Intelligence Behind Rig Performance

Used in PRECISE* automated drilling system operations, the SOFT TORQUE surface-controlled rotary drilling software plugin is an easy-to-use and intuitive add-on feature for mitigating stick-slip vibrations while rotary drilling. This plugin provides numerous advantages that enable customers to consistently drill longer and more aggressively.

The SOFT TORQUE software plugin protects downhole tools by reducing excessive and erratic torsional vibration. This helps maintain a more consistent torque across all sections of the drill string, lessening wear and tear on the bit and other downhole equipment, increasing ROP, and limiting bit trips. As a result, this plugin allows for longer, uninterrupted bit runs.

The SOFT TORQUE software plugin integrates seamlessly into Schlumberger AC variable frequency drive (VFD) control systems. Additionally, it has the potential to be integrated into a standalone HMI or operated from an existing HMI. The plugin modifies the speed loop gains in the top drive controller (VFD) to match the characteristics of the top drive motor to the stiffness of the drill pipe.

The rig will receive a high speed data historian that samples at 200 times/sec and 24/7 support from Schlumberger as part of the system package.