Technical Specification
Ranger DX800 T4 - 3EN 16228
2015-02-13

Ranger DX800

Surface Top Hammer Drills



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 DX800 are road cutting, pipe-line drilling and foundation drilling, as well as production drilling in medium size quarries. Therefore DX800 is most often used by construction contractors, mines and quarries, and also included in the equipment fleet of rental houses as well.

| 76 - 127 mm (3" - 5") |
|---------------------------------------|
| 45 or 51 mm (1 ¾" and 2") rods |
| 21/23kW |
| 168 kW |
| 8.1 m ³ /min, up to 10 bar |
| 1,3 Mt/year |
| 15 200 kg |
| |



HYDRAULIC ROCK DRILL

| Rock drill type | HL/HF 810T |
|-------------------------|----------------|
| Drill rod diameters | 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 |
|----------------------------|-----------------------|
| 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 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) |
| 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 |

Ranger DX800

POWERPACK

| Engine type | Caterpillar C 7.1 (TIER 4F) |
|-----------------------|---|
| DEF tank | AdBlue, 24 I |
| 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 ³ /min |
| Flushing air pressure | 4 - 10 bar |
| Air cleaner | 2 pcs., with ejector and safety element |
| Fuel tank | 380 I |
| 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 I |
| 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 ³ /min at 1 000 mm vacuum H ₂ O |
| Filter elements/material | 13 pcs/fiber |
| Total filter surface | 10.4 m ² |
| 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 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

| Rock drill | HL 810T , 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 |
| 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 di- ameter | 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 - 127 mm 3 ½" - 5" |
| Extension rods | 51 mm 2" | 89 - 127 mm 3 ½" - 5" |
| | | |

Ranger DX800

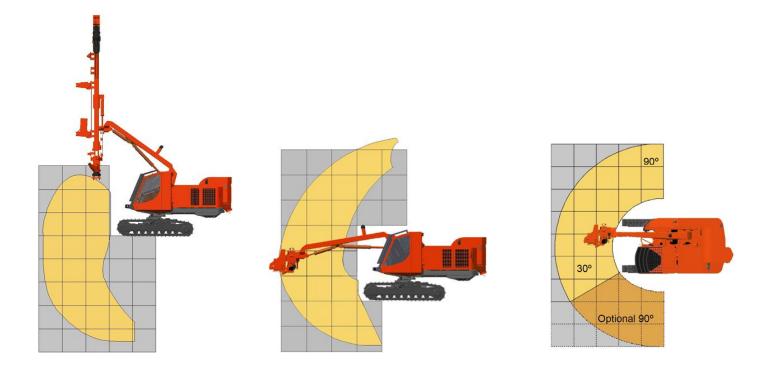
Note: not with 10' MF-rods. With hose reel only 10' or 12' rods. 51 mm (2") extension rods only 5 + 1. If several jaws selected please specify jaws assembled

SELECTION OF OPTIONS

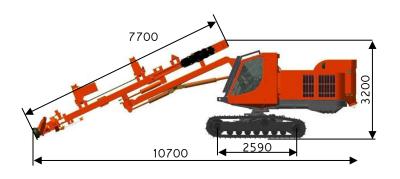
| | T 11 (100) |
|-----|--|
| 1. | Turnable superstructure 180 deg. |
| 2. | HF 810T rock drill |
| 3. | Alternative seat ISRI 6000 |
| 4. | Radio and CD-MP3 player |
| 5. | Reversing camera |
| 6. | Vacuum cleaner for cabin |
| 7. | TIM 5200 for vertical holes |
| 8. | TIM 5300 for vertical holes and depth measuring |
| 9. | TIM 6300 for inclined holes and depth measuring |
| 10. | TIM 6500 for inclined holes, depth measuring and laser level (douple receiver) |
| 11. | TIM 6700 with interface to external navigation system |
| 12. | GPS aiming device for TIM 6300 and TIM 6500 |
| 13. | TIM3D navigation system |
| 14. | Power extractor |
| 15. | Readyness for Power Extractor |
| 16. | Horizontal drilling kit including hose reel |
| 17. | Thread greasing |
| 18. | 1. Thread greasing with 5 gallon bucket |
| 19. | Anti- freeze system for air lines |
| 20. | Flushing control automatics |
| 21. | Shut down of suction for water holes |
| 22. | Dustmizer |
| | |

| 23. | Water injection system |
|-----|--|
| 24. | Guides for grousers |
| 25. | Three bar grouser plates |
| 26. | Towing hook |
| 27. | Xenon lights, 6 pcs |
| 28. | Hydraulic rear ground support |
| 29. | Winch with radio remote control and cable tightness automatics |
| 30. | Radio remote control for rear ground support, tramming and oscillation |
| 31. | Fuel powered heater for engine and cabin |
| 32. | Fuel powered heater for engine, cabin and water tank |
| 33. | Readyness for fuel powered heater |
| 34. | Electric fuel filling pump |
| 35. | Grinder Sandvik RG420H |
| 36. | Central lubrication system Sandvik |
| 37. | Biogradeable hydraulic oil, Shell Naturelle HFE 46 or HFE 68 |
| 38. | Kit for alternative steels, each |
| 39. | First service kit for DX800 |
| 40. | Special tools for HL 800T, field kit |
| 41. | Special tools for HL 800T, complete |
| 42. | Extra manuals |
| 43. | Security+ Silver, Gold or Platinum |
| 44. | SanRemo (Silver, Gold or Platinum) |
| 45. | LED lights not with laser |
| | |

COVERAGE AREA



TRAMMING AND TRANSPORT DIMENSIOS





| 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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