



**PosiFrac® Straddle System – Multi Set Inflatable Straddle Packer System**

**PRODUCT DESCRIPTION:**

TAM's PosiFrac® Straddle System is an inflatable straddle packer system consisting of an upper packer that utilizes a multi-set setting mechanism and an externally inflated lower packer that is connected with spacer pipe and an inflation line. The tool isolates the interval between upper and lower packers, allowing a wide array of applications. Depending on the configuration of the tool, it can be run on a variety of work strings in vertical, deviated, or horizontal wellbores, and it can be set in cased or open hole conditions.

The tool is operated by generating differential pressure in favor of the work string to inflate both upper and lower packers simultaneously. Once they are set, fluid can then flow through the ID of the tool to stimulate the isolated zone between the packers. Fluid can also be flowed through the tool to stimulate zones below the lower packer while at the same time another stimulation operation is done in the annulus above the upper packer, therefore isolating a certain section of the wellbore against the stimulation operation. Accessories can be run to prevent fluid loss in low fluid level wells.

**PROVIDE SOLUTIONS FOR:**

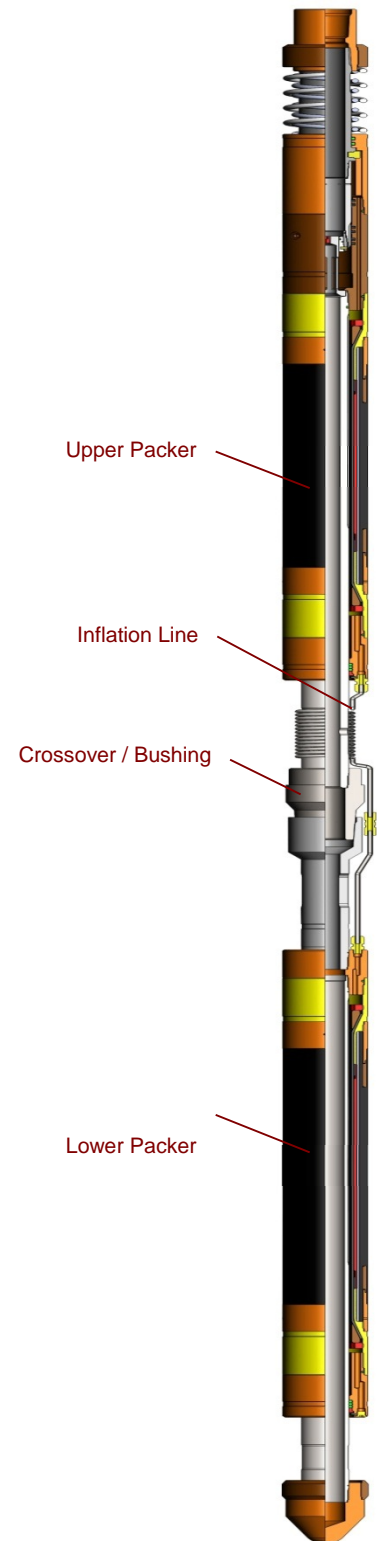
- Acidizing
- Swab testing
- Well testing
- Fracturing
- Stimulation of multiple intervals in a single run

**FEATURES:**

- 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
- Two types of lock set mechanisms are available: rotation lock systems or set-down weight lock systems
- The standard configuration is rated for a maximum working pressure of 4000 psi and maximum working temperature of 250°F (121°C)
- A wide selection of elements accommodates a broad array of well conditions and hole sizes
- Can be deployed on jointed tubing or coiled tubing
- Ability to straddle customizable lengths in the well bore, which isolates the stimulation in the most productive zone

**BENEFITS:**

- Multi-set capability, including setting within open perforations saves time
- Retains the acid in the work string with TAM Fluid Control Valves while moving between intervals in the wellbore saves time
- Reduce risk of fracturing adjacent zones
- Reduce water usage
- Insta-Set® Valve option provides additional time savings.





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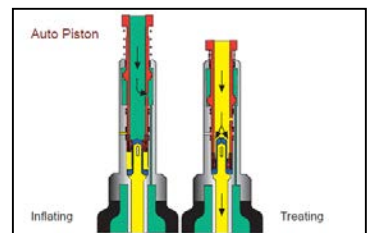
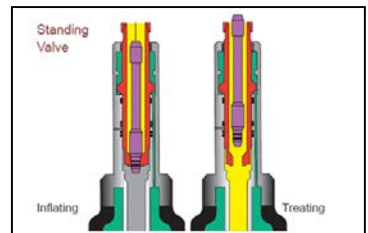
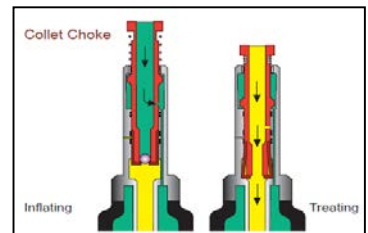
**SETTING MECHANISM OPTIONS:**

The Insta-Set Valve is a setting mechanism option for TAM's PosiFrac Straddle System, designed primarily for sand frac applications. The Insta-Set™ Valve can also be used with a Fluid Control Valve for acid frac and matrix acid stimulation applications, as well as many other multi-set inflatable packer applications. 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.

The Collet Choke Kit mechanism allows multiple sets by circulating a ball to its seat for each inflation cycle. It provides the largest flow capacity of any of the setting mechanisms. 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. The normal downward movement of the control tube 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.

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., 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. This option can be added to the bottom of a pressure gauge, with a port through a standing valve for surface readout of pressure and temperature gauge data. This technique improves the quality of information and reduces rig time during well testing.

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. It is particularly reliable in horizontal applications as there is no requirement to place a ball onto a seat. This option eliminates the force loading of the inflating pressure versus ball seat area.



**TOOL SIZES:**

Nominal Tool OD		Nominal Tool ID		Top Connection
in.	mm	in.	mm	(in.)
2-1/8	54	0.56	14.20	1.315 NU
2-5/8	66.7	0.63	16.00	1.900 EU
3-1/16	77.8	1.00	25.40	2.375 EU
3-7/16	87.3	1.00	25.40	2.375 EU
4-1/4	108	1.50	38.10	2.375 EU
5-1/2	139.7	1.75	44.45	2.875 EU
7*	177.8*	2.75*	69.85*	4.5 IF

\*For premium connection 7" (177.8 mm) PosiFrac Straddle System, mandrel ID is 2.50 in. (63.5 mm)

\*\*4.5 in. (114.3 mm) EU thread option is available for 7-1/2 in. (190.5 mm) PosiFrac Straddle System

For packer element size capabilities, contact Technical Group.