



# WJ-1.5 Underground Mining Loader

WJ-1.5 underground mining loader is suitable for 3x3 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-1.5 cab is rear-mounted, has a good view and is ROPS/FOPS certified to protect the operator. The ergonomically designed cab provides a comfortable operating space.

Z-link working mechanism with a safety locking pin on the boom ensures the safety of the staff during maintenance.

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



## MAIN SPECIFICATIONS

Tramming capacity	3 000 kg
Max.Break out force	70kN
Max. Tractive force	85kN
Standard bucket	1.5m <sup>3</sup>
Size	7105*1760*2080(mm)

## SPEEDS FORWARD & REVERSE

1st gear	4.4km/h
2nd gear	10.7km/h
3rd gear	19.4km/h

## BUCKET MOTION TIMES

Raising time	4.8sec
Lowering time	2.7sec
Dumping time	1.0sec

## OPERATING WEIGHTS \*

Total operating weight	11 500 kg
Front axle	5 000 kg
Rear axle	6 500 kg

## LOADED WEIGHTS \*

Total loaded weight	14 500 kg
Front axle	9 250 kg
Rear axle	5 250kg

\* Unit weight is dependent on the selected options

### OPERATIONAL CONDITIONS AND LIMITS

Environmental temperature	-15°C~+40°C
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### 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	DEUTZ/ BF4M1013EC
Output	115 kW @2300rpm
Torque	577 Nm @ 1400rpm
Number of cylinders	4
Cooling system	Water cooled
Fuel System	4-stroke direct injection supercharged engine
Intake air filter	Dry air filtration
Speed governor	Mechanical governor
Electrical System	24V
Emission Standards	Euro Stage II
Exhaust system	Exhaust gas purifier
Average fuel consumption at 50% load	11.5L/h
Fuel tank capacity	120L

### CONVERTER

Dana C270 Convertor
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### TRANSMISSION

Dana R20000 Transmission	Power shift Three gears forward and reverse
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### AXLES

Front axle SAHR Fixed axle	XWD 2.03.00.0024
Rear axle SAHR Fixed axle	XWD 2.03.00.0025

### TIRE

Model	12.00-24
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### HYDRAULICS

Fittings	JIC
Hoses	GB 3683
Working Hydraulic oil tank capacity	160 L

### STEERING HYDRAULICS

Full hydraulic, centre-point articulation, power steering with two double acting cylinders.	Hydraulic pilot control
Steering main valve	Open circuit type
Steering hydraulic cylinders	2pcs
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	Hydraulic pilot control
Form of work organization	Anti six link
Lift cylinders	2 pcs
Dump cylinder	1 pc
Main valve	Open circuit type
Pump for bucket hydraulics	Gear type Quantitative pump

### BRAKES

Spring apply, 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
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## OPERATOR'S COMPARTMENT

WJ-1.5 cab provides superior ergonomic operating space to reduce operator fatigue by increasing legroom and improving pedal position.

WJ-1.5 cab is front-mounted, has a good view and is ROPS/FOPS certified to protect the operator.

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

## 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	
Optional engine	F6L912W
Centralized lubrication	



## ELECTRICAL SYSTEM

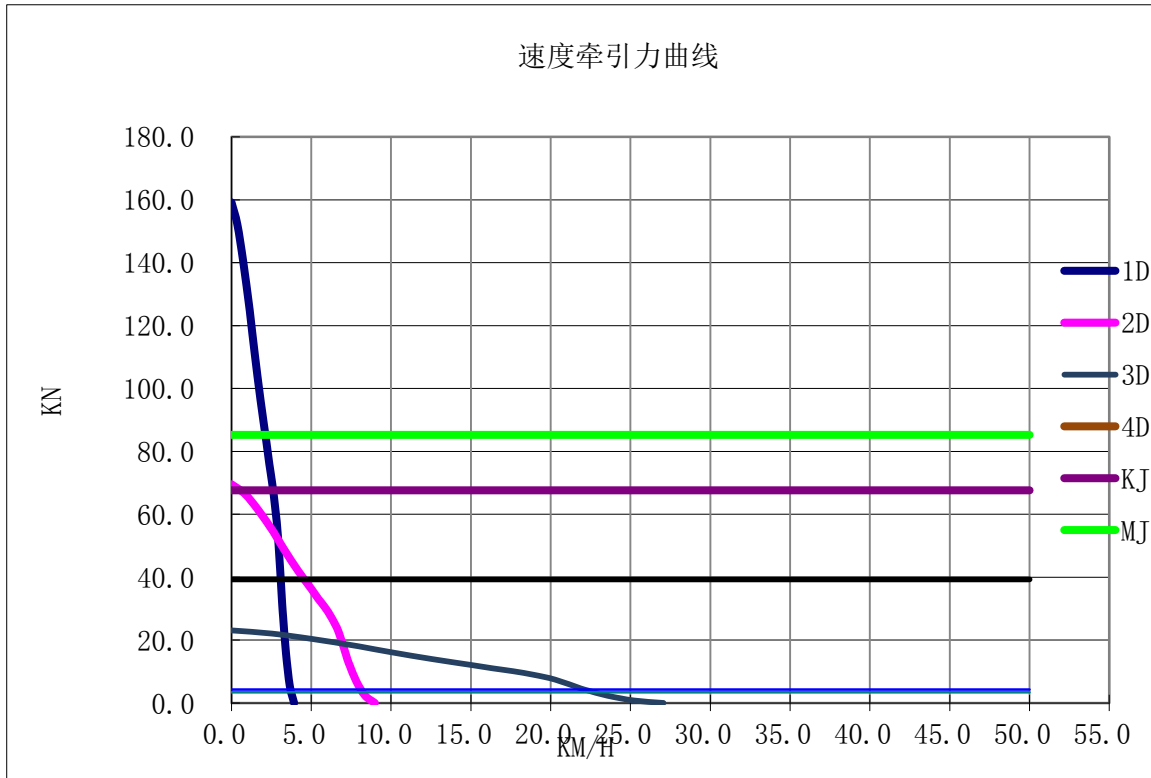
### MAIN COMPONENTS

Alternator	28 V,55 A
Batteries	2x12 V, 100Ah
Starter	24V/4KW
Driving and working lights	LED 2PCS on the top of cab 2PCS in rear frame
Alarm	Oil pressure warning/ Rotation Warning Lamp
Horn	Standard

**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;

