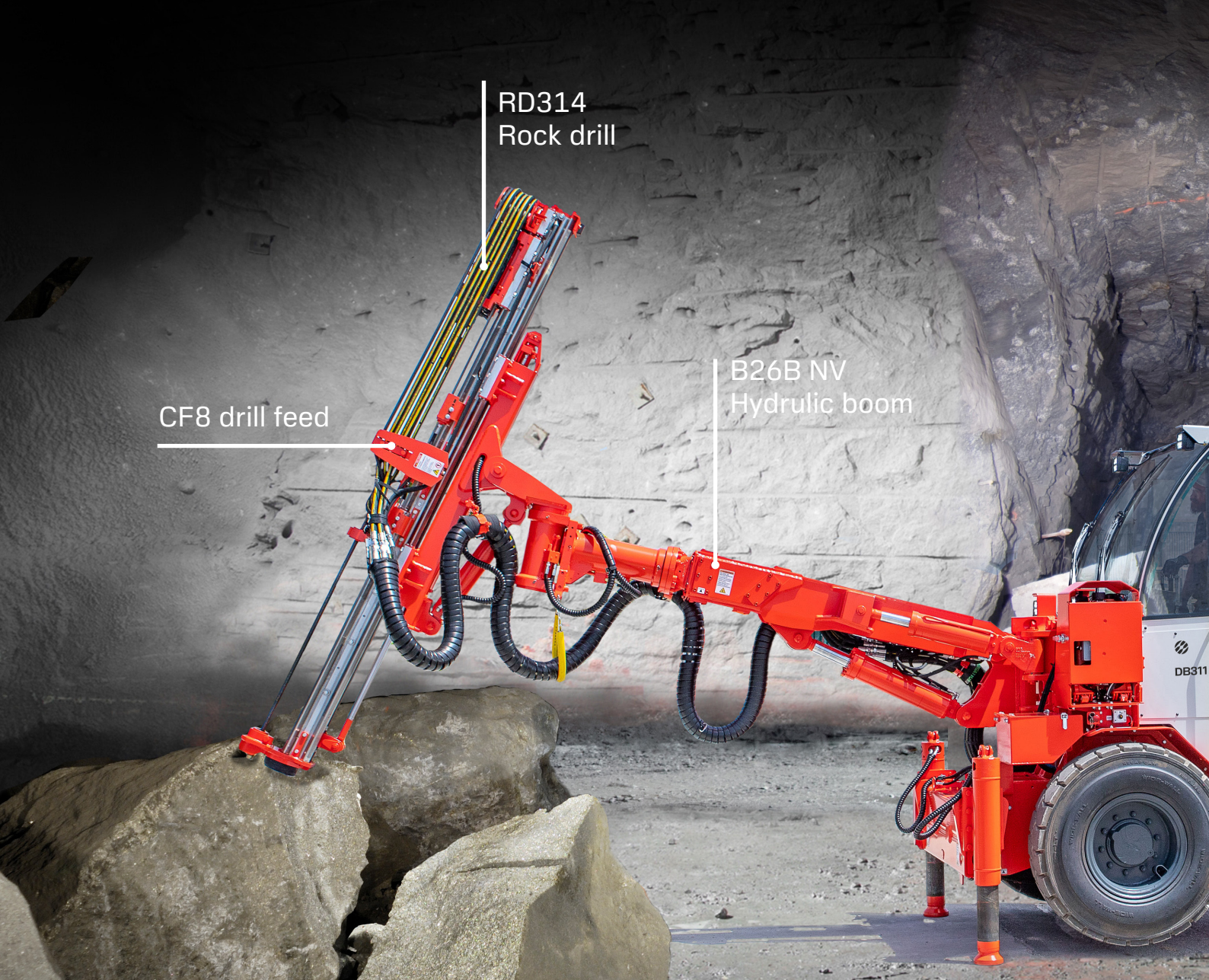


DB311

Secondary breaking drill

Technical Specification





Your rock boulders reduction solution

Key features

Coverage area	30 m ²
Hydraulic rock drill	1 x RD314, 14 kW
Drill feed	1 x CF8
Boom	1 x B26B NV
Hole length	Up to 2 230 mm
T-section width in turning	3.6 m
Transport width	2 020 mm
Transport height (canopy)	2 140 mm / 3 100 mm
Transport height (cabin)	2 920 mm or 2 670 mm
Transport length	10 720 mm
Total weight	15 000 kg depending on options

Sandvik DB311 is a Secondary Breaking Unit (SBU) for rock boulders reduction and ore facilitation in mass mining methods, enabling fast recovery of full mining production when large rock boulders cause draw points blockages.

Sandvik DB311 is a fully autonomous unit based on self-contained diesel hydraulic carrier, with on-board water tank and large air compressor for air-mist flushing.

The drill rig does not require any connection to external power nor water hose, thus allowing fast set up and removal in production areas.

The robust telescopic boom with double rotation actuators and compact feed offers an easy positioning within confined spaces at drawpoints. The high frequency rock drill enables fast drilling, short time exposure in drawpoints.

Drill and blast method is used to fragment the boulders. The explosive charging system is not included.

The drill rig layout is designed for good visibility and stability. This, and the powerful four-wheel-drive articulated carrier, ensure fast and safe maneuvering in narrow drifts.

The operator environment and added automatic functions allow the operator to concentrate on safe, fast and accurate drilling.

All the service points are well protected but still easy to access.

FOPS / ROPS
Cabin, low cabin
or telescopic canopy

Same carrier
through the range



Main benefits

Safety first!!

Optional offering : drilling can be done remotely line-of-sight with an ergonomic radio remote control panel.

A full teleremote operation, with different levels of ergonomic control stations to fit end user needs, can be offered on specific demand, through our Sandvik partner UFR.





Optimized working environment

Modern and ergonomic cabin for maximum operator comfort with improved visibility and reduced noise level



Teleremote drilling

Radio remote control can control the drilling at distance between 5 to 100 meters.



Robust telescopic boom

Easily maneuver within confined spaces at drawpoints with the drill rig's telescopic boom, double rotation actuators and compact feed.



Sandvik 365 Parts and Services

Proudly keeping you on track!

Sandvik 365 Parts & Services offer a variety of possibilities to enhance your Sandvik DB311 drill's performance.

As an OEM, we provide the best-suited choices to preserve your machine's high performance throughout its lifetime.

These consist of highly skilled service specialists supporting you 365 days a year, all using Sandvik Genuine parts and components complemented by a range of robust tools.

In addition, you get to enjoy the benefits of advanced digital services and a global infrastructure dedicated to keeping your Sandvik fleet on track.

Technical Specification

Hydraulic rock drill

Type of rock drill	RD314 (TS2-137)
Percussion power	14 kW
Percussion pressure	Max. 180 bar
Percussion rate	110 Hz
Rotation speed	Max. 520 rpm (with OMS100)
Rotation torque	400 Nm (with OMS100)
Hole size (drifting)	43 to 51 mm
Shank adapter (male)	R32 - T38 (male)
Weight	127 kg
Length	559 mm
Profile height	95 mm

Drilling feed

Type of feed	CF-feed (TS2-258)
Feed force	Max. 31 kN
Rod length	2 475 mm (8')
Hole length	2 230 mm
Total length	3 560 mm
Total weight	320 kg

Boom

Type of boom	B26B NV (TS2-346)
Coverage	30 m ²
Boom extension	1 200 mm
Roll-over angle	360°
Boom weight, net	1 600 kg

Hydraulic system

Powerpack	Diesel hydraulic powered
Filtration size (pressure / return)	20 µ / 10 µ Quick couplers for kidney filtration
Oil tank volume	330 liters (drilling)
Filling pump for hydraulic oil	Electric
Oil cooler (air actuated)	OA21 oil-to-air (1 x 21 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
Drilling safety	Boom movements inhibition switches

Electric system

Main switch gear	MSE 5 (24V)
IP classification	Specification TS2-132
Sealed AGM batteries	2 x 12 V, 95 Ah
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
Search light	Remoted with cabin: 1 x 40W LED (2 300 lm, 5 700 K) Manual with canopy: 1 x 17W LED (600 lm, 6 000K)

Air and water flushing

Flushing of holes	By air mist
Water booster pump	CAT pump (hydraulic driven 25 cc)
Water pump capacity	16 l/min
Water pump inlet pressure	2 bar (Min.)
Flushing water pressure	10 - 15 bar
Shank lubrication device	SLU-1 (air / oil mist)
Air compressor	2.8 m ³ /min (at 7 bar) hydraulic driven 16 cc
End of hole air flushing	1 x 60 liters air receiver
Water tank	500 liters (parts of flushing packages)
Air mist flushing packages	For internal supply of air and water
Rock drill oil consumption	100 - 200 g/h
Rock drill air consumption	150 - 250 l/min

Operator's safety cabin

Cabin certification	FOPS / ROPS (ISO 3449 / 3471) Cabin with safety grill, height 2 920 mm
Operation	Standing drilling, seated tramming
Sound pressure level according to EN 16228	Operator station: 80 dB(A)
Operator's seat	Ergonomic T-back seat
Air conditioning	Cooling only
Tramming cameras	1 x rear frame 2 x on each side of cabin or canopy

Technical Specification

Carrier

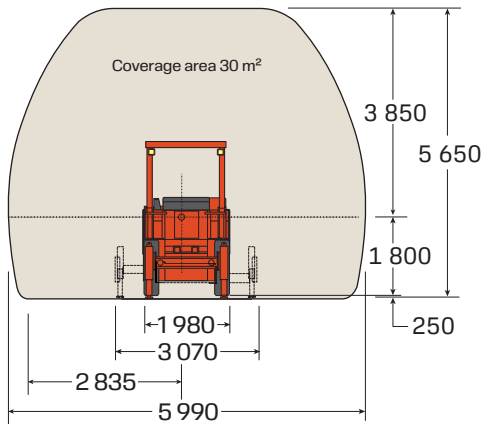
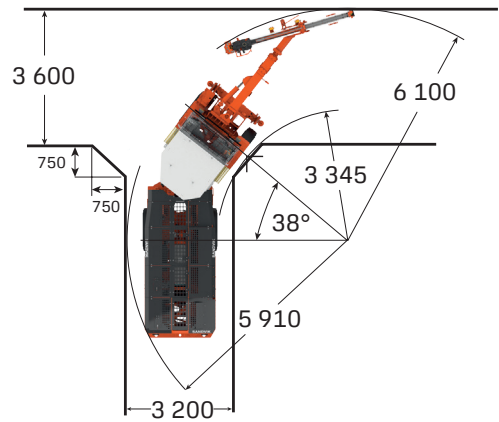
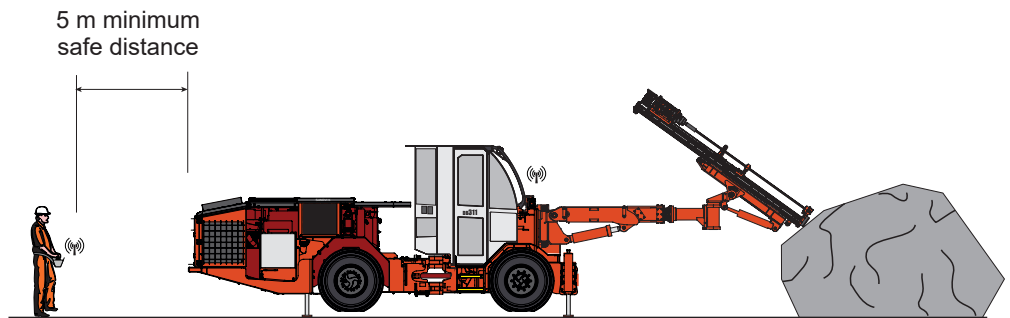
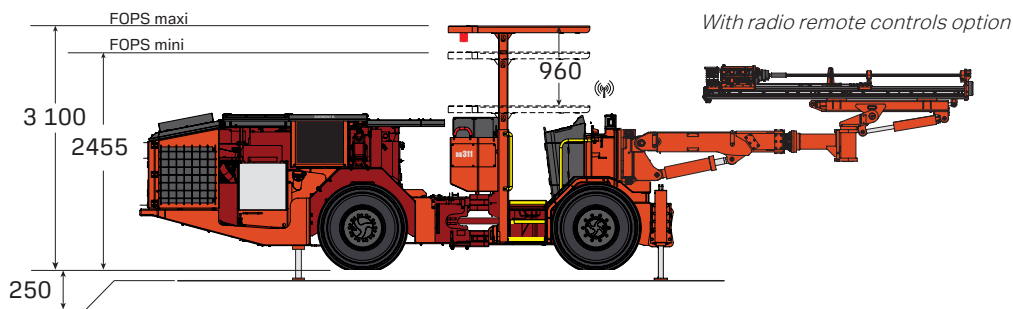
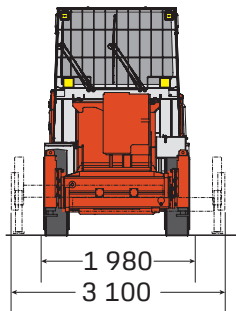
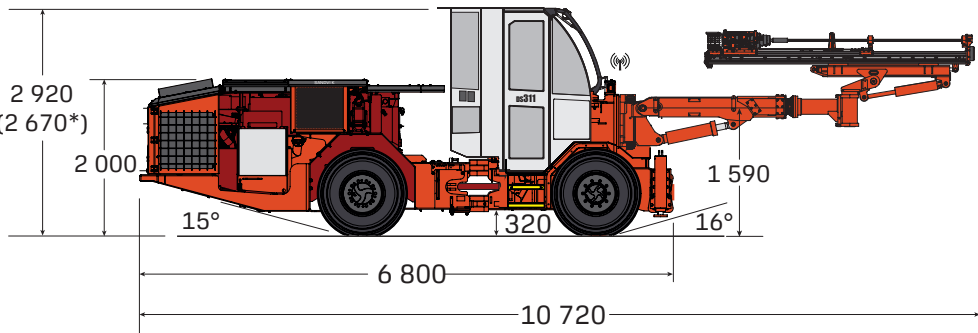
Type of carrier	NC5-17
Steering system	Frame steering
Carrier articulation	Up to $\pm 38^\circ$
Rear axle oscillation	$\pm 10^\circ$
Ground clearance	320 mm
Diesel engine	Deutz TCD3.6, 100 kW, Stage IIIA
Exhaust catalyzer	Standard
Transmission	Hydrostatic, automotive
Axles	Dana spicer 112 with extended differential breathers
Tires	12.00-20
Service brakes	Hydrostatic and positive braking
Parking and emergency brakes	SAHR fail safe type wet disc brakes
Tramming speed	12 km/h (horizontal) 5 km/h (14%=1:7=8°)
Gradeability / sideways tilt	Max. 15° / 5° (according to ISO 18758)
Fuel recommended	Diesel EN590 / HVO EN15940
Fuel tank	160 liters
Tramming oil tank	55 liters (tramming)
Carrier stabilization	2 x Telescopic (front) 2 x Vertical (rear)
Tramming alarm	Backward alarm
Knowledge Box™	Connectivity solution (TS2-535) My Sandvik insight readiness (TS2-390)
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 USB key of manuals (PDF files) 1 x Online Parts manuals (MySandvik)
Underground standard working environment	0°C < Mine air T° < 40°C Humidity < 85% -1000 m < Altitude < 4000 m When applicable : 0° < Water flushing T° < 30°C 5 < Flushing or mine water pH < 10 Flushing water salt concentration < 2%

Optional features and packages

Boom	
Wear plates boom	Easy adjustable on B26 boom
Boom suspension system	Specification TS15-232
Drilling feed	
*CF Feed length	10', 12'
Hydraulic system	
*Biodegradable oils	PLANTOHYD SE 68 or PLANTOHYD SE 46 (arctic)
Electric system	
Battery jump start	Optional
Amber flashing light	LED (24 V)
Drilling control system	
Radio remote controls	Drilling
Indicator lights	For boom movement prevention switch
Access detector systems	Detector or protector (TS2-211)
Cleaning system	
HP system with reel	Up to 180 bar (TS2-343)
Greasing systems	
Centralized greasing points	Specification TS2-463
Manual system	Grease gun and cartridge system
Automatic system	Carrier and boom
Operator's safety cabin / canopy	
*Safety canopy	FOPS / ROPS certification
*Lowered cabin	FOPS / ROPS certification
Cabin heating	Height 2 670 mm, During drilling and tramming
Cabin audio system	MP3 player / radio / Bluetooth® and loudspeakers
Seat belt and door interlock	Brake applied or buzzer
Front screen protection grill	For cabin or canopy
Fire suppression system	
Hand held fire extinguisher	1 or 2 x 6 kg or 7.7 kg (Type ABC)
Manual or automatic system	Ansul, 6 nozzles (TS2-460)
Auto. fire suppression system	Sandvik Eclipse™ (TS2-461)
Carrier	
*Diesel engine	Deutz TCD3.6, 100 kW, Tier 4F, Stage V, Canmet
*Foam filled tires	4 pcs
Fast filling and evacuation system	Wiggins (complete)
Brake release	Manual hand pump
Knowledge Box™	My Sandvik productivity readiness (TS2-390)
Wheel chocks and holders	2 Sets
*Directional tramming alarm	Cri du Lynx®
Extra items	
Spare rock drill	RD314
Tools and pressure test box	Specification TS2-429
Inflating device for accumulator	Specification TS2-430
Spare wheel assembly	Air or foam filled tires
Special tools for rock drill	Field tool set (TS2-119) Complete tool set (TS2-118)
Warranty extension	One year (excl. Kazakhstan)
Documentation	Extra paper, PDF manuals
Package: Country specific options	LAM package
Package: Harsh water	Basic or advanced (TS2-049)
*) Replaces standard feature	

Technical drawings

All dimensions in mm



* With low cabin option
All dimensions in mm

SANDVIK

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