

Commando DC121R SURFACE DRILLS

Technical specification

Commando DC121R is a remote controlled, hydraulic and self-propelled drilling unit on a 4- wheel drive carrier.

Typical applications for DC121R are foundation drilling, road cutting, trenching, bolting, line drilling in dimensional stone quarries, and other special drilling applications. Therefore DC121R is most often used by construction contractors, mines and quarries, and the municipal sector. Due to its versatility DC121R is often included in the equipment fleet of rental houses as well.

KEY FEATURES

Hole diameter:	22 - 45 mm (7/8" - 1 3/4")
Rock tools:	19, 22 or 25 mm (3/4", 7/8" or 1") rods
Rock Drill	5,5 kW
Engine output:	37 kW
Flushing air:	1,2 m ³ /min, up to 8 bar
Production capacity:	300 - 540 m ³ /8h
Total weight :	2800 kg





HYDRAULIC ROCK DRILL

Rock drill	RD106
Rock tools	HEX 19 x 108 mm, HEX 22 x 108 mm, HEX 25 x 108 mm
Operating pressure	100 - 160 bar
Percussion output power	5,5 kW
Maximum rotation torque	100 Nm/120 bar
Shank lubrication	Air / oil mist
Flushing	Air
Weight	46 kg

FEED

Feed type	CF 100 x 32
Total length	4 540 mm
Rock drill travel	3 300 mm
Max. length of starter rod	3 200 mm hexagonal or 10', R23 MF
Hole depth with starter rod	2 800 mm (9' 2")
Hole depth with second rod	6 000 mm (19' 8")
Feed extension travel	600 mm (2')
Feed/pull out force	3.7 kN
Feed swing	+/- 47°
Feed tilt	110°

BOOM

Boom type	DB 120, articulated
Boom reach	3.8 m
Drilling coverage	10 m ²
Boom swing	+/- 43°
Collaring height	+2.2 m/-4.0 m
Horizontal holes	Sideways, forwards

POWERPACK

Engine type	CAT C 2.2 water cooled
Number of cylinders	4
Engine output	37 kW / 2 800 rpm
Transmission type	Direct/polygroove belt
Screw compressor type	Enduro 3
Air filters	2 pcs
Fuel tank	75 l

HYDRAULIC SYSTEM

Number of gear pumps	3 pcs.
Filtration rate	10 micron abs.
Cooling capacity	up to +50°C ambient
Hydraulic oil tank	45 l
Shank lubrication device	WL 30

CONTROL SYSTEM

Control system type	Direct and PLC controlled
Tramming/boom/ drilling control	Direct controlled
Drilling control system type	Tamrock TA 132 E / 120
Half percussion/minimum percussion	Standard
Antijamming system	Standard
Collaring control	Stepless
Voltage	24 VDC

DUST COLLECTOR

Dust collector type	DC 120
Capacity/vacuum	5 m ³ /min at 855 mm vacuum H ₂ O
Filter elements/material	6 pcs/fiber
Total filter surface	4.8 m ²

CARRIER

Ground clearance	220 mm
Tramming force	20 kN
Max. tramming speed	3.6 km/h



STANDARD COMPONENTS

1 pc Rock drill RD106, hydraulic
1 pc Chain feed CF 100 x 32, incl. one set of jaws
1 pc Rod rack on the carrier
1 pc Boom DB 120, articulated
1 pc Carrier, rubber-tyred
1 pc Power pack, diesel driven, hydraulic pumps and on-board compressor
1 pc Hydraulic system, open center
1 pc Control system TA132E, with radio remote control for boom movements and drilling
1 pc Dust collection system DC 120 H, hydraulic
4 pcs Working lights
4 pcs Hydraulic jacks
1 pc Operator's manual (paper copy)
EU-safety devices

SELECTION OF OPTIONS

Spirit level angle indicator
TIM 1402 feed angle measuring system
TIM 1403 feed angle and depth measuring system
TIM 1404 feed angle measuring and aligning system
Biodegradable hydraulic oil
Central lubrication system Lincoln
Chain tracks
Electric fuel filling pump
Hydraulic winch
Manual fuel filling pump
Electric heater for engine 230 V
Exhaust gas purifier
Shut down of suction for water holes
Water flushing kit without water pump
Water pump for water flushing kit
Grinder Dynaset
Grinder Sandvik RG100H
Spare radio remote transmitter

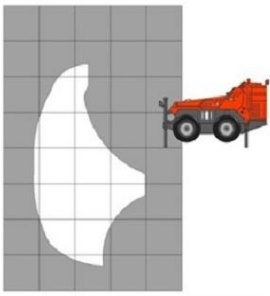
THE JAWS FOR DRILL STEELS

DRILL STEEL TYPE	DRILL STEEL DIAMETER	RECOMMENDED HOLE DIAMETER
Hexagonal steels	19 mm 3/4"	22 - 27 mm 7/8" - 1 1/16"
Hexagonal steels	22 mm 7/8"	28 - 45 mm 1 7/64" - 1 3/4"
Hexagonal steels	25 mm 1"	35 - 45 mm 1 3/8" - 1 3/4"
MF rods	R23	33 - 45 mm 1 5/16" - 1 3/4"
Shank adaptor/Shank rod	R23	33 - 45 mm 1 5/16" - 1 3/4"
Shank rod Alpha 250	25 mm 1"	35 - 45 mm 1 3/8" - 1 3/4"

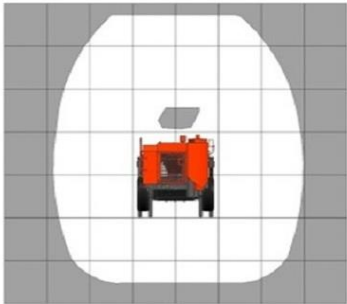
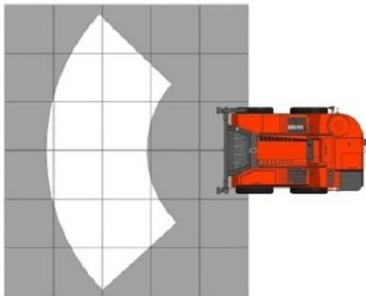


Coverage area and dimensions

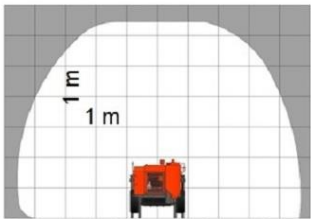
Vertical drilling



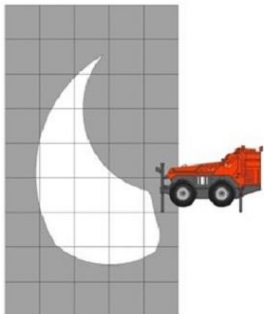
Vertical drilling



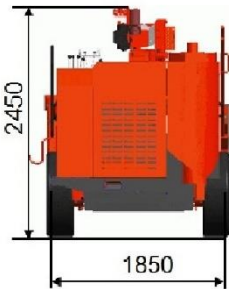
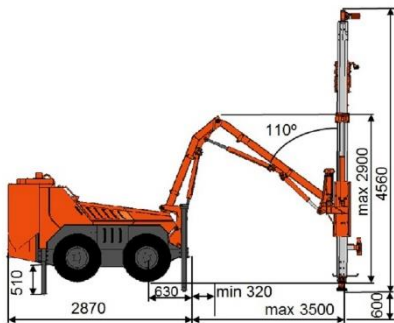
Horizontal drilling, forwards



Horizontal drilling, sideways
With manual roll-over



Horizontal drilling, sideways



DIMENSIONS

Weight	2800 kg
Width	1.85 m
Height	2.45 m
Total length	4.5 m

Sandvik Mining and Rock Solutions reserves the right to make changes to the information on this data sheet without prior notification to users. Please contact a Sandvik representative for clarification on specifications and options.