

ER-2000 DIAMOND CORE DRILLING RIG TECHNICAL SPECS



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TECHNICAL SPECS

Drilling Depth Capacity	
Drill Rod	Drilling Depth, meters <i>Based on fluid filled hole conditions</i>
BQ	2500
NQ	2000
HQ	1500
PQ	900

Engine (Prime Mover)	
Engine (Prime Mover)	Cummins ISL 8.9 L, 6 cylinder, turbo charged, inter cooled diesel engine.
Displacement	8.9 L
Power (maximum) at 2,100 RPM	380 hp

PQ Drill Head - Hollow Spindle		
Maximum Rod Diameter	127 mm	
Rotation Motor	Rexroth A6VM140 hydraulic motor - variable/reversible	
Mechanical Transmission Ratios	Funk 4 speed	
	1st	6.27:1
	2nd	3.12:1
	3rd	1.75:1
	4th	1.00:1
Final Drive Ratio	Straight Cut Gears 2:1	
Head Opener	Sliding style — Hydraulic operation	
Hydraulic PQ Chuck	Chuck-Hydraulically opened, nitrogen or steel spring closed. Axial holding capacity of 222 000 N	
Drill Head Lubrication	Force fed bearings, - hydrailcly driven oiling pump and cooling and circulation system	
Drill Head Lubrication Oil Filtration	25 Micron high pressure oil filter	

Torque And RPM Ratings - PQ Head		
(Hydraulic motor at maximum/minimum displacement, prime mover at 2,200 RPM)		
	Speed (no load) RPM	Torque (stall) Nm
1st Gear	144- 199	5322 - 3826
2nd Gear	288 - 400	2648 - 1898
3rd Gear	514 - 714	1486 - 1068
4th Gear	900 - 1,250	849 - 610

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Hydraulic System	
Primary Pump	Kawasaki K3VL140 Axial piston, variable displacement load sensing, pressure compensated with low pressure standby.
Max Flow	280 L/m
Maximum Pressure	320 bar
Secondary Pump-1	Kawasaki K3VL45 Axial piston, variable displacement, pressure compensated
Max Flow	99 L/m
Maximum Pressure	320 bar
Secondary Pump-2	Kawasaki K3VL45 Axial piston, variable displacement, pressure compensated
Max Flow	99 L/m
Maximum Pressure	320 bar
Auxiliary Pump	Kawasaki K3VL28 Axial piston, variable displacement load sensing, pressure compensated with low pressure standby.
Max Flow	61 L/m
Maximum Pressure	320 bar
Drill Mast And Feed System	
Feed Stroke	3.8 m
Pull Capacity @ 200 bar	22,600 kg
Thrust Capacity @ 200 bar	12,600 kg
Rod Pull	3 or 6 m
Drilling Angle	45° off horizontal to 90° vertical down
Draw Works	
Main Line Hoist	Main Line Hoist Double speed motor
Hook Load (single part line) Bare Drum	18,140 kg
Hoisting Speed (single part line) Bare Drum	72 m/min and 40 m/min
Main Hoist Cable	22 mm
Minimum Breaking Strength	51000 kg
Foot Clamp Capacity	HWT
Wireline Hoist	
Rotation Motor	400 cc/rev, hydraulic motor
Line Pull	
Bare Drum	990 kg
Full Drum	510 kg
Line Speed	
Bare Drum	145 m/min
Full Drum	284 m/min
Drum Capacity 4.8 mm (3/16") swaged	2500 m
Minimum Breaking Strength	2250 kg

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Track System	
Track Model	A-TRACK A-08-09-TH
Maximum Dynamic Capacity	10000 kg
Track Type	400 mm wide triple grouser steel track shoes

RQ-535 Triplex Twin Mud Pumps (Two Pumps In Parallel)	
Rotation Motor	100 cc/rev, hydraulic motor
Max. Flow Rate	270 L/m
Working Pressure	36 Bar
Max. Pressure	49 Bar

Mud Mixer	
Hydraulically Powered Mud Mixer	
Maximum R.P.M. of Mud Mixer Shaft at Full Flow	2300

One ER-2000 Drilling Rig Consist of:	
Undercarrige (Track System)	
Power Unit Group Cummins 8.9 L, 6 cylinder, 400 hp	
Hydraulic Module: 420 L Oil Tank and Filtering System, Hydraulic Pumps and Motors, Control Panel	
Hot Weather Hydraulic Cooling Group	
Hydraulically Driven PQ Head Oil Cooling and Circulation System	
Rotation Unit Grp. c/w PQ Nitro Chuck/Head Guard	
Draw Works Grp. c/w 19 Ton Main Line Hoist with Cable, Wireline Hoist less Cable	
Hydraulic Mast Raising	
Hydraulic Mast Dump	
Telescopic Mast Assembly	
Hydraulic Leveling Jacks	
Base Frame and Fuel Tank (300 L)	
Diesel Engine Display and Control Panel	
Lighting System and 12V Battery	
2x535 Mud Pumps and Mud Circulation System	
Mud Mixer	
Hydraulic Foot Clamp HWT Capacity (Optional)	
10 kw, 380 Volt, 50 Hz Hydraulically driven Generator (Optional)	

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OUR REFERENCES

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- 8- Feni Madencilik A.Ş., Türkiye (1 ea ER-1100)
- 9- Enerson Mühendislik Ltd. Şti., Türkiye (5 ea ER-1100, 2 ea ER-2000)



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