

# Sandvik DI550

## Surface Down the hole Drills

**TIER 4**



The DI550 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.

Hole Diameter:	90 - 165 mm (3½" – 6 ½")
Drill Pipes:	76, 89, 102 and 114 mm ( 3, 3½", 4 and 4½")
DTH-Hammer:	3", 4" and 5"
Engine Output:	328 kW
Air Delivery:	24,4 m <sup>3</sup> /min, at 24 bar
Production Capacity:	~1,85 Mt/a, one shift
Total Weight (without options and tools)	24.050 kg

## HYDRAULIC HTRH5 ROTARY HEAD

Rotary head type	HTRH5
Drill tube diameters	76 / 89 / 102 / 114 mm
Drill tube diameters	3" / 3½" / 4" / 4½"
Hydro motor	OMTS 400
Operating pressure	180 bar
Rotation speed	0...80 rpm
Max Rotation torque	4300 Nm
Weight	478 kg

## FEED

Feed type	Chain feed
Length of feed	10 050 mm
Rotation head travel	5 990 mm
Length of tubes	5000 mm
Feed/pull out force	32 kN
Feed extension travel	1200 mm
Feed swing	-30/+95°
Feed tilt	-35/+93°
Weight, incl. rod changer	3460 kg

## ROD CHANGER

Rod changer type	Carousel, 360° rotatable
Storage capacity	7+1 (76 to 102 mm pipes) 5+1 (114 mm drill pipe)
Tube length	5000 mm
Max. hole length (102 mm)	40 m

## BOOM

Boom type	Fixed
Boom extension, option	500 mm
Boom lift	+40/-24°
Boom swing	0/+20°
Collaring height	390 mm

## CARRIER

Track type	FL 6
Grouser plate width	400 mm
Ground pressure	1.2... 1.3 kg/cm <sup>2</sup>
Ground clearance	360 mm
Oscillation angles	+/- 10°
Tramming force *	140 kN
Tramming speed *	1.6 / 3.2 km/h

\* Depending on drive gear

## POWERPACK

Engine type	CAT C13, Tier 4 Interim
Number of cylinders	6
Engine output	328 kW/ 1800 rpm
Transmission type	Direct
Hydraulic pumps	1 axial / 3 gear pumps
Screw compressor type	GHH CF 1000H
Flushing Air capacity	24,4 m <sup>3</sup> /min
Flushing air pressure	24 bar
Air cleaner	2 pcs, dry type
Fuel tank	930 litres
Weight	

## 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

Type	Electric / hydraulic
Collaring system	
Antijamming system	Electric / hydraulic
Voltage	24 VDC

## DUST COLLECTOR

Dust collector type	X-150
Capacity/vacuum	5 l m <sup>3</sup> /min at 500 mm WG
Filter elements/material	4 pcs
Total filter surface	16 m <sup>2</sup>
Hydraulic motor output	11 kW
Movable suction head	Standard
Weight	300 kg

## CABIN

Cabin type	HVC550
Controls	Drilling and tramming
Noise level in the cabin	<80 dB (A)
Heaters	Standard
Seat	Ergonomic, adjustable
Vibration dampening	Standard
Windows	Safety laminated, with wipers

## STANDARD COMPONENTS

Rotary head	HTRH5 with OMTS 400 hydro motor
Feed	Chain feed
Rod changer	Carousel type, drill pipe magazine diameter 102mm (7+1)
Boom	Fixed
Carrier	FL 6, oscillating
Powerpack	Diesel driven, hydraulic pumps and on board compressor
Hydraulic system	Hydraulic/ electric
Control system	Electric / hydraulic
Cabin	Heating, led-lights, toolbox below operator's seat, safety grill on front window, flashing beacon
Dust collector	X-150
Dust collector pre-separator on boom	
Working halogen lights 7 pcs in front and 4 pcs in rear	
Working light at refuelling area (in engine compartment)	
Reversing alarm	IS221
Tracks	Three-bar grouser plates
Antijamming device	
Working light at refueling area, led-light	
Manuals	1 x paper copy 1 x CD-ROM (ToolMan)

## SELECTION ON OPTIONS

1.	Air conditioning
2.	Roller shutter for cabin windows
3.	Cabin vacuum cleaner
4.	Radio with CD-MP3 player
5.	Reversing camera (two cameras)
6.	Additional tool box below cabin
7.	Shield for front lower lights and lower part of window
8.	Zenon lights (front 7 pcs and rear 4 pcs)
9.	Additional working lights in engine compartment (3 pcs)
10.	Hand-held working light
11.	Telescopic boom
12.	Front ground support
13.	Rear ground support
14.	Single-bar grouser plates
15.	Guides for grousers
16.	Carrier winch with radio remote control
17.	Towing hook
18.	Fuel operated preheater
19.	Disengagement clutch for compressor
20.	Ether starting help cartridge
21.	Jump start device (high current el. socket)
22.	Water injection system (350 liter)
23.	Dust minimizing system (with water injection option only)
24.	Pressure washer (with water injection option only)
25.	Central lubrication system
26.	Drill pipe thread greasing system
27.	Antifreezing system for thread greasing
28.	Drilling pipe magazine diameter 76mm (7+1)

## THE JAWS FOR DRILL STEELS

Drill steel type	Drill steel diameter	Recommended hole diameter
Tubes	76/89 mm,	89 - 127 mm 3½" - 5"
Tubes	102/114 mm,	114 - 165 mm 4½" - 6 ½"

## ADJUSTMENT INFORMATION FOR DELIVERY

Drill tube length and diameters

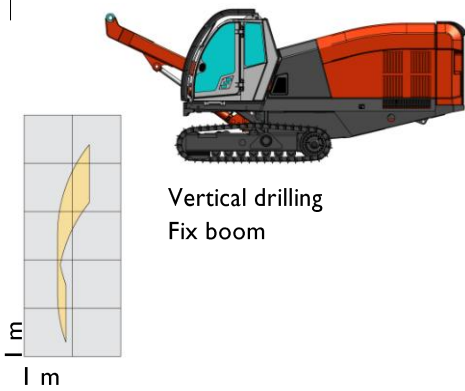
5000 mm	16,7 ft
76, 89, 102 or 114 mm	3", 3½", 4" or 4½"

## RECOMMENDED DTH HAMMER

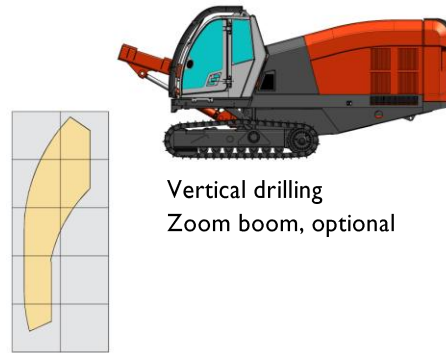
Sandvik RH550

29.	Drill pipe magazine diameter 89mm (7+1)
30.	Drill pipe magazine diameter 114mm (5+1)
31.	Winch for drill pipes with remote control
32.	Hammer service tool with remote control
33.	Bit basket
34.	Grinder for drill bits
35.	Electric fuel filling pump
36.	Fast fuel filling system Wiggins
37.	Electric hydraulic oil filling pump
38.	Fire suppression system
39.	TIM 5200 system, vertical holes
40.	TIM 5300 system, vertical holes, depth measurement
41.	TIM 5600 system, vertical & horizontal holes, depth measurement
42.	TIM 6300 system, inclined holes, depth measuring
43.	TIM 6300 system with optional GPS compass, inclined holes, depth measuring
44.	TIM 6500 system, inclined holes, depth measuring, laser level
45.	TIM 6500 system with optional GPS compass, inclined holes, depth measuring, laser level
46.	First service kit DM 76
47.	First service kit DM 89
48.	First service kit DM 102
49.	First service kit DM 114
50.	1 set of extra manuals

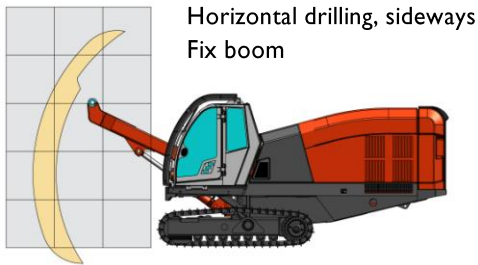
## COVERAGE AREA



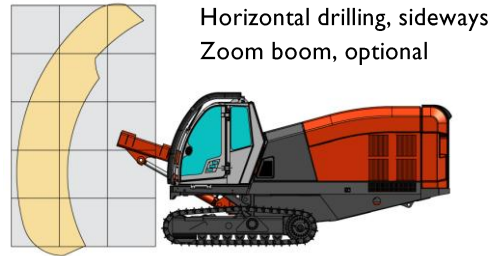
Vertical drilling  
Fix boom



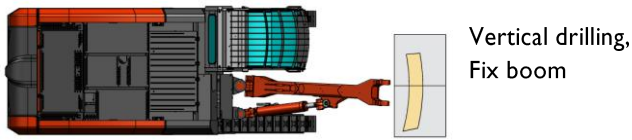
Vertical drilling  
Zoom boom, optional



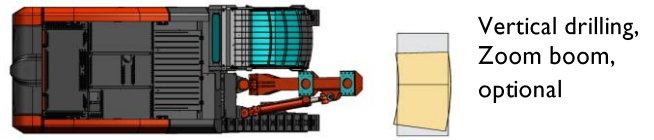
Horizontal drilling, sideways  
Fix boom



Horizontal drilling, sideways  
Zoom boom, optional



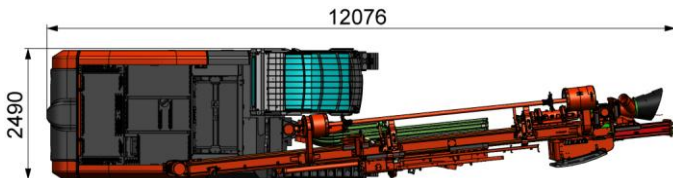
Vertical drilling,  
Fix boom



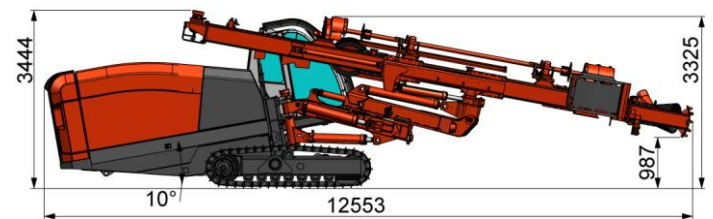
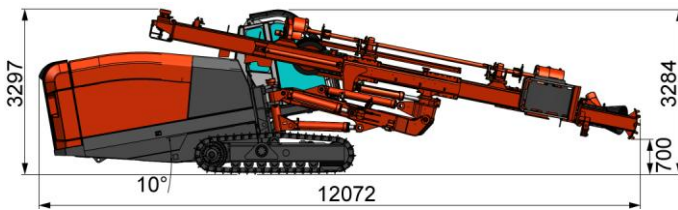
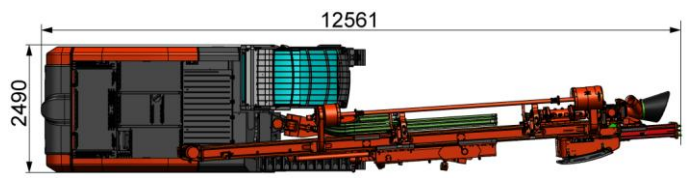
Vertical drilling,  
Zoom boom,  
optional

## TRANSPORT DIMENSIONS

### Fix boom



### Zoom boom



Weight	24 050 kg
Total width	2.49 m
Height	3.29 m
Total length	12.1 m

Weight	25 000 kg
Total width	2.49 m
Height	3.44 m
Total length	12.6 m

Sandvik Mining and Construction reserves the right to charge this specification without further notice.

Sandvik Mining and Construction Oy  
P.O.Box 100, FIN-33311 Tampere, Finland  
Tel. +358 205 44 121, Telefax +358 205 44 4771  
www.sandvik.com

