



SJ-400

Underground Mining Rock Breaker

SJ-400 is a high capacity rock breaker for use in 2.5x2.5 meter mining tunnels. It is used for secondary crushing in the underground mining process. The SJ-400 rock breaker has been upgraded for higher level of safety and more convenient operation and maintenance.

Higher productivity and efficiency is achieved by better stability and larger hammer size. The improved working mechanics of the rock breaker makes it easier to be positioned and stabilized.

The SJ-400 is equipped with a single seat, lateral driving and side working. The front and rear frames are equipped with outrigger cylinders, which are stable and reliable. The four leg cylinders can be separately controlled and adjusted smoothly. The articulated frame has flexible steering and small turning radius. The transmission system adopts pump motor structure to realize stepless speed change.



MAIN SPECIFICATIONS

Hammer impact energy	850J
Hammer impact power	6-12KW
Impact Rate	400~800bpm
Hammer working Pressure	130~160bar
Rod Diameter	85mm

SPEEDS FORWARD & REVERSE WITH DEUTZD914L04

Speed	0-10km/h
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WORK MECHANISM,CABIN

Boom Oscillation Angle	±30°
Hammer maximum working height	5540mm
Hammer maximum working distance	5845mm
Maximum ground clearance when the drill rod is vertical	1945 mm
Cabin	Open

MAIN SPECIFICATION

Total operating weight*	8800 kg
Dimension	6945mmx1568mmx2705mm
Min. Steering Radius	4285mm/2540mm
Min. Ground Clearance	200 mm
Gradeability	14° (25%)

*Unit weight is dependent on the selected options

OPERATIONAL CONDITIONS AND LIMITS

Environmental temperature	-15°C~+50°C
Standard operating altitude	With engine DeutzD914L04 from -1500 m to +1000 m at 25 °C without rated power derate

DESIGN STANDARD

JB/T5503-2004 Backhoe loader
JB 8518 Underground Mining Loader Safety Requirement
GB25518 Underground Mining Loader Safety Requirement
Q/XY 008 - 2018 Rock Breaker Company Standard

POWER TRAIN

ENGINE

Diesel engine	DEUTZ D914L04
Output	58kW @ 2300 rpm
Torque	273 Nm @ 1500 rpm
Number of cylinders	In-line 4
Displacement	4.314L
Cooling system	Air cooled and engine driven cooler fan
Combustion principle	4-stroke, direct injection
Air filtration	Prefiltration, Two stage filtration, dry type
Electric system	24 V
Emissions	Tier 3,
Euro II certificate number	C3C158
Exhaust system	DOC+POC+Silencer
Average fuel consumption at 50% load	5.8L/h
Fuel tank capacity	90L

VARIABLE PUMP

Variable pump	
Slovakia	PV22

VARIABLE MOTOR

Variable motor	
Slovakia	MV23

GEARBOX

Gearbox	
Xingye	WJD1-8A

AXLES

Front Axle	
SAHR	PC15
Fixed	
Rear Axle	
SAHR	PC15
Oscillating ± 8°	

TIRES

Tire size	10.00-20
Tire brand	TIANLI / QIANJIN

HYDRAULICS

Hydraulic oil radiator	Maximum heat dissipation can meet ≤ 50 ° C ambient temperature
Transmission oil radiator	
Fittings	H type (metric 24° cone seal)
Hoses	GB3683
Working hydraulic oil tank capacity	163 L
Driving hydraulic tank volume	110 L
Liquid level sight glass	1 pc

STEERING HYDRAULIC SYSTEM

Full hydraulic central articulated steering	Steering wheel handwheel operation
One double-acting hydraulic cylinder	Full hydraulic steering gear control steering
Shifting	Stepless speed regulation
Steering hydraulic cylinders	1 pc
Steering pump	Gear type fixed pump

WORK HYDRAULIC SYSTEM

Control mechanism	Hydraulic control handle operation (breaker is foot hydraulic controlled) 1pc
Work mechanism type	Folding working arm
Swing cylinder	2 pcs
Boom cylinder	1 pc
Second boom cylinder	1 pc
Rotary hammer cylinder	1 pc
Outrigger cylinder	4pcs
Working main valve	Open system
Working pump type	Gear type fixed pump

BRAKES

Fully enclosed multi-disc wet brake with spring brake; brake system performance in accordance with EN ISO 3450, AS2958.1 and SABS 1589.	
Characteristic	Parking brake is SAHR
Brake hydraulic tank volume	Integrated with the hydraulic tank

OPERATOR'S COMPARTMENT

SJ-400 cab provides a superior ergonomic operating environment that reduces operator fatigue by increasing legroom and improving pedal position. It is equipped with a three-point seat belt that adjusts the front and rear of the seat. Lateral driving, sideways work.

SJ-400 cab has passed ROPS/FOPS certification to protect operator safety. The cab has sufficient strength to prevent falling rocks from rolling over to protect the operator's safety; With work lights, the operator's line of sight can be clearer during gravel operations.

Cab

ROPS certification according to ISO 3471
FOPS certification according to ISO 3449
Open cabin
Dry powder fire extinguisher
Full hydraulic pilot proportional control handle
Washable cab floor to reduce dust
Three-point access to the cab
All power circuit breaker power off switch
Mechanical suspension

CAB DASHBOARD

The icon form panel to make it easier for the operator to identify the switch information of the alarm and have more time to look at the road and work.

XWD Standard Control System	
Warning and alarm system	Sound and light alarm prompt
Dash board	Icon dashboard Full-featured knob and push button switch control



FRAME

Structure

The rear frame adds a heavy-duty design which can stabilize the machine while working. The heavy-duty rear frame and tail frame minimize damage due to the roadway wall impact.

High-strength alloy steel plate is used to optimize material thickness, reduce self-weight, improve overall transportation capacity, and have long structural life.

The boom of the working mechanism is box-shaped and provides a strong impact load resistance and is optimized to reduce stress and extend boom life;

All articulation systems of the SJ-400 are equipped with lubrication points and are equipped with a multi-door wraparound hood that is well designed, saves time and effort, is easy to maintain, and is durable.

Central articulation	Adjustable bearing connection
Boom	Box structure
Engine cover	Multi-door combination
Automatic centralized lubrication system	Optional



ELECTRICAL EQUIPMENT

MAIN COMPONENTS

Alternator	28 V, 35 A
Batteries	2 x 12 V, 80Ah
Starter	4 kW, 24 V
Driving and working lights	LED lights 2PCSinside the cabin 2PCSin the rear frame
Dual horn configuration	Standard
Alarm	Oil pressure alarm, rotating alarm light

CONTAINED SECURITY FEATURES

FIRE SAFETY

Portable fire extinguisher	2kg 1PC
Centralized fire extinguishing system	optional
Hot side - cold side design	standard
Heat source isolation cover	standard
Exhaust pipe insulation cotton protection	optional

ENERGY ISOLATION

Lockable main switch	Standard
Frame articulation locking device	Standard

DOCUMENTATION

STANDARD MANUALS

Maintenance Manual	English
Parts Manual	English
Decals	English

OPTIONS

SAFETY OPTIONS

Sight remote control system
Retrieval hook (hydraulic brake release by pulling the hook)
Ansul Manual Fire suppression system with auto shutdown
Emergency steering function
Remote control system

OPTIONAL CONFIGURATION OF THE ELECTRICAL SYSTEM

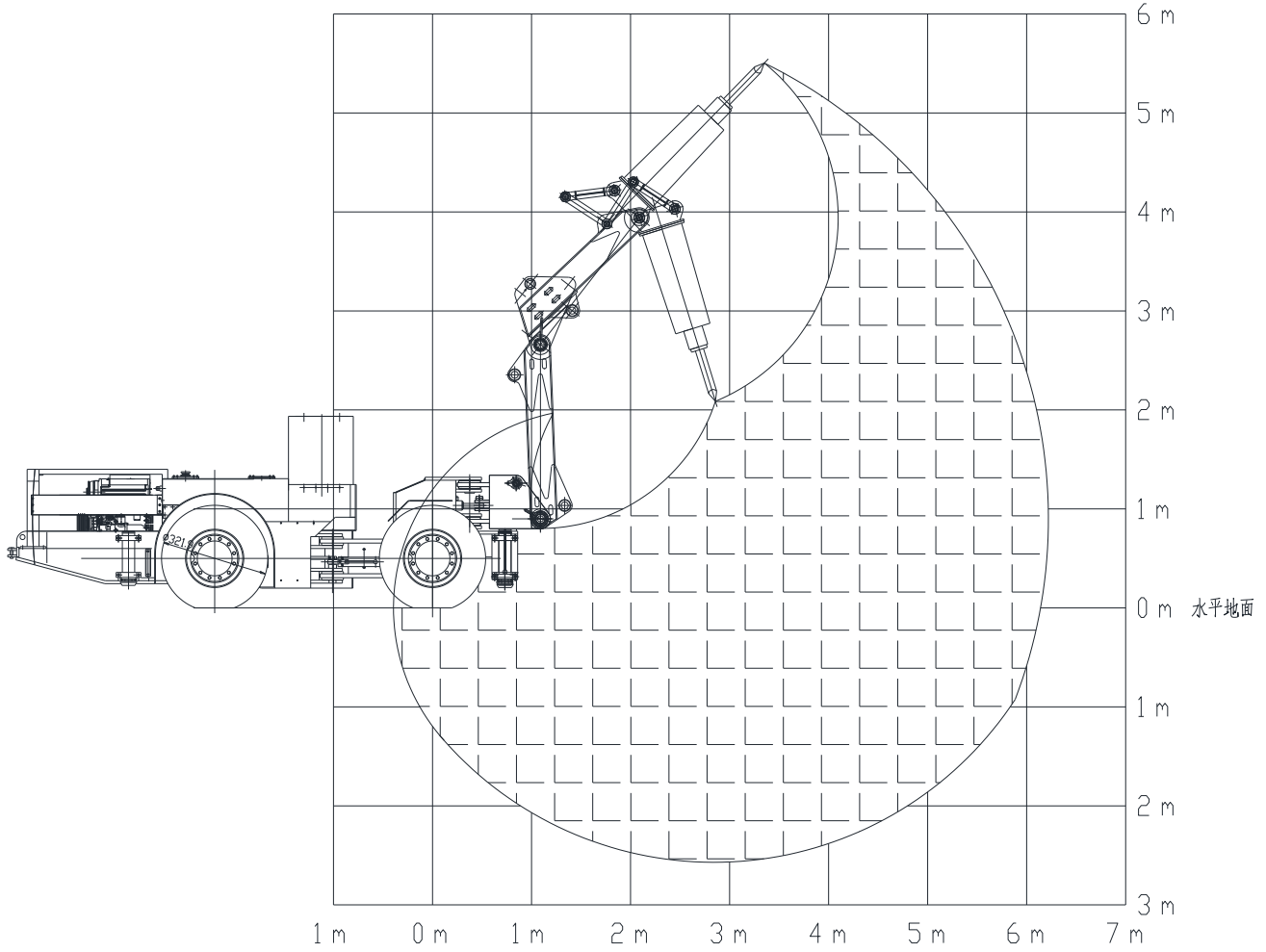
Imaging system

OTHER OPTIONS

Fast fueling, hydraulic oil and transmission oil interface
Customizable other breakers

GOOD WORKING RANGE

Equipped with SOOSAN SB45 breaker



THE HIT RANGE OF THE HAMMER



