

SITON

DS3

Rock Bolting Rig



DS3 Rock Bolting Rig

DS3 rock bolting rig is developed for using in various drift sizes from small to medium. It can install most common rock bolts like split set or resin bolts from 1.5m to 3m length. The suitable cross-sections (width x height) is from minimum 3.5m x 3m to maximum 6m x 6m.

Woserld Rock Drill

Specialized rock drill for bolting is designed in short length, big power and high stability. 8kw rock drill is standard, and higher power 10kw rock drill is optional.



Versatile Bolting Head

DS2 Bolting head can be customized for using split set bolts only, or resin bolts only, or combined both bolts. The bolts handler capacity for split set is 10 pcs, resin is 10 pcs, and combined both is 6 pcs split set + 6 pcs resin at the same time. Also resin conveying system and mesh handling arm are equipped on bolting head, by working together they can complete the meshing, drilling and bolting processes consistently and quickly.

Heavy Load Chassis

With time-proven and robust design chassis, this rig delivers high reliability with heavy loads. Also the classic direct hydraulic control system makes operating and maintenance easier.



Note: This picture is for reference only. Different or optional configuration will make it looks different.

Rock drill		
Model	M8B/D	M10B/D
Shank	R32	R32
Hole diameter (mm)	32-51	32-64
Max. Impact power (Kw)	8	10
Impact rate (Hz)	55-65	53
System pressure (bar)	15	16
Rotation motors	Independent rotation	
Rotation speed (rpm)	300	300
Max. Rotation Torque (Nm)	401	482
Lub. air consump.(L/s)	5	5
Weight (Kg)	71	103
Noise dB(A)	120	120
Note: Other models are available		

Feed and bolting head			
Model	BU25	BU25F	BU25D
Rock drill model	M8B/D	M8B/D	M8B/D
bolt length (mm)	1800	2000	2200
Bolt type (optional)	Split Set/Resin/Combined both		
Bolt handler capacity	10/10/6+6	10/10/6+6	10/10/6+6
Drill rod length (mm)	2175	2475	2700
Hole depth (mm)	1950	2185	2460
Propel force KN	7.5	7.5	7.5
Total length mm	2870	3165	3395

Mesh handling arm

Extention stroke1000mm
 Drive method.....hydraulic
 Handling method.....hydraulic cylinder

Boom

Propelling compensation.....410mm
 Boom extension.....1200mm
 Feed roll-over..... + /-180°

Control system

Direct hydraulic control system

Function:Anti-jamming

Hydraulic system

Hydraulic pump for impact, positioning and propulsion

Hydraulic pump for rotary oil unloading start

Max system pressure.....220bar

Volume of Hydraulic oil tank.....180L

Low oil level indicator with shutdown function

Oil tank with oil temperature gauge, temperature switch

Filtration accuracy.....10μm

Oil filtration indicator

Stainless steel water cooler for hydraulic oil

Mineral-based hydraulic oil

Air compressor system

Type.....screw type

Motor power.....5.5KW

Maximum displacement.....11.6 L/S

Working pressure.....8 Bar

Water system

Type.....Centrifugal type

Motor power.....1.5KW

Maximum flow.....50L/min

Maximum working pressure25bar

Electrical system

Total Installed power.....	62KW
Main motor power.....	55KW
Voltage.....	380V
Frequency.....	50HZ
Starting method.....	Star/triangle
Thermal overload protection for electric motors	
Impact timer	
Digital voltage/current meter	
Phase sequence indicator	
Ground fault indicator	
Battery charger	
Transformer.....	300VA
Electrical cable volume.....	90m

Chassis

Engine.....	Cummins
Rated power.....	53KW
Torque.....	270Nm
Fixed seat	
Articulated steering angle.....	$\pm 40^{\circ}$
four-wheel drive	
Hydrostatic Power Steering System	
Hydrostatic transmission	
Front axle.....	wet type
Rear axle.....	wet type
Tyre.....	9.00R20
Departure angle.....	17°
Approach angle.....	20°
Front hydraulic Outrigger.....	2pcs (extensible)
Rear hydraulic Outrigger.....	2pcs

Parking braking

Emergency and parking brake

Fuel tank volume.....70L

Electrical system voltage.....12V

Battery.....120Ah

Tramming lights.....8*Halogen

Brake light

Catalytic converter/silencer

Fire extinguisher

Spirit level

Max. Working gradient..... 14°

Traveling speed.....14Km/h

Horns, warning lights and reversing alarms

Optional Part

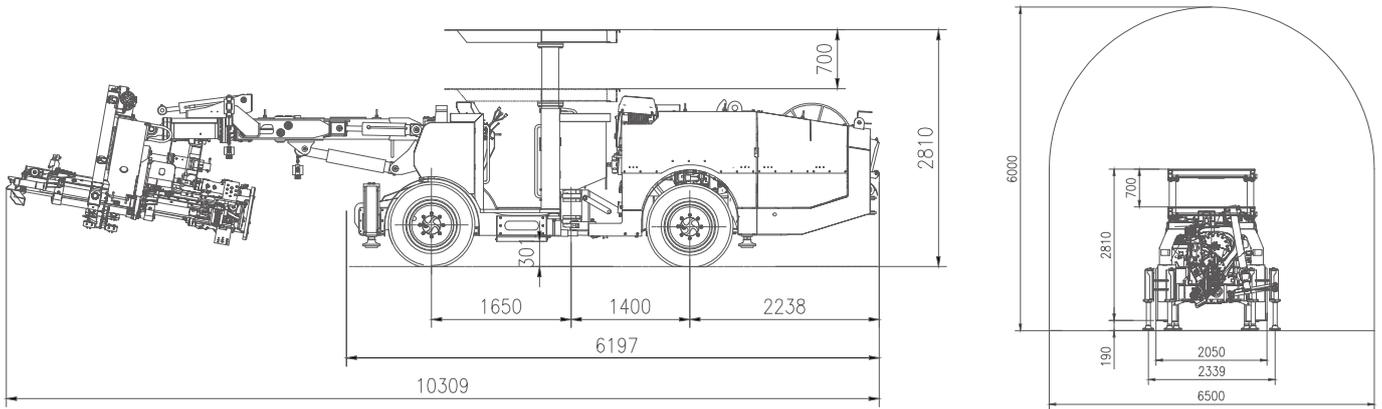
Diesel engine: Yanmar 56KW / Cummins 53KW

Bolting head: split Set / resin / combined both

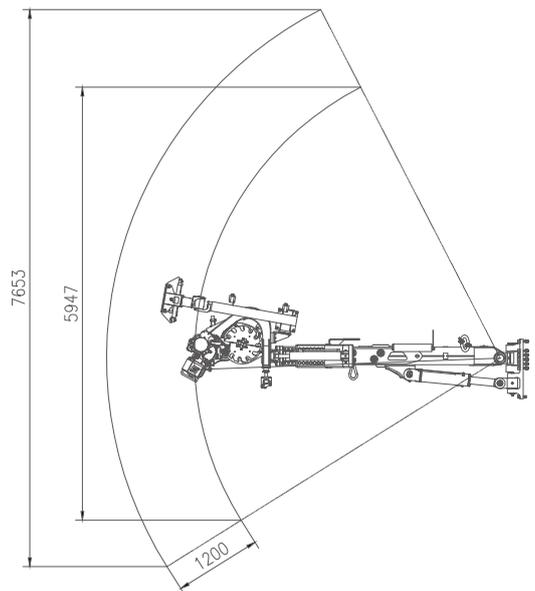
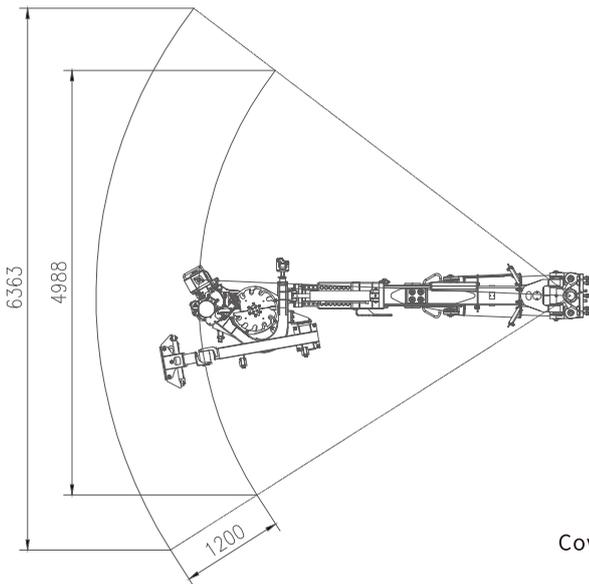
Automatic fire extinguishing system

Plateau type for over 3000m high altitude

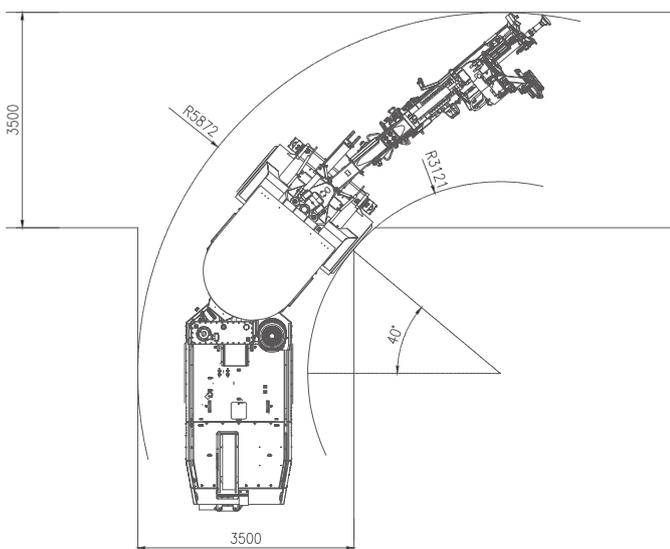
Measurements



Side view



Coverage area



Turning radius

Overall dimension	
L×W×H(mm)	10309x2050x2110/2810
Ground clearance(mm)	301
Weight Kg	13500
Turning Radius mm	3121/5872
Traveling speed Km/h	14