



# ***FLEXIROC D60, D65***

Surface drill rig for aggregate and limestone quarries, surface mining and construction

FlexiROC D60  
Hole diameter 110–178 mm (4 5/16 – 7")

FlexiROC D65  
Hole diameter 110–203 mm (4 5/16 – 8")

***Atlas Copco***

# A TOTAL DRILLING SOLUTION YOU CAN TRUST

WITH THE PERFECT BALANCE BETWEEN PRODUCTIVITY AND EFFICIENCY, THE ATLAS COPCO FLEXIROC D60 AND D65 HAVE SET A NEW BENCHMARK FOR DTH DRILLING IN MINING AND LARGE QUARRY APPLICATIONS. THESE RUGGED, MULTIFUNCTIONAL RIGS RISE TO MEET THE TOUGH DRILLING DEMANDS AND ARE READY TO EXCEED YOUR EXPECTATIONS.

## + MAIN BENEFITS

**Maximizes your productivity** and efficiency due to optimum DTH performance

**Enlarges your utilization** thanks to greater flexibility and multi-task capability

**Proven and rugged design** ensures you to get the job done





*Built for high efficiency mining, the DTH hammer relies on its precisely matched compressor.*



*Whether your application is in quarries or open pit mines, the FlexiROC D60 and D65 will deliver straight, smooth holes.*



*With the ability to handle a vast number of drilling angles, the FlexiROC D60 and D65 with short feed are ready for work in almost any situation.*

The feeding system ensures smooth and uniform feeding

Superior visibility during collaring and tube handling

The safety cabin is ROPS and FOPS approved mounted on a protective plate

Designed to meet the latest emissions regulations with Tier 3 /Tier 4 engines



# FLEXIBLE AND VERSATILE FOR A FAST RETURN OF INVESTMENT

THE FLEXIROC D60 AND D65 REPRESENT THE BROADEST AND MOST VERSATILE PRODUCT OFFERING, MAKING IT THE TOTAL DRILLING SOLUTION, OUTPERFORMING IN VARIOUS APPLICATIONS SUCH AS: PRODUCTION, PRE-SPLITTING, DE-WATERING, AND INPIT GRADE CONTROL WITH REVERSE CIRCULATION (RC) DRILLING.



## + BUILT FOR HIGH EFFICIENCY MINING

Whether your application is in quarries or open pit mines, the FlexiROC D60 and D65 will deliver straight, smooth holes with plenty of air to keep the hole clean for easy charging. The high efficiency of the DTH hammer relies on its precisely matched compressor capacity; the result of decades of experience and know-how in the toughest conditions. Atlas Copco is a world leader in both air compressors and mining equipment.



## + DESIGNED BY EVOLUTION

At Atlas Copco, we never stop learning. Thanks to our strong customer interaction, we are constantly evolving, growing, and learning new ways to get the job done better and more efficiently. Continuous customer feedback and our years of experience from all over the world have produced the FlexiROC D60 and FlexiROC D65, raising the bar with their improved design for the most demanding mining applications.



## + FLEXIBLE AND VERSATILE

Delivering value in a number of applications is important for a fast return on investment. With the ability to handle both short feeds and long feeds, as well as a vast number of drilling angles, the FlexiROC D60 and FlexiROC D65 are ready for work in any almost any situation. These rigs are designed to insure your profitability.

## ATLAS COPCO SERVICE

Even the best equipment requires regular service to ensure optimal performance. Atlas Copco provides service solutions to safeguard the optimal relationship between productivity, availability and operational cost. Atlas Copco Mining and Rock Excavation Technique has over 3 300 technicians located in over 80 countries. By combining Atlas Copco genuine parts with the service provided by a certified Atlas Copco technician, you'll have a winning combination regardless of where in the world you operate.



**MAIN COMPONENTS**

- Crawler type two speed undercarriage with track oscillation system
- Caterpillar turbo charged diesel engines with Tier 4 Final technology
- Atlas Copco screw type high pressure compressors
- Operator's cabin, ROPS and FOPS approved with rubber vibration dampers
- Single section boom system
- Aluminum profile feed beam
- Toe hole drilling capability on short feed version
- Carousel type tube handling system
- Break-out table with pressure regulating kit
- Hydraulic operated rotary head
- Built for use with 4", 5", and 6" down-the-hole hammers
- Service hand lights inside canopy

**HOLE RANGE**

Recommended hole range		Metric	Imperial
FlexiROC D60	COP 44 Gold, COP 54 Gold, COP 64 Gold	110-178 mm	4 3/16"-7"
FlexiROC D65	COP 44 Gold, COP 54 Gold, COP 64 Gold, COP 66	110-203 mm	4 3/16"-8"
Hydraulic tube handling system for max hole depth, with 5 m (16,4') tubes			
FlexiROC D60 & D65	Ø 89-114 mm (3 1/2"- 4 1/2") drill tubes	45 m	148'
FlexiROC D60 & D65	Ø 127-140 mm (5"- 5 1/2") drill tubes	25 m	82'
Hydraulic tube handling system for max hole depth, with 6 m (20') tubes and a 7.5 m starter tube			
FlexiROC D60 & D65	Ø 89-114 mm (3 1/2"- 4 1/2") drill tubes	55.5 m	182'
FlexiROC D60 & D65	Ø 127-140 mm (5"- 5 1/2") drill tubes	31.5 m	103'
Single pass drilling, max hole depth			
FlexiROC D60 and D65 Short Feed		5.4 m	18'
FlexiROC D60 and D65 Long Feed		7.5 m	25'

**ENGINE**

FlexiROC D60	Metric	Imperial
CAT C15, Caterpillar turbo charged diesel engine Tier 3/EU Stage IIIA		
CAT C15, Caterpillar turbo charged diesel engine Tier 4 Final / EU Stage IV		
Power rating at 1800 rpm	354 kW	475 HP
FlexiROC D65	Metric	Imperial
CAT C15, Caterpillar turbo charged, diesel engine, Tier 4 Final /EU Stage IV		
CAT C15 Caterpillar turbo charged diesel engine, Tier 3/ EU Stage IIIA		
Power rating at 1800 rpm	403 kW	540 HP

**CARRIER**

	Metric	Imperial
Tramming speed, max	3.2 km/h	2.0 mph
Traction force, max	138 kN	31 023 lbf
Track oscillation	±10°	
Ground clearance	405 mm	16"

**ROTARY HEAD**

Rotary head	Connection thread	Max rpm	Max torque, drilling		Suitable for DTH-hammer
			Nm	lbf	
DHR6 H 45	API 2 3/8" REG, box	137	1 839	1 356	COP 44 Gold (COP 54 Gold)
DHR6 H 56	API 3 1/2" REG, box	107	2 353	1 735	COP 54 Gold
DHR6 H 68	API 3 1/2" REG, box	68	5 800	2 712	COP 64 Gold, COP 66
DHR6 H 78	API 3 1/2" REG, box	54	6 600	3 417	COP 64 Gold, COP 66

**COMPRESSOR**

FlexiROC D60	Metric	Imperial
Atlas Copco XRX 10, two stage screw type compressor		
Working pressure, max	25 bar	363 psi
FAD, at 25 bar	405 l/s	858 cfm
FlexiROC D65	Metric	Imperial
Atlas Copco XRX 10, two stage screw type compressor		
Working pressure, max	30 bar	435 psi
FAD, at 30 bar	470 l/s	995 cfm

**HYDRAULIC SYSTEM**

Hydraulic oil cooler	Metric	Imperial
Max ambient temperature	50°C	122°F
<b>Pumps</b>		
Axial piston pump (1)	240 l/min	63 US gal/min
Gear pump (2)	117 l/min	31 US gal/min
Gear pump (3)	63 l/min	16.6 US gal/min
Gear pump (4)	39 l/min	10.3 US gal/min
Gear pump (5)	37 l/min	9.8 US gal/min
Gear pump (6)	37 l/min	9.8 US gal/min
Return and drainage filters (2 x 3 filters)		
Filtration rate	20 µm absolute	

**ALUMINIUM FEED**

Aluminum profile feed with hose guide and double drill tube support with break-out table and movable lower guide/dust hood	Metric	Imperial
Feed rate, max	0.9 m/s	177 ft/min
Feed force, max	40 kN	8 992 lbf
Tractive pull, max	50 kN	11 240 lbf
Feed motor size	2099 cc	0.6 US gal
Chain size	45 mm	1 3/4"
<b>Long Feed (LF)</b>		
Feed extension	1 150 mm	3' 9"
Travel length	7 540 mm	25'
Total length	11 600 mm	38'
<b>Short Feed (SF)</b>		
Feed extension	1 900 mm	6' 3"
Travel length	5 400 mm	17' 7"
Total length	9 400 mm	30' 1"

**DUST COLLECTOR**

DCT 320 including pre-separator	Metric	Imperial
Filter area	32 m²	344 sq.ft
Number of filter elements	32 pcs	32 pcs
Suction capacity at 500 mm	1 270 l/s	2 690 cfm
Suction hose diam	203 mm	8"
Cleaning air pressure, max	8 bar	116 psi
Cleaning air consumption	2-4 l/pulse	0.06-0.12 cf/pulse

**ELECTRICAL SYSTEM**

Voltage	24 V
Batteries	2 x 12 V, 235 Ah
Alternator	28 V, 95 Ah
Work lights, front	4 x 70 W
Work lights, rear	2 x 70 W
Work lights, feed	2 x 70 W
Warning lamp and reverse buzzer	

**AIR CONDITIONER**

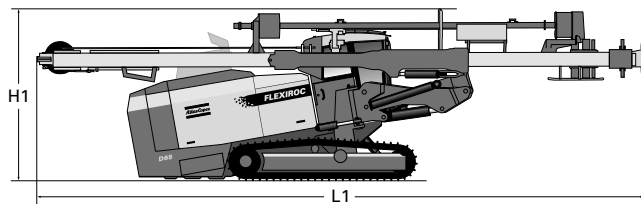
	Metric	Imperial
Refrigerant	R134a	
Cooling capacity	5,5 kW	
Fan suction capacity	125 l/s	265 cfm

**VOLUMES**

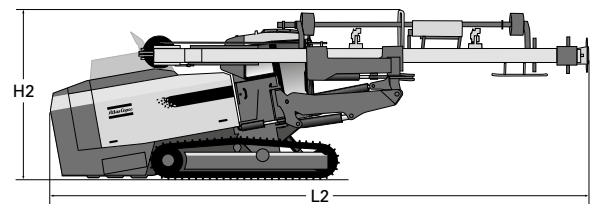
	Metric	Imperial
Hydraulic oil tank	380 l	100 US gal
Hydraulic system, total	600 l	158 US gal
Compressor oil	63 l	12 US gal
Diesel engine oil	44 l	11.6 US gal
Diesel engine, cooling water, Tier 3	65 l	17 US gal
Diesel engine, cooling water, Tier 4	110 l	29 US gal
Diesel engine, fuel tank	780 l/1 050	206/277 US gal
Traction gear	3 l	0.8 US gal
Lubrication tank (HECL)	20 l	5.3 US gal
DEF fluid tank (Tier 4 final only)	34 l	9 US gal

**SAFETY CABIN**

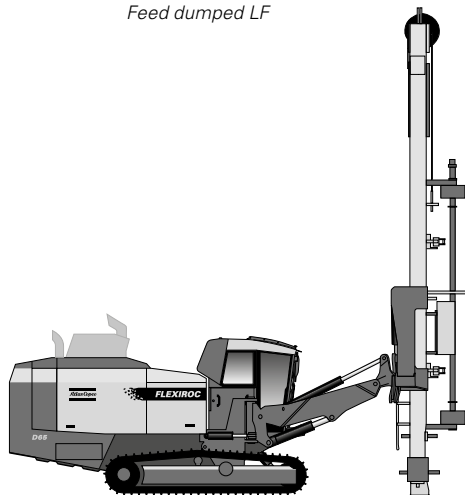
- ROPS and FOPS approved with rubber vibration dampers
- 2 x wipers with washer
- Clear laminated glass (front and roof windows)
- Clear toughened glass (side and rear windows)
- Fully adjustable operator's seat
- Adjustable foot rest, rear view mirror, cabin light
- Rig inclination indicator
- Fire extinguisher, 6 kg (13 lbs) dry chemical type ABE class III type
- Outlet socket, 24 V
- Prepared for CD, radio or DVD
- Electric combined engine/inclination/hole depth instrument



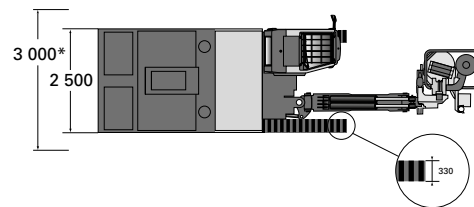
Feed dumped LF



Feed dumped SF



Side view



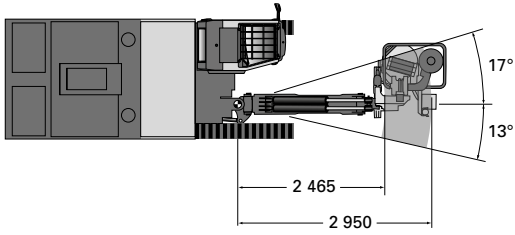
\* Track widening kit

**HEIGHT AND LENGTH**

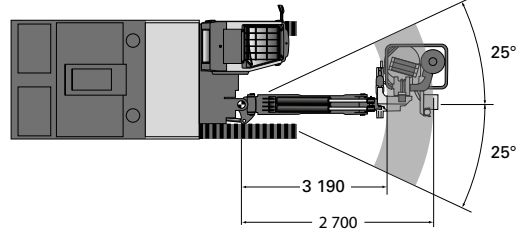
	Metric	Imperial
Long Feed (LF) dumped		
Height (H1)	3 500 mm	11' 6"
Length (L1)	11 600 mm	38'
Short Feed (SF) dumped		
Height (H2)	3 500 mm	11' 6"
Length (L2)	11 350 mm	37' 2"
Feed height		
Long feed (LF)	11 600 mm	38'
Short Feed (SF)	9 400 mm	31'

**WEIGHT**

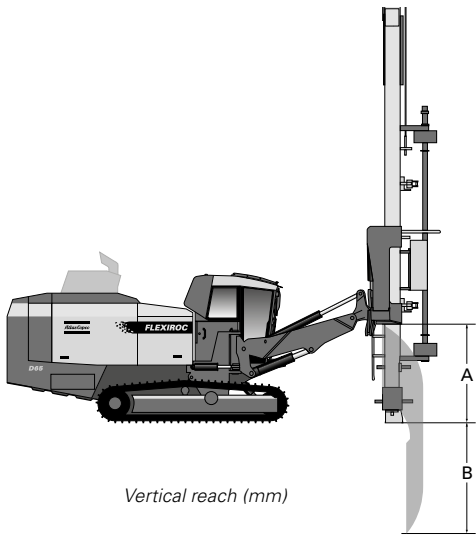
Standard unit excluding all options and drill steel	Metric	Imperial
FlexiROC D60 and FlexiROC D65 LF	23 700 kg (T3)	52 250 lb
FlexiROC D60 and FlexiROC D65 SF	22 600 kg (T3)	49 820 lb
	23 000 kg (T4)	50 700 lb



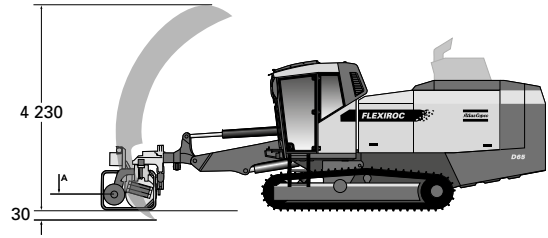
Horizontal reach (mm) with long feed



Horizontal reach (mm) with short feed

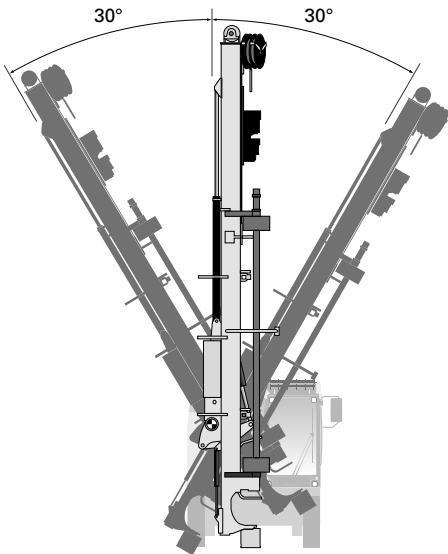


Vertical reach (mm)

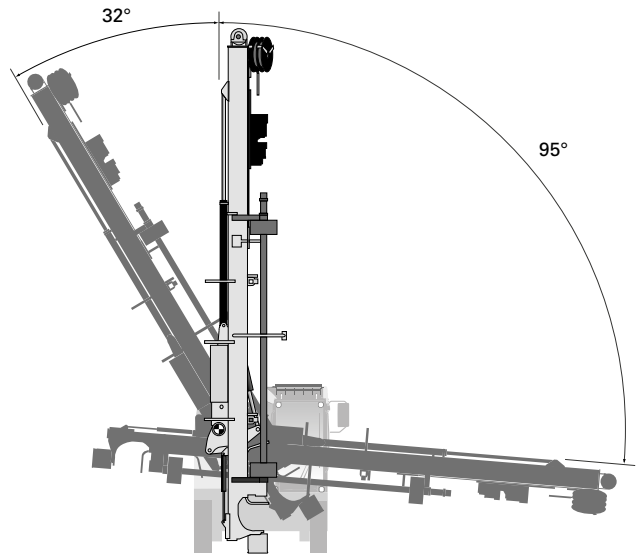


Toe-hole drilling reach for short feed

VERTICAL REACH		
	A (mm)	B (mm)
Long Feed	582	2 277
Short Feed	1 040	2 659



Feed swing angles long feed



Feed swing angles short feed

**SELECTION OF OPTIONS**

**Carrier**

- Hydraulic support leg
- Protection hand rails on top of canopy
- Wide body kit
- Halogen work light pointing to feed support, transport position
- Xenon work lights, 2 pcs on top of canopy pointing forward and 2 pcs on top of canopy pointing to the rear
- Heavy duty air intake filters for engine and compressor
- Combined warning sound and warning light, beacon type
- Automatic fire extinguisher, P21M, type Ansul, manually activated
- Automatic fire extinguisher, P21EAM, type Ansul, automatically activated
- Tropical ambient kit for 55° ambient temperature
- Electric pump for filling hydraulic oil
- Electric fuel filling pump
- Fast fuel filling system
- Cold weather kit +5° C to -25° C, including diesel engine heater
- Cold weather kit -25° C and below, including diesel engine heater and ether start

**Safety cabin**

- Rubber ladder for left hand side
- Clear laminated glass (front and roof windows)
- Tinted toughened glass (side and rear windows)
- Sun shade kit
- Electric heated operator's seat
- Radio/CD or Radio/DVD
- Reverse camera with cab mounted monitor. May also be used for monitoring DVD

**Feed**

- Rod Handling System 102 (only short feed)
- Screw sampler
- Service winch with jib boom mounted on the feed
- Wide feed foot

- Break out table pressure regulating kit
- Protection of Moving parts

**Water mist system**

- Water mist system including 225 liters pressurized tank
- Water mist system with water pump and 400 liters water tank
- Water mist system, insulated for arctic conditions, with water pump and 400 liters tank

**Lubrication**

- Central lubrication system, type Lincoln
- Thread lubrication, spray system
- Artic hydraulic oil, VG 32
- Tropical hydraulic oil, VG 68
- Biological hydraulic oil, VG 46

**Hole and Inclination systems**

- Aiming unit function to standard instruments
- GPS compass aiming unit
- Laser receiver

**Automation and software**

- Production log for ROC Manager

**Parts and Services Products**

- ROC Care
- ProCom satellite based drill rig monitoring system (only in combination)

**Delivered equipment, not mounted**

- First 50 hours service kit for compressor
- Tool kit for rotary head with fixed spindle sub
- Tool kit for rotary head with floating spindle sub

**COMMITTED TO SUSTAINABLE PRODUCTIVITY**

We stand by our responsibilities towards our customers,  
towards the environment and the people around us.  
We make performance stand the test of time.  
This is what we call – Sustainable Productivity.

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