ESP Pod Systems

Multizone production and casing protection system

APPLICATIONS
- High-horsepower applications
- Dual ESP systems in series
- Highly corrosive fluids
- High-pressure pumping systems
- Deep, high-load ESP system deployment
- Commingling fluids produced from multiple zones

ADVANTAGES
- Produce greater volume of fluid from deeper in the wellbore
- Protect casing integrity from overpressure, corrosion, and erosion
- Sustain tubing load and protect ESP system
- Allow natural flow bypass

POD SYSTEM
A pod system is a specially designed capsule that encases and supports an ESP system in a sealed environment. This system is used to isolate and produce multiple zones independently or to configure two ESP systems in series (with the option for an Auto Y-Tool® subsurface automatic diverter system) and provide up to 2,000 hp in a single system.

The pod system can also be used to isolate and protect casing in a harsh environment. The pod system is installed, and the annulus is isolated with a packer or other sealing device. The annulus is then filled with a benign fluid to prevent casing corrosion. The wellbore fluid enters through the bottom of the pod system and is produced through the tubing without contact with the annulus.

Pod systems provide wellbore integrity and higher flow rates from deeper in the well, bear the load of the tubing string, and enable more production in a sealed system.

Dual ESP systems configured with dual or single pod systems for commingled or independent production.
SIZING
The correct pod casing size for a given application is based upon a number of variables:

- casing size and weight
- ESP series
- external cables/control lines (dimensions)
- pod system configuration (e.g., single or dual ESP)
- ESP motor cooling requirements
- type of pod system casing (coupled or flush joint).

<table>
<thead>
<tr>
<th>Well Casing, in</th>
<th>Pod System Casing Size, in</th>
<th>Maximum ESP Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>5½</td>
<td>456</td>
</tr>
<tr>
<td>7¾</td>
<td>5½</td>
<td>456</td>
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<tr>
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<td>562</td>
</tr>
<tr>
<td>9¼</td>
<td>7½</td>
<td>562</td>
</tr>
<tr>
<td>10¼</td>
<td>8½</td>
<td>675</td>
</tr>
<tr>
<td>13¾</td>
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