.
- Available in all common Hunting quick unions.

BENEFITS
- Safely moves lubricators.
- Reduces potential damage to lower QUI connection.

The Hunting quick union rig up dolly is designed to be attached to the bottom of the lubricator providing a roller system to aid the movement of the lubricator when rigging up / down pressure control equipment.

The quick union rig up dolly is simply threaded onto the lower union, so that it is unable to come off during the rig-up process. It has a steel axle and two heavy-duty wheels that support the weight of the lubricator whilst it is being brought into position, irrespective of the lift angle.

Available to suit all Hunting quick unions, the rig-up dolly is also offered to suit in-situ middle joint connections.
ADAPTERS

Crossover Adapters

FEATURES

■ Ease of adapting between connections
■ Utilise existing equipment on different sized wellheads
■ Designed and manufactured to meet industry standards
■ Connection Combinations to suit requirements (some examples below)
  - Quick union to quick union
  - Quick union to flange
  - Flange to threaded connection
  - Quick union to threaded connection
  - Threaded connection to threaded connection
■ Fully certified designs, with reference to API (6A and 5CT)

BENEFITS

■ Ease of adapting between connections
■ Utilise existing equipment on different sized wellheads
■ Designed and manufactured to meet industry standards

Crossover adapters are available in various configurations which can include API flanges, quick unions and thread connections.
ANCILLARY ITEMS

Quick Union Test Equipment 53
Quick Union Lift / Test Cap 54
Quick Union Lifting Cap 55

FEATURES

■ Safely contains test rod during WLV testing
■ Reduced manual handling of test fixtures
■ Lift/test caps are all CE marked

BENEFITS

■ Lift/test caps fitted with internal thread for test rod holder
■ Threaded ports on assemblies
■ Lift/test caps are all CE marked

Hunting Quick Union Test Caps are designed to fit into a Quick Union Box and can be used for pressure testing of pressure control equipment. The assembly consists of a quick union collar and a body with an integral test port.

Quick Union Test Stumps fit into the pin and collar and are fitted with a side port. These are also supplied with threaded holes where eye bolts can be used to aid manual handling.

Test assemblies are available for our quick union connections. Each test fixture is fully tested and certified.

Lift/test caps are available to suit all of our quick union connections, H2S service is available upon request.
**Quick Union Lift / Test Cap**

**Ancillary Items**

**FEATURES**
- Manufactured with one piece of steel to give absolute security when making the lift
- Available for every union
- Load tested and certified by third party

**BENEFITS**
- One cap for both lifting and testing applications
- Convenient and safe way of capping-off a WLV that is left on the wellhead

Hunting Quick Union Lift Caps share the duties of a pressure test and lifting component. These can be used as an efficient means of moving then pressure testing equipment. They also offer a convenient and safe way of capping-off a WLV remaining on a wellhead.

Unlike a Quick Union Lifting Cap, the Lift / Test Cap has a complete union pin, collar and test port. The integral eye offers a means of connection to the lifting device.

With safety being our number one priority, the main body of our Quick Union Lift / Test Caps is manufactured from one piece of steel, ensuring absolute security when making a lift.

For further security, our Quick Union Lift / Test Caps are designed to meet all current lifting regulations and are load tested, pressure tested and certified by a third party to a Specific Working Load.

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**Quick Union Lifting Cap**

**Ancillary Items**

**FEATURES**
- Manufactured with one piece of steel to ensuring absolute security when lifting rather than threaded eyebolts
- Meets all current lifting regulations
- Load tested and certified by third party
- Available for all Hunting quick unions

**BENEFITS**
- Safely manufactured using one piece of steel

Hunting Quick Union Lifting Caps offer a safe and convenient method of lifting pressure control equipment such as wireline valves and riser sections etc. The Cap is simply threaded onto the top union of the item to be lifted. The integral eye offers the means of connection to the lifting device.

Hunting Quick Union Lifting Caps are available for all Hunting quick unions.

With safety being Hunting’s number one priority, our standard Quick Union Lifting Caps are manufactured from one piece of steel, ensuring absolute security when making a lift.

For further security, our Quick Union Lifting Caps are designed to meet all current lifting regulations, are load tested and certified to a specific Safe Working Load by a third party.
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