



Ranger DX500 T3 SURFACE DRILLS

TECHNICAL SPECIFICATION

Ranger DX500 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 DX500 are road cutting, pipeline drilling and foundation drilling, as well as production drilling in medium size quarries. Therefore Ranger DX500 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:	51- 89 mm (2"– 3½")
Rock tools:	32, 38 or 45 mm (1¼", 1½", and 1¾")
Rock Drill	15,5kW
Engine output:	168 kW
Flushing air:	6,2 m3/min, up to 10 bar
Production capacity:	2200 m3/8h
Total weight :	15 200 kg



HYDRAULIC ROCK DRILL	
Rock drill	HL 510
Rock tools	32,38,45 mm
Operating pressure	80-170 bar
Percussion rate	60 Hz
Percussion output power	15.5 kW
Maximum rotation torque	680 Nm
Shank lubrication	Air / oil mist
Flushing	Air
Weight	130 kg

FEED	
Feed type	CF 145H
Total length	7 700 mm
Rock drill travel	5 020 mm
Max. length of starter rod	5 485 mm (18')
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	29 m (7x14')*

BOOM	
Boom type	DB 800H, articulated
Boom reach	4,8 m
Drilling coverage	17.6 m ² (26.4 m ²)
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-134a

POWERPACK	
Engine type	Caterpillar C 7.1 (TIER 3)
Max. tilt angles	+/- 45°
Number of cylinders	6
Engine output	168 kW / 1 800 rpm
Transmission type	Gear box
Screw compressor type	Enduro 12
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	2pcs. 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 m ³ /min at 1 000 mm vacuum H2O
Filter elements/material	13 pcs/fiber
Total filter surface	10.4 m ²
Primary cyclone	Standard
Movable suction head	Standard

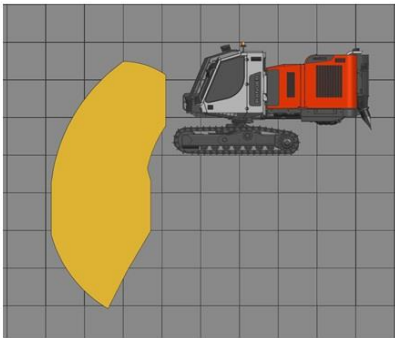
CARRIER	
Track type	FL 6
Grouser plate width	310 mm
Ground contact length	2 590 mm
Ground pressure	0.81 kg/cm ²
Ground clearance	440 mm
Turnable superstructure	120° / 180°
Oscillation angles	+/- 10°
Tramming force	121 Kn
Max. tramming speed	3.5 km/h

STANDARD COMPONENTS		
Standard Component:		
1 pc	Rock drill HL 510, hydraulic OMSU200 rotation motor	
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, 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	Hydraulic system load sensing and open center	
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	Back up alarm	
1 Set	Manuals, paper copy	
1 Set	Manuals, USB memory	
Eu-safety devices		

THE JAWS FOR DRILL STEELS		
DRILL STEEL TYPE	DRILL STEEL DIAMETER	RECOMMENDED HOLE DIAMETER
Extension rods	32 mm 1 ¼"	45 - 57 mm 1 ¼" - 2 ¼"
MF-rods	32 mm 1 ¼"	45 - 57 mm 1 ¼" - 2 ¼"
Extension rods	38 mm 1 ½"	64 - 70 mm 2 ½" - 2 ¾"
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"
Extension rods	45 mm 1 ¾"	76 - 89 mm 3" - 3 ½"

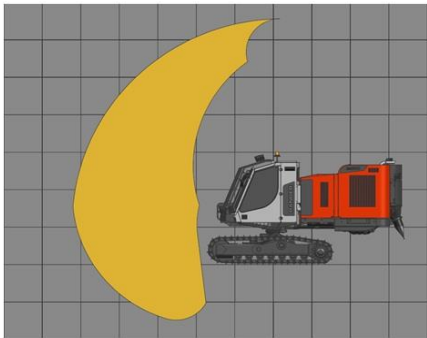
SELECTION OF OPTIONS
Alternative seat ISRI 6000
Radio with CD-MP3 player
Reversing camera
Vacuum cleaner for cabin
Driller's Office planning software (one-year license)
GPS aiming device for TIM and TIMi inclined holes
TIM 5200 for vertical holes
TIM 5300 for vertical holes and depth measuring
TIM 6300 for inclined holes and depth measuring
TIM 6500 for inclined holes, depth measuring and laser level
TIMi for inclined holes with touchscreen and TIM3D readiness
TIM3D drill navigation system (Leica)
Horizontal drilling kit
Kit for alternative steels, each
Thread greasing
Thread greasing with 5 gallon bucket
Anti-freeze system for air lines
Biodegradable hydraulic oil, not with CSL
Central lubrication system Sandvik
Electric fuel filling pump
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
First service kit for DX500
Special tools for HL 510, field kit
Special tools for HL 510, complete
My Sandvik and SanRemo

COVERAGE AREA AND DIMENSIONS

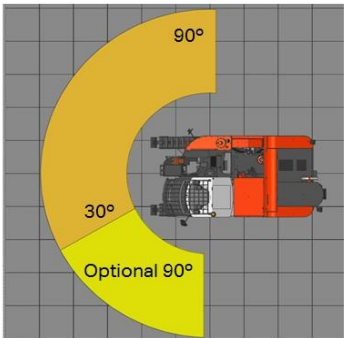


Vertical drilling

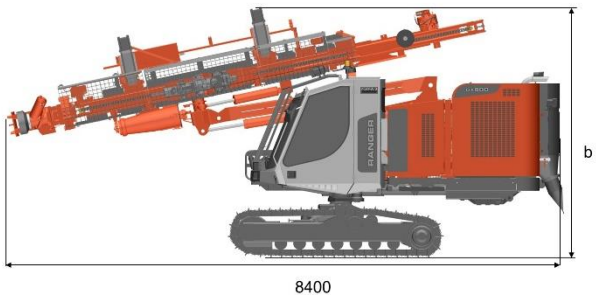
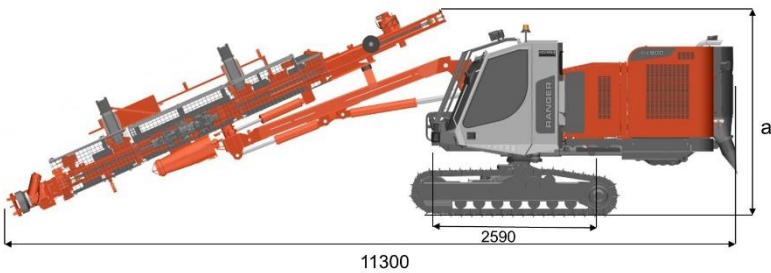
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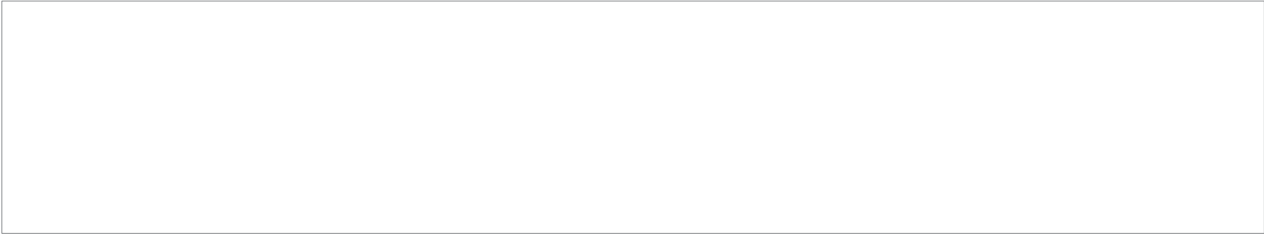
Horizontal drilling



Drilling coverage



DIMENSIONS	
Weight	15 200 kg
Width	2.45 m
Height	a/b, 3.2 m/3.6 m
Total length	8.4 m / 11.3 m



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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