Sandvik DS511, equipped with Sandvik SB120S boom, offers the widest coverage currently available for underground mining operations and civil construction tunnelling.

Sandvik DS511 installs the industry’s longest rock bolts in drifts with ease, thanks to its Sandvik BH bolting head and compact yet powerful Sandvik RD314 rock drill.

Like all Sandvik underground drills, Sandvik DS511 benefits from a design philosophy that focuses on the operator. The air-conditioned enclosed cabin can be tilted back 10 degrees when bolting at maximum reach, just one of many features designed to improve the operator comfort.

<table>
<thead>
<tr>
<th>KEY FEATURES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic rock drill</td>
<td>Sandvik RD314, 14 kW</td>
</tr>
<tr>
<td>Bolting head</td>
<td>Sandvik BH</td>
</tr>
<tr>
<td>Boom</td>
<td>Sandvik SB120S</td>
</tr>
<tr>
<td>Bolt length</td>
<td>From 1.5 m to 6 m (5’ to 20’)</td>
</tr>
<tr>
<td>Turning radius (external)</td>
<td>9 250 mm</td>
</tr>
<tr>
<td>Tramming / bolting width</td>
<td>2 740 mm / 3 440 mm</td>
</tr>
<tr>
<td>Tramming height (cabin / canopy)</td>
<td>3 320 mm / 3 600 mm</td>
</tr>
<tr>
<td>Transport / bolting length</td>
<td>11 370 mm / 10 950 mm</td>
</tr>
<tr>
<td>Total weight</td>
<td>25 000 kg depending on options</td>
</tr>
</tbody>
</table>
HYDRAULIC ROCK DRILL
Type of rock drill Sandvik RD314 (TS2-137)
Percussion power 14 kW
Percussion pressure Max. 160 bar
Percussion rate 110 Hz
Rotation speed Max. 520 rpm (with OMS100)
Rotation torque 340 Nm (with OMS100)
Hole size (bolting) 33 - 43 mm
Shank adapter 45 mm / R32 female
Weight 122 kg
Length 571 mm

ELECTRIC SYSTEM
Standard voltages 380 ... 690 V (± 10%), 50 or 60 Hz
Total installed power 90 kW
Main switch gear MSE 10
IP classification Specification TS2-132
Starting method Star delta 380 V - 690 V
Soft starter 575 V
Automatic cable reel TCR3EL
Cable reel control Operator station and remote control at rear machine

AIR AND WATER SYSTEM
Flushing By water
Water pump type WBP1
Water pump capacity 65 l/min
Water pump inlet pressure 2 bar (Min.)
Flushing water pressure 10 - 15 bar
Shank lubrication device SLU1 (Air / oil mist)
Rock drill oil consumption 100 - 200 g/h
Rock drill air consumption 150 - 250 l/min
Air compressor CTN10, 1 m³/min (7 bar)
Air cleaner for external air supply IP5

BOLTING HEAD
Type of bolting head Sandvik BH (TS2-277)
Bolting head feed KS140
Bolt caroussel capacity 8 rock bolts with 150 x 150 mm maximum plate size
Bolt head length Max. 7 535 mm (BH60)
Net weight Max. 2 174 kg (BH60)

OPERATOR’S SAFETY CABIN
Safety cabin FOPS (ISO 3449)
Operation Seated drilling and tramming
Sound pressure level according to EN791 Operator station: 80 dB(A)
Seat Ergonomic, adjustable for tramming and drilling including seat belt
Air conditioning system For drilling and tramming
Audio system CD / MP3-player, radio and loudspeakers
Boot washer At cabin entrance
Cabin safety grill Standard

HYDRAULIC SYSTEM
Powerpack HPP35S (55 kW)
Percussion pump 100 cc (variable)
Rotation pump 33 cc (gear)
Filtration size (pressure / return) 20 µ / 12 µ
Oil tank volume 200 liters
Oil tank filling pump Electric
Cooler for hydraulic oil OW30 oil-to-water (30 kW)

CONTROL SYSTEM
Type of control system TPC301 EW
Power control Adjustable full power
Adjustable collaring power
Anti-jamming control Adjustable anti-jamming pressure
Rotation control Adjustable rotation speed
Flushing control Water flushing flow and pressure control air-mist flushing, option
Boom control Proportional, four movements simultaneously
Returns automatics Rock drill

BOLTING BOOM
Type of boom Sandvik SB120S (4-3320)
Boom extension 1 900 mm
Boom weight, net 3 000 kg
Roll-over angle 360°

2. SANDVIK DS511 ROCK SUPPORT BOLTER
### CARRIER

<table>
<thead>
<tr>
<th>Type of carrier</th>
<th>Sandvik TC8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steering system</td>
<td>Frame steering</td>
</tr>
<tr>
<td>Carrier articulation</td>
<td>± 35°</td>
</tr>
<tr>
<td>Rear axle oscillation</td>
<td>± 8°</td>
</tr>
<tr>
<td>Ground clearance</td>
<td>400 mm</td>
</tr>
<tr>
<td>Diesel engine</td>
<td>MB OM904LA, 110 kW, Tier 3, Stage IIIA</td>
</tr>
<tr>
<td>Diesel engine controls</td>
<td>Electronic</td>
</tr>
<tr>
<td>Transmission</td>
<td>Hydrodynamic, Spicer T20 000</td>
</tr>
<tr>
<td>Tires</td>
<td>14.00-24</td>
</tr>
<tr>
<td>Service brakes</td>
<td>Hydraulically-operated wet disc brakes</td>
</tr>
<tr>
<td>Parking and emergency brakes</td>
<td>Emergency and parking SAHR type, fail-safe wet disc brakes</td>
</tr>
<tr>
<td>Tramming speed</td>
<td>16 km/h (Horizontal) 5 km/h (14°=1.7'=8°)</td>
</tr>
<tr>
<td>Gradeability / sideways</td>
<td>Max. 15° / 5°</td>
</tr>
<tr>
<td>Fuel tank</td>
<td>150 liters</td>
</tr>
<tr>
<td>Hydraulic jacks</td>
<td>2 x TJ60 Vertical (front) 2 x TJ75 Vertical (rear)</td>
</tr>
<tr>
<td>Centralized greasing points</td>
<td>Specification 5-2110</td>
</tr>
<tr>
<td>Hand held fire extinguisher</td>
<td>1 x 7.7 or 9 kg (type ABC)</td>
</tr>
<tr>
<td>Tramming alarm</td>
<td>Standard</td>
</tr>
<tr>
<td>Colour scheme</td>
<td>Sandvik</td>
</tr>
<tr>
<td>Documentation</td>
<td>2 x Operator's manual 2 x Maintenance manual 2 x Technical manual (in English only) 2 x Parts manual (in English only) 1 x Toolman CD</td>
</tr>
</tbody>
</table>

### OPTIONAL FEATURES AND PACKAGES

#### Air and water system
- **Air compressor**
  - CT28 (2.8 m³/min, 18.5 kW)
- **Water hose reel and hose**
  - THRSE and Ø32 mm (1 ¼''), 130 m
- **Compressed air outlet**
  - Quick coupling for pneumatic tools

#### Cleaning system
- **Low pressure system with reel**
  - Up to 15 bar (5-2120)
- **High pressure system with reel**
  - Up to 220 bar (5-2120)
- **Boiling module continuous washing system**
  - Remote controlled

#### Greasing systems
- **Manual system**
  - Lincoln (complete)
- **Automatic system**
  - For utility boom

#### Electric system
- **Voltage option**
  - 1 000 V (50 or 60 Hz) with Direct-On-Line starter
  - Specification TS2-121 VYK
- **Electric cable**
  - Ground fault and overcurrent protection
  - Dewatering pump outlet
  - Battery jump start
  - Optional Amber flashing light
  - LED (24 V)

#### Operator's safety cabin / canopy
- **Safety canopy**
  - FOPS (ISO 3449)
- **Stainless steel cabin**
  - FOPS (ISO 3449)
- **Cabin heating**
  - During tramming and drilling

#### Fire suppression system
- **Additional fire extinguisher**
  - 1 x 7.7 or 9 kg (type ABC) Ansul, 6 nozzles Sandvik FS1000 (above 0°C)
- **Fire suppression system**
  - Manual or automatic system

#### Carrier
- **Reduced tramming speed**
  - 3 rd gear lockout
- **Tramming camera**
  - Rear and side
  - TC8, incl. MB OM906LA, 170 kW, Tier 3, Stage IIIA, with Spicer T32 000 transmission
- **High speed carrier (MB)**
  - TC8, incl. QSB6.7, 164 kW, Tier 4i, Stage IIIB, with Spicer T32 000 transmission
- **High speed carrier (QSB)**
  - 4 pcs Complete
- **Foam filled tires**
  - 2 Sets
- **Fast filling systems**
  - For 4 rods (N/A with bolt storage)

#### Extra Item
- **Spare rock drill**
  - RD314
- **Spare wheel assembly**
  - 12.00-20 or foam-filled RD314
- **Special tools for rock drill**
  - Extra, Catbase, Link one manuals US, AUS, EUR, SWE
- **Documentation**
  - Basic (TS2-049)
- **Package: Country specific options**
  - Block heater for engine, heater for hydraulic oil, water circuit flushing with air, antifreeze adding in water circuit

*replaces standard feature
<table>
<thead>
<tr>
<th>Bolting head</th>
<th>Minimum operating height and width (A:D)</th>
<th>Optimum operating height (B)</th>
<th>Maximum operating height (C)</th>
<th>Maximum width (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BH15</td>
<td>2 930</td>
<td>8 320</td>
<td>10 260</td>
<td>12 460</td>
</tr>
<tr>
<td>BH18</td>
<td>3 150</td>
<td>8 320</td>
<td>10 260</td>
<td>12 460</td>
</tr>
<tr>
<td>BH22</td>
<td>3 650</td>
<td>8 320</td>
<td>10 260</td>
<td>12 460</td>
</tr>
<tr>
<td>BH24</td>
<td>3 900</td>
<td>8 780</td>
<td>10 720</td>
<td>13 380</td>
</tr>
<tr>
<td>BH27</td>
<td>4 110</td>
<td>8 780</td>
<td>10 720</td>
<td>13 380</td>
</tr>
<tr>
<td>BH30</td>
<td>4 450</td>
<td>8 780</td>
<td>10 720</td>
<td>13 380</td>
</tr>
<tr>
<td>BH40</td>
<td>5 650</td>
<td>9 620</td>
<td>11 560</td>
<td>15 060</td>
</tr>
<tr>
<td>BH50</td>
<td>6 650</td>
<td>10 620</td>
<td>12 560</td>
<td>17 060</td>
</tr>
<tr>
<td>BH60</td>
<td>7 620</td>
<td>10 620</td>
<td>12 560</td>
<td>17 060</td>
</tr>
</tbody>
</table>

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