

# Sandvik DI600

## Surface DTH Drills



The DI600 is a diesel powered, self-contained crawler mounted drilling rig designed for DTH blasthole drilling in medium large to large quarries and open pit mines. The drill is equipped with an operator's cabin, fix boom, dry dust collector and drill pipe changer.

Hole Diameter:	89 - 190 mm (3½" - 7½")
Rock Tools:	89 / 102 / 114 / 127mm (3 ½" / 4" / 4 ½" / 5")
DTH-Hammer:	3" - 6½"
Engine Power: (at 1.800 rpm)	CAT: 403 kW (540 hp)
Air Delivery:	28 m <sup>3</sup> /min (999cfm), 24 bar (348 psi)
Production Capacity:	* > 2,5 Mt/year
Total Weight	29 000 kg

\* 1 shift operation, 5 working days/week and 250 days/year

**HYDRAULIC ROTARY HEAD**

Rotary head type	HD rotary head
Drill tube diameters	89 / 102 / 114 / 127mm 3 ½" / 4" / 4 ½" / 5"
Hydromotor	DANFOSS OMV500 EM
Operating pressure	0-180 bar
Rotation speed	0 - 100 rpm
Rotation torque	0 - 4.500 Nm
DTH-Hammer lubrication	Air / oil mist
Weight	385 kg

**FEED**

Feed type	Chain feed
Length of feed	10 700 mm
Rotary head travel	7050 mm
Length of tubes	6 000 mm
Feed/pull out force	39 kN
Retaining centralizer	w. centering and uncoupling
Feed extension travel	1500 mm
Feed swing	-30/+30°
Feed tilt	20 - 66°
Weight	3950 kg

**ROD CHANGER**

Rod changer type	Carousel
Storage capacity 89-102 mm 114mm/ 127 mm	6+1 pipes 5+1/4+1 pipes
Tube length	6000 mm
Max. hole length	42 m (7x6 m)
Weight without rods	450 kg

**BOOM**

Boom type	Fix
Boom lift	+40/-20°
Boom swing (left/right)	+0/-30°
Drilling coverage on flat	0.7 m <sup>2</sup>
Collaring height	+0.7 /-2.7 m

**CARRIER**

Track type	D4
Grouser plate width	430 mm
Ground contact length	2 823 mm
Ground pressure	1.2 kg/cm <sup>2</sup>
Ground clearance	375 mm
Oscillation angles	+/- 5°
Tramming force	180 kN
Tramming speed	0-2/0-3,5 km/h

**POWERPACK**

Engine type	CAT C15 or
Number of cylinders	6
Engine output	403 kW/ 1800 rpm or
Transmission type	Gear box
Hydraulic pumps	Variable/gear
Screw compressor type	GHH CF, double stage
Air flushing capacity	28 m <sup>3</sup> /min
Flushing air pressure	24 bar
Air cleaner	2 pcs, dry type with ejector and safety element
Fuel tank	900 l
Fuel saving system	Standard
Weight	2550 kg

**HYDRAULIC SYSTEM**

Filtration rate	10 micron
Cooling capacity	up to +52°C ambient
Hydraulic oil tank	400 l
Shank lubrication device	OE370

**CONTROL SYSTEM**

Type	Hydraulic/ electric
Collaring system	Standard
Antijamming system	Hydraulic/ electric
Voltage	24 VDC

**DUST COLLECTOR**

Dust collector type	HXL 900
Capacity/vacuum	82 m <sup>3</sup> /min at 1000 mm vacuum H <sub>2</sub> O
Filter elements/material	36 pcs/fiber
Total filter surface	43,2 m <sup>2</sup>
Hydraulic motor output	20 kW
Movable suction head	Standard
Weight	500 kg

**CABIN**

Cabin type	LK 100
Certificates	F.O.P.S. and R.O.P.S.
Noise level in the cabin	81 dB (A)
Controls	Drilling and tramming
Heaters and AC	Standard
Seat	Multiposition
Vibration dampening	Standard
Windows	Safety laminated, tinted, with wiper



## STANDARD COMPONENTS

Rotary head	HD rotary head
Feed	Chain feed
Rod changer	Carousel type
Boom	Fix
Carrier	D4, oscillating
Powerpack	Diesel driven, hydraulic pumps and on board compressor
Hydraulic system	Load sensing and open center
Control system	Hydraulic/ electric
Operator's cabin	LK 100
Dust collector	HXL 900
Working lights	Front 4 pcs + 1 pc Rear 2 pcs
FM radio	With tape player
Electrick angle indicator	IS22
Reversing camera	

Manuals	Operator and Maintenance-, Technical- and Spare parts manuals: 1 x paper copy 1 x CD-ROM (ToolMan)
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## THE JAWS FOR DRILL STEELS

Drill steel type	Drill steel diameter	Recommended hole diameter
Tubes	89/102 mm	89 - 127 mm
Tubes	114 mm	127 - 140 mm
Tubes	127 mm	140-190mm

## ADJUSTMENT INFORMATION FOR DELIVERY Drill pipe length and diameters

6.000 mm	20'
89, 102, 114, or 127mm	3 ½", 4", 4 ½", or 5"

## Rotation motor

DANFOSS OMV500 EM

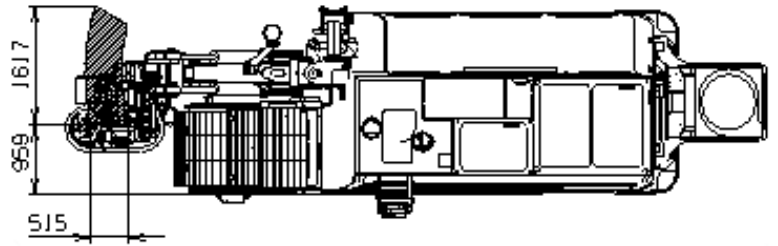
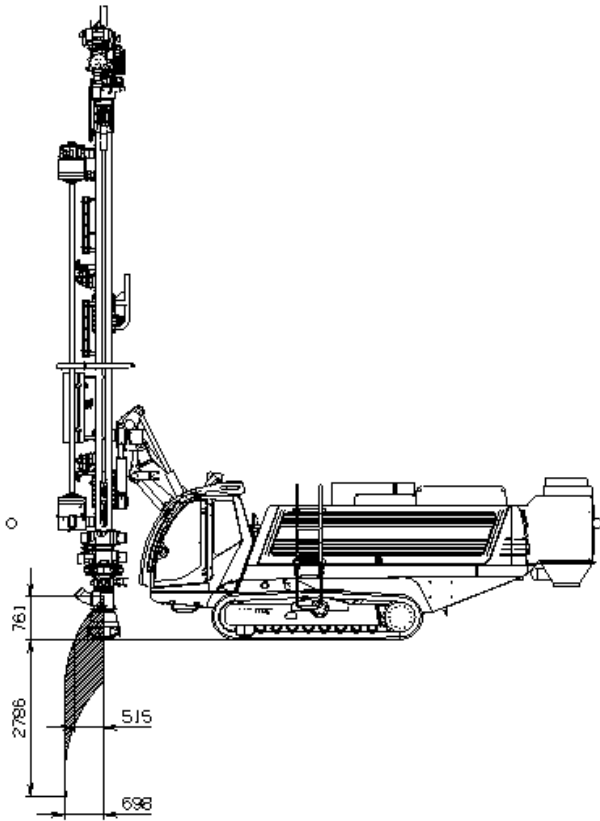
## SELECTION OF OPTIONS

Tropical package for high humid ambient conditions DI600  
 Fuel operated heater (WEBASTO)  
 Bit holder basket, lockable (hole diameter has to be defined)  
 Suction hood for inclined holes  
 Suction hood for inclined holes, quick adjustable  
 Depth indicator for el. angle display (chain feed)  
 Angle indicator IS22ID with PC-connection for drill hole dat  
 Electric hydraulic oil filling pump DI600-series  
 Disengagement clutch for compressor (hand lever operated)  
 Arctic package  
 Cabin pressure filter (pressurizer)  
 Sandvik central lubricator  
 Water / foam injection system (500 liter) DI600  
 Working light in engine compartment (LED-Handlamp with 5m sp  
 Working light in engine compartment (2 fixed halogen head-lamp)  
 Ether starting help cartridge  
 Fast refueling connection (Wiggins) DI600-series  
 Fuel tank cap lockable  
 Rock shield (stone protection fence to front screen) DI600  
 Precleaner on feed hydr. tiltable T600  
 Working platform (down foldable)  
 Bit & hammer breaking device 5" hammer  
 Bit & hammer breaking device 4" hammer  
 Bit & hammer breaking device 6" hammer  
 Shock absorber floating spindle Foremost DM 114 mm  
 Fire extinguisher system Ansul DI600-series  
 Fire extinguisher system to be mount on working platform  
 Electric filling pump for refuelling DI600-series

Windshield for compressor controls  
 Drill pipe thread greasing system DI600-series  
 Hydraulic test station DI600-series  
 Jump start device (high current el. socket)  
 CUMMINS QSX 15 diesel engine instead of CAT C15  
 Drill pipe magazin diameter 102mm (6+1) DI600  
 Drillpipemagazin diameter 89mm (6+1) DI600  
 Drillpipemagazin diameter 114mm (6+1) DI600  
 Drillpipemagazin diamter 127mm (4+1) DI600  
 Flashing beacon  
 Antijamming device  
 Radio with CD-MP3 player  
 Additional Foam Canister 25L  
 First service kit DM 89  
 First service kit DM 102  
 First service kit DM 114  
 First service kit DM 127  
 Filter set for 2000 h  
 1 set of extra manuals  
 Security+ Gold



**COVERAGE AREA**



Weight	29 000 kg
Width	2.523 m
Height	3.303 m
Total length	12.752 m

**TRAMMING AND TRANSPORT DIMENSIS**

