

# Ranger DX600R T3 SURFACE DRILLS

TECHNICAL SPECIFICATION

Ranger DX600 is a hydraulic, self-propelled, self-contained, crawler based surface drilling rig with full radio control.

Typical applications for Ranger DX600 are road cutting, pipeline drilling and foundation drilling, as well as production drilling in medium size quarries. Therefore Ranger DX600 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- 102 mm (2½"– 4")
Rock tools:	38, 45 or 51 mm (1½", 1¾" and 2")
Rock Drill	17,5kW
Engine output:	168 kW
Flushing air:	6,2 m3/min, up to 10 bar
Production capacity:	2200 m3/8h
Total weight :	15 200 kg



Rock drill	HL 650
Rock tools	38,45,51 mm
Operating pressure	100-170 bar
Percussion rate	55 Hz
Percussion output power	17.5 kW
Maximum rotation torque	1 325
Shank lubrication	Air / oil mist
Flushing	Air
Weight	245 kg
FEED	
Feed type	CF 145H
Total length	7 700 mm
Rock drill travel	5 020 mm without hose reel
Max. length of starter rod	5 485 mm (18') without hose reel
Hose reel	Optional
Feed extension travel	1350 mm
Feed/pull out force	20 kN
Feed swing	-56°/+52° (-20°/+94°)
Feed tilt	125°
Rod changer type	RH 714
Storage capacity	RH 714 6+1 rods 3050, 3660, 4265 mm (10', 12',
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Storage capacity  Rod length  Max. hole depth  BOOM  Boom type	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')* DB 800H, articulated
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach  Drilling coverage	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m 17.6 m² (26.4 m²)
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m 17.6 m² (26.4 m²) +2.5 m/-4.5 m
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach  Drilling coverage  Collaring height	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m 17.6 m² (26.4 m²)
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach  Drilling coverage  Collaring height  Horizontal holes	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m 17.6 m² (26.4 m²) +2.5 m/-4.5 m  To the right
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach  Drilling coverage  Collaring height  Horizontal holes  POWERPACK  Engine type	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m 17.6 m² (26.4 m²) +2.5 m/-4.5 m To the right  Caterpillar C 7.1 (TIER 3)
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach  Drilling coverage  Collaring height  Horizontal holes  POWERPACK  Engine type  Max. tilt angles	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m 17.6 m² (26.4 m²) +2.5 m/-4.5 m To the right  Caterpillar C 7.1 (TIER 3) +/- 45°
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach  Drilling coverage  Collaring height  Horizontal holes  POWERPACK Engine type  Max. tilt angles  Number of cylinders	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m  17.6 m² (26.4 m²) +2.5 m/-4.5 m  To the right  Caterpillar C 7.1 (TIER 3) +/- 45° 6
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach  Drilling coverage  Collaring height  Horizontal holes  POWERPACK Engine type  Max. tilt angles  Number of cylinders  Engine output	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m 17.6 m² (26.4 m²) +2.5 m/-4.5 m To the right  Caterpillar C 7.1 (TIER 3) +/- 45° 6 168 kW / 1 800 rpm
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach  Drilling coverage  Collaring height  Horizontal holes  POWERPACK  Engine type  Max. tilt angles  Number of cylinders  Engine output  Transmission type	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m 17.6 m² (26.4 m²) +2.5 m/-4.5 m To the right  Caterpillar C 7.1 (TIER 3) +/- 45° 6 168 kW / 1 800 rpm Gear box
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach  Drilling coverage  Collaring height  Horizontal holes  POWERPACK Engine type  Max. tilt angles  Number of cylinders	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m 17.6 m² (26.4 m²) +2.5 m/-4.5 m To the right  Caterpillar C 7.1 (TIER 3) +/- 45° 6 168 kW / 1 800 rpm Gear box Enduro 12
Storage capacity  Rod length  Max. hole depth  BOOM  Boom type  Boom reach  Drilling coverage  Collaring height  Horizontal holes  POWERPACK  Engine type  Max. tilt angles  Number of cylinders  Engine output  Transmission type	6+1 rods 3050, 3660, 4265 mm (10', 12', 14') 29 m (7x14')*  DB 800H, articulated 4,8 m 17.6 m² (26.4 m²) +2.5 m/-4.5 m To the right  Caterpillar C 7.1 (TIER 3) +/- 45° 6 168 kW / 1 800 rpm Gear box

HYDRAULIC SYSTEM	4 pcs. for dust collector and
Number of gear pumps	cooling
Number of piston pumps	2pcs. for drilling, tramming, boor and rodhandling
Filtration rate	12 micron abs., return 25 micron pressure
Cooling capacity	up to +50°C ambient
Hydraulic oil tank	200
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	Radio remote and pressure gauge
Drilling control system type	Rock Pilot+
Antijamming system	For rotation standard and flushing optional
Collaring control	Stepless
Voltage	24 VDC
DUST COLLECTOR	
DUST COLLECTOR	
Dust collector type	DC 810H
Dust collector type	23 m3/min at 1 000 mm vacuum
Dust collector type Capacity/vacuum	23 m3/min at 1 000 mm vacuum H2O
Dust collector type Capacity/vacuum Filter elements/material	23 m3/min at 1 000 mm vacuum H2O 13 pcs/fiber
Dust collector type  Capacity/vacuum  Filter elements/material  Total filter surface	23 m3/min at 1 000 mm vacuum H2O 13 pcs/fiber 10.4 m2
Dust collector type  Capacity/vacuum  Filter elements/material  Total filter surface  Primary cyclone	23 m3/min at 1 000 mm vacuum H2O 13 pcs/fiber 10.4 m2 Standard
Dust collector type  Capacity/vacuum  Filter elements/material  Total filter surface  Primary cyclone  Movable suction head	23 m3/min at 1 000 mm vacuum H2O 13 pcs/fiber 10.4 m2 Standard
Dust collector type  Capacity/vacuum  Filter elements/material  Total filter surface  Primary cyclone  Movable suction head  CARRIER	23 m3/min at 1 000 mm vacuum H2O 13 pcs/fiber 10.4 m2 Standard Standard
Dust collector type  Capacity/vacuum  Filter elements/material  Total filter surface  Primary cyclone  Movable suction head  CARRIER  Track type	23 m3/min at 1 000 mm vacuum H2O 13 pcs/fiber 10.4 m2 Standard Standard
Dust collector type  Capacity/vacuum  Filter elements/material  Total filter surface  Primary cyclone  Movable suction head  CARRIER  Track type  Grouser plate width	23 m3/min at 1 000 mm vacuum H2O 13 pcs/fiber 10.4 m2 Standard Standard FL 6 310 mm
Dust collector type  Capacity/vacuum  Filter elements/material  Total filter surface  Primary cyclone  Movable suction head  CARRIER  Track type  Grouser plate width  Ground contact length	23 m3/min at 1 000 mm vacuum H2O 13 pcs/fiber 10.4 m2 Standard Standard FL 6 310 mm 2 590 mm

+/- 10°

121 Kn 3.5 km/h

Oscillation angles

Tramming force

Max. tramming speed

## STANDARD COMPONENTS

1 pc Rock drill HL 650 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+, full radio remote
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
1 pc Service light, hand held 12V magnetic
EU-safety devices

#### THE JAWS FOR DRILL STEELS

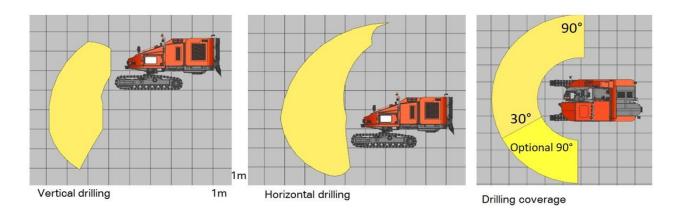
DRILL STEEL TYPE	DRILL STEEL	RECOMMENDED
	DIAMETER	HOLE DIAMETER
Extension rods	38 mm 1 ½"	64 - 70 mm 2 ½" - 2
		3/4"
MF-rods	38 mm 1 ½"	64 - 70 mm 2 ½" - 2
		3/4"
Extension rods	45 mm 1 ¾"	76 - 89 mm 3" - 3 ½"
MF-rods	45 mm 1 ¾"	76 - 89 mm 3" - 3 ½"
MF-rods	51 mm 2"	89 - 102 mm 3 ½" - 4"
Extension rods	51 mm 2"	89 - 102 mm 3 ½" - 4"

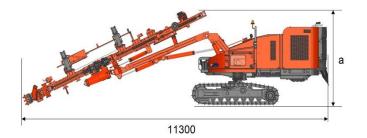
### SELECTION OF OPTIONS

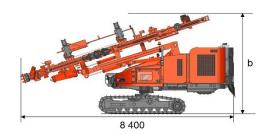
Drillaria Natas - MAND Data Callection for TIMAD
Driller's Notes - MWD Data Collection for TIM3D
Driller's Office planning software (one-year license)
TIM 5200 for vertical holes
TIM 5300 for vertical holes and depth measuring
TIM 6300 inclined holes, depth measuring and GPS aiming
TIM 6300 with open interface
TIM 6500 inclined holes, depth measuring, laser level and GPS aiming
TIM 6700 (TIM6500 with open interface)
TIM3D drill navigation system (Leica)
Horizontal drilling kit
EN 16228 Safety cage for feed, long
Kit for alternative steels, each
Thread greasing
Thread greasing with 5 gallon bucket
Power extractor
Readyness for Power Extractor
Ramp up option RD520 drifter, not with silencer option
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
Remote Screen Interface for TIMi and TIM3D
Led lights, 6 pcs
Three bar grouser plates
Towing hook
Turnable superstructure 180 deg.
Xenon lights, 6 pcs
Fuel powered heater for engine
Fuel powered heater for engine 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 RD520, field kit
Special tools for RD520, complete set
Special tools for HL 710, HL650, field kit
Special tools for HL 710, HL650, complete
My Sandvik and SanRemo



#### **COVERAGE AREA AND DIMENSIONS**







#### **DIMENSIONS**

Weight	15 200 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



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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