

# PowerROC D45

Surface drill rig for quarrying and mining

Hole diameter: 90–130 mm (3.5–5")





# User-friendly performance

The PowerROC D45 is a reliable, robust and straightforward surface drill rig. It is both easy to operate and maintain and is very reliable.

PowerROC D45 offers you safe and sustainable operation. It is perfectly suited for limestone, aggregate and cement quarries, as well as open pit mines - where high working efficiency is a must. The rig delivers easy operation with the help of direct control. It is assembled using a simplified design which utilizes as few components as possible which assists with troubleshooting and maintenance. The PowerROC D45 is an integrated

hydraulic drill rig with high reliability which includes a FOPS- and ROPS-certified cabin, automatic rod handling system and dust collection system. A 12.1 inch touchscreen-and-button display provides the operator with a user-friendly, intuitive interface which presents information concerning the running status of the whole rig. This new interface, makes maintenance easier and reduces service costs.

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## + Main benefits

**Easy operation and maintenance** due to a pilot hydraulic control system and PLC control system.

**High reliability** due to straightforward design

**Solid performance** thanks to the use of proven Epiroc technology

# Performance

The PowerROC D45 has a mechanized drilling operation which means risks associated with manual rod handling are avoided. Features such as a FOPS- and ROPS-certified cabin help to improve ergonomics and boost safety.



## + Performance

The PowerROC D45 utilizes proven Epiroc technology and Down The-Hole drilling to help give reliable performance and high drilling quality all year round. Piston pumps make the hydraulic system more dependable and efficient, which means that the rig can deliver high productivity and low fuel consumption shift-after-shift. This machine also features an impressive penetration rate, so it has all the potential needed to help boost your profits.



## + Operator friendly

The FOPS- and ROPS-certified cabin of PowerROC D45 provides operators with good visibility. Ergonomic joystick controls make the rig easy and intuitive to operate. The dust collection system keep dust levels down during drilling, providing the operator with a cleaner and more healthy work environment. The 12.1 inch display clearly displays engine and system data, diagnostic information, warning messages and parameter settings.



## + Easy accessibility

Components on the PowerROC D45 are designed to be easily maintained. All hoses and cables are marked at each end which makes troubleshooting easier. The simplified design of the electrical system also 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, Tier 3
- Atlas Copco screw type high pressure compressor
- FOPS- and ROPS-certified, air conditioned cabin with 12.1 inch display
- Standard boom
- Steel feed beam
- PowerUP function

- 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
- 2D angle indicator, electronic, integrated into display
- Radio

## Engine

Cummins Turbo charged, QSL8.9-C325, Tier 3	Metric
Power rating at 1 800 rpm	234 kW

## 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

## Dust collector

DCT 150	Metric
Filter area	15 m <sup>2</sup>
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

## Volumes

Hydraulic oil tank	360 l
Hydraulic system, total	450 l
Compressor oil	63 l
Diesel engine oil	35 l
Diesel engine, cooling water	60 l
Diesel engine, fuel tank	500 l
Traction gear	3 l
Lubrication tank (ECL)	20 l

## Rotary head

Rotary head	Connection thread	Max rpm	Max torque, drilling	Max torque, breaking	Suitable for DTH hammer
DRU 5	API 2 3/8" REG, box	100	1 600 Nm	3 100 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

## Compressor

Atlas Copco C146, screw type air compressor	Metric
Maximum working pressure	17 bar
FAD, at normal working pressure at 1 800 rpm	230.8 l/s
FAD, at normal working pressure at 2 000 rpm	250 l/s

## 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

## Hydraulic system

Hydraulic oil cooler	Metric
Ambient temperature	-25-50°C
Piston pump (1)	102.6 l/min
Piston pump (2)	102.6 l/min
Gear pump (3)	38 l/min
Gear pump (4)	23.4 l/min
Gear pump (5)	23.4 l/min
Filtration rate	10 µm absolute

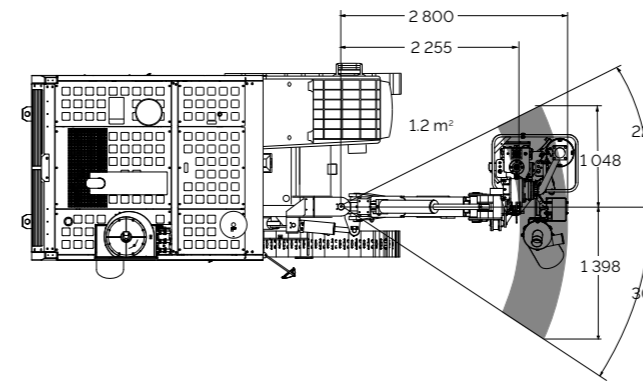
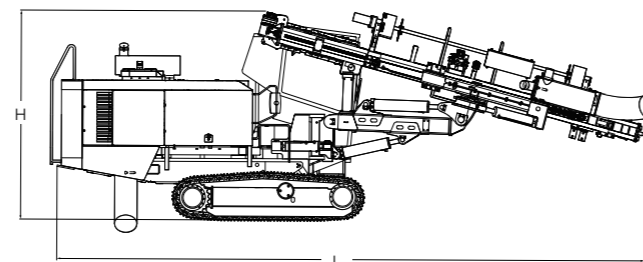
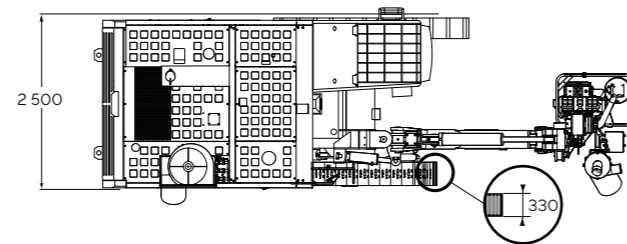
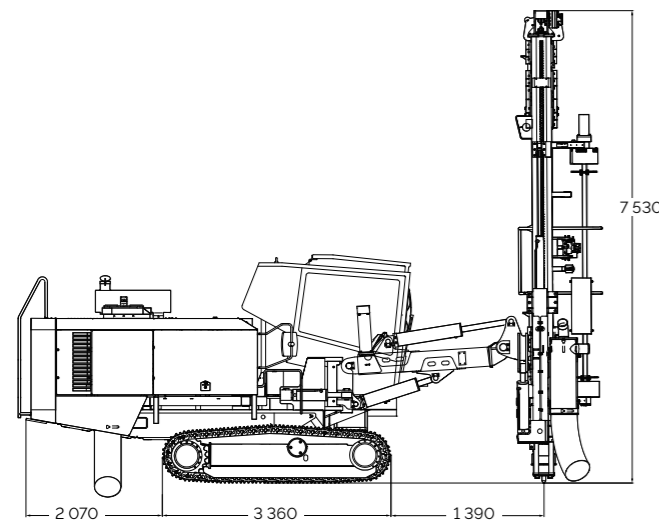
## Electrical system

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	

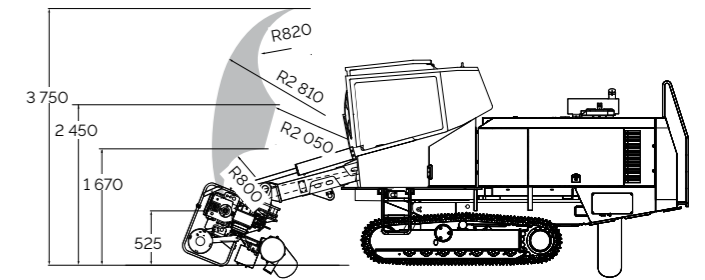


Transport dimensions

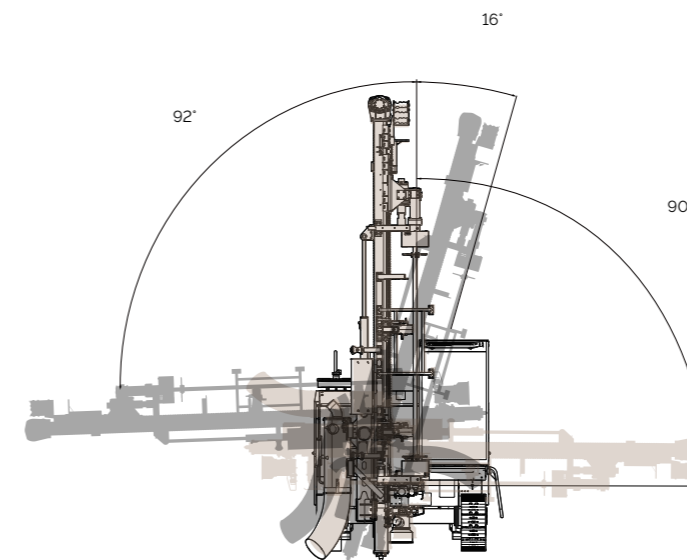
	Metric	US
Height(H)	3 445 mm	135.6'
Length(L)	9 250 mm	364.2'
Width	2 500 mm	98.4'
Weight	14 300 kg	31 526.1 lb



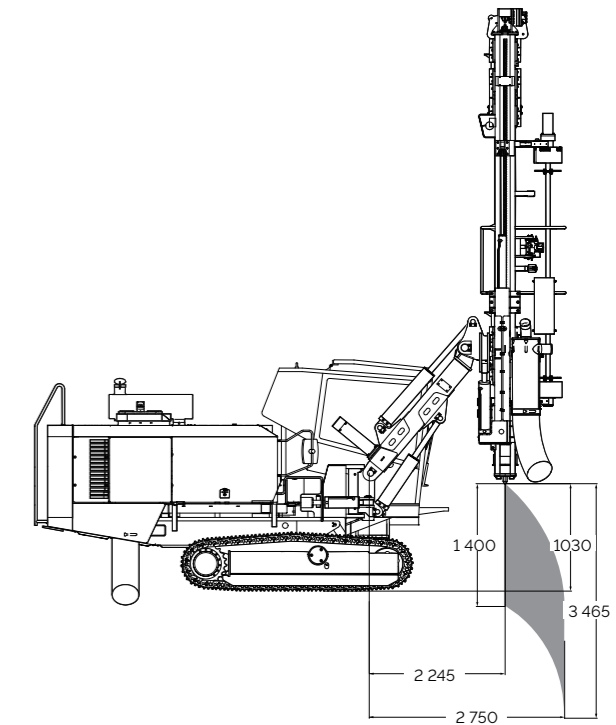
Horizontal reach (mm)



Horizontal hole drilling (mm)



Feed swing angles



Vertical reach (mm)

Selection of options

Carrier

- Heavy duty air intake filters for engine and compressor
- Cold weather kit below -25°C, diesel engine pre-heater and compressor regulation heating kit
- Combined warning sound and warning light
- Hydraulic oil heater

Feed

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

Lube oil, lube system and water mist system

- Central Lubrication System (CLS)
- Arctic hydraulic oil, VG 32
- Tropical hydraulic oil, VG 68
- Standard hydraulic oil, VG 46
- Water mist system, with water pump and 300 l water tank (dual 150 l tank)

# 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.  
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