PosiFrac®
Multi-Set Inflatable Packer Straddle System

Versatile, Reliable, Durable. The tool that you need.

- Stimulation of multiple intervals in a single run
- Acidizing
- Fracturing
- Swab testing
- Well testing
TAM has the tool that can do it all.
The PosiFrac Straddle enhances the testing, treating, and fracturing market with a simple and reliable inflatable packer straddle tool that selectively isolates individual zones for treatment.

SYSTEM DESCRIPTION:
TAM’s PosiFrac® Straddle System assemblies can be used for a wide array of applications including acidizing, fracturing, flow testing, washing perforations, and pressure testing. The Auto Piston setting mechanism is designed for multi-set operations with a fluid medium in conjunction with the TAM Fluid Control Valve. The Insta-Set Valve® setting mechanism is designed for multi-set sand fracturing operations with densities up to four pounds per gallon. Re-frac applications include near wellbore repacking through frac sleeves and/or existing perforations, or fracturing isolated sections of new rock. These TAM-designed setting mechanisms eliminate the need for a ball to be pumped or dropped from surface to inflate the packers, saving time, fluids, and money. The Straddle System is particularly reliable in horizontal applications. It is configured for the specific applications and can be deployed with either coiled tubing or jointed pipe.

FEATURES:
• The standard configuration is rated for a maximum working pressure of 5,000 psi and maximum working temperature of 250°F (121°C)
• Packers with separate sealing elements allow for spacing out of packers to accommodate specific well and/or treatment interval requirements
• Packer seal elements are designed and manufactured for resistance to corrosive fluids
• Elements inflate simultaneously
• A wide selection of elements accommodates a broad array of well conditions and hole sizes
• The straddle system can be deployed on jointed pipe or coiled tubing

BENEFITS:
• Multi-set capability, including setting within open perforations
• Retains the acid in the work string with TAM Fluid Control Valves while moving between intervals in the wellbore
• Reduces risk of fracturing adjacent zones
• Reduces water usage
• Insta-Set Valve option provides additional time savings
• Field-proven design for reliability

TAM’s PosiFrac Straddle System fractured over 100 sets in one run for a customer in Canada.
INSTA-SET VALVE
The Insta-Set Valve is a setting mechanism option for TAM’s PosiFrac Straddle System, designed primarily for sand frac or re-frac applications. This valve can also be used with the TAM High Rate Fluid Control Valve for acid frac applications up to 20 barrels per minute. The design consists of a dual-purpose rotatable ball valve that can be utilized to divert and isolate fluid within an inflatable element and provide an unrestricted flow area for hydraulic stimulation fluids. The cycling between the two operational positions is achieved with only vertical manipulation of the work string, adding several benefits over other multi-set mechanisms.

COLLET CHoke KIt
The Collet Choke Kit mechanism allows multiple sets by circulating a ball to its seat for each inflation cycle. It is highly reliable and provides a large flow path. The setting ball seals inside the honed ID of the control tube extension and is held there by means of the fingers of the collet. After applying inflation pressure, the normal downward movement of the control tube isolates the inflation pressure in the elements and allows the collet to open as it enters an undercut area in the control tube. This opening action then allows the ball to pass through the control tube, opening a flow path.

STANDING VALVE KIt
The Standing Valve Kit is used for special testing programs, such as hydraulic fracturing stress testing, when it is important to protect the target formation from pressure (e.g., to avoid shearing the setting ball) prior to the test. After the packers are inflated and pressure in the work string has been released, the valve is lifted by wireline, opening through the mandrel. A pressure gauge can be added to the bottom of the Standing Valve to acquire downhole pressure and temperature data. This technique improves the quality of information and reduces rig time during well testing.

AUTO PISTON KIt
The Auto Piston Kit mechanism requires no balls. The tool is always in either the inflating or the treating position. This mechanism is designed for multi-set operations and is run in conjunction with the TAM Fluid Control Valve. It is particularly reliable in horizontal applications as there is no requirement to displace a ball onto a seat to inflate the packer.
TOOL SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Setting Tool OD</th>
<th>2-1/8 in.</th>
<th>2-5/8 in.</th>
<th>3-1/16 in.</th>
<th>3-7/16 in.</th>
<th>4-1/4 in.</th>
<th>5-1/2 in.</th>
<th>7 in.*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>54mm</td>
<td>66.7mm</td>
<td>77.8mm</td>
<td>87.3mm</td>
<td>108mm</td>
<td>139.7mm</td>
<td>177.8mm</td>
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<tr>
<td>Minimum ID</td>
<td>0.56 in.</td>
<td>0.63 in.</td>
<td>1 in.</td>
<td>1 in.</td>
<td>1-1/2 in.</td>
<td>1-3/4 in.</td>
<td>2-3/4 in.*</td>
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<tr>
<td></td>
<td>14.20mm</td>
<td>16.00mm</td>
<td>25.40mm</td>
<td>25.44mm</td>
<td>38.10mm</td>
<td>44.45mm</td>
<td>69.85mm</td>
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<tr>
<td>Top Connection</td>
<td>1.315 in. NU</td>
<td>1.900 in. EU</td>
<td>2-3/8 in. EU</td>
<td>2-3/8 in. EU</td>
<td>2-3/8 in. EU</td>
<td>2-7/8 in. EU</td>
<td>4-1/2 in. IF</td>
</tr>
<tr>
<td></td>
<td>33.4mm</td>
<td>48.26mm</td>
<td>60.33mm</td>
<td>60.33mm</td>
<td>60.33mm</td>
<td>73.03mm</td>
<td>114.3mm</td>
</tr>
</tbody>
</table>

*For premium connection 7 in. (177.8mm) PosiFrac Straddle System, mandrel ID is 2-1/2 in. (63.5mm). 4-1/2 in. (114.3mm) EU thread option is available for 7-1/2 in. (190.5mm) PosiFrac Straddle System. For packer element size capabilities, contact Technical Group.

The PosiFrac Straddle System runs through restrictions and can be set in larger diameters. It is also capable of providing zonal isolation in the fracturing or re-fracturing of existing multi-stage completions.