SANDVIK

Leopard DI450 S5
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:	250kW (Stage 5, Tier4F)
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



ENG/METRIC. © Sandvik Mining and Rock Solutions. SANDVIK is a registered trademark owned by Sandvik Intellectual Property AB in Sweden and other countries.

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

POWERPACK	
Engine type	Caterpillar C9.3B (Stage 5, Tier4FI
DEF tank	AdBlue 93,7 litres
Number of cylinders	6
Engine output	250 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	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

ENG/METRIC. © Sandvik Mining and Rock Solutions. SANDVIK is a registered trademark owned by Sandvik Intellectual Property AB in Sweden and other countries.

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
Guides for grousers
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 pc Operator's manual (paper copy)

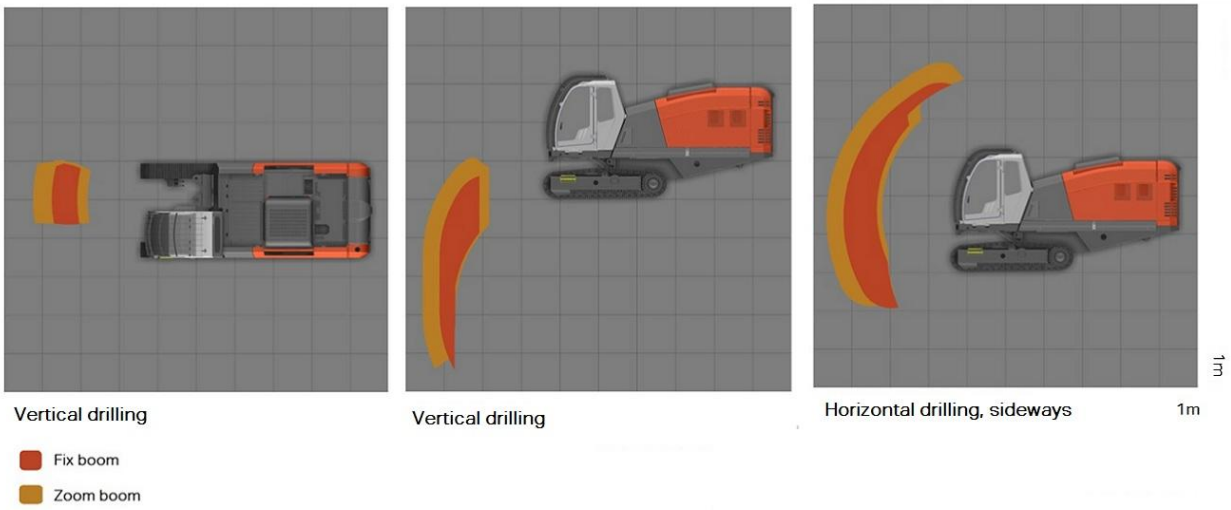
THE JAWS FOR DRILL STEELS

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

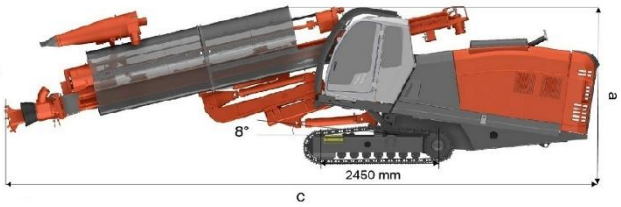
SELECTION OF OPTIONS
Alternative seat, 3-point seat belt and air cushioning(*)
Radio, CD/USB MP3/WMA, DAB/DAB+/DMB, Bluetooth®
Reversing camera
Rock shield for lights and lower part of the window
Roller blinds for cabin windows
Vacuum cleaner for cabin
Driller's Notes - MWD Data Collection for TIM3D
Driller's Office planning software (one-year license)
Knowledge Box for TIM3D or readiness (4G/LTE and WiFi for My Sandvik)
Knowledge Box for TIM5300-6700 (4G/LTE for My Sandvik, no WiFi)
+ My Sandvik Insight, 1-yr license, BG01722724
+ My Sandvik Wireless Drill Plan Transfer 1-yr license, BG01765055 (Productivity)
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
GPS aiming device for TIM 6000-series
TIMi for inclined holes with touchscreen and TIM3D readiness
TIM3D drill navigation system (Trimble)
TIM3D drill navigation system (Leica)
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
Central lubrication system Lincoln
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
Fire suppression, Ansul, automatic
Fire suppression, Ansul, manual triggering
Hand-held led working light with accumulator
Hydraulic rear ground support
Hydraulic winch (requires radio remote control option)
Remote Screen Interface for TIMi and TIM3D
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
Led lights, 9 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)
Sampling device
Water injection system
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

ENG/METRIC. © Sandvik Mining and Rock Solutions. SANDVIK is a registered trademark owned by Sandvik Intellectual Property AB in Sweden and other countries.

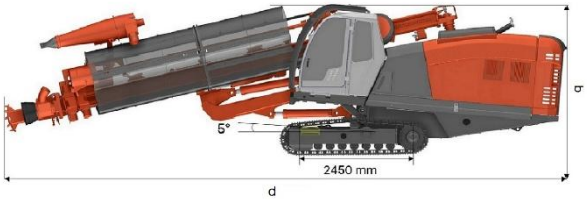
Coverage area and dimensions



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 Solutions 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.

ENG/METRIC. © Sandvik Mining and Rock Solutions. SANDVIK is a registered trademark owned by Sandvik Intellectual Property AB in Sweden and other countries.