

# 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 m3/min, up to 8 bar
Production capacity:	300 - 540 m3/8h
Total weight :	2800 kg



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

ILLD	
Feed type	CF 100 x 32 / HEX 1
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 m2
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

percussion		
Antijamming system	Standard	
Collaring control	Stepless	
Voltage	24 VDC	
DUST COLLECTOR		
Dust collector type	DC 120	
Capacity/vacuum	5 m3/min at 855 mm vacuum H2O	
Filter elements/material	6 pcs/fiber	
Total filter surface	4.8 m2	
CARRIER		
Ground clearance	300 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 Set Manuals, paper copy

# THE JAWS FOR DRILL STEELS

1 Set Manuals, USB memory EU-safety devices

DRILL STEEL TYPE	DRILL STEEL	RECOMMENDED
	DIAMETER	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	R23	33 - 45 mm 1 5/16" -
rod		1 3/4"
Shank rod Alpha 250	25 mm 1"	35 - 45 mm 1 3/8" - 1
		3/4"

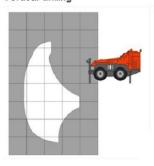
# SELECTION OF OPTIONS

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
Kit for alternative steels, each
Biogradeable 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
First service kit for DC120
Tools for RD106, field kit (not include punches)
Punches for RD106, workshop kit

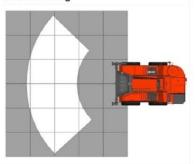


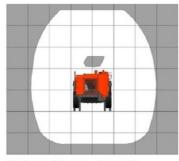
# **COVERAGE AREA AND DIMENSIONS**

# Vertical drilling

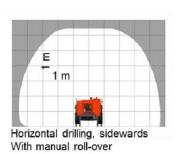


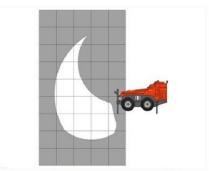
# Vertical drilling



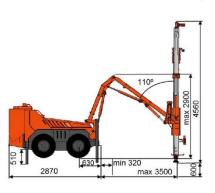


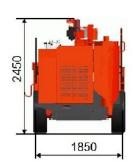
Horizontal drilling, forwards





Horizontal drilling, sidewards





# **DIMENSIONS**

Weight	2800 kg
Width	1.8 m
Height	2.2 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.

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