

Atlas Copco Surface drill rigs

FlexiROC T45

Technical specification



FlexiROC T45 is intended for construction sites, aggregate and limestone quarries. The main components are:

- Crawler type two speed undercarriage with track oscillation system
- Caterpillar turbo charged diesel engines
- Atlas Copco screw type compressor
- Hydraulic cooling system for 50 °C ambient temperature
- Combined warning sound and warning light
- Fixed boom system/folding boom system
- Hydraulic chain feed system with hose guide
- Hydraulic rock drill COP 3060/COP 2560
- 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

Hole range			
Recommended hole range			
FlexiROC T45 fixed boom	T60	89-140 mm	3 ½" - 5 ½"
FlexiROC 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			
FlexiROC T45 fixed boom	T51, T60	36 m	118'
Hydraulic rod handling system for max hole depth, with 3,6 m (12') extension rods and a 4,2 m (14') starter rod			
FlexiROC T45 folding boom	T45, T51	28 m	92'



Specifications

Engine

Caterpillar turbo charged, diesel engine, CAT C9,
Tier 4/Stage IIIB and Tier 3/Stage IIIA

- Power rating at 1900 rpm 242 kW 325 HP

Carrier

- Trimming speed 3,4 km/h 2,1 mph
- Track oscillation $\pm 10^\circ$
- Ground clearance 405 mm 16 "

Feed

FlexiROC T45-10

Hydraulic cylinder feed with hose guide and double drill steel support with movable lower guide/dust hood

- Feed extension 1 150 mm 3'9"
- 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 11 560 mm 28"
- Travel length 7 500 mm 27'4"

FlexiROC T45-11

Hydraulic chain feed with hose guide and double drill steel support with moveable lower guide/dust hood

- 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

DCT 200 for FlexiROC T45

- Filter area 20 m² 215 sq.ft
- Number of filter elements 20 pcs
- Suction capacity at 500 mm wg 560 l/s 1 200 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

Air conditioner

- Refrigerant R134a
- Cooling capacity 5,5 kW
- Fan suction capacity 125 l/s 265 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

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

Compressor

Atlas Copco C146-07, screw type compressor

- Working pressure, max 12 bar 174 psi
- FAD at normal working pressure 223 l/s 472 cfm

Hydraulic system

COP Logic rock drill control system

Hydraulic oil cooler

- Max ambient temperature 50°C 122°F

Pumps at 1900 rpm

- Axial piston pump (1) 200 l/min 52.8 US gal/min
- Gear pump (2) 160 l/min 42.2 US gal/min
- Gear pump (3) 50 l/min 13.2 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

- Filtration rate 10 µm absolute

Volumes

- 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

Hydraulic rock drill

Rock drill	Drill rig	Impact power		Hydraulic pressure, max		Impact rate, max	Torque, max		Weight approx	
		kW	HP	bar	psi		Nm	lbf/ft	kg	lb
COP 2560	FlexiROC T45-11	25 kW	33.5 HP	230 bar	3 335 psi	44 Hz	1 810 Nm	1 335 lbf/ft	187 kg	412 lb
COP 2560 EX									249 kg	549 lb
COP 3060	FlexiROC T45-10	30 kW	41 HP	240 bar	3 481 psi	50 Hz	2 360 Nm	1 741 lbf/ft	315 kg	694 lb
COP 3060 EX	FlexiROC T45-10	30 kW	41 HP	240 bar	3 481 psi	50 Hz	2 360 Nm	1 741 lbf/ft	355 kg	783 lb

Transport dimensions

Height and length		
Fixed boom		
Height (H1)	3 200 mm	10' 6"
Length (L1)	10 700 mm	35' 2"
Folding boom		
Height (H2)	3 200 mm	10' 6"
Length (L2)	13 300 mm	43' 8"

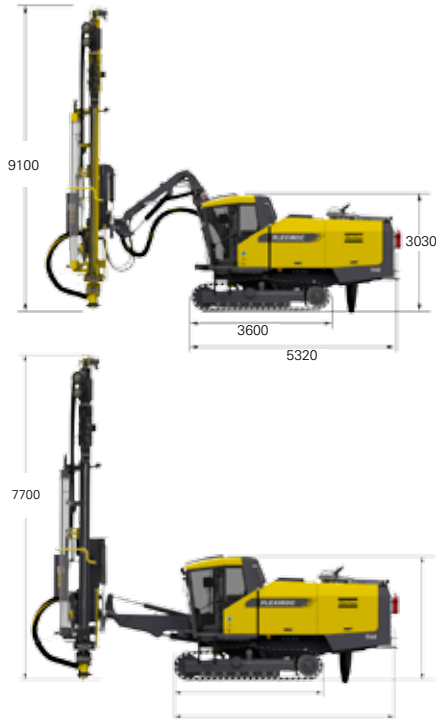
Feed dumped (fixed boom)



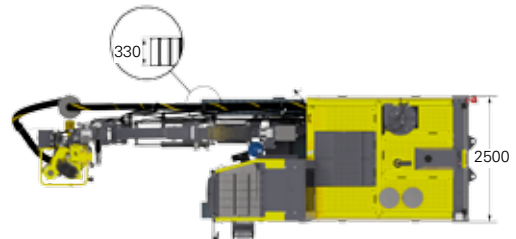
Feed dumped (folding boom)



Dimensions and weight



Weight		
<i>Standard unit excluding all options and drill steel</i>		
FlexiROC T45 fixed boom	19 300 kg	42 600 lb
FlexiROC T45 folding boom	17 400 kg	38 400 lb



Selection of optional equipment

Carrier

- Hydraulic support leg
- Hydraulic winch, radio remote controlled with towing eye and wire guides
- Electric refuelling pump
- Track chains with single/triple grouser pads
- Extra LED work lights
- Water mist system, 225 l

Safety cabin

- Clear laminated glass (front and roof windows)
- Tinted toughened glass (side and rear windows)
- Wiper for right hand side window

- Sun shade kit (rear side and rear windows)
- Radio/CD
- Reverse camera integrated to rig display

Feed

- Wide feed foot
- 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

Hole measuring systems

- Laser receiver upgrading kit
- GPS compass for parallel holes

Lubrication

- Central lubrication system, type HydroScand
- Thread greasing devise ECG (with oil)
- Thread greasing device, brush type (with grease)
- PAR Oil S
- PAR Oil M

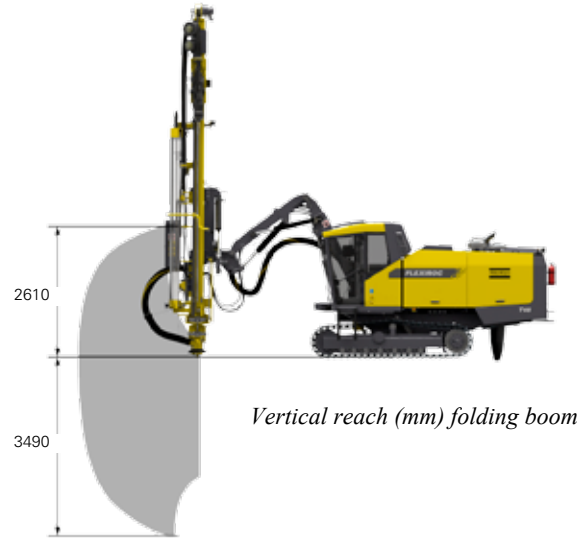
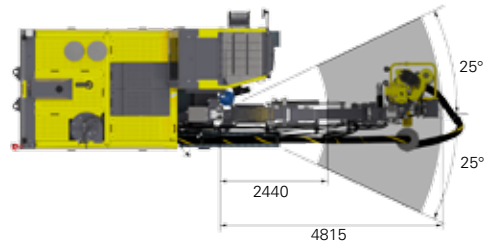
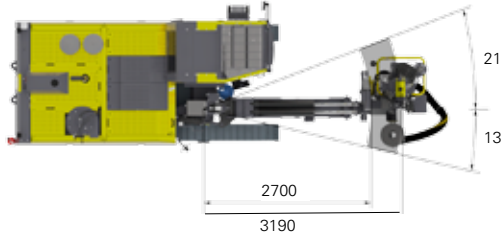
Environment conditions

- Diesel driven engine heater
- Artic hydraulic oil, VG 32
- Tropical hydraulic oil, VG 68
- Biological hydraulic oil, VG 46

Delivered equipment, not mounted

- Gas charging equipment for rock drill
- First 50 hours service kit for compressor
- Conversion kit T45
- Conversion kit T51
- Conversion kit T60
- ROC Manager with bench plan
- RCS service tool box
- Electrical tool kit

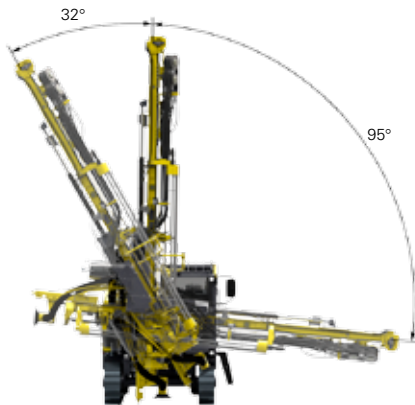
Coverage areas



Horizontal reach (mm) folding boom

Vertical reach (mm) folding boom

Feed swing angles



Valid for both fixed and folding boom