

# Ranger DX700

## Surface Top Hammer Drills



Ranger DX700 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 DX700 are road cutting, pipe-line drilling and foundation drilling, as well as production drilling in medium size quarries. Therefore DX700 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 - 115 mm (3" - 4½")
Rock Tools:	45 or 51 mm (1 ¾" and 2" ) rods
Rock Drill:	19,5 kW
Engine Output:	168 kW
Flushing Air:	8,1 m <sup>3</sup> /min, up to 10 bar
Production Capacity:	1,2 Mt/year
Total Weight	15 600 kg

## HYDRAULIC ROCK DRILL

Rock drill type	HL 710
Drill rod diameters	45 and 51 mm
Operating pressure	100-190 bar
Percussion rate	48 Hz
Percussion output power	19,5 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	4320 mm
Max. length of starter rod	4875 mm (16')
Feed/pull out force	20 kN
Travelling hose reel	Standard
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

## ROD CHANGER

Rod handler type	RH 714
Storage capacity	6+1 rods
Steel lengths	3050, 3660,mm (10', 12')
Max. hole depth	26,8 m (6x12'+1x16')
3660,mm (12')	
4875,mm (16')	

## BOOM

Boom type	DB 800H, articulated
Boom length	4,8 m
Drilling coverage on flat	17.6 m <sup>2</sup> (26.4 m <sup>2</sup> )
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 l
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 l
Fuel saving system	Standard
Weight	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 l
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 710, hydraulic
Chain feed	CF 145H, with hose reel
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	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 Primary separator
Working lights	9 pcs
Gauge set	For accumulator pressure checking
EU-safety devices	EN 16228, service light, alarm signal, alarm beacon
Manuals	1 x paper copy 1 x CD-ROM (ToolMan)

## THE JAWS FOR DRILL STEELS

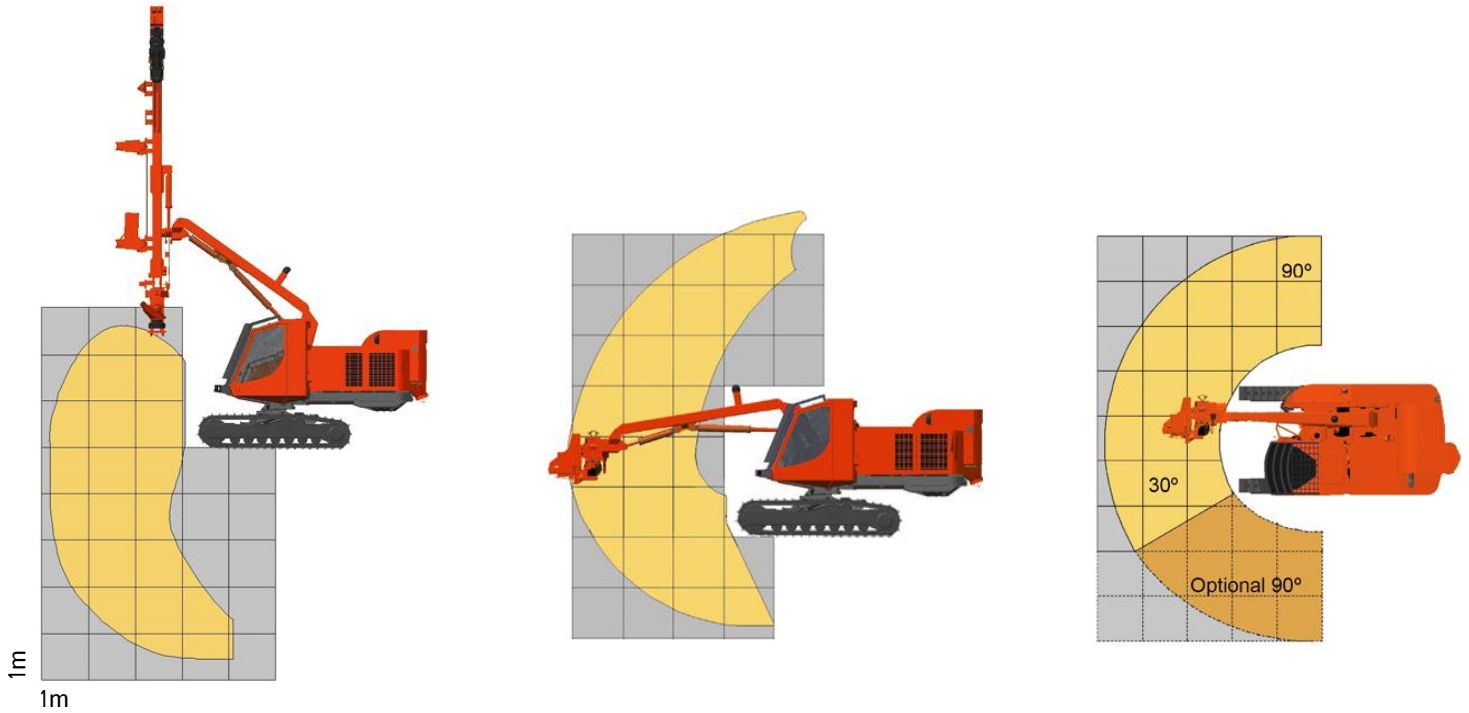
Drill steel type	Drill steel diameter	Recommended hole diameter
Extension rods	45 mm 1 ¾"	76 - 89 mm 3" - 3 ½"
MF-rod	45 mm 1 ¾"	76 - 89 mm 3" - 3 ½"
MF-rod	51 mm 2"	89 - 115 mm 3 ½" - 4 ½"
Extension rods	51 mm 2"	89 - 115 mm 3 ½" - 4 ½"

**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

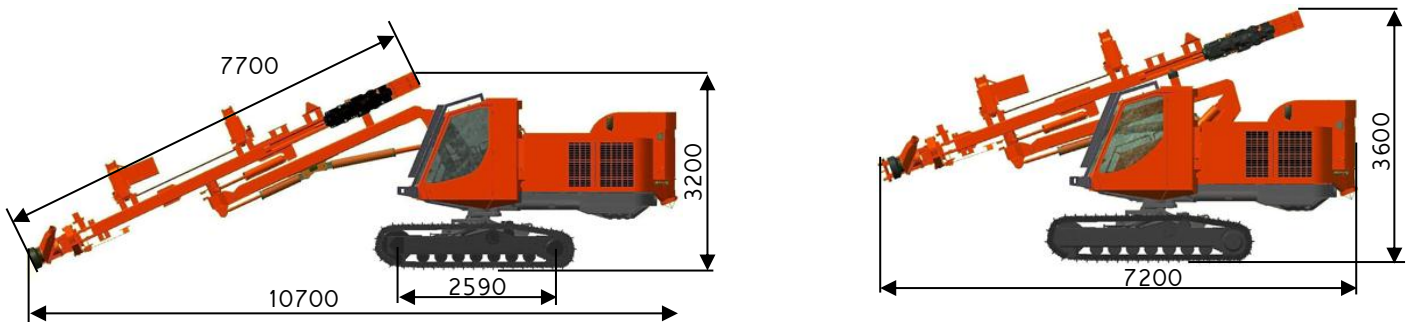
## SELECTION OF OPTIONS

1.	Turnable superstructure 180 deg.
2.	Alternative seat ISRI 6000
3.	Radio and CD-MP3 player
4.	Reversing camera
5.	Vacuum cleaner for cabin
6.	TIM 5200 for vertical holes
7.	TIM 5300 for vertical holes and depth measuring
8.	TIM 6300 for inclined holes and depth measuring
9.	TIM 6500 for inclined holes, depth measuring and laser level
10.	TIM 6700 with interface to external navigation system
11.	GPS aiming device for TIM 6300 and TIM 6500
12.	TIM3D navigation system
13.	Power extractor
14.	Readiness for Power Extractor
15.	Horizontal drilling kit including hose reel
16.	Thread greasing
17.	Thread greasing with 5 gallon bucket
18.	Anti-freeze system for air lines
19.	Flushing control automatics
20.	Shut down of suction for water holes
21.	Dustmizer
22.	Guides for grousers
23.	Water injection system
24.	Three bar grouser plates
25.	Towing hook
26.	Xenon lights, 6 pcs
27.	Hydraulic rear ground support
28.	Winch with radio remote control and cable tightness automatics
29.	Radio remote control for rear ground support, tramming and oscillation
30.	Fuel powered heater for engine and cabin
31.	Fuel powered heater for engine, cabin and water tank
32.	Readiness for fuel powered heater
33.	Electric fuel filling pump
34.	Grinder Sandvik RG420H
35.	Central lubrication system Sandvik
36.	Biodegradable hydraulic oil, Shell Naturelle HFE 46 or HFE 68
37.	Kit for alternative steels, each
38.	First service kit for DX700
39.	Special tools for HL 710T, field kit
40.	Special tools for HL 710T, complete
41.	Extra manuals
42.	Security+ Silver, Gold or Platinum
43.	SanRemo (Silver, Gold or Platinum)
44.	LED lights (not with laser option)
45.	Winch with full radio remote for drilling, tramming boom and rod handling control
46.	Full radio remote control for drilling, tramming, boom and rod handling control

## COVERAGE AREA



## TRAMMING AND TRANSPORT DIMENSIONS



Weight (without options)	15 600 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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