

A large yellow and black Atlas Copco SMARTROC T45 surface drill rig is shown in a quarry. The rig is mounted on a tracked carrier and has a long, vertical drilling column. The background shows a rocky quarry face under a blue sky with light clouds. The rig is positioned on a pile of dark, rocky material.

SMARTROC T45

Surface drill rig for quarry and construction.

Folding boom
Hole diameter: 89–127 mm (3½"–5")

Fixed boom
Hole diameter: 89–140 mm (3½"–5½")

Atlas Copco

SMART AND PRECISE EFFICIENCY

WITH THE SMARTROC T45 YOU'RE IN CONTROL.

SmartROC T45 is based on a proven control system which gives consistency in job after job and doesn't, to the same extent, rely on your operator's performance. SmartROC T45 will revolutionize your fuel consumption,

improve your availability, and provide you with the documentation you need to be on top of your business. With help from features such as HNS, AutoPos and ROC Manager, you're always on top of your operation.





+ MAIN BENEFITS

Efficiency with increased capacity and performance while reducing fuel consumption

Safety and availability thanks to the new and intuitive design

Excellence through precise drilling and consistent operation, resulting in improved blasting results

TECHNOLOGY THAT PUTS YOU IN CONTROL

SAFETY DEPENDS ON CONTROL. THE SMARTROC T45 DRAMATICALLY REDUCES THE RISKS OF MANUAL ERRORS AND HUMAN MISTAKES. WITH OPTIONS SUCH AS HOLE NAVIGATION SYSTEM (HNS) YOU HAVE THE RIGHT INFORMATION AT YOUR FINGERTIPS. THIS GREATLY IMPROVES BOTH EFFICIENCY AND SAFETY ON THE BENCH.



+ PLAN YOUR WORK, THEN WORK YOUR PLAN

The SmartROC T45 relies on automation functionalities to make sure you drill as planned. The automatic feed alignment ensures that you always maintain the desired angle when drilling, which is crucial for optimum blasting results. In addition, the automatic rod adding system makes it easy for the operator, adding rods to the desired depth. The machine drills to the exact desired drilling depth with no mistakes, while the operator supervises until it's time to pick up the rods. Both functions deliver consistent results you can rely on, shift after shift.



+ CUT YOUR FUEL COSTS IN HALF

There are two things the SmartROC T45 never compromises on – fuel efficiency and high productivity. The key to its incredible fuel efficiency is a rig that only uses the energy it needs for the work at hand. In addition to its standard automatic radiator fan, engine and compressor speed are automatically adjusted depending on operating mode. For example, during tramming or when the rig is not working, the compressor puts no load on the engine and thus reduces engine speed. Further, the airflow and dust collector speed can be adjusted as needed by the operator.



+ EFFICIENCY WITH ENVIRONMENTAL CARE

Atlas Copco's commitment to the environment is evident in everything we do. We want to maximize your productivity and save you money, at the same time as we leave as few printmarks as possible on the environment. That's why the SmartROC T45 gives you the most energy efficient rig in its class. Its hydraulic system uses significantly less oil, compared to other rigs, with a hydraulic tank that is 1/3 the standard size for its class. This means you can use biological oil with approximately the same cost as usual oil, and you don't have to worry about taking care of spillage.

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

- Crawler type two speed undercarriage with track oscillation system
- Caterpillar turbo charged diesel engine
- Atlas Copco screw type compressor
- Dust pre separator
- Combined warning sound and warning light
- Fixed boom system/folding boom system
- Automatic cooler fan control
- Air flow switch
- Rock drill lubrication system
- COP Logic
- Toe-hole drilling system
- Carousel type rod handling system
- Hydraulic double drill steel support with movable dust collector hood
- Double hose drum
- Dust collection system
- AutoPos
- Automatic rod adding
- Operator's cabin, ROPS and FOPS approved

HOLE RANGE

Recommended hole range		Metric	Imperial
SmartROC T45 fixed boom	T51, T60	89–140 mm	3 ½"– 5 ½"
SmartROC T45 folding boom	T45, T51	89–127 mm	3 ½"– 5"
Hydraulic rod handling system for max hole depth, with 4,2 m (14') extension rods and a 6,1 m (20') starter rod		Metric	Imperial
SmartROC T45 fixed boom	T51, T60	35 m	115'
Hydraulic rod handling system for max hole depth, with 3,6 m (12') extension rods and a 4,2 m (14') starter rod		Metric	Imperial
SmartROC T45 folding boom	T45, T51	29 m	95'

ENGINE

Caterpillar turbo charged, diesel engine, CAT C9.3/ CAT C9, Tier 4 Final and add blue or Tier 3/Stage IIIA	Metric	Imperial
Power rating at 1 900 rpm	242 kW	325 HP

CARRIER

	Metric	Imperial
Tramming speed	3,4 km/h	2,1 mph
Track oscillation	±10°	±10°
Ground clearance	405 mm	16"

HYDRAULIC ROCK DRILL

Rock drill	Drill rig	Impact power		Hydraulic pressure, max		Impact rate, max	Torque, max		Weight approx	
COP 2560+	SmartROC T45 folding boom	25 kW	33.5 HP	230 bar	3 335 psi	44 Hz	1 555 Nm	1 147 lbf/ft	187 kg	412 lb
COP 2560EX+									249 kg	549 lb
COP 3060	SmartROC T45 fixed boom	30 kW	41 HP	240 bar	3 481 psi	50 Hz	2 450 Nm	1 807 lbf/ft	315 kg	694 lb
COP 3060EX									355 kg	783 lb

FEED SMARTROC T45 WITH FIXED BOOM

Hydraulic cylinder feed with hose guide and double drill steel support with movable lower guide/dust hood	Metric	Imperial
Feed extension	1 900 mm	6'3"
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
Total length	9 500 mm	31'
Travel length	5 520 mm	18'1"

FEED SMARTROC T45 WITH FOLDING BOOM

Hydraulic chain driven steel feed with hose guide and double drill steel support with moveable lower guide/dust hood	Metric	Imperial
Feed extension	1 150 mm	3'9"
Feed rate, max	0.9 m/s	177 ft/min
Feed force, max	20 kN	4 496 lbf
Tractive pull, max	30 kN	6 744 lbf
Total length	7 700 mm	25'3"
Travel length	4 610 mm	15' 2"

DUST COLLECTOR DCT 200

	Metric	Imperial
Filter area	20 m ²	215 sq.ft
Number of filter elements	20 pcs	20 pcs
Suction capacity at 500 mm wg	540 l/s	1 144 cfm
Suction hose diam	127 mm	5"
Cleaning air pressure, max	7.5 bar	109 psi
Cleaning air consumption	2-4 l/pulse	0.06 - 0.12 cu.ft/pulse

COMPRESSOR

Atlas Copco C146-07, screw type compressor	Metric	Imperial
Working pressure, max	12 bar	174 psi
FAD, at normal working pressure	223 l/s	472 cfm

ELECTRICAL SYSTEM

Voltage	24 V
Batteries	2 x 12 V, 185 Ah
Alternator	28 V, 105 Ah
Work lights LED type, front	4 x 3500 Lumen
Work lights LED type, rear	2 x 3500 Lumen
Work lights LED type, feed	2 x 5300 Lumen
Warning lamp and reverse buzzer	

VOLUMES

	Metric	Imperial
Hydraulic oil tank	100 l	36.4 US gal
Hydraulic system, total	240 l	63.4 US gal
Compressor oil	52 l	13.7 US gal
Diesel engine oil	32 l	8.4 US gal
Diesel engine, cooling water	75 l	19.8 US gal
Diesel engine fuel tank	400 l	105.7 US gal
Traction gear	3 l	0.8 US gal
Lubrication tank (ECL)	23 l	6.1 US gal

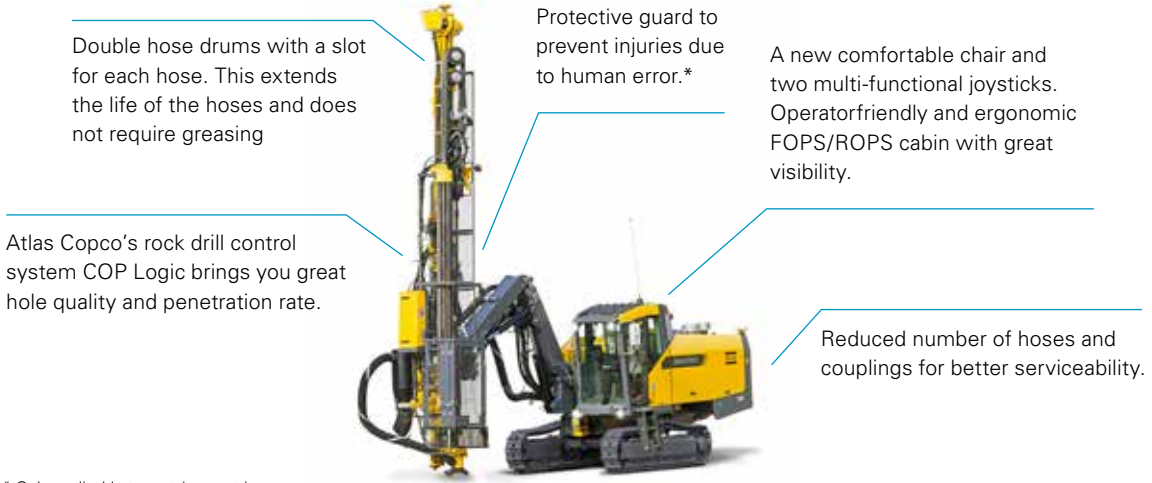
AIR CONDITIONER

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

HYDRAULIC SYSTEM

Hydraulic oil cooler	Metric	Imperial
Max ambient temperature	50°C	122°F
Pumps at 1900 rpm	Metric	Imperial
Axial piston pump (1)	160 l/min	42.3 US gal/min
Gear pump (2)	120 l/min	31.7 US gal/min
Gear pump (3)	40 l/min	10.6 US gal/min
Gear pump (4)	40 l/min	10.6 US gal/min
Gear pump (5)	40 l/min	10.6 US gal/min
Return and drainage filters	Metric	Imperial
Filtration rate	10 µm absolute	

SmartROC T45



Double hose drums with a slot for each hose. This extends the life of the hoses and does not require greasing

Protective guard to prevent injuries due to human error.*

A new comfortable chair and two multi-functional joysticks. Operatorfriendly and ergonomic FOPS/ROPS cabin with great visibility.

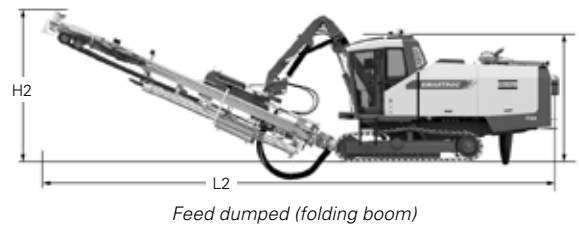
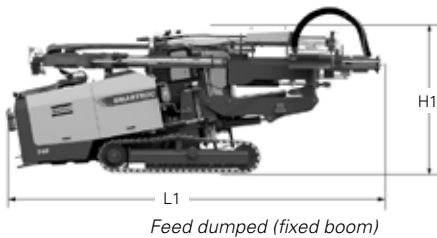
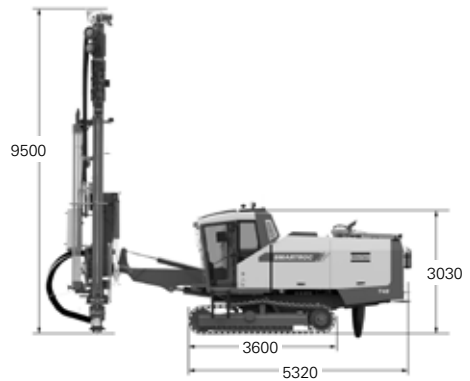
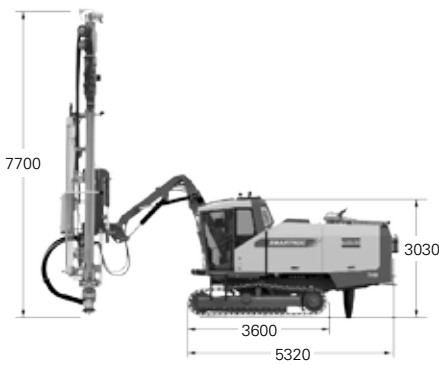
Atlas Copco's rock drill control system COP Logic brings you great hole quality and penetration rate.

Reduced number of hoses and couplings for better serviceability.

* Only applicable to certain countries.

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
- 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 with speakers for CD-radio or DVD radio
- Combined front mounted platform/tool box
- Electric combined engine/inclination/hole depth instrument in main computer display

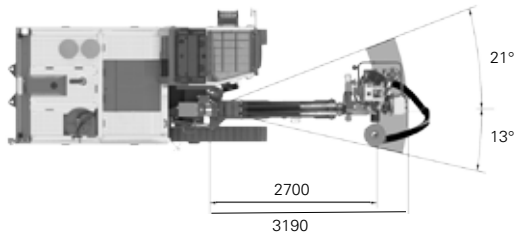


HEIGHT AND LENGTH

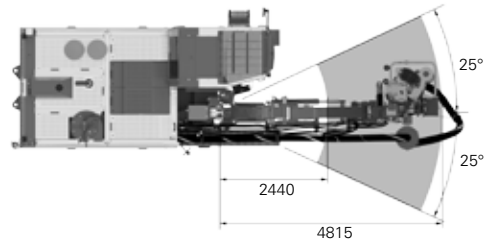
Feed dumped 1	Metric	Imperial
Height (H1)	3 300 mm	10' 8"
Length (L1)	10 700 mm	35' 2"
Folding boom	Metric	Imperial
Height (H2)	3 300 mm	10' 8"
Length (L2)	13 300 mm	43' 8"

WEIGHT

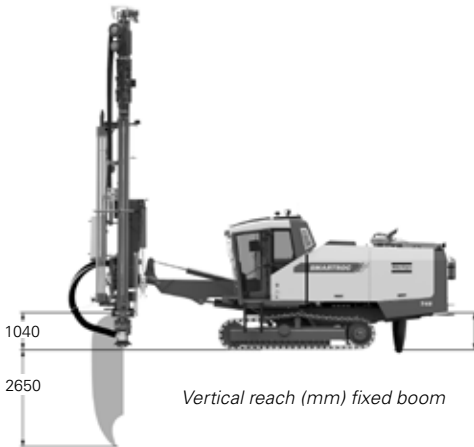
Standard unit excluding all options and drill steel	Metric	Imperial
SmartROC T45 fixed boom	19 600 kg	43 200 lb
SmartROC T45 folding boom	17 500 kg	38 600 lb



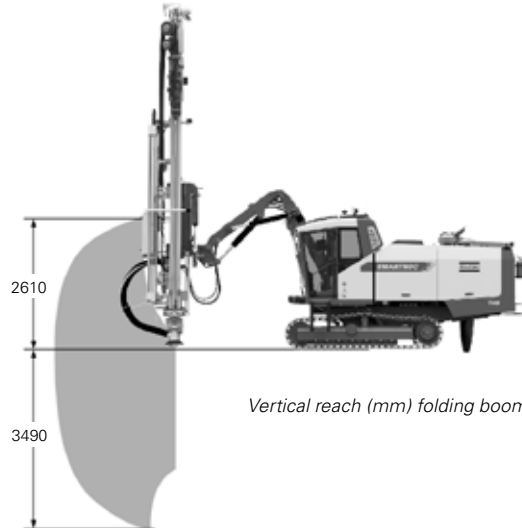
Horizontal reach (mm) fixed boom



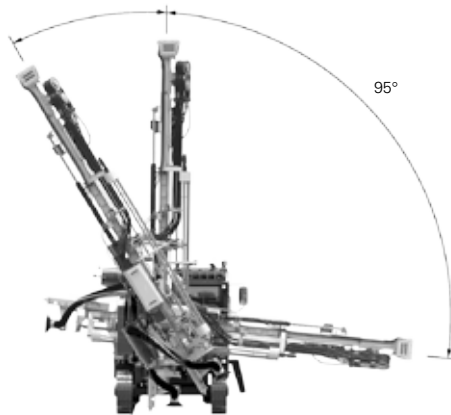
Horizontal reach (mm) folding boom



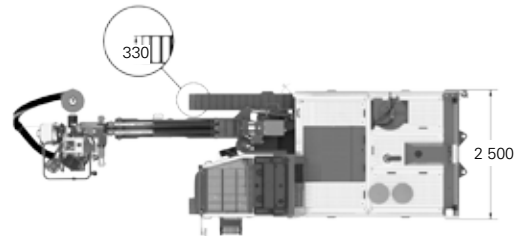
Vertical reach (mm) fixed boom



Vertical reach (mm) folding boom



Valid for both fixed and folding boom



SELECTION OF OPTIONS

Cabin

- Combined warning sound and warning light – BEACON type
- Reverse camera with cab mounted display
- Window wiper, right hand window
- Radio/CD/DVD
- Window panes: Laminated 24 mm clear front, 10 mm roof and 8 mm tinted side – toughend 8 mm rear

Feed

- Protective guard, according to EN16228
- Sleeve retainer
- Service winch with jib boom mounted on the feed
- TAC guide tube guides for drill steel support
 - TAC 64 mm for 64 mm guide tube
 - TAC 76 mm for 76 mm guide tube
 - TAC 87 mm for 87 mm guide tube
- Thread greasing devices

Carrier

- Hydraulic support leg
- Hydraulic winch including wire with towing eye and wire guides

Water system

- Water mist system

Hole and inclination systems

- Laser plane receiver for hole depth
- GPS compass aiming unit

Hole Navigation System (HNS)

- Prepared for Trimble SPS 580/550 and Leica

Automation & software

- Rig Remote Access (RRA) including/excluding WLAN Module
- Measure While Drilling (MWD)
- ROC Manager

Parts and Services

- COP Care
- ROC Care

Optional equipment not mounted

- Gas charging equipment (for rock drill)
- First 50 hrs service kit for compressor
- Lubrication kit
- Conversion kit T45
- Conversion kit T51
- Conversion kit T60
- RCS service tool-box
- Electrical tool kit

Other

- Radio Remote Control (RRC)

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.

www.atlascopco.com

