

The Xingye Machinery WJD -6 (LE-14) underground electric loader features a horizontal drum design. This underground loader boasts significant improvements in ergonomics for operation and maintenance. Safety levels have been further enhanced compared to previous models, resulting in smoother operation and maintenance. The cab space has been greatly increased, making operation more comfortable for the driver.

Improved overall machine stability and a larger bucket size enhance productivity and profitability. The newly improved working mechanism facilitates ore loading and reduces tire wear. A maximum unloading height of 2490mm meets the loading requirements of 50Ton trucks during underground mining operations.

The WJD-6 (LE-14) features an independent cab that is easy to disassemble and maintain; the increased interior space of the cab improves driver comfort.



Loader XINGYE WJD-6

Main parameters

External dimensions (mm)	10825 × 2920 × 2576
Rated load capacity	14,000 kg
Maximum digging force	230k N
Maximum traction	280k N
Standard bucket capacity	6.0 m³

Forward and backward speed

1st gear	3.2 km/h
2nd gear	5.5 km/h
3rd gear	9.0 km/h
4 gears	17.7km/h

Work unit exercise time

Arm raising time	9.4 sec
Falling arm time	5.4 sec
Flip Time	2.8 sec

Unloaded*

Operating weight	39,800 kg
Front axle load	18600 kg
Rear axle load	21200 kg

Fully loaded*

Operating weight	53800 kg
Front axle load	37100 kg
Rear axle load	16700 kg

* Device weight depends on the selected options.

Equipment design according to standards

JB/T5500 Underground Loader
JB/T5501 Test Methods for Underground Loaders
JB8518 Safety Requirements for Underground Loaders
GB25518 Safety Requirements for Underground Loaders
XY13.1-2013 Enterprise Standard for Loaders and Shovels

Powertrain

Electric motor

Electric motor (walking)	M 3BP-315-SMC-4
type	Three-phase rat cage type
Rated power	132 kW @ 1500 rpm
Operating voltage	1000V
frequency	50Hz
Electric motor (pump)	YE4-250M-4
type	Three-phase rat cage type
Rated power	55 kW @ 1480 rpm
Operating voltage	1000V
frequency	50Hz
Electric motor (fan)	M 3BP-90LA-2 (2pcs)
type	Three-phase rat cage type
Rated power	2.2 kW @ 3000 rpm
Operating voltage	380V
frequency	50Hz

Torque converter

Dana C 8672 torque converter

Gearbox

Dana 6421 gearbox	Electronic shifting Four gears for forward and four gears for reverse
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Axle

Front axle			
Spring	brake	hydraulic	Kessler D 106
release			Limited slip differential
Rigid axle			
Rear axle			
Spring	brake	hydraulic	Kessler D 106
release			Limited slip differential
Includes a swing arm with a swing angle of ±8°.			

Tire

model	26.5 - 25 L-5S 36 ply
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Hydraulic system

When the driver's cab door is unlocked , the equipment brakes.	standard
Hydraulic oil cooler	Maximum heat dissipation can meet
Transmission oil cooler	≤50 °C ambient temperature
Connector Standard	JIC Standard
Hose Standards	GB 3683
Working hydraulic oil tank volume	320L

Steering hydraulic system

Fully hydraulic center articulated steering	Electronic control
Two double -acting steering hydraulic cylinders	
Steering main valve	Center closed core type
Steering hydraulic cylinder	2 pcs
Steering pump type	Variable displacement piston pump

Working hydraulic system

When not steering, the steering hydraulic pump and the working hydraulic pump combine to improve working efficiency.	Electronic control
organizational structure	Reverse Six
Lifting cylinder	2 pcs
Tipping cylinder	1 pc
Working main valve	Center closed core type
Working pump type	Variable displacement piston pump

Brake hydraulic system

It adopts spring braking and a fully enclosed multi-disc wet brake; it integrates service braking, parking braking and emergency braking .	
The braking system performance meets the requirements of EN ISO 3450, AS2958.1 and SABS 1589 standards.	
Automatic braking activation system	standard
Electric emergency brake release pump	standard
100 L capacity	

Driver operation

The Xingye Machinery WJ D -6 (LE-14) cab offers superior ergonomic operating space, reducing operator fatigue through increased legroom and improved pedal position. The pedals protrude outwards at the front, and the upper front and sides also protrude outwards, maximizing cab space.

Xingye Machinery's WJ D -6 (LE-14) enclosed cab has passed ROPS/FOPS certification to protect operator safety. The enclosed cab interior is upholstered in 25mm flame-retardant and noise-reducing fabric, with an additional flame-retardant ABS interior covering on the exterior, providing not only an aesthetically pleasing and comfortable interior but also effective dustproofing and noise reduction. It features laminated glass windows with four-way sealing strips, allowing for internal and external glass removal for emergency escape in case of danger. The cab is secured to the frame using rubber shock absorbers to reduce cab vibration.

Driver's cab

ROPS certification complies with ISO 3471.
FOPS certification complies with ISO 3449.
Enclosed air-conditioned cab
Interior materials for sound absorption, noise reduction, and flame retardancy
Laminated glass windows
Air conditioning is installed independently from the driver's cab.
Configure air conditioning filter element
Adjustable operating handle and armrest
Emergency escape exits
The cab floor is washable to reduce dust.
Three-point entry system for driver's cab

Cab dashboard

Configuration 7" The color display screen allows for flexible switching between various interfaces and adjustment of brightness, time, and import / export of programs. The screen can display vehicle parameters and various alarm information , enabling operators to understand the vehicle's real-time status and operate the vehicle more efficiently and safely .	
Xingye Standard Intelligent Control System	
Warning and alarm systems	Audible and visual alarm prompts
Dashboard	7" Color display screen
	Fully functional rocker switch button control



Driver's seat

The Xingye Machinery WJ D -6 (LE-14) driver's seat is an adjustable mechanical suspension seat equipped with a four- point seatbelt. The seat is adjustable in height, fore-and-aft position, and features a padded armrest and adjustable control levers that can be mounted on the cab door or the right-side wall of the cab.

Mechanical levitation
Height adjustable
Adjustable according to the operator's weight
Adjustable armrests
Adjustable back support
Four- point safety belt

Front and rear racks

The rear frame features a heavy-duty design, providing better stability during lifting and shoveling of ore. The heavy-duty rear frame and tail frame minimize damage from impacts from the tunnel walls. It uses high-strength alloy steel plates, optimizes material thickness, reduces weight, improves overall transport capacity, and has a long structural life. The boom of the working mechanism adopts a box-type structure, which provides strong resistance to impact loads and has been optimized to reduce stress and extend the service life of the boom. The rear frame features a split design, allowing for easy disassembly and deployment into the well.

Central hinge	Adjustable bearing connection
Tank	rack- mount
Work unit	Inverse six-bar linkage

Electrical system

Main configuration

Lighting and work lights	LED lights
	1pc in the lower part of the upper arm
	4pcs in the front rack
	3 pieces in the cab
control system	4 pieces in the rear rack
	7" color display
	Programmable Logic Controller
	Built-in diagnostic system
Horn/Reversing Alarm	standard
Flashing warning light	standard
Parking/ Brake Indicator Light	2 pieces in the rear rack
Red and green indicator lights	2 pieces in the front rack
	2 pieces in the rear rack
Reversing camera	1 PC monitor in the driver's cab
	1 camera in the rear rack
storage battery	2 × 12 V, 1 00 Ah
Cable reel system	Automatic electronic control
Residual current protection	standard
Standard cable	250m, 3*50+3*25/3

Included security features

Fire safety

Portable fire extinguisher	8 kg 2pcs
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Energy isolation

The main power switch can be locked.	standard
Emergency stop button	1 cab , 2 rear racks
Front and rear frame locking devices	standard
boom locking device	standard
Cooling fan shroud	standard

Document

Standard Manual

User Manual	Chinese or English
Repair Manual	English
Spare parts manual	Chinese or English
Maintenance Manual	Chinese or English
Label	Chinese or English

Complete configuration

Project	Standard configuration	Optional
Manual centralized lubrication system	☐	☒
Automatic centralized lubrication system	☒	☐
Automatic dry powder fire extinguishing system	☐	☒
Manual dry powder fire extinguishing system	☐	☒
Emergency brake release pump	☐	☒
Automatic reversing mechanism	☐	☒
English labels	☐	☒
Russian signs and labels	☐	☒
Line-of-sight remote control system	☐	☒
Remote control system	☐	☒
Emergency steering system	☐	☒
Air conditioning heating system	☐	☒
Weighing system	☐	☒
dashcam	☐	☒
Tire pressure monitoring system	☐	☒

Other optional configurations

Project	Configuration instructions
Add shovel teeth	This configuration requires separate consultation. and special notes
Customize other bucket capacity	
Add pusher function	
changing tires	
Automatic Shift Series	
Collision avoidance system	
Production Management System	
Autonomous driving system	

