

## DD212 NARROW VEIN DRILL



ROCKTECHNOLOGY.SANDVIK

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DD212

# HIGH VERSATILITY IN NARROW VEIN DRILLING

Sandvik DD212 is a compact and flexible single-boom electro-hydraulic jumbo for tunneling and mining development in narrow vein drifts.

Equipped with the new hydraulic boom SB20i, this drill has a large shaped coverage of up to 25m<sup>2</sup>. Thanks to the one meter boom extension, the 360-degree rotation and full automatic parallelism with electronic positioning, this drill offers accurate face drilling.



## MAIN BENEFITS

#### LOW TOTAL COST OF OWNERSHIP

Sandvik DD212 is a compact drill solution enabling mines to open smaller tunnel sections and benefiting from increased levels of productivity with more meters advanced

The rig brings operational safety and versatility for tackling different applications, precise electronic positioning, ergonomic operator interface, data monitoring, all leading to superior pull-out ratio and reduced tool consumption, ensuring to deliver the best fit in narrow vein drilling. Up to 20%\* Time saving in boom positioning

### EFFICENCY

Up to <mark>3%\*</mark> improvement in pull-out ratio CYCLE TIME

Up to  $15\%^*$  gain in drilling time

### PRODUCTIVITY





#### **OPTIMIZED OPERATIONS**

The one-meter boom extension and the 2 rotation actuators narrow vein type of Sandvik DD212 ensure a large face coverage from 6 m<sup>2</sup> to 25 m<sup>2</sup>.

Equipped with the compact versatile CFX feed system, the rig helps mines to open smaller tunnel sections reducing overbreak / dilution / hauling cost to remove ore.



#### EFFICIENT CONTROL SYSTEM

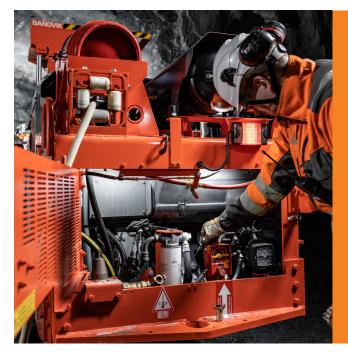
The THC562 drilling control system with torque control and reaming hole selector increase drilling performance and reduces the wear on both rock drill and rock tools for an extended lifetime.

The operating environment, and incorporated automatic functions allow the operator to concentrate on safe, precise and productive operations.



#### INSTRUMENTATION

The SB20i intelligent boom ensures accurate hole electronic positioning enabling the precise and fast navigation of drill feed and tool, with automatic parallelism and instrumentation for hole angle measurements. Hole angles for face drilling, vertical and inclined holes can easily be visualized on the colored screen.



## SANDVIK 365 PARTS & SERVICES

#### PROUDLY KEEPING YOU ON TRACK!

Sandvik 365 Parts & Services offers a variety of possibilities to enhance your Sandvik DD212 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 global infrastructure dedicated to keep your Sandvik fleet on track.

#### HYDRAULIC ROCK DRILL

Type of rock drill	RDX5 (TS2-433)
Percussion power	20 kW
Percussion pressure	175 bar
Percussion rate	67 Hz
Rotation speed	Max. 250 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 - Hex 35 - R32 T38 - Hex 35 - Alpha 330 T38 - Hex 35 -R35
Shank adapter (male)	Т38
Weight	210 kg
Filling device for accumulators	Specification TS2-430

#### DRILLING FEED

Type of Feed	TF500-10 (RDX5) Option	TF500-12 (RDX5) Standard	(RDX5)	CFX6/12 (RD314) Option	CFX-XS (RD314) Option
Feed force	25 kN	25 kN	23 kN	23 kN	20 kN
Hole length	2 830 mm	3 440 mm	1 520 / 3 350 mm	1 587 / 3 417 mm	1 070 / 2 132 mm
Rod length	3 090 mm	3 700 mm	1 830 / 3 660 mm	1 830 / 3 660 mm	1830 / 2 435 mm
Total length	4 690 mm	5 300 mm	3 285 / 5 115 mm	2 930 / 4 765 mm	1 965 / 3 035 mm
Net weight (w/o rock drill)	470 kg	500 kg	566 kg	527 kg	416 kg

#### BOOM

Type of boom	SB20i (TS2-432) Versatile NV boom
Boom movements	Hydraulic controls
Parallel coverage	25 m² auto-parallel
Parallelism	Automatic electronic
Boom telescopic extension	1 000 mm
Feed extension	1 350 mm (TF feed)
Boom weight, net	1 550 kg
Boom swing, left and right	± 30° (limited)
Roll-over angle	360°
Feed swing angle	240°

#### HYDRAULIC SYSTEM

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Powerpack	HPP 545 (45 kW)
Filtration (pressure / return)	20 μ / 10 μ
Oil tank volume	165 liters
Cooler for hydraulic oil	Harsh water cooled OW25 oil-to-water (25 kW)

#### DRILLING CONTROL SYSTEM

Type of control system	THC562
Operating principle	Hydraulic control
Controls	Direct control Fully proportional Fast rock drill return movement
Drilling control	Feed / percussion control Anti-jamming system Torque control
Automatic cycle	Stop and return automatics (for feed without rod retainer)
Rotation speed selector	Two rotation speeds can be preset
Display default	QN panel
Boom inibition switch	At each side of the machine
MySandvik insight	Remote monitoring system

#### ELECTRIC SYSTEM

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Standard voltages	380 - 690V (±10%)
Total installed power	60 kW
Main switch gear	QM14
IP classification	Specification TS2-132
Starting method	Star delta 380 - 575 V DOL 600 - 690 V
Automatic cable reel	CRQ with six turn indicator light and three turn interlock system
Cable reel control	At the operator station
Sealed AGM batteries	2 x 12 V, 90 Ah
Low level hydraulic oil	Indicator and switch
Emergency stop	On the electric cabinet, at right side machine and on drilling panel
Front lights (combined working and driving)	4 x 50 W LED (4 200 lm, 6 000 K)
Rear tramming light	1 x 50 W LED (4 200 lm, 6 000 K)
Parking rear brake / park lights	1 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	CTN9, 1 m³/min (7 bar)
Rock drill oil consumption	180 - 250 g/h
Rock drill air consumption	250 - 350 l/min
1 x 60 liters air receiver	For end of hole air flushing

#### OPERATOR'S SAFETY CANOPY

Canopy certification	FOPS (ISO 3449)
Unit height in tramming	2 750 mm
Operation	Standing drilling, seated tramming
Operator's seat	Ergonomic, adjustable for tramming including seat belt
Sound pressure level according to EN 16228	Operator station: 102 dB(A) Emitted: 124 dB(A)

#### TECHNICAL SPECIFICATION

#### CARRIER

CARRIER	
Type of carrier	TCQ (articulated frame)
Carrier articulation	± 27°
Rear axle oscillation	± 6°
Ground clearance	225 mm
Diesel engine	Deutz D914L04, 55 kW (Tier 4i, Stage IIIA, MSHA)
Exhaust catalyzer	Standard
Transmission	Hydrostatic
Wheel motor	4 x radial piston
Tires, rim	300 x 15, 8.00 - 15
Service brakes	Hydrostatic transmission
Parking and emergency brakes	SAHR type, fail safe wet disc brakes ABA brakes
Tramming speed	6.0 km/h (Horizontal) 4 km/h (14%=1:7=8°)
Gradeability / sideways tilt	Max. 15° / 5° (according to ISO 18758)
Fuel tank	75 liters
Carrier stabilization	Telescopic (front) Vertical (rear)
Brake release	Manual hand pump
Centralized greasing points	Specification TS2-463
Hand held fire extinguisher	1 x 6 kg (type ABC)
Tramming alarm	Standard
Colour scheme	Sandvik
Documentation	2 x Operator's manual 2 x Maintenance manual 2 x Technical manual (in English only) 2 x Parts manual (in English only) 2 x USB key of manuals (PDF files) 1 x Online Parts manuals (MySandvik)

#### INSTRUMENTATION (OPTION)



	Hole parallelism
Instrumentation with display	Hole angles:
	- Horizontal face drilling
	- Horizontal cross cutting
	- Vertical and inclined holes
	Boom angles

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RD314 with CFX-feeds
Smooth tramming, Improved ergonomy
TF510 feed, CFX6/12 telescopic feed CFX-XS extra compact feed For TF and CFX feeds
600 mm (vertical holes), CFX-feed only
Electric OA25 oil-to-air (25 kW)
Remote monitoring system (TS2-390) Mandatory in Europe (TS2-211)
Up to 180 bar (TS2-343)
Greasing gun and cartridge with hose reel (TS2-463)
1 000 V (50 or 60 Hz) with DOL starter (machine height mini 2 470 mm) Specification TS2-121 VYK
Optional LED (24 V)
External air / external water External air / internal water (150 liters)
IP5 with air mine connection 32 mm (1 ¼"), 80 meters
Front grill or all around the canopy
Ansul, 6 nozzles (TS2-460) Sandvik Eclipse™ (TS2-461)
Deutz D914L04, 52 kW, Tier 3, Stage IIIA, CANMET Deutz BF4L914, EMR, 72 kW, Tier 2 (for high altitude) Deutz TCD2.2, EMR, 55 kW, Tier 4, Stage V
4 pcs 2 Sets
250A Tramming speed display RDX5 or RD314 Standard or foam filled tire Field tool set (TS2-434) Complete tool set (TS2-435)
Complete tool set (TS2-435) Specification TS2-429 Extra paper or PDF manuals One year (excl. Kazakhstan) CIS, AUS, EUR, US/CAN Basic or Advanced (TS2-049) For extreme conditions (below 0 °C) LHF drilling module (TS2-474)

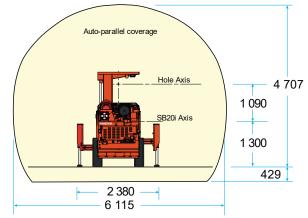
\*) Replaces standard feature

#### MAIN DIMENSIONS

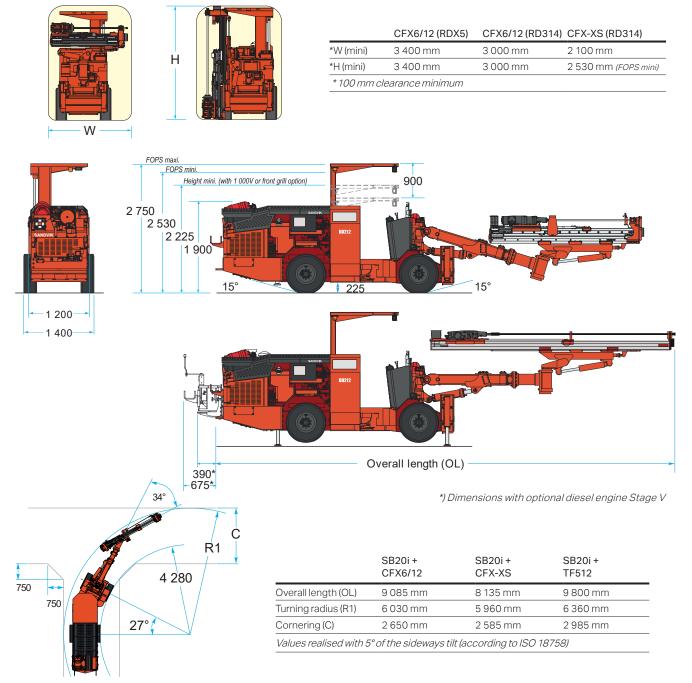
The dimensions are indicative only - All dimensions in mm

#### **KEY FEATURES**

Coverage	25 m² auto-parallel
Drift size class (H x W)	2 500 mm x 2 500 mm
Turning width (T-section)	2 985 mm (TF512)
Transport width	1 400 mm
Transport height	1 900 mm / 2 750 mm
Transport length	9 800 mm (TF512)
Total weight	10 850 kg depending on options



Coverage dimensions with SB20i with CFX6/12+ RDX5



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