Technical Specification 05271-1 2005-04-18

RANGER 700 Rock pilot



APPLICATION

Ranger 700 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. It drills vertical, inclined or horizontal holes with a diameter of 64 - 115 mm (2 ½" - 4 ½") utilizing 38, 45 or 51 mm (1 ½", 1 ¾" or 2") extension rods.

Ranger 700 is equipped with HL 710, hydraulic top hammer rock drill. With high rotation torque, sufficient flushing and sophisticated ergonomic drilling control system the rig is well suited also in very fractured rock conditions. The rock drill and articulated boom are mounted on the turnable superstructure giving a drilling coverage of 17,6 m² (optionally 26,4 m²).

The powerpack of Ranger 700 consists of a Caterpillar diesel engine and a gearbox, which divides the power for hydraulic pumps and flushing air compressor. The powerpack is mounted crosswise at the rear end of the superstructure to keep counterweight on the opposite side of the boom and feed regardless of the drilling direction.

Ranger 700 has an ergonomic cabin to increase operator's safety and visibility. The cabin is certified for R.O.P.S. (ISO-3471 Roll-Over Protection Structure) and F.O.P.S. (ISO-3449 Falling Object Protection Structure). Windows are laminated for added safety. The noise level in the cabin is less than 80 dB(A). To keep dust at a minimum, the cabin is fitted with efficient filters for incoming fresh air. Adjustable seat, good visibility, adequate lighting and an optimum working temperature are among the many features ensuring a good operating environment. Drilling functions are proportionally controlled by one hydraulic joystick. Several routine functions e.g. antijamming are executed automatically. There are fewer levers to make it easy to use. Driving, rear jack and winch control can be done outside the cabin from the optional remote control box.

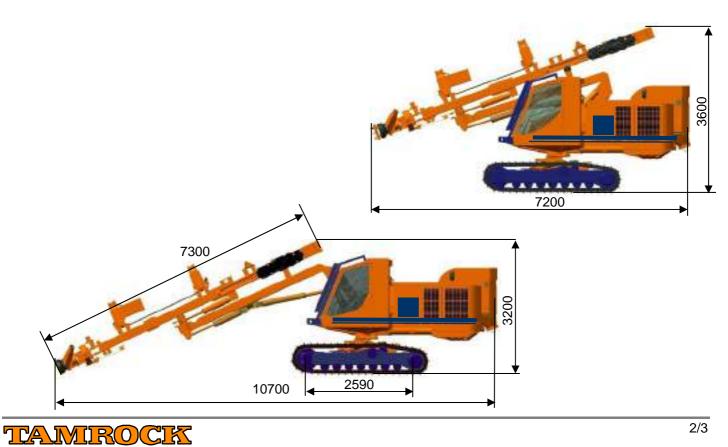
Typical applications for Ranger 700 are road cutting, pipeline drilling and foundation drilling, as well as production drilling in medium size quarries. Therefore Ranger 700 is most often used by construction contractors, mines and quarries, and also included in the equipment fleet of rental houses as well.

Optional 90°

DRILLING DIMENSIONS 90° 30°

TRANSPORT DIMENSIONS

1m 13



RANGER 700 Rock Pilot

STANDARD COMPONENTS

1. Rock drill HL 710, hydraulic

Chain feed CF 145H

Rod handler
 Boom
 Boom
 Carrier
 RH 714 incl. 1 set of jaws
 B800H, articulated
 Track mounted, turnable

superstructure

6. Powerpack Diesel driven, hydraulic

pumps and on-board com-

pressor

7. Hydraulic system Load sensing and open

center

Control system
 Operator's cabin
 Dust collection
 THC 700 Rock Pilot
 F.O.P.S. and R.O.P.S.
 DC 800 H, hydraulic

system

11. Working lights 9 pcs

12. Gauge set For accumulator pressure

checking

13. Reversing alarm

14. Manuals Service and spare

parts manuals: 2 x paper copy

2 x CD-ROM (Toolman)

15. EU-safety devices

TRANSPORT DIMENSIONS

Weight (without options) 14 800 kg
Width 2.5 m
Height 3.6 m / 3.2 m
Total length 7.2 m / 10.7 m

THE JAWS FOR DRILL STEELS

	Drill steel type	Drill steel diameter	Recommended hole diameter
1.	Extension rods	38 mm 1 ½"	64 - 70 mm 2 ½" - 2 ¾"
2.	MF-rod	38 mm 1 ½"	64 - 70 mm 2 ½" - 2 ¾"
3.	Extension rods	45 mm 1 ³ ⁄ ₄ "	76 - 89 mm 3" - 3 ½"
4.	MF-rod	45 mm 1 ¾"	76 - 89 mm 3" - 3 ½"
5.	MF-rod	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") / 14' steels only MF-type
- if several jaws selected please specify jaws assembled

SELECTION OF OPTIONS

- 1. Turnable superstructure 180°
- Air conditioning
- 3. Rod greasing system
- 4. P&Q electric vertical angle indicator (± 6 deg.)
- 5. Electric angle indicator TIM 2302 with aiming unit
- 6. Measuring system TIM 2303 with aiming unit
- 7. Laser based measuring system TIM 2305
- 8. Power extractor
- 9. Electric filling pump for refuelling
- Remote control box; for rear ground support, driving and oscillation
- 11. Remote control box + hydraulic winch with cable tightness automatics (replaces previous option)
- 12. Hydraulic rear ground support
- Three-bar grouser plates
- 14. Guides for grousers
- Fuel operated heater for cabin, hydr. oil and engine
- Flushing control automatics
- 17. Shut down of suction for water holes
- 18. Sanrock Mini H hydraulic bit grinder
- 19. Readyness for Power extractor
- 20. Towing hook
- 21. Primary separator PE 50

- 22. Horizontal drilling kit
- 23. Hose reel (not with 14' rods)
- 24. Movable drill steel support
- 25. Radio with CD player
- 26. Central lubrication system
- 27. Kit for alternative steels
- 28. Water injection system with tank
- 29. Water injection system w/o tank
- 30. Zero Dust system
- 31. Biogradeable hydraulic oil, Shell naturelle HFE 46 or HFE 68 (synthetic ester)
- 32. Extra manuals
- 33. First service kit for Ranger 700²
- 34. Special tools for HL 710, field kit ID 150 734 88
- 35. Special tools for HL 710, complete ID 150 730 78
- Antifreeze for air lines
- 37. Vacuum cleaner for cabin

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