TAM-J
Multple Set
Inflatable Packer System

- Highest reliability multiple-set inflatable packer system available
- Element sizes for 2-3/8" tubing through 30" casing
- Easy conversion to straddle tool
General Descriptions

With over twenty-five years experience, the TAM-J tool line has a proven track record of performing a wide variety of functions where multiple inflate cycles are required. Different setting mechanisms are available for use with TAM-J tool systems, which allow multiple cycles without circulating additional setting balls.

TAM-J

The TAM-J control tube moves the inflation port between inflate, locked-set and release positions with only right-hand torque and up/down motion. In addition to the simplicity of the “J” track, an equalization flow path from above to below the inflatable element is opened and closed with the same up/down movement.

Straight-J

The Straight-J simplifies operations further by eliminating all rotation from required tool functions, requiring only up-and-down motion.

JUMBO-J

A premium connection, 7” OD tool body, JUMBO-J is available to accept 7” through 141/2” OD elements. This tool configuration provides the highest tensile and torque capacity of any inflatable service tool on the market.

Straddle

The TAM-J system is particularly suitable for conversion to a straddle packer assembly to selectively isolate zones for testing or treating. The straddle interval is adjustable from 3-ft. (1 m) to as long as desired by adding tubing between packers.

In one well in Canada, the TAM-J Straddle was used to selectively acidize fifty-seven intervals in a horizontal well, on a single trip into the well.

Inflation Elements

TAM offers four types of inflatable elements to satisfy the wide range of application requirements in vertical, horizontal, cased or open hole. These include the IE (weave type), SE (slat type), VE (dual layer canted slat type) and HE (hybrid slat and weave type) elements. They come in various sizes and are designed to operate in holes ranging in diameter from 23/8” through 30”.

TAM-J Key Features

A typical TAM-J Straddle assembly can be made-up and ready to run in an hour or less.

Special packer mandrels and extensions are available for high-pressure operations, and special packer elements are available for high-temperature service.

Optional Element Reinforcement Styles

Weave Type Element (IE)
- Multiple-set applications
- Sets in perforations, slots, fractures, or open hole
- Seldom leaves rubber in the hole

Weave Type Element (HE)
- Combination of Slat element for extrusion resistance, and Weave element for multi-set capabilities

Slat Type Element (TE & SE)
- Single and multi-set applications
- Exposed slats function as slips

Canted Slat Dual Layer (VE)
- Single and multi-set applications
- Cased or open hole
- Benefit of Slat type for HPHT
- Sets in perforations, slots, fractures, or open hole
The packer is run on the work string, drillpipe or tubing with the “J” track control in the inflating position.

Drop a steel ball to seat at the choke. Pressure up to inflate the packer. See back page for alternate setting mechanisms.

Pick up and rotate a quarter turn to the right, then slack off weight. With the inflating and equalization port between PolyPak seals, packer element is isolated from pressure inside the work string.

Pressure up to shear the ball and choke, opening the mandrel through the packer.

Set down with about 2,000 lbs. at the tool. Rotate a quarter turn to the right and pick up to deflate the packer. Fluid drains into both the work string and into the annulus outside the packer, allowing the packer to deflate fully.

To reset the packer in the hole, pump a phenolic ball down to the remaining ball seat, and repeat the setting procedure. The phenolic ball will shear through the seat, again opening the mandrel through the packer.
Problem:
• Scale build-up in perforations

Solution:
• Run Thru-Tubing
• Straddle and acidize individual perforation sets

Problem:
• Screen & gravel pack plugged

Solution:
• Perform multiple sets to selectively acidize screen
Problem:
- Leak in 22-inch casing or shoe

Solution:
- Perform multiple tests to determine exact depth of leak and squeeze cement to repair

Problem:
- Well requires P&A
- Corroded tubing

Solution:
- Perform multiple sets to locate leaks
- Squeeze perforations and spot annulus cement plugs
Problem:
• Well producing excess water

Solution:
• Perform multiple production tests to determine water entry point

Problem:
• Multi-lateral well producing excess water

Solution:
• Selectively test each leg
Problem:
• Severe lost circulation in lateral

Solution:
• Squeeze cement L/C zones

Problem:
• Low productivity due to formation damage

Solution:
• Perform multiple matrix acid treatments as required
Optional Setting Mechanisms

**Auto Choke**

A ball and prong configuration where the prong kicks the ball off seat when down movement is applied to the work string after inflation. This setting mechanism allows circulation while running into the well and prior to dropping the ball to the seat. It provides a means for multiple sets without dropping additional balls.

**Auto Piston**

No balls are dropped in this setting mechanism and the tool is always in either the inflating or treating position. This mechanism is designed for multiple set operations. It is particularly reliable in horizontal applications as there is no requirement to place a ball onto a seat.

**Standing Valve**

The standing valve 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 is released, the valve is lifted by wireline, opening through the mandrel.

**Collet Choke**

This mechanism allows multiple sets by circulating a ball to seat for each inflation cycle. It provides the largest flow capacity of any of the setting mechanisms.

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**Standard TAM-J Sizes**

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<thead>
<tr>
<th>TAM-J Outside Diameter</th>
<th>mm</th>
<th>42.9</th>
<th>54</th>
<th>66.7</th>
<th>77.8</th>
<th>87.3</th>
<th>108</th>
<th>140</th>
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<tbody>
<tr>
<td></td>
<td>inches</td>
<td>111/16</td>
<td>21/8</td>
<td>25/8</td>
<td>31/16</td>
<td>31/16</td>
<td>41/4</td>
<td>51/2</td>
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<tr>
<td>Mandrel Inside Diameter</td>
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<td>2.375</td>
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Element Range: 111/16” up to 141/2”