# Atlas Copco Surface drill rig ROC F9CR



# A new standard in performance and productivity

Hole range 90 mm-127 mm (3½"-5")



Sustainable Productivity

# The most powerful drill rig in its class

Atlas Copco's ROC series of crawler rigs have earned an enviable reputation for outstanding performance in the toughest conditions. Following on this success, we are proud to present the ROC F9CR – the most powerful drill rig in its class, setting new standards of performance and productivity for aggregate quarrying work.

The ROC F9CR is designed to keep a high level of productivity through high penetration rate and high availability. Well dimensioned diesel engine with god power margin and a well dimensioned compressor, not just ensures the capability but also a trouble free operation as well as low fuel consumption and the lowest possible total cost. The ROC F9CR has gained a world wide reputation and is now a well known work horse on the market.

## The ROC F9CR gives you:

- Superior hole quality.
- Double drill tube support for accurate guiding when collaring.
- Exceptionally durable COP 2550CR rock drill.
- Double dampening system for longer drill string life and higher penetration rates.
- Low fuel consumption.

Carousel type handling system of COPROD sections with random selection of COPROD sections.

Full view ROPS and FOPS safety cabin, silenced and vibration damped, fitted with a comfort operator's seat, joy stick drilling control and easy-to-read instrumentation.

> Movable dust hood for excellent view when collaring and drilling.

Toe hole drilling capability that not just allows horisontal drilling but also horisontal service positioning of the feed.



## **COPROD** brings you the best of both worlds

Take the benefits of tophammer drilling, and forget the drawbacks. Then take the accuracy of down the-hole drilling, and forget the drawbacks. Pool the benefits of the two methods and you have COPROD, the most exciting development in decades.

The COPROD system combines the speed of tophammer drilling with the precision and long service life of the down-the-hole method. ROC F9CR is equipped with the COP 2550CR, a powerful hydraulic rock drill, and a drive system powered by a Caterpillar stage 3/ Tier III engine, which meets all the latest exhaust emission standards.

## **Designed for simplicity of service**

The ROC F9CR drill rig comes with single-section boom developed for quarries that place very high demands on productivity. Optional equipment for horizontal drilling is available – and the possibility of placing the feed horizontally also facilitates servicing of the feed and rock drill. Designed for simplicity of service and maintenance, the ROC F9CR has easy access to all service points and components.

#### **Superior hole quality**

The COPROD drill string offers the possibility to select the most efficient outer diameter of the drill tube to be able to adopt the flushing capability to the selected hole diameter and not risk destroying the hole walls by over flushing, nor risking getting stuck due to low flushing capability. By the smooth joints of the drill string the flushing air speed will be the same through the bottom to the top of the hole to secure fully straight and smooth hole walls.





# **COPROD** brings you the best of both worlds

Inside each rigid, threaded pipe section is an impact rod furnished with stop lugs to keep it in place. The COPROD sections are joined together via the drill-pipes. Since the drill-pipes transmit rotation force only, all negative effects due to the transmission of impact energy through the threads are eliminated entirely. The result is highimpact power with minimal wear. Since the outer pipes are smooth and flush along the entire length of the drill-string, it is almost impossible for jamming to occur. The unique design of the COPROD head eliminates the rod guide and reduces air passage in the bit spline area to an absolute minimum. This prevents shank breakage, while the improved airflow reduces plugging of the bit. The drill bit itself is made of a new grade of steel with high impact and fatigue strength. In combination with the systems low air pressure of only 12 bar, less airflow in the annulus results in up to 50 % longer life.

# A selection of options on ROC F9CR

For a more comprehensive options list, please contact your local Atlas Copco Customer Center.



## TED

TED (Tube Extracting Device) generates and transmits reverse percussion into the housing and on to the drill string and bit. In this way, the reverse percussion automatically releases the drill string if it gets jammed during removal. TED adds real value to your operation.

## Cold climate kit

With the optional cold climate kit mounted the rig can not just be started but also fully operated down to minus 25 °C without risk of freezing problems by condensed water.

# **Sampling device** The screw sampling device provides a sample of the cuttings in to

a can or a bag while drilling production drilling. The sample is immediately ready for the geologists to analyze in the laboratory, which increases the sample accuracy and saves time. The sampler is operated from the cabin to secure that the sample is taken at the correct depth.

## Watermist

The pressurized 225 l water mist system adds water in to the flushing air to bind the dust to the hole walls. Binding the dust to the hole walls not just reduce the dust pollution around the machine but also stabilize the hole walls and seals eventual cracks for a controlled charging of the hole.



# Quick facts ROC F9CR

Main application area:	□ DIMENSION STONE INDUSTRY X LIMESTONE QUARRIES		□ CONSTRUCTION SELECTIVE MINING		AGGREGATE QUARRIES
Drilling method:	□ TOPHAMMER	DOWN-TH	IE-HOLE	🕅 COPROD	
Rods:	COP 2550CR				
Drill steel:	CR76, CR89				
Hole diameter:			<b>■</b> 90 mm (3 ½″)	► 127 mm (5″)	
Maximum hole depth:	≺ 32 m (105′)				
Engine power: rating at 2000 rpm	224 kW (300 HP)				
Rock drill power output:	25 kW (34 HP)				



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