

## EDM 47K D Drill

Truck / Track Mounted Surface Core Drill



The EDM47K-D Drill is a mid-size surface core drill with 47,000lbs of pull back capacity and capable of drilling to more than 2000m in tough environments. The rig features a robust 2 speed top drive rotation head delivering 1250rpm and 6,713Nm of torque, deck engine options up to 400HP, a 40,000ll capacity main winch and can be delivered track or truck mounted, or ready to mount to customers own vehicle.

Designed for ease of maintenance and servicing, the EDM47K-D is ideal for working in tough environments and comes fully equipped for highly productive and safe drilling, including hands-free dual rod breakers, EDM rod spinner and rod spin guard with hydraulic cut out, wireline auto spooler, main winch and wireline winch over ride, automatic fire suppression and radio remote control for Teir 1 mine site safety compliance.

The EDM47K-D drill is a well-proven and reliable machine built to deliver years of highly productive and safe drilling in the toughest environments and remote locations.

# Technical Specifications

## Diesel Engine

Cummins Options from 260 HP – 400HP  
Tier 2, Tier 3, Tier 4 Final/Stage 5

## Truck Options

Rig mounted on 6x4/6x6  
Rig can also be mounted on customer own truck if required.

## Crawler Options (subject to rig configuration)

Sejin 14T tracks with CAT D3 compatible running gear  
On board tramming cabin and/or Radio Remote Control tramming included

## Drill Mast

Heavy Duty two piece tubular section mast structure  
Capable of angles from vertical to 45°  
2.000 mm (6,6 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 4.364 Nm (3.219 Lbft) @ 300 rpm  
High gear Max. displacement 1.610 Nm (1.188 Lbft) @ 817 rpm  
High gear Min. displacement 1.047 Nm (772 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 550 mm/s (21,5 in/s)  
7,6 m (25 ft) stroke with rotation head

## Capacity

Pulldown 78 kN (17.500 Lbf)  
Pullback 209 kN (47.000 Lbf)

## Main Winch

Mounted on top of mast (Type Braden RW300)  
Max pull 178 kN (40.000 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 overshoot being pulled over mast.

## Drillers Control Console Options

Standard hydraulically deployable control console with drillers platform and overhead protection. Stows behind rig for transport.  
Sealed 2 person FOPs rated operators control Cabin, hydraulically deployable up to 5m away from the drill. Climatized with AC/heating  
EDM **Xcs** (e**X**ploration **c**ontrol **s**ystem), a fully **EOH** system, controlled by PLC allowing the driller to view all drilling parameters and data with a touch screen interface. This data can also be remotely monitored and downloaded as required.

## 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)

## Rod Breakout Wrench

Metzke Makorbreak LD Hydraulic Wrench with hydraulic vertical movement. 10,030Nm of breakout torque, 40-140mm and 219mm diameter capacity

## Hands-free Dual Breaker Options

Metzke **MB550** hands-free dual breakers for making/breaking rods, 90-140mm gripping range, 21,000Nm of torque.

## Diamond Rod Clamps

Self-energising rod clamps included  
Easy to remove  
Common jaw sizes B+, N+, H+, PQ,

## 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)

## 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+	3.000 m (9.842 ft)
N+	2.460 m (8.070 ft)
H+	1.668 m (5.472 ft)
P+	1.103 m (3.618 ft)

## Dimensions (Subject to configuration)

Platform Width:	3.000 mm (9 ft 10 in)
Rig Overall Length:	12.135 mm (39 ft 10 in)
Height:	4.600 mm (5 ft 1 in)
Approx. Weight:	28.000 kg (61.730 lbs)

## 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.

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