

WJ-2 Underground Mining Loader

WJ-2 underground mining loader is suitable for 3.1×3.1 m mine tunnel. The loader has been greatly improved in terms of operation and maintenance ergonomics. Further improvements in the safety level of the original underground loader make operation and maintenance smoother.

WJ-2 cab is front-mounted, has a good view and is ROPS/FOPS certified to protect the operator. The ergonomically designed cab provides a comfortable operating space.

There is a safety locking pin on the boom to ensure the safety of the staff during maintenance.

Working brake and parking brake are SAHR. Each lubrication point is arranged reasonably for easy maintenance.

Drive system is accurately matched for high transmission efficiency.





MAIN SPECIFICATIONS

Tramming capacity	4 000 kg
Max.Break out force	81KN
Max. Tractive force	102KN
Standard bucket	2.3m ³
Size	6957×1820×2050 (mm)

SPEEDS FORWARD & REVERSE

1st gear	3.4km/h
2nd gear	7.1km/h
3rd gear	11km/h

BUCKET MOTION TIMES

Raising time	5.3sec
Lowering time	2.4sec
Dumping time	2.6sec

OPERATING WEIGHTS *

Total operating weight	13200 kg
Front axle	6000 kg
Rear axle	7200 kg

LOADED WEIGHTS *

17200 kg
12300 kg
4900kg
1

* Unit weight is dependent on the selected options



Lion One Mining Service (Pty) Ltd

Technical Specification WJ-2

Environmental temperature	-15 °C~+45 °C	
REQUIREMENTS AND COMPLIANCE		
JB/T5500 Underground	Mining Loader	
JB/T5501 Underground Mining Loader Test Method		
JB 8518 Underground Mining Loader Safety Requirement		
GB25518 Underground Mining Loader Safety Requirement		
XY13.1-2013 Underground Mining Loader Company Standard		
POWER TRAIN		
ENGINE		
Diesel engine	Cummins/ QSB4.5	
Output	119 kW @2200rpm	
Torque	624 Nm @ 1500rpm	
Number of cylinders	4	
Cooling system	Water cooled	
Fuel System	4-stroke direct injection supercharged engine	
Intake air filter	Dry air filtration	
Control System	Fuel electronically controlled injection system	
Electrical System	24V	
Emission Standards	Euro Stage III	
Exhaust system	Exhaust gas purifier	
Average fuel consumption at 50% load	11.9L/h	
Fuel tank capacity	127L	

OPERATIONAL CONDITIONS AND LIMITS

CONVERTER

Dana C270 Convertor

TRANSMISSION

Dana	Electric control shifting
R32000 Transmission	Three gears forward and reverse
	0

AXLES	
Front axle SAHR Fixed axle	XWD 2.03.00.0035
Rear axle SAHR Fixed axle	XWD 2.03.00.0036
TIRE	
Model	12.00-24

HYDRAULICS

Fittings	GB3733.1
Hoses	GB 3683
Working Hydraulic oil tank capacity	166L

STEERING HYDRAULICS

Full hydraulic, centre-point articulation, power steering with two double acting cylinders.	Mechanical control
Steering main valve	Open circuit type
Steering hydraulic cylinders	1pcs
Steering pump	Gear type Quantitative pump

BUCKET HYDRAULICS

The oil flow from Steering hydraulic pump is directed to Bucket hydraulics when steering is not used	Mechanical control
Working mechanics	6 link
Lift cylinders	1 pcs
Dump cylinder	1 pc
Main valve	Open circuit type
Pump for bucket hydraulics	Gear type Quantitative pump

BRAKES

SAHR. Fully closed multi-disc wet brake with spring brake; Integrated service brake, parking brake and emergency brake Brake system performance complies with requirements of EN ISO 3450, AS2958.1 and SABS 1589



Technical Specification WJ-2

OPERATOR'S COMPARTMENT

WJ-2 cab provides superior ergonomic operating space to reduce operator fatigue by increasing legroom and improving pedal position.

WJ-2 cab is front-mounted, has a good view and is ROPS/FOPS certified to protect the operator.

The control operation is a mechanical handle, which conforms to the operator's usage habits, has a simple structure and is convenient for maintenance.



ELECTRICAL SYSTEM

MAIN COMPONENTS	
Alternator	28 V,70 A
Batteries	2x12 V, 100Ah
Starter	24V/6KW
Driving and working lights	LED 2PCS on the top of cab 2PCS in rear frame
Screen	IFM 4.3 inch color programmable display
Alarm	Oil pressure alarm, rotating alarm light, engine fault alarm, water temperature alarm
Horn	Standard

INCLUDED SAFETY

FEATURES		
FIRE SAFETY		
Portable fire extinguisher	2kg 1PCS	
Main power switch	Standard	
Emergency stop push buttons	1 pc in cab	
Engine water tank cover	Standard	
Manual discharge for pressure accumulators	Standard	
Mechanical boom locking	Standard	

DOCUMENTATION

STANDARD MANUALS	
Operator's and Maintenance Manual	English
Parts Manual	English
Decals	English

OPTIONS

Remote control

Centralized extinguisher

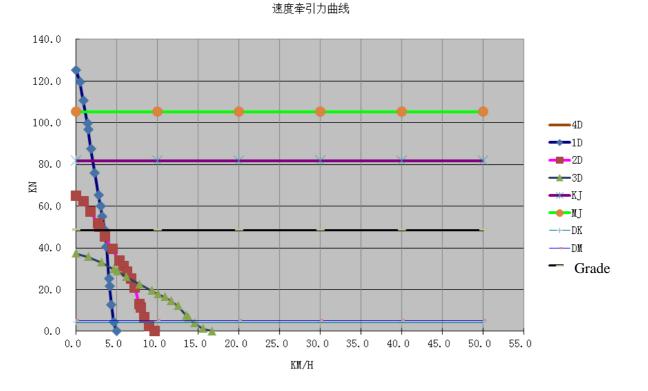
Electronically controlled operating system



GRADE PERFORMANCE

BF4M1013EC, Tier II (3 % rolling resistance)

EMPTY AND LOADED SPEED CURVE



1D, 2D, 3D, 4D: Gear Positions;

KJ is the static friction force at empty load, and MJ is the static friction force at full load;

DK is the dynamic friction force at empty load, and DM is the dynamic friction force at full load;





