

SHALE EXPRESS™ CUSTOMIZABLE CONVENTIONAL BHA



Turbo Drill Industries offers our clients the most innovative directional services in the industry through Scout Drilling Technologies. Because we have spent years developing leading edge solutions for the directional drilling industry, this gives us an edge on delivering wells to our customers that meet the many challenges encountered in today's drilling market.

As the industry continues to evolve, the demand for long reach laterals is on the rise, and so is the need to rotate the drill string at higher speeds to assist in hole cleaning, higher rates of penetration and hole quality. While much of this has been achieved with Rotary Steerable Systems, costs and reliability are real concerns.

Introducing Shale Express

Scout Drilling Technologies introduces the Shale Express, a conventional, customizable BHA design that cost-effectively delivers wellbore efficiency, while managing potential drilling dysfunctions throughout the entire BHA.

The Shale Express consists of a double stabilized motor, a Vibe Scout® friction reduction tool, and optionally, a Steady Scout® stick slip mitigation tool, all of which are embedded with drilling dynamic sensors.

Double Stabilized Motors

Our double stabilized motors are designed mechanically stronger than average motors, enabling them to handle higher torque and increased WOB. They incorporate a second stabilizer to add another touch point to the wellbore to assist with steering in conventional drilling.

One of our latest developments in double stabilized motors, CAMSCOUT®, is a component of Shale Express which features an internal tilted mandrel and a low degree external bend that delivers high dogleg capabilities while slide drilling and high surface RPM while rotary drilling.





Friction Reduction Tool

Our Vibe Scout Friction reduction tool provides axial oscillation to maximize friction reduction throughout the wellbore. The Vibe Scout provides consistent and reliable performance through optimized pressure drop and MWD compatibility.

Stick-Slip Mitigation

The Steady Scout stick-slip mitigation tool improves drilling performance and extends bit life by reducing the peak RPMs experienced during stick-slip. The Steady Scout reacts to changes in the internal drill string pressure to maintain a consistent weight and pressure, increasing time with bit-on-bottom for a consistent depth of cut, leading to a smoother wellbore.

Downhole Sensor Technology

Each component of the Shale Express is embedded with CuBIC® sensors measuring drilling dynamics at different points along the BHA. The placement of the sensors allows us to better understand downhole BHA dysfunctions. Combining the CuBIC data and the data from the MWD system, we are also able to optimize drilling parameters for high speed efficient drilling. The merging of surface and downhole data can lead to the generation of precise road maps to allow the operator a full understanding of the drilling dynamics being experienced downhole.

Shale Express Delivers

- Improved penetration rates through higher rotary RPM's, better tracking, reductions in stick-slip, increased drill bit performance, and faster slide times
- Reduced drilling dysfunctions to minimize non-productive time due to bit, motor, or MWD Failure
- Improved wellbore quality to reduce torque and drag and aid in casing running operations
- Eliminates the need to trip the dedicated "high-bend" curve BHA for the lateral section

Operators can expect an intelligent approach to reaching the technical limits through the use of Shale Express executed by Scout Drilling Technologies.

