

# An Introduction to Elmar WPCE

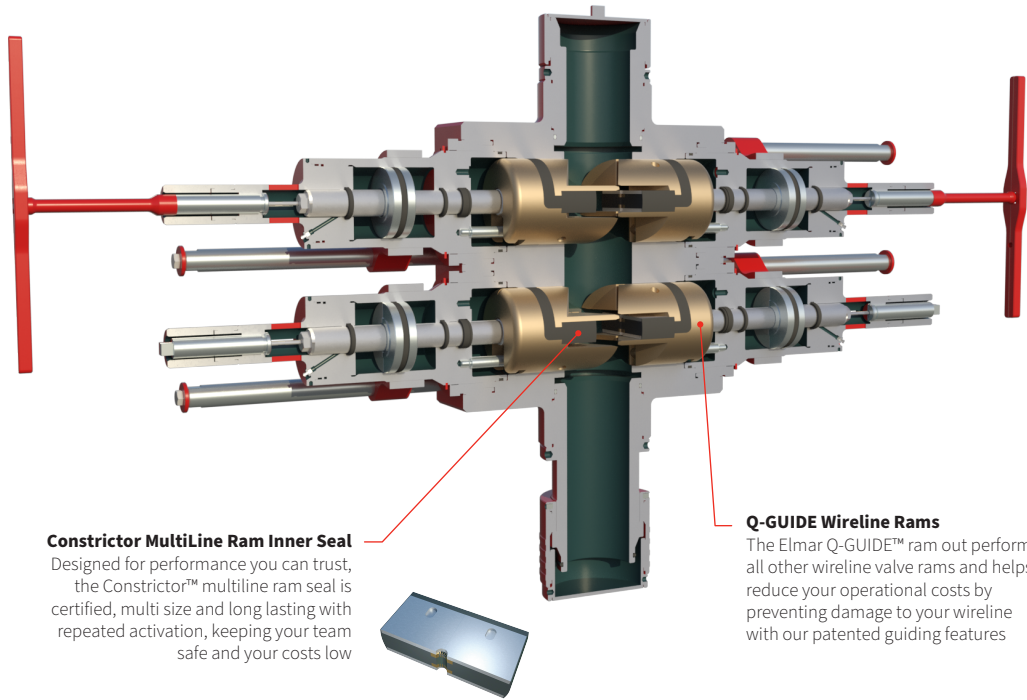


## The world’s most reliable and durable wireline pressure control equipment.

Our focused approach to engineering and manufacturing results in reliable, easy-to-operate equipment that keeps your teams safe on the wellsite, extends the life of your assets, and reduces your operating costs.

Innovation and quality come built in to all our equipment, all the way from our lightweight 10,000-psi 3-in. slickline sets to the industry’s first 30,000-psi wireline pressure control equipment.

Extensively tested, field proven, and certified, Elmar™ wireline pressure control equipment comes with reliability as a standard.



**Constrictor MultiLine Ram Inner Seal**

Designed for performance you can trust, the Constrictor™ multiline ram seal is certified, multi size and long lasting with repeated activation, keeping your team safe and your costs low

**Q-GUIDE Wireline Rams**

The Elmar Q-GUIDE™ ram out performs all other wireline valve rams and helps reduce your operational costs by preventing damage to your wireline with our patented guiding features

**Wireline Valve**

Our wireline valve gives positive barrier protection during well service operations, providing sealing and/or shearing functions when running slickline, braided wireline, or electric line

- Configuration: Single, dual, triple, and quad
- Grease injection, glycol injection, equalization and pressure monitoring
- Q-Guide wireline ram—positive centralization of cable
  - Line specific or Constrictor multiline
  - Easily inverted when changing between slickline and wireline
  - Shear seal
- Corrosion resistant coating solutions
- Compact
- Lightweight
- Manual
- Pressure balanced hydraulic cylinders to reduce volume and closing times
- NORSOK and API 16A certification options

**Additional Products**

- Liquid seal slickline control head
  - Venting/glycol injection valve
  - Chemical injection sub
  - Cable cutter sub
  - Hydraulic QuickLatch
- Variable length lubricator
  - Bleed-off sub
  - Turnaround sheave
  - Safety flow diverter
- Pressure testing accessories
    - Quick union test cap
    - Test plug and collar
    - Lifting bails
    - Test rods

## NOV Value Added



HSE Risk Reduction



Enhance Wellsite Efficiency



Digitisation



Reduce Wellsite Risk & Uncertainty



Technical Support



Reduced Maintenance Burden



Reduce OPEX Costs



Designed & Engineered In-House

**Product Overview:**

- 3 to 9-in ID
- 3,000 to 15,000 psi
- Bespoke 20,000-psi systems
- The world’s only 30,000-psi system
- Full material traceability and 3rd-party independent approval covering API 6A, and NACE (for H2S)
- Industry standard quick unions and API flange connections
- Artic, extreme cold weather certified
- High temperature and geothermal applications
- Purchase and rental options
- Aftermarket—spares, service, and recertification support globally

Wellhead Adapter Flange	Pump-in Sub	Quick Test Sub	Tool Trap	Lubricator	Hydraulic Tool Catcher	Grease Injection Control Head	Slickline Stuffing Box	Slick Cable Pack-off	Enviro Dual Pack-off
<p>Maximize the usage of your WPCE assets with our wellhead adapter flanges. These allow you to safely connect your existing WPCE to multiple different wellheads. Our flanges are manufactured and certified to the same strict standards as all our WPCE, meaning you can guarantee the integrity of your complete rig-up.</p> <ul style="list-style-type: none"><li>• API 6A flange connections to industry standard connections</li><li>• API 6A monogrammed adapter spools, spacer spools, blind and test flanges available</li><li>• Ring groove inlays</li><li>• Stud bolts, nuts and gaskets</li><li>• API 20E mongrammed stud bolts and nut fasteners supplied as standard</li><li>• Quick union crossovers</li><li>• Fast track delivery options</li><li>• Blanking plug and collar</li></ul>	<p>Our compact low height pump-in-sub (PIS) is a versatile addition to your WPCE rig up. It provides a large bore inlet through which various fluids can be pumped, for operations such as well control, inhibitor pumping, fluid sampling, and bleed-down and equalization.</p> <ul style="list-style-type: none"><li>• Side outlet options - BX152, Proprietary Elmar flange, integral 1502</li><li>• Plug and gate valve supply</li><li>• Position below or above the wireline valve</li></ul>	<p>Reducing non-productive time using the Elmar Quick Test Sub will give operational cost savings as well as integrity of your well pressure string throughout operations.</p> <ul style="list-style-type: none"><li>• Save time on multiple wireline runs</li><li>• Reduce contamination of the well with test fluids</li><li>• Eliminates risk of pressure testing with perforating guns</li><li>• Test plug / lifting bail for middle working connection</li></ul>	<p>Prevent the cost and inconvenience of losing wireline tools downhole with an Elmar tool trap.</p> <ul style="list-style-type: none"><li>• Single or dual flapper</li><li>• Pressure balanced flapper shaft ensuring fast closure of the trap</li><li>• Positive tool passage indicator</li><li>• Remote hydraulic operation.</li><li>• Can be operated manually</li></ul>	<p>Our lightweight wireline lubricators for easy handling or where lifting capacity is reduced, suitable for use in H2S environments, these field proven lubricators can be used in most intervention applications.</p> <ul style="list-style-type: none"><li>• NACE compliant stainless tubes</li><li>• Corrosion resistant materials and coatings</li><li>• Up to 70% lighter than conventional lubricators</li><li>• 10,000-psi WP – 3, 4½, 5½, 6½ in.</li><li>• 15,000-psi WP – 5½ in.</li></ul>	<p>Prevent the cost and inconvenience of losing wireline tools downhole with an Elmar tool catcher.</p> <ul style="list-style-type: none"><li>• Fail safe, spring close, hydraulic open</li><li>• Combined with compact ball check valve for e-line operations</li><li>• Single catch collets 1 to 1¾-in. fish neck<ul style="list-style-type: none"><li>- Collet change out to suit rope socket</li></ul></li><li>• Piranha 1 to 1¾-in. fish neck<ul style="list-style-type: none"><li>- Single piece collet for easy assembly</li><li>- Increased corrosion resistance</li></ul></li><li>• MultiCatch 1 to 2 ½-in. fish neck<ul style="list-style-type: none"><li>- Winch operator assistance with the damper and rope socket ejector assembly</li></ul></li></ul>	<p>As the primary well control device, our Enviro grease injection control head is designed to create a seal around a moving wireline, giving positive protection and allowing intervention access to wells under pressure.</p> <ul style="list-style-type: none"><li>• Environmentally friendly minimizing grease spillage</li><li>• Air line wiper</li><li>• Single or dual grease injection</li><li>• Flotubes in sizes 0.001 in. increments</li><li>• Line sized parts manufactured from aluminium bronze to ensure no wireline damage</li></ul>	<p>Our hydraulic slickline stuffing box is designed to pack-off all sizes of solid wireline with safety and convenience.</p> <ul style="list-style-type: none"><li>• Lightweight or QuickLoad™</li><li>• 0.108, 0.125, 0.160 in.</li><li>• 16 and 20-in sheave brackets</li><li>• Line sized parts manufactured from aluminium bronze to ensure no wireline damage</li><li>• Engineered packings available to suit various well conditions</li><li>• Injection points to increase sealing performance</li><li>• Combined blow out plug and ball check valve</li></ul>	<p>Our slick cable pack-off is designed to seal against a moving smooth-jacketed braided cable under pressure giving positive protection during well service operations.</p> <ul style="list-style-type: none"><li>• Two independent sealing arrangements</li><li>• Line sized parts manufactured from aluminium bronze to ensure no wireline damage</li><li>• High-pressure lubrication port</li><li>• Line wiper</li><li>• Vent port</li><li>• Lightweight</li></ul>	<p>Our Enviro dual hydraulic pack-off gives positive protection during well service operations. Compact, reliable, and robust, this pack off is designed to wipe clean moving cable under pressure.</p> <ul style="list-style-type: none"><li>• Adherence to dual barrier/device philosophy</li><li>• Single pack off option</li><li>• Integral lifting shoulder to accept lifting clamp for efficient and safe operations</li><li>• Line sized parts manufactured from aluminium bronze to ensure no wireline damage</li></ul>