

**SCHRAMM**

# TXD ROTADRILL

A heavy hoist, deep hole, trailer mounted top head drive drill rig with an automated pipe handling system. The TXD utilizes innovative Schramm Telemast technology to achieve range 3 pipe length capability in an efficient, readily transportable package. Ideally suited for shallow gas, surface hole, CBM, directional and large diameter drilling applications with mud or air.

- Equipped with Schramm patented Telemast
- 50' top head travel
- 200,000 lb hoist
- Trailer mounted automated pipe handling system
- Hands free power breakout
- Fast set-up

**Telemast**<sup>®</sup>  
Drill Tower of Power



**DEEP HOLE TOP HEAD DRIVE ROTARY RIG**

# TXD ROTADRILL SPECIFICATIONS

## Engine

Detroit Diesel DDC/MTU 12V-2000TA DDEC  
760 bhp (567 kw) @ 1800 rpm, air starter

## Cooling

Two core, side by side type  
130°F (54.4°C) ambient design temp.

## Dimensions

OA length, transport - 50' (15.2 m) less tractor  
OA width - 9' 6" (2.9 m)  
OA height, transport - 13' 6" (4.1 m)  
Weight std. rig - 95,000 lb (43,181 kg)

## Top Head Rotation - Hydraulic Tilting

Ductile iron, single reduction oil bath gearbox  
with 4 two-speed disc valve type hydraulic motors.  
Infinitely variable rotation speed.

3.5:1 Reduction Gear

4.75" diameter (120.6 mm) spindle, 3" ID swivel

0-90 rpm @ 17,750 ft-lb, 0-180 rpm @ 7,670 ft-lb

3" ID, 3000 psi fluid flushing system

## Feed System

Top head is driven by hydraulic traverse  
cylinders through special wire rope and large  
diameter Nylatron sheaves. As top head is raised,  
the inner mast section extends by a ratio of 1:2  
until it reaches its fully extended position.

50' (15.24 m) top head travel

200,000 lb (90,909 kg) pullup

100 fpm (30.48 mpm) pullup speed-rapid feed

32,000 lb (14,545 kg) pulldown capacity

14 fpm (7.92 mpm) pulldown speed-slow feed

200 fpm (60.9 mpm) pulldown speed-rapid feed

52' 10" (16.1 m) working clearance mast spindle to  
table (sub removed)

48' 10" (14.9 m) working clearance floating sub to table

## Drill Pipe & Casing

Range 2 drill pipe, range 3 casing

30.25" (768 mm) max. diameter through slipbox

## Mast

Telescoping construction permits long head travel  
and working height, yet short OA length in  
transport position.

72" (1828 mm) cylinder operated slide

Free-standing mast

Hydraulically operated adjustable mast feet

Hydraulically retracted slip box

30.25" (768 mm) table opening w/o slips

124" (3.150 m) working height below table

## Pipe Handling Winch

Planetary with spring applied hydraulic  
release brake

9,600 lb (4,354 kg) bare drum line pull

151 fpm (46 mpm) bare drum line speed

Hydraulic jib boom swing & extend

## Hydraulic System

Open loop load sensing system

7 micron filtration

210 gallon (798 l) system capacity

## Outriggers

Front - (2) 5" bore x 36" stroke  
(127 mm x .91 m)

Rear - (2) 5" bore x 41" stroke  
(127 mm x 1.04 m)

## Electrical System - 24 Volt

Power supply for explosion proof environment

(2) 12V gel batteries

Power convertor & charger

## Automated Pipe Handling System

Lifts drill pipe and casing from horizontal position  
into alignment with tilting top head, racks and  
stores tubulars and positions blow out preventer.

47' (14.3 m) tubular lengths

Up to 30" (762 mm) diameter casing

## Optional Equipment

A variety of equipment is available and includes the  
following:

- 25 gpm (95 lpm) Cat water injection pump
- 35 gpm (132.5 lpm) Bean water injection pump
- Tool lubricator for DTH hammer
- Schramm *i*-Control drilling display
- Power breakout
- Power slips
- Survey line winch
- Rotation brake for directional drilling

These specifications are based on theoretical calculations and industry standards. Performance will vary according to actual drilling conditions. Schramm, Inc. continuously improves its products and reserves the right to change specifications, design, prices and terms at any time without notification or obligation. These specifications do not extend any warranty, expressed or implied, nor do they or Schramm, Inc. make or imply any representation of the machine's merchantability or fitness for a particular purpose.



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