

Boyles C8C

A core drilling rig for deep holes in all ground conditions



A powerful drill rig for great depths

It is a rugged all-terrain, Radio Remote Controlled and crawler mounted drill rig that stands up to any terrain and ground condition it confronts. The Boyles C8C rig is a powerful, compact and reliable drill with a drill capacity of 2 013 meters (N-size).

+ Main benefits

Deep drilling-The Boyles C8C rig is ideal for deep borehole depths, and despite its power, it is compact in design and easy to operate in the field.

Robust design-Designed for sturdiness and operation in harsh environments, the Boyles C8C rig just goes on and on without interruption, thus minimizing service requirements.

Safety-The rig is designed with safety in mind, minimizing the risk of personal injury during operation.

Rotation unit – robust rotation unit with two speeds providing the essential torque and rpm speed ranges for coring. It can drill effectively from 45 to 90 degree angles, make and break rods (from the control panel).

Rod holder – opens hydraulically and closes using gas pressure. In case of loss of hydraulic pressure, the rod holder closes instantly to prevent dropping the drill string in the hole. The jaws' gripping is evenly distributed around the drill string to reduce wear and tear on rods.



The C8C crawler rigs come with a radio remote control, which allows you to the rig from distance.



Ergonomic and user-friendly design, which displays the drilling parameters necessary to ensure productive drilling. Also included is a hold back function to prolong bit life.

Mast and feed system – sturdy and stable ensuring minimal vibrations, straight bore holes and optimum lifting/holding capacity.

Power pack and engine – the Cummins engine is recognized for its durable life, high efficiency and capability to minimize fuel consumption in the toughest of drilling operations. The engine is compliant with Tier III/Stage 3A.



Reliable and user-friendly

The Boyles C8C rig can drill in many different project sites, confronting the harshest conditions and environments. It offers the power necessary for effective surface core drilling for 2 013 meter N-size borehole depths. The rig's safety and ergonomic features provide confidence and assurance, making it first in mind and first in choice for drill operators.



+ Depth capacity

With a drill depth capacity of 2 013 meters N-size the Boyles C8C rig is the surface core drilling rig with the deepest drilling depth capacity in its drill class.



+ Ergonomics and safety

A user-friendly drill which gives operators a sense of comfort during operation. The rig comes equipped with guarding around moving parts, safety sensors, warning displays, nocturnal lighting, safety stops and fire-extinguishers.



+ Productivity and lower operational costs

The parts and components making up the drill are of the highest quality and standard designed with durability in mind. The Boyles C8C rig is synonymous with productive drilling, high rate of uptime and minimal maintenance needed.



A comprehensive service offering

Even the best equipment needs to be serviced regularly to make sure it sustains peak performance. An Epiroc service solution offers peace of mind, maximizing availability and performance throughout the lifetime of your equipment. We focus on safety, productivity and reliability.

By combining genuine parts and an Epiroc service from our certified technicians, we safeguard your productivity – wherever you are.

Technical specifications

Boyles C8C

Wireline hoist

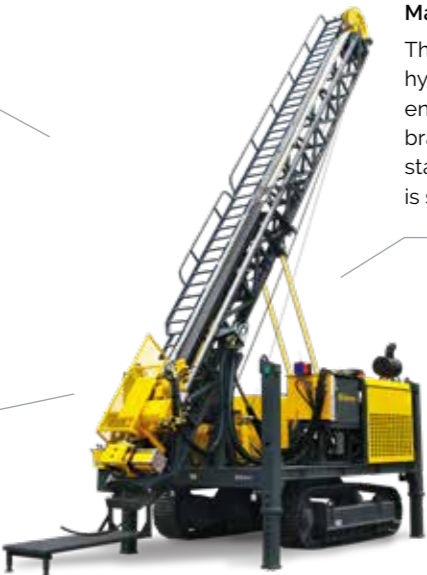
The wireline hoist has a high level of speed control to ensure safe and consistent operation.

Rotation unit

The rotation unit can handle BO-PO rods and BW-HW casing. It consists of a hydraulic motor, a sealed gearbox, a hollow spindle and an Epiroc patented hydraulic chuck, and quick change chuck jaws. The rotation speed is adjustable from the control panel.

Main hoist

The powerful main hoist, equipped with a hydraulic motor and a dual brake system, ensures a well-controlled speed. The dual brake system offers both dynamic and static breaking. When the lifting operation is stopped, firm self-locking is applied.



Standard equipment

- Hydraulic mast dump
- Mast in one section
- Large crown sheave wheel
- Wear liners on mast
- Safety guards
- Hydraulic oil reservoir fill pump
- Hydraulic oil tank volume (300 liters)
- Diesel tank volume (700 liters)
- Radio Remote Control (RRC)
- Wireline winch
- Hydraulic PW-size rod holder
- 4 hydraulic levelling jacks
- Fuel filter & water separator
- Hydraulic mast raise
- RPM meter
- Tachometer
- Lighting kit
- Crawler tracks
- Control panel

Main hoist

	Metric	US
Single line capacity, bare drum	133 kN	30 000 lb
Line speed, bare drum	40 m/min	131 ft/min
Cable size	29 m x 22 mm	95' x 0.87"

Rod holder

Hydraulic open, gas spring closed - BO to PO rods/HW casing	Metric	US
Max diameter	235 mm	9.3"
Clamping diameter PO size rods	139 mm	5.5"
Clamping capacity	130 kN	29 214 lb

Depth capacity

	Standard		Thin Wall Rods	
	Metric	US	Metric	US
B wireline	2 553 m	8 376'	3 032 m	9 948'
N wireline	2 013 m	6 604'	2 296 m	7 533'
H wireline	1 336 m	4 383'	1 828 m	5 997'
P wireline	816 m	2 677'	1 280 m	4 199'

*These figures serve as guidelines only. They are calculated with available pull force from main winch, weight of drill string in water filled hole and average WOB. Epiroc cannot guarantee these capacities will be reached in all working conditions due to varying factors such as ITH used, conditions of the ground and differences in operation.

Rotation unit

Power	Hydraulic motor - variable speed/ reversible
Final drive	2-speed gear driven
Spindle (inner diameter)	124 mm (4.9")
Max torque	7 602 Nm
Max speed	1 300 rpm
Gear change	Mechanical shift

Mast and feed system

	Metric	US
Feed travel	3.5 m	11.5'
Feed speeds	High and Low with variable control	
Mast dump travel	1.7 m	5.57'
Thrust	59.6 kN	13 390 lb
Pull	156 kN	35 000 lb
Drilling angle	45° - 90°	
Rod pull length	6.09 m	20'

Technical specifications

Drill base supports

Crawler mounted rig on crawler tracks	Crawler mounted rig on crawler tracks
Crawler band width	400 mm (15.74")
Crawler ground pressure	11 psi/74.5 kPa
Radio control tramping speed (max)	2.8 km/h
Support	4 hydraulic jack legs to adjust rig height
Pad diameter	Ø210 mm
Leg adjust range	600 mm (23.6")

Chuck assembly

Type	Hydraulic open, spring close
Maximum diameter	124 mm (4 7⁄8")
Holding capacity	178 kN

Trido

Trido 140H	Metric	US
Flow	140 L/min	37 gal/min
Pressure	70 bar	1 015 psi

Power unit

Manufacture	Cummins
Mode	OSB 6.7
Volume	6.7 liter, 6 cyl
Power	Tier 3: 179 kW (240 hp)
RPM	2 000
Engine type	Diesel turbocharged/after cooled
Cooling system	Water
Electrical system	24V (Alternator 24 V, 95 Amp)
Sound level	Tier III: 116 dB(A)

Weight

	Metric	US
Crawler	13 500 kg	29 760 lb

Selections of options

- Wireline cable, 5 mm x 1 850 m (0.19" x 6 069') or 6 mm x 1 500 m (0.23" x 4 921')
- Hydraulic mud mixer
- Trido water pump
- Electric water flow meter
- Tool kit
- Heavy duty water flow meter kit
- Battery terminal for export
- Level wind

Spindle data

Spindle	Ratio	Speed	Torque Metric (Nm)	US (lbf)
1st	1755 : 1	50 – 200 rpm	7 602 – 2 993	5 606 – 2 208
2nd	2.70 : 1	350 – 1 300 rpm	1 322 – 520	975 – 384

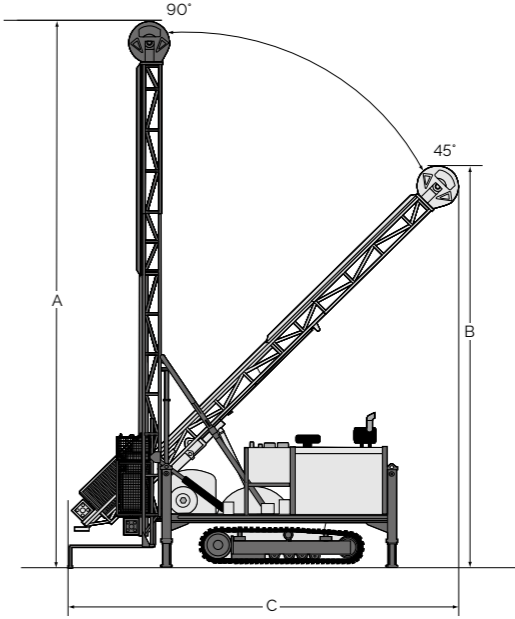
Wireline hoist

Capacity	1 500 m (4 921') of 6 mm (¼") or 1 850 m (6 070') of 5 mm (⅜") or 2 200 m (7 218') of 4.76 mm (⅜")
Line pull	Bare drum: 12.6 kN (2 830 lb), full drum: 3.3 kN (750 lb)
Line speed	Bare drum: 115 m/min (377 ft/min), full drum: 434 m/min (1 424 ft/min)

Hydraulic system

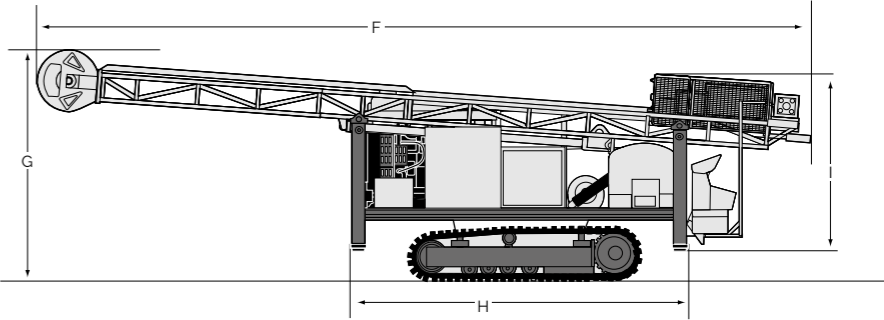
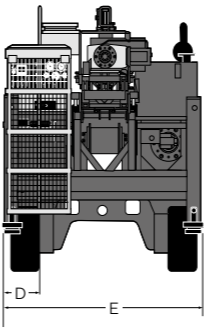
Primary pump	31.2 MPa, 250 L/min (4 524 psi, 66 gal/min)
Secondary pump	20 MPa, 125 L/min (2 901 psi, 33 gal/min)
Auxiliary pump	21.5 MPa, 54 L/min (3 118 psi, 14 gal/min)
Hydraulic oil cooling	Air

Technical specifications



Working dimensions

Dimension	Metric	US
A	11 219 mm	442"
B	8 145 mm	321"
C	8 296 mm	327"



Transport dimensions

Dimension	Metric	US
D	450 mm	18"
E	2 500 mm	98"
F	11 242 mm	443"
G	3 199 mm	126"
H	4 571 mm	180"
I	2 470 mm	97"

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