



DT621 TUNNELING DRILL

TECHNICAL SPECIFICATION

Sandvik DT621 is a compact two-boom jumbo for demanding conditions and multiple applications. The jumbo is capable of face drilling, cross-cut drilling and bolt hole drilling.

The drill rig various options make it suitable for a range of conditions and tasks. The proven and robust SB40 boom provides coverage of 49 m². 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 DT621 offers a best serviceability and usability.

KEY FEATURES

Coverage area	49 m ² (8 820 x 6 060)
Hydraulic rock drills	2 x RD520, 20 kW
Drilling feeds	2 x TF512, 12 - 16 ft
Booms	2 x SB40
Control system	2 x THC561
Hole length	Up to 4 660 mm
Drift size class (H x W)	4 000 x 4 000 mm
Turning width (T-section)	3 500 mm
Transport width	2 150 mm
Transport height	2 350 mm / 3 200 mm
Transport length	12 350 mm
Total weight	22 000 kg depending on options



HYDRAULIC ROCK DRILL

Type of rock drill	RD520 (TS2-235)
Percussion power	20 kW
Percussion pressure	Max. 220 bar
Percussion rate	74 Hz
Stabilizer	Hydraulic
Rotation speed	Max. 270 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 - R32 - H35 T38 - R35 - R39
Shank adapter (male)	T38
Weight	225 kg
Length	1 010 mm
Profile height	90 mm

DRILLING FEED

Type of feed	TF500-12' Standard	TF500-14' Optional	TF500-16' Optional
Feed force	Max. 25 kN	Max. 25 kN	Max. 25 kN
Total length	5 270 mm	5 880 mm	6 490 mm
Hole length	3 440 mm	4 050 mm	4 660 mm
Rod length	3 700 mm	4 305 mm	4 915 mm
Net weight	500 kg	530 kg	560 kg

BOOM

Type of boom	SB40 (TS2-231)
Parallel coverage	44.5 m ²
Parallelism	Automatic hydraulic
Boom extension	1 050 mm
Feed extension	1 350 mm
Boom weight, net	2 100 kg
Roll-over angle	358°

HYDRAULIC SYSTEM

Powerpack	HPP555 (2 x 55 kW)
Filtration (pressure / return)	20 µ / 10 µ
Oil tank volume	270 liters (drilling)
Oil tank filling pump	Electric
Cooler for hydraulic oil	OW30 oil-to-water (2 x 30 kW)

DRILLING CONTROL SYSTEM

Type of control system	THC561 (TS2-362)
Operating principle	Hydraulic control
Manual boom control	Direct control Fully proportional Hydraulic parallelism
Drilling control	Feed / percussion control Flushing control
Automatic cycle	Stop and return automatics

ELECTRIC SYSTEM

Standard voltage	380 - 690 V (± 10%)
Total installed power	135 kW
Main switch gear	MSE 20
IP classification	Specification TS2-132
Starting method	Star delta 380 V - 690 V Soft starter 575 V
Automatic cable reel	TCR3E with spooling system
Cable reel control	Operator station and remote control at rear machine
Batteries	2 x 12 V, 145 Ah
Front lights (combined working and driving)	6 x 50 W LED (4 200 lm, 6 000 K)
Rear lights (combined working and driving)	4 x 50 W LED (4 200 lm, 6 000 K)
Parking rear brake / park lights	2 x Red LED
Stair and service light	LED (24 V)

AIR AND WATER SYSTEM

Flushing of holes	By water
Water booster pump	WBP2
Water pump capacity	100 l/min
Water pump inlet pressure	2 bar (Min.)
Flushing water pressure	10 - 15 bar
Shank lubrication device	SLU2 (air / oil mist)
Air compressor	CTN10, 1 m ³ /min (7 bar)
Rock drill oil consumption	180 - 250 g/h
Rock drill air consumption	250 - 350 l/min

OPERATOR'S SAFETY CANOPY

Canopy certification	FOPS (ISO 3449)
Unit height in tramming	3 200 mm
Operation	Standing drilling, seated tramming
Operator's seat	For tramming Adjustable with seat belt
Sound pressure level according to EN 16228	Operator station: 100 dB(A)

CARRIER

Type of carrier	NC7 (frame-steered)
Carrier articulation	± 40°
Rear axle oscillation	± 10°
Ground clearance	320 mm
Diesel engine	MB OM904LA, 110 kW, Tier 3, Stage IIIA
Exhaust catalyzer	Standard
Transmission	Hydrodynamic, Spicer T20 000
Axles	Spicer
Tires	12.00-20
Service brakes	SAHR type, fail save wet disc brakes
Parking and emergency brakes	SAHR type, fail save wet disc brakes
Tramming speed	16 km/h (Horizontal) 6 km/h (14%=1:7=8°)
Gradeability / sideways tilt	Max. 15° / 5° (according to EN 16228-2)
Rod rack on carrier side	For 10 - 16 ft rods and two shank adapters
Fuel tank	140 liters
Carrier stabilization	2 x Vertical (front) 2 x Vertical (rear)
Centralized greasing points	Specification TS2-463
Hand held fire extinguisher	1 x 7.7 or 9 kg (type ABC)
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 RDX5 (OMS80) instead of RD520

Drilling feed

*Feed length 14', 16'
*Telescopic feed TFX6/12, TFX8/14
Rod retainer TRR1 incl. safety wire,
add 35 mm length of the feed
Two rods system TRS included TRR1 with safety wire.

Boom

*Type of boom SB40NV instead of SB40

Hydraulic system

*Oil tank filling pump Manual
Cooler for hydraulic oil OA30 oil-to-air (2 x 30 kW)
Vacuum pump For hydraulic system

Drilling control system

Constant speed drilling Replaces feed / percussion control
Instrumentation TMS+ D2 for TFX-feed
TMS+ DDSS2 for TF-feed
TCAD+ with iSURE I Basic (Drill plan design)
Access detector Mandatory in Europe (TS2-211)

OPTIONAL FEATURES AND PACKAGES

Electric system

*Optional voltage 1 000 V (50 or 60 Hz)
with Direct-On-Line starter
Specification TS2-121
*Electric cables VYK
Ground fault and overcurrent protection
Auxiliary outlet 1 x 110 V or 1 x 230 V, 16 A
Dewatering pump outlet readiness Site voltage 380 - 690 V (Max. 8 kW)
Amber flashing light LED (24 V)
Battery jump start Option

Air and water system

Air mist flushing kit IP5 air cleaner and flow control
Flushing flow control 2 booms
*End of hole air flushing Including CT28 air compressor
Water hose reel with water hose THR2.5E with 38 mm (1 ½"), 65 m
Compressed air outlet Quick coupling

Cleaning system

LP system with reel Up to 15 bar (TS2-343)
HP system with reel Up to 180 bar (TS2-343)

Greasing systems

Manual system Greasing unit with pump, reel and nozzle (TS2-463)
Automatic system Carrier and booms

Operator's safety cabin / canopy

*Safety cabin FOPS / ROPS (ISO 3449 / 3471)
incl. air conditioning
FOPS (ISO 3449)
*Stainless steel cabin During tramming and drilling
Cabin heating CD player / radio / MP3 with loud-
Cabin audio system speakers and 12 V outlet
Boot washer At each access
Front screen protection grill For cabin or canopy

Fire suppression system

Spare hand held extinguisher 1 or 2 x 7.7 or 9 kg (type ABC)
Manual or automatic system Ansul, 6 nozzles (TS2-460)
Automatic system Sandvik Eclipse™ (TS2-461)

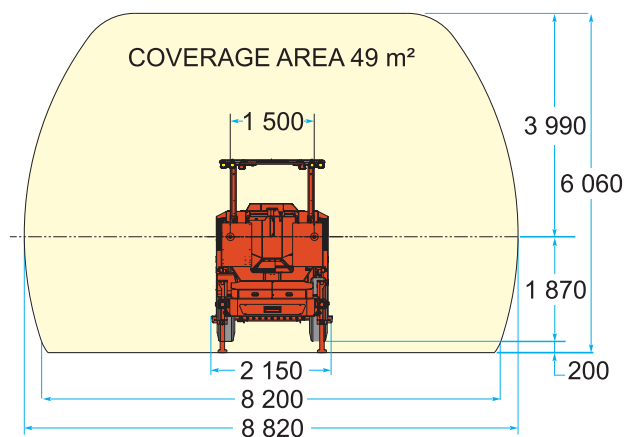
Carrier

Reduced tramming speed 3 rd gear lockout
*Diesel engine B4.5, 129 kW, Stage V
*Foam filled tires 4 pcs
Fast filling and evacuation Wiggins (complete)
system
Wheel chocks and holders 2 Sets
Tramming camera Rear and side
Rod rack On carrier side

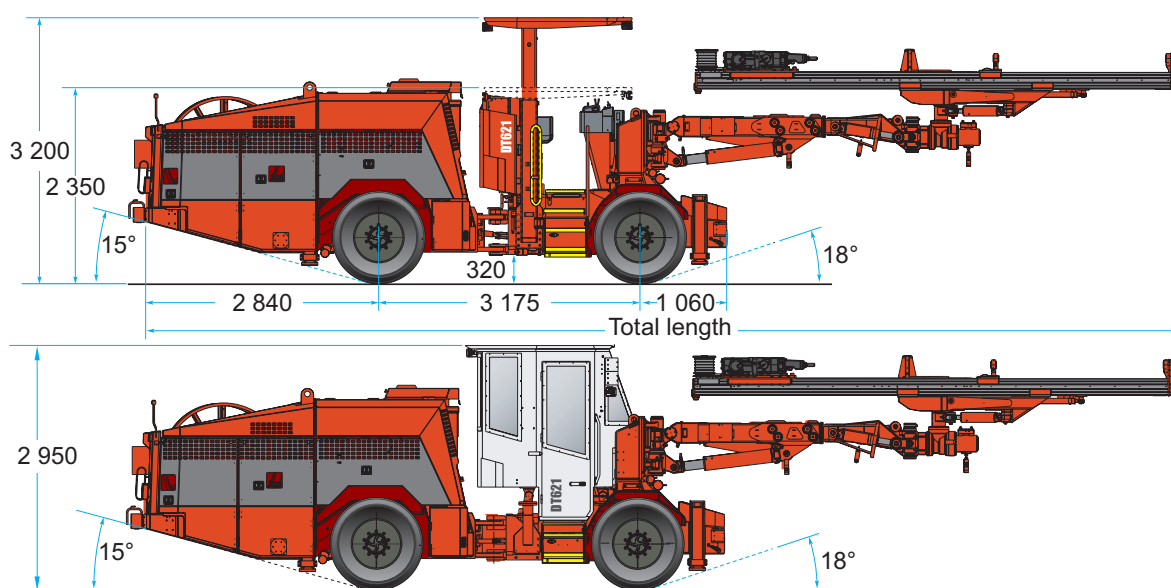
Extra items

Spare rock drill RD520 or RDX5
Spare wheel assembly 12.00-20 or foam filled tire
Special tools for rock drill Complete tools set
Field tool set
Documentation Extra paper, CAT-base, Link-one
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)
LAM, USC, EUR, Turkey
Package: Country specific
options
*Package: Harsh water Basic or advanced (Spec. TS2-049)

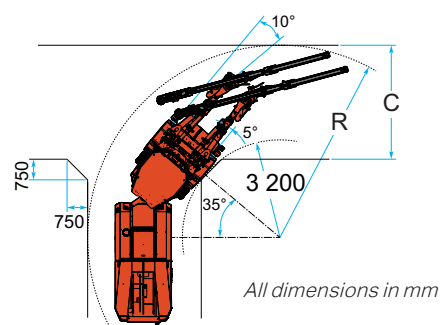
**) Replaces standard feature*



		TF512	TF514	TF516	TFX6/12	TFX8/14
Overall length	mm	12 350	12 550	13 000	11 900	11 900



Drilling feed	Radius (R)	T-cross (C)
TF500-12'	6 300 mm	3 700 mm
TF500-14'	6 450 mm	3 850 mm
TF500-16'	6 600 mm	4 000 mm
TFX6/12	6 250 mm	3 600 mm
TFX8/14	6 250 mm	3 600 mm



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