OrientXpress® Rotary Steerable System

Drill higher quality wells at a lower cost
The OrientXpress® Rotary Steerable System (RSS) is the latest technology for optimizing hole quality and wellbore placement to maximize resource contact and achieve faster penetration rates.

**OrientXpress® RSS**

Nabors' OrientXpress® RSS features a unique steering mechanism that does not use traditional external actuation or moving parts. Instead, its near-bit stabilizer pushes off center from the drill string and can be adjusted continuously to orient the bit in the desired direction. This enables customers to drill higher-quality wells while lowering the cost of directional drilling operations through better downhole maneuverability, improved borehole quality and reduced nonproductive time.

The OrientXpress® RSS eliminates extra time consumed by sliding, reduces friction and increases the rate of penetration in hostile drilling environments. Its shorter tool design delivers greater lateral lengths in the reservoir. Other features include:

- **No wellsite assembly needed**, increasing reliability with fewer hands on the tool at the wellsite
- **No external moving parts** for improved reliability and less potential damage in difficult hole sections
- **The industry's shortest RSS**, allowing sensors to be closer to the bit for optimal hole placement
- **A near-bit stabilizer**, which provides bit support and steering control just outside the bit, limiting the impact of potential wash-out on steering response

**Versatile Application**

OrientXpress® RSS is designed to operate in any extended-reach drilling well onshore or offshore, conventional or unconventional, at temperatures up to 347 degrees Fahrenheit (175 degrees Celsius) and up to 20,000 psi. Its features one of the best build rates in the industry to maximize lateral length in restricted areas, such as U.S. land locations. It also delivers complex trajectories in areas with tight well spacing, mitigating collision risk.

The OrientXpress® RSS integrates with Nabors’ AccuSteer™ Measurement While Drilling (MWD) system, a premier directional drilling and geosteering tool, for additional downhole measurements to optimize drilling performance.

**OrientXpress® System Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>D&amp;I Sensor Accuracy</td>
<td>Inclination ± 0.1° (Range: 0-180°)</td>
</tr>
<tr>
<td></td>
<td>Azimuth ± 1.0° (Range: 0-360°)</td>
</tr>
<tr>
<td></td>
<td>Toolface ± 1.0° (Range: 0-360°)</td>
</tr>
<tr>
<td>Flow Range*</td>
<td>300-600 gpm</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>175°C (150°C for field tests)</td>
</tr>
<tr>
<td>Maximum Pressure</td>
<td>20,000 psi</td>
</tr>
</tbody>
</table>

**Why choose Nabors’ OrientXpress® RSS over the competition?**

- Enhanced hole quality and wellbore placement
- Faster penetration rates
- Higher-quality wells
- Lower directional drilling operation costs

**OrientXpress® RSS provides high wellbore accuracy and efficiency in harsh conditions, and exposes more of the productive pay zones.**