

EDM 67K MP Drill

Truck / Track Mounted Multipurpose Drill Rig



The EDM67K-MP Drill is a heavy-duty multipurpose rig capable of carrying out many different drilling methods in a highly productive and safe manner. The rig features 67,000lbs of pullback capacity, can be track or truck mounted or delivered ready to fit on a customer's own carrier. It can be configured with a Sullair 1350CFM/500PSI compressor onboard, or without a compressor ready to drill with an independent air package.

With multiple options for major components including engines, hands-free dual breakers, sampling system, rod spinner, winches, and RC hands-free rod handlers, the EDM67K-MP drill is highly customisable to suit customers' specific requirements and is ready to drill on Tier 1 mine sites with the highest safety standards.

The EDM67K-MP rig is designed to be simple to operate and easy to maintain in the field and is built to deliver years of highly productive and safe drilling in the toughest environments.

Technical Specifications

Diesel Engine Options

Cummins QSM 11, 400HP @ 2100RPM (when used with independent compressor)

Caterpillar/Cummins engines from 700HP to 950HP.

Tier 2, Tier 3, Tier 4/Stage 5 emissions engines available

Compressor Options (Subject to engine choice)

Sullair 20/12 Two-stage rotary screw compressor with manually operated clutch to engage and disengage.

Max 1350CFM / 500PSI

Cooler Pack Options (Subject to engine choice)

Vee Pack Allied Heat Cooler assembly, 55°C ambient temp, provide engine, compressor, hydraulic oil, fuel, rotation head cooling.

Truck Options (subject to rig configuration)

Rig mounted on 8x4/8x8 truck

Rig can also be mounted on customers own truck if required.

Crawler Options (subject to rig configuration)

CAT C330 L Tracks

Hitachi EX400 Tracks with Komatsu running gear.

On board tramping cabin and/or Radio Remote Control tramping 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 installed as standard for safety

Rotation Top Drive Head

Hollow Floating spindle ID: 70 mm – 3 1/2" API IF pin thread

Two speed, Low/High manual gear change

Low gear Max. displacement 10.490 Nm (7.737 Lbft) @ 192 rpm

Low gear Min. displacement 6.713 Nm (4.952 Lbft) @ 300 rpm

High gear Max. displacement 2.516 Nm (1.856 Lbft) @ 800 rpm

High gear Min. displacement 1.609 Nm (1.188 Lbft) @ 1.250 rpm

Head Traverse

Driven by one hydraulic cylinder through heavy duty 2:1 rope system

Maximum speed up 830 mm/s (2.72 ft/s)

Maximum speed down 622 mm/s (2.04 ft/s)

Side racking rotation head to L/H side

7,6 m (25 ft) Stroke with rotation head

Capacity

Pulldown 78 kN (17.500 Lbf)

Pullback 298 kN (67.000 Lbf)

Main Winch

Mounted on top of mast (Type Braden RW300)

Max pull 178 kN (40.000 Lbf)

Max speed 75 m/min

Failsafe brake mechanism (spring applied, hydraulic release)

9 m (29,53 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 2.600 m (8.530 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.

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

Danfoss pumps and motors

Parker CVG main valves

Danfoss PVG32 auxiliary valves

Sun cartridges

Water Pump

American (Bean) AW1122BCD

140 l/min @ 7.000 kPa

(37 gal/min @ 1.000 psi)

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

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

Rod Breakout Wrench Options

Metzke Makorbreak LD Hydraulic Wrench with hydraulic vertical movement.

10,030Nm of breakout torque, 40-140mm and 219mm diameter capacity

Metzke Makorbreak MD Hydraulic Wrench with hydraulic vertical movement.

20,000Nm 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.

Metzke **MB850** hands-free dual breakers for making/breaking rods, 90-204mm gripping range, 35,000Nm of torque.

RC Slips Table

Hydraulic double acting RC Table with 4.5" slips

Hydraulically operated RC table spanner

Max table opening 304mm (12")

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)

EDM RC Rod Handler Options

EDM Hands-free RC Rod Handler mounted on rig. Handles 4.5" diameter RC rods 6m long, 200kg lifting capacity.

EDM **Heavy Duty** Hands-free RC Rod Handler mounted on rig. Handles 4.5" – 6" diameter RC rods, 6m long, 400kg lifting capacity.

RC Rod Handler is mounted on the right side of the mast and work in conjunction with on-board tilting rod bin and/or separate rod trucks/sloops.

Hydraulically controlled from Rod Handler console or by Radio remote operation

Rod Spinner

Hydraulic slew in/out of mast

Self adjusting jaws ranging from N+ to PWT

2,98 kNm (2.200 Lbft) breaking torque

Ajustable 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

N+ 3.360 m (11.024 ft)

H+ 2.378 m (7.803 ft)

P+ 1.572 m (5.157 ft)

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

4 1/2" dual wall RC pipe 520 m (1.705 ft)

Sampling Systems

Cyclone and Splitter mounted on swing out arm with hydraulic vertical movement and stows behind the rig for transport.

Sampler systems include; EDM Basic Cyclone and wet splitter, OX

Engineering, Sanvick, Metzke and Progradex.

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: 42.000 kg (92.595 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 1500 hrs Diesel engine