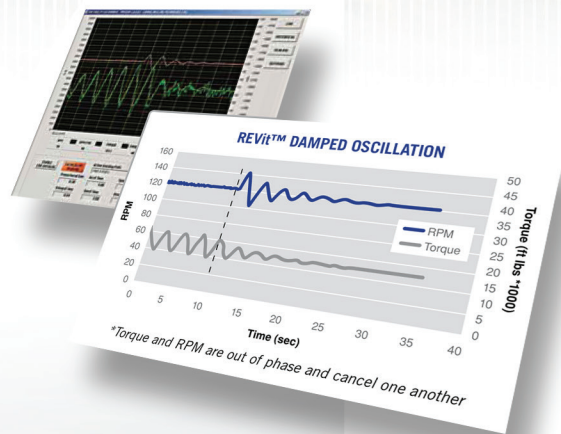




# REViT<sup>®</sup> System

Reduce stick slip to extend bit life, eliminate tool failures and increase rate of penetration



# Nabors REVit® technology features advanced top drive automation that eliminates stick slip, a common mode of vibration that limits drilling performance.

## ▶ ABOUT REVIT® SYSTEM

REVit® System mitigates torsional oscillation in the drill string and prevents excessive bottom hole assembly (BHA) and bit acceleration. By precisely adjusting the top drive, rpm torque waves are absorbed and the stick slip cycle is eliminated. As a result, drillers can extend bit runs, avoid unplanned trips due to bit damage or other downhole tool failures, increase the rate of penetration and avoid erratic torque and over-torqued connections for significant savings in drilling time and costs. REVit® System lets the top drive manage stick slip, enabling the driller to focus on drilling as fast as possible.

## ▶ REVIT® SYSTEM FEATURES:

- Advanced top drive automation that provides real-time stick slip mitigation
- A monitored service to ensure the correct use of the system
- An upgrade to the top drive for effectiveness that does not diminish throughout the run
- A proven, reliable, simple and safe surface-based system which is not prone to down-hole failure experienced by other systems
- High service quality with minimal driller input

## ▶ 24/7 SUPPORT

To ensure optimal performance, the REVit® System service includes monitoring, training and reporting through RIGLINE 24/7™. Certified REVit® System analysts provide the parameters to tune the system, ensure that it is being used properly and send reports with detailed metrics and usage scores to the well construction team.

## ▶ REDUCED DRILLING TIMES

Depending on the severity of stick slip and the well type, a customer drilling with REVit® technology could save anywhere from one-half to six days in drilling time (and in extreme cases, even greater time savings).

For example, a customer drilling a 12.25-inch hole section to 10,800 feet in a section notorious for stick slip, trips three times on a four-well pad at around 8,000 feet and needs a new bit or mud motor to complete the section, adding an additional 12 hours of non-productive time. The REVit® System eliminates this lost time, while offering the potential to increase rate of penetration, decreasing rotary time by four to five hours. As a result of eliminating the three trips and saving four hours per well in drilling time, the client saves a total 48 hours on a four-well pad.

## Enhance Your Operations

Nabors offers an integrated suite of performance products and services that work with REVit® technology to improve drilling performance. They include:

- **Total Control NonStop Driller:** A sub-based constant circulation system designed to improve drilling efficiency, operational safety, hold condition and equipment integration.
- **DrillSmart™ Technology:** A best-in-class automatic driller based on proprietary technology that allows the system to adapt to operating parameters and drilling conditions while optimizing performance.

## ▶ CASE STUDY

An operator drilling in the Granite Wash experienced severe stick slip in the 12 ¼-inch and 8 ¾-inch sections, leading to multiple bit runs per section and a significant amount of nonproductive time. After REVit® technology system was installed, the operator saved an average of two bits and 5.5 days per well.

