



WJD-3 Underground Mining Loader

WJD-3 electric underground mining loader is suitable for 3.7*3.7m mine tunnel. Compared with other underground mining loader, this model has been greatly improved in terms of operation and maintenance ergonomics. Further improvement in the safety level makes operation and maintenance smoother.

The front unloading V-type bucket has a simple structure, reliable unloading, and large effective volume, and is widely used in various working conditions. Reasonable bucket edge design can effectively improve production efficiency and wear resistance and service life of the bucket.

The Z-link working device is compact in structure and small in front suspension, which provides a better view for the driver; the breakout force is large; the discharge speed is easy to control.

The ROPS/FOPS open cab has an open view; it is safe and reliable; comply with ergonomic design and provide comfortable operation.



MAIN SPECIFICATIONS

Tramming capacity	6 000 kg
Max.Break out force	103kN
Max. Tractive force	128kN
Standard bucket	3.0m ³
Size	9160x2174x2300(mm)

SPEEDS FORWARD & REVERSE

1st gear	2.4km/h
2nd gear	4.8km/h
3rd gear	12.6km/h

BUCKET MOTION TIMES

Raising time	8sec
Lowering time	8sec
Dumping time	6sec

OPERATING WEIGHTS *

Total operating weight	17500kg
Front axle	6500 kg
Rear axle	11000 kg

LOADED WEIGHTS *

Total loaded weight	23500 kg
Front axle	15000 kg
Rear axle	8500kg

* Unit weight is dependent on the selected options

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	YX3-280M-4
Type	Three-phase, squirrel-cage motor
Output	90 kW @1480rpm
Working voltage	380V
Frequency	50Hz
Rated Current	136.7A
Efficiency	95.0%
Power factor	0.88

CONVERTER

Dana C5400

TRANSMISSION

Dana 32000Transmission	Electric control shifting Three gears forward and reverse
------------------------	--

AXLES

Front axle spring applied hydraulic released brakes Fixed	DANA 16D Limited slip differentials
Rear axle spring applied hydraulic released brakes Self-oscillation frame, Oscillating \pm 8°	DANA 16D No spin differentials

TIRES

Tire size	17.5-25 L-5S 20ply
Tire brand	TIANLI/QIANJIN

HYDRAULICS

Fittings	JIC
Hoses	GB 3683
Working Hydraulic oil tank capacity	383L/297L (Effective volume)

STEERING HYDRAULICS

Full hydraulic, centre-point articulation, power steering with two double acting cylinders.	Handle operation
Steering main valve	Open circuit type
Steering hydraulic cylinders	2 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.	Handle operation
Boom system	Z-link
Lift cylinders	2 pcs
Dump cylinder	1 pc
Main valve	Open circuit type
Pump for bucket hydraulics	Gear type Quantitative pump

BRAKES

Enclosed multidisc wet brakes on all wheels. Integrate service brake, park brake and emergency brake in a whole system. Brake system performance complies with requirements of EN ISO 3450, AS2958.1 and SABS 1589	
Automatic brake activation system, ABA	Standard
Brake hydraulic tank is shared with servicing hydraulic tank, volume 383L	



OPERATOR'S COMPARTMENT

WJD-3 cab provides superior ergonomic operating space to reduce operator fatigue by increasing legroom and improving pedal position. The front part of the pedal protrudes outward, and the upper front part and the left and right sides protrude outward to make the cab space larger.

WJD-3 cab has passed ROPS/FOPS certification (ISO3471/ISO3449) to protect operator safety. The left side is equipped with an electronically controlled shifting hydraulic steering (integrated) handle, and the right side is equipped with a hydraulically controlled working handle, which is in line with the operator's driving habits, flexible operation, safe and reliable.



DOCUMENTATION

STANDARD MANUALS

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

ELECTRICAL EQUIPMENT

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	Oil pressure warning/ Rotation Warning Lamp
Horn	Standard

INCLUDED SAFETY FEATURES

FIRE SAFETY

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

OPTIONS

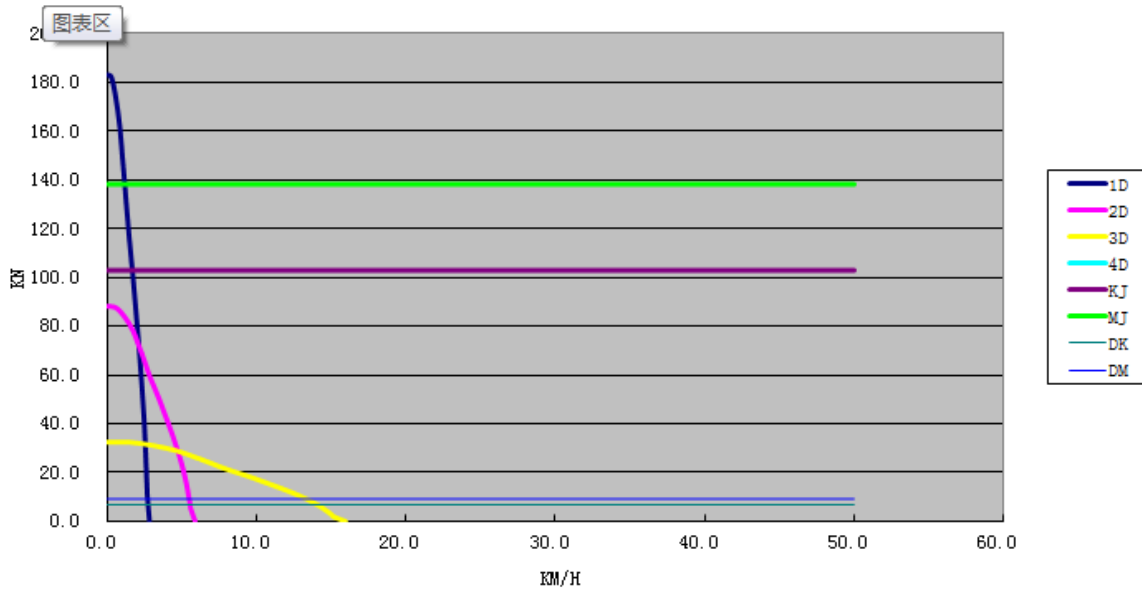
Electronically controlled operating system
Centralized lubrication

GRADE PERFORMANCE

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

EMPTY AND LOADED SPEED

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;



