GuardVibe high-frequency torsional oscillation dampener

Drill longer and faster with assured vibrational control in your BHA

Applications

- Harsh environment drilling
- Extended reach drilling

Features and Benefits

- Minimizes torsional vibrations to extend the BHA's operating life
- Improves stability, efficiency, and directional control while drilling through transitions
- Achieves higher ROPs and extends run-life downhole
- Extends drilling envelope to include harder formations and other extreme downhole conditions

Drilling through hard, aggressive rock formations can generate excessive torsional vibrations that limit penetration rates and shorten the life of tools in the bottomhole assembly (BHA).

The GuardVibe™ high-frequency torsional oscillation dampener from Baker Hughes takes a holistic system approach to eliminate critical torsional vibrations for the entire BHA.

The 4¾-in. GuardVibe dampener consists of dampening elements and connection subs. The dampener is most commonly run on top of the BHA. In cases where a downhole motor is used, the dampener is placed below the motor.

In either configuration, the GuardVibe is handled like any regular drilling tool, with no need for special setups or electrical configurations. Due to its design and placement on top of the BHA, the dampener does not compromise formation evaluation sensor positioning or the steerability of the rotary steerable system.

This unique technology enables dampening of high-frequency torsional oscillations for the entire BHA, which provides several benefits to the drilling operation.

Fewer trips with fewer compromises

GuardVibe helps improve drilling stability and directional control while drilling through complex intervals and formation transitions.

The dampener also boosts BHA durability for increased run-life in difficult intervals. This durability extends to the shaped cutters in the drill bit, keeping the cutting edge sharper for longer for a wider operating range of formations.

Improved speed and efficiency

GuardVibe helps lower torsional vibrations within the BHA, which affords smoother torque response and a higher rate of penetration (ROP).

The dampener allows for improved hydraulic efficiency and enhance cuttings evacuation to help the drill bit destroy difficult formations with greater ease.

Enhanced reliability in extreme conditions

GuardVibe's robust body frame is designed to withstand higher operating loads. In addition, the lack of mechanical moving components and electrical component's results in greater reliability.

GuardVibe can be configured to match any drilling application that don't include modular motors including the Baker Hughes Lucida™ Steering Unit, AutoTrak™ eXact™, and AutoTrak™ G3.

Contact your Baker Hughes representative to learn how GuardVibe can help you enhance the efficiency, reliability, and drilling performance from your BHA.