

# SANDVIK DD32I-40C DEVELOPMENT DRILL

TECHNICAL SPECIFICATION



Sandvik DD32I is a compact two-boom jumbo for demanding conditions and multiple application. The jumbo is capable of face drilling, cross cut drilling and bolt hole drilling.

The drill's various options make it suitable for a range of conditions and tasks. The proven and robust SB40 boom provides a coverage of 49 m<sup>2</sup>. A selection of fixed and telescopic feeds are available for a variety of applications.

The new rock drill RD520 provides smooth and efficient drilling.

Sandvik DD32I offers a new look and improved serviceability and usability over predecessors Sandvik DD320 and Sandvik DD420.



## HYDRAULIC ROCK DRILL

Rock drill	RD520	
Percussion Power	20 kW	
Percussion Pressure	Max. 220 bar	
Percussion rate	74 Hz	
Stabilizer	Hydraulic	
Rotation Speed	Max. 400 rpm (with OMS80)	
Rotation torque	400 Nm (with OMS80)	
Hole size (drifting)	43 - 64 mm	1.7 - 2.5 in
Hole size (cut hole)	76 - 127 mm	2.9 - 5 in
Recommended Rod	T38 - R32 - H35	
	T38 - R35 - R39	
Shank adapter	T38 (male)	
Weight	225 kg	496 lb
Length	1010 mm	39.7 in
Profile height	90 mm	3.5 in
Shank lubrication device	Air / oil mist, SLU-2	
Air consumption	250 - 350 l/min	
Oil consumption	180 - 250 g/h	

## BOOM

Boom	SB40	
Parallel coverage	44.5 m <sup>2</sup>	146 ft <sup>2</sup>
Parallelism	Automatic hydraulic	
Boom extension	1050 mm	41.3 in
Boom weight, net	2100 kg	4630 lb
Roll-over angle	358°	

## FEED

Feed	TF500-12'	
Feed Force	Max. 25 kN	
Feed Extension	1350 mm	53 in

## FEED DIMENSIONS

Feed TF500	Total Length	Hole Length	Rod Length	Net Weight
10 ft*	4660 mm	2830 mm	3090 mm	470 kg
	183.4 in	111.4 in	121.6 in	1036 lb
12 ft	5270 mm	3440 mm	3700 mm	500 kg
	207.4 in	135.4 in	145.6 in	1102 lb
14 ft*	5880 mm	4050 mm	4305 mm	530 kg
	231.4 in	159.4 in	169.4 in	1168 lb
16 ft*	6490 mm	4660 mm	4915 mm	560 kg
	255.5 in	183.4 in	193.5 in	1234 lb

\*Alternative options features/components    \*\* Additional options features/components

## HYDRAULIC SYSTEM

Powerpack	HPP 555 (55kW)	
Percussion pump	110 cc (variable)	
Rotation pump	33 cc (gear)	
Filtration size	20 micron (pressure)	
	10 micron (return)	
Oil tank volume	270 liters	71.3 US gal
Tank filling	Electric pump	
Oil cooler	Water cooled. Cooling capacity 2 x 30 kW	

## CONTROL SYSTEM

Type	THC561, hydraulic	
Manual boom control	Direct control	
	Fully proportional	
	Hydraulic parallelism	
Drilling Control	Feed/percussion control	
Automatic cycle	Stop and return automatics	

## GREASING SYSTEM

Centralized greasing points	Carrier
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## ELECTRIC SYSTEM

Total input power	135kW
Main switch	MSE20
IP classification	See spec sheet TS2-132
Standard voltages	380-690 VAC
Starting method	Star delta starter 380VAC-690VAC Soft starter 480VAC, 575VAC (USC) Direct on line (DOL) 1000 VAC
Voltage fluctuation	± 10%
Automatic cable reel	TCR3E with spooling system
Cable reel control (in & Out)	Operator station + Remote control
Cable plug holder	Hook type holder & cable pull sock
Front lights (combined working & driving)	6 x 35 W HID (24V)
Rear working lights	2 x 35 W HID (24V)
Rear driving lights	2 x 35 W HID (24V)
Parking rear brake/park lights	2 x Red LED
Stair and service lights	LED

## FLUSHING SYSTEM

Flushing	Water
Water pump type	WBP2
Water pump capacity	100 l/min
Water pump inlet pressure	2 bar (Min.)
Flushing water pressure	10 - 15 bar
Air compressor	CTN10, 1m <sup>3</sup> /min (7bar)

## TRAMMING &amp; OPERATOR STATION

Tramming Speed	Horizontal: 16 km/h
	14% = 1:7 = 8° 6.0 km/h
Gradeability / Inclination	Max. 15° / 5°
Safety cabin	FOPS/ROPS (ISO3449/ISO3471)
Operation	Standing drilling, seated tramming
Sound pressure level according to EN791	Operator station: 80 db(A)
Seat	Ergonomic, adjustable for tramming including seat belt
Reversing alarm	Standard
Air conditioning	Filtering capacity EU6/7
Windows	Safety laminated, with wiper Stainless steel windows frames

## CARRIER

Carrier	NC7	
Carrier type	Wheel mounted, frame steering	
Frame steering	± 40°	
Rear oscillation	± 10°	
Ground clearance	320 mm	12.5 in
Diesel Engine	MB OM904LA, 110kW. Tier 3, Stage 3A	
Exhaust catalyzer	Standard	
Transmission	Hydrodynamic, Spicer T20 000	
Axles	Spicer	
Tyres	12.00 - 20	
Service Brakes	SAHR type, fail save wet disc brakes	
Brakes parking emergency	SAHR type, fail save wet disc brakes	
Fuel tank	140 liters	37 US gal
Hydraulic jacks	Vertical (front), Vertical (rear)	
Hand throttle	Standard	
Total weight Depending on options	Around 22500 kg	Around 49600 lb

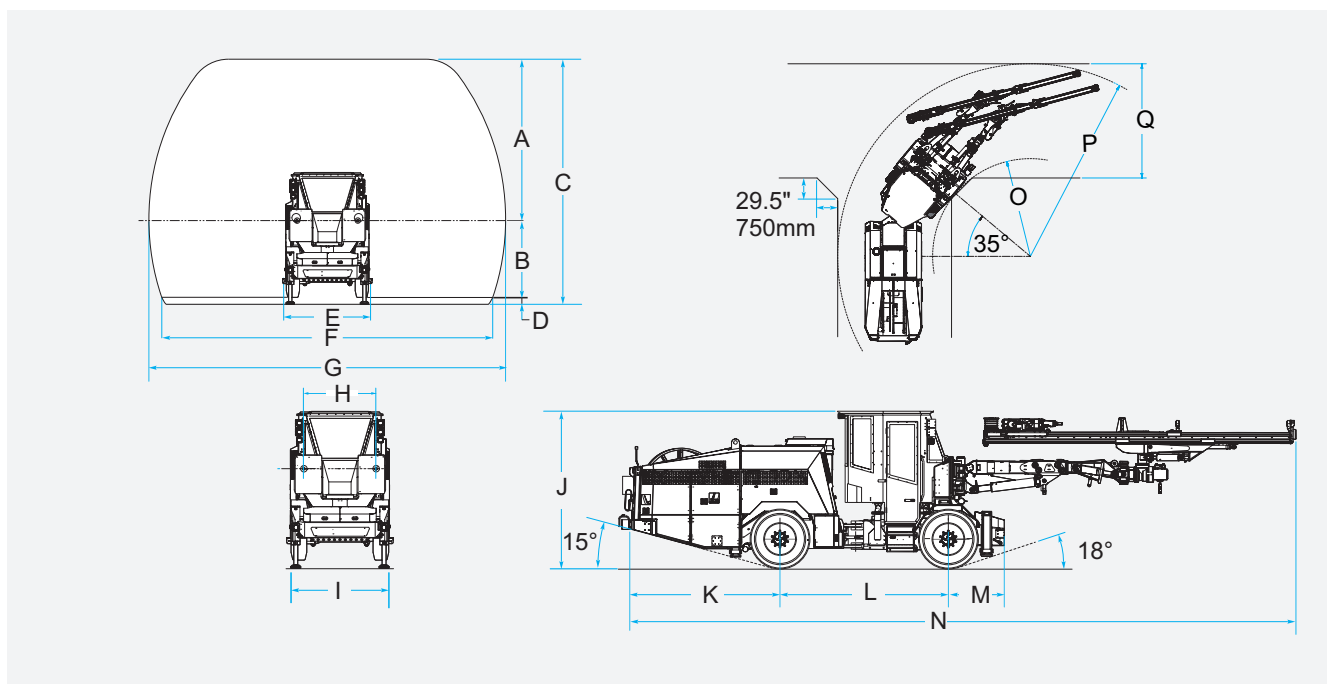
## OPTIONS &amp; PACKAGES

<b>Rock drill</b> Rock drill*	HLX5 instead of RD520
<b>Boom</b> Boom*	SB40NV instead of SB40
<b>Feed</b> TF Feed lengths* Telescopic feed*	10, 14, 16 ft TFX6/12. 8/14
<b>Drilling options</b> Rod retainer**	TRRI included safety wire adds 35mm length of the TF-Feed For TF feed, included TRR1 and safety wire (not for bolting)
Two rods system**	
<b>Instrumentation</b> Angle, position and depth measurement with data logging** MWD analysis**	TCAD + TLOG with iSure I-II design & reporting iSURE III Analysis (only with TCAD option)

## OPTIONS &amp; PACKAGES

<b>Hydraulic system</b> Tank filling* Biodegradable oils* Vacuum pump for hydraulic oil**	Manual pump Shell Naturelle HFE46/HFE68
<b>Control system</b> Constant speed drilling**	Replaces feed/percussion control
<b>Cleaning system</b> Pressure cleaning system with reel** HP cleaning system with reel**	5 - 15 bar Max. 180 bar
<b>Greasing system</b> Greasing unit with pump, reel and nozzle** Automatic greasing system**	Manual Carrier and booms
<b>Electric system</b> Optional voltage* Electric cable rubber or PUR**  Sealed AGM batteries* Battery jump start** Extra working lights** Amber strobe light** Auxiliary outlet**	1000 VAC, 50 Hz Depending on voltage (See spec TS2-121) 2 x 12 V, 50Ah  2 x 35W HID (24V) Flashing (24V) 3-phase network voltage (380-690VAC) 230V outlet max.16A (carrier)
<b>Flushing system</b> Flushing flow supervision* Air mist flushing**  Water flushing with air cleaning of hole** External air connection** Water hose reel with water hose** Additional air for hole cleaning with air**	For 2 booms External / internal water/air connection(incl. air cleaner & flushing flow supervision) External water + CTN16 (11kW)  IP5 air cleaner THR2.5E + 38 mm (1"1/2); 65m 1 x 60l air receiver
<b>Fire suppression system</b> Hand held fire extinguisher** Manual fire suppression system** Automatic fire suppression system** FS1000**	1 pc or 2 pc, Type ABC 6 nozzles (incl.1 x extinguisher) 6 nozzles (incl.1 x extinguisher) Above 0°C
<b>Tramming &amp; operator station</b> Reduced tramming speed** Stainless steel cabin* Reversing camera** Cabin heating** Electric outlet & CD player readiness** CD player/radio/MP3** Boot washer** Front screen protection bar**	3rd gear lockout FOPS (ISO3449) On rear and side During drilling and tramming 12VDC  At each cabin acces
<b>Carrier</b> Tyres* Fast filling systems** Wheel chocks and holders** Rod rack on carrier side**	Foam filled tyres Complete 2 pieces For 10-16ft rods and two shank adapters
<b>Extra items</b> Ground fault and overcurrent protection** Spare rock drill** Spare wheel assembly** Special tools for rock drill** Documentation**	VYK  Standard or foam filled  Extra manuals
<b>Packages</b> Regional packages** Harsh water packages*  Antifreezing**	LAM, USC, AUS, EUR Basic or advanced (see spec sheet TS2-049) Block heater for engine Hydraulic oil tank heater Water circuit flushing

\*Alternative options features/components    \*\* Additional options features/components



## DIMENSIONS - DRILLING

Model	Units	COVERAGE AREA							WIDTH DIMENSIONS	
		A	B	C	D	E	F	G	H	I
DD321-40C	mm	3990	1870	6060	200	2150	8200	8820	1500	2150
	in	157	73.6	238.6	7.9	84.6	322.8	347.2	59	84.6

## DIMENSIONS - TRAMMING

Model	Units	MACHINE DIMENSIONS					CORNERING		
		J	K	L	M	N	O	P	Q
DD321-40 TF510*	mm	2950	2840	3175	1060	11800	3200	6200	3500
	in	116.1	111.8	125	41.7	464.5	126	244	137.8
DD321-40 TF512	mm	2950	2840	3175	1060	12350	3200	6300	3700
	in	116.1	111.8	125	41.7	486	126	248	145.6
DD321-40 TF514*	mm	2950	2840	3175	1060	12550	3200	6450	3850
	in	116.1	111.8	125	41.7	494	126	254	151.6
DD321-40 TF516*	mm	2950	2840	3175	1060	13000	3200	6600	4000
	in	116.1	111.8	125	41.7	511	126	260	157.4

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