

# Leopard DI450 T4 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", 31⁄2" and 4"
DTH-Hammer	3", 4"
Engine output:	261 kW (Tier 4)
Air delivery	18 m3/min at 24 bar 636 cfm at 348 psi
Production capacity:	1,5 Mt/a, one shift
Total weight :	23 370 kg



ROTARY HEAD	
Rotary head	HTRH6
Drill pipes	76 / 89 / 102 3" / 31/2" / 4"
Operating pressure	180 bar
Rotation speed	080 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 *

Fixed
500 mm (Optional)
3,6 m
0/+20°
+ 0,5 / -3,8 m
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

<sup>\*</sup> Air condition system contains fluorinated greenhouse gases HFC-134a

## POWERPACK

Engine type	Caterpillar C9.3 (Tier 4 final)
DEF tank	AdBlue 47 I
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
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	1.21.3 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 Safety cage for feed 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

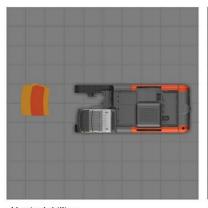
THE JAWS FOR DRILL STEELS		
DRILL STEEL TYPE	DRILL STEEL	RECOMMENDED
	DIAMETER	HOLE DIAMETER
Pipes	76/89 mm	89 - 127 mm 3½" -
		5"
Pipes	102 mm	114 - 130 mm 4½"
		- 5 1/8"

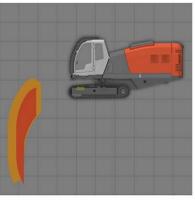
1 Set Manuals, paper copy 1 Set Manuals, CD rom

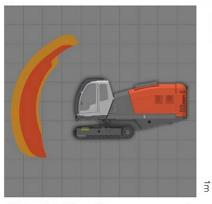
SELECTION OF OPTIONS
SELECTION OF OPTIONS
Additional tool box below cabin
Radio with CD-MP3 player
Reversing camera
Rock shield for lights and lower part of the window
Roller blinds for cabin windows
Vacuum cleaner for cabin
GPS aiming device for TIM and TIMi inclined holes
TIM 5200 for vertical holes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







Vertical drilling

Horizontal drilling, sideways

1m

Vertical drilling

Fix boom
Zoom boom

Zoom boom



Fix boom



### **DIMENSIONS**

Weight	23 370 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.

CONSTRUCTION.SANDVIK.COM