

Sandvik DD42I-60

Underground Drill Rig



Sandvik DD42I-60 is a two boom electro hydraulic jumbo for fast and accurate drilling in drifting and tunneling of 8-60 m² cross sections.

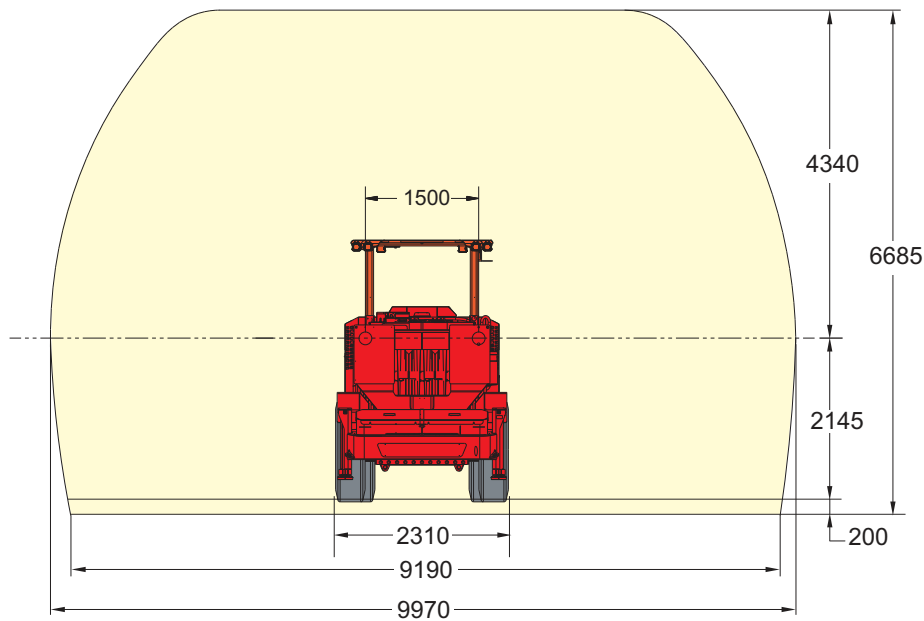
The improved hydraulic control system with new features enables accurate drilling performance with efficient control.

The new RD525 rock drill has proven to be an efficient drill with smooth penetration and powerful drilling performance.

Optimal coverage is achieved with the proven SB60 booms. The drilling performance can be improved with optional instrumentation.

| | |
|----------------|-------------------------------------|
| Coverage | 60m ² |
| Boom | SB60 |
| Feed | TF500, 10-16 ft |
| Rock drill | RD525, 25kW |
| Hole diameter | 43 - 64 mm |
| Hole length | Up to 4660 mm |
| Control system | THC561, Hydraulic |
| Cornering | 3770 mm |
| Total weight | 24 500 kg (depending on options) |

Coverage area



All dimensions in mm

Hydraulic rock drill

Technical Specification 2-1952

| | |
|------------------------------|--------------------------------------|
| Rock drill | RD525 |
| *Optional rock drill | RD520, HLX5 |
| Percussion power | 25 kW |
| Percussion pressure | Max. 235 bar |
| Percussion rate | 93 Hz |
| Stabilizer | Hydraulic |
| Rotation speed | Max. 400 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-H35-R32 T38-R39-R35 |
| Shank adapter | T38 |
| Weight | 225 kg |
| Length | 1 010 mm |
| Profile height | 90 mm |
| Shank lubrication device | Air/oil mist, SLU |
| Shank lubrication compressor | CT16, 1,6m ³ /min (7 bar) |
| Air consumption | 250-350 l/min |
| Oil consumption | 180-250 g/h |

Boom

Technical Specification 4-3105

| | |
|--------------------|---------------------|
| Boom | SB60 |
| Parallel coverage | 54 m ² |
| Parallelism | Automatic hydraulic |
| Boom extension | 1 200 mm |
| Boom weight, net | 2 250 kg |
| Roll-over angle | 358° |
| Bolt hole drilling | Yes |

Feed

Technical Specification 3-1400

| | |
|------------------|----------------------|
| Feed | TF500-12 |
| Feed force | Max. 25 kN |
| Feed extension | 1 350 mm |
| *TF feed lengths | 10', 12', 14', 16' |
| *Telescopic feed | TFX6/12, 8/14, 10/16 |

| Feed TF500 | Total length (mm) | Hole length (mm) | Rod length (mm) | Net weight (kg) |
|---------------|-------------------------|---------------------|--------------------|--------------------|
| 10' | 4 660 | 2 830 | 3 090 | 470 |
| 12' | 5 270 | 3 440 | 3 700 | 500 |
| 14' | 5 880 | 4 050 | 4 305 | 530 |
| 16' | 6 490 | 4 660 | 4 915 | 560 |

*Drilling options

| | |
|---------------------|--|
| #Rod retainer TRR I | Including safety wire Adds 35mm length of the TF-feed. |
| #Two rod system TRS | For TF Feed. Included TRR I & Safety wire (not for bolting) |

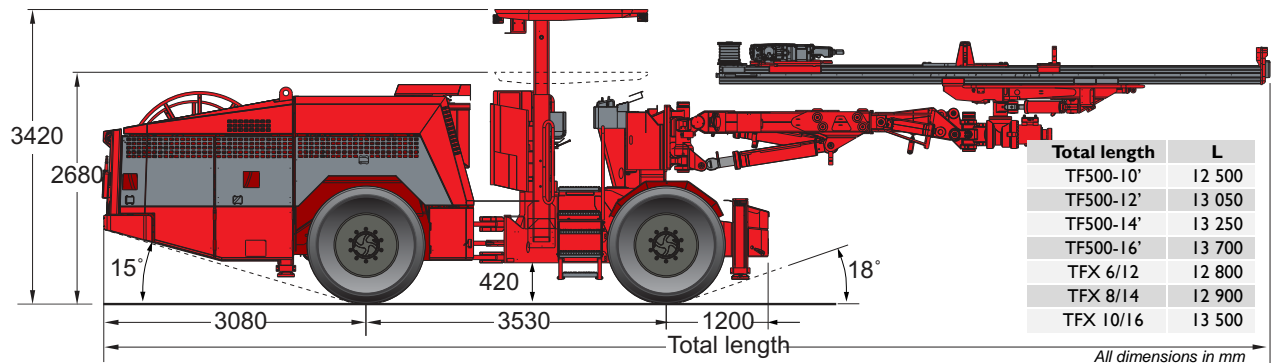
Instrumentation options

| | |
|------------------|-----------|
| #Angle | TMS D2 |
| #Angle and depth | TMS DDSS2 |

* Alternative options features/components

Additional options features/components

Machine dimensions



Hydraulic system

| | |
|--------------------------------|---|
| Powerpack | HPP 575 (75kW) |
| *Powerpack | HPP555 (55kW) with RD520 or HLX5 rock drill |
| Percussion pump | 110cc (variable piston) |
| Rotation pump | 60 cc (gear) |
| Filtration size | 20 micron (pressure) 10 micron (return) |
| Oil tank volume | 270 l |
| Tank filling | Electric pump |
| *Tank filling | Manual pump |
| Oil cooler | Water cooled. Cooling capacity 2x30kW |
| *Oil cooler | Air cooled. Cooling capacity 2x30kW N/A with water hose reel |
| *Biodegradable oils | Shell Naturelle HFE46/HFE68 |
| #Vacuum pump for hydraulic oil | Option |

Control system

Technical Specification 5-1020

| | |
|--------------------------|---|
| Type | THC561, Hydraulic |
| Manual boom control | Direct control Fully proportional Hydraulic parallelism |
| Drilling control | Feed/percussion control |
| Automatic cycle | Stop and return automatics |
| *Constant speed drilling | Replaces feed / percussion control |

Cleaning system

| | |
|--|--------------|
| #Pressure cleaning system with reel | 5-15 bar |
| #High pressure cleaning system with reel | Max. 180 bar |

Greasing systems and *options

| | |
|---|-------------------|
| Centralized greasing points | Carrier |
| #Greasing unit with pump, reel and nozzle | Manual |
| #Automatic greasing system | Carrier and booms |

Electric system and options

| | |
|--|--|
| Total input power | 180 kW |
| Main switch | MSE20 |
| Standard voltages | 380-690 VAC |
| *Optional voltage | 1000 VAC, 50 Hz |
| Starting method | Star delta starter 380 VAC-690 VAC Soft starter 480 VAC, 575 VAC (USC) Direct on Line (DOL) 1000 VAC |
| Voltage fluctuation | ± 10% |
| Automatic cable reel | TCR4E + spooling (input 135kW) TCR4EHD + spooling (in.180kW) |
| Cable reel control (in & out) | Operator station #Rear of unit |
| Cable plug holder | Hook type holder and cable pull sock |
| #Electric cable rubber or PUR | Depending on voltage (see spec 5-4100) |
| #Ground fault and overcurrent protection | VYK |
| *Sealed AGM batteries | 12V, 50Ah |
| #Battery jump start | |

Flushing system and *options

| | |
|---|---|
| Flushing | Water flushing flow and pressure control. Air-mist flushing, option |
| *Flushing flow supervision | |
| Water pump | WBP 2HP |
| Water pump capacity | 185 l/min |
| Inlet pressure | 2-7 bar |
| Water hose reel + hose | THR2,5E + 38mm (1"½), 65 m |
| #Water flushing with air cleaning of hole | External water and CT16 (11kW) |
| #Additional air capacity for hole cleaning with air | 1 x 60l Air receiver |
| #Air mist flushing | External water/air connection (incl. IP5 + flushing flow supervision) |
| #External air connection | IP5 air cleaner |

Fire suppression system and options

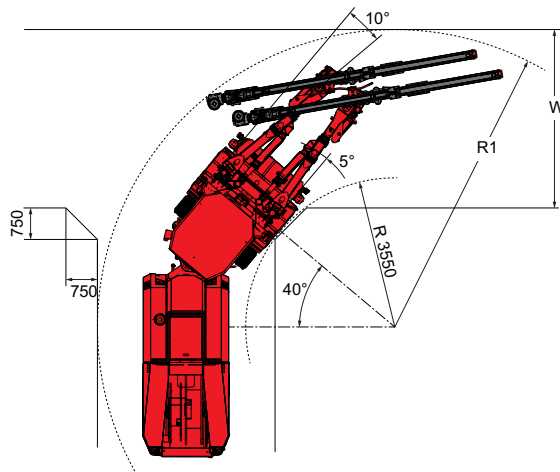
Tech. Spec. 5-9800

| | |
|------------------------------------|-----------|
| #Hand held fire extinguisher | 1 pcs |
| #Manual fire suppression system | 6 nozzles |
| #Automatic fire suppression system | 6 nozzles |
| #FS1000 | above 0°C |

* Alternative options features/components

Additional options features/components

Tramming dimensions



| Feed | RI | W |
|-----------|------|------|
| TF500-10' | 6650 | 3770 |
| TF500-12' | 6800 | 3920 |
| TF500-14' | 6950 | 4070 |
| TF500-16' | 7100 | 4250 |

All dimensions in mm

Tramming

| | |
|----------------------------|--|
| Tramming speed | Horizontal: 16 km/h 14% = 1:7 = 8° 6,0 km/h |
| Gradeability / Inclination | Max. 15° / 5° |
| #Reduced tramming speed | 3rd gear lockout |

Operator station

| | |
|---|---|
| Safety canopy | FOPS (ISO 3449) |
| *Heightened canopy roof | 250mm higher canopy, FOPS (ISO 3449) |
| Operation | Standing drilling, seated tramming |
| Seat | Ergonomic, adjustable For tramming including seat belt |
| Sound pressure level according to EN791 | Operator station: 100 dB(A) |
| Reversing alarm | Standard |
| #Reversing camera | On machine rear and side |

Lights and *options

| | |
|---|-------------------|
| Front lights (combined working and driving) | 6 x 35W HID (24V) |
| Rear working lights | 2 x 35W HID (24V) |
| Rear driving lights | 2 x 35W HID (24V) |
| Rear brake/park lights | 2 x Red LED |
| Stair and service lights | LED |
| #Extra working lights | 2 x 35W HID (24V) |
| #Amber strobe light | Flashing (24V) |

Packages

| | |
|-----------------------|--|
| #Regional | LAM, AUS, USC |
| *Harsh water packages | Basic or advanced See spec sheet 5-9100 |
| #Antifreezing | Block heater for engine Hydraulic oil tank heater Water circuit flushing |

Carrier

| | |
|---------------------------|---|
| Carrier | NC7W |
| Carrier type | Wheel mounted, frame steering |
| Frame steering | ± 40° |
| Rear oscillation | ± 8° |
| Ground clearance | 420 mm |
| Diesel engine | MB OM904LA, 110kW, Tier 3 |
| Exhaust catalyzer | Standard |
| Transmission | Hydrodynamic, Spicer T20000 |
| Axles | Spicer |
| Tyres | 14.00-24 PR28 |
| *Tyres | Foam filled tyres |
| Service Brakes | SAHR type, fail safe wet disc brakes |
| Brakes park and emergency | SAHR type, fail safe wet disc brakes |
| Fuel tank | 140 liters |
| Hydraulic jacks | TJ50 (front), TJ60 (rear) |
| Hand throttle | Standard |
| #Fast filling systems | Complete |
| #Wheel chocks and holders | 2 pieces |
| #Rod rack on carrier side | For 10-16ft rods and two shank adapters |

Extra items

| | |
|-------------------------------|-------------------------|
| #Spare rock drill | |
| #Spare wheel assembly | Standard or foam filled |
| #Special tools for rock drill | |
| #Documentation | Extra manuals |

* Alternative options features/components

Additional options features/components