THE MAGNUM ACE™

INNOVATION REVEALED

Every operator needs to have an “ACE” in the hole. The Magnum ACE™ (All Composite Edition) is a fully composite frac plug designed for multi-stage frac operations where efficiency is key. The plug’s all composite design eliminates milling through metals post-frac and drastically improves mill times. The Magnum ACE™ uses the same proven sealing system as other plugs in Magnum’s product line and is quickly and easily milled and circulated back to surface using conventional milling, drilling with a rig and tubing, or with coiled tubing. The Magnum ACE™ can be deployed in both vertical and horizontal operations.

OPTIONAL BALL-IN-PLACE FUNCTIONALITY

Thanks to Magnum’s revolutionary “Liberty Bell” setting sleeve adapter, the Magnum ACE™ has the capability of being run downhole with the ball already in place. This saves operators time associated with dropping balls from surface. The Magnum ACE™ can also be run as a traditional ball drop plug.

Features

• Fully composite design
• Answers the industry need for composite slips
• Anti-preset design
• No tungsten carbide buttons or aluminum
• Composite material aids in fast drill-outs and time saved
• Can be deployed on wireline, coiled tubing, tubing or drill pipe
• Efficient wireline deployment speeds of up to 450 feet per minute
• Designed for horizontal or vertical wells
• Setting is done via a universal setting sleeve and adapter
• Positive lock-up feature to ensure lock-up of multiple plugs in a single wellbore
• Patented technology
<table>
<thead>
<tr>
<th>Casing O.D.</th>
<th>Weight Range</th>
<th>Min I.D. inch</th>
<th>Max I.D. inch</th>
<th>O.D. inch</th>
<th>Ball Drop Min I.D. inch</th>
<th>Flo-Back Min I.D. inch</th>
<th>Length inch</th>
<th>Ball Size inch</th>
<th>Setting Tool</th>
<th>Low Temp</th>
<th>High Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-1/2 (114.3)</td>
<td>15.1-17.1 (22.47-25.45)</td>
<td>3.75 (95.3)</td>
<td>3.83 (97.3)</td>
<td>3.44 (87.4)</td>
<td>0.75 (19.1)</td>
<td>22.4 (569.0)</td>
<td>1.75 (44.5)</td>
<td>Magnum “A-1”, Baker #10 or Owen</td>
<td>250°F (121°C) 10K psi (68.9 Mpa)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>5.0 (127.0)</td>
<td>23.20-24.10 (34.5-35.8)</td>
<td>4.00 (101.6)</td>
<td>4.04 (102.7)</td>
<td>3.57 (90.7)</td>
<td>0.50 (12.7)</td>
<td>21.6 (548.64)</td>
<td>2.13 (54.0)</td>
<td>Magnum “A-1”, Baker #20 or Owen</td>
<td>300°F (149°C) 10K psi (68.9 Mpa)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-1/2 (139.7)</td>
<td>23.00-26.8 (34.2-39.9)</td>
<td>4.50 (114.3)</td>
<td>4.67 (118.6)</td>
<td>4.13 (104.8)</td>
<td>1.13 (28.6)</td>
<td>10K 250°F 21.4 (543.6) 10K 300°F 21.8 (553.7)</td>
<td>2.13 (54.0)</td>
<td>Magnum “A-1”, Baker #20 or Owen</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Casing Specs are according to API Tubing/Casing Dimension Chart Information.