



**Scientific Drilling International's TiAN22 performance drilling motor is designed for the most extreme drilling environments in the industry.**

It has been engineered to run with the highest torque power sections, delivering ultimate reliability and durability in all sections of the well.

The TiAN22 also features a unique Ti-Flex™ Titanium Flex Shaft and bearing pack assembly to deliver optimal performance in a wide range of applications.

For more information on improving your drilling efficiency [while staying on target] contact your Scientific Drilling sales representative or visit:

<http://scientificdrilling.com/titan22>

## APPLICATIONS

- + Performance Drilling
- + Extended Reach Laterals
- + Factory Drilling in Shale Reservoirs
- + One Run Applications
- + Laminated Formations

## BENEFITS

- + Enhanced WOB capacity supporting increased and consistent ROP for superior drilling performance
- + Rugged driveline design for ultra-high power torque sections delivering maximized reliability
- + Full rotational capabilities in all sections of the well ensuring optimal wellbore integrity

## FEATURES

- + Innovative Ti-Flex™ Titanium Flex Shaft and bearing assembly, for increased durability and extended tool life

## GENERAL SPECIFICATIONS

<b>OD</b>	7.15 in. (181 mm)
<b>LENGTH</b>	38 ft (11.52 m)
<b>RECOMMENDED HOLE SIZES</b>	8.50 - 9.87 in. (216 - 250 mm)
<b>MAX BEND ANGLE</b>	2.12°

## BEARING SECTION

<b>BIT TO BEND LENGTH</b>	52 in. (1.3 m)
<b>BIT BOX CONNECTION</b>	4 1/2 in. API Reg. Box
<b>MAX WOB</b>	60,000 lbs (26,689 DaN)
<b>MAX OVERPULL FOR RETURN</b>	100,000 lbs (48,930 DaN)
<b>OVERPULL TO YIELD MOTOR</b>	240,000 lbs (106,757 DaN)
<b>MAX BIT PRESSURE DROP</b>	1,000 psi (6,894 kPa)
<b>OPT BIT PRESSURE DROP</b>	100 - 750 psi (690 - 5,171 kPa)
<b>LCM CAPABILITY</b>	40 lb nut plug

## POWER SECTION

<b>LOBE CONFIGURATION</b>	6/7
<b>STAGES</b>	7.1
<b>MAX DIFFERENTIAL PRESSURE</b>	1,670 psi (11,600 kPa)
<b>STALL DIFFERENTIAL PRESSURE</b>	2,630 ft-lbs (18,200 Nm)
<b>TORQUE AT MAX DIF PRESSURE</b>	18,230 ft-lbs (24,800 Nm)
<b>STALL TORQUE</b>	28,700 ft-lbs (39,000 Nm)
<b>FLOW RANGE</b>	500 - 750 gal/min (1,890 - 2,840 L/min)
<b>SPEED RANGE</b>	115 - 170 RPM
<b>SPEED RATIO</b>	0.23 rev/gal (0.06 rev/L)
<b>TORQUE SLOPE</b>	10.92 ft-lb/psi (2.15 Nm/kPa)

\*Specifications are subject to change without notice

Power  
Section

Ti-Flex™ Titanium  
Flex Shaft

Bearing  
Assembly