Achieve high-quality wellbores and enhanced control with automated, multi-parameter drilling system

The M/D Totco™ e-Wildcat 2.0 electronic autodrilling system delivers superior performance, including improved bit wear, increased safety, enhanced rig efficiency, and a higher quality wellbore. The e-Wildcat 2.0 system is the first universal autodriller offering for the conventional rig market. It can be installed in addition to a RigSense™ 3.21 or later rental system, or as a small footprint, standalone solution to work with an existing rig-owned EDR. Both configurations provide constant force and payout to generate a higher quality wellbore and optimize drilling parameters. The system smoothly controls payout via brake handle, using precise stepper motor technology and multiple-parameter control. In addition to Delta-P technology and proven reliability, our e-Wildcat 2.0 system expands control parameters to include rate of penetration (ROP), weight on bit (WOB), and torque. The Time Drill feature allows drilling at a specific rate, addressing specialized requirements of casing sidewall milling and sidetrack operations within multilateral openhole wellbores. The robust design of our e-Wildcat 2.0 system ensures maximum uptime while delivering the performance needed in your conventional and unconventional drilling operation.

The e-Wildcat 2.0 system offers more information at a glance through the RigSense system, an easier setup, and intuitive operation via the driller’s screen, allowing you to maximize the potential of our powerful autodriller.

To learn how our e-Wildcat 2.0 system can improve your efficiency and increase ROP on your rigs, contact your local representative or visit us online at www.nov.com.

Features and Benefits

- Torque & differential pressure limiting can be enabled or disabled without having to stop drilling
  • Saves time by no longer having to come off bottom to release stored torque or a stalled motor
- Control parameter is always highlighted
  • Increases accuracy to maximize performance gains
- Digital control can increase the accuracy to a setpoint
  • Allows the user to set the maximum desired value, with the software achieving the correct balance between them
- The mud-pump safety cutout will disable the system if there is insufficient mud-pump pressure
  • Prevents dry drilling from burning up drill bits
- Monitors the drum position and senses the driller starting to hoist and will disconnect if left engaged
  • Secures the equipment and keeps the driller safe
- Allows the user to set a Ream Speed which will maintain a steady block velocity when off bottom
  • Perfect for re-logging sections missed by MWD and saves time after a connection by tagging bottom
- Drill stop point disables the system if block height achieves a user-assigned lower limit
  • Helps prevent rig floor collisions to keep the equipment intact
- The “bit protect” feature automatically slows block travel as the bit approaches the bottom of the hole
  • Saves time and money with longer bit life
- Time Drill feature allows the user to set parameters for the system to achieve without overshooting WOB, differential pressure, or torque
  • Assists the driller with tasks such as kickoff, side-tracking, and milling
e-Wildcat 2.0 Electronic Autodrilling System

Electronic features
- Multi-parameter control includes WOB, ROP, differential pressure, and torque
- Precise stepper motor control for superior performance
- Drill stop point saves kelly bushings and adds convenience
- Time Drill feature for time-dependent drilling operations
- "Bit protect" feature to manage initial weight transfer of bit to the formation

Operational features
- High-resolution stepper motor for precise brake control
- Simple interface facilitates easy control adjustments over wide ranges of formations
- Fail-safe operation, monitors itself and inputs for faults and displays a diagnostic code to the driller
- Sensitivity slide bar to adjust control responses from formation changes
- Drilling management profiles for sliding, rotating, or other operating procedures
- UL Class/Div Certified for installation in hazardous areas

Single-parameter autodrilling
- Lower quality borehole through inconsistent WOB and torque at the bit
- ROP limiters and bit-wear issues through inconsistent WOB

Wildcat multi-parameter autodrilling
- Straighter borehole through consistent WOB and torque at the bit
- Improved ROP and bit wear
- Saves time through improved ROP and increased bit life