CoilFLATE Through-Tubing Packer

Reliable zonal isolation for harsh environments
Reliable zonal isolation for harsh environments

**BENEFITS**
- Elimination of cost and time associated with workover rig
- Reduction in downtime by achieving success on first attempt
- Economical production optimization in harsh-environment wells
- Significant safety margin over conventional systems at similar injection pressures

**APPLICATIONS**
- Lower-zone abandonment
- Water shutoff
- Wellhead, pressure, and tubing integrity testing
- Cement squeeze and acidizing operations
- Chemical and water-control treatments

**FEATURES**
- Applicability at temperatures up to 375 degF [190 degC]
- No-kill well intervention
- Reliable high-pressure seal at large inflation ratios
- Chemical resistance against aggressive chemicals
- Accurate depth control and real-time pressure monitoring using the ACTive* system
- No ball drop required for inflation and release
- Computer-aided job design with Inflate Advisor software

**ROBUST DESIGN FOR SEVERE CONDITIONS**
Tapered heavy-duty slats, a high-strength carcass restraint system, a composite bladder, and a chemically resistant seal compound keep the CoilFLATE packer anchored in place, providing a high-pressure seal even at large inflation ratios (>5,000 psi at 2:1, >2,000 psi at 3:1). The CoilFLATE design allows extended exposure of the assembly to temperatures up to 375 degF [190 degC], under harsh wellbore conditions and in almost any chemical environment.

**COMPATIBILITY WITH LIVE DOWNHOLE CT SERVICES**
The CoilFLATE system is compatible with the ACTive* family of live downhole CT services, which allow downhole measurement, interpretation, and job optimization when it matters most—while the job is still in progress. ACTive Isolation provides
- casing collar locator (CCL) depth correlation, which enables the CoilFLATE packer to be accurately positioned in the well in a single run
- pressure monitoring to control the pressure differential of the CoilFLATE packer across the sealing elements and tool, improving performance and reducing operational risk.

**PERMANENT ZONE ABANDONMENT, TEMPORARY ISOLATION**
Overcoming conventional operating restrictions of inflatable packers under extreme conditions, the CoilFLATE* CT through-tubing inflatable packer extends critical zonal isolation capability to previously inaccessible, chemically harsh, and high-temperature environments. The CoilFLATE isolation system suite is run on either CT or jointed pipe into vertical, deviated, or horizontal wellbores, in both cased hole and openhole sections, eliminating the need for a workover rig.

The system enables permanent abandonment of zones and temporary isolation of wellbore areas for tubing integrity testing, wellhead testing, and general pressure testing applications. Its chemical resistance makes it ideal for selective placement of treating fluids required for acid stimulation, water control, and chemical treatment.
CoilFLATE Through-Tubing Packer Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>2½ in</th>
<th>3 in</th>
<th>Open Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. tubing requirements for packer setting</td>
<td>2½-in OD, 2.32-in ID; 7.9 lbm/ft</td>
<td>4-in OD, 3.34-in ID; 13.2 lbm/ft</td>
<td>N/A</td>
</tr>
<tr>
<td>Max. OD of element before expansion</td>
<td>2¼ in</td>
<td>3 in</td>
<td>3 in</td>
</tr>
<tr>
<td>Max. OD of packer after expansion</td>
<td>5½ in (7½-in OD, 29.7 lbm/ft casing)</td>
<td>9 in (9½-in OD, 32.3 lbm/ft casing)</td>
<td>6½ in open hole</td>
</tr>
<tr>
<td>ID of flow passage through CoilFLATE packer</td>
<td>¼ in</td>
<td>1 in</td>
<td>1 in</td>
</tr>
<tr>
<td>ID of flow passage through running assembly</td>
<td>¼ in</td>
<td>¼ in</td>
<td>¼ in</td>
</tr>
<tr>
<td>Packer element length (shoulder to shoulder)</td>
<td>72 in</td>
<td>91.2 in</td>
<td>49.2 in</td>
</tr>
<tr>
<td>Packer chassis assembly length</td>
<td>138 in</td>
<td>162 in</td>
<td>117.5 in</td>
</tr>
<tr>
<td>Min. nipple size for retrieval</td>
<td>2.05 in (2½-in XN nipple)</td>
<td>3.135 in (4.0-in XN nipple)</td>
<td>3.135 in (4.0-in XN nipple)</td>
</tr>
<tr>
<td>Max. retrieval load</td>
<td>&lt;3,000 lbf</td>
<td>&lt;3,000 lbf</td>
<td>&lt;3,000 lbf</td>
</tr>
<tr>
<td>Max. tensile load for fishing</td>
<td>20,000 lbf</td>
<td>44,000 lbf</td>
<td>44,000 lbf</td>
</tr>
<tr>
<td>Element shipping weight and storage</td>
<td>100 lbm in shipping tube, 40 to 140 degF</td>
<td>60 lbm in shipping tube, 40 to 140 degF</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1 Hydrogen sulfide (H2S) concentration in parts per million is a function of downhole pressure. Not all materials meet NACE MR0175.

The engineered slat design allows higher differential pressures at varying inflation ratios.

![Differential pressure versus setting ID](image-url)