Permanent NeoPEPs are thru-tubing mechanical bridge plugs that pass thru small restrictions and set in casing and openhole diameters up to 3½ times their run-in diameter. Standard and NACE MR0175 Compliant Plugs are available.

NeoPEPs can be run and set on electric line, slickline, and coiled tubing.

NeoPEPs facilitate low cost operations that were never before possible.

Plug removal would require pumping, drilling, and/or milling of the plug anchor system.

NeoPEPs have robust anchor systems and elastomeric seals that provide immediate pressure isolation upon setting in casing. Like conventional cast iron bridge plugs, cement must be placed atop NeoPEPs if permanent long-term pressure isolation is required.

NeoProducts provides all the non-explosive tools needed for zonal isolation projects;

- High-Expansion Positive-sealing Elastomeric Plug (NeoPEP)
- NeoLong-Stroke Setting Tool (NeoHST)
- Non-Explosive Dump Bailer Systems (NeoBB & NeoHybridPDB)
- High Shear Bond Cement Slurry Kits (17 - 20 ppg expanding NeoSuperSlurry)

NeoPEPs can be set in open holes, cased holes, perforated casing intervals, and gravel packs.

View the Permanent NeoPEP animation, pick here.

Contact NeoProducts for information regarding Permanent NeoPEPs and their non-explosive setting tools (NeoHSTs).

Applications

- Rigless zonal isolations and recompletions
- Isolate cross-flow & thief zones
- Water production shut-off
- X-mas tree repairs & replacements
- Wellhead repairs & replacements
- Tubing string repairs and replacements
- Base for frack jobs
- Base for chemical stimulation jobs
- Base for thru-tubing gravel packs
- T&A and P&A operations

Benefits

- NeoPEPs facilitate low cost operations that were never before possible.
- Eliminates the burdens related to the presence of, transport and use of explosives
- NeoPEPs facilitate optimal exploitation of recoverable reserves (especially applicable to horizontal wells)

Features

- Run thru small restrictions, set in casing and provide ΔP seal
- Removable via drilling and/or milling
- 100% Non-explosive isolation operations, using;
  - Non-explosive setting tool
  - Non-explosive cement plug placement atop NeoPEP
  - High shear bond cmt plug assures long-term isolation
- Up to 3-½ : 1 expansion ratio
- Robust Bi-directional anchor system
- Instant pressure isolation
- Standard and NACE MR0175 Compliant Plugs are available.
Rigless Non-explosive Thru-Tubing Isolations
9-5/8” Permanent NeoPEPs

2-5/8" NeoPEP Specifications
(Permanent - Standard and Sour Service)

<table>
<thead>
<tr>
<th>Casing Size (in.)</th>
<th>Casing Weight (lb/ft)</th>
<th>Casing ID</th>
<th>RIH Length</th>
<th>Set Length</th>
<th>RIH Diameter</th>
<th>Maximum Pressure *</th>
<th>Temperature Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-⅝”</td>
<td>40-53-½</td>
<td>8.84-8.54 in. (224.5-216.9 mm)</td>
<td>161.13 in. (4.09m)</td>
<td>72.0 in. (1.83 m)</td>
<td>2.63 in. (66.8 mm)</td>
<td>500 psid (34 bard)</td>
<td>ambient - 350⁰F (ambient - 177⁰C)</td>
</tr>
</tbody>
</table>

* This value is the maximum pressure at the middle of the Casing ID range for the plug without cement at 250⁰F. The 2-5/8” NeoPEP can pass through a minimum restriction of 2.75” and greater ID.

The NeoPEP can be set at depth using two different non-explosive setting tools; NeoHydrostaticSettingTool and the NeoNEST.

NeoHSTs are used to effectively set the Permanent and Removable NeoPEPs (Neo Positive-sealingElastomericPlugs) and are hydrostatic pressure driven.

NeoHSTs function in multiple stages, with 2 stages being the standard. These multiple stages generate the force necessary to set the anchors, compress the packing element, and sever the weak point. Severing the weak point allows the NeoHST to release from the NeoPEP.

The NeoHST comes standard as a 2-stage tool. Additional stages, sold as Extra Stage Kits, are needed for lower Setting Depth Pressures.

NeoNESTs are “Ready-to-GO” wholly integrated non-explosive setting tools that are electronic/hydraulic pump driven.

NeoNESTs:
- can be operated in vertical through horizontal orientations,
- have no transportation restrictions,
- have no expendable costs per run,
- are compatible with Shooting Gamma Rays, and
- operate on positive and negative polarity.

Setting Tool Specifications

<table>
<thead>
<tr>
<th>Type of Setting Tool</th>
<th>OD</th>
<th>Pressure Rating</th>
<th>Temperature Rating</th>
<th>Stroke Length</th>
<th>RIH Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrostatic Pressure Driven</td>
<td>2-⅝ in. (66.7 mm)</td>
<td>10,000 psid (689 bard)</td>
<td>350⁰F 177⁰C</td>
<td>100 in. (254 cm)</td>
<td>25 ft. 4 in. (772 cm)</td>
</tr>
<tr>
<td>Electronic/Hydraulic Pump Driven</td>
<td>2-⅝ in. (66.7 mm)</td>
<td>10,000 psid (689 bard)</td>
<td>350⁰F 177⁰C</td>
<td>100 in. (254 cm)</td>
<td>39 ft. 11 in. (1,217 cm)</td>
</tr>
</tbody>
</table>