

Atlas Copco ROC L8

Flexibility and Power.

The new breed of D-T-H crawler drill for pre-splitting and production drilling.

Hole diameters 110-165 mm ($4\frac{5}{16}$ " – $6\frac{1}{2}$ ")



Atlas Copco

ROC — the Power Generation

A smarter solution

Atlas Copco's new ROC L8 is a high production down-the-hole crawler with ample power to deliver high penetration rates and deep holes. It has a rod handling capacity for hole depths of 54 meters (176 feet).

But there's more to the ROC L8 than power alone. Forget the idea that you need one small machine for pre-splitting and another larger one for production. You can use a single ROC L8 to do both jobs.

The ROC L8 is not just another down-the-hole crawler. It's a total solution for drilling in quarries and open pit mines. Everything you'd expect from Atlas Copco's ongoing commitment to raising standards in rock drilling technology.

Ergonomics and safety

As always with Atlas Copco crawlers, operator comfort figures high on the agenda. That way we can be sure you get the most out of the ROC L8.

The ergonomically designed cab, with its superb all-round visibility and user-friendly layout, reduces fatigue to a minimum and increases safety to the maximum. The seat is fully adjustable. The cab meets all international safety requirements. And there's much more. All adding up to a truly modern work station designed to give you the highest productivity.

ROC L8 — power and flexibility in perfect harmony

The ROC L8 features:

- High performance down-the-hole rock drills for fast and straight drilling. As an option, a back hammer system can be added to ensure you will not

waste time or costs with stuck drill steels

- A hydraulic break-out table and double drill steel support, which helps the operator thread and unthread drill steels, saves on drill steel consumption and helps you drill straighter holes at the same time
- State-of-the-art 317 kW (431hp) Caterpillar diesel engine with more than enough power for fast drilling in the most demanding rock
- Onboard Atlas Copco 405 l/s (858cfm) screw compressor that delivers a full 25 bars of air pressure for extra-high penetration and strong flushing – giving straight clean holes that are easier to charge
- Electronic hole inclination instrument and depth control for drilling blast holes that are perfectly aligned
- Heavy-duty tracks with 18 degrees (-8°/+10°) of oscillation for superb tramming – making it easy to reach the work site quickly and safely
- Flexible single-section boom with a wide feed swing – right and left, backwards and forwards

Designed to keep you up and running

Like all of our crawlers, the ROC L8 has been designed for ease of maintenance with ready access to all service points. All hoses and cables are marked at each end and can be related to the schematic drawings in the spare parts lists for easier maintenance and trouble-shooting. But that's no more than you'd expect. Designing with service in mind is a way of life for us.



A sturdy and effective break-out table.



The ROC L8 is designed with service in mind.

Higher power for faster penetration

To meet the ongoing challenge for higher productivity, we've provided the ROC L8 with a robust power pack – tuned for maximum efficiency but with plenty of reserve power for those difficult jobs that stress a rig to the limit. This, in combination with our fast down-the-hole rock drills, gives the ROC L8 top level performance even when drilling deep, large diameter holes.

A powerful partnership

The engine that drives the ROC L8 is a rugged Caterpillar diesel with an output of 317 kW (430hp) at 2000 rpm. Not only is it a power house. For normal drilling and tramming, it uses no more than 90% of its capacity. It therefore lasts longer and it's low on fuel consumption.

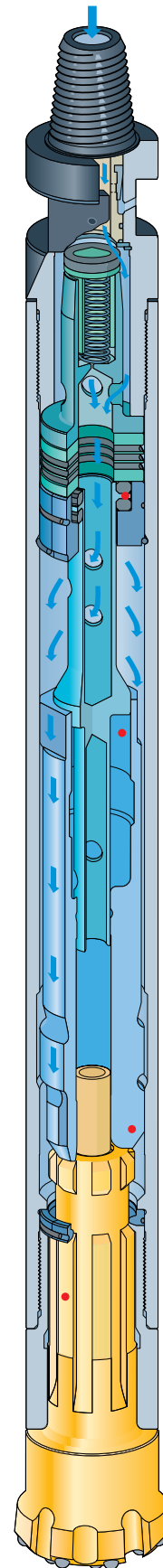
The engine drives a big onboard compressor – an Atlas Copco screw compressor with a free air delivery of 405 l/s (858cfm) at an operating pressure of 25 bar. A unit that's well up to the task of delivering top performance even when drilling holes as large as 165 mm (6 1/2") down to depths of 54 metres (176 feet) –and flushing them clean for charging.

DTH hammers that combine speed with economy

The ROC L8 can be fitted with a range of Atlas Copco down-the-hole rock drills – COP 44, 54 and 64 (4", 5" and 6"). These are among the fastest on the market. Their high performance, together with great functional reliability and outstanding service life, gives first-class drilling economy.

The superior penetration rate of our down-the-hole rock drills is due to a more efficient impact mechanism and better use of compressed-air energy. Flexible suspension of the central control tube enables the piston to be manufactured with much closer tolerances. This minimizes internal air leakage and optimizes the transmission of energy.

Two important benefits result: a higher penetration rate and lower fuel consumption per metre drilled.



An investment that pays

The ROC L8 is probably the most powerful DTH crawler in the business. And we're proud of that. But you will also get great satisfaction from the flexibility that we've been able to build into such a big machine.

If you think a heavy-duty DTH crawler is strictly for high-performance production drilling, this one will prove you wrong! It will do the work of two machines. The ROC L8 is maneuverable and precise enough to do presplitting work, yet strong enough to handle the most demanding production jobs.

Agility

For a rig of its size, the ROC L8 has unusually good terrainability features.

Heavy-duty tracks with 18 degrees of oscillation. A low center of gravity. Good weight distribution and generous ground clearance. These give the

ROC L8 excellent tramming ability, helping it to move quickly and safely between work sites.

Precision and Flexibility

In drilling, the ability to drill at different angles – and to accurately set the inclination of the drill and the depth of the hole – plays a major part in the overall economy of the operation.

The ROC L8 is well designed for this. The flexibility of the feed swing permits inclinations of up to 30 degrees right and left, and 40 degrees forward. There's an optional electronic inclination instrument and depth control too – to ensure that all blast holes are perfectly aligned in a predetermined direction and to the same drilling depth. An obvious advantage for the smooth contour blasting involved in pre-splitting work.

30°





A first class workstation

Good working conditions increase productivity. For this reason, we've taken great pains to provide the ROC L8 with a first class working environment

A superb operator's workstation

- Spacious cab, ROPS/FOPS approved, for comfort and safety
- Six-way adjustable seat with all drilling controls in the armrests
- Perfect view over collaring and tramming
- Efficient, Freon-free climate control
- Low noise level
- Generously dimensioned windows for excellent vision
- Rubber-damped cab mounted directly to the chassis to minimize vibration
- Easy-to-read instrumentation

and many other improvements to the working environment

- Break-out table with double guides gives straighter holes
- Straighter, more widely-spaced holes mean less explosives needed
- More efficient drilling reduces fuel consumption
- Rod handler rotates 360 degrees, allowing the random selection of any drill tube and maximizing tube life



The ROC L8 equipped with worklights as standard allows work around the clock.

- Well located, lockable service doors give easy access to vital components and protects against vandalism
- Low exhaust emission and engine noise values have minimal impact on the environment
- Efficient dust collection with pre-

separation gives cleaner holes and clean air to breathe

The new ROC L8 has everything you're looking for.

Spacious and well designed cabin.



Good view of collaring.



Electronic inclination instrument.



Technical data

Recommended hole-diameter range with

COP 44	110-130 mm	4 ⁵ / ₁₆ "-5 ¹ / ₈ "
COP 54	134-152 mm	5 ¹ / ₄ "-6"
COP 64	156-165 mm	6 ¹ / ₈ "-6 ¹ / ₂ "
Drill tube diam.	89/102/114 mm	3 ¹ / ₂ "/4"/4 ¹ / ₂ "
Drill tube length	6 m	20 ft
Hole Depth, max.	54 m	177 ft

Compressor

Atlas Copco, screw type compressor XRV 9

Working pressure	max. 25 bar	363 psi
FAD	405 l/s	858 cfm

Engine

Caterpillar, water-cooled diesel engine, CAT 3196 ATAAC

Rating at 2000 rpm	317 kW	431 HP
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Fuel tank

Total capacity	775 l	200 Usgal
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Feed

Feed length, total	11 250 mm	37'
Travel length	8 100 mm	26'7"
Feed extension	1 300 mm	4'3"
Feed rate, max.	0.92 m/s	180 ft/min
Feed force, max.	40 kN	8 950 lbf

Tramming

Tramming speed, max.	3.4 km/h	2.1 mph
Traction force	110 kN	24 729 lbf
Hill climbing ability	20°	
Track oscillation	±10/8°	
Ground clearance	405 mm	16"

Hydraulic Rotation unit

DHR 48H-45		
Rotation speed	30-80 r/min	
Torque, max.	3250 Nm	2 400 lbf/ft
DHR 48H-56		
Rotation speed	20-45 r/min	
Torque, max.	4250 Nm	3 150 lbf/ft
DHR 48H-68		
Rotation speed	20-40 r/min	
Torque, max.	6 200 Nm	4 550 lbf/ft

Transport dimensions

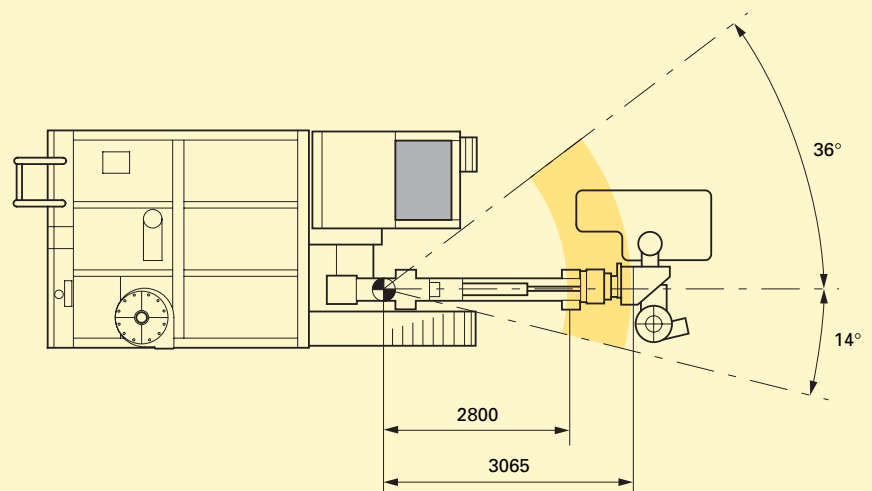
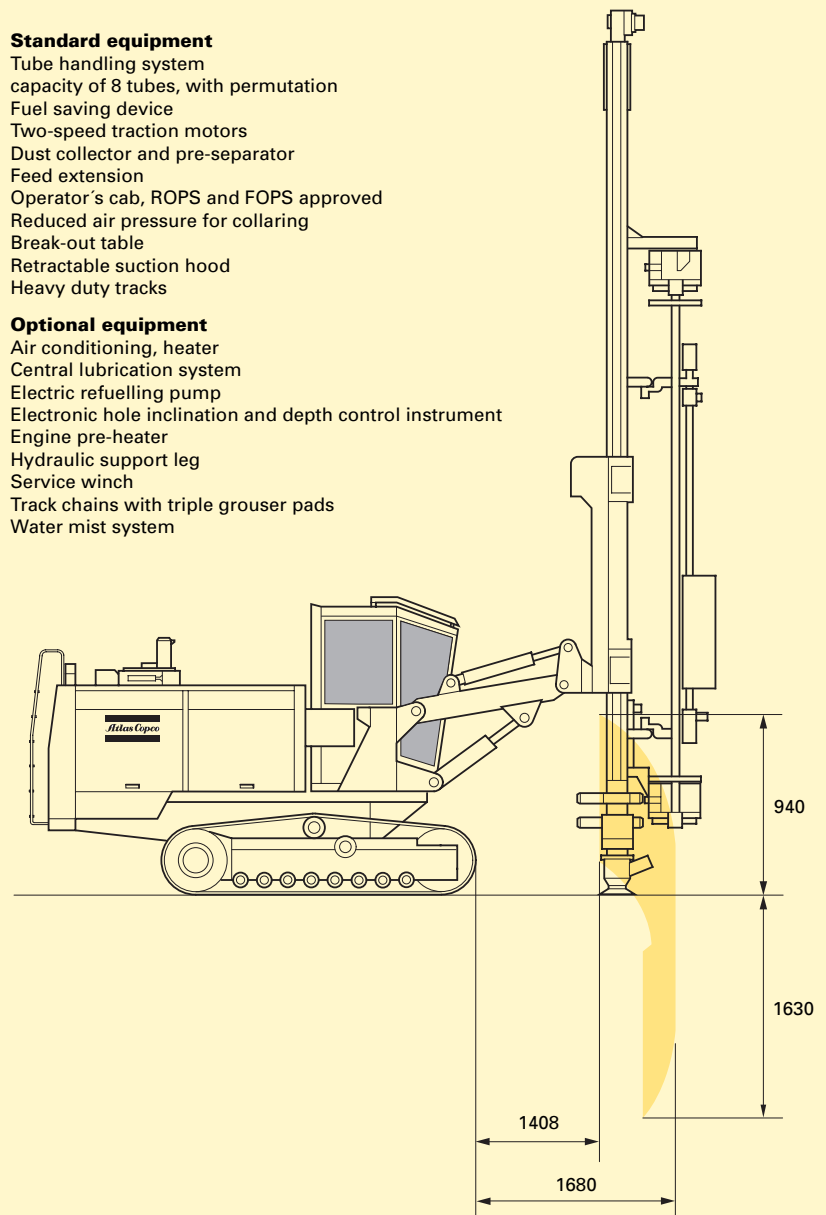
Weight, optional equipment excluded, approx.	19 900 kg	43 780 lb
Width	2 490 mm	8'
Length	11 250 mm	37'
Height	3 995 mm	13'1"

Standard equipment

- Tube handling system capacity of 8 tubes, with permutation
- Fuel saving device
- Two-speed traction motors
- Dust collector and pre-separator
- Feed extension
- Operator's cab, ROPS and FOPS approved
- Reduced air pressure for collaring
- Break-out table
- Retractable suction hood
- Heavy duty tracks

Optional equipment

- Air conditioning, heater
- Central lubrication system
- Electric refuelling pump
- Electronic hole inclination and depth control instrument
- Engine pre-heater
- Hydraulic support leg
- Service winch
- Track chains with triple grouser pads
- Water mist system



Illustrations in this brochure may show equipment with optional extras. Specifications and equipment subjects to change without prior notice. Consult your Atlas Copco sales company for specific information.

Total Rock Drilling Technology[®]



Atlas Copco