Technical Specification 12170 2012-01-30

Sandvik DCI22R Surface Top Hammer Drills



Sandvik DC122R is a fully remote controlled, hydraulic and self-propelled drilling unit on a 4-wheel drive carrier.

Typical applications for DC122R are foundation drilling, road cutting, trenching, bolting, line drilling in dimensional stone quarries, and other special drilling applications. Therefore DC122R is most often used by construction contractors, mines and quarries, and the municipal sector. Due to its versatility DC122R is often included in the equipment fleet of rental houses as well.

Hole Diameter:	22 - 45 mm (⁷ / ₈ " - 1 ³ / ₄ ")
Rock Tools:	19, 22 or 25 mm (³/₄", ⁷ /₅" or 1") rods
Rock Drill:	5,5 kW
Engine Output:	37 kW
Flushing Air:	I,2 m³/min, up to 8 bar
Production Capacity:	300 - 540 m³/8h
Total Weight	2 850 kg



Technical Specification 12170 2012-01-30

HYDRAULIC ROCK DRILL

Rock drill type	HEX I
Drill rod diameters	HEX 19 x 108 mm;
	HEX 22 x 108 mm;
	HEX 25 x 108 mm
Operating pressure	100 - 160 bar
Percussion rate	82 Hz
Percussion output power	5,5 kW
Maximum rotation torque	100 Nm/120 bar
Shank lubrication	Air / oil mist
Flushing	Air
Weight	46 kg

FEED

Chain feed type	CF 100 x 32 / HEX 1
Length of feed	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")
Max. length of two rods	6 400 mm (21')
Hole depth with second rod	6 000 mm (19' 8")
Feed/pull out force	3.7 kN
Front centralizer	Manual
Travelling centralizer	Manual
Feed extension travel	600 mm (2')
Feed swing	+/- 47°
Feed tilt	110°
Weight without steels	155 kg

BOOM

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

HYDRAULIC SYSTEM

Hydraulic system type	Open center, pilot control
Filtration rate	10 micron abs.
Cooling capacity	up to +50°C ambient
Hydraulic oil tank	45 I
Shank lubrication device	WL 30

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
Hydraulic pumps	Three gear pumps
Screw compressor type	Enduro 3
Air flushing capacity	I.2 m³/min
Flushing air pressure	4 - 8 bar
Air cleaner	2 pcs
Fuel tank	75
Average fuel consumption	4 - 6 l/h
Max. operating altitude	3 000 m
Fuel saving system	Standard

CONTROL SYSTEM

Tamrock TA 132 E / 120	Remote controlled
Antijamming system	Controlled by I/O-module and software
Voltage	24 VDC
Boom and drilling control	Radio remote
Driving and jack control	Radio remote

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 m ²
Hydraulic motor output	3 kW
Weight	90 kg

CARRIER

Carrier type	Rubber tyred, 4-wheel drive
Ground clearance	300 mm
Tramming force	20 kN
Tramming speed	3.6 km/h
Number of hydraulic jacks	4



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STANDARD COMPONENTS

• • • • • • •	
Rock drill	HEX I, hydraulic
Chain feed	CF 100 x 32 / HEX 1,
	incl. one set of jaws
Rod rack	On the carrier
Boom	DB 120, articulated
Carrier	Rubber-tyred
Powerpack	Diesel driven, hydraulic pumps and
	on-board compressor
Hydraulic system	Open center
Control system	TA132E/120, radio remote
Dust collector	DC 120, hydraulic
Working lights	4 pcs
Hydraulic jacks	4 pcs
Manuals	I x paper copy
	I x CD-ROM (ToolMan)

Drill steel	Drill steel	Recommended
type	diameter	hole diameter
Hexagonal	19 mm	22 - 27 mm
steels	³/₄"	⁷ / ₈ " - 1 ¹ / ₁₆ "
Hexagonal	22 mm	28 - 45 mm
steels	⁷ / ₈ "	⁷ / ₆₄ " - ³ / ₄ "
Hexagonal	25 mm	35 - 45 mm
steels	I"	³ / ₈ " - ³ / ₄ "
MF rods	R23	33 - 45 mm ⁵ / ₁₆ " - ³ / ₄ "
Shank adapter/ Shank rod	R23	33 - 45 mm ⁵ / ₁₆ " - ³ / ₄ "
Shank rod	25 mm	35 - 45 mm
Alpha 250	I"	³/ ₈ " - ³/ ₄ "

THE JAWS FOR DRILL STEELS

If several jaws selected please specify jaws assembled

SELECTION OF OPTIONS

١.	Spirit level angle indicator
2.	TIM 1402 feed angle measuring

- TIM 1402 feed angle measuring system
 TIM 1403 feed angle and depth measuring statements
- TIM 1403 feed angle and depth measuring system
 TIM 1404 feed angle measuring and aligning system
- 5. Shut down of suction for water holes
- 6. Water flushing kit without water pump
- 7. Chain tracks
- 8. Hydraulic winch
- 9. Electric heater for engine
- 10. Manual fuel filling pump
- 11. Electric fuel filling pump
- 12. Grinder Dynaset

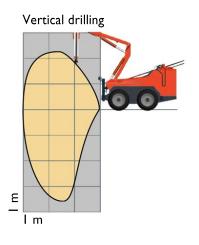
13. Central lubrication system Lincoln

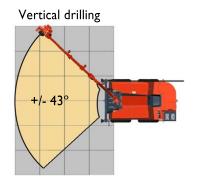
- 14. Grinder Sandvik RG100H
- 15. Exhaust gas purifier
- Biogradeable hydraulic oil, Shell Naturelle HFE 46 or HFE 68
- 17. Kit for alternative steels, each
- 18. Spare radio remote transmitter
- 19. First service kit for DCI20
- 20. Special tools for HEX I
- 21 Security+ Silver (price will be added to your order accordin
- 22 Extra manuals, price will be added according to pricing shee

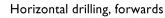


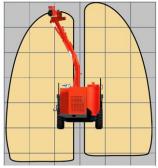
Sandvik DCI22R

COVERAGE AREA

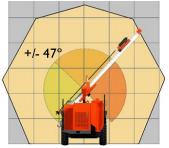




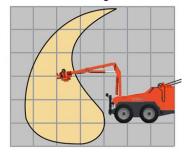




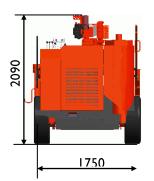
Horizontal drilling, sidewards With manual roll-over

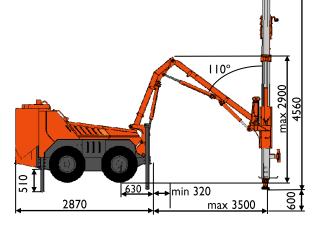


Horizontal drilling, sidewards



TRAMMING AND TRANSPORT DIMENSIOS





Weight (without options)	2 850 kg
Width	I.8 m
Height	2.1 m
Total length	4.6 m

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