

WJD-4(LE-10A) Underground shovel loader, which is highly intelligent, safe and reliable to use, has good overall machine stability , and can greatly improve mine productivity and profitability .

Flexible operation:

The horizontal cable winding system is used, which is flexible in operation, saves reversing time, and has high production efficiency; it does not need to dig a reversing chamber, saving the development work of digging a reversing chamber. It does not require a complex cable arrangement device, the cable tension is small, and the cable is not easily damaged.

Energy saving and emission reduction:

The whole machine hydraulic system such as working, steering and cable winding adopts load feedback variable system, which effectively reduces the power loss of the main motor and saves electricity.



Main parameters

Dimensions (mm)	10172×2613×2384
Rated load capacity	10000 kg
Maximum digging force	185k N
Standard bucket capacity	4 m³

Forward and reverse speed

1st gear	2.9 km/h
2nd gear	6.2 km/h
3rd gear	10.6 km/h
4 gears	17.8 km/h

Working mechanism movement time

Arm Raise Time	7.9 sec
Arm drop time	4.0 sec
Tipping time	2.2 sec

No load*

Operating Weight	29620 kg
Front axle load	11300 kg
Rear axle load	18320 kg

Fully loaded*

Operating Weight	39620 kg
Front axle load	24620 kg
Rear axle load	15000 kg

* Equipment weight depends on options selected

Equipment design in accordance with the standard

JB/T5500 Underground Loader
JB/T5501 Test method for underground loaders
JB8518 Safety requirements for underground loaders
GB25518 Safety requirements for underground loaders
XY13.1-20 21 Scraper Enterprise Standard

Powertrain

Powertrain	
Travel motor type	Three-phase squirrel cage asynchronous motor
Travel motor rated power	132 kW
Travel motor rated voltage	1000V
Travel motor rated frequency	50Hz
Travel motor rated speed	1480 rpm
Travel motor protection level	IP65
Travel motor insulation grade	F
Brake pump motor type	Three-phase squirrel cage asynchronous motor
Brake pump motor rated power	7.5 kW
Brake pump motor rated voltage	380V
Brake pump motor rated frequency	50Hz
Brake pump motor rated speed	1480 rpm
Brake pump motor protection level	IP65
Brake pump motor insulation grade	F
Fan motor type	Three-phase squirrel cage asynchronous motor
Fan motor rated power	2*2.2 kW
Fan motor rated voltage	380V
Fan motor rated frequency	50Hz
Fan motor rated speed	2880 rpm
Fan motor protection level	IP65
Fan motor insulation grade	F
Total motor power	143.9kW

Torque Converter

Dana C 5572 Torque Converter

Gearbox

Dana R36420 gearbox

Electronic shift
Gear shift buffer function
Gear shifting operation and steering handle integrated control
Four gears forward and reverse

Axles

Front axle	Kessler D 102
Spring brake hydraulic release	Limited slip differential
Rigid axle	
Rear axle	Kessler D 102
Spring brake hydraulic release	Limited slip differential
Comes with a swing frame , swing angle $\pm 8^{\circ}$	

tire

model	18.00- 25 L-5S 32ply
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Hydraulic system

When the cab door is not locked , the equipment brakes	standard
Hydraulic oil radiator Transmission oil radiator	Maximum heat dissipation can meet $\leq 45^{\circ}\text{C}$ ambient temperature
Connector Standard	JIC Standard
Hose Standard	GB3683
Working hydraulic oil tank capacity	250L

Steering hydraulic system

Fully hydraulic central articulated steering Two double -acting steering cylinders	Electric proportional control
Steering main valve	Load sensing multi-way valve Center closed core type
Steering hydraulic cylinder	2 pcs
Steering pump type	Plunger variable displacement pump

Working hydraulic system

When not steering, the steering hydraulic pump merges with the working hydraulic pump to improve working efficiency	Electric proportional control
Work organization form	Reverse six -link
Lifting cylinder	2 pcs
Tipping cylinder	1 pc
Working main valve	Load sensing multi-way valve Center closed core type
Working pump type	

Brake hydraulic system

It adopts spring brake, fully enc it integrates service brake, park brake.	
The performance of the braking requirements of GB/T33921 an	Plunger variable displacement pump
Automatic brake activation system	
Electric emergency brake release pump	
Brake hydraulic oil tank capacity	

Driver operation :

The cab provides an excellent ergonomic operating space, reducing operator fatigue by increasing legroom and improving pedal position. The front of the pedal protrudes outward, and the upper front and left and right sides protrude outward to make the cab space larger.

The cab is ROPS/FOPS certified to protect the operator's safety. The left handle integrates the shift and steering functions, and the right handle controls the movement of the working device.

Cab

ROPS certified according to ISO 3471
FOPS certified according to ISO 3449
Closed air-conditioned cab

Sound-absorbing and flame-retardant interior material (enclosed)
Laminated glass windows (closed)
Air conditioning and cab are installed independently
Equipped with air conditioning filter element (closed type)
Adjustable operating handle and armrest
Emergency exit
Washable cab floor to reduce dust
Three-point entry system for the cab

Cab dashboard

Configuration 7” The color display screen can flexibly switch between various interfaces and adjust brightness, time, import / export programs and other operations; the display screen can display vehicle parameters and various alarm information , allowing the operator to understand the real-time status of the vehicle and operate the vehicle more efficiently and safely .	
Industrial Standard Intelligent Control System	
Warning and alarm systems	Sound and light alarm prompt
Dashboard	7 ” color display Fully functional rocker switch button control

Adjustable back support
Three-point seat belt

frame

Front and rear rack

The heavy-duty design of the rear frame can better stabilize the equipment when lifting and shoveling ore. The heavy-duty design of the rear frame and tail frame minimizes the damage from the impact of the tunnel wall. Adopt high-strength alloy steel plate, optimize material thickness, reduce dead weight, improve overall transportation capacity, and prolong the structure life.

The working mechanism boom adopts a box-type structure, which provides strong resistance to impact loads and is optimized to reduce stress and extend the service life of the boom.

Central hinge	Bearing connection
Work organization	Reverse six-bar mechanism



Driver's Seat

The driver's seat is adjustable and equipped with a three-point safety belt. The seat can be adjusted up and down, front and back. It is equipped with a padded arm rest and an adjustable joystick that can be installed on the cab door or the right wall of the cab.

Height adjustable
Adjustable operator weight
Adjustable arm rests

Electrical System	
Main Configuration	
Battery	2 × 12 V, 1 00 Ah
Cable winding system	Automatic electronic control
Leakage protection	standard
Lighting and work lights	LED Light: 1pc under the upper arm 4pcs on upper arm 3pcs in the cab 4pcs in rear rack
Control System	7 ” color display Programmable controller Built-in diagnostic system
Horn/Back-up Siren	standard
Flashing warning lights	standard
Parking/ brake indicator light	2pcs in rear rack
Traffic warning lights	2pcs in front rack 2pcs in rear rack
Maximum cable capacity	300m , 3*35+3*10
Standard cable	200m, 3*35+3*10
Reversing Image	1pc monitor in cab 1pc camera in rear frame

Included safety features	
Fire safety	
Portable fire extinguisher	12 kg
Other features	
Main power switch	standard
Automatic centralized lubrication system	standard
Emergency stop button	2pcs In the rear rack 1pc in the cab
Accumulator automatic pressure relief device	standard
Front and rear rack locking device	standard
Arm locking device	standard

document	
Vehicle Operation Manual	Chinese or English
Vehicle Maintenance Manual	Chinese or English
Vehicle spare parts manual	Chinese or English

Standard configuration of the whole machine		
project	Standard	Optional
Automatic centralized lubrication system	☒	☐
Electric emergency brake release pump	☒	☐
Chinese logo stickers	☒	☐
Reversing Image	☒	☐
Closed cab	☒	☐
Air conditioning and refrigeration system	☒	☐
Optional configuration of the whole machine		
project	Standard	Optional
Manual centralized lubrication system	☐	☒
Automatic dry powder fire extinguishing system	☐	☒
Manual dry powder fire extinguishing system	☐	☒
Manual emergency brake release pump	☐	☒
Automatic trailer mechanism	☐	☒
English logo label	☐	☒
Russian logo stickers	☐	☒
Line-of-sight remote control system	☐	☒
Remote control system	☐	☒
Emergency steering	☐	☒
Air conditioning and heating system	☐	☒
Weighing system	☐	☒
Driving Recorder	☐	☒
Big arm suspension	☐	☒
Tire Pressure Monitoring System	☐	☒

Other optional configurations	
project	Configuration Instructions
Adding skive teeth	This configuration requires separate consultation and special instructions
Customize other bucket capacity	
Added dozer function	
Changing tires	
Automatic shift series	
Anti-collision system	
Production Management System	
Unmanned driving system	

