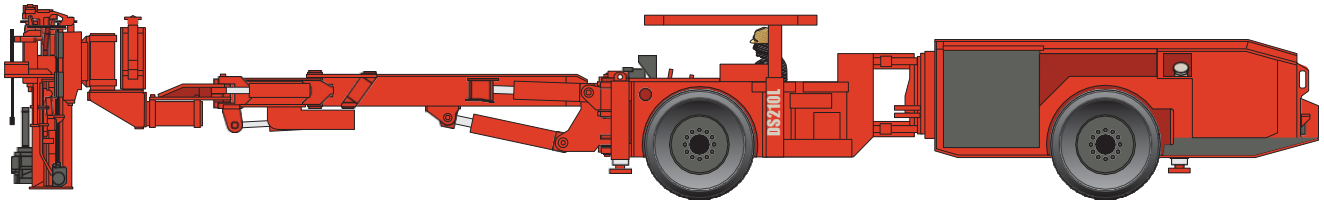


DS210L-M UNDERGROUND DRILL RIG

TECHNICAL SPECIFICATION



DS210L-M is a fully mechanized one man operated electro hydraulic low profile bolting machine for rock reinforcement in excavations with headroom as low as 1.6 m.

The robust rectangular profile telescopic boom allows the installation of several rows of bolts without moving the machine, the single operator working under the FOPS protective canopy.

The exceptional «V» shape layout is designed for good visibility and balance, this and the powerful four-wheel-drive articulated carrier ensure fast and safe manoeuvring even in low headroom conditions.

The high performance drilling system allows high drilling

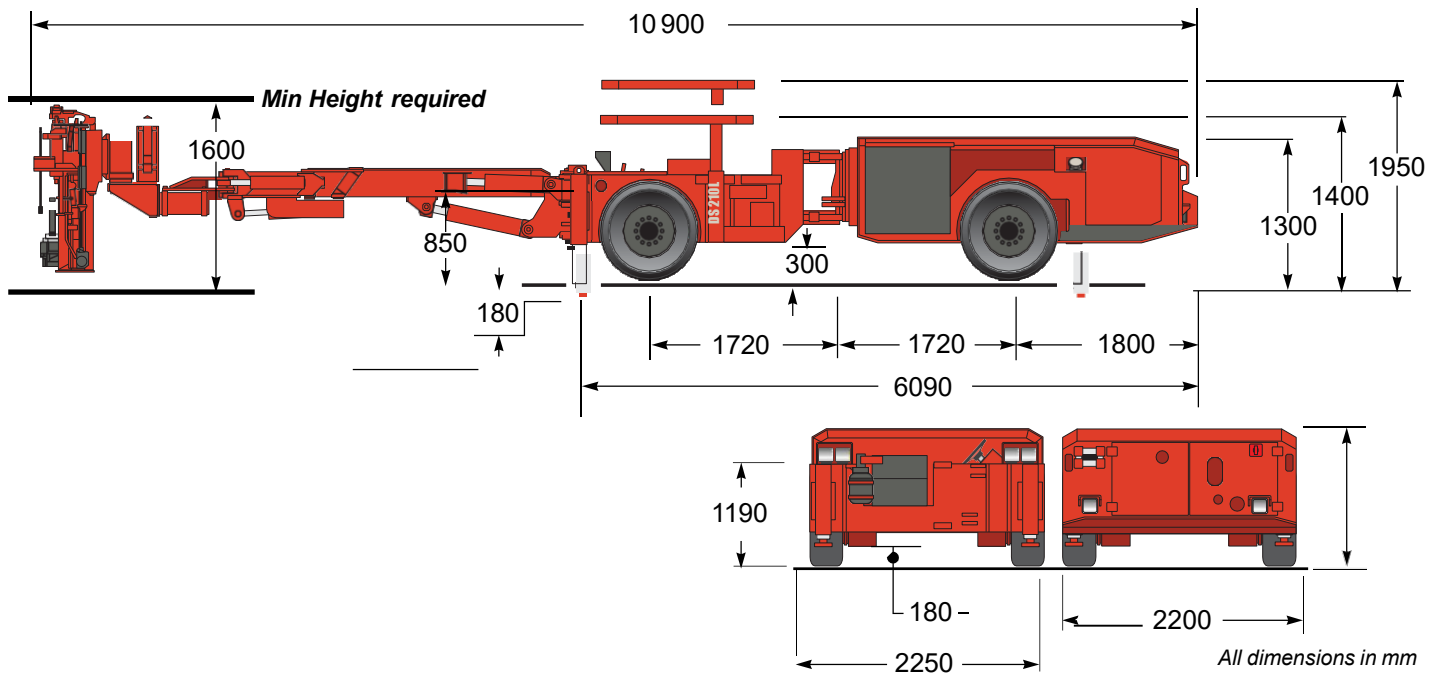
performance with good drill steel economy and high machine reliability.

The operator environment and added automatic functions allow the operator to concentrate on safe, fast and accurate drilling and bolts installation. All functions are piloted by an electric cable remote control.

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

Carrier	TC LP
Rock drill	HLX1
Wrench	RHR54
Boom	B26 XL-LPMB
Bolting head	TU LPM60
Control panel	TA 132E
Powerpack	30kW
Shank lubrication device	KVL10-1
Air compressor	CT10
Water pump	WBP1
Cable reel	TCR LP
Length	10 900mm
Width	2250mm carrier, front part 2200mm carrier, rear part
Height	1 400 mm roof down 1 950 mm roof up
Weight	13 100 kg

General dimensions



Hydraulic rock drill

Technical Specification 09025-1

Rock drill	HLX1
Standard shank	R23
Weight	50kg
Impact frequency	70-88kg
Percussion pressure	100-180bar
Impact Power	3.0-6.5 kW

Hydraulic rotary drill

Technical Specification 2-405 S

Rock drill	RHR54 Wrench
Weight	40kg
Max. oil pressure	210 bar
Max. torque	450 Nm

Boom

Technical Specification 8-510 S

Boom	B26XL LPMB
Type	Universal
Weight	2 000kg
Bolting head roll-over	240°
Boom extension	1 700mm
Bolting head extension (drilling & bolting)	500mm

*Greasing systems and options

*Greasing unit with pump, reel and nozzle	Manual
*Centralized greasing nipples	Remoted and centralized carrier greasing nipples

Bolting head

Technical Specification 8-406

Turret	TU-LPM
Type	Mechanized, double pass
Drill rods	MF R23 - H25
Bolt magazine capacity	5 bolts
Types of bolts	Resin / Mechanical end anchor

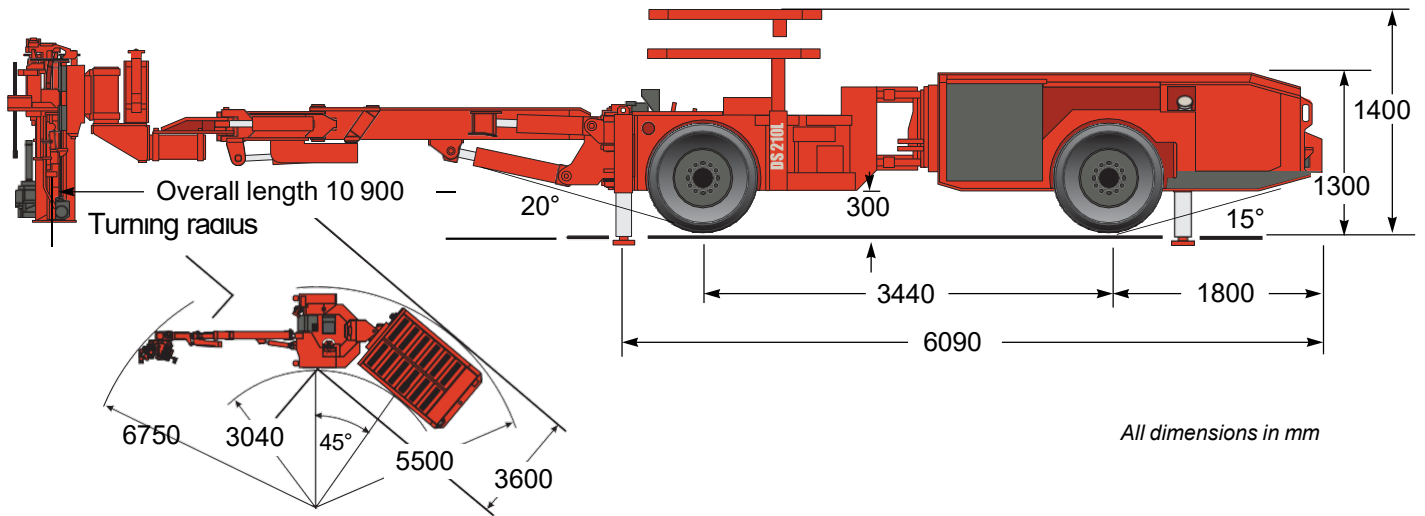
	Standard		*Optional		*Optional	
	TU-LPM 60		TU-LPM 56		TU-LPM 45	
	Min	Max	Min	Max	Min	Max
Bolt length	1500	2100	1500	1800	1110	1500
Hole depth	1710	2130	1550	1930	1195	1585
Operating height, mini	1900	2100	1800	2100	1600	1710
Overall length	1730	1900	1600	1790	1405	1600

*Cleaning system

*Pressure cleaning system with reel	Max. 15 bar (11 bar additional to mine water network)
*High pressure cleaning system with reel	Max. 180 bar

DS210L-M

Tramming dimensions



Hydraulic system

Filtration rate	20 microns (pressure) 10 microns (return)
Oil cooler	Cooling capacity 30kW OW30 water cooling
Drilling oil tank	160 liters
Tank filling	Manual filling pump
Powerpack	HPP130 (30kW)
Percussion pump	Gear pump, double stage
Rotation pump	Gear pump
*Tank filling	Electric filling pump
*Additional HP filters on tramming circuit	

Control system

Type	TA132E
Control	Electric remote
Power control	Adjustable full power Adjustable collaring speed
Rotation control	Adjustable rotation speed Reversible rotation
Flushing control	Water flushing

*Fire suppression system and options

*Manual fire suppression system (Ansul)	6 nozzles
*Automatic fire suppression system (Ansul)	6 nozzles
*Hand held fire extinguisher	6 kg

Electric system and *options

Total input power	45kW
Main switch	MSE-1JH
Standard voltage	380-690 VAC
Voltage fluctuation	+/- 10%
Phase sequence indicator frequency	50 or 60 Hz
Starting method	Star / delta
Thermal overload protection	
5 x hourmeters (Engine; Powerpack, Percussion, Compressor, Tramming)	
Reverse alarm	
Cable reel	TCR LP type, with spooling device
-Capacity	Seespec, 5-4100
Batteries	Voltage: 2x12V Rating: 120Ah
Transformer rating	1.3kVa
*Ground fault and overcurrent protection	VYK200
*Electric cable rubber or PUR	80, 100, 150 meters depending on voltage

Flushing system and *options

Flushing	Water
Water pump	WBP 1 (4kW)
Water pump capacity	33 l/min (at 11 bar)
Min water supply pressure	2 bar
Inlet pressure	2 - 7 bar (while drilling)
Air compressor	CT10, screw type
Electric motor	7.5 kW (10hp)
Shank lubrication device	KVL 10-1
Air consumption	250-350 l/min
Oil consumption	180-250 g/h
Air tank (flushing on rock drill return)	60 liters

*Optional features/components