



# The best just got better TDS-11SAE

Our enhanced upgrade package brings higher torque and more power to enable faster and deeper drilling, even in the most demanding well operations

The TDS-11SAE is an upgrade package that consists of two new 600-horsepower induction motors and gear box internals that are retrofitted to a customer-owned TDS-11SA top drive. Increasing the horsepower from 800 to 1,200 allows drilling contractors to drill faster and deeper wells while maintaining a similar rig footprint.

The TDS-11SAE upgrade provides drilling contractors with a cost-effective, OEM-engineered solution to upgrade a critical piece of drilling equipment. The upgrade can be performed at an NOV repair shop during standard CAT-IV or five-year overhaul services, minimizing downtime. Performing the upgrade at our certified NOV repair centers guarantees that you receive the design and engineering expertise of the OEM and the continued support of a global organization that understands the product better than anyone else.

Contact your local NOV representative or visit us online to learn how the TDS-11SAE upgrade can provide up to 45% more power and torque, allowing you to drill your most challenging wells.



Related Products: TDS-11 HD

# Up to 45% more power and torque

## Features and benefits

### Two 600-horsepower induction motors

- Dramatic increase in horsepower yields significantly more torque
- Enables drilling of wells beyond the technical limits of the standard top drive

### 500-ton main thrust bearing

- Ensures hoisting capacity to handle heavy pipe
- API 8C hoisting and rotating; dynamic and static

### Retrofittable to stand TDS-11SA top drives

- Minimizes downtime associated with equipment upgrade
- Delivers significantly more power in virtually the same footprint
- Reduces the cost of total ownership

Drilling Motor Type	AC Induction Motors
Horsepower Rating	2 x 600 HP
TDS Working Height	19'4" (21'8" with 120" Bail)
Weight	35,000 lbs. (15,875 kg)
<b>Transmission</b>	
Gear Ratio	10.56:1
Lube	Force-fed, filtered, air-cooled
<b>Drilling Parameters</b>	
Maximum Speed	228 RPM
Maximum Continuous Torque	58,800 ft-lb (79,722 N-m)
Speed at Maximum Breakout Torque	110 RPM
Maximum Breakout Torque	75,000 ft-lb (101,686 N-m)
Maximum Makeup Torque	62,500 ft-lb (84,738 N-m)
Static Lock Brake	39,000 ft-lb (52,877 N-m)
<b>Rating Capacities</b>	
Hoisting and Rotating	500 ton (453,592 kg)
Water Course	3 in (76.2 mm)
Washpipe Packing	7,500 psi (517 bar)
<b>Pipe Handler</b>	
PH-75	
Torque Capacity	75,000 ft-lb (101,686 N-m)
Connection OD	4 in – 8½ in (101.6 mm – 215.9 mm)
IBOP Pressure Rating	15,000 psi (1,034 bar)
Upper IBOP	6½ in API Reg. RH Box (remote operated)
Lower IBOP	6½ in API Reg. RH Pin/Box (manual)
Rotation/Orientation	360°/Unlimited
<b>Other</b>	
Cooling System	Local Blower
Hydraulic Power	Onboard
Temperature Range	-40°C to +55°C (-40°F to +131°F)*
Casing Running Tool Ready	Optional
Elevator Links	250, 350 and 500 ton API
Footprint	65.2 in x 56.1 in (1,656 mm x 1,425 mm)

40° C is the standard operating temperature

### Torque compare

TDS11-SA	TDS11-SAE Upgrade
37,500 ft-lb @ 110	58,800 ft-lb @ 110
35,000 ft-lb @ 120	51,000 ft-lb @ 120
33,000 ft-lb @ 125	49,900 ft-lb @ 125
23,000 ft-lb @ 180	32,800 ft-lb @ 180
14,668 ft-lb @ 228	25,200 ft-lb @ 228

### Torque Curves for TDS-11SA and TDS-11SAE

