

PowerROC D45

Surface drill rig for quarrying and mining

Hole diameter: 90–130 mm (3 9/16"–5 1/8")





Power up

PowerROC D45 is a reliable, robust and straightforward surface drill rig, which gives easy operation, maintenance and high reliability.

PowerROC D45 provides safe and sustainable operation, and is perfectly suited for limestone, aggregate and cement quarries, open pit mines - where high working efficiency is a must. The rig delivers easy operation and maintenance with the help of direct control. Few components gives simple

troubleshooting and service. PowerROC D45 is an integrated hydraulic drill rig with high reliability which includes the FOPS and ROPS certificated cabin, automatic rod handling system and dust collection system.

+ Main benefits

- Easy operation and maintenance** due to direct control system
- High reliability** due to straightforward design
- Robust performance** thanks to the use of proven Epiroc technology

Power up

By implementing the mechanized drilling operation on PowerROC D45, risks associated with manual rod handling are avoided. A safe and ergonomical working platform is achieved with the help of components such as the FOPS and ROPS - approved cabin.



+ Performance

By using proven Epiroc technology and Down-The-Hole drilling, PowerROC D45 provides reliable performance and high drilling quality year round. Piston pumps make the hydraulic system more stable and efficient, thus the rig can deliver high productivity and low fuel consumption in daily operation. Combined with low initial investment and high penetration rate, you are kept on the profitable side—always!



+ Operator friendly

The FOPS and ROPS certificated cabin of PowerROC D45 provides comfort-ability for operations and good visibility. Joystick controlling gives you easy and convenient drilling operation. The dust collection system suppresses the dust during drilling, providing the operator a cleaner and clearer operation plus an environmentally friendly atmosphere.



+ Easy accessibility

Components on PowerROC D45 are designed for easy maintenance. All hoses and cables are marked at each end which allows for easy trouble-shooting. Meanwhile, the electrical system simplified design results in easier service and maintenance.

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

Main components

- Trimming system including triple grouser pads with cleaning holes, hydraulic track oscillation and two speed traction motor
- Cummins diesel engine with National III emission/Stage III compliance
- Atlas Copco screw type high pressure compressor
- Air-conditioned cabin, FOPS and ROPS certified
- Standard boom
- Steel feed beam

- Rod Handling System(RHS), 6+1 carousel type
- Break-out table
- Dust collection system
- Pre-separator
- DTH hammer lubricator device (pneumatic)
- Thread greasing device
- Back-up alarm

Engine

Cummins Turbo charged, QSB6.7-C260, Tier 3	Metric
Power rating at 2 000 rpm	193 kW

Compressor

Atlas Copco C146, screw type air compressor	Metric
Maximum working pressure	17 bar
FAD, at normal working pressure	230.8 l/s

Feed

Hydraulic motor driven chain feed with hose guide and double drill tube support with break-out table and movable lower guide/dust hood	Metric
Feed rate, max	0.88 m/s
Feed force, max	12 kN
Tractive pull, max	18 kN
Total length	7 560 mm
Travel length	4 684 mm

Hole range & depth (recommended)

		Metric
Recommended DTH hammers and hole range	3.5" and 4" DTH hammer	90–130 mm
Hydraulic rod handling system for max hole depth, with 4m (13.12') rods	Ø 76 mm Rod	29 m
Single pass drilling, max hole depth		4.3 m

Dust collector

DCT 150	Metric
Filter area	15 m²
Number of filter elements	15 pcs
Suction capacity at 500 mm wg	350 l/s
Suction hose diameter	127 mm
Cleaning air pressure, max	7.0 bar
Cleaning air consumption	2–4 l/pulse

Hydraulic system

Hydraulic oil cooler	Metric
Ambient temperature	-20—50°C
Piston pump (1)	83.7 l/min
Piston pump (2)	83.7 l/min
Gear pump (3)	41.4 l/min
Gear pump (4)	22.6 l/min
Gear pump (5)	22.6 l/min
Filtration rate	16 µm absolute

Volumes

Hydraulic oil tank	360 l
Hydraulic system, total	450 l
Compressor oil	63 l
Diesel engine oil	16 l
Diesel engine, cooling water	60 l
Diesel engine, fuel tank	500 l
Traction gear	3 l
Lubrication tank (ECL)	10 l

Electrical system

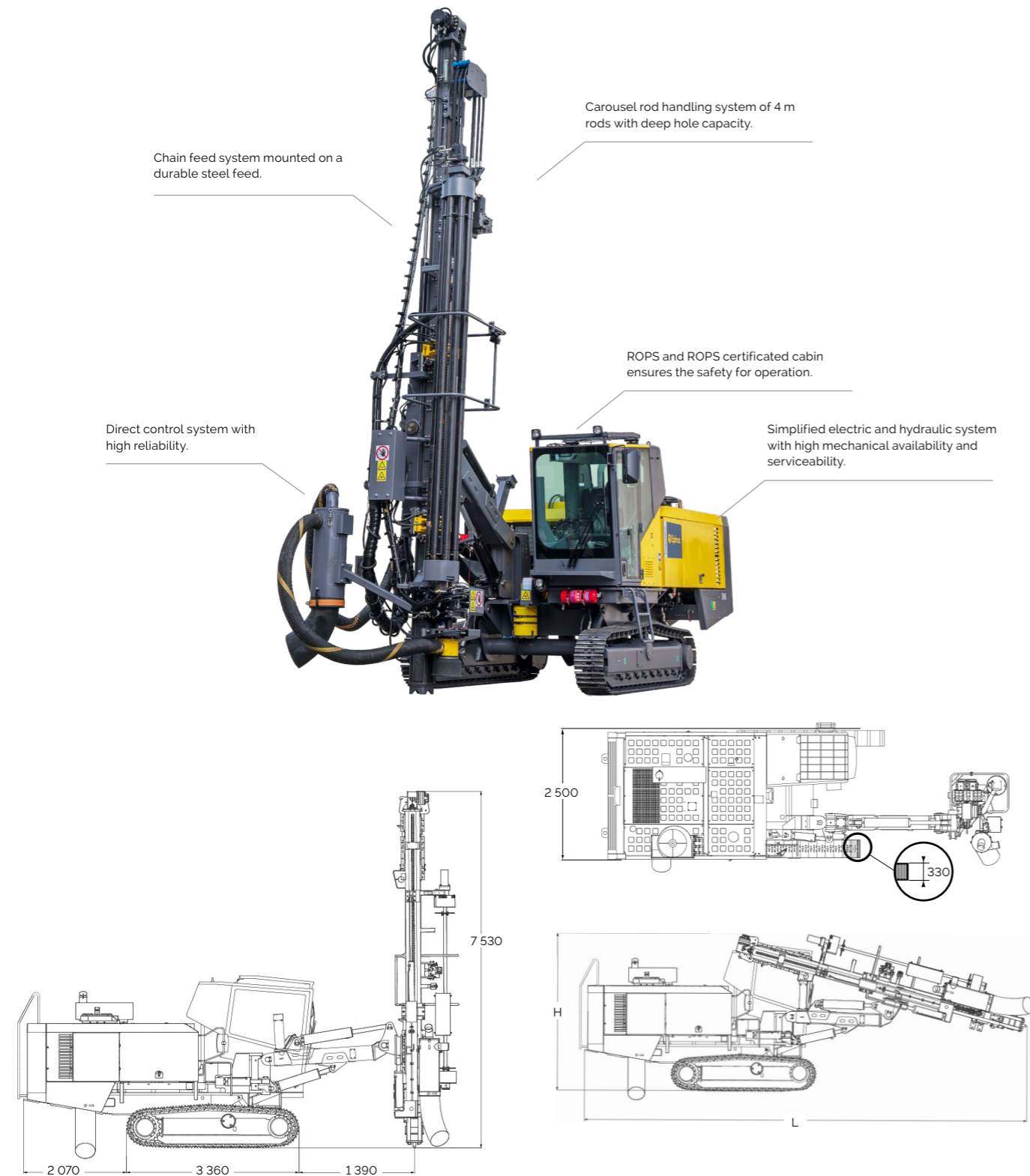
Voltage	24 V
Batteries	2 x 12 V, 180 Ah
Alternator	28 V, 95 A
Work lights, front	3 x 70 W
Work lights, rear	1 x 70 W
Work lights, feed	2 x 70 W
Reverse alarm buzzer	

Rotary head

Rotary head	Connection thread	Max rpm	Max torque, drilling	Max torque, breaking	Suitable for DTH hammer
DRU 4	API 2 3/8" REG, box	144	1140 Nm	1 640 Nm	3.5" and 4" DTH hammer

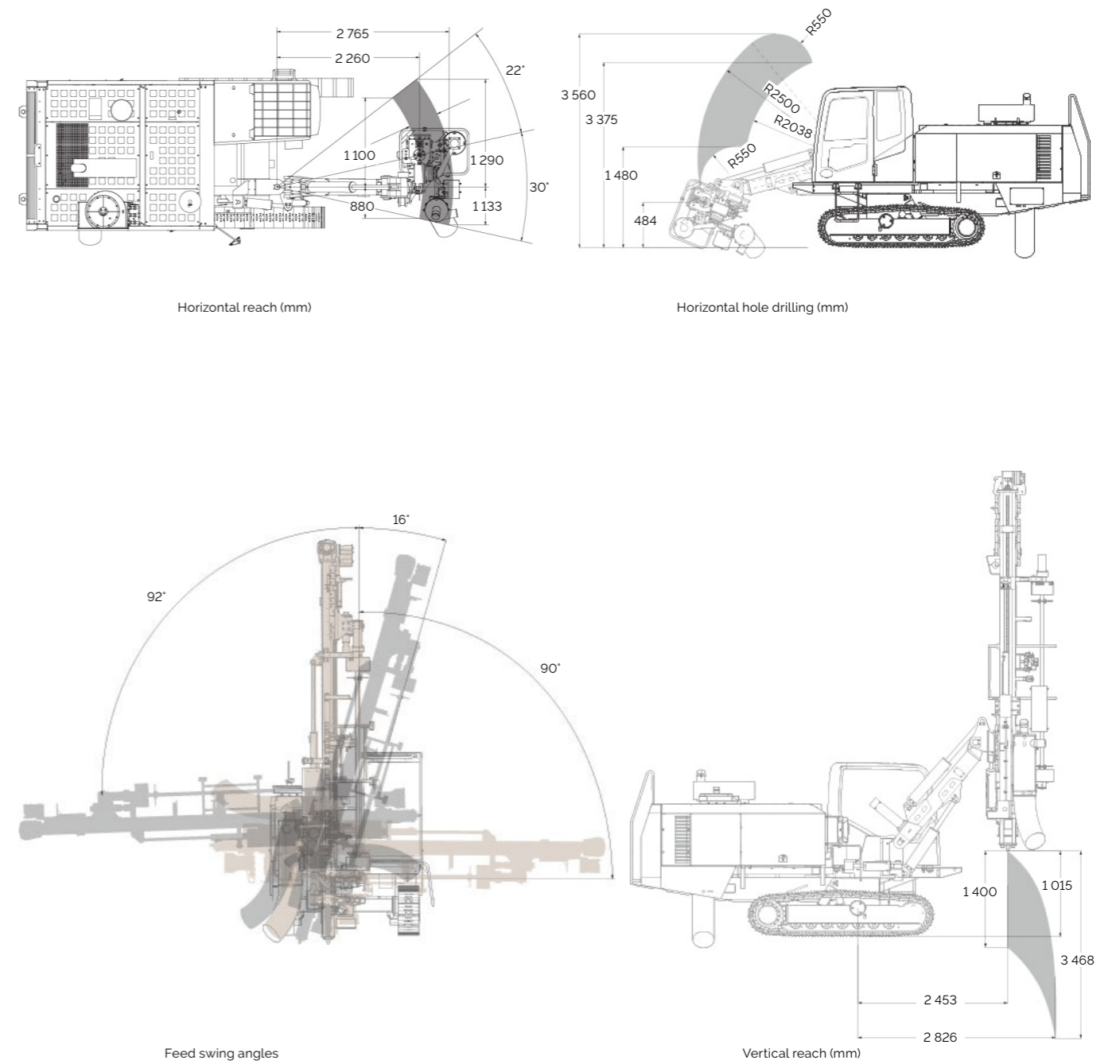
Down-the-hole hammer (to be ordered separately)

Down-the-hole hammer	Top sub thread	Hole range	Weight	Length excl thread
DHD 3.5C	API 2 3/8" REG pin	90–100 mm	29 kg	984 mm
DHD 4	API 2 3/8" REG pin	105–130 mm	39 kg	984 mm



Transport dimensions

	Metric	US
Height(H)	3 445 mm	135.6'
Length(L)	9 250 mm	364.2'
Width	2 500 mm	98.4'
Weight	14 000 kg	30 864.7 lb



Selection of options

Carrier

- Heavy duty air intake filters for engine and compressor
- Cold weather kit below -25°C
- Insulated and heated compressor regulation system
- Central Lubrication System (CLS)

Lube oil, lube system and water mist system

- Arctic hydraulic oil, VG 32
- Tropical hydraulic oil, VG 68

Feed

- Rod Handling System (RHS) dimension kit, 89 mm

United in performance. Inspired by innovation.

Performance unites us, innovation inspires us, and commitment drives us to keep moving forward. Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.
epiroc.com

