

EDM HXR 40

Reverse Circulation Horizontal Drill Rig



The EDM HXR 40 is a heavy duty and powerful horizontal drill rig that is track mounted and configured for reverse circulation.

The EDM HXR 40 is versatile and simple to operate and maintain.

The rig can push and pull 210 kN (47,000 lbf) and can easily produce 500 m (1650 ft) holes using 4½" Reverse Circulation Drill Pipe.

The mast is fitted with a rod handler that is capable of presenting 4½" - 10" diameter and up to 200 kg (440 lbs) drill pipe to and from the rotation head.

When combined with the EDM Horizontal Presenter the EDM HXR 40 is hands free for its entire depth capacity.

The drill has been fitted with the latest in hands free operation equipment including Metzke powered slips table and Metzke and Airdrill make and breakers setting the standard for world class performance and safety.

Technical Specifications

Diesel Engine

Cummins QSB 6.7 Tier IV
265 hp @ 2100 rpm

Tracks

Crawler Strickland DL385, 40T
Two speed motors: low 1,3 km/h, high 3,5 km/h.

Drill Mast

Heavy Duty tubular section mast structure
Capable of angles from horizontal to +6° & -3°
Standard hydraulic mast raise cylinders with counter balance valves.

Two hydraulically extendable mast feet to support the mast against the wall

Rotation Head Top Drive Floating Spindle

Floating Spindle ID: 70 mm – 3½" API IF pin
Revolutions 5 - 85 rpm
Torque maximum 12,88 kNm (9.500 lbf)

Head Traverse

Driven by one hydraulic cylinder, 2:1 rope system
Up Speed 830 mm/s (2,72 ft/s)
Down Speed 616 mm/s (2,02 ft/s)
Stroke with rotation head 6,6m (25 ft)

Feed Capacity

Pull Down 209 kN (47.000 lbf)
Pull Back 209 kN (47.000 lbf)

Control Panel

Cabin FOPS with good visibility at all mast angles.
(Fully Enclosed Cabin- Optional)
Cameras for critical areas and blind spots.
Easy self explanatory layout
Easy access for basic maintenance and repairs
Fully sealed control panel with all electrical instrumentation.

Hydraulic System

Parker pumps & motors, Parker CVG main valve,
Danfoss PVG auxiliary valves, Sun cartridges.

Water Pump

FMC (Bean) W1122BCD
140 l/min @ 7.000 kPa
37 gal/min @ 1.000 psi
Powered from rig hydraulic system

Rod Break Out

Metzke Makorbreak Hydraulic breakout wrench.
Adjustable height (Optional)
Air Drill single rod breaker up to 5½" capacity

Rod Handler

EDM Rod Handler Capable of handling 4½" to 10".
EDM Rod rack and presenter capable of holding 5 Rods
Crane for loading/unloading with jaws capable of holding 3" - 5" rods
Max capacity 350 kg @ 4,2 m Remote controlled with manual backup

Jack Legs

Heavy duty jack legs cylinders with pilot check valves and flow fuses for safety
Extra large pads for better ground stability

Theoretical Rated Depth Capacity

Dual Wall RC 4" pipe	450 m
Dual Wall RC 4½" pipe	400 m

Dimensions

Platform Width working	4.850 mm
Platform Width transport	3.850 mm
Mast length	11.800 mm
Overall height	3.500 mm
Approx. weight:	30.000 kg

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 cabinet and on both sides of machine
Heat guards on all exhaust manifolds and piping
Murphy shut down system which protects the following
Low engine oil pressure.
coolant level
High engine temperature
Low hydraulic tank oil level
12 volt, 100amp alternator
LED high quality work lights
Two certified 10 kg (22 lb) fire extinguishers
Warning horn to alert drill crew
Flashing light, and standard mine site lighting

RC Drilling Kit.

Rig Air circuit with 2 Auxiliary inlets
2" Airline from Inlet to Swivel
Hydraulically actuated 2" Ball valves for air On/Off and Air Vent
100 psi Pressure reducer for service Air
Water injection into Air circuit
EDM Cyclone
Butterfly Valve for sample control
Bottom side entry air swivel
Top mounted sample Swivel
lubrication tank 60 Litre (15,8 gal)
Hydraulic operated air on/off and vent valves
1.500 psi rated 2" air hose with certified hoses socks
500 psi rated 3" sample hose assembly with certified hose socks.

EDM Rod Presenter (optional)

Capacity to transport 500 m 4½" RC
Strickland tracks DL385, 40T
Two speed, low 1,3 km/h, high 3,5km/h.
Heavy duty Jack cylinders with pilot check valves and flow fuses for safety
Extra large pads for better ground stability

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