

MH™ TD Series

Top Drives

Our top drive (TD) design is based on years of experience from MDDMs and DDMs in operation, combining the highest torque, lifting and handling capabilities with a compact design.

Product description

Our TDs feature continuous main shaft from the power swivel through the gearbox and the pipe handler. The weight of the drill string is transferred from the link hanger to the main shaft by means of a load hang-off nut. A remote controlled, multifunctional pipe handler enables 360° continuous rotation. The auto positioning ensures safe, easy and accurate orientation at all times.

In addition to providing market leading drilling torque and speed, the drive motors provide make-up and break-out of the drill-pipe connection. With a multi jaw design, the back-up wrench requires only minimal adjustments to clamp various tool-joint sizes.

Various features of our top drives minimize manual handling and therefore improve safety and reduce maintenance downtime considerably:

- The unit can be lowered flush to the drill floor via the link tilt system with bi-directional knuckle links
- The top drive's subs can easily be removed via a simple clamp system

Benefits

- Modularized design significantly minimizes field maintenance
- Simple IBOP actuator system with direct acting cylinders
- Single oil reservoir eliminates the risk of leakage between oil reservoirs
- Improved HSSE performance due to requirements for no manual tong to break subs
- Water (IP56) and air cooled main motors available to meet your project requirements
- IBOP/saver sub clamp handling eases installation, inspection and maintenance
- Prepared for CBM (Condition Based Maintenance) strategy

- The elevator can be lowered or stopped in any position with a link-tilt float system – simply by means of gravity
 - The complete stack can swing out to simplify inspections and reduce work on the drill floor itself
- To further reduce your maintenance time on-site, critical main components of our TDs are modularized, e. g. the AC motors, pipe handler, back-up wrench, hydraulic swivel, inside blow out preventers (IBOP) etc.

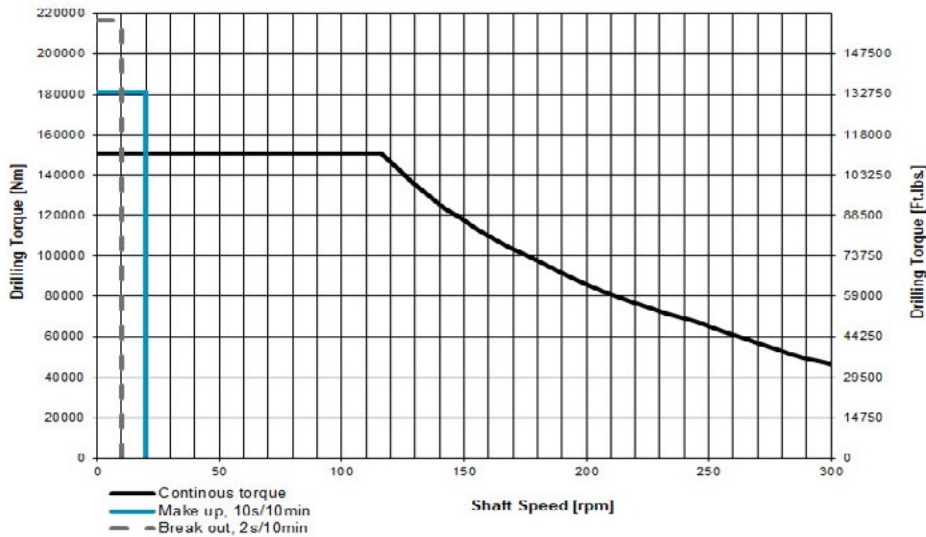
Our top drives are designed in accordance with recognized RAM and FMECA standards. For the requirements of harsh environments we use state-of-the-art components, such as stainless steel hydraulic fittings.

Available Options:

- ABS and DNV approval
- Riser handling system
- Various elevator links, saver subs, etc.
- 10 000 psi mud pressure
- Long-life wash pipe
- SoftTorque Z



Drilling Performance TD 1250 and TD 1500



Technical specifications

Description	TD 1250	TD 1500
Controls	Electric remote	
Weight	85 980 lb (39 000 kg)	
Motor type	AC induction motor	
Power rating	2 x 1 300 hp (969 kW)	
Height	22 ft (6.7 m)	
Continuous torque, max.	110 662 lbf-ft (150 500 Nm)	
Speed @ max. continuous torque	117 rpm	
Torque @ max. speed	45 735 lbf-ft (62 200 Nm)	
Speed, max.	250 rpm	
Hook load	1 250 sh.tons (1 134 m.tons)	1 500 sh.tons (1 361 m.tons)
Pressure class	7 500 psi (517 bar) *	
IBOP pressure rating	15 000 psi (1 034 bar) **	
Water course	4 in (102 mm)	
BU wrench, make-up/break-out	133 480 lbf-ft (181 000 Nm)/ 160 000 lbf-ft (217 000 Nm)	133 480 lbf-ft (181 000 Nm)/ 160 000 lbf-ft (217 000 Nm)
Hazardous area classification (according to IEC 60079-10-1)	Zone 1	
Ambient temperature min./max.	-4/+131°F (-20/+55°C)	
Hydraulic requirements	79.3 gpm(us) @ 3 000 psi (300 l/min @ 210 bar)	

* 10 000 psi (690 bar) available on request

** 20 000 psi (1 380 bar) available on request

All data is subject to confirmation by the manufacturer.

