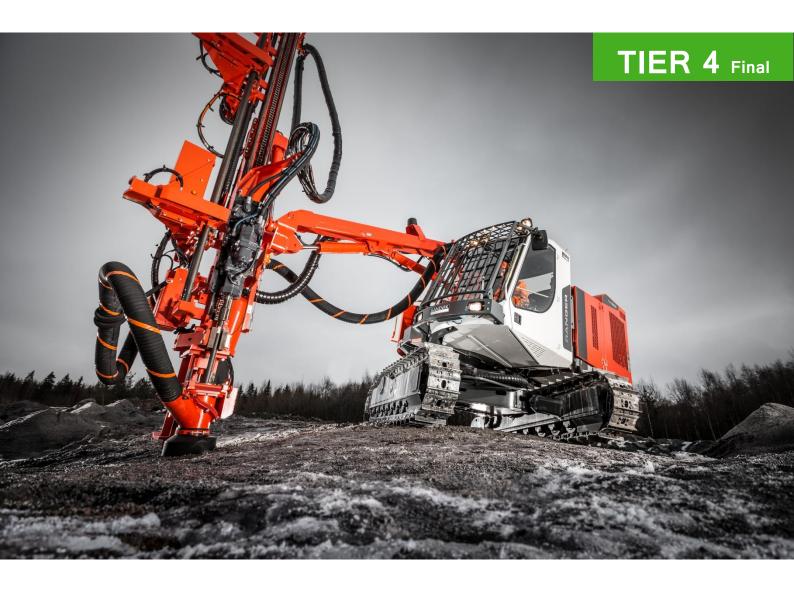
Technical Specification
Ranger DX800 T4 - 1
2014-02-24

## Ranger DX800

# **Surface Top Hammer Drills**



Ranger DX800 is a hydraulic, self-propelled, self-contained, 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 DX800 are road cutting, pipe-line drilling and foundation drilling, as well as production drilling in medium size quarries. Therefore DX800 is most often used by construction contractors, mines and quarries, and also included in the equipment fleet of rental houses as well.

Hole Diameter:	76 - 127 mm (3" - 5")
Rock Tools:	45 or 51 mm (1 ¾" and 2" ) rods
Rock Drill:	21/23kW
Engine Output:	168 kW
Flushing Air:	8.1 m <sup>3</sup> /min, up to 10 bar
Production Capacity:	1,3 Mt/year
Total Weight	15 200 kg



## Ranger DX800

#### **HYDRAULIC ROCK DRILL**

Rock drill type	HL/HF 810T
Drill rod diameters	45 and 51 mm
Operating pressure	100-200 bar
Percussion rate	53/58 Hz
Percussion output power	21/23 kW
Maximum rotation torque	1 355 Nm
Shank lubrication	Air / oil mist
Flushing	Air
Weight	245 kg

## **FEED**

Feed type	CF 145H
Length of feed	7 700 mm
Rock drill travel	5 020 mm*
Max. length of starter rod	5 485 mm (18')*
Feed/pull out force	20 kN
Travelling hose reel	Optional
Front jaws	Centralizing Pito 12H
Feed extension travel	1350 mm
Feed swing	-56°/+52° (-20°/+94°)
Feed tilt	125°
Weight without steels	1 200 kg

\* W/o hose reel

## **ROD CHANGER**

Rod handler type	RH 714
Storage capacity	6+1 rods (45 mm)
Steel lengths	3050, 3660, 4265 mm
	(10', 12', 14')
Max. hole depth with	29 m (7x14')*
4265 mm (14') MF-rods	

\* W/o hose reel

#### **BOOM**

Boom type	DB 800H, articulated
Boom length	4,8 m
Drilling coverage on flat	17.6 m² (26.4 m²)
Collaring height	+2.5 m/-4.5 m
Horizontal holes	To the right

## **CABIN**

Cabin type	Ergo
Certificates	F.O.P.S. and R.O.P.S.
Noise level in the cabin	below 80 dB(A)
Controls	Drilling, tramming, boom and rod changer
Heaters	Standard
Pressurization	Standard
Seat	Multiposition
Vibration dampening	Standard
Windows	Safety laminated, tinted, with wipers
Power take-off	12 VDC

#### **POWERPACK**

Engine type	Caterpillar C 7.1 (TIER 4F)
DEF tank	AdBlue, 24 I
Max. tilt angles	+/- 45°
Number of cylinders	6
Engine output	168 kW / 1 800 rpm
Transmission type	Gear box
Hydraulic pumps	2 variable, displacement
	piston, 3 gear pumps
Screw compressor type	Enduro 25
Flushing air capacity	8,1 m <sup>3</sup> /min
Flushing air pressure	4 - 10 bar
Air cleaner	2 pcs., with ejector and safety element
Fuel tank	380 I
Fuel saving system	Standard
Weight	1 200 kg
vveigni	1 200 kg

## **HYDRAULIC SYSTEM**

Driving, boom and drilling	Load sensing system
Cooling and dust collector	Open center
Filtration rate	12 micron abs., return 25 micron, pressure
Cooling capacity	up to +50°C ambient
Hydraulic oil tank	200 I
Shank lubrication device	SLU 14-1

## **CONTROL SYSTEM**

Driving control	Pilot operated, hydraulic
Boom control	Direct operated, hydraulic
Drilling	Pilot controlled (el/hydr.)
Rod handler	Electric remote
Collaring control	Stepless
Percussion control	Controlled by feed
	pressure (THC 700)
Antijamming system	Hydraulic
Voltage	24 VDC

## **DUST COLLECTOR**

Dust collector type	DC 810H
Capacity/vacuum	23 m <sup>3</sup> /min at 1 000 mm vacuum H <sub>2</sub> O
Filter elements/material	13 pcs/fiber
Total filter surface	10.4 m <sup>2</sup>
Weight	200 kg

## **CARRIER**

Track size	FL 6
Grouser plate width	310 mm
Ground contact length	2 590 mm
Ground pressure	0.81 kg/cm <sup>2</sup>
Ground clearance	440 mm
Turnable superstructure	120° / 180°
Oscillation angles	+/- 10°
Tramming force	121 Kn
Max. tramming speed	3.5 km/h



## STANDARD COMPONENTS

Rock drill	HL 810T, hydraulic
Chain feed	CF 145H
Rod handler	RH 714 incl. 1 set of jaws
Boom	DB 800H, articulated
Carrier	Track mounted, turnable superstructure
Powerpack	Diesel driven, hydraulic pumps and on- board compressor with twin pressure control
Hydraulic system	Load sensing and open center
Control system	THC 700 Rock Pilot
Movable drill steel support	
Cabin	F.O.P.S. and R.O.P.S.and Air conditioning
Dust collector	DC 810 H, hydraulic
Working lights	9 pcs
Gauge set	For accumulator pressure checking
Reversing alarm	
Manuals	1 x paper copy 1 x CD-ROM (ToolMan)

#### THE JAWS FOR DRILL STEELS

Drill steel type	Drill steel di- ameter	Recommended hole diameter
Extension rods	45 mm 1 ¾"	76 - 89 mm 3" - 3 ½"
MF-rod	45 mm 1 ¾"	76 - 89 mm 3" - 3 ½"
MF-rod	51 mm 2"	89 - 127 mm 3 ½" - 5"
Extension rods	51 mm 2"	89 - 127 mm 3 ½" - 5"

**Note:** not with 10' MF-rods. With hose reel only 10' or 12' rods. 51 mm (2") extension rods only 5 + 1. If several jaws selected please specify jaws assembled

#### **SELECTION OF OPTIONS**

1.	Turnable superstructure 180 deg.
2.	HF 810T rock drill
3.	Alternative seat ISRI 6000
4.	Radio and CD-MP3 player
5.	Reversing camera
6.	Vacuum cleaner for cabin
7.	TIM 5200 for vertical holes
8.	TIM 5300 for vertical holes and depth measuring
9.	TIM 6300 for inclined holes and depth measuring
10.	TIM 6500 for inclined holes, depth measuring and laser level
11.	TIM 6700 with interface to external navigation system
12.	GPS aiming device for TIM 6300 and TIM 6500
13.	TIM3D navigation system
14.	Power extractor
15.	Readyness for Power Extractor
16.	Horizontal drilling kit including hose reel
17.	Hose reel (not with 14' rods)
18.	Thread greasing
19.	Thread greasing with 5 gallon bucket
20.	Anti- freeze system for air lines
21.	Primary separator
22.	Flushing control automatics
23.	Shut down of suction for water holes
24.	Dustmizer
25.	Water injection system
26.	Guides for grousers

27. Three bar grouser plates 28. Towing hook 29. Xenon lights, 6 pcs 30. Hydraulic rear ground support Winch with radio remote control and cable tightness auto-31. matics 32. Radio remote control for rear ground support, tramming and oscillation 33. Fuel powered heater for engine and cabin 34. Fuel powered heater for engine, cabin and water tank 35. Readyness for fuel powered heater 36. Electric fuel filling pump 37. Grinder Sandvik RG420H 38. Central lubrication system Sandvik 39. Biogradeable hydraulic oil, Shell Naturelle HFE 46 or HFE 40. Kit for alternative steels, each 41. First service kit for DX800 42. Special tools for HL 800T, field kit 43. Special tools for HL 800T, complete 44. Extra manuals 45. Security+ Silver, Gold or Platinum

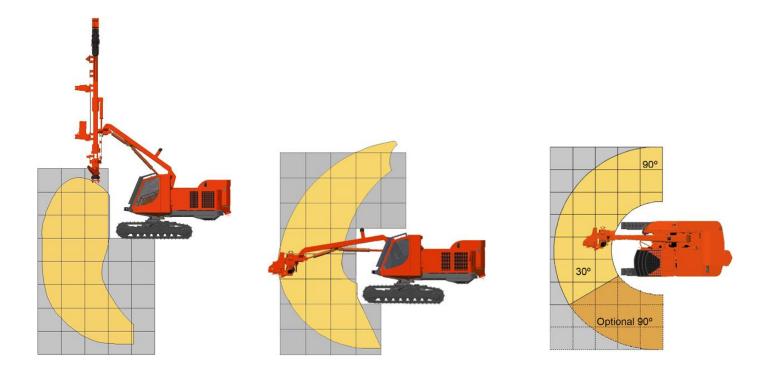
46. SanRemo (Silver, Gold or Platinum)

See more detailed option descriptions in Sales Tools

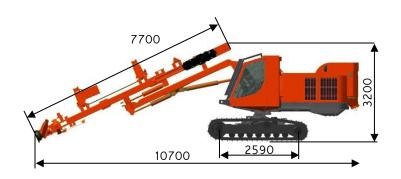
47. LED lights



## **COVERAGE AREA**



#### TRAMMING AND TRANSPORT DIMENSIOS





Weight (without options)	15 200 kg
Width	2.45 m
Height	3.6 m / 3.2 m
Total length	7.2 m / 10.7 m

Sandvik Mining and Construction reserves the right to change this specification without further notice.

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