APPLICATION

Pantera 1100 is a hydraulic, self-propelled, self-contained, crawler based surface drilling rig equipped with a cabin and a rod changer. It drills 89 - 140 mm (3 ½" - 5 ½") vertical, inclined or horizontal holes with 51 mm and 60 mm (2" and 2 3/8") extension rods or 102 - 152 mm (4" - 6") vertical, inclined or horizontal holes with 76 and 87 mm (3" and 3 ½") tubes. Good results in difficult ground conditions are obtained by using pilot tube drilling, where the first rod is replaced by a 76 or 87 mm (3" or 3 ½") special tube.

Pantera 1100 is equipped with HL 1000, hydraulic top hammer rock drill. With high rotation torque, proper flushing and sophisticated, ergonomic drilling control system the rig adapts itself easily into varying rock conditions. The rig has a telescopic boom for fast hole spotting and set up of the feed. The cylinder feed for max. 6.1 m (20’) starter rod for single pass drilling together with carousel type rod changer with a possibility to use 4.3 m (14’) rods add productivity of drilling.

The powerpack of Pantera 1100 consists of Caterpillar diesel engine and a gearbox, which divides the power for hydraulic pumps (two variable displacement pumps) and flushing air compressor.

All panel sections can be opened for easy access to service spots. Powerpack is mounted crosswise at the rear of the rig to balance the weight of the boom and the feed.

Pantera 1100 has an ergonomic and roomy full vision cabin to increase operator's comfort and efficiency. The cabin is certified for F.O.P.S. and R.O.P.S. (Falling Object Protection Structure and Roll-Over Protection Structure). Windows are safety laminated and the noise level in the cabin is less than 80 dB(A). Optimal visibility to the drilling spot is achieved by locating the control levers to both sides of the cabin. Drilling functions are proportionally controlled by one joystick on right hand side. Rod changer functions are controlled by another joystick on left hand side. Cabin exceeds all standards for operator's working environment.

Pantera 1100 is designed for efficient production drilling in medium large to large quarries or open pit mines and construction work sites. It suits well also for wall control and development works. To customize the rig it can be equipped with a variety of options to meet special requirements.
COVERAGE AREA

Vertical drilling

Horizontal drilling, sideways

Horizontal drilling, forwards

DIMENSIONS

Vertical drilling

Horizontal drilling, sideways

Horizontal drilling, forwards

Technical Specification
03511-2
2003-XX-XX

PANTERA 1100

COVERAGE AREA

9655

2830

8025

900

2010

3030

4010

2490

PANTERA 1100

TAMROCK
**STANDARD COMPONENTS**

1. **Rock drill** HL 1000, hydraulic
2. **Feed** LF 1514
3. **Rod changer** RC 1514
4. **Boom** ZB 1550 H, telescopic
5. **Carrier** FL 6, oscillating
6. **Powerpack** Diesel driven, hydraulic pumps and on board compressor
7. **Hydraulic system** Load sensing and open center
8. **Control system** THC Pro
9. **Operator’s cabin** Ergo Pro
10. **Dust collection system** DC 1520 H, hydraulic
11. **Working lights** 8 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**: 18 800 kg
- **Width**: 2.52 m
- **Height**: 3.2 m
- **Total length**: 10.5 m

**THE JAWS FOR DRILL STEELS**

<table>
<thead>
<tr>
<th>Drill steel type</th>
<th>Drill steel diameter</th>
<th>Recommended hole diameter</th>
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</thead>
<tbody>
<tr>
<td>1. Extension rods / MF rods</td>
<td>51 mm</td>
<td>2”</td>
</tr>
<tr>
<td></td>
<td>2”</td>
<td></td>
</tr>
<tr>
<td>2. MF-rods</td>
<td>60 mm</td>
<td>2 3/8”</td>
</tr>
<tr>
<td></td>
<td>102 - 140 mm</td>
<td>4” - 5 1/2”</td>
</tr>
<tr>
<td>3. Pilot tube</td>
<td>76 mm</td>
<td>3”</td>
</tr>
<tr>
<td></td>
<td>89 - 127 mm</td>
<td>3 1/2” - 5”</td>
</tr>
<tr>
<td>4. Pilot tube</td>
<td>87 mm</td>
<td>3”</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>102 - 152 mm</td>
<td>4” - 6”</td>
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</tbody>
</table>

**ADJUSTMENT INFORMATION FOR DELIVERY**

**Rotation motor**

1. Rotation motor OMT 315 for 76-102 mm, 3”-4” holes
2. Rotation motor OMT 500 for 102-152 mm, 4”-6” holes

**Extension rod lengths**

1. 3 660 mm 12’
2. 4 270 mm 14’

**SELECTION OF OPTIONS**

1. Heating and air conditioning
2. Rod greasing
3. P&Q electric angle indicator
4. Electric angle indicator TIM 2302
5. Measuring system TIM 2303
6. Laser based measuring system TIM 2305
7. Power extractor
8. Electric filling pump for refuelling
9. Remote control box & hydraulic winch (7 tons)
10. Rollers for rod changer RC 1514
11. Hose reel
12. Three-bar grouser plates
13. Guides for grousers
14. Flushing control automatics
15. Shut-down of suction for water holes
16. Water injection system
17. Water injection system w/o tank
18. Hydraulic ground support HM 75
19. Fuel heater for cabin, hydraulic oil and engine
20. Kit for alternative steels
21. Tube drilling kit
22. Movable drill steel support
23. Horizontal drilling support
24. Towing hook
25. Readyness for Power extractor
26. Extra manuals
27. First service kit for Pantera 1100
28. Special tools for HL 1000, field kit ID 880 822 99
29. Special tools for HL 1000, complete ID 151 737 78
30. Central lubrication system
31. Fast fill connection for fuel and water tanks
32. Fast fill connection for engine coolant, hydraulic oil, engine oil
33. Sanroc Mini H hydraulic bit grinder
34. Radio and CD player
35. Biodegradable hydraulic oil, Shell naturelle HFE 46 or HFE 68 (synthetic ester)