



WJD-1 Underground Mining Loader

The WJD-1 is a small electric underground mining loader for 2.5 x 2.5 m mine tunnels. It uses lateral driving and operation. The cab is spacious, with a wide view and comfortable operation.

The whole machine adopts the central hinged and slewing bearing type body swing structure, which has better stability and passing ability.

The transmission system uses a hydrostatic transmission system (pump & motor) for continuously variable speed.



MAIN SPECIFICATIONS

Tramming capacity	2 000 kg
Dimension	6090mm*1340mm*2000mm
Max. Break out force	42kN
Max. Tractive force	50kN
Standard bucket	1.0m ³

SPEEDS FORWARD & REVERSE

	0-8km/h
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BUCKET MOTION TIMES

Raising time	4.4sec
Lowering time	2.6 sec
Dumping time	1.8sec

OPERATING WEIGHTS *

Total operating weight	6 600 kg
Front axle	3 050 kg
Rear axle	3 550 kg

LOADED WEIGHTS *

Total loaded weight	8 600 kg
Front axle	5 800 kg
Rear axle	2 800kg

* Unit weight is dependent on the selected options

OPERATIONAL CONDITIONS AND LIMITS

Environmental temperature	-10°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

ELECTRIC MOTOR

Electric motor	YX3-225M-4
Type	Three-phase, squirrel-cage motor
Output	45kW @ 1480rpm
Working voltage	380V
Frequency	50Hz
Cable length	98m

VARIABLE PUMP

Danfoss	T90
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VARIABLE MOTOR

Eslovaquia	MV23
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TRANSFER CASE

XINGYE	WJD1-8A
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AXLES

Front axle	PC15
Fixed axle	
Rear axle	PC15 NO-SPIN differential
Central swing	articulated Swing angle $\pm 8^\circ$

HYDRAULICS

Hydraulic oil radiator	Capability up to 40°C ambient temperature
Transmission oil radiator	
Fittings	Type C (metric 74° cone seal)
Hoses	GB 3683
Working Hydraulic oil tank capacity	160 L
Driving Hydraulic oil tank	55L

STEERING HYDRAULICS

Full hydraulic, centre-point articulation, One power steering cylinders.	Direction handwheel operation Full hydraulic steering gear control steering
Hydraulic Steering Unit	Open center type
Double acting steering cylinder	1 pc
Steering pump	Gear type Quantitative pump

BUCKET HYDRAULICS

Control Mechanism	Hydraulic pilot control
Working mechanism	5-link
Lift cylinders	1 pcs
Dump cylinder	1 pc
Main working valve	Open center 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

TIRE

Model	10.00-20
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OPERATOR'S COMPARTMENT

WJD-1 cab provides superior ergonomic operating space to reduce operator fatigue by increasing legroom and improving pedal position. It is equipped with 2-point safety belt and the seat is adjustable. The operator drives and works sideways.

WJD-1 cab has passed ROPS/FOPS certification to protect operator safety.

The steel framed 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 is clearer during operation.

CABIN

ROPS certification according to ISO 3471

FOPS certification according to ISO 3449

Open Cabin

Portable fire extinguisher

Full hydraulic pilot proportional control handle

Floor washable with water to reduce dust

Three-point contact access system to cabin

Seat belt.

Master circuit breaker switch

DASHBOARD AND DISPLAYS

Equipped with 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.

XINGYE Standard Control System Standard

Critical warnings and alarms	Displayed with sound and light
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Instrument Panel	Icon form panel Full-featured rocker switch control
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REAR AND FRONT FRAME

A new heavy duty rear frame with added weight in the rear of the loader balances the machine perfectly when lifting and pushing into the muck pile. Heavy duty rear frame and mask with integrated reaction bars minimizes damage from wall impacts.

High strength structure with optimized material thicknesses and reduced own weight contribute to higher overall hauling capacity and long structural lifetime.

Welded steel box structures used in the frame and boom provide strong resistance to shock loads and are optimized to reduce stresses and extend frame lifetime

Central hinge	Adjustable bearing
Tanks	Welded to the frame
Boom system	5-LINK

ELECTRICAL SYSTEM

MAIN COMPONENTS

Driving and working lights	LED 2PCS in cab 2PCS in rear frame
Alarm	Rotation Warning Lamp
Horn	Standard

INCLUDED SAFETY FEATURES

FIRE SAFETY

Portable fire extinguisher	2kg 1PCS
Cooling fan guard	Standard
Front and rear frame locking device	Standard
Boom locking device	Standard

DOCUMENTATION

STANDARD MANUALS

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

OPTIONS

SAFETY OPTIONS

Ansul manual fire extinguishing system and automatic shutdown
Emergency steering function

ELECTRICAL OPTIONS

Monitoring camera system

OTHER OPTIONS

Centralized lubrication
0.75m ³ Bucket Capacity
Side dump bucket



