



SMARTROC D65

Surface down-the-hole drill rig for limestone and aggregate quarries, selective mining, construction and open pit mining.

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

Atlas Copco

THE MINING MASTERMIND

THE SMARTROC D65 DOWN-THE-HOLE DRILL RIG TURNS YOUR MINING VISION INTO REALITY. DESIGNED WITH LEADING-EDGE AUTOMATION TECHNOLOGY IT USES BOTH BRAINS AND POWER TO DRILL PRODUCTION BLAST, PRE-SPLIT AND BUFFER HOLES, AS WELL AS IN-PIT GRADE CONTROL WITH REVERSE CIRCULATION. YOUR BUSINESS WILL PROFIT FROM THE ADDED INTELLIGENCE OF THE SMARTROC D65.

Minimize your non-drilling time with the Hole Navigation System (HNS), the intelligent option that permits a faster setup so you can get right down to effective, high-precision drilling in any weather conditions. Shrink your production costs by optimizing drilling

and blasting, improving fragmentation and reducing the quantity of explosives needed. HNS removes the need to manually mark and survey hole positions. This greatly improves both efficiency and safety on the bench.





+ *MAIN BENEFITS*

Supports your ambitions in the total mining process

Minimizes non-drilling time

Boosts operator productivity

REVOLUTIONIZE YOUR MINING OPERATION WITH US

SMARTROC D65 SHARES ITS INTELLIGENT PLATFORM WITH THE ATLAS COPCO PIT VIPER SERIES. THE COMMON COMMUNICATION PLATFORM TOGETHER WITH ATLAS COPCO SURFACE MANAGER TOOL ENABLES TOTAL FLEET MANAGEMENT AND OPERATION CONTROL DIRECTLY VIA THE WORKSITES' OWN WIRELESS NETWORK. THE PLATFORM IS BASED ON THE IREDES STANDARD.



+ A RIG THAT DRILLS ON ITS OWN

The SmartROC D65 is highly automated and drills the holes on its own. It adds rods automatically and extracts them when the desired depth is reached. This provides consistency to the operation and the rig is less dependent on the operator. The consistency in the Auto Rod Handling also provides less wear on consumables and on the rig itself. The precision in the drilling gives you optimal blasting results, increased safety and quality in the whole operation.



+ SELF-DIAGNOSTIC CAPABILITIES

The SmartROC D65 is a dependable, low-maintenance co-worker on the bench. By minimizing the number of cables, the electric system is more reliable and by adding self-diagnostic functionalities the rig also provides efficient troubleshooting.



+ DRILL FROM A DISTANCE

The BenchREMOTE option enables you to safely operate the rig from a distance of up to a 100 meters. Used together with the Hole Navigation System it removes the need for operators and surveyors in hazardous areas. You can also reach even higher productivity as one operator now can control up to three SmartROC D65's from one single control station.

ATLAS COPCO SERVICE

Even the best equipment requires regular service to ensure optimal performance. Atlas Copco provides service solutions to safeguard an optimized 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 the usage of Atlas Copco genuine parts with service provided by a certified Atlas Copco technician, you'll have a winning combination no matter of where in the world you operate.



MAIN COMPONENTS

- Full drill cycle automation
- Hole Navigation System, option
- Documentation by IREDES
- Atlas Copco Rig Control System, RCS
- Troubleshooting support from cabin display
- Vaportec compressor control
- ROPS and FOPS approved cabin
- Aluminium profile feed beam
- Pressure regulated break-out table
- Caterpillar turbo charged diesel engine
- Atlas Copco high pressure screw compressors

HOLE RANGE

Recommended DTH hammers and hole range		Metric	Imperial
SmartROC D65	COP 44 Gold, COP 54 Gold, COP 64 Gold, Cop 66	110–203 mm	4 5/16"– 8"
Hydraulic tube handling system for max hole depth, with 6 m (20') tubes and a 7.5 m starter tube			
SmartROC D65	Ø 89–114 mm (3 1/2"– 4 1/2") drill tubes	55.5 m	182'
SmartROC D65	Ø 127–140 mm (5"– 5 1/2") drill tubes	31.5 m	103'
Single pass drilling, max hole depth			
SmartROC D65		7.5 m	25'

ENGINE

CAT C15, Caterpillar turbo charged, diesel engine, Tier 4 final / stage IV, Tier 4 / Stage IIIB and Tier III/stage IIIA	Metric	Imperial
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	31 020 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, COP 64 Gold, COP 66
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

Atlas Copco XRX 10, two stage screw type compressor	Metric	Imperial
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
Pumps		
Axial piston pump (1)	240 l/min	65 US gal/min
Gear pump (2)	110 l/min	29 US gal/min
Gear pump (3)	65 l/min	17.2 US gal/min
Gear pump (4)	40 l/min	10.5 US gal/min
Gear pump (5)	30 l/min	7.9 US gal/min
Gear pump (6)	30 l/min	7.9 US gal/min
Return and drainage filters (2 x 3 filters)		
Filtration rate	20 µm absolute	

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

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	2 099 cc	0.6 US gal
Chain size	45 mm	3/4"
Feed extension	1 150 mm	3' 9"
Travel length	7 540 mm	25'
Total length	11 600 mm	38'

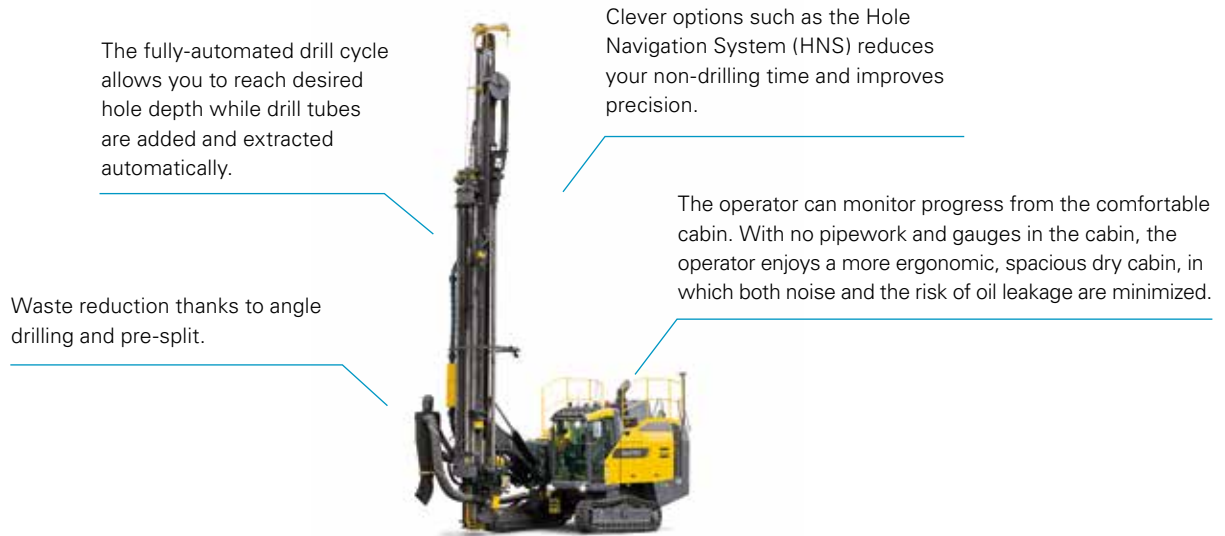
DUST COLLECTOR

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 wvg	1 270 l/s	2 690 cfm
Suction hose diam	203 mm	8"
Cleaning air pressure, max	2–4 l/pulse	0.06–0.12 cfm/pulse

VOLUMES

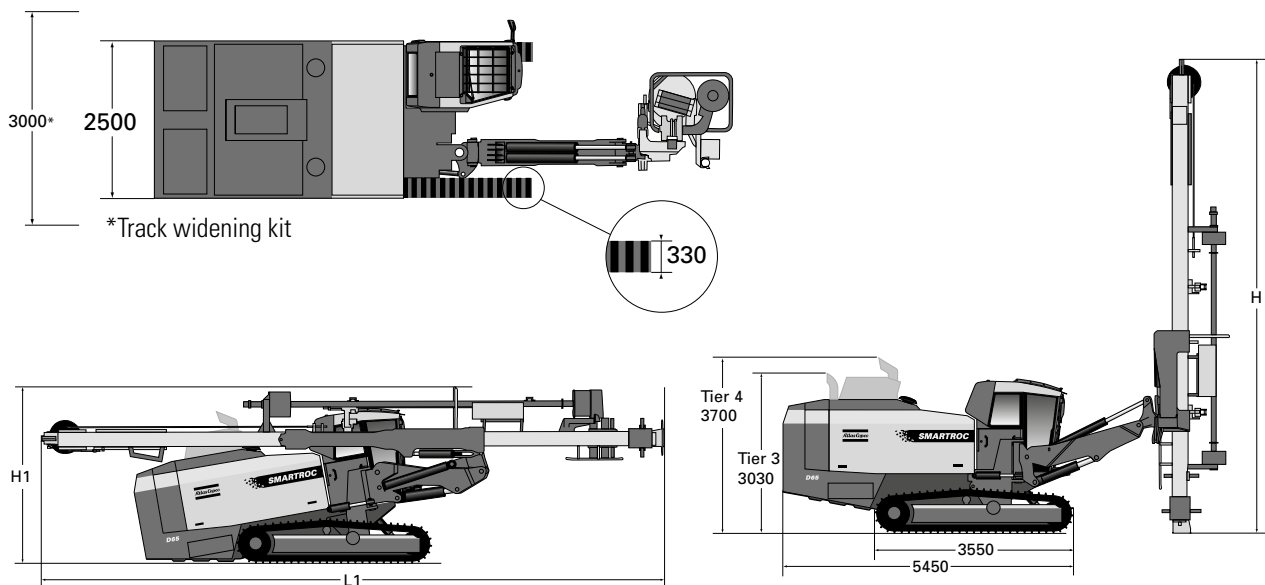
	Metric	Imperial
Hydraulic oil tank	380 l	100 US gal
Hydraulic system, total	600 l	158 US gal
Compressor oil	80 l	21 US gal
Diesel engine oil	44 l	11 US gal
Diesel engine, cooling water, Tier 3	65 l	17 US gal
Diesel engine, cooling water, Tier 4	110 l	29 US gal
Diesel engine fuel tank	1050 l	277 US gal
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

SmartROC D65



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 and foot rest
- Cabin light
- Rig inclination indicator
- Rear view mirror
- Fire extinguisher, 6 kg (13 lbs) dry chemical type ABE class III type
- Outlet socket, 24 V
- Prepared speakers for CD, radio or DVD
- Electric combined engine/inclination/hole depth instrument

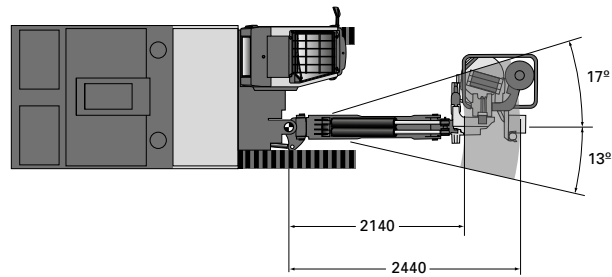


HEIGHT AND LENGTH

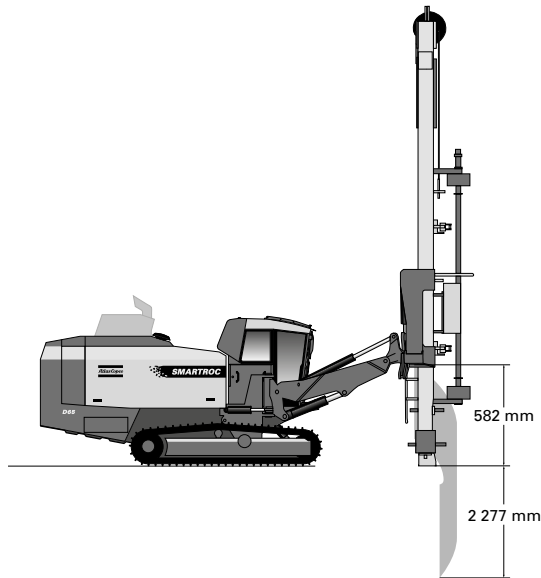
	Metric	Imperial
Height (H1)	3 500 mm	11' 6"
Length (L1)	11 600 mm	38'
Feed height		
Feed height (H)	11 600 mm	38'

WEIGHT

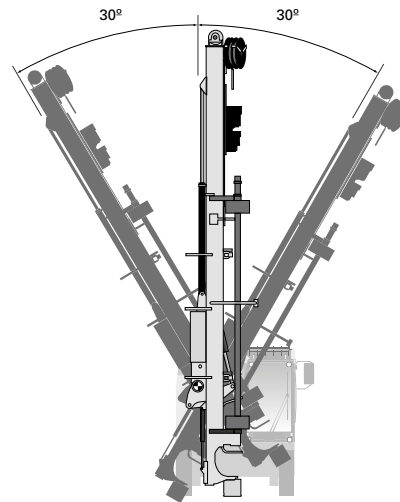
Standard unit excluding all options and drill steel	Metric	Imperial
SmartROC D65 (T3)	23 700 kg	52 250 lb
SmartROC D65 (T4)	24 100 kg	53 130 lb



Horizontal reach (mm)



Vertical reach (mm)



Feed swing angles

OPTIONAL EQUIPMENT

Carrier

- Wide body kit
- Hydraulic support leg
- Protection hand rails on top of canopy
- 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 light, beacon type
- Reverse camera with cab mounted display
- 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

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

Feed

- Service winch with jib boom mounted on the feed
- Wide feed foot
- Break out table pressure regulating kit
- Protective guard, according to EN16228
- Reverse circulation

Water mist system

- Water mist system with water pump and 400 l water tank
- Water mist system, insulated for arctic conditions, with water pump and 400 l water tank

Lubrication

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

Hole & Inclination systems

- Hole Navigation System
- GPS compass aiming unit
- Laser receiver

Automation and software

- BenchREMOTE remote operator station
- Rig Remote Access
- Surface Manager
- Rig Access control
- Configurable safety software

Parts and Services Products

- ROC Care
- ProCom satellite based drill rig monitoring system (only in combination with a written service agreement)

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
- Lubrication kit
- RCS tool box

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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