Technical Specification 142814-1 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 m³/min, up to 10 bar	
Production Capacity:	1,3 Mt/year	
Total Weight	15 200 kg	



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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

Centralizing Pito 12H Front jaws 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') 29 m (7x14')\*

Max. hole depth with 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) +2.5 m/-4.5 m

To the right

Collaring height Horizontal holes

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 Standard

Vibration dampening Safety laminated, tinted, Windows

with wipers Power take-off 12 VDC

Ranger DX800

POWERPACK

Engine type DEF tank Max. tilt angles Number of cylinders 6 Engine output Transmission type Hydraulic pumps

Screw compressor type Flushing air capacity Flushing air pressure

Air cleaner

Fuel tank Fuel saving system Weight

HYDRAULIC SYSTEM

Cooling capacity

Shank lubrication device

Caterpillar C 7.1 (TIER 4F)

AdBlue, 24 I +/- 45°

168 kW / 1 800 rpm

Gear box

2 variable, displacement

piston, 3 gear pumps

Enduro 25 8,1 m<sup>3</sup>/min 4 - 10 bar

2 pcs., with ejector and

safety element

380 I Standard 1 200 kg

Driving, boom and drilling Cooling and dust collector Filtration rate

Hydraulic oil tank

Load sensing system Open center

12 micron abs., return 25 micron, pressure up to +50°C ambient

2001 SLU 14-1

CONTROL SYSTEM

Driving control Boom control Drilling Rod handler Collaring control Percussion control

Antijamming system

Voltage

Pilot operated, hydraulic Direct operated, hydraulic Pilot controlled (el/hydr.)

Electric remote Stepless

Controlled by feed pressure (THC 700)

Hydraulic **24 VDC** 

DUST COLLECTOR

Dust collector type Capacity/vacuum

Filter elements/material

Total filter surface Weight

DC 810H

23 m<sup>3</sup>/min at 1 000 mm

vacuum H<sub>2</sub>O 13 pcs/fiber 10.4 m<sup>2</sup> 200 kg

CARRIER

Track size Grouser plate width Ground contact length Ground pressure Ground clearance Turnable superstructure Oscillation angles Tramming force

Max. tramming speed

FL<sub>6</sub> 310 mm 2 590 mm 0.81 kg/cm<sup>2</sup> 440 mm 120° / 180°

+/- 10° 121 Kn 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 stee	I 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

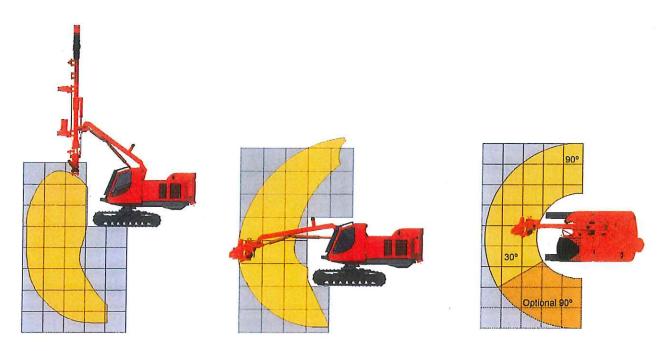
- Turnable superstructure 180 deg.
- 2. HF 810T rock drill
- 3. Alternative seat ISRI 6000
- 4. Radio and CD-MP3 player
- Reversing camera
- 6. Vacuum cleaner for cabin
- 7. TIM 5200 for vertical holes
- 8. TIM 5300 for vertical holes and depth measuring
- 9. TIM 6300 for inclined holes and depth measuring
- 10. TIM 6500 for inclined holes, depth measuring and laser
- 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
- 31. Winch with radio remote control and cable tightness automatics
- 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
- Biogradeable hydraulic oil, Shell Naturelle HFE 46 or HFE
  68
- 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)
- 47. LED lights

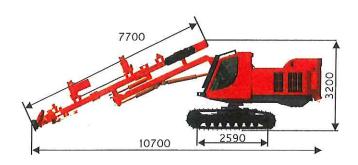
See more detailed option descriptions in Sales Tools



## **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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