



Ranger DX900i T3 SURFACE DRILLS

TECHNICAL SPECIFICATION

Ranger DX900i 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 DX900i are road cutting, pipe-line drilling and foundation drilling, as well as production drilling in medium size quarries. Therefore DX900i 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: | 89 - 140 mm (3" - 5.5")* |
| Rock tools: | 51 mm or 60mm (2" and 2 3/8") |
| Rock Drill | 27kW |
| Engine output: | 210kW |
| Flushing air: | 9.5 m ³ /min, up to 10 bar |
| Production capacity: | 1,9 Mt/year |
| Total weight : | 19 600 kg |

*if larger than 127mm holes drilled please consult factory



| HYDRAULIC ROCK DRILL | |
|-------------------------|------------------|
| Rock drill | RD927L, RD927L-C |
| Rock tools | 45, 51, 60 mm |
| Operating pressure | 100-200 bar |
| Percussion rate | 56 |
| Percussion output power | 27kW |
| Maximum rotation torque | 1 750 Nm |
| Shank lubrication | Air / oil mist |
| Flushing | Air |
| Weight | 345 kg |

| FEED | |
|-------------------------------------|---|
| Feed type | CylF 16 feed, CylF 18 (option) |
| Total length | 7 500 mm, 8 410mm (option) |
| Rock drill travel | 4 680 mm, 5 290mm |
| Max. length of starter rod | 4 875 mm (16'), 5 486 mm (18') (option) |
| Hole depth with starter rod | 4 480 mm, 5 090 mm (option) |
| Hole depth with second rod | 8138 mm |
| Hose reel | Standard |
| Feed extension travel | 1300 mm |
| Feed/pull out force | 28 kN |
| Feed swing | -45°/+45° (-20°/+94°) |
| Feed tilt | 140° |
| Minimum height for horizontal holes | 410 mm |

| ROD CHANGER | |
|------------------|--|
| Rod changer type | RC1712 |
| Storage capacity | 7+1 rods (51 mm), 6+1 (60mm, st. feed), 5+1 (60mm long feed) |
| Rod length | 3050, 3660, 4267 (10', 12', 14')*(option) |
| Max. hole depth | 30 m,(7x12'+1x16'), 34,3m* (7x14'+1x18') *(option), 25m (60mm) |

| BOOM | |
|-------------------|-----------------------|
| Boom type | DB5200, articulated |
| Boom reach | 5,2 m |
| Drilling coverage | 55m ² 290° |
| Collaring height | +2.6 m/-4.5 m |
| Horizontal holes | To the right |

| CABIN | |
|--------------------------|---------------------------------------|
| Cabin type | iCab |
| Certificates | F.O.P.S. and R.O.P.S. |
| Noise level in the cabin | below 75 dB(A) |
| Air conditioning | Intelligent air condition safety + * |
| 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 | Volvo TAD852VE |
| Number of cylinders | 6 |
| Engine output | 210kW / 1 800 rpm |
| Transmission type | Gear box |
| Screw compressor type | Enduro 25 |
| Air filters | 2 pcs., with ejector and safety element |
| Fuel tank | 400 l |

| HYDRAULIC SYSTEM | |
|--------------------------|---|
| Number of gear pumps | 2 pcs. for cooling |
| Number of piston pumps | 3 pcs. for drilling, tramming, boom and rodhandling, dust collector |
| Filtration rate | 10 micron abs., return 25 micron, pressure |
| Cooling capacity | up to +50°C ambient |
| Hydraulic oil tank | 300 l |
| Shank lubrication device | SLU 22-1 CSL (option) |

| CONTROL SYSTEM | |
|---------------------------------|---|
| Control system type | Sandvik SICA, PLC controlled proportional electro- hydraulics |
| Tramming/boom/ drilling control | PLC controlled |
| User interface | Electro-proportional joysticks and touchscreen |
| Control system diagnostics | Graphical flow chart type |
| Drilling control system type | iTorque |
| Antijamming system | For rotation and flushing |
| Collaring control | Automatic |
| Preset drilling parameters | Adjustable for fine tuning for different rock conditions |
| Voltage | 24 VDC |

| DUST COLLECTOR | |
|--------------------------|----------------------------------|
| Dust collector type | DC 900H |
| Capacity/vacuum | 23 m3/min at 1 000 mm vacuum H2O |
| Filter elements/material | 15 pcs/fiber |
| Total filter surface | 12 m2 |
| Primary cyclone | Standard |
| Movable suction head | Standard |

| CARRIER | |
|-------------------------|----------------|
| Track type | FL 6 |
| Grouser plate width | 310 mm |
| Ground contact length | 2 750 mm |
| Ground pressure | 1.0 kg/cm2 |
| Ground clearance | 400 mm |
| Turnable superstructure | CCW180°+CW110° |
| Oscillation angles | +/- 10° |
| Tramming force | 156 KN |
| Max. tramming speed | 3.2 km/h |

STANDARD COMPONENTS

| |
|---|
| 1 pc Rock drill RD927L, hydraulic with SLU system |
| 1 pc CylF 16 feed HR, With hose reel |
| 1 pc Rod handler RC1712 incl. 1 set of jaws |
| 1 pc BoomDB5200, articulated |
| 1 pc Carrier track mounted, Rotating upper structure CW180+CCW110 Degrees |
| 1 pc Power pack diesel driven, hydraulic pumps and on-board compressor with twin pressure control |
| 1 pc Control system iTorque, incl Flushing control automatics, Shutdown of suction for waterholes |
| 1 pc TIMi for vertical holes and depth measuring |
| 1 pc Operator's cabin F.O.P.S. and R.O.P.S. with Intelligent air condition safety + |
| 1 pc Radio, 12V with USB MP3 Bluetooth, without CD |
| 1 pc Dust collection system DC 900 H, hydraulic, Primary separator |
| 1 pc Flushing control automatics |
| 1 pc Shut down of suction in water holes |
| 10 pcs Working lights, Halogen |
| 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 Service light |
| SanRemo Mobile, Bluetooth connectivity |

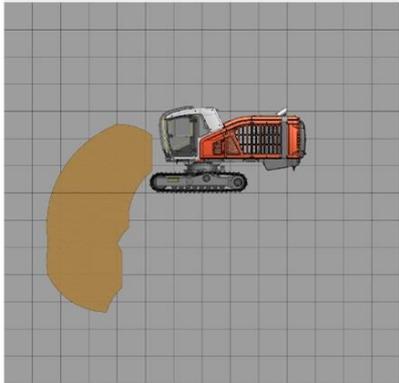
THE JAWS FOR DRILL STEELS

| DRILL STEEL TYPE | DRILL STEEL DIAMETER | RECOMMENDED HOLE DIAMETER |
|------------------|----------------------|---------------------------|
| MF-rods | 45 mm 1 3/4" | 76 - 89 mm 3" - 3 1/2" |
| MF-rods | 51 mm 2" | 89 - 127 mm 3 1/2" - 5" |
| MF-rods | 60 mm 2 3/8" | 92- 140mm 3 5/8" - 5 1/2" |

SELECTION OF OPTIONS

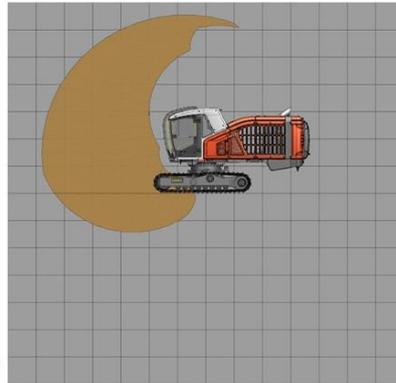
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|---|
| Additional tool/bit box below cabin |
| Alternative seat with 3-point seat belt and air cushioning |
| H13 Cabin filter, HEPA |
| Cooler bag in cabin |
| Radio CD/MP3 Bluetooth, Handsfree, DAB |
| Reversing camera |
| Roller blinds for cabin windows |
| Vacuum cleaner for cabin |
| Explosion proof cabin window |
| Heated mirrors |
| Driller's Notes - MWD Data Collection for TIM3D |
| Driller's Office planning software (one-year license) |
| Automatic feed alignment for TIMi |
| GPS aiming device for TIM and TIMi inclined holes |
| TIM3D drill navigation system (Trimble) |
| TIM3D drill navigation system (Leica) |
| TIMi for inclined holes and hole depth measuring |
| TIMi for inclined holes with TIM3D readiness |
| TIMi laser level based depth measuring |
| TIMi with open interface (Option laser level included) |
| RockPulse sensor system |
| Horizontal drilling kit with extra brake, TIM included (not with long feed) |
| (Noth with long feed)Long safety cage, replaces standard component |
| Kit for alternative steels, each |
| Thread greasing |
| Safety cage for feed |
| Full cycle one hole automatic drilling |
| Power extractor |
| Readyness for Power Extractor |
| CSL-system for R92x series rock drill, replaces standard component |
| Biogradeable hydraulic oil, not with CSL |
| Central lubrication system Sandvik |
| Electric fuel filling pump |
| Electric hydraulic oil filling pump |
| Electric water filling pump |
| Fast fill connection for engine coolant, hydraulic and engine oils |
| Fast fill connection for fuel Wiggins |
| Fire suppression system Sandvik, Eclipse 65L |
| Guides for grousers, long |
| Rear bumper |
| Long feed for 14' rods, CylF 18 HR, not with horizontal drilling |
| Hydraulic rear ground support |
| Hydraulic winch with full radio drilling, tramming boom and rod handling |
| Remote screen interface (Tablet or mobile phone not included) |
| Full radio remote control for drilling, tramming, boom and rod handling control |
| Three bar grouser plates |
| Towing hook |
| Extra brake for turnable upper structure (included in horizontal drilling) |
| Led lights, 9 pcs |
| Led lights 17 pcs. also carrier rear and side option lights |
| Cold weather package - 25 degrees |
| Cold-weather package -25degree, incl watertank heater |
| Readyness for fuel powered heater |
| Dustmizer (engine heater option needed below freezing point) |
| Flap feeder for dust collector |
| Sampling device |
| Water injection system |
| CME Grinder readyness |
| Grinder, Dynaset |
| CME mini junior Grinder |
| Spare radio remote transmitter |
| Extra manuals, price will be added according to pricing sheet |
| First service kit for Ranger DXi series |
| Special tools for RD92x series, field |
| Special tools for RD92x series, complete |
| My Sandvik and SanRemo - select level from extra item |

COVERAGE AREA AND DIMENSIONS

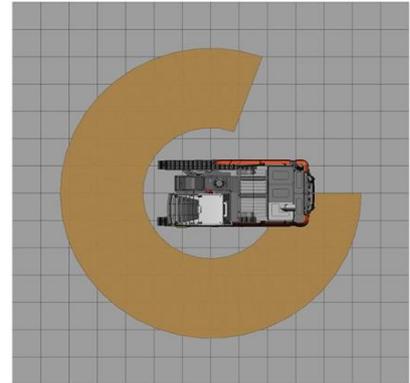


Vertical drilling

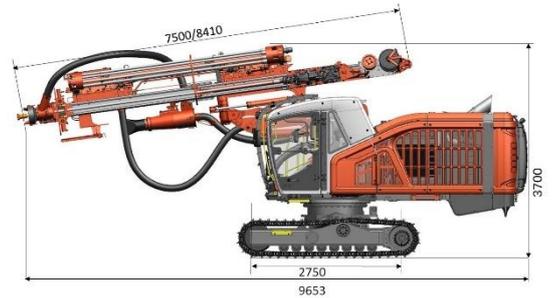
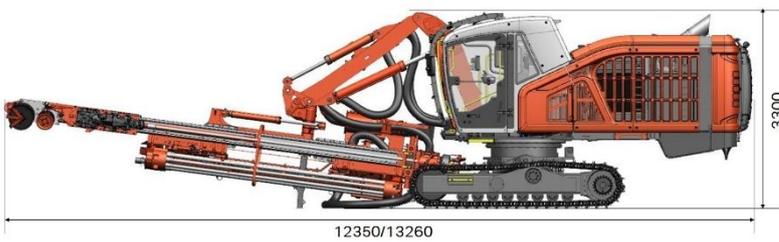
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Horizontal drilling

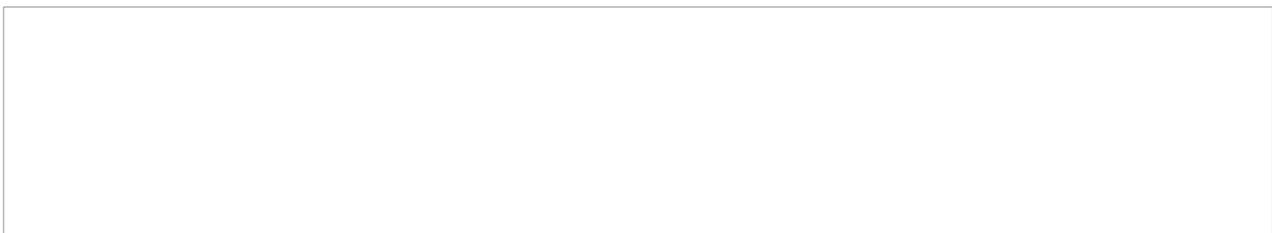


Drilling coverage



DIMENSIONS

| | |
|---------------------|--------------------------------------|
| Weight | 19 600 kg |
| Width | 2.45 m |
| Height | 3.3 m/4.4 m |
| With safety cage | 3.3 m/4.4 m |
| With noise silencer | 3.7 m/5 m |
| Total length | 12,35m, 13,26m with CylF 18 (option) |



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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