



INDUSTRY LEADER

IN HYBRID POWER



WHEEL LOADER

XC9150

Product Specifications

OPERATING WEIGHT

55,000 kg

BATTERY

4 x 280 kW

BUCKET CAPACITY

7.7m³

ENGINE

Cummins QSM15

563 kW @ 2100 rpm

Built for African Conditions



PRODUCT HIGHLIGHTS

- Equipped with a high-voltage electric drive system, high transmission efficiency, and fast response speed. Special functions include anti-slip, anti-skid, limp-home, and automatic protection.
- Hybrid power and energy recovery, effectively recovers energy generated by the "integrated electro-hydraulic brake" using it to drive the wheel-side motors, reducing mechanical brake wear.
- Intelligent human-machine visual interaction system, providing real-time, safe, convenient, and fast monitoring and diagnosis of the entire vehicle's operating information, with comprehensive safety protection system.
- The electro-hydraulic proportional intelligent control system, electro-hydraulic system with positive flow control, and load-sensing electro-hydraulic handle steering system, achieve precise and efficient compound actions such as loading, driving, and steering.

MACHINE WALKAROUND

ELECTRICAL SYSTEM

Electrical air cleaner blockage alert
 Battery voltage
 Engine oil pressure
 Fuel level
 Engine coolant temperature
 Transmission malfunction code
 Engine coolant temperature
 Engine tachometer
 Engine oil pressure gauge
 Battery voltmeter
 Fuel tank display
 Working hour display
 Battery main switch
 Electric horn
 Parking brake
 High beams
 Turn signal
 LCD screen
 2 Headlights (LED)
 1 LED dome light
 2 rear combination lights
 2 front roof working lights (LED)
 Main light
 2 working lights, rear hood (LED)
 Working light
 Rotating warning light

POWERTRAIN

Cummins engine

Engine intake preheating
 Reduction gear
 Electrical differential
 Parking brake
 Service brake (enclosed wet disc)
 Power cut off
 Emergency stop
 Transmission oil level inspection
 35/65R33 L5 double coin tyre

HYDRAULIC SYSTEM

Bucket lift limit
 Automatic bucket levelling
 Diagnostic pressure joint
 Hydraulic oil cooler

SAFETY

360° panoramic view
 Fire extinguisher
 Radar + auxiliary display
 Lockable fuel tank cap
 Boom safe lever

CAB

Rear wiper
 ROPS & FOPS cab
 Coat hook
 Tinted safety glass
 Magazine bag
 Radio/USB player

Wrist supports and arm rests
 24V to 12V DC converter
 Cab lock/key
 Cooling and heating AC
 3-inch retractable safety belt
 Adjustable air suspension (heated)
 Air suspension seat
 Cup holder
 Dual brake pedal
 Start-up
 FNR gear

OTHER

Counterweight
 Traction pin
 Handrails/ ladders/ platforms/ pedals
 Splash guard (front)
 Anti-corrosion spray
 Tool kit
 Automatic lubrication system
 Fan reversal
 Chassis guard (engine, transmission)

BUCKET

5.0m³ mine bucket
 6.5m³ mine bucket
 7.6m³ mine bucket

UNRIVALED ON THE MINESITE

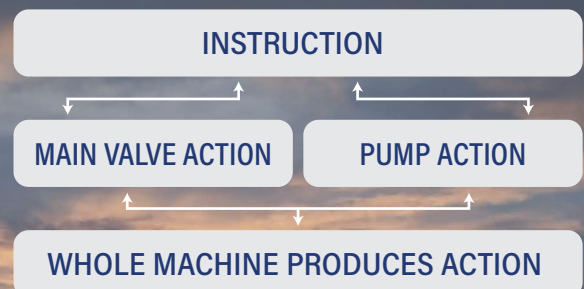


TECHNICALLY ADVANCED

- The XC9150 integrates a combination of advanced technologies, to achieve precise and efficient loading, driving, and steering. These systems include:
 - ◆ *Electro-hydraulic proportional intelligent control*
 - ◆ *Electronic control positive flow hydraulics*
 - ◆ *Load sensing electronic control handle steering*
- The AC-direct high-voltage electrical system boasts high transmission efficiency and a fast response speed, saving more than 20% in fuel when compared to loaders with the same level of hydraulic transmission.
- Featuring anti-slip, limp-home, and automatic protection functions, for greater performance and increased life of the machinery.
- Hybrid power and energy recovery effectively recycle energy generated by the integrated electro-hydraulic braking system, utilising it to drive the wheel-side motors, reducing mechanical brake wear.

POSITIVE FLOW CONTROL LOOP

- Increased productivity and responsiveness.
- Improved system stability and power management.
- Reduced energy consumption and hydraulic system complexity.



PROVEN STRENGTH AND RELIABILITY

SUPERIOR STRENGTH

- Structural components are made of low-temperature, high-strength structural steel.
- Key stress-bearing parts are made of high-strength cast steel, providing strong load-bearing capacity to withstand torsion and impact under various working conditions.
- The working device is built from high-strength structural steel and wear-resistant steel for the boom and bucket. This allows the loader to adapt to harsh variable conditions with variable loads.
- The transmission system consists of a multi-stage planetary wheel system, providing high transmission ratio and large torque.

HIGHER RELIABILITY

- The electric drive system offers high transmission efficiency, high control precision, and fast response speed; saving over 25% fuel compared to loaders of the same level with hydraulic transmission. AC motors have the advantages of high reliability, low maintenance rate, and high output torque.
- The electric drivetrain - equipped with highly reliable electric motors - eliminating the need for a transmission and drive axle. This significantly reduces the failure rate of the powertrain.
- The working device is equipped with a limit sensing mechanism with angle memory function, offering functions such as lifting limit, automatic levelling, ensuring accurate positioning during lifting and unloading, reducing impacts, avoiding repetitive operations, and reducing workload while making the operation more efficient.
- The electro-hydraulic positive flow hydraulic system, combined with constant power control technology, enhances the energy efficiency, rapid response, manoeuvrability, and joint operation efficiency of the hydraulic system.
- Hybrid power and energy recovery effectively recover the energy generated by the "integrated electro-hydraulic brake" and use it to drive the wheel-side motors, reducing mechanical brake wear.



OPERATOR FOCUSED

DELIVERING COMFORT, SAFETY AND CONTROL

The XC9150 electric-driven loader - featuring a rated working load of 15 tonnes - has become the leader of international super-large tonnage loaders. With its long service life, low maintenance costs, and high reliability, this loader is well-suited for large-scale open-pit mining, loading of ore trucks, short-distance transportation, and various other applications.

CONVENIENT SERVICEABILITY

■ INTELLIGENT MANAGEMENT SYSTEM

The intelligent management system provides users with the ability to monitor the operation and maintenance status of the equipment in real time. Through data analysis, the system enables precise evaluation of user projects, ensuring optimal equipment matching and efficient operation.

By optimising equipment matching, the system enhances production and management efficiency, while lowering operating costs and risks, ultimately optimising profitability. Users can easily control the equipment and have full command of all critical information.

■ MULTIPLE MAINTENANCE PLATFORMS

Convenient maintenance is achieved through multiple maintenance platforms and centralised points, strategically located throughout the machine, and rotatable structures on the hood for easy access.

■ CENTRALISED LUBRICATION

The centralised lubrication system and pressure test outlets for the hydraulic system, further improve maintenance efficiency.



LEADING SAFETY STANDARDS

- The advanced design of the XC9150 cab, takes into account the comfort and safety of the operator. The new integrated pressurised cab meets international standards for rollover protection and falling object protection.
- Equipped with adjustable air suspension, and streamlined, vibration-dampening seats, the cab vibration is significantly reduced.
- Advanced sealing of the cab ensures ultra-quiet and dust-free operation.
- The intelligent heating and cooling climate control system, provides optimal temperatures, for a comfortable working environment.
- The 360° reversing camera reduces blind spots and enhances operational safety.
- The CAN bus communication technology offers strong resistance to interference, assuring accurate detection of engine data and other parameters. The reliable integrated instrument panel provides precise readings and features audible and visual alarm signals, allowing for real-time monitoring of the machine's operating status.
- Electric retarder braking: controlled by the brake pedal, it allows the loader to come to a complete stop without using mechanical brakes.
- Hydraulic braking: full hydraulic multi-friction plate wet brake, providing strong braking torque to meet the emergency braking requirements under various working conditions.
- Equipped with 3 emergency stops and power isolation switch.



XC9150

WHEEL LOADER

DIMENSIONS & SPECIFICATIONS



MAIN SPECIFICATIONS

ENGINE	
Model	Cummins QSM15
Type	In-line 6-cylinder, air to air intercooler, electric common
	563 kW @ 2100 rpm
Rated Power	563 kW
Max. Power	3000 Nm
Max. Torque	14.5 L
Displacement	

OVERALL PARAMETERS	
Operating Weight	55,000 kg
Bucket Capacity	7.7 m ³
Rated Load	15,000 kg
Max. Breakout Force	370 kN
Tipping Load	Straight ≥ 42,000 kg
	Fully articulated ≥ 36,000 kg

EIC SYSTEM	
Whole Voltage Platform	600 V
Rated Power	4 x 145 kW
Max. Rated Power	4 x 280 kW
Max. Rated Output Torque	4 x 1205 Nm
Output Torque	4 x 3500 Nm
Battery Type	Power Mode
Power Battery Voltage	600 V
Hypobaric Electric System	118 kWh
DC Charging Port	240 kW
Electrical System Voltage (low)	24 V
Battery Voltage	24 V
Walking Motor	
Amount	4
Type	Permanent magnet synchronous motor
Single Rated Output Power	145 kW
Single Max. Output Power	280 kW

Electric Generator	
Amount	1
Type	Permanent magnet synchronous motor
Single Rated Output Power	350 kW
Single Max. Output Power	450 kW

Charging Pile	Single 150 kW (250A)
Charging Power	118 kWh
Charging Time	0.75 h

DRIVELINE	
Travel Speed	
FWD 1st / 2nd	12 / 32 km/h
RVS 1st / 2nd	12 / 32 km/h
Brake Distance	<14.22 m
Tyre	35/65R33
Min. Ground Clearance	570 mm

CAB	
Heating Power	8 kW
Cooling Power	4.5 kW

SOUND	
Sound Pressure Level	78 dB
Exterior Sound Power Level	106 dB

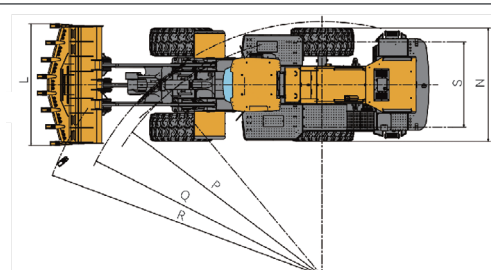
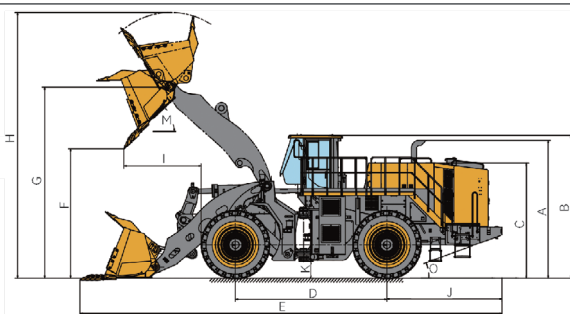
HYDRAULIC SYSTEM	
Pumps	Electric control pump
Rated Flow	145 ml/r
Control Valve	Electric-hydraulic proportional
System Pressure	30 MPa
Operating Hydraulic Circuit	
Lifting Cylinder	2 x 210 x 125 mm
Tipping Bucket Cylinder	1 x 260 x 140 mm
Brake System (Service, park, emergency brake)	Fully hydraulic

AXLE	
Drive System	Four-wheel independent drive
Front Axle	Fixed
Rear Axle	Central oscillation with 12° angle to each side
Reduction Gear	Planetary final drive in wheel hubs
Differential	Electrical differential

STEERING SYSTEM	
Type	Electric control pump
Rated Flow	145 ml/r
Hydraulic Cylinder	2 x 130 x 80 mm
System Pressure	21 MPa
Steering Angle	±40°

SERVICE REFILLS	
Diesel Engine Oil	600 L
Engine Oil	52 L
Reduction Gear	4 x 50 L
Hydraulic Gearbox	5 L
Coolant	120 L
Hydraulic Oil	300 L

DIMENSIONS		
A	Height to Top of Exhaust	4086 mm
B	Height to Top of Cab	4234 mm
C	Height to Top of Hood	3409 mm
D	Wheelbase	4500 mm
E	Overall Length	12538 mm
F	Dumping Height	3838 mm
G	Height to Hinge Pin, Fully Raised	5662 mm
H	Max. Lifting Height	7873 mm
I	Dumping Height	2292 mm
J	Length, Rear Axle to Bumper	3420 mm
K	Ground Clearance	505 mm
L	Bucket Width	3875 mm
M	Dumping Angle for Max. Lifting and Dumping	47°
N	Width Over Tyres	3606 mm
O	Departure Angle	20°
P	Turning Radius, Centre of Tyres	7622 mm
Q	Turning Radius, Outside of Tyres	8108 mm
R	Turning Radius, Over Bucket	9214 mm
S	Wheel Track	2710 mm



Materials and specifications in this brochure are subject to change without notice. Please speak with a Brooks Equipment Sales Representative for specifications of the physical unit.