

## 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

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

## Feed

### FlexiROC T45-10 Chain feed

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 m<sup>2</sup>    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  $\mu$ m 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"

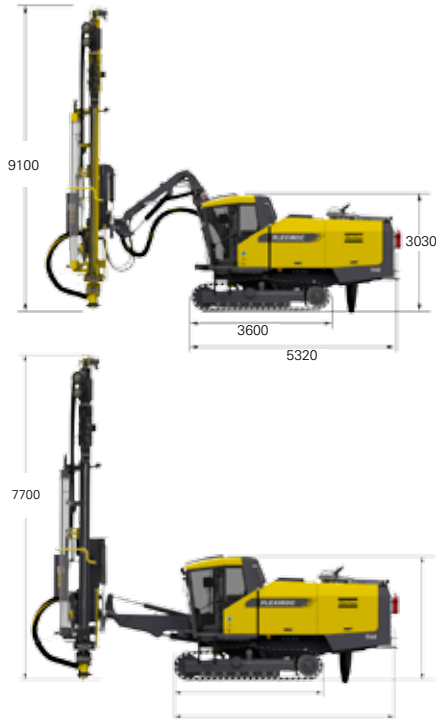
Feed dumped (fixed boom)



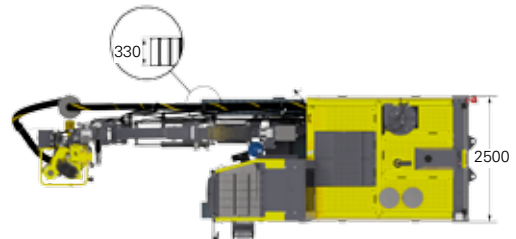
Feed dumped (folding boom)



# 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

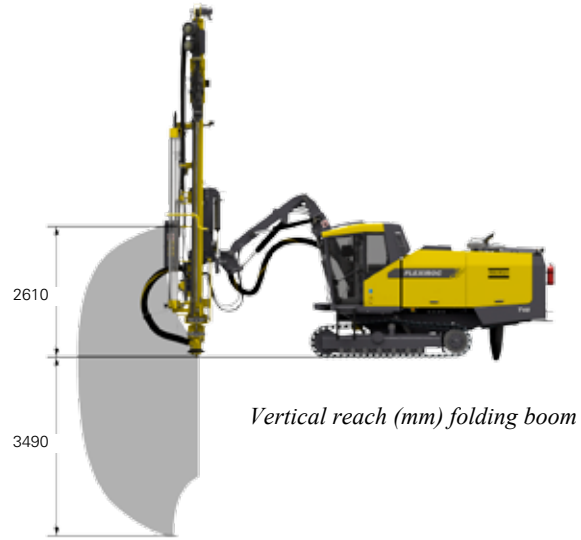
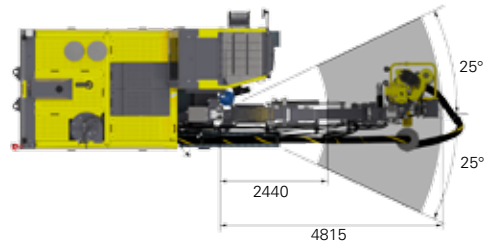
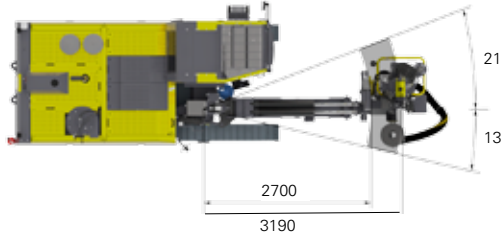
**Environment conditions**

- 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

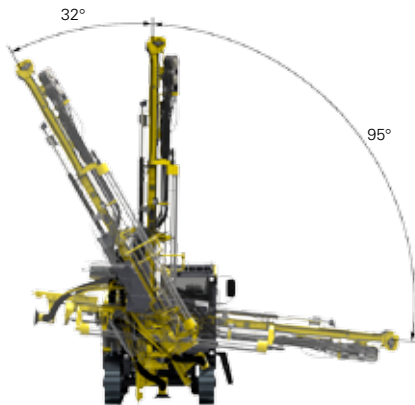
# Coverage areas



*Horizontal reach (mm) folding boom*

*Vertical reach (mm) folding boom*

# Feed swing angles



*Valid for both fixed and folding boom*