

AutoTrak Curve Pro high build-up rate rotary steerable system

Reduce directional drilling costs
and maximize production

The **AutoTrak™ Curve Pro high build-up rate rotary steerable system (RSS)** delivers smooth, precise, and fast drilling in your high build-up rate directional drilling applications. Efficiently drilling a smooth wellbore and precisely placing it in the most productive zone keeps your directional drilling costs down while maximizing production.

The AutoTrak Curve Pro RSS incorporates an advanced wellpath trajectory control system as the next step in rotary closed-loop drilling automation. The wellpath trajectory control system combines azimuthal hold, inclination hold, new electronics, and firmware to automatically correct the wellbore trajectory for any formation trends. This automated system will reduce wellbore tortuosity along with a corresponding reduction in torque and drag to drill better curve sections and longer and faster lateral sections. It also reduces the number of downlinks, resulting in more on-bottom time and increased overall rate of penetration (ROP).

Precise reservoir navigation and well placement are key to maximize reservoir contact. The AutoTrak Curve Pro RSS provides near-bit directional and azimuthal gamma-

ray measurements to enable a quick response time, minimizing the need for high doglegs to navigate back to the planned wellpath or sweet spot in the reservoir. The add-on benefit is better wellbore quality enabling better overall drilling performance and trouble-free casing and completion deployment.

The AutoTrak Curve Pro RSS utilizes continuous proportional steering to deliver superior directional control and a quality wellbore. The system uses three precision-controlled pads that maintain a continuous proportional steering vector to drill a smooth, in-gauge hole. Azimuth and inclination are checked every millisecond and steer forces are automatically adjusted second-by-second for precise control, even at very high penetration rates. Steering control is not affected by drilling dynamics as the independent ribs are powered by internal hydraulic power on the decoupled slow rotating sleeve. As a result, the precision-controlled pads operate independently of bit pressure, flow rates, and drilling fluid properties—allowing you to optimize your bit and hydraulics program to formation challenges and drilling performance.

Continuous proportional steering combined with the wellpath trajectory

Applications

- Wells that require high build up rates
- Simple or complex 3D wellbore profiles
- Single-run vertical, curve, and lateral
- Extended-reach wells
- Pad or batch drilling
- Onshore, shelf, or deepwater

Features and benefits

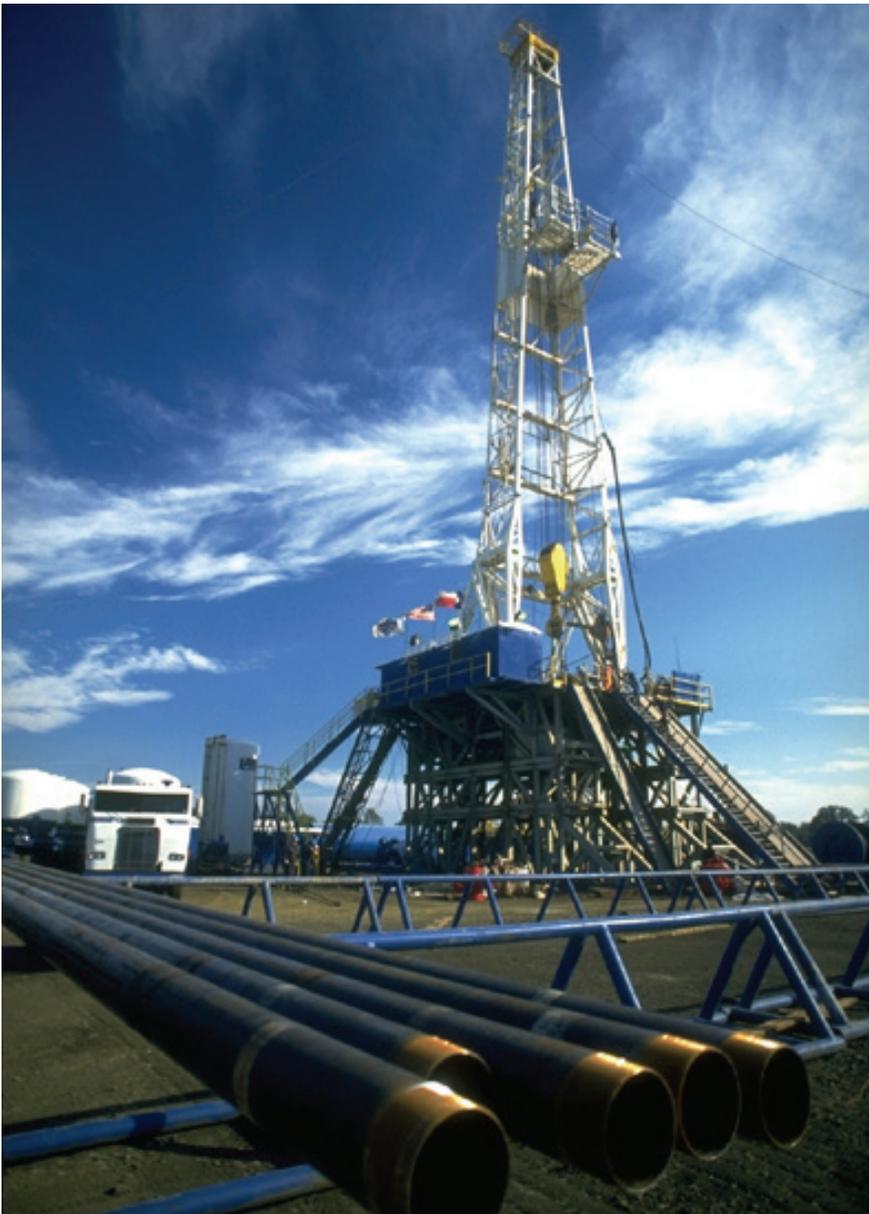
- Automated wellpath trajectory control system decreases wellbore tortuosity and downlinks - more on-bottom time to increase overall ROP
- Continuous proportional steering for superior hole quality, longer laterals, and faster ROP
- Internal hydraulics independent of pressure drop enabling hydraulics optimization for drilling performance
- Near-bit directional and azimuthal gamma-ray measurements for precise reservoir navigation and well placement
- Flow-off directional surveys combines accurate wellbore positioning with optimal drilling efficiency
- High-resolution vibration and stick slip (VSS) measurements to mitigate drilling dysfunctions for maximum ROP and run length

control system provides enormous versatility and reliability in all formation types—from soft to hard—allowing you to drill the vertical, curve, and lateral sections in a single run.

Operational implementation is easy with the AutoTrak Curve Pro RSS. It is one-piece and ready to pick up when it arrives at the wellsite. There are no connections to manage other than the drill bit and the rest of the BHA.

The AutoTrak Curve Pro RSS is also fully enabled for Baker Hughes **Remote Operations Services**. With experience from thousands of wells, our drilling and evaluation experts use proprietary systems and advanced technology to execute remote operations and deliver high-quality performance, superior efficiency, and consistent results everywhere.

Contact your Baker Hughes representative to learn more about how the AutoTrak Curve Pro RSS and Baker Hughes Remote Operations Services can deliver superior directional drilling performance for your well.



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