



EDM45K-D TRACK MOUNTED DIAMOND DRILL



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The EDM45K-D Track Mounted Diamond Drill rig has been designed as a high capacity diamond drill, with a small footprint and good manoeuvrability. The EDM45K-D is a high capacity Top Drive Diamond drill rig with a 7m (23ft) stroke powered by a Cummins QSB 6.7 engine giving this Rig the power and ability to easily drill up to a 1500m (5000ft) N+ hole. The EDM45K-D has been designed with a jack up base that allows the rig to easily be loaded on to a standard flatbed truck or trailer for long distance moves. The compact rig design allows it to be loaded into a 40ft high cube container with minimum fuss. The EDM45K-D has been built with safety in mind and comes standard with many features not currently available on many rigs this size, these include, rod spinner, rod spin guard with hydraulic cut-out to stop rotation the moment the spin guard is opened, wire line spooler and both a main winch and wire line winch over ride to prevent rods or the overshot accidentally being pulled through the drum / sheaves. This Rig has been specifically designed to operate in remote locations and as such has been kept as simple as possible while maintaining a high performance and a very high level of safety for both the operators and crew.

Diesel Engine

- Cummins QSB 6.7 Tier 3 , 260HP

Hydraulic Pumps

- Main Hydraulic Pump Parker 145cc Piston Pump
- Secondary Hydraulic pump Parker 105cc Piston Pump
- Secondary Danfoss Gear Pumps
- 300L Hydraulic Tank

Hydraulic Valves

- Main Hydraulic Valve Danfoss PVG256 Pilot operated
- Secondary Hydraulic Valve Danfoss PVG32

Tracks

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

Water Pump

- American (Bean) L1118DSC
- 65GPM @ 2000PSI

Auxiliary hydraulic Circuits

- One mud mixer circuit , 40LPM (10GPM)

Rotation Head Top Head Drive

- Hollow Floating spindle ID: 68mm – 3 ½” API IF pin thread
- Two speed, Low/High manual gear change
- 6713Nm (4952Lbft) @190 rpm (Max. Break out torque)
- 4406Nm (3250Lbft) @300 rpm
- 1610Nm (1188Lbft) @817 rpm
- 1057Nm (779 Lbft) @1250 rpm

Mast

- Capable of angles from vertical to 45°
- Single Feed Cylinder 2:1 Feed System
- Main Winch mounted on top of mast.

Head Traverse

- Driven by single hydraulic cylinder
- Max speed up cylinder 790 mm/sec, (31in/sec)
- Max speed down cylinder 1000mm/sec, (39.5in/sec)
- 7.2 m (23ft)stroke with rotation head
- Pulldown 75.6kN (17,000 Lbf)
- Pullback 200kN (45,000 Lbf)

Main Hoist

- Mounted on top of mast (Type Braden RW300)
- Max pull 178kN (40,000 Lbf)
- Max speed 60m/minute
- Failsafe brake mechanism (spring applied, hydraulic release)
- 6m (20ft) 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 6mm (¼”) rope: 2000m (6500ft)
- Max average pull from full to empty drum 16.4kN (3,680Lbf)
- Max average speed from full to empty drum 7m/sec (23ft/s)
- Automatic rope spooling device
- Wireline override to prevent overshot being pulled over mast.

Rod Break Out

- Metzke Make or Break hydraulic breakout wrench

Rod Clamp and Slip Table

- Hydraulic operated, self energizing rod clamp (UDR Type)
- Easy to remove jaws
- Common jaws (B+, N+, H+ and P+ casing)

Rod Spinner 4.5" (5.5" Option)

- Hydraulic operated, rod spinner
- Self adjusting jaws ranging from B+ to HWT
- (N+ to PWT - 5.5" Option)
- 2,200Lbft breaking torque
- Adjustable torque control

Control Cabin

- Ergonomic heated/air conditioned operators cabin
- Additional seat for helper
- Locks behind Rig for transport
- Easy self explanatory layout
- Easy access for basic maintenance and repairs
- Extending boom allows operator to be up to 5m away from hole
- FOPS Rated cabin

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

Rig Base

- Extendable hydraulic jacks with 1.8m (72") Stroke cylinders enabling rig to be loaded onto flatbed truck or trailer
- Compact design enabling Rig to be loaded into 40ft high cube container with minimum fuss

Theoretical Rated Depth Capacity Diamond Coring Q Series Pipe

- N – 1600m (5250 ft)
- H – 1100m (3600ft)
- P – 730m (2400ft)

Dimensions

- Platform Width : 2300mm (7ft 6in)
- Mast Length : 10100mm (33ft 2in)
- Rig Overall Length: 12000mm (39ft 6in)
- Height : 2600mm (8ft 6in)
- Approx Weight : 14000kg (31000lb)

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
- Murphy 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

Standard Features

- Easy accessible control panel for general maintenance
- Clear easy to read and self explanatory controls
- Fully sealed electrical panel
- Hydraulic test points on all pumps, motors, and spool banks
- Lockable Battery isolation switch
- Fuel tank gauge
- Clearly labelled oil type and grades on all oil fill points
- All jaw sets from B+, N+, H+, P+.
- EDM products are designed with standard imperial materials. All threads are either UNC or UNF. All hydraulic valves bodies, pumps, motors use common SAE O-ring boss adaptors

Warranty

6 Months / 1500 hrs