

Boyles C5/C5C

Compact and powerful core drilling rig



Power and flexibility in a compact design

The Boyles C5/C5C surface core exploration drilling rig is compact, yet powerful. Its compact design makes it easy to position and transport, even by helicopter. The sturdy and robust design enables continuous operation also in remote locations and harsh operating environments.

+ Main benefits

Small and compact-Despite it's small and compact exterior, the Boyles C5/C5C provides the torque and RPM necessary for BO-PO size coring, making it the most powerful rig in its class.

Robust design-Designed for sturdiness and operation in harsh environments, the Boyles C5/C5C just goes on and on without interruption, minimizing service requirements.

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

The rig is equipped with the Durahead 2-gear drive rotation unit that provides the necessary torque and rpm speed ranges for coring and comes with an improved design of chuck and jaws.

The rig is equipped with safety guard around the rotation unit which provides operators with operational safety.



The rig can be divided into seven main modules, the heaviest weight as 1 000 kg (2 200 lbs). Each module is equipped with lifting points to ensure safe and effective helicopter transportation.



All drilling functions are performed, using the ergonomic and user-friendly control panel which also displays all the drilling parameters necessary to ensure productive drilling.



The Boyles C5C crawler rigs come with a radio remote control, which allows you to tram the rig from a distance providing a safer working environment.

A sturdy mast and feed system ensures minimal vibration, straight bore holes and optimum lifting capacity. It can drill effectively from 45 to 90 degree angles. The three-piece, de-mountable mast adds further to the rig's excellent mobility.

Tier III Cummins engine is recognized for its durable life, efficient operation and capability to minimize fuel consumption even in the toughest of drilling operations.



Second to none in its drill class

The Boyles C5/C5C guarantees high performance and productivity coupled with the service and support necessary to maintain and ensure the rig's durability and continuous uptime. It is an affordable, fully hydraulic machine that takes a leadership position in its drill class segment.

+ Depth capacity

Robustly designed down to the smallest component, the Boyles C5/C5C has a drilling depth capacity of 1 044 meters N-size making it suitable for drilling at large depths in remote locations.

+ Ergonomics and safety

The rig is easy to operate using an intuitive control panel. All drilling functions can be operated from the control panel. For example, you can make and break rods without manual intervention or being close to any moving parts.

+ Productivity and lower operational costs

Every part and component is of the highest quality and standard, designed with ruggedness and durability in mind. The Boyles C5/C5C is synonymous with productive drilling, maximum uptime and low maintenance requirements.



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 C5/C5C

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 gear-box, a hollow spindle and an Epiroc 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 well-controlled feed. The dual brake system offers both dynamic and static breaking. When the lifting operation is stopped, firm self-locking is applied.



Standard equipment

- Mast in three sections
- Large crown sheave wheel
- Wear liners on lower mast
- Safety guards
- Hydraulic oil fill pump and filtration system
- Tier III diesel engine
- Control panel
- Hydraulic rod holding clamp
- Manual leveling jacks
- Fuel tank 200 l
- Fuel filter and water separator
- Hydraulic mast raise
- Lighting kit
- Emergency-stop devices
- Spindle tachometer

Main hoist

	Metric	US
Single line capacity, bare drum	69 kN	15 500 lb
Line speed, bare drum	39.7 m/min	130 ft/min
Cable size	27 mx 16 mm	89' x 0.63"

Rod clamp

Hydraulically open and close. Easy-to-remove jaws, common jaws from 56 mm to 117 mm	Metric	US
Max diameter	210 mm	8.3'
Max clamping diameter	117 mm	4.6'
Holding capacity	Up to 13 000 kg	29 000 lb

Depth capacity

Hole size	Standard		Thin Wall Rods	
	Metric	US	Metric	US
B wireline	1 325 m	4 347'	1 573 m	5 161'
N wireline	1 044 m	3 425'	1 191 m	3 907'
H wireline	693 m	2 274'	948 m	3 110'
P wireline	423 m	1 388'	664 m	2 178'

*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

Model	Durahead 6M
Power	Hydraulic motor – variable speed/ reversible
Final drive	Gear driven
Spindle (inner diameter)	124 mm (4.9')
Max torque	6 787 Nm
Max speed	1 300 rpm

Mast and feed system

	Metric	US
Feed travel	2.0 m	6.6'
Feed speeds	Fast and slow with variable control	
Mast dump	0.42 m	1.4'
Thrust	59.6 kN	13 390 lb
Pull	107 kN	24 055 lb
Drilling angle	45° – 90°	
Rod pull length	6.09 m	20'

Technical specifications

Drill base supports

Mount/base system	Trailer mounted rig with two 770 mm wheels and towing package
Support	4 mechanical jacks and can adjust rig height manually
Pad diameter	Ø200 mm
Leg adjust range	550 mm (21.7")

Hydraulic system

Primary pump	25 MPa, 182 L/min (3 626 psi, 48 gal/min)
Secondary pump	20 MPa, 135 L/min (2 901 psi, 36gal/min)
Auxiliary pump	21.5 MPa, 39 L/min (3 118 psi, 10 gal/min)
Hydraulic oil cooling	Air

Chuck assembly

Type	Hydraulic open, spring close
Maximum diameter	124 mm (4.6")
Holding capacity	18 000 kg (39 600 lb)

Optional rodholder (gas pressure)

Type	Hydraulically opened, gas pressure locked
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Power unit

Manufacture	Cummins
Mode	QSB4.5 Tier III
Volume	4.5 liter, 4 cyl
Power	119 kW (160 hp)
RPM	2 200
Engine type	Diesel turbocharged, air-to-air charge air cooled
Cooling system	Water
Electrical system	24V

Wireline hoist

Capacity	1 500 m x 6 mm, 1 850 m x 5 mm
Line pull	Bare drum: 9.0 kN, full drum: 2.4 kN
Line speed	Bare drum: 126 m/min (413 ft/min); full drum: 484 m/min (1 588 ft/min)

Spindle data

Range selection: Manual control from operator's station Hinged head: Swing away				
	Ratio	Speed, rpm	Torque	
			Metric	US
Low speed	17.55 : 1	50 – 200 rpm	6 787 – 2 672 Nm	5 002 - 1 969 lbf
High speed	2.70 : 1	350 – 1 300 rpm	1 066 – 420 Nm	785 - 309 lbf

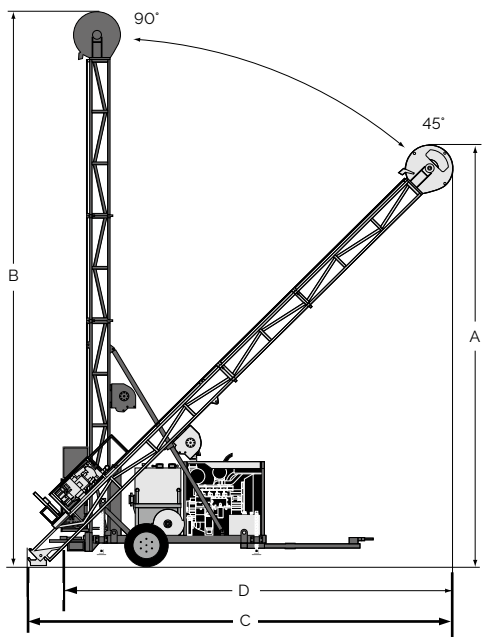
Weight

	Metric	US
Complete rig Boyles C5	5 700 kg	12 566 lb
Complete rig Boyles C5C	8 100 kg	17 857 lb
Trido 140	315 kg	694 lb

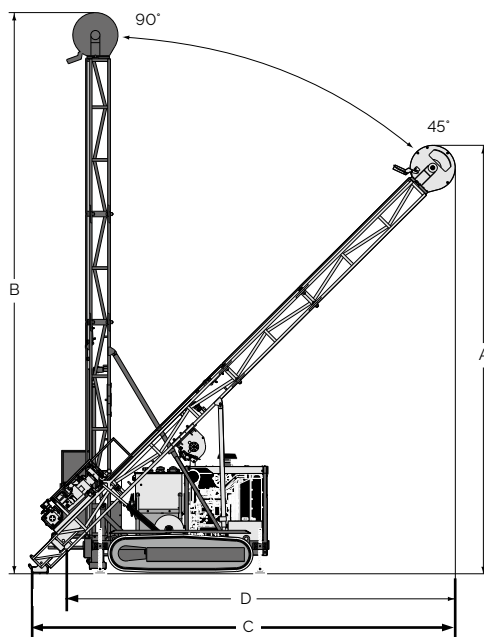
Selections of options

- Tool kit
- Hydraulic jack legs
- Gas pressure rod holder - PO size
- Hydraulic mud mixer
- Hydraulic mud pump kit, Trido 140, 140 L/min / 7 MPa
- Battery terminal for export
- RRC (Radio Remote Control) (Boyles C5C)
- Water flow meter kit
- Quick diconnect kit for fly operations
- Engine covers

Boyles C5



Boyles C5C

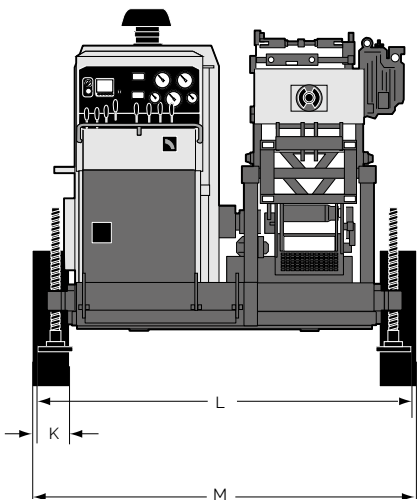


Technical specifications

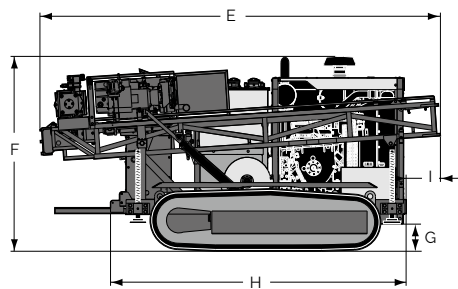
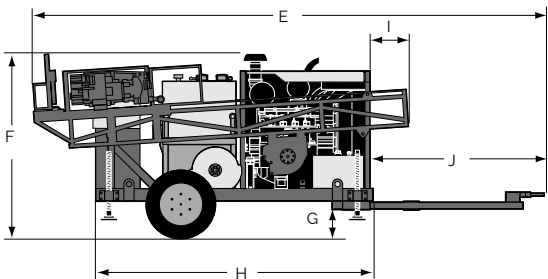
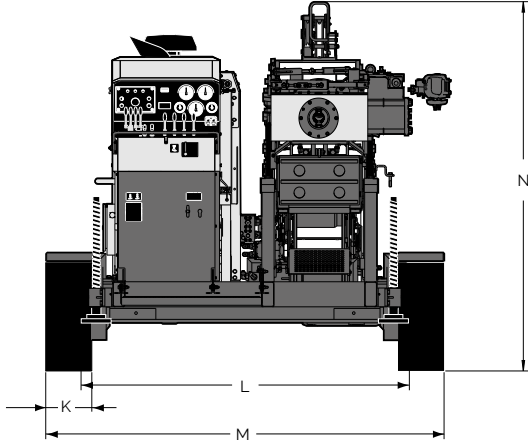
Working dimensions

Dimension	Boyles C5		Boyles C5C	
	Metric	US	Metric	US
A (45° drilling)	7 719 mm	304"	7 726mm	304"
B (90° drilling)	10 112 mm	398"	10 119 mm	398"
C (45° drilling)	7 612 mm	300"	7 599 mm	299"
D (90° drilling)	6 073 mm	239"	4 513 mm	178"

Boyles C5



Boyles C5C



Transport dimensions

Dimension	Boyles C5		Boyles C5C	
	Metric	US	Metric	US
E	6 073 mm	239"	4 513 mm	178"
F	2 138 mm	84"	2 146 mm	85"
G	330 mm	13"	287 mm	11"
H	3 202 mm	126"	3 331 mm	131"
I	417 mm	16"	387 mm	15"
J	1 947 mm	77"	-	-
K	220 mm	9"	300 mm	12"
L	2 160 mm	85"	2 134 mm	84"
M(incl. wheels)	2 200 mm	87"	2 594 mm	102"
N	-	-	2 356 mm	98"

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