

## EDM 33K Series Drill

Diamond / Multipurpose, Truck / Track Mounted Drill Rig



The EDM33K is a light and versatile exploration drill rig with diamond or multipurpose configurations.

The EDM33K is versatile and simple to operate and maintain.

The EDM33K borrows many characteristics of a broad range of drill rigs on the market today which have never before been offered in one stand alone drill.

A popular option for the multipurpose configuration is the EDM RC Rod Handler for hands free handling of Dual Wall RC Pipe up to 5½" and 200 kg (440 lbs).

Rod spinner, rod spin guard, wireline automatic rope spooler, WLO - winch limiter overrun on main and wireline winches prevents winches from drawing the overshot or rods into sheave or drum.

The drill has been fitted with most modern break and make tools from Metzke, Airdrill etc for world class performance and safety.

# Technical Specifications

## Diesel Engine

Cummins QSB 6,7 Tier III  
260 HP @ 2.000 RPM  
Tier IV options available on request

## Truck -Optional

Six-wheel drive (6WD or 6x6) or 6x4 drivetrain

## Crawler -Optional

Track Sejin 14T  
Two Speed 4.5kph ( 2.8mph) Hi , 2.5kph ( 1.56 mph) Low  
Caterpillar D3 Compatible Running Gear  
Brevini Final Drives

## Drill Mast

Heavy Duty two piece tubular section mast structure  
Capable of angles from vertical to 45°  
1.800 mm (6 ft) mast dump  
Standard hydraulic mast raise cylinders with counter balance valves.

## Rotation Top Drive Head

Hollow Floating spindle ID: 70 mm – 3 1/2" API IF pin thread  
Two speed, Low/High gear change  
Low gear Max. displacement 6.713 Nm (4.952 Lbft) @ 190 rpm  
Low gear Min. displacement 3.776 Nm (2.785 Lbft) @ 300 rpm  
High gear Max. displacement 1.610 Nm (1.188 Lbft) @ 817 rpm  
High gear Min. displacement 906 Nm (668 Lbft) @ 1.250 rpm

## Head Traverse

Driven by single hydraulic cylinder  
Max speed up cylinder 830 mm/s (33 in/s)  
Max speed down cylinder 622 mm/s (24.5 in/s)  
7,6 m (25 ft) stroke with rotation head

## Capacity

Pulldown 78 kN (17.500 Lbf)  
Pullback 147 kN (33.000 Lbf)

## Main Winch

Mounted on top of mast (Type Braden RW300)  
Max pull 134 kN (30.000 Lbf)  
Max speed 75 m/min (246 ft/min/)  
Failsafe brake mechanism (spring applied, hydraulic release)  
6 m (20 ft) pull for diamond pipe and casing  
Winch limiter system to prevent rod being pulled into drum

## Wire Line Winch Mounted on Mast Dump Plate

Capacity of 2.000 m (6.562 ft) of 6 mm (1/4") wire rope  
Max average pull from full to empty drum 16,4 kN (3.680 lbf)  
Max average speed from full to empty drum 7 m/s (23 ft/s)  
Automatic rope spooling device  
Wireline override to prevent overshot being pulled over mast.

## Control Cabinet

Pivoting Control Cabinet off rear right corner of machine  
Good visibility at all mast angles  
Folding drillers jump up stand and protective roof  
Slews behind for transport  
Easy self explanatory layout  
Easy access for basic maintenance and repairs  
Fully sealed control panel with all electrical instrumentation.

## Hydraulic System

Main Hydraulic Pump Parker 145 cc Piston Pump  
Secondary Hydraulic pump Parker 105 cc Piston Pump  
300 L Hydraulic Tank  
Main Hydraulic Valve Danfoss PVG2 56 Pilot operated  
Secondary Hydraulic Valve Danfoss PVG 32

## Water Pump

American (Bean) AW1122BCD  
140 l/min @ 7.000 kPa (37 gal/min @ 1.000 psi)

**Please contact an Exploration Drill Masters representative for detailed product information.**

## Rod Break Out

Hydraulic cylinder mounted EDM wrap Spanner for N+, H+, P+ and casing  
Metzke Makorbek Hydraulic breakout wrench.  
Adjustable height (optional)

## Rod Clamps & Slip Table

Maximum table opening of 304 mm (12")  
Hydraulically operated, self energizing rod clamp (UDR Type)  
Easy to remove jaws  
Common jaws (B+, N+, H+ and P+ casing)

## Jib Boom -Optional

Actuated by hydraulic cylinder for raise/lower & hourglass worm for left/right  
Independent winch with lifting capacity of 200 kg (440 lb)

## EDM RC Rod Handler -Optional

Direct hydraulic actuation from rod handler console  
Remote control  
Handling Capability for rods 4" & 4 1/2" (optional 5 1/2")

## Rod Spinner 4 1/2" (5 1/2" Optional)

Hydraulic slew in/out of mast  
Self adjusting jaws ranging from N+ to PWT  
2.980 kNm (2.200 Lbft) breaking torque  
Adjustable torque control

## Rod Spin Guard

Cage off the rotating rods from operator/helper  
Hydraulically interlocked with rotation  
Can be set to either reduce rotation speed to 150 rpm or a complete stop when cage is opened

## Theoretical rated diamond core depth on a vertical, clean and dry hole with a 10% capacity allowance

B+	2.245 m (7.365 ft)
N+	1.727 m (5.666 ft)
H+	1.172 m (3.845 ft)
P+	774 m (2.525 ft)

## Theoretical rated RC depth on a vertical and clean hole with a 45% capacity allowance

4" dual wall RC pipe	350 m (1.157 ft)
4 1/2" dual wall RC pipe	255 m (840 ft)

## Dimensions

Platform Width:	2.500 mm (8 ft 2 in)
Rig Overall Length:	12.000 mm (39 ft 6 in)
Height:	4.600 mm (5 ft 1 in)
Mast length:	10.100 mm (33 ft 2 in)
Approx. Weight:	32.000 kg (70.548 lb)

## Safety Features

Guards on all rotating equipment  
Anti slip grid mesh on all work platforms  
Hand rails on all work platforms  
Emergency stops in control cabin and on all corners of machine  
Rod spin guard with hydraulic interlock.  
Reduces rotation to 150 rpm when opened.  
Heat guards on all exhaust manifolds and piping  
Shut down system which protects the following

- Low engine oil pressure
- High engine temperature
- Low hydraulic tank oil level, low coolant level
- Hydraulic Rod Spinner
- Winch Limiter
- Wire line winch limiter

## Warranty

6 Months or 1.500 hrs Diesel engine

**Rig performance is directly related to conditions encountered in the field.**