

CUBEX® Surface Drills

QXR 920

Technical Specification



Cubex QXR drill series are designed to switch flexibly between production drilling, pre-split drilling or horizontal drilling. Optional attachments allow for RC sample drilling



Blast Hole Production Drilling



Pre Split drilling



Reverse Circulation drilling



Horizontal drilling

PERFORMANCE

Compressor		
Working pressure, max	34.5 bar	500 psi
FAD, at 1800rpm max working pressure	425 l/s	900 cfm
FAD, at 2100rpm 350 psi (24.1 bar)	496 l/s	1 050 cfm

Hole Range		
Hammer size, min	102 mm	4 in
Hole depth, carousel	42.6 m	140 ft
Hole size, max	216 mm	8.5 in
Hole size, min	114 mm	4.5 in

Engine		
Caterpillar turbo charged, diesel engine	CAT C15	Tier III
Power rating at 1800 rpm	403 kW	540 HP
Mesabi Radiator (max cooling capacity)	125°F	(52°C)

Tramming		
Tramming speed, high gear	5 km/h	3 mph
Gradeability	35%	
Brakes	SAHR	
Track oscillation (independent)	±10°	
Ground clearance	530 mm	21 in



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Standard Specifications

Carrier		
Hi-Intensity discharge lighting system (9 lights)		
Warning lamp and reverse buzzer		
Ground level engine start/stop at tram step		
Battery disconnect switch		
Caterpillar® chassis and triple grouser shoes		
Fixed winch		
Water injection system		

Engine		
Caterpillar turbo charged, diesel engine	CAT C15	Tier III
Power rating at 1800 rpm	403 kW	540 HP
Mesabi Radiator (max cooling capacity)	125°F	(52°C)

Feed		
Feed rate, max	1.3 m/s	257 ft/min
Hoisting, max	47 kN	10 600 lbf
Pulldown, max	47 kN	10 600 lbf
Total Length	10 185mm	33' 5"
Travel Length	7 315mm	24'
Feed Extension	1 371 mm	4' 6"

Breakout System		
Jaw rotation	15°	
Clamping force	288 kN	64 800 lbf

Top Drive		
Rotation torque	5730 Nm	4225 ft-lbs
Rotation speed	0 - 80 rpm ∞ variable	

Compressor		
Sullair two stage screw type compressor		
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FAD, at 1800 rpm max working pressure	425 l/s	900 cfm
FAD, at 2100 rpm 350 psi (24.1 bar) working pressure	496 l/s	1 050 cfm

Electrical System	
Voltage	24 v
Batteries	2x 12V, 190 Ah
Alternator	CAT 24V 100 Ah
Lights	
Front	5x 55W HID 2x 6
Rear	2x 65W
Side	2x 55W HID

Carousel		
Capacity, standard	6 rods	
Rod size, max	127 mm	5 in
Rod size, min	83 mm	3.25 in
Rod length	6 m	20 ft

Hydraulic System		
Hydraulic oil cooler		
Upper design temperature	52°C	125°F
Pumps		
Axial piston pump 1	100 cc/rev	6.1 cu in/rev
Axial piston pump 2	100 cc/rev	6.1 cu in/rev
Axial piston pump 3	71 cc/rev	4.3 cu in/rev
Return and pressure filters (3 x 2 filters)		
Filtration rate	5 µm absolute	

Hammer Lubrication		
Positive metering of either:		
• Grease lubricant	type 000NLG1	
• Rock drill oil		
Metering capacity, max	1 500 cc/hr	91.5 cu in/hr
Metering capacity, min	60 cc/hr	3.7 cu in/hr

Volumes		
Hydraulic oil tank	303 l	80 US gal
Compressor oil	140 l	37 US gal
Diesel engine, fuel tank	1 400 l	370 US gal
Hammer lubrication tank	20 l	5.3 US gal

Safety Cabin	
Boom mounted with lateral swing and leveling control	
FOPS approved	
Sound insulated (<82 dB)	
Fully adjustable Operator's seat with vibration isolators	
Trainer's fold up seat	
360° Viewing windows	
Safety glass with removable escape window	
3 x wipers with washer (front shield and roof)	
Color touch screen operating system	
Electric combined inclination/hole depth instr.	
Cabin light	
12V outlet	
CD player with Bose speakers (Satellite Radio Compatible)	
Air Conditioner (14,400 btu cooling, 28,000 btu heating)	

Controls	
Accra Feed—Electric/hydraulic controls	
Manual override, on tram step	
Can-Bus controller/computer	

Cubex Ltd reserves the right to change this specification without further notice.

Selection of Optional Equipment

Optional Carousels

Carousel	Pipe diameter (for 20' pipe)
8 Drill Pipe	76–102 mm 3–4 in.

Fire Suppression Options

Automatic	Ansul System—10 nozzles
Manual	Ansul System—10 nozzles

Winterization Package Options

Tier I Winterization (52°C to –15°C)

- Removable display panel
- Variable cooler fan speed control
- Ether injection (for diesel engine start)
- Water flush-out with antifreeze
- Proheat coolant heater system
- Cab floor heater

Tier II Winterization (52°C to –40°C)

All of Tier I, Plus the following:

- Coolant heater and battery box
- Equipment deck enclosure with steel roof and adjustable canopy sides
- Two additional 24 V batteries
- Insulation of all water lines
- Cold weather lubricants
- Engine exhaust plumbed through water tank

Tier II Winterization (52°C to –45°C)

All of Tier I and Tier II, Plus the following:

- Engine block heater
- Oil pan heater
- Engine oil pan insulation
- Air receiver pad heaters
- Hydraulic tank immersion heater
- Water tank immersion heater
- Heating blankets for feed system hydraulics
- Control panel electric heating
- Arctic grade hydraulic hosing
- *Note: Tier II requires a Genset to power the 240 V heaters

Lubrication Options

Centralized manual lubrication

Auto lubrication (Lincoln 69 point)

Reverse Circulation Option

- Complete splitter with hydraulic leveling arm
- Reverse circulation 6240 top drive, complete with RC ceramic swivel
- Discharge hose

Additional Options

- Air Conditioner / Heater upgrade to Sigma TDR-7
- Angle indicators
- Cab floor heater
- Data Communication System
- Depth laser
- Dust collector system
- Fast filling and evacuation system (Wiggins) for fuel only
- Fast filling and evacuation system (Wiggins) for engine oil, hydraulic oil, transmission oil coolant, fuel
- On-board pressure washer
- Petrol chain wrench
- Portable fire suppression
- RPM indicator for top drive
- Stainless steel electrical panel
- Tools to specifications