

PowerROC D55

Surface drill rig for mining and quarrying

Hole diameter: 90–152 mm (3.5–6")





Performance you can count on

PowerROC D55 is a hydraulic down-the-hole rig you can trust on to perform reliably, even in the most demanding mines and quarries.

The PowerROC D55 is designed according to our philosophy of providing customers a reliable drill rig with high capacity, maximum uptime and simplicity in operation. Dual drill steel supports for straight hole drilling. Spacious compartment with ergonomic design, providing high visibility during drilling as well as comfortable operation. This rig allows flexibility for different

applications, such as horizontal hole drilling, de-water hole drilling and toe hole drilling, not limited to production drilling. A touchscreen-and-button display, with the size of 12.1 inch, offers operators a user-friendly interface for an intuitive understanding about the running status of the whole rig. With the new interface, maintenance is easier, and service cost can be reduced.

⊕ Main benefits

High performance thanks to well-proven Epiroc technology and extensive experience

High reliability due to a tried and tested design and reliable, high quality components

Easy operation and maintenance thanks to straightforward design

Dependable performance

Epiroc is constantly focused on the safety of our products. Data shown on a display in cabin include, but are not limited to the data of engine, systems running status, diagnostic information, warning and alarm message and functional parameter settings, which clearly shows the running status of the rig.



+ Safety in focus

The rig is equipped with FOPS and ROPS certified cabin. The rig will stop drilling automatically when operator leaves seat. The rig features a strong, standard boom giving strength and stability during drilling. The PowerROC D55 stops immediately if one of the four emergency stop switches which are distributed around the machine is activated.



+ High performance

The rig is fitted with an onboard Atlas Copco compressor delivering up to 321 l/s of air at a maximum pressure of 24 bar ensuring a high penetration rate. The straightforward design makes PowerROC D55 more reliable. A robust chain feed gives the PowerROC D55 lower running costs and a prolonged service life. The cooling system can handle a wide ambient temperature range of between -20°C to 50°C even during demanding drilling.



+ Easy maintenance

The centralized service spot is a feature on PowerROC D55. It provides easy access to vital service points, convenient replacement of air filters and oil filters, and makes it easy to check all oil levels. Additionally, the hydraulic valve blocks have been positioned to allow for easy adjustment and inspection. The feed beam can be positioned horizontally which enables toe-hole drilling and makes for easy inspection 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

- Cummins turbo-charged Tier III and China IV diesel engine
 - Atlas Copco two-stage screw type compressor
 - Carousel type rod handling system
 - Break-out table
 - Track frames with triple grouser pads and cleaning holes, hydraulic track oscillation and two speed traction
 - ROPS and FOPS certified cabin with a 12.1 inch display and air-condition
 - Standard boom
 - Hydraulic oil heater
 - Power ECO
- PowerUP
 - Aluminum feed beam which can be positioned horizontally for toe-hole drilling
 - Chain feed system powered by hydraulic motor
 - Dust collection system
 - Pre-separator
 - Feed extension
 - DTH hammer lubricator device (pneumatic)
 - Thread lubrication, spray system
 - Back-up alarm
 - 2D angle indicator, integrated into display

Engine

Cummins turbo-charged, diesel engine, QSL8.9-C360 Tier 3 version and L9CS4 360C China IV version	Metric	US
Power rating at 2 000 rpm	265 kW	356 hp

Hydraulic system

Hydraulic oil cooler	Metric	US
Maximum ambient temperature	50°C	122°F

Dust collector

PowerROC D55 - DCT 200	Metric	US
Filter area	20 m²	215 sq.ft
Number of filter elements	20 pcs	20 pcs
Cleaning air pressure, max	7.0 bar	102 psi
Cleaning air consumption	2-4 l/pulse	0.06-0.12 cu.ft/pulse
Suction capacity at 500mm wg	850 l/s	1 802 cfm

Compressor

Atlas Copco, two-stage screw type compressor	Metric	US
Maximum working pressure	24 bar	348 psi
FAD, at Power ECO working pressure, at 1600 rpm	253 l/s	536 cfm
FAD, at normal working pressure, at 1800 rpm	287 l/s	608 cfm
FAD, at PowerUP working pressure, at 2000 rpm	321 l/s	680 cfm

Hole range & depth (recommended)

Recommended DTH hammers and hole range			
PowerROC D55	COP 35, COP 44, COP 54	90-152 mm (3.5-6')	
Hydraulic rod adding system for max hole depth		Metric	US
PowerROC D55		5 m	16.4'
Single pass drilling, max hole depth			
PowerROC D55	Ø 102 mm Rod	30 m	98.4'

Feed

Chain feed with dual drill rod support	Metric	US
Feed extension	1 900 mm	74.8'
Feed rate, max	0.85 m/s	170 ft/min
Feed force, max	35 kN	7 868 lbf
Tractive pull, max	40 kN	8 992 lbf
Total length	9 400 mm	370.1'
Travel length	5 400 mm	212.6'

Volumes

Hydraulic oil tank	380 l	100 US gal
Hydraulic system, total	470 l	124 US gal
Compressor oil	70 l	18.5 US gal
Diesel engine oil	35 l	9.2 US gal
Diesel engine, cooling water	60 l	15.9 US gal
Diesel engine, fuel tank	760 l	201 US gal
Traction gear	3 l	0.8 US gal
Lubrication tank (ECL)	20 l	5.3 US gal
Urea tank (China IV version)	85 l	22.5 US gal

Electrical system

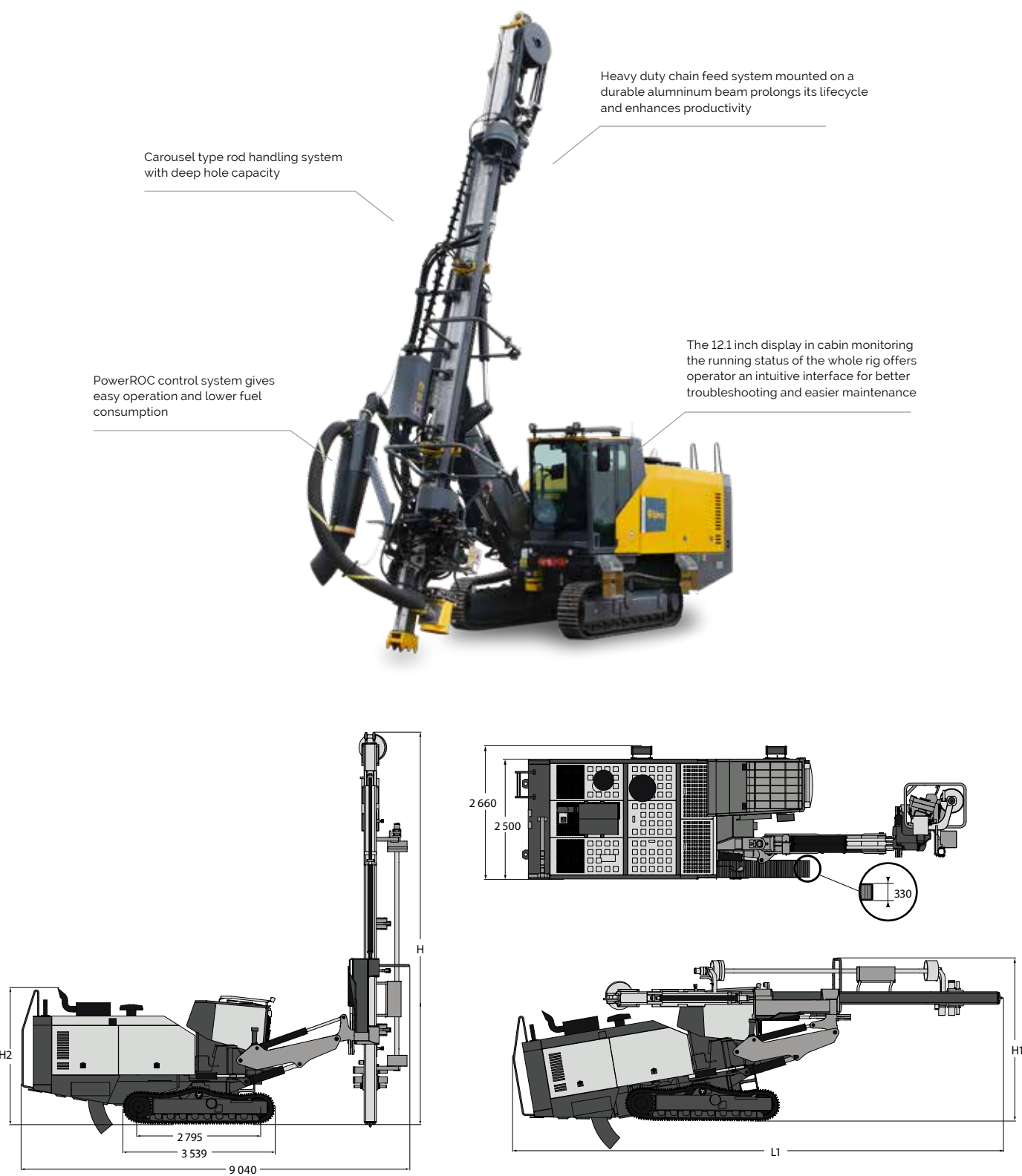
Voltage	24 V
Batteries	2 x 12 V, 200 Ah
Alternator	28 V, 110 A
Work lights, front	4 x 70 W
Work lights, rear	1 x 70 W
Work lights, feed	2 x 70 W

Rotary head

Rotary head	Connection thread	Hole range	Max rpm	Max torque, drilling	Max torque, breaking	Suitable for DTH hammer
DHR 6H 45	API 2 3/8" REG, box	90-152 mm (3.5-6')	136	2 630 Nm (1 939 lbf)	3 000 Nm (2 211 lbf)	COP 35, COP 44
DHR 6H 56	API 2 3/8" REG, box	90-152 mm (3.5-6')	107	3 375 Nm (2 488 lbf)	3 900 Nm (2 875 lbf)	COP 44, COP 54
DRU5 (China IV only)	API 2 3/8" REG, box	90-152 mm (3.5-6')	90	2040 Nm (1504 lbf)	3 400 Nm (2 506 lbf)	COP 35, COP 44, COP 54

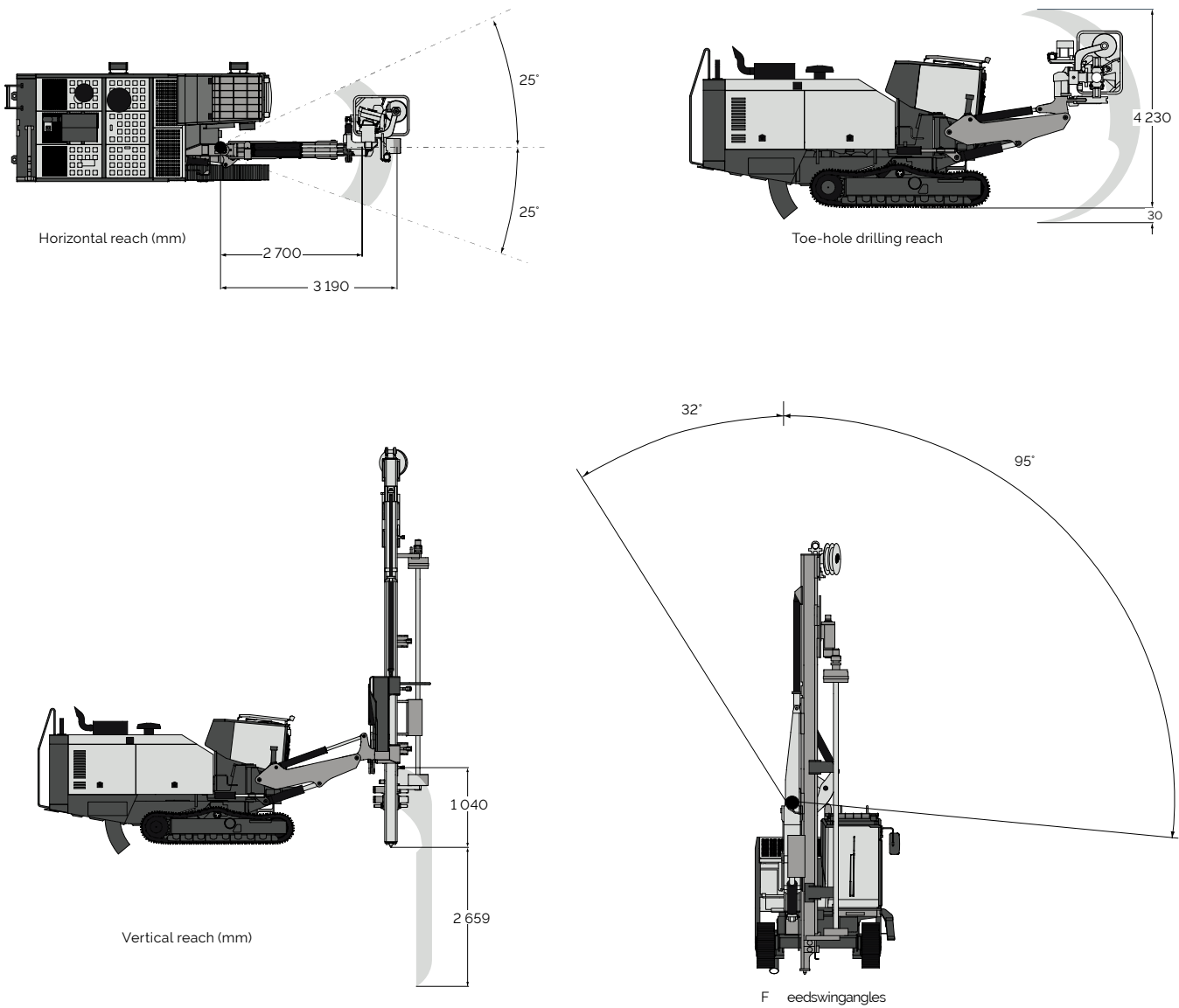
Down-the-hole hammer (to be ordered separately)

Down-the-hole hammer	Top sub thread	Hole range	Weight	Length excl thread
COP 35	API 2 3/8" REG pin	90-105 mm (3.5-4.1')	30 kg (65 lb)	902 mm (35.5')
COP 44	API 2 3/8" REG pin	110-127 mm (4.5-5')	40.5 kg (89 lb)	1034 mm (40.5')
COP 54	API 2 3/8" REG pin	134-152 mm (5.5-6')	66 kg (146 lb)	1 194 mm (47')



Transport dimensions

	Metric	US
Height (H1)	3 700 mm	145"
Height (H2)	3 030 (Tier 3)/3220 (China IV) mm	119"/127"
Length (L1)	11 350 mm	447"
Feed height (H)	9 400 mm	370"
Weight	21 000 kg	46 297 lb



Selection of options

- Carrier**
- Hydraulic support leg
 - Electrical refueling pump
 - Service lamps in canopy
 - Cold weather kit, diesel engine pre-heater and compressor regulation heating kit
 - LED lights
 - DCT 320
 - Heavy duty air intake filter
 - Combined warning sound and warning light, beacon type
- Hole and inclination system**
- 3D indicator with aiming device, integrated into display in cabin
 - Hole Navigation System (HNS)
- Safety cabin**
- Reversing camera with display mounted in the cabin

- Feed**
- Service winch with jib boom mounted on the feed
 - Wide feed foot/dowel
 - Drill steel support-steel bushing type
 - Movable pre-separator
 - Dimension kit for 76 mm, 89 mm, 102 mm and 114 mm
- Digital products**
- Fleet monitoring with Fleet+ on My Epiroc
 - Machine and fleet data via APIs
- Lubrication oil, lubrication system and water mist system**
- Central lubrication system (CLS)
 - Artic hydraulic oil, VG 32
 - Tropical hydraulic oil, VG 68
 - Standard hydraulic oil, VG 46
 - Water mist system, with water pump and 400 l water tank
 - Arctic-ready water mist system

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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