Leopard DI450 T3 SURFACE DRILLS

TECHNICAL SPECIFICATION

Leopard DI450 is a diesel powered, self-contained crawler mounted drilling rig designed for DTH blasthole drilling in the mining, quarry and construction industries. The drill is equipped with an operator’s cabin, fixed boom, dry dust collector and drill pipe changer. The design and the lay-out are according to latest state-of-art.

KEY FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hole diameter:</td>
<td>90 - 130 mm 3½&quot; – 5 1/8&quot;</td>
</tr>
<tr>
<td>Drill pipes:</td>
<td>76, 89 and 102 mm 3&quot;, 3½&quot; and 4&quot;</td>
</tr>
<tr>
<td>DTH-Hammer</td>
<td>3&quot;, 4&quot;</td>
</tr>
<tr>
<td>Engine output:</td>
<td>261 kW (Tier 3)</td>
</tr>
<tr>
<td>Air delivery:</td>
<td>18 m³/min at 24 bar 636 cfm at 348 psi</td>
</tr>
<tr>
<td>Production capacity:</td>
<td>1,5 Mt/a, one shift</td>
</tr>
<tr>
<td>Total weight:</td>
<td>23 150 kg</td>
</tr>
</tbody>
</table>
### ROTARY HEAD
- **Rotary head:** HTRH6
- **Drill pipes:** 76 / 89 / 102 3" / 3½" / 4"
- **Operating pressure:** 180 bar
- **Rotation speed:** 0...80 rpm
- **Maximum rotation torque:** 4300 Nm
- **Hammer lubrication:** Air / oil mist
- **Flushing:** Air
- **Weight:** 478 kg

### FEED
- **Feed type:** Chain feed
- **Total length:** 10050 mm
- **Rotary head travel:** 5990 mm
- **Length of tubes:** 5000 mm
- **Hose reel:** Standard
- **Feed extension travel:** 1200 mm
- **Feed/pull out force:** 32 kN
- **Feed swing:** -30/+95°
- **Feed tilt:** -35/+93°

### PIPE CHANGER
- **Pipechanger type:** Carousel
- **Storage capacity:** 7 + 1 (76 to 102 mm pipes)
- **Pipe length:** 5000 mm
- **Max. hole depth:** 40 m *

### BOOM
- **Boom type:** Fixed
- **Boom extension:** 500 mm (Optional)
- **Boom reach:** 3.6 m
- **Boom swing:** 0/+20°
- **Collaring height:** + 0.5 / -3.8 m
- **Horizontal holes:** To the right

### CABIN
- **Cabin type:** HVC550
- **Certificates:** FOPS and ROPS
- **Noise level in the cabin:** <80 dB (A)
- **Air conditioning:** Standard *
- **Pressurization:** Standard
- **Seat:** Ergonomic, adjustable
- **Vibration dampening:** Standard
- **Windows:** Safety laminated, tinted

* Air condition system contains fluorinated greenhouse gases HFC-134a

### HYDRAULIC SYSTEM
- **Filtration rate:** 10 micron
- **Cooling capacity:** Up to +55°C ambient
- **Hydraulic oil tank:** 350 l
- **Shank lubrication device:** SLU 50

### CONTROL SYSTEM
- **Control system type:** PLC controlled electro-proportional hydraulics
- **Tramming/boom/ drilling control:** PLC controlled
- **User interface:** Electro proportional joysticks and screen
- **Antijamming system:** Standard
- **Collaring control:** Automatic
- **Voltage:** 24 VDC

### DUST COLLECTOR
- **Dust collector type:** X-150
- **Capacity/vacuum:** 51 m³/min at 500 mm WG
- **Filter elements/material:** 4 pcs / fiber
- **Total filter surface:** 16 m²
- **Primary cyclone:** Standard
- **Movable suction head:** Standard

### CARRIER
- **Track type:** FL 6
- **Grouser plate width:** 400 mm
- **Ground contact length:** 2450 mm
- **Ground pressure:** 1.2...1.3 kg/cm²
- **Ground clearance:** 360 mm
- **Oscillation angles:** +/- 10°
- **Tramming force:** 140 kN
- **Max. tramming speed:** 1.6 / 3.2 km/h

### ENGINE
- **Engine type:** Caterpillar C9 (Tier 3)
- **Number of cylinders:** 6
- **Engine output:** 261 kW / 1800 rpm
- **Transmission type:** Direct

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2. TECHNICAL SPECIFICATION – Leopard DI450 T3 - 1 – 2017-07-10
STANDARD COMPONENTS

Rotary head HTRH6.0
Chain feed, with hose reel
Pipe changer, carousel type
Fixed boom
Cabin HVC550
Carrier, track mounted
Powerpack, diesel driven, hydraulic pumps and onboard compressor
Dust collector X-150
Hydraulic system, load sensing
Control system
Working lights, 11 pcs, 3 pcs in engine compartment
1 Set Manuals, paper copy
1 Set Manuals, CD rom

THE JAWS FOR DRILL STEELS

<table>
<thead>
<tr>
<th>DRILL STEEL TYPE</th>
<th>DRILL STEEL DIAMETER</th>
<th>RECOMMENDED HOLE DIAMETER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipes</td>
<td>76/89 mm</td>
<td>89 - 127 mm 3½” - 5”</td>
</tr>
<tr>
<td>Pipes</td>
<td>102 mm</td>
<td>114 - 130 mm 4½” - 5 1/8”</td>
</tr>
</tbody>
</table>

SELECTION OF OPTIONS

Additional tool box below cabin
Radio with CD-MP3 player
Reversing camera
Rock shield for lights and lower part of the window
Roller blinds for cabin windows
Vacuum cleaner for cabin
GPS aiming device for TIM and TIMi inclined holes
TIM 5200 for vertical holes
TIM 5300 for vertical holes and depth measuring
TIM 5600 for vertical and horizontal holes and depth measuring
TIM 6300 for inclined holes and depth measuring
TIM 6500 for inclined holes, depth measuring and laser level
TIM3D Hole navigation system
DTH hammer service tool (requires radio remote control option)
Horizontal drilling kit
Kit for alternative pipes, each
Pipe winch (requires radio remote control option)
Thread greasing
Telescopic boom
Anti-freeze system for thread greasing
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
Guides for grousers
Hand-held led working light with accumulator
Hydraulic rear ground support
Hydraulic winch (requires radio remote control option)
Manual compressor oil filling pump
Pressure washer (with water injection option only)
Radio remote control for carrier and pipe winch and hammer service tool
Single bar grouser plates
Towing hook
Xenon lights, 11 pcs
Disengagement clutch for compressor, manual
Ether starting aid for engine without ether bottle
Fuel powered engine heater, extra large
Fuel powered engine heater, large
Jump start device (high current el. socket)
Water injection system
Grinder Sandvik RG420H
Extra bit basket
Extra manuals, price will be added according to pricing sheet
First service kit for DI450
Service agreement - select level from extra item
SanRemo - select level from extra item
## COVERAGE AREA AND DIMENSIONS

![Diagram showing coverage area and dimensions](image)

### DIMENSIONS

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>23,150 kg</td>
</tr>
<tr>
<td>Width</td>
<td>2.49 m</td>
</tr>
<tr>
<td>Height</td>
<td>a/b, 3.37/3.29 m</td>
</tr>
<tr>
<td>Total length</td>
<td>c/d, 12.6/12.1 m</td>
</tr>
</tbody>
</table>

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