



# WJD-2 Underground Mining Loader

WJD-2 electric 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.

WJD-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	104KN
Standard bucket	2m <sup>3</sup>
Size	7312×1820×2050 (mm)

## SPEEDS FORWARD & REVERSE

1st gear	3.4km/h
2nd gear	7.1km/h
3rd gear	11.0km/h

## BUCKET MOTION TIMES

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

## OPERATING WEIGHTS \*

Total operating weight	13600 kg
Front axle	5700 kg
Rear axle	7900 kg

## LOADED WEIGHTS \*

Total loaded weight	17600 kg
Front axle	11000 kg
Rear axle	6600kg

\* Unit weight is dependent on the selected options

### OPERATIONAL CONDITIONS AND LIMITS

Environmental temperature	-15 °C~+45 °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

#### ELECTRIC MOTOR

Electric motor	YE3-280S-4
Type	Three-phase, squirrel-cage motor
Output	75 kW @ 1485rpm
Working voltage	380V
Frequency	50Hz
Rated Current	136.3A
Efficiency	95.0%
Power factor	0.88

### CONVERTER

Dana C270 Convertor
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### TRANSMISSION

Dana R32000 Transmission	Electric control shifting Three gears forward and reverse
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### AXLES

Front axle SAHR Fixed axle	XWD 2.03.00.0013
Rear axle SAHR Fixed axle	XWD 2.03.00.0014

### TIRE

Model	12.00-24
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### HYDRAULICS

Fittings Standard	GB3733.1
Hoses Standard	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	1 pcs
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

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

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

WJD-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.



### INCLUDED SAFETY FEATURES

#### FIRE SAFETY

Portable fire extinguisher	2kg 1PCS
Main power switch	Standard
Emergency stop push buttons	1 pc in cab
Manual discharge for pressure accumulators	Standard
Mechanical boom locking	Standard
Safety Device	Three-phase electric monitoring, thermal overload protection, cable over-discharge protection

### DOCUMENTATION

#### STANDARD MANUALS

Operator's and Maintenance Manual	English or Chinese
Parts Manual	English or Chinese
Decals	English or Chinese

### OPTIONS

Remote control
Centralized extinguisher
Centralized lubrication

### ELECTRICAL SYSTEM

#### MAIN COMPONENTS

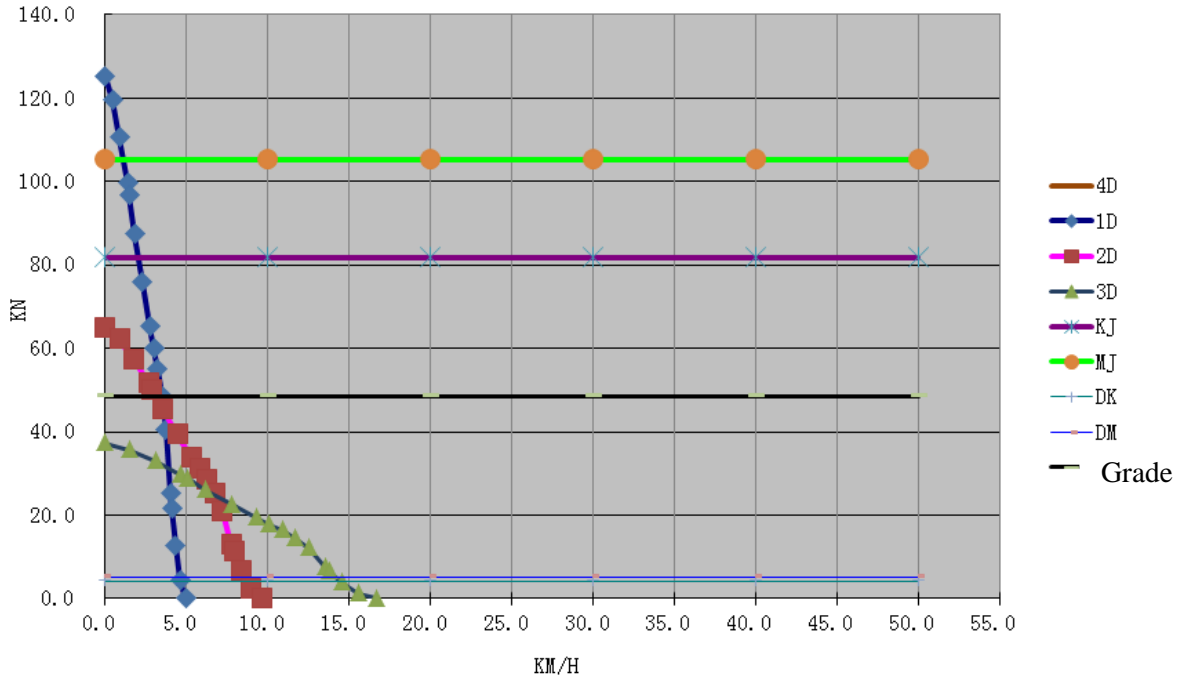
Control Voltage	24 V
Cable Length	100m
Driving and working lights	LED 2PCS on the top of cab 2PCS in rear frame
Startup mode	Star-delta starting
Alarm	Low oil level warning/ Rotation Warning Lamp
Horn	Standard

**GRADE PERFORMANCE**

YE3-280S-4 Three-phase, squirrel-cage motor (3 % rolling resistance)

**EMPTY AND LOADED SPEED CURVE**

速度牵引力曲线



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;



