

# TD-1000-AC-2M

## Top drive

### APPLICATIONS

Offshore drilling operations

### BENEFITS

- Improved operational certainty and efficiency with best-in-class performance and reliability
- Rig-time savings through simplified maintenance
- Enhanced range of applications through modular design and ruggedized drilling capabilities

### FEATURES

- Maintenance-friendly solutions
  - Hydraulic valve blocks directly mounted on rotation head
  - Drip pans under all filters
  - Access to all relevant maintenance items if working platform mounted between guiderails
  - Swing-out blower design
  - Docking pin that enables splitting top drive body from main frame in minimum time
  - Lifting provisions on all items
  - Disk brakes mounted inside coupling bell housings
- High-capacity thrust bearing
- Helical-cut gear teeth (carburized and grinded) that increase service life and reduce noise level and maintenance
- Gearbox lubrication for optimal performance of gears and bearings under all environmental conditions
- Self-calibrating thread compensation system that uses analog stroke sensor to optimize performance
- Onboard hydraulic system designed to minimize the number of hoses and fittings installed
- Bell housings between AC motors and gearbox that ensure perfect alignment and protect the flexible coupling between motor output shaft and gearbox pinion shaft

The TD-1000-AC-2M top drive is a two-motor top drive designed to accommodate customer demands for an efficient and rigid top drive system for offshore drilling operations.

### Dependable service offshore

The TD-1000-AC-2M top drive is designed for permanent installation at offshore drilling locations. Its engineering includes industry-proven components and high-fatigue-capacity materials, ensuring low maintenance requirements and long equipment life. Part replacement is quick and easy because of the top drive's modular design. All maintenance and lubrication points are easily accessible and protected from collision.

### Simplified, safer operations

The top drive also features a remotely operated control system that uses a customized PLC, facilitating smooth, natural, and comfortable operation for the operator.

### Expedited pipe handling

Washpipe can be replaced within 5 min. The pipe handling systems include a high-capacity knuckle-link tilt system that enables handling the latest-model fail-safe elevator—from drilling to maximum kickout mode.



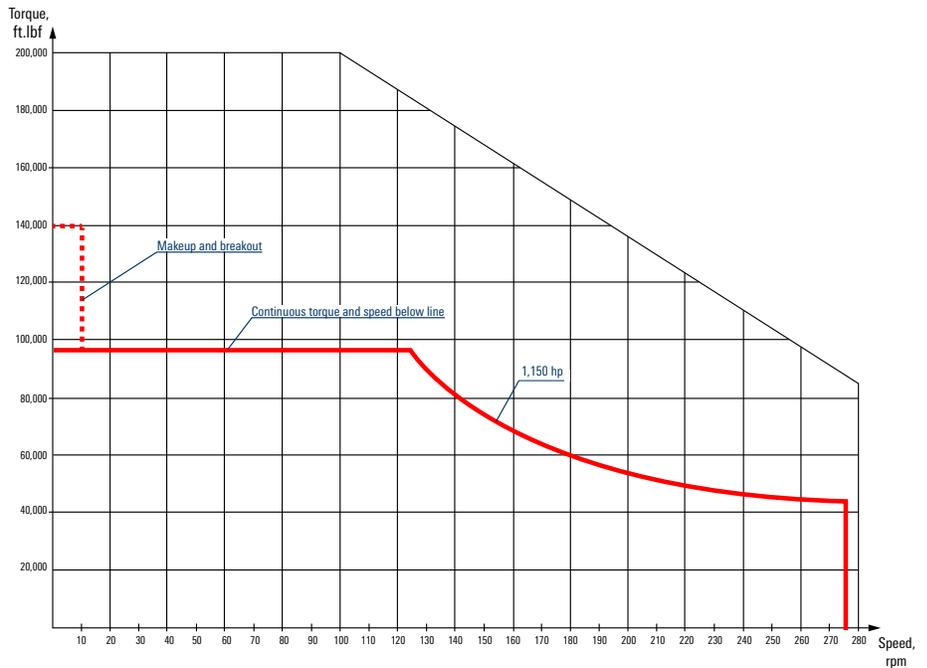
*The TD-1000-AC-2M top drive has a modular, customizable design that helps meet critical drilling objectives in a range of applications.*

### Technical Specifications

Hoisting capacity, t [tonUK]	1,000 [893]
Maximum continuous torque, ft.lbf [N.m]	98,150 [133,000]
Maximum speed, rpm	275
Maximum makeup-breakout torque, ft.lbf [N.m]	115,000 [153,500]
Backup tong grab size, in [mm]	
Minimum OD	4 [101]
Maximum OD	10 [254]
Power rating, hp [kW]	2,300 [1,715]
Water course pressure rating, psi [MPa]	7,500 [51.7]
Inside BOP (IBOP) pressure rating, psi [MPa]	15,000 [103.4]
Design code and standard	API Specification 8C (Product Specification Level 1)
Area classification	ATEX Zone 1, IIB, T3

# TD-1000-AC-2M

- High-capacity knuckle-link tilt system for handling the latest model of fail-safe elevator—from drilling to maximum kickout mode
- Torque wrench that can handle tool joint OD sizes from 4 in to 10 in without changing die inserts
- Washpipe that can be replaced within minutes
- Rotary head with 18 ports
- Ready integration with hydraulic elevators, pneumatic elevators, or both
- Programmable arbitrary stop positions for the pipehandler rotate function, enabling the driller to set a number of predefined “elevator open” positions
- No need for hammer or tools when replacing washpipe
- Customized programmable logic control (PLC) software for simple, accurate, and natural operator controls from a single point
- Noise reduction
- Dual retention of all fasteners
- Torque wrench design that eliminates risk of accidental breakout of drillstem subs



*Torque and rpm performance curve of the top drive represents its high-quality performance in a range of operating parameters.*

## Scope of Supply

Top drive assembly with gearbox, S-pipe, AC drilling motor with Ingress Protection Standard 44 (IP44) enclosure, blower, drillstem subs, suspension system, weight-compensating system, rotatable pipehandler with knuckle-link tilt system, remote IBOP actuator, and torque wrench

Power and signal service loops

Control system, including PLC, onboard valve control unit, and derrick junction box termination kit

Handling (transport) cradle, including lifting sling

Auxiliary tools

Documentation

## Options

Retractable or nonretractable dolly—specifically designed to fit existing guide rails

Elevator links for drilling, casing, or both

1,000-tonUS traveling block (or traveling block adapter becket)

Riser running tool tilt system

AC drive package

AC motor with IP56 enclosure

Water-cooled AC drilling motors

Mud hose

Saver sub for various tool joint sizes

Traveling block adapter

Operator’s control panel

[cameron.slb.com/drilling](http://cameron.slb.com/drilling)