



DT912D TUNNELING DRILLS

TECHNICAL SPECIFICATION

Sandvik DT912D is a diesel-hydraulic jumbo with a boom for fast and accurate drifting and production drilling of 12 – 125 m² cross sections. The electric-controlled drilling system with added automatic functions and different optional instrumentation levels enable productive and high quality excavation.

Sandvik RD525 rock drill delivers superior performance with high lifetime. Sandvik SB150i universal boom has a large optimum shaped coverage and full automatic parallelism. The boom can also be used for cross-cutting, bolt hole drilling and extension drilling applications.

The powerful 4-wheel-drive center-articulated carrier ensures rapid and safe tramming with a good balance. The noise and vibration insulated safety cabin provides an ergonomic workplace with excellent visibility for both tramming and drilling.

KEY FEATURES

Coverage area	14 000 x 10 000 mm (150 m ²)
Hydraulic rock drill	1 x RD525, 25 kW
Drill feed	1 x TF500-16', 14 - 20 ft
Boom	1 x SB150i
Drilling control system	SICA platform
Hole length	Up to 6 180 mm
Turning width (T-section)	4 500 mm
Tramming / drilling width	2 500 mm / 3 000 mm
Tramming / drilling height	3 590 mm / 3 590 mm 3 190 mm with cabin lifting system
Tramming length	14 900 mm (with TF500-16')
Total weight	24 000 kg depending on options



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HYDRAULIC ROCK DRILL

Type of rock drill	RD525 (TS2-236)
Percussion power	25 kW
Percussion pressure	Max. 235 bar
Percussion rate	93 Hz
Stabilizer	Hydraulic
Rotation speed	Max. 400 rpm (with OMS80)
Rotation torque	400 Nm (with OMS80)
Hole size (drifting)	43 - 64 mm
Hole size (cut hole)	76 - 127 mm
Recommended rod	T38 - H35 - R32 T38 - R39 - R35
Shank adapter	T38 (male)
Weight	225 kg
Length	1 010 mm
Profile height	90 mm

FEED

Type of feed	TF500-14' Optional	TF500-16' Standard	TF500-18' Optional	TF500-20' Optional
Feed force	Max. 25 kN	Max. 25 kN	Max. 25 kN	Max. 25 kN
Feed extension	1 650 mm	1 650 mm	1 650 mm	1 650 mm
Total length	5 965 mm	6 575 mm	7 185 mm	7 770 mm
Hole length	4 050 mm	4 660 mm	5 270 mm	5 880 mm
Rod length	4 305 mm	4 915 mm	5 525 mm	6 135 mm
Net weight	530 kg	560 kg	590 kg	620 kg

BOOM

Type of boom	SB150i
Parallel coverage	150 m²
Parallelism	Hydraulic
Boom extension	3 200 mm
Feed extension	1 650 mm
Boom weight, net	3 300 kg
Roll-over angle	358°

HYDRAULIC SYSTEM

Operating principle	Electric pilot control
Powerpack	Diesel engine, 205 kW
Filtration size (pressure / return)	20µ / 10µ
Oil tank volume	290 liters
Filling pump for hydraulic oil	Electric
Cooler for hydraulic oil	OA30 oil-to-air (1 x 30 kW)

DRILLING CONTROL SYSTEM

Type of control system	SICA platform
Manual boom control	Manual boom control with hydraulic parallelism (proportionally controlled) Feed swing parallelism disconnection
Drilling controls	Feed / percussion control, Feed / percussion manual control Torque control
Automatic cycle	One hole drilling automatics
Adjustable drilling control parameters in operator panel	Feed-Percussion power level, Feed force deviation

DRILLING CONTROL SYSTEM (CONTINUE)

Other functions from operator panel	Drilling mode selection, Return automatics selection, Flushing selection, Hole finishing mode selection, Adjustable threading mode, Fast feed
Collaring	Manual and auto collaring, Stepless feed speed adjustment with reverse, Rock detect
Ramp to full power	Two stage ramp to full power
Different drilling settings for hole types	Normal hole, Reaming hole
Drilling supervision	Anti-jamming; shank lubrication oil flow and oil level, stabilator pressure, rock detect, air pressure, water pressure, water flow (opt), air flow (opt)
Onboard diagnostics	Through the user interface
Parameter handling	Factory settings restore, User settings restore
Feed swing parallelism bypass	With basic and silver package
OptiMine®	With configuration readiness
Cable kit	Spare parts programming

ELECTRIC SYSTEM

Front lights (combined working and driving)	8 x 50 W LED (24VDC)
Rear lights (combined working and driving)	2 x 50 W LED (24 VDC)
Rear brake / park lights	2 x Red LED
Amber flashing light	LED (24 V)

AIR AND WATER SYSTEM

Air mist flushing	Flushing flow supervision
Water booster pump type	Diaphragm pump
Water pump capacity	max. 12.7 lpm
Water tank	1 000 liters
Flushing water pressure	10 - 15 bar
Shank lubrication device	SLU-1 (air / oil mist)
Air compressor	4 m³/min (10 bar)
Oil consumption	180 - 250 g/h
Air consumption	250 - 350 l/min

OPERATOR'S SAFETY CABIN

Safety cabin certification	FOPS / ROPS (ISO 3449 / 3471)
Operation	Graphical user interface Seat for operator (two position; tramming and drilling)
Sound pressure level	According to EN16228 Operator station: 73 dB(A) Emitted: 125 dB(A)
Vibrations	Vibrations dampening
Floor	Water-washable
Air conditioning	EU6/7 filtering capacity
Cabin heating	During tramming and drilling
Audio system	CD / MP3 player with radio
Stairs and indoors lights	LED lights
Electricity outlets	1 x 12 VDC and CD player readiness

CARRIER

Type of carrier	C900D
Steering system	Axle steering in engine end Orbitrol
Carrier articulation	± 40°
Rear oscillation	± 8°
Ground clearance	330 mm
Diesel engine	B6.7, 194 kW, Tier 4F, Stage V
Transmission	Hydrostatic
Axles	Dana Spicer
Tires	14.00-24 PR 28
Service brakes	Hydraulically operated wet disc brakes
Parking and emergency brakes	SAHR type, fail safe wet disc brakes
Tramming speed	12 km/h (Horizontal) 7 km/h (14% = 1:7 = 8°)
Gradeability	28 % = 1:3,5 = 15°
Fuel tank	400 liters
Hydraulic jacks	2 x TJ60 (front), 2 x TJ75 (rear)
Hand throttle	Standard
Centralized greasing points	Carrier
Hand held fire extinguisher	1 x 7.7 or 9 kg (type ABC)
Wheel chocks and holders	2 pcs
Tramming alarm	Standard
Knowledge Box™	Connectivity solution (TS2-535)
Colour scheme	Sandvik
Documentation	1 x Operator's manual 1 x Maintenance manual 1 x Technical manual (in English only) 1 x Parts manual (in English only) 2 x Toolman USB key

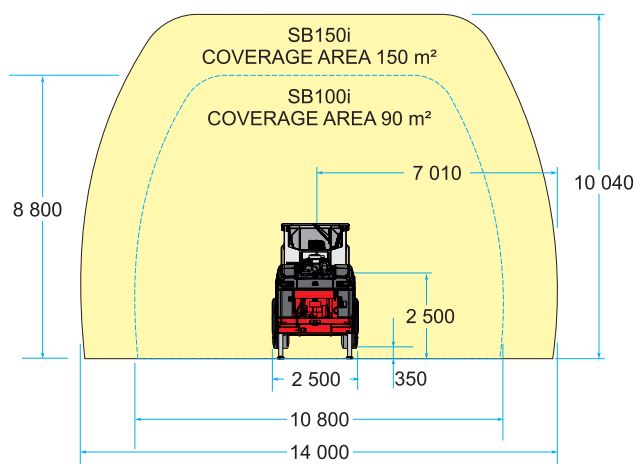
OPTIONAL FEATURES AND PACKAGES

Rock drill	
*Type of rock drill	RD520 (OMS80 or OMS125) RDX5 (OMS80 or OMS125) RD525 (OMS125)
Boom	
*Type of boom	SB100i (gold and platinum package)
Feed	
*Feed length	14', 18', 20'
*Telescopic feed	TFX6/12, TFX8/14, TFX10/16, TFX12/18
Rod retainer	SCR with TF feed (incl. safety wire) TRR1 with TFX feed (incl. safety wire)
Hydraulic system	
*Filling pump for hydraulic oil	Manual
By pass oil filter	
Vacuum pump	For hydraulic oils
*Biodegradable oils	Sandvik oils
Instrumentation options	
Silver package	Angle and depth measurement Drill plan visualisation on-board Includes iSURE I Basic (drill plan design) DrillConnect mobile application : Connectivity through Knowledge box™ for easy data transfer to and from the rig
Gold package	
Platinum package	
iBOLT systematic bolting	Gold package + semi and full automatic face drilling
Data transfert	Includes iSURE I Basic (drill plan design)
Access detector or protector	WLAN including remote GUI view Specification TS2-211

OPTIONAL FEATURES AND PACKAGES

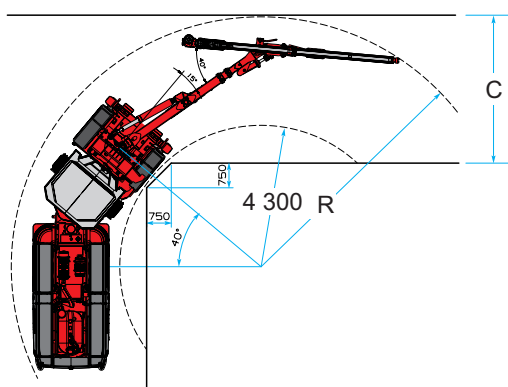
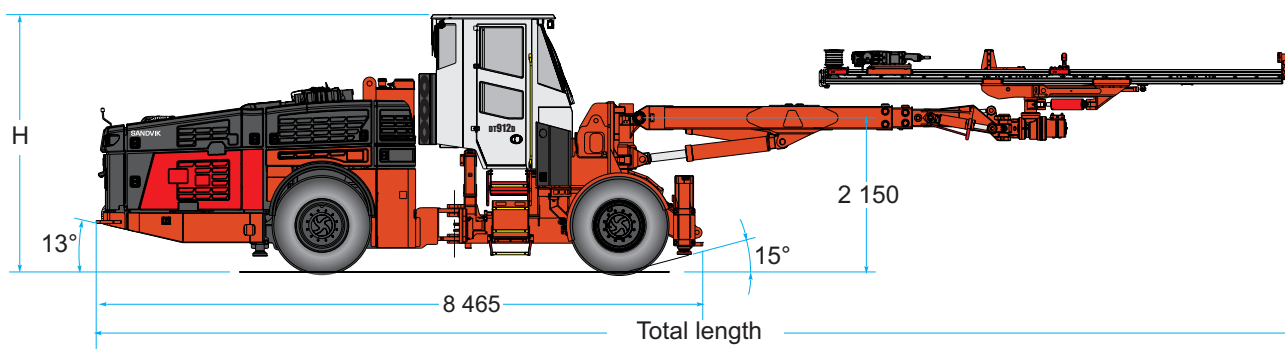
Electric system	
Battery jump start	
Spot lights	Remote controlled 2 pcs
Indicator lights for jacks up	Sensors in the jacks
Generator 5.5 kW	2 x 230 V and 1 x 400 V outlets
Amber flashing light	4 pcs at the machine corner
Cleaning system	
HP system with reel	Up to 180 bar (TS2-343)
Greasing systems	
Manual system	Specification TS2-463
Automatic system	Carrier, booms
Operator's safety canopy	
*Optional cabin	Stainless steel cabin (FOPS 3449)
Elevation cabin	FOPS, height min: 3 190 mm
Safety grill	For cabin
Boot washer	At cabin each entrance
Fire suppression system	
Manual or Automatic system	Ansul, 6 nozzles (TS2-460)
Automatic system	Sandvik Eclipse™ (TS2-461)
Carrier	
*Diesel engine	B6.7, 205 kW, Tier3
*Fast filling system	Complete
*Rod rack on carrier side	For 12-18 ft rods (Max. 400 kg)
Tramming cameras	Rear and side
Registration plate	Bracket with light
Front jack extension	Sequence control (one by one)
Power supply for MiniSSE	
Extra items	
Spare rock drill	RD525, RD520 or RDX5
Spare wheel assembly	14.00-24 PR 28
Special tools for rock drill	Field tool set Complete tool set
Tunnel laser set	
Documentation	Extra, Toolman manuals
iSURE®	iSURE II Plus annual license (Advanced drill and blast design including round reports) iSURE III Premium annual license (MWD including pull out analyses) iSURE IV Pro annual license (Tunnel development KPI's) EUR
*Package: Regional	Block heater for engine, heater for hydraulic oil, Water circuit flushing with air, antifreeze adding in water circuit with antifreezing liquid receiver.
*Package: Anti-freezing	
*Package: TRS Rod handling system	TRS rod handler for 10 - 12 ft extention rods SCR rod retainer
*Package: Start-up drilling tools	For 45 - 51 mm hole

**) Replaces standard feature*



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Standard cabin	3 590 mm
Cabin with lifting system	Min. 3 190 mm Max. 3 590 mm

	TF500-14'	TF500-16'	TF500-18'	TF500-20'
Feed length	5 940 mm	6 550 mm	7 160 mm	7 770 mm
Total length	16 417 mm	16 722 mm	17 027 mm	17 332 mm



	Radius (R)	T-cross (C)
TF500-14'	7 600	4 500
TF500-16'	7 600	4 500
TF500-18'	7 800	4 700
TF500-20'	7 950	4 850

All dimensions in mm

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.

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