



# cerT&D™

## Real-Time Torque and Drag Data System

Acquire and evaluate accurate torque and drag data in real time to effectively monitor and control wellbore friction

### Complete your well with certainty

The M/D Totco™ cerT&D real-time torque and drag data collection and monitoring system provides real-time information on downhole friction and hole issues during deviated drilling operations. The system works in conjunction with your rigsite instrumentation, providing torque and drag data that helps you make necessary adjustments to reduce the chance of getting stuck, lower the risk of damaged equipment, and improve wellbore quality.

In today's complex drilling trajectories, friction is the most critical issue that limits drilling beyond a certain measured depth; therefore, the need for accurate torque and drag data collection is vital. Torque and drag monitoring plays an integral part in diagnosing problems related to differential sticking, poor hole cleaning, severe doglegs, sloughing shale, excessive tortuosity, and many others. Our system supports all torque and drag models and provides three ways to capture the actual torque and drag data points, which can then be compared in real time to the model.

In addition to standard manual torque and drag data collection, our cerT&D system provides real-time guided- and automatic-capture modes that eliminate the need for manual data entry and reduce the risk of human error. Our system ensures accurate torque and drag data at the correct intervals, which you can configure to take place at each connection, at specific depth intervals, or when a survey is approved. Leveraging the system's high-resolution database, you can recalculate torque and drag values at any time for a custom data collection plan that meets your needs.

The cerT&D system's ability to plot real-time data versus the model provides an accurate picture of the current well condition, enabling immediate response to any changes identified by the system. The system features configurable alarms that notify rigsite and remote personnel if captured data exceeds the planned model, allowing you to address hole-quality issues and avoid getting stuck while drilling or running casing.

The cerT&D system can also be accessed remotely via the WellData Real-Time application, providing shared rigsite and remote capabilities and enabling remote collaboration from anywhere in the world. Additional torque and drag data services, including pre-well modeling and real-time/post-well analysis and interpretation, are available upon request.

Contact your local M/D Totco representative to learn how our cerT&D system can help you manage downhole friction while improving your equipment's overall performance and durability.

### Features and Benefits

#### Accurately capture torque and drag data in real time

- Identify potential downhole problems to help reduce the risk of damage to downhole equipment and the wellbore

#### Design supports any torque and drag model

- Allows you to choose which torque and drag model works best for you

#### Shared rigsite and remote capabilities enabling collaboration throughout the world

- Ensure the right people are involved in the decision-making process for quick, accurate execution

#### Plot real-time torque and drag data alongside torque and drag model

- Enables immediate analysis of downhole conditions to ensure torque and drag readings are within plan

#### Alarm system notifies personnel of deviation from well plan

- Provides a clear and distinct indication that real-time torque and drag data is off plan