# **SANDVIK**

# Ranger DX810i T3 SURFACE DRILLS

# **TECHNICAL SPECIFICATION**

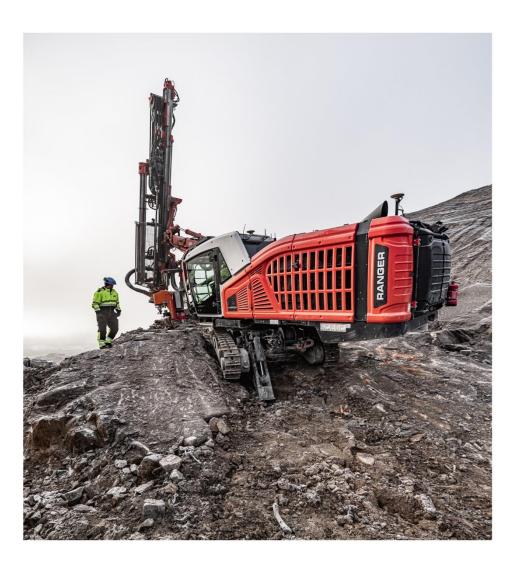
Ranger DX810i is a hydraulic, self-propelled, selfcontained, crawler based surface drilling rig equipped with a cabin (F.O.P.S. and R.O.P.S.) and rod handling system.

Typical applications for DX810i are road cutting, pipe-line drilling and foundation drilling, as well as production drilling in medium size quarries. Therefore DX810i is most often used by construction contractors, mines and quarries, and also included in the equipment fleet of rental houses as well.

## **KEY FEATURES**

Hole diameter:	64 - 127 mm (3" - 5")*
Rock tools:	38 mm, 45 mm, 51mm (1½", 1¾" and 2")
Rock Drill	25kW, 21kW
Engine output:	185kW
Flushing air:	8.5 m3/min, up to 10 bar
Production capacity:	1,8 Mt/year
Total weight :	19 600 kg

\*if larger than 115mm holes drilled please consult factory



## HYDRAULIC ROCK DRILL

Rock drill	RD925M, RD925M-C, RD921S, RD921S-C	
Rock tools	45, 51, mm	
Operating pressure	100-200 bar	
Percussion rate	69 Hz/71 Hz	
Percussion output power	25kW/21kW	
Maximum rotation torque	1 750 Nm	
Shank lubrication	Air / oil mist	
Flushing	Air	
Weight	345 kg	

## FEED

Feed type	CyIF 16 feed, CyIF 18 (option)
Total length	7 500 mm, 8410mm (option)
Rock drill travel	4 680 mm, 5 290mm
Max. length of starter rod	4 875 mm (16'), 5486 mm (18') (option)
Hole depth with starter rod	4 480 mm, 5 090 mm (option)
Hole depth with second rod	8138 mm
Hose reel	Standard
Feed extension travel	1300 mm
Feed/pull out force	28 kN
Feed swing	-45°/+45° (-20°/+94°)
Feed tilt	140°
Minimum height for horizontal holes	410 mm

## ROD CHANGER

Rod changer type	RC1712
Storage capacity	7+1 rods (51 mm), 6+1 (60mm, st. feed), 5+1 (60mm long feed)
Rod length	3050, 3660, 4267 (10', 12',14'*)*(option)
Max. hole depth	30 m,(7x12'+1x16'), 34,3m* (7x14'+1x18') *(option), 25m (60mm)

### BOOM

2001		
Boom type	DB5200, articulated	
Boom reach	5,2 m	
Drilling coverage	55m² 290°	
Collaring height	+2.6 m/-4.5 m	
Horizontal holes	To the right	

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CABIN	
Cabin type	iCab
Certificates	F.O.P.S. and R.O.P.S.
Noise level in the cabin	below 78 dB(A)
Air conditioning	Intelligent air condition safety + *
Pressurization	Standard
Seat	Multiposition
Vibration dampening	Standard
Windows	Safety laminated, tinted, with wipers
Power take-off	12 VDC

\* Air condition system contains fluorinated greenhouse gases HFC-134a

#### POWERPACK Volvo TAD851VE Engine type Number of cylinders 6 Engine output 185kW / 1 800 rpm Transmission type Gear box Enduro 25 Screw compressor type Air filters 2 pcs., with ejector and safety element Fuel tank 400 l

### HYDRAULIC SYSTEM

Number of gear pumps	2 pcs. for cooling
Number of piston pumps	3 pcs. for drilling, tramming, boom and rodhandling, dust collector
Filtration rate	10 micron abs., return 25
	micron, pressure
Cooling capacity	up to +50°C ambient
Hydraulic oil tank	3001
Shank lubrication device	SLU 22-1 CSL (option)

## CONTROL SYSTEM

Control system type	Sandvik SICA, PLC controlled
5 51	proportional electro-hydraulics
Tramming/boom/ drilling	PLC controlled
control	
User interface	Electro-proportional joysticks
	and touchscreen
Control system diagnostics	Graphical flow chart type
	. ,
Drilling control system type	iTorque
3	
Antijamming system	For rotation and flushing
, intijalining of otom	i of fotation and hadding
Collaring control	Automatic
	ratomato
Preset drilling parameters	Adjustable for fine tuning for
r reset anning parameters	
	different rock conditions
Voltage	24 VDC
, oncogo	21100

## DUST COLLECTOR

Dust collector type	DC 900H
Capacity/vacuum	23 m3/min at 1 000 mm vacuum H2O
Filter elements/material	15 pcs/fiber
Total filter surface	12 m2
Primary cyclone	Standard
Movable suction head	Standard

#### CARRIER FL 6 Track type Grouser plate width 310 mm Ground contact length 2 750 mm Ground pressure 1.0 kg/cm2 Ground clearance 400 mm CCW180°+CW110° Turnable superstructure Oscillation angles +/- 10° 156 KN Tramming force Max. tramming speed 3.2 km/h

STANDARD COMPONENTS
1 pc Rock drill RD925M, hydraulic with SLU system
1 pc CyIF 16 feed HR, With hose reel
1 pc Rod handler RC1712 incl. 1 set of jaws
1 pc BoomDB5200, articulated
1 pc Carrier track mounted, Rotating upper structure
CW180+CCW110 Degrees
1 pc Guides for grousers, long
1 pc Power pack diesel driven, hydraulic pumps and on-board
compressor with twin pressure control
1 pc Control system iTorque, incl Flushing control automatics,
Shutdown of suction for waterholes
1 pc TIMi for vertical holes and depth measuring
1 pc Operator's cabin F.O.P.S. and R.O.P.S. with Intelligent air
condition safety +
1 pc Radio, 12V with USB MP3 Bluetooth, without CD
1 pc Dust collection system DC 900 H, hydraulic, Primary
separator
10 pcs Working lights, Halogen
1 pc Gauge set for accumulator pressure checking
1 pc Alarm signal
1 Set Manuals, paper copy
1 Set Manuals, USB memory
1 pc Alarm beacon
1 pc Service light
SanRemo Mobile, Bluetooth connectivity

# THE JAWS FOR DRILL STEELS

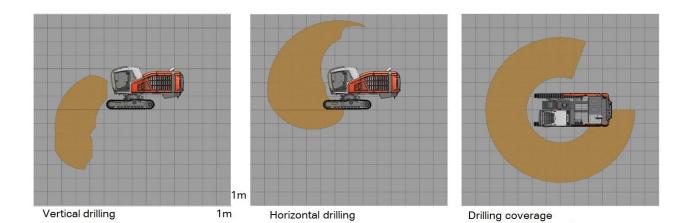
DRILL STEEL TYPE	DRILL STEEL DIAMETER	RECOMMENDED HOLE DIAMETER
MF-rods	38 mm 1 ½"	64 - 70 mm 2 ½" - 2 ¾"
MF-rods	45 mm 1 ¾"	76 - 89 mm 3" - 3 ½"
MF-rods	51 mm, CT55 2"	89 - 127 mm 3 ½" - 5"

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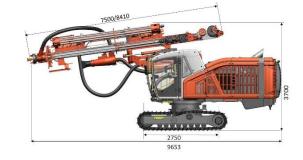
Extra manuals, price will be added according to pricing sheet First service kit for Ranger DXi series



## COVERAGE AREA AND DIMENSIONS







DIMENSIONS	
Weight	19 600 kg
Width	2.45 m
Height	a/b,3.3 m/4.4 m
With safety cage	a/b,3.3 m/4.4 m
With noise silencer	3.7 m/5 m
Total length	12,35m, 13,26m with CylF 18 (option)

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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