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Innovative Specialist Solutions

At Wellpro Group we supply industry leading Thru Tubing, Inflatable Packer and Well Intervention capabilities along with best in class response service and response.

Wellpro Group provide a complete Thru Tubing, Inflatable Packer and Well Intervention Technology portfolio including operational design, project management, service, rental and sales.

Operations cover fishing, milling and severance along with a wide range of inflatable and well intervention technology including well isolation, well abandonment, well surveillance and monitoring.

The directors of the company are industry leaders with proven track records having worked globally for major service companies, operators and previously owned similar businesses.

Our focus is on providing a dedicated and responsive service along with industry leading tooling and technologies covering all intervention service portfolios.

In addition, we can also provide bespoke tool and element design coupled with engineering and manufacturing capabilities for challenging and non-routine operations.

The extensive long-term experience, knowledge and intervention expertise of the Wellpro Group team is further strengthened with in-house design engineers thus achieving and maintaining the highest level of customer service and quality.

Service Offering

**Technology**
Team of proven innovators delivering new technology solutions and solving bespoke engineering challenges.

**Responsive R&M and Design**
In-house design support by experienced engineers for solving field and operational challenges along with bespoke tool and inflatable element design.

**Geographic coverage**
UK Centre of excellence with global credentials and capability to support and service all product line portfolios in the Eastern Hemisphere.

**Expert Teams**
Led by recognised industry experts in Well Intervention along with highly qualified, competent and experienced field personnel.

**Tool Portfolio**
Fleet of modern, expertly maintained Well Intervention with a broad service capability and responsive delivery. Being Independent allows us access to the best and most innovative well intervention technologies available on the market.

**Service Capability**
Recognised industry experienced teams capable of supporting all Well Intervention operations along with any general intervention services.
Core Values

**Integrity**
Wellpro Group perform all services and engage clients with the highest integrity and best advice thus building lasting relationships.

**Accountability & Collaboration**
Wellpro Group will support our clients with operational and engineering design and support to become a trusted and respected supplier.

**Pursuit Of Excellence**
Everything we do will be to assist our clients in meeting their objective, providing the highest quality in a responsive, efficient and cost effective way.

**Passion**
Thru Tubing, Inflatable and Well Intervention services and the provision of quality tools and services are our passion. We strive to advance the industry capability and ensure leading service quality.

**Mutual Respect**
Our workforce brings expertise and experience from all backgrounds with the single vision of providing the best and most complete Thru Tubing, Inflatable and Well Intervention service offering.

Our Vision
To be recognised as market experts in the provision and execution of Thru Tubing, Inflatable & Well Intervention products & services.

Our Mission
Wellpro Group shall perform its services and client interactions with the highest integrity based on building lasting relationships with honesty and trust.
Permanent Inflatable Bridge Plug (TT-PIBP)

The Thru Tubing permanent inflatable bridge plug (TT-PIBP) utilises the InflataLOK™ valving system in conjunction with the DuraGRIP™ packer element which provides bi-directional sealing and anchoring. The design incorporates an equalisation feature that eliminates the effect of wellbore pressure. This ensures correct tool function regardless of setting conditions. Three standard configurations are available to allow deployment on Coiled Tubing, Capillary Tube, and Wireline/Slickline*.

Applications
- Plug and abandonment with cement retainer option
- Zonal isolation (Vertical/Horizontal wells)
- Shut off lost circulation zones
- Bottom hole shut off operation in open or cased hole conditions
- Depleted zone abandonment

Features
- Available in a range of configurations allowing conveyance on Coil Tubing, Capillary Tube or Wireline/Slickline*
- Available in bridge plug or cement retainer configurations
- Can be deployed in both saturated and depleted well conditions**
- Ball free setting and disconnection
- Adaptable to a range of inflatable element sizes suitable for Thru Tubing applications
- DuraGRIP™ packer element construction features an external steel wire reinforcement layer designed to maximize bi-directional anchoring/sealing for optimal differential pressure capability
- Self-anchoring to maximum rated differential pressure capacity
- High expansion capabilities

Available Sizes***

<table>
<thead>
<tr>
<th>Inflation Valve OD</th>
<th>Packer OD****</th>
<th>Max Inflation Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>in</td>
<td>mm</td>
<td>in</td>
</tr>
<tr>
<td>2.125</td>
<td>54</td>
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</tr>
<tr>
<td>3.25</td>
<td>83</td>
<td>7.9</td>
</tr>
</tbody>
</table>

* WPG offers the down hole pump and required accessories for deployment on wireline
** Back pressure valve device may be required when operating in depleted or unsaturated conditions, to maintain control of inflation pressure
*** As per operational requirements/restrictions, PIBP can be modified to adapt different packer sizes on each chassis
**** Packer elements available in NBR and HNBR options
Reetrievable Inflatable Bridge Plug (TT-RIBP)

The Thru Tubing Retrievable Inflatable Bridge Plug (TT-RIBP) utilises the InflataLOK™ valving system in conjunction with the DuraGRIP™ packer element which provides bi-directional sealing and anchoring.

The TT-RIBP is an innovative design with an equalization mechanism allowing the operator to equalise any potential pressure below the packer with the annulus above prior to activating the deflation mechanism. There are two standard configurations to enable deployment on Coiled Tubing, Capillary Tube, and Wireline/Slickline*.

Applications
- Permanent and temporary abandonment
- Zonal isolation operations
- Shut off lost circulation zones
- Bottom hole shut off operation in open or cased hole conditions

Features
- Available in a range of configurations allowing conveyance on Coil Tubing, Capillary Tube or Wireline/Slickline*
- Industry standard fishneck allows for retrieval with standard fishing tools
- Equalisation feature allowing any potential pressure below the packer to be equalised with the pressure above prior to deflation
- Can be deployed in both saturated and depleted conditions
- Ball free setting, equalisation and retrieval mechanisms
- Adaptable to a range of inflation element sizes suitable for Thru Tubing applications
- Packer element construction (DuraGRIP™) features an external steel wire reinforcement layer designed to maximize bi-directional anchoring/sealing for optimal differential pressure capability
- High expansion capabilities

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<tr>
<th>Inflation Valve OD</th>
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<td>83</td>
<td>7.9</td>
</tr>
</tbody>
</table>

* Slickline and Wireline options require downhole motor/pump by others
** As per operational requirements/restrictions, RIBP can be modified to adapt different packer sizes on each chassis
*** Packer elements available in NBR and HNBR options
ST Range of Testing Tools

The ST range of multi-cycle inflatable packer systems features a four-stage operating mechanism that enables packer inflation, annular circulation, interval testing, and complete shut-in isolation. The ST range can be configured as a single packer or a dual packer straddle assembly both with a standard pressure rating of 5,000 psi (10,000 psi version available). Its multi-cycle functionality allows for multiple formation evaluation tests or stimulation cycles to be performed on different zones within a single trip. Its design features a volume compensated balanced piston that prevents inner-component movement from inducing pressure fluctuations within isolated test zones and allows the ability to accurately record initial shut-in pressure while preventing unintentional formation fractures. This innovation makes the ST range the optimal inflatable packer solution for formation evaluation and well stimulation in open hole or cased hole applications.

Applications
- Coalbed methane DST, IFO and DFIT testing
- Formation evaluation in Oil & Gas, geotechnical, or water wells
- Casing patch leak-off testing
- Well stimulation (acid treatment)

Features
- Simple and reliable operation only requires axial movement and hydraulic pressure (control lines, rotation, or downhole pumps are not required)
- Innovative design eliminates squeeze pressure during packer inflation
- Improved shut-in pressure accuracy due to zero-displacement valve design
- Low-pressure-loss tool chassis
- Ability to circulate while in the shut-in stage enables air/nitrogen induced hydrostatic head reduction for DST or swabbing applications
- Filter screen protected flow path prevents solid/debris clogging
- Backup pull release emergency deflation mechanism available
- Ideal for cased and open hole applications
- Available upgrades for real time downhole measurement systems
- Adaptor sub extensions available for longer straddle intervals
- Three different chassis sizes available for adaptability with an extensive range of packer types and sizes

Compatible Packer Systems

<table>
<thead>
<tr>
<th>Packer size</th>
<th>Compatible ST Tool</th>
<th>Hole Size</th>
<th>Max. Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø57  Ø2 ¼</td>
<td>ST60</td>
<td>mm</td>
<td>inch</td>
</tr>
<tr>
<td>Ø67  Ø2 ¾</td>
<td>ST60</td>
<td>76</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>96</td>
<td>3.8</td>
</tr>
<tr>
<td>Ø86  Ø3 ⅜</td>
<td>ST86</td>
<td>96</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>140</td>
<td>5.5</td>
</tr>
<tr>
<td>Ø114  Ø4 ½</td>
<td>ST86 &amp; ST114</td>
<td>115</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>152</td>
<td>6</td>
</tr>
<tr>
<td>Ø127  Ø5</td>
<td>ST86 &amp; ST114</td>
<td>140</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200</td>
<td>7.9</td>
</tr>
<tr>
<td>Ø140  Ø5 ½</td>
<td>ST86 &amp; ST114</td>
<td>170</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>250</td>
<td>9.8</td>
</tr>
<tr>
<td>Ø178  Ø7</td>
<td>ST114</td>
<td>180</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>260</td>
<td>10.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>300</td>
<td>11.8</td>
</tr>
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</table>
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<tbody>
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<td>ST60</td>
<td>76 3.0</td>
<td>5000 psi</td>
</tr>
<tr>
<td>Ø67 Ø2 ⅝</td>
<td>ST60</td>
<td>96 3.8</td>
<td>5000 psi</td>
</tr>
<tr>
<td>Ø86 Ø3 ⅜</td>
<td>ST86</td>
<td>115 4.5</td>
<td>5000 psi</td>
</tr>
<tr>
<td>Ø114 Ø4 ½</td>
<td>ST86 &amp; ST114</td>
<td>140 5.5</td>
<td>5000 psi</td>
</tr>
<tr>
<td>Ø127 Ø5</td>
<td>ST86 &amp; ST114</td>
<td>170 6.7</td>
<td>5000 psi</td>
</tr>
<tr>
<td>Ø140 Ø5 ½</td>
<td>ST86 &amp; ST114</td>
<td>180 7</td>
<td>5000 psi</td>
</tr>
<tr>
<td>Ø178 Ø7</td>
<td>ST114</td>
<td>210 8.3</td>
<td>5000 psi</td>
</tr>
</tbody>
</table>

**Specifications**

<table>
<thead>
<tr>
<th>Tool Type</th>
<th>ST60</th>
<th>ST86</th>
<th>ST114</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Tool Diameter</td>
<td>60 mm</td>
<td>86 mm</td>
<td>114 mm</td>
</tr>
<tr>
<td>Run on API Drill Pipe/Tubing</td>
<td>2 ⅜ inch</td>
<td>2 ⅜ inch</td>
<td>4 ½ inch</td>
</tr>
<tr>
<td>Max. Pressure Rating</td>
<td>5000 psi (34.5 MPa)</td>
<td>5000 psi (34.5 MPa)</td>
<td>5000 psi (34.5 MPa)</td>
</tr>
<tr>
<td>Max. Temperature Rating *</td>
<td>80° C (176° F)</td>
<td>80° C (176° F)</td>
<td>80° C (176° F)</td>
</tr>
<tr>
<td>Max. Pull (Emergency Deflate)</td>
<td>4.4 T (9,700 lb)</td>
<td>13.2 T (29,100 lb)</td>
<td>26.4 T (58,202 lb)</td>
</tr>
<tr>
<td>Max. Axial Load (1.6 safety factor)</td>
<td>13.5 T (29,762 lb)</td>
<td>48 T (105,821 lb)</td>
<td>87 T (191,802 lb)</td>
</tr>
</tbody>
</table>

* Maximum temperature rating on a standard tool ST65 (HP) and ST114 (HP) 10,000 psi versions are also available.

Tools requiring higher temperatures can be supplied, as well as change over kits to existing tools to a maximum temperature of 150° C / 302° F.

**Pressure Vs Flow**

![Pressure Vs Flow Chart]
Multi Set Injection Packer System (MSIPS)

The Multi Set Injection Packer System (MSIPS) is a multi-cycle inflatable packer assembly designed for high flow rate and high pressure well intervention applications. It can be configured as a single packer or a dual packer straddle system, and its multi-set full-bore functionality allows for multiple high volume stimulation cycles or formation tests to be performed on different zones within a single trip.

The MSIPS workstring annular circulation feature enables to efficiently spot treatment fluids within the wellbore which reduces overall operational costs. Its design features high performance duplex metallurgy that optimises corrosion resistance in high flow velocity acid treatments and provides superior mechanical properties which enable this system to withstand differential pressures up to 10,000 psi. These innovations make the MSIPS an optimal inflatable packer solution for formation evaluation, well stimulation, hydraulic fracturing, and enhanced oil recovery (EOR) applications in open hole or cased hole.

Applications
- Selective formation stimulation (acid treatment)
- Cement squeeze for permanent zonal isolation
- Caprock integrity testing
- Formation evaluation in Oil & Gas, geotechnical and water wells
- Diagnostic fracture injection testing – Minifracs

Features
- Simple and reliable operation requires axial movement and dart/ball pressure activation (control lines, rotation, or downhole pumps are not required)
- Pressure balanced design with adjustable shear pressures
- High expansion elements available for retrievable Thru Tubing applications
- Backup pull-release emergency deflation mechanism available
- Auto J function provides positive indication of multiple operational stages through axial movement
- Adjustable injection sub location for treatment efficiency optimization
- Deployed on Workstring or Coiled Tubing
- Adaptor sub extensions available for longer straddle intervals
- Robust DuraGRIP surface finish technology enables anchoring in severe conditions
- Available upgrades for downhole measurement systems
- Two different chassis sizes available for adaptability with an extensive range of packer types and sizes

Standard System Configurations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>mm     in</td>
<td>mm² in²</td>
<td>mm in</td>
</tr>
<tr>
<td>73  2 ⅞</td>
<td>380 0.59</td>
<td>76 3</td>
</tr>
<tr>
<td>114 4 ½</td>
<td>1,257 1.95</td>
<td>114 4 ½</td>
</tr>
<tr>
<td></td>
<td></td>
<td>127 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>140 5 ½</td>
</tr>
<tr>
<td></td>
<td></td>
<td>178 7</td>
</tr>
</tbody>
</table>
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Applications

- Selective formation stimulation (acid treatment)
- Zonal isolation for EOR chemical injection
- Cement squeeze for permanent zonal isolation
- Hydraulic fracturing up to 10,000 psi
- Caprock integrity testing
- Open hole injection testing
- Formation evaluation in Oil & Gas, geotechnical and water wells
- Diagnostic fracture injection testing – Minifrac

Features

- Simple and reliable operation requires axial movement and dart/ball pressure activation (control lines, rotation, or downhole pumps are not required)
- Pressure balanced design with adjustable shear pressures
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- Backup pull-release emergency deflation mechanism available
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Standard System Configurations

<table>
<thead>
<tr>
<th>Standard MSIPS Modular Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Straddle Zone Extension</td>
</tr>
<tr>
<td>2. Dart/Ball Catcher</td>
</tr>
<tr>
<td>3. Crossovers to standard thread</td>
</tr>
</tbody>
</table>

Msips Packers Rated Pressure Vs. Inflation Diameter

* Charted differential pressure ratings assume straddle packer configuration. Refer to your IPI Representative for single packer ratings if required.
The Single Set Treatment Packer (SSTP) is a Thru Tubing system which utilises the DuraGRIP™ inflatable packer technology, in conjunction with a pressure activated inflation valve to provide bi-directional zonal isolation and anchoring. This allows pump through operations without workstring manipulation. The design incorporates an equalisation feature which eliminates the effects of wellbore pressure to ensure an optimal packer setting sequence in stringent downhole conditions. The SSTP is compatible for conveyance on Coiled Tubing, Workstring, or Capillary Tubing in its standard configurations.

**Applications**
- Zonal isolation
- Reservoir stimulation
- Open hole and cased hole pressure testing
- Downhole seal verification
- Water shut off chemical squeeze
- LCM chemical squeeze

**Features**
- Suited for balanced and underbalanced well conditions*
- Ball free setting and disconnection
- Compatible with a wide range of Thru Tubing inflation-element sizes which can be adjusted for a tailored solution.
- DuraGRIP™ inflation element construction features an external OD surface finish designed to maximize bi-directional anchoring while allowing for full OD retraction after deflation
- Self-anchoring to maximum differential pressure capacity
- High expansion capability

**Available Sizes **

<table>
<thead>
<tr>
<th>Inflation Valve OD</th>
<th>Internal Diameter</th>
<th>Packer OD***</th>
<th>Max Inflation Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.125 in</td>
<td>54 mm</td>
<td>0.55 in</td>
<td>14 in</td>
</tr>
<tr>
<td>2.25 in</td>
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</tr>
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<tr>
<td>3 in</td>
<td>76 mm</td>
<td>3 in</td>
<td>76 mm</td>
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<tr>
<td>3.25 in</td>
<td>83 mm</td>
<td>3.25 in</td>
<td>83 mm</td>
</tr>
</tbody>
</table>

* A back pressure valve device may be required when operating in underbalanced conditions to control of inflation pressure through the setting sequence
** Packer elements available in NBR and HNBR options
The Single Set Treatment Packer (SSTP) is a Thru Tubing system which utilises the DuraGRIP™ inflatable packer technology, in conjunction with a pressure activated inflation valve to provide bi-directional zonal isolation and anchoring. This allows pump through operations without workstring manipulation. The design incorporates an equalisation feature which eliminates the effects of wellbore pressure to ensure an optimal packer setting sequence in stringent downhole conditions. The SSTP is compatible for conveyance on Coiled Tubing, Workstring, or Capillary Tubing in its standard configurations.

**Applications**

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- Reservoir stimulation
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**Features**

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**Available Sizes**

<table>
<thead>
<tr>
<th>Conventional Inflatable</th>
<th>Size</th>
<th>OD Internal Diameter</th>
<th>Packer OD</th>
<th>Max Inflation Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.125</td>
<td>54</td>
<td>0.55</td>
<td>14</td>
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<td>2.125</td>
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<td></td>
<td>3.25</td>
<td>83</td>
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The Retrievable Remedial Cementing Packer (RCP) is a field proven innovative inflatable packer system designed for retrievability after remedial cementing. The retrievable RCP features drillable residual components, which makes it the optimal solution for shutting-off lost-circulation zones encountered during drilling operations.

The RCP is conveyed on workstring and allows circulation during deployment. The RCP setting sequence starts by dropping and pressuring up against a phenolic ball. Once the RCP is fully inflated, an over-pressure is applied, shearing out the setting ball and drillable ball seat sleeve, which can be captured in a tailpipe ball catcher. Once the RCP system is fully set, remedial cementing operations can commence.

After the remedial cement is set, the RCP can be deflated by applying over-pull, which shears its release pins to enable RCP packer deflation. Once deflated, further over-pull is required to break any remaining cement bond to the packer assembly. A drillable plastic shroud located at the bottom of the packer element is the contact point between the RCP body and the remedial cement. The RCP packer element plastic shroud is designed to shear off if the RCP is cemented in place, minimizing risk of becoming stuck at setting depth.

**Applications**
- Shut-off lost-circulation zones without running and cementing casing
- Test, squeeze and treat operations
- Vertical, inclined and horizontal wells
- Workover/Well intervention with a Retrievable Inflatable Bridge Plug (RIBP) as a pair

**Features**
- Stand-alone retrievable treatment while drilling to eliminate the need for a drillable or permanent system
- Conveyed on workstring
- Allows circulation during deployment
- Optional short fiberglass pipe stinger below the packer as an easily drillable tailpipe
- Optional tailpipe ball catcher
- Optional shearable plastic shroud located at the bottom of the RCP packer element, minimizing the risk of tool becoming stuck at setting depth
Casing Integrity Test Tool (CITT)

The Casing Integrity Testing Tool (CITT) combines the inflatable packer technology with a multi-set packer tool chassis enabling operators to perform multiple casing integrity tests in a single trip. Its design features a steel reinforced inflatable packer element and a tool chassis fitted with an Auto Dump Valve (ADV), which was designed to allow for multiple inflation cycles and prevent premature inflation in the case of hydraulic unbalances across the workstring during deployment.

The CITT can be deployed on workstring or coiled tubing, and it is inflated hydraulically by increasing applied pressure. Once the CITT is set, mechanical integrity of the casing string can be tested by increasing applied pressure within the workstring annulus above the CITT.

**Applications**
- Cased hole mechanical integrity testing
- Temporary isolation for zonal stimulation
- Blowout preventer (BOP) stack leak testing
- High expansion retrievable thru-tubing pressure testing
- Open hole injection testing

**Features**
- Multiple set capability
- Maximum differential pressure rating of 5,000psi (workstring tensile limitations may apply)
- Temperature rating of 130°C/ 266°F
- High expansion elements available for retrievable thru-tubing testing
- Available in a wide range of sizes to cover for standard oilfield casing dimensions
- ADV inflation valve for multiple controlled inflation sequences (Pat. Pending)
- Deployed on workstring or coiled tubing
- Fluid bypass option for bottom-end deflation available
- Bridge plug zonal isolation not required for casing tests
- Optional DuraGRIP surface finish technology for anchoring in severe conditions
- Inflated hydraulically by increasing applied pressure without the need to move or rotate string, or change weight
The Inflatable Casing Packer (ICP) provides a reliable effective seal, establishes zonal isolation, and improves wellbore integrity while optimizing well construction costs, and operational efficiency. The ICP is run as an integral part of the casing string, and its inflation is achieved through an inflation/shut-in valve mechanism designed to enable a controlled inflation sequence, and establish a permanent seal between the ICP and its annulus.

**Applications**
- Cement assurance in open hole or between casing
- Zonal isolation in open hole completions
- Annular barrier to prevent gas migration to surface
- Multi-stage cementing
- Isolation for multi-lateral well branches
- Off-bottom cementing of open hole completions
- Zonal isolation for selective stimulation or water shut-off

**Features**
- No welding during construction
- Full-length steel wire reinforced element
- Field-proven ICP inflation valve designed for simple pin reconfiguration
- Manufactured on a casing joint (no additional internal threads)
- Available on a wide range of sizes (from 23/" to 20.00")
- Primary and secondary ICP inflation valve locking mechanisms
- Maximum temperature rating of 130°C (266°F)
- Differential pressure rating of 4,000 psi (276 bar)
- Re-pressure test capability of 10,000 psi (689 bar) after inflation
- Epoxy-free inflation valve collar for all ICP sizes

**Options**
- Cement retainer or bridge plug configuration adaptor kits available
- Anti-rotation lock to prevent packer damage
- Standard seal-length options are 3ft (0.91m) and 9.6ft (2.74m)
- Other seal lengths options available upon request
- External control line inflation option available
Large Diameter Plugs & Abandonment Packers

Specifically designed for plugging of exploration wells as part of usual cementing procedures prior to abandonment. These permanent inflatable bridge plugs have advantages of relatively small run-in diameter, large setting range and ease of installation.

They are simply run in on drill pipe, inflated through this pipe and released by a left hand thread back-off. Typically, cement is then pumped directly on top of them to complete abandonment cementing requirements.

Applications
• Exploration well plug and abandonment

Features
• Suitable for setting in open hole or casing
• Available to suit standard casing sizes of 13 ¾", 20" and 30" - other sizes including high expansion are available
• Factory set spring check and relief valve systems assure positive pressure shut-in over pressurisation
• Shear valve inflation protection system to prevent premature inflation
• Lifting points provided on both ends of all plugs to facilitate handling
• Designed to support differential pressure from above or below
• The standard range of plugs is designed for setting in casing
• Options for open hole applications are also available

<table>
<thead>
<tr>
<th>Casing size</th>
<th>Packer diameter</th>
<th>Rubber length</th>
<th>Different pressure capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in mm</td>
<td>in mm</td>
<td>bar</td>
</tr>
<tr>
<td>13,375</td>
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<td>10,630</td>
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<tr>
<td>20</td>
<td>434</td>
<td>17,087</td>
<td>800</td>
</tr>
<tr>
<td>30</td>
<td>582</td>
<td>22,913</td>
<td>980</td>
</tr>
</tbody>
</table>
The Permanent Inflatable Bridge Plug (PIBP) incorporates the DuraGRIP™ bidirectional inflation element as integral part of a modular system that enables adaptability to a wide range of configurations and tool sizes.

**Applications**
- Plug and abandonment (P&A’s) with cement squeeze option
- Zonal isolation in open or cased hole conditions (Vertical/Horizontal wells)
- False bottom as a base for cement in open hole side-tracking operations
- Shut-off lost-circulation zones
- Water Shutoff
- Depleted zone abandonment

**Features**
- Available in bridge plug or cement retainer configurations
- Can be configured with a dual-flapper valve system rated to 5,000psi (Bidirectional seal established after disconnection/release)
- Incorporates a robust Inflation Valve System
- Adaptable to a wide variety of inflation element sizes
- Disconnect release mechanisms can be configured for right hand rotational release, direct pull release, hydraulic pressure shear or ON/OFF tool
- Inflation element construction features DuraGRIP™ external anchoring designed to maximize anchoring for optimal differential pressure holding capability while maintaining an effective bi-directional seal
- Self-anchoring to maximum rated differential pressure capacity
- Large expansion capability – up to 3 times uninflated diameter
- Conveyed on Coiled Tubing or Workstring

---

The Retrievable Inflatable Bridge Plug (RIBP), incorporates the same valving used on PIBP and ICP inflation valving system in conjunction with a DuraGRIP™ packer element, which provides bi directional sealing and anchoring. The RIBP is an innovative design with an equalisation mechanism allowing the operator to equalize pressure across the packer, before activating the deflation mechanism. There are several methods of deployment such as drill pipe, coiled tubing and capillary tube (micro coil).

**Applications**
- Permanent and temporary abandonment
- Zonal isolation operations
- Shut off lost circulation zones
- Bottom hole shut off operation in open or cased hole conditions
- Tubing/casing isolation for wellhead change-out

**Features**
- Available in a range of configurations allowing it to be conveyed, set and retrieved on DP, CT, capillary tube
- Equalization feature allowing any potential pressure across the packer to be equalised, prior to deflation
- Can be deployed and retrieved in both saturated and depleted conditions
- Ball free setting, equalization and retrieval mechanisms
- Adaptable to a wide variety of inflation element sizes
- Inflation element construction (DuraGRIP™) features an external steel wire reinforcement layer designed to maximise bi-directional anchoring whilst maintaining bi directional sealing for optimal differential pressure capability
- Suitable for cased and open hole
- High expansion capabilities
- Conveyed on Coiled Tubing or Workstring

---

### Available Sizes*

<table>
<thead>
<tr>
<th>Inflation Valve OD</th>
<th>Packer OD</th>
<th>Max Inflation Diameter (in mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>4.5</td>
<td>114</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
<td>5.5</td>
<td>140</td>
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<tr>
<td></td>
<td>6.3</td>
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<td></td>
<td>7.75</td>
<td>197</td>
</tr>
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<td></td>
<td>9.0</td>
<td>230</td>
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<tr>
<td></td>
<td>11.0</td>
<td>280</td>
</tr>
<tr>
<td></td>
<td>15.5</td>
<td>395</td>
</tr>
</tbody>
</table>

* As per operational requirements/restrictions, RIBP can be modified to adapt different packer sizes on each chassis

**Packer elements available in NBR and HNBR options**
The Permanent Inflatable Bridge Plug (PIBP) incorporates the DuraGRIP™ bidirectional inflation element as an integral part of a modular system that enables adaptability to a wide range of configurations and tool sizes.

Applications
- Plug and abandonment (P&A) with cement squeeze option
- Zonal isolation in open or cased hole conditions (Vertical/Horizontal wells)
- False bottom as a base for cement in open hole side-tracking operations
- Shut off lost circulation zones
- Water Shutoff
- Depleted zone abandonment

Features
- Available in bridge plug or cement retainer configurations
- Can be configured with a dual-flapper valve system rated to 5,000psi (bidirectional seal established after disconnection/release)
- Incorporates a robust Inflation Valve System
- Adaptable to a wide variety of inflation element sizes
- Disconnect release mechanisms can be configured for right hand rotational release, direct pull release, hydraulic pressure shear or ON/OFF tool
- Inflation element construction features DuraGRIP™ external anchoring designed to maximize anchoring for optimal differential pressure holding capability while maintaining an effective bi-directional seal
- Self-anchoring to maximum rated differential pressure capacity
- Large expansion capability – up to 3 times uninflated diameter
- Conveyed on Coiled Tubing or Workstring

The Retrievable Inflatable Bridge Plug (RIBP), incorporates the same valving used on PIBP and ICP inflation valving system in conjunction with a DuraGRIP™ packer element, which provides bi-directional sealing and anchoring. The RIBP is an innovative design with an equalization mechanism allowing the operator to equalize pressure across the packer, before activating the deflation mechanism. There are several methods of deployment such as drill pipe, coiled tubing and capillary tube (micro coil).

Applications
- Permanent and temporary abandonment
- Zonal isolation operations
- Shut off lost circulation zones
- Bottom hole shut off operation in open or cased hole conditions
- Tubing/casing isolation for wellhead change-out

Features
- Available in a range of configurations allowing it to be conveyed, set and retrieved on DP, CT, capillary tube
- Equalization feature allowing any potential pressure across the packer to be equalised, prior to deflation
- Can be deployed and retrieved in both saturated and depleted conditions
- Ball free setting, equalization and retrieval mechanisms
- Adaptable to a wide variety of inflation element sizes
- Inflation element construction (DuraGRIP™) features an external steel wire reinforcement layer designed to maximise bi-directional anchoring whilst maintaining bi-directional sealing for optimal differential pressure capability
- Suitable for cased and open hole
- High expansion capabilities
- Conveyed on Coiled Tubing or Workstring

Available Sizes*

<table>
<thead>
<tr>
<th>Inflation Valve OD</th>
<th>Packer OD**</th>
<th>Max Inflation Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>in</td>
<td>mm</td>
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</tr>
<tr>
<td>3.5</td>
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<td>395</td>
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</tbody>
</table>

* As per operational requirements/restrictions, RIBP can be modified to adapt different packer sizes on each chassis
** Packer elements available in NBR and HNBR options
The Production Injection Packer (PIP) incorporates the same valving used on ICP and PIBP in conjunction with IPI’s inflatable packer elements, well known for their ability to recover to the uninflated diameter, which is critical to operational success when retrieving. The PIP is an innovative use of IPI’s existing technologies, to provide reliable, retrievable packers for both production and injection purposes, which can also be used for zonal isolation, testing, stimulation and selective acidizing.

Applications
- Zonal isolation operations/Scab liner
- Bottom hole shut-off operation in open or cased hole conditions
- Test, treat or squeeze operations
- Selective acidizing
- Low pressure zone treatment

Features
- Single shot retrievable tubing packer - drop ball inflate mechanism
- Three different deflation mechanisms (drop ball, rotate and pull deflate) to suit the application based on DLS and depth
- Incorporates IPI PIBP/ICP inflation valve system
- Modular design – multiple element sizes have common chassis
- DuraGRIP™ elements available for operations requiring anchoring – DuraGRIP™ packers feature an external steel wire layer designed to maximize bi-directional anchoring whilst maintaining bi-directional sealing, for optimal differential pressure holding capability
- Conveyed on coiled tubing or work string (DP, tubing)

Available Sizes

<table>
<thead>
<tr>
<th>Inflation Valve OD</th>
<th>Packer OD</th>
<th>Equivalent TBG Diameter - OD (ID)</th>
<th>Minimum ID through the tool</th>
<th>Maximum Tensile Strength</th>
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<tr>
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* PIP is available with different grades of tubing.
** Safety factor of 1.6 has been considered for tensile limit calculations.