



**OVERVIEW**

# CORTEX<sup>®</sup> STICK SLIP MITIGATION

*Stick-Slip Mitigation That Protects Tools and Boosts Efficiency*

## Why it Matters

Stick-slip is a damaging drilling dysfunction that causes the bit to stall and surge, reducing rate of penetration (ROP), accelerating bit wear, and increasing non-productive time (NPT). If not controlled, it can shorten tool life, destabilize the wellbore, and lead to costly operational challenges.

**CORTEX Stick-Slip Mitigation** actively mitigates stick-slip by damping torsional vibrations through top-drive speed control. Unlike older “soft torque” systems that require frequent tuning, Stick-Slip Mitigation uses impedance-matching control to absorb torque waves at the surface, preventing them from reflecting back downhole.

The result: smoother drilling, better tool life, and a significant reduction in downtime.

## Key Benefits

### Optimized Performance

By maintaining smoother rotary motion, Stick-Slip Mitigation improves drilling efficiency, borehole quality, and overall operational stability.

### Adaptability Across Wells

Unlike systems that require re-tuning for different string lengths, Stick-Slip Mitigation adapts automatically and operates effectively in a variety of formations.

### Protecting the BHA and Bit

By absorbing torque perturbations at the surface, Stick-Slip Mitigation reduces wear and premature failure of critical downhole tools.

### Automatic Engagement

Stick-Slip Mitigation is designed for simplicity: drillers can turn it on and focus on the job. Once enabled, Stick-Slip Mitigation automatically engages and disengages based on predefined operating criteria.

### Supporting the Driller

By automating torsional control, Stick-Slip Mitigation allows drillers to focus on optimizing parameters, monitoring well conditions, and ensuring crew safety.



**Operators Gain Measurable Benefits**

**Reduced NPT** from fewer bit trips and tool failures

**Higher Efficiency** with faster, steadier ROP

**Lower Costs** by extending bit and BHA service life

## Bottom Line

**CORTEX Stick-Slip Mitigation** provides operators with a reliable way to drill smoother, faster and safer. By helping maintain stable drilling conditions within established operating limits, it protects tools and the wellbore while delivering improvements in drilling efficiency.