Ranger DX800 S5
SURFACE DRILLS

TECHNICAL SPECIFICATION

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 Ranger DX800 are road cutting, pipe-line drilling and foundation drilling, as well as production drilling in medium size quarries. Therefore Ranger DX800 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:	76 - 127 mm (3” - 5”)
Rock tools:	45 or 51 mm (1¾” and 2”)rods
Rock Drill	21/23kW
Engine output:	168 kW (TIER 4F/EU Stage V)
Flushing air:	8.1 m3/min, up to 10 bar
Production capacity:	1,3 Mt/year
Total weight :	15 600 kg

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HYDRAULIC ROCK DRILL

Rock drill	HL/HF 820 T
Rock tools	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
Total length	7 700 mm
Rock drill travel	4 320 mm
Max. length of starter rod	4 875 mm (16’)
Hose reel	Standard
Feed extension travel	1350 mm
Feed/pull out force	20 kN
Feed swing	-56°/+52° (-20°/+94°)
Feed tilt	125°

ROD CHANGER

Rod changer type	RH 714
Storage capacity	6+1 rods
Rod length	3050, 3660, 4265 mm (10', 12', 14')
Max. hole depth	26,8 m (6x12’+1x16’)

BOOM

Boom type	DB 800H, articulated
Boom reach	4,8 m
Drilling coverage	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)
Air conditioning	Standard *
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-134

POWERPACK

Engine type	Caterpillar C 7.1 (TIER 4F/EU Stage V)
DEF tank	AdBlue, 24 l
Max. tilt angles	+/- 45°
Number of cylinders	6
Engine output	168 kW / 1 800 rpm
Transmission type	Gear box
Screw compressor type	Enduro 25
Air filters	2 pcs., with ejector and safety element
Fuel tank	380 l

HYDRAULIC SYSTEM

Number of gear pumps	4 pcs. for dust collector and cooling
Number of piston pumps	2 pcs. for drilling, tramming, boom and rodhandling
Filtration rate	12 micron abs., return 25 micron, pressure
Cooling capacity	up to +50°C ambient
Hydraulic oil tank	200 l
Shank lubrication device	SLU 14-1

CONTROL SYSTEM

Control system type	Hydraulic pilot control and relay logic
Tramming/boom/ drilling control	Pilot/direct/ pilot controlled
User interface	Proportional hydraulic joysticks and pressure gauges
Drilling control system type	Rock Pilot+
Antijamming system	For rotation standard and flushing optional
Collaring control	Stepless
Voltage	24 VDC

DUST COLLECTOR

Dust collector type	DC 810H
Capacity/vacuum	23 m3/min at 1 000 mm vacuum H2O
Filter elements/material	13 pcs/fiber
Total filter surface	10.4 m2
Primary cyclone	Standard
Movable suction head	Standard

CARRIER

Track type	FL 6
Grouser plate width	310 mm
Ground contact length	2 590 mm
Ground pressure	0.81 kg/cm2
Ground clearance	440 mm
Turnable superstructure	120° / 180°
Oscillation angles	+/- 10°
Tramming force	121 Kn
Max. tramming speed	3.5 km/h

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STANDARD COMPONENTS

1 pc Rock drill HL 820 T, hydraulic
1 pc Chain feed CF 145H with movable drill steel support
1 pc Rod handler RH 714 incl. 1 set of jaws
1 pc Boom DB 800 H, articulated
1 pc Carrier track mounted, turnable superstructure
1 pc Power pack diesel driven, hydraulic pumps and on-board compressor with twin pressure control
1 pc Control system Rock Pilot+
1 pc Operator's cabin F.O.P.S. and R.O.P.S. with AC
1 pc Dust collection system DC 810 H, hydraulic, Primary separator
9 pcs Working lights
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 Hose reel with steel length 3660 mm (12'),
1 pc Service light, hand held 12V magnetic
EU-safety devices, EN16228, short safety cage

THE JAWS FOR DRILL STEELS

DRILL STEEL TYPE	DRILL STEEL DIAMETER	RECOMMENDED HOLE DIAMETER
Extension rods	45 mm 1 ¾"	76 - 89 mm 3" - 3 ½"
MF-rods	45 mm 1 ¾"	76 - 89 mm 3" - 3 ½"
MF-rods	51 mm 2"	89 - 127 mm 3 ½" - 5"
Extension rods	51 mm 2"	89 - 127 mm 3 ½" - 5"

SELECTION OF OPTIONS

Alternative seat ISRI 6000
Radio with CD-MP3 player
Reversing camera
Vacuum cleaner for cabin
Driller's Notes - MWD Data Collection for TIM3D
Driller's Office planning software (one-year license)
GPS aiming device for TIM and TIMi inclined holes
2000RPM Engine, 9,1m^3/min compressor
Spirit level angle indicator
TIM 5200 for vertical holes
TIM 5300 for vertical holes and depth measuring
TIM 6300 for inclined holes and depth measuring
TIM 6300 with open interface
TIM 6500 for inclined holes, depth measuring and laser level
TIM 6700 (TIM6500 with open interface)
TIM3D drill navigation system (Leica)
Horizontal drilling kit
EN 16228 Safety cage for feed, long
Feed 5 485 mm (18'), without hose reel and horizontal drilling
Long feed 6069 mm 20', no rod changer
Kit for alternative steels, each
Thread greasing
Thread greasing with 5 gallon bucket
Power extractor
Readyness for Power Extractor
HF820T rock drill (replaces standard component)
Anti- freeze system for air lines
Biogradeable hydraulic oil, not with CSL
Central lubrication system Sandvik
Electric fuel filling pump
Fast fill connection for fuel Wiggins
Guides for grousers, long
Hydraulic rear ground support
Hydraulic winch with radio remote and cable tightness automatics
Hydraulic winch with full radio drilling, tramming boom and rod handling
Remote Screen Interface for TIMi and TIM3D
Led lights, 6 pcs
Radio remote control for rear ground support, tramming and oscillation
Full radio remote control for drilling, tramming, boom and rod handling
Three bar grouser plates
Towing hook
Turnable superstructure 180 deg.
Xenon lights, 6 pcs
Fuel powered heater for engine and cabin
Fuel powered heater for engine, cabin and water tank
Readyness for fuel powered heater
Dustmizer (engine heater option needed below freezing point)
Flushing control automatics
Sampling device
Shut down of suction for water holes
Water injection system
Grinder, Dynaset
CME mini junior Grinder
Spare radio remote transmitter
First service kit for Ranger DX800
Special tools for HL 820 T, field kit
Special tools for HL 820 T, compete
My Sandvik and SanRemo

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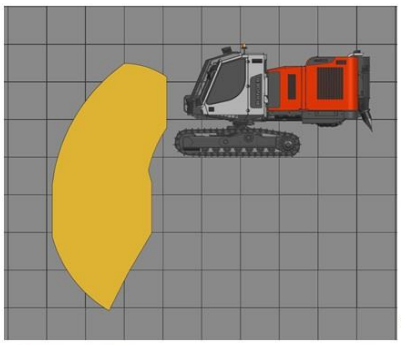
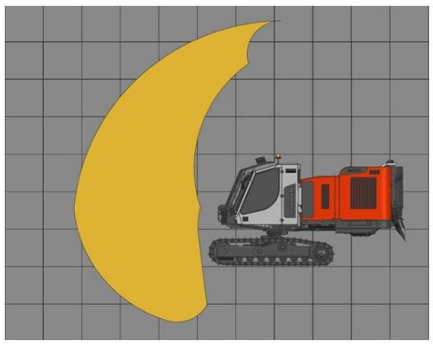
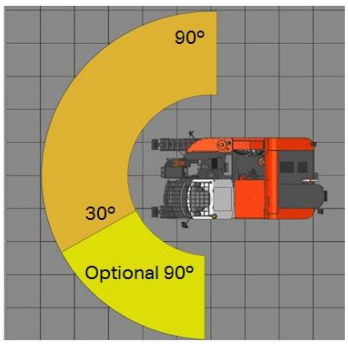
COVERAGE AREA AND DIMENSIONS



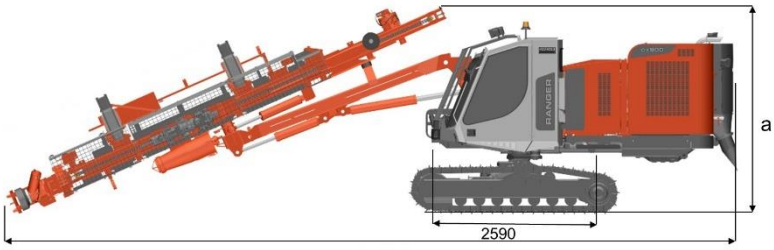
Vertical drilling

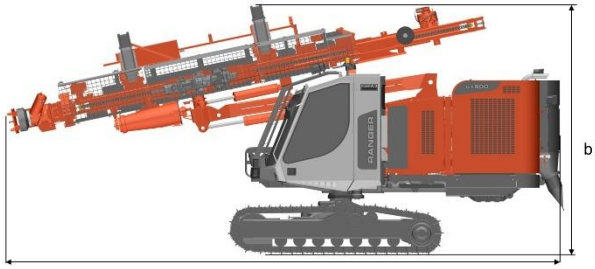


Horizontal drilling



Drilling coverage





DIMENSIONS	
Weight	15 600 kg
Width	2.45 m
Height	a/b, 3.2 m/3.6 m
With safety cage	3.3 m/3.8 m
With noise silencer	3.3 m/4.0 m
Total length	11.3 m/8.4 m

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