Exploration Drill Masters Multipurpose Drill Rig

EDM 1200 HC NUGGET
TRUCK MOUNTED/TRACK MOUNTED

Safety – Efficiency - Trust
Exploration Drill Masters Chile S.A announces the release of the newly developed all terrain EDM1200 HC Nugget dual purpose exploration drill. The EDM 1200 HC is a heavy duty drill rig which is mounted on self propelled crawler tracks. The EDM 1200 HC drill was designed to be containerised for shipping. The design allows all the major mast components above the main chords to be removed easily so the machine can be trammed into a 40’ high cube closed container. The tracks are designed with bolt in spacers which are also easily removed which takes the overall track width from 2,700mm to 2,300mm to fit in the container. The concept behind the 500hp engine is very untraditional to the way most exploration machines are designed, but has many advantages. We use high horsepower engine and more hydraulic pump flow to allow the engine to run consistently at 1200rpm and still maintain maximum torque and speeds. The fuel consumption is very reasonable considering the available hp, and the noise level around the machine is very low.

**Diesel Engine**
MTU Detroit OM502LA – PDU Tier 3
470HP@1800 rpm
Open frame module with roof cover

**Rotation Head Top Head Drive**
Hollow Floating spindle ID: 70mm – 3 ½” API IF pin thread
Two speed, Low/High manual gear change
5-150 rpm low gear/max displ. of 250cc – 8,684 ft-lbf
150-1300 rpm high gear/max displ. of 250cc - 1,323 ft-lbf

**Mast**
Heavy Duty section mast structure
Capable of angles from vertical to 45°
2000mm mast dump

**Head Traverse**
Driven by one hydraulic cylinder, 2:1 rope system
Max speed up cylinder 701mm/sec, rope system 1403mm/sec
Max speed down cylinder 526mm/sec, rope system 1052mm/sec
7.6m stroke with rotation head

**Pull Down**
12,500 Lbf

**Pull Out**
33,000 Lbf

**Main Hoist**
Mounted on top of mast (Type Braden RW300)
Max pull 30,000 Lbf
Max speed 70m/minute (1.17 m/s)
Failsafe brake mechanism (spring applied, hydraulic release)
6 metre pull for diamond pipe and casing
Load sensing winch motor for optimum operating speed

**Jib Boom**
Actuated by hydraulic cylinder for raise/lower
Actuated by hydraulic hourglass worm for left/right
Independent winch with lifting capacity of 200kg

**Water Pump**
FMC (Bean) L1118SC
246 LPM@10,345KPa
Powered from rig hydraulic system

**Rod Break Out**
48" Adjustable Stillson wrench hydraulic cylinder mounted for hydraulic break out
Diaspan wrap spanner for N+, H+ and P+ casing

**Rod Spinner (Optional)**
Chuck type floating Rod Spinner
2,200Lbf breaking torque
Adjustable torque control

**Jack Leg**
Heavy Duty cylinder with pilot check valves
Extra large pads for better ground stability

**Rod Clamp and Slip Table**
Hydraulic operated, self energising rod clamp
Easy to remove jaws
Common jaws from 44.5mm to 177.8mm (B+, N+, H+ and P+ casing)

**Wire Line Winch Mounted on mast pivot plate**
Capacity 6mm rope: 1600m
Max average pull from full to empty drum 3,680Lbf
Max average speed from full to empty drum 7m/sec
Automatic rope tracking device

**Control Panel**
Easy self explanatory layout
Easy access for basic maintenance and repairs
Fully sealed control panel with all electrical instrumentation

**Mud Mixing Circuit**
60 LPM pump independent from all other function, with flow control, and quick release connectors

**Hydraulics**
Danfoss pump & motors, Parker CVG main valve, Danfoss
PVG32 auxiliary valves, Sun cartridge

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Rod Spin Guard
Cage off the rotating rods from operator
Hydraulically interlocked with rotation
Reduces rotation speed to 150 rpm when cage is opened

Theoretical Rated Depth Capacity Diamond Coring Q Series
Pipe
N – 1600m
H – 1000m
P – 550m

Theoretical Rated Depth Capacity Reverse Circulation Drilling
4” – Dual Wall RC pipe – 350m
4 ½” – Dual Wall RC pipe – 300m

Track (Strickland with Berco chain & sprocket assembly)
40,000 kg rating
Maximum tramming speed 4kph
Remote control & pilot control for tramming

Dimensions
Platform Width 2,300mm
Jack leg centres 4,500mm
Mast Length 10,850mm
Overall Height 3,200mm

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
• Rod spin guard with hydraulic interlock. Reduces rotation to 100 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
• 24 volt, 100amp alternator to enable high quality additional work lights
• Two certified 10kg fire extinguishers

Standard Features
• Easy accessible control panel for general maintenance
• Clear easy to read and self explanatory controls
• Waring horn to alert drill crew
• Central grease point for wireline and top sheave wheels
• Easy accessible oil drain station for engine, hydraulic tank, FMC pump
• Remote mounted oil and fuel filter station
• Fully sealed electrical panel
• Hydraulic test points on all pumps, motors, and spool banks
• Additional work light plug outlet station
• Lockable diesel tank fill points
• Battery isolation switch
• Fuel tank gauge
• Clearly labelled oil type and grades on all oil fill points
• Level bubbles mounted on platform and mast
• Tool box
• Two additional available spool banks, one with detent, one spring centre for additional mud mixing systems, casing jacks, etc
• All jaw sets from B+, N+, H+, P+.
• Stillson wrench for hydraulic break out, 48” inch
• 10m of 2 inch suction hose with foot valve and cam lock connectors
• First 250 and 500 hr service kit
• Flashing light, and standard mine site lighting
• Mast ladder
• Rig platform access ladders and steps
• Large fully adjustable offsiders platform
• 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
1 Year / 5000 hrs

Optional Features
• Reverse circulation kit
• KL Rod loader for RC pipe only
• Additional sealed lockable Tool Box
• Additional work lights
• Hydraulic boost kit for high altitudes (Prevents hydraulic pump cavitation)
• Fully silenced, and enclosed engine for quite and cleaner machine
• 6 inch tradesmen vice
• 1500 hr service kit
• Remote spare parts kit
• Clients colour choice
• Fire suppression unit
• Chuck type rod spinner
• Extendable front jack legs for removing truck or crawler carrier.
• FMC L11-18SC Disc 65gpm high pressure water pump
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Carrier Options
• 6 x 6 Truck
• 6 x 4 Truck
• Track carrier