



DD311 STREAMLINE PACKAGE LAM

TECHNICAL SPECIFICATION

The Sandvik DD311 is a single-boom electro-hydraulic jumbo, designed for fast and accurate drilling within drifting and tunneling of 40 m² cross-sections.

The hydraulic controls enable drilling performance of the highest accuracy, ensuring maximum performance vs. customer requirements.

Our new Sandvik RDX5 rock drill now replaces the previous HLX5 model, capitalizing on the existing reliability and efficiency of its predecessor – whilst further improving/lowering operating costs alongside an extended service interval.

The robust SB40 Boom ensures that optimal coverage is achieved, with drilling performance also being improved via optional instrumentation.

The DD311 is the last born of Sandvik medium size single boom jumbos, compromising none of the previous unit's quality, whilst offering a number of improvements including (but not limited to) easier maintenance etc.

KEY FEATURES

Coverage area	40 m ² (5.8 x 7.2 m)
Hydraulic rock drill	1 x RDX5, 20 kW
Drill feed	1 x TF512, 12 - 16 ft
Boom	1 x SB40NV
Hole length	Up to 4 660 mm
Drift size class (H x W)	3 000 x 3 000 mm
Turning width (T-section)	3 550 mm (TFX6/12)
Transport width	2 020 mm
Transport height (canopy)	2 140 mm / 3 100 mm
Transport length	12 520 mm
Total weight	15 000 - 18 000 kg depending on options



HYDRAULIC ROCK DRILL

Type of rock drill	RDX5 (TS2-433)
Percussion power	20 kW
Percussion pressure	Max. 220 bar
Percussion rate	67 Hz
Rotation speed	Max. 250 rpm (with OMS80)
Rotation torque	400 Nm (with OMS80)
Hole size diameter (drifting)	43 - 64 mm
Hole size diameter (cut hole)	76 - 127 mm
Recommended rod	T38 - Hex 35 - R32 T38 - Hex 35 - Alpha 340 T38 - Hex 35 - R35
Shank adapter (male)	T38
Weight	210 kg
Length	955 mm
Profile height	87 mm
Filling device for accumulators	Specification TS2-430

FEED

Type of feed	TF500-12' Standard	TF500-14' Optional	TF500-16' Optional	TFX6/12 Readiness	TFX8/14 Readiness
Feed force	Max. 25 kN	Max. 25 kN	Max. 25 kN	Max. 25 kN	Max. 25 kN
Total length	5 270 mm	5 880 mm	6 490 mm	3 560 / 5 390 mm	4 170 / 6 000 mm
Hole length	3 440 mm	4 050 mm	4 660 mm	1 610 / 3 440 mm	2 220 / 4 050 mm
Rod length	3 700 mm	4 305 mm	4 915 mm	1 830 / 3 700 mm	2 480 / 4 305 mm
Net weight	500 kg	530 kg	560 kg	640 kg	680 kg

BOOM

Type of boom	SB40NV (TS2-257)
Parallel coverage	44.5 m ²
Parallelism	Automatic hydraulic
Boom extension	1 050 mm
Feed extension	1 350 mm
Roll-over angle	358°
Feed vertical roll-over	± 90°
Boom weight, net	2 100 kg

HYDRAULIC SYSTEM

Powerpack	HPP555 (1 x 55 kW) IE3 electric motor
Filtration (pressure / return)	20 µ / 10 µ Quick couplers for kidney filtration
Oil tank volume	180 liters
Oil tank filling pump	Manual
Cooler for hydraulic oil	OW30 oil-to-water (1 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	Manual collaring Feed / percussion pressure control Feed / percussion pressure monitoring Anti-jamming system Flushing control (On / Off / Auto.) Reaming control
Automatic cycle	Stop and return automatics
TFX adjustment	Electric
Drilling safety	Boom movements inhibition switches

ELECTRIC SYSTEM

Standard voltage	380 - 440 V (± 10%), at 50 or 60 Hz
Total installed power	70 kW
Main switch gear	MSE 5
IP classification	Specification TS2-132
Starting method	Star Delta 380 V - 440 V
Automatic cable reel	TCR1
Cable reel control	Operator station and remote control at rear of the machine
Electric cables	PUR 3 x 50 + 3 x 10 mm ² , 100 m for 380 / 440 V (with pilot cord)
Sealed AGM batteries	2 x 12 V, 95 Ah
Cable plug holder	On central rear hood
Front working lights (combined working and driving)	4 x 50 W LED (4 200 lm, 6 000 K)
Rear working 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

AIR AND WATER SYSTEM

Flushing of holes	By water
Water booster pump	WBP1 (4 kW)
Water pump capacity	33 l/min at 15 bar (input pressure = 4 bar)
Water pump inlet pressure	2 bar (Min.)
Flushing water pressure	10 - 15 bar
Shank lubrication device	SLU1 (air / oil mist)
Air compressor	1 m ³ /min at 7 bar
End of hole air flushing	1 x 60 liters air receivers
Rock drill oil consumption	180 - 250 g/h
Rock drill air consumption	250 - 350 l/min

OPERATOR'S SAFETY CANOPY

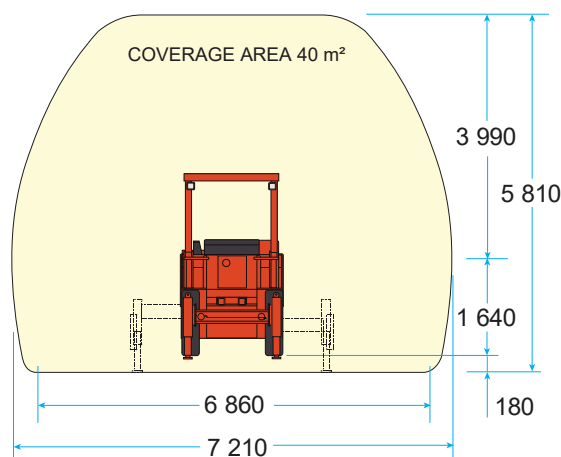
Canopy certification	FOPS / ROPS (ISO 3449)
Standing height	2 930 to 3 100 mm
Seated operations	2 430 to 3 100 mm
Operation	Standing drilling, seated tramming
Sound pressure level according to EN 16228	Operator station: < 95 dB(A)
Operator's seat	Ergonomic T-back seat

CARRIER

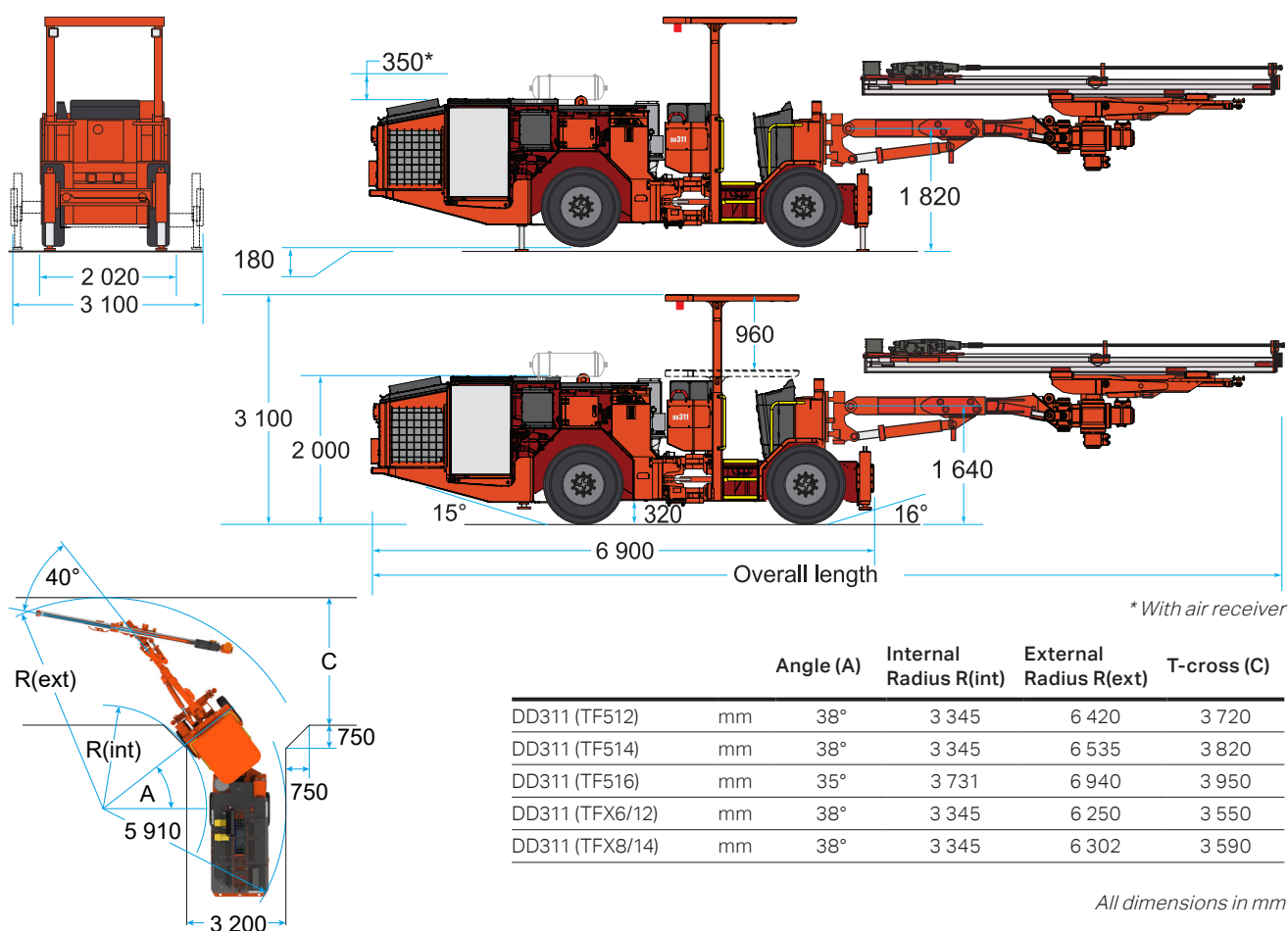
Type of carrier	NC5-17
Steering system	Frame steering
Carrier articulation	Up to $\pm 38^\circ$
Rear axle oscillation	$\pm 10^\circ$
Ground clearance	320 mm
Diesel engine	Deutz TCD2012, 74 kW, Tier 3, Stage IIIA, Canmet, China 2
Exhaust catalyzer	Standard
Fuel preheating	Standard
Transmission	Hydrostatic, automotive
Axles	Dana spicer 112 with extended differential breathers
Tires	12.00-20
Service brakes	Hydrostatic and positive braking
Parking and emergency brakes	Hydraulic oil immersed multiple disc brakes on both brakes
Tramming speed	12 km/h (horizontal) 5 km/h (14% \approx 1:7 \approx 8°)
Gradeability / sideways tilt	Max. 15° / 5° (according to ISO 18758)
Fuel tank	90 liters
Tramming oil tank	55 liters
Carrier stabilization	2 x Telescopic (front) 2 x Vertical (rear)
Tramming alarm	Standard
Knowledge Box™	Connectivity solution (TS2-535) My Sandvik insight readiness (TS2-390)
Documentation	1 x Operator's manual 1 x Technical manual (in English only) 1 x Parts manual (in English only) 2 x USB key of manuals (PDF files) 1 x Online Parts manuals (MySandvik)

OPTIONAL FEATURES AND PACKAGES

Rock drill	
*Type of rock drill	RD520 instead of RDX5
Drilling feed	
*Feed length	14', 16'
*Telescopic feed	TFX6/12, TFX8/14
Rod retainer	TRR1 incl. safety wire, adds 35 mm length of the feed
Boom	
*Type of boom	SB40 instead of SB40NV
Boom suspension system	Specification TS15-232
Electric system	
Electric cable	3 x 35 mm ² + 3 x 6 mm ² , 100 m for 500 / 575 VAC
Ground fault and overcurrent protection	VYK, with pilot cord (optional)
Battery jump start	Optional
Amber flashing light	LED (24 V)
Air and water system	
Air mist flushing	External air / water Internal air / external water
*Air compressor	2.8 m ³ /min at 7 bar
Water hose with hooks	32 mm (1 ¼"), 80 meters
Cleaning system	
HP system with reel	Up to 180 bar (TS2-343)
Greasing systems	
Centralized greasing points	Specification TS2-463
Manual system	Greasing gun and cartridge with hose reel (TS2-463)
Operator's safety canopy	
Safety grill	For canopy
Tramming cameras	For canopy and rear carrier
Fire suppression system	
Hand held fire extinguisher	1 x 6 kg Type ABC
Manual system	Ansul, 6 nozzles (TS2-460)
Auto. fire suppression system	Sandvik Eclipse™ (TS2-461)
Carrier	
*Foam filled tires	4 pcs
Brake release	Manual hand pump
MySandvik productivity	Remote monitoring system
Wheel chocks and holders	2 Sets
Extra items	
Spare rock drill	RDX5, RD520
Tools and pressure test box	Specification TS2-429
Spare wheel assembly	Air or foam filled tire
Special tools for rock drill	Field tool set (TS2-434) Complete tool set (TS2-435)
Warranty extension	One year
Documentation	Extra paper, PDF manuals
*Package: Harsh water	Basic (TS2-049)
*) Replaces standard feature	



	TF512	TF514	TF516	TFX6/12	TFX8/14
Overall length mm	12 520	12 720	13 170	12 055	12 055



	Angle (A)	Internal Radius R(int)	External Radius R(ext)	T-cross (C)
DD311 (TF512)	mm 38°	3 345	6 420	3 720
DD311 (TF514)	mm 38°	3 345	6 535	3 820
DD311 (TF516)	mm 35°	3 731	6 940	3 950
DD311 (TFX6/12)	mm 38°	3 345	6 250	3 550
DD311 (TFX8/14)	mm 38°	3 345	6 302	3 590

All dimensions in mm

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4. SANDVIK DD311 - LAM STREAMLINE PACKAGEL