

# Atlas Copco Hydraulic Drill Rig **ROC® D3**



**Ideal for tough pioneering work and for urban area work sites**

Hole diameter 41-89 mm (1 <sup>5</sup>/<sub>8</sub>" - 3 <sup>1</sup>/<sub>2</sub>" )

*Atlas Copco*

The new ROC D3

# offers high capacity

## Aluminium feed

*The rigid aluminum profile, is stronger and less sensitive to bending stresses than traditionally steel beams, and is fitted with a cylinder feed with hydraulics drill steel support to provide better collaring and a constant, even feed force on the bit.*

## Hydraulic rock drill

*The ROC D3 series has a selection of two different hydraulic rock drills: COP 1240 and COP 1640.*

## Drill steel support

*The drill steel support is accurately and securely guiding the drill rod. On the ROC D3-01 there is a double drill steel support as standard, on the -03 model its a single movable drill steel support.*

*Compact and limited in dimensions - the new ROC D3 bench-drilling rig performs well, even on rough ground, and the boom has a reach of up to 5.2 m. It also has a powerful engine, double drill steel support and is equipped with aluminium feed with cylinder feeding. Teamed up with various COP rock drills, this folding boom rock-drilling unit makes a very strong double act. It offers unsurpassed access on all ground, no matter how rough it is.*

## EASY TO MANOEUVRE IN DIFFICULT TERRAIN

The bench-drilling rig is compact in size to manoeuvre and provides the answer whenever you need the advantages of long reach in difficult terrain. The tracks have  $\pm 15^\circ$  oscillation, smooth and efficient, but still sufficiently quick to ensure excellent

mobility in difficult terrain. This, together with a ground clearance of 340 mm, means that good, all-round access comes easy to the ROC D3. The machine's generous coverage saves time in tough conditions, where it is essential to be able to work effectively. In a nutshell the ROC D3, dubbed a "medium size" rig, is a drilling rig which gives

good, all-round efficiency and meets user demands for very high performance. At the same time, the ROC D3 also satisfied all criteria for simplicity and good, purpose-built design features. The drilling unit is of modular construction, using tried and tested components from other Atlas Copco equipment.



**ROC D3 - VALUE FOR MONEY**

Taken all round, this is an alternative which gives considerably increased productivity thanks to its good ground clearance, powerful drive motors and built-in compressor. Its low fuel consumption and high capacity make it ideal for medium sized sites, for drilling in built-up areas and for drilling in the dimension stone industry. It is important to have a drill rig you can rely on. The ROC D3 has a Cummins QSB4.5 engine and an Atlas Copco screw type compressor to ensure good flushing air capacity. The medium-sized rig has rapidly become a real favourite. It adapts easily and effortlessly to both construction work on small and medium sites, drilling in built-up areas and work in the dimension stone industry. A hydraulic winch and hydraulic support leg are also available as optional extras.



*Drilling panel.*

**EXTRA LONG REACH**

The ROC D3 has been specially designed to give you the greatest possible reach on hilly ground - a full 5.2 metres, which is now standard on the new ROC D3 -03 model. The powerful drive system in the new rig, with two strong hydraulic motors, high ground clearance and a low centre of gravity, combine to enable the rig to get just about anywhere, and reach ground speeds of up to 3 km/h. The ROC D3 comes with two different rock drills: COP 1640 or COP 1240.



*Hydraulic support leg.*



*Hydraulic winch.*

**LARGE FLUSHING AIR CAPACITY**

A more than ample compressor, delivering up to 95 l/s of flushing air, makes the ROC D3 a truly dependable workhorse. The machine's impressive flushing air capacity has been specially developed and designed for drilling in the toughest conditions, and the engine power provides enough reserve capacity to help in really tough situations. The ROC D3 is suitable for a range of hole diameters which are common on medium-sized contracts or for assignments which require compact rock-drilling equipment, well suited to the terrain.



*Feed mounted angle instrument.*



*Separated percussion hoses.*

# Technical Data

## ALUMINIUM CYLINDER FEED

### ROC D3 -01

Travel length	4240 mm	14'
Feed rate, max.	0,5 m/s	98 ft/min
Feed force, max.	20 kN	4400 lbf
Feed swing	35° right	60° left
- reconnected	10° right	80° left

### ROC D3 -03

Travel length	4070 mm	13'4"
Feed rate, max.	0,33 m/s	65 ft/min
Feed force, max.	12 kN	2160 lbf
Feed swing	37° right	37° left

## ENGINE

### Cummins QSB4.5

Rating at 2000 rpm	116 kW	156HP
Emission standard	Tier 3/Stage 3	

## COMPRESSOR

### Atlas Copco Screw Compressor

Working pressure	8.5 bar	123 psi
FAD at 8.5 bar		
(-01 ver.)	95 l/s	201 cfm
(-03 ver.)	80 l/s	170 cfm

## TRAMMING

Travel speed, max	3.3 km/h	1.9 mph
Traction force	90 kN	16185 lbf
Hill climbing ability (CE Norm)		
- without winch	20°	
- with winch	30°	
Track oscillation	± 15°	± 15°
Ground clearance	340 mm	13.4"



## TRANSPORT DIMENSIONS, approx

Weight		
ROC D3-01 with RHS 51	10 500kg	23 150 lb
ROC D3-03 with rod rack	9 500 kg	20 950 lb
ROC D3-03 with optional Rod Adding System, RAS	9 700kg	21 400 lb
Length (-01 and -03)	10 000 mm	32'9"
Width (-01 and -03)	2 390 mm	7'10"
Height (-01)	3 600 mm	11'10"
Height (-03)	2 900 mm	9'6"

## HYDRAULIC ROCK DRILLS

### COP 1640

Impact power	16 kW	22 HP
Working pressure	200 bar	2900 psi
Torque, alt hyd. motors	545/740/980 Nm	400/545/725 lbf.ft
Weight	193 kg	425 lb

### COP 1240

Impact power	12 kW	16 HP
Working pressure	220 bar	3190 psi
Torque, alt hyd motors	545/740/980 Nm	400/545/725 lbf.ft
Weight	185 kg	408 lb

## STANDARD EQUIPMENT

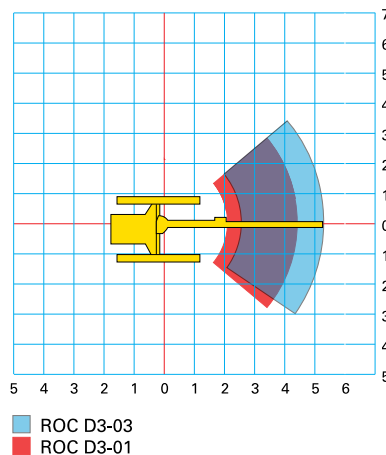
- Track chains with cleaning holes
- Two speed traction with track oscillation
- Work lights
- Fuel saving device at rod handling
- Enginge rpm stepless setting
- Reduced impact mechanism pressure
- Anti-jamming system
- Automatic feed pressure control (RPC-F)
- Cylinder operated feed beam
- Feed extension, 1 000 mm (3'3")
- Hydraulic double drill steel support (-01)
- Hydraulic single drill steel support (-03)
- Rod handling system, RHS (-01)
- Dust collector, DCT 140

## OPTIONAL EQUIPMENT

- Hydraulic support leg
- Hydraulic winch
- Cold start kit
- Air flow control switch
- Anti-freeze equipment for compressed air
- Diesel engine preheater
- Electric refuelling pump
- Rod Adding System - RAS
- Rod rack
- Sleeve retainer
- TAC guide tube guides
- Mechanical hole inclination instrument - ROCANGIE
- Electronic hole inclination instrument - HQS 9
- Central lubrication system
- Gas charging equipment for rock drill
- ProCom rig navigation system

ROC D3	Drill Steel Type	Drill Steel Diameter		Recommended Hole Diameter	
-01/-03	Drifter rod (single pass)	32 mm	1 1/4"	41-64 mm	1 5/8"-2 1/2"
-01/-03	Extension rod	32 mm	1 1/4"	48-64 mm	1 7/8"-2 1/2"
-01/-03	Extension rod	38 mm	1 1/2"	64-76 mm	2 1/2"-3"
-01	Extension rod	45 mm	1 3/4"	76-89 mm	3"-3 1/2"

Coverage area, horizontal



Coverage area, vertical

