

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

| Hole diameter: | 90 - 130 mm 3½" – 5 1/8" | |
|----------------------|---|--|
| Drill pipes: | 76, 89 and 102 mm 3", 3½" and 4" | |
| DTH-Hammer | 3", 4" | |
| Engine output: | 261 kW (Tier 3) | |
| Air delivery | 18 m3/min at 24 bar 636 cfm at 348 psi | |
| Production capacity: | 1,5 Mt/a, one shift | |
| Total weight : | 23 150 kg | |



| ROTARY HEAD | |
|-------------------------|-----------------------------|
| Rotary head | HTRH6 |
| Drill pipes | 76 / 89 / 102 3" / 3½" / 4" |
| Operating pressure | 180 bar |
| Rotation speed | 080 rpm |
| Maximum rotation torque | 4300 Nm |
| Hammer lubrication | Air / oil mist |
| Flushing | Air |
| Weight | 478 kg |

| Chain feed |
|------------|
| 10050 mm |
| 5990 mm |
| 5000 mm |
| Standard |
| 1200 mm |
| 32 kN |
| -30/+95° |
| -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 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

POWERPACK

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

| Screw compressor type | GHH CF 1000H | |
|---------------------------------|--|--|
| Air filters | 2 pcs, dry type | |
| Fuel tank | 930 litres | |
| | | |
| HYDRAULIC SYSTEM | | |
| Filtration rate | 10 micron | |
| Cooling capacity | Up to +55°C ambient | |
| Hydraulic oil tank | 3501 | |
| 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 | |

| PLC controlled electro- proportional hydraulics | |
|--|--|
| PLC controlled | |
| Electro proportional joysticks and screen | |
| Standard | |
| Automatic | |
| 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 | 1.21.3 kg/cm2 |
| Ground clearance | 360 mm |
| Oscillation angles | +/- 10° |
| Tramming force | 140 kN |
| Max. tramming speed | 1.6 / 3.2 km/h |

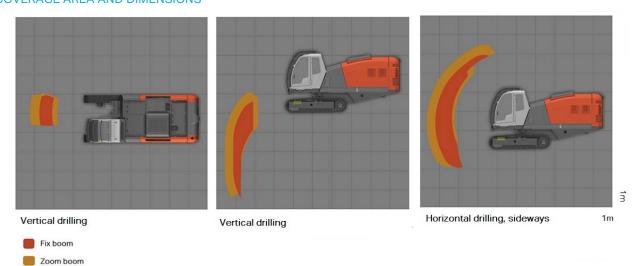
STANDARD COMPONENTS Rotary head HTRH6.0 Chain feed, with hose reel Pipe changer, carousel type Fixed boom Cabin HVC550 Carrier, track mounted Powerpack, diesel driven, hydraulic pumps and onboard compressor Dust collector X-150 Hydraulic system, load sensing Control system Working lights, 11 pcs, 3 pcs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

| THE JAWS FOR DRILL STEELS | | |
|---------------------------|-------------|-------------------|
| DRILL STEEL TYPE | DRILL STEEL | RECOMMENDED |
| | DIAMETER | HOLE DIAMETER |
| Pipes | 76/89 mm | 89 - 127 mm 3½" - |
| | | 5" |
| Pipes | 102 mm | 114 - 130 mm 4½" |
| | | - 5 1/8" |

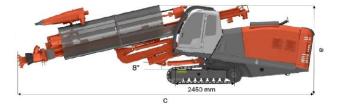
| SELECTION OF OPTIONS |
|--|
| Additional tool box below cabin |
| Radio with CD-MP3 player |
| Reversing camera |
| Rock shield for lights and lower part of the window |
| Roller blinds for cabin windows |
| Vacuum cleaner for cabin |
| GPS aiming device for TIM and TIMi inclined holes |
| TIM 5200 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







Fix boom



DIMENSIONS

| Weight | 23 150 kg |
|--------------|------------------|
| Width | 2.49 m |
| Height | a/b, 3.37/3.29 m |
| Total length | c/d, 12.6/12.1 m |

Sandvik Mining and Rock Technology 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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