

WE2350-2

Wheel Loader General Specifications



Safety



Reliability



Productivity



Operating capacities, weights and dimensions

	Standard lift		High lift		Super high lift	
	m ³	yd ³	m ³	yd ³	m ³	yd ³
Bucket capacity	40.52	53	38.23	50	53.5	70
Operating payload	72574 kg	160000 lb	68039 kg	150000 lb	54431 kg	120000 lb
Static tipping loads						
Straight	184300 kg	406300 lb	164200 kg	362000 lb	128751 kg	283848 lb
Full 42° turn	172100 kg	379400 lb	153300 kg	338000 lb	108884 kg	240049 lb
Breakout force	1173 kN	263702 lb	1290 kN	289900 lb	980 kN	220142 lb
Operating weight	266622 kg	587800 lb	272065 kg	599800 lb	276045 kg	608576 lb

Note: Standard rock bucket based on a material density of 1780 kg/m³ (3000 lb/yd³)

Super high lift data based on 70yd³ coal bucket - rock bucket data available upon request.

Working ranges

Engine	1715 kW	2300 hp
Payload		
Standard	72574 kg	160000 lb
High lift	68039 kg	150000 lb
Super high lift	54431 kg	120000 lb
Bucket capacity sized to material density		
Truck match	290 - 363+ tonne	320 - 400+ ton

Power module

Diesel power options

Cummins diesel engine	Tier 1, Tier 2 or Tier 4	
Model	QSK 60 16 cylinders	
Type	4-cycle turbocharged	
Rated power	1715 kW (2300 hp) @ 1800 rpm	
MTU Detroit diesel engine	Tier 1, Tier 2	Tier 4
Model	16V series 4000 16 cylinders	12V series 4000 12 cylinders
Type	4-cycle turbocharged	
Rated power	1715 kW (2300 hp) @ 1800 rpm	

The independent power module mounting system, consisting of the engine coupled to the SR generator, is cradled within the rear frame by a three-point isolation system.

Radiator/oil cooler module

- Replaceable tube type, side-by-side split flow
- Thermostatically controlled, variable speed hydraulic motor-driven, radiator-mounted fan
- Auxiliary oil cooler available for high ambient conditions

Exhaust system

Dual, low restriction mufflers with vertical, mid-hood discharge

Control system-LINCS II

LINCS II

Microprocessor based modular design Vehicle Control Unit (VCU) with monitoring and diagnostics including integrated data logging and storage.

LINCS II uses a dash mounted full color, touch screen display as the operator interface. Out-of-range conditions will cause an audible alarm along with a message screen that is color coded to indicate severity.

In addition, the touch-screen display provides repair technicians with operational data and fault messages.

LINCS II load weigh

- Displays real-time load per pass, per truck and total loads
- Memory capable of retaining months of production information
 - Capable of interfacing with radio dispatch systems for real-time monitoring

Steering and hoisting system

Steering

Steering function is controlled by a single joystick. Constant engine rpm assures full hydraulic steering response.

Articulation angle	R-42°, L-41°	
Turning radius		
Standard lift	19.43 m	63 ft 9 in
High lift	19.52 m	64 ft 0 in

Hoist and bucket control

Hoist and bucket control functions are incorporated into a single joystick control. The proportional electro-hydraulic controlled hoist and bucket system is independent of the steering system.

Standard/high lift cycle times:

Hoist	17 seconds
Dump	3 seconds
Float	6 seconds

Propulsion system

SR Hybrid Drive switched reluctance (SR) technology propulsion system

- Digital microprocessor controlled traction drive
- SR Hybrid Drive advantages include:
 - No commutator, brushes or rotor windings on SR motors or generator
 - Hybrid regenerative energy storage for improved fuel economy
 - Parts commonality - power conversion modules identical for motor and generator

Travel speed

Forward and reverse 0-19.31 km/h (0-12 mph)

Generator

- G200 SR generator

Traction motors

- B60 SR motor
- SR all wheel drive (independent SR motor for each wheel)

Planetary gearing

- Model 57
- In-line gear train mounted within the rim of the tire, transmitting power from the traction motor through the tire/rim assembly.
 - A four-stage planetary drive unit in each position
 - Total reduction 99:1

Hydraulic system

HPD drive box

- Pressurized, cooled, and filtered lubrication
- Ratio 1:1

Pumps (maximum flow rate at 1800 rpm)

Main	Piston (4)	1870 L/min	494 gpm
Steering	Piston (2)	469 L/min	124 gpm
Accessory	Piston	81 L/min	21 gpm

Tier one engine

Fan/blower drive	Tandem piston	171/171 L/min	45/45 gpm
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Tier two engine

Fan drive	Piston	235 L/min	62 gpm
Blower	Piston	171 L/min	45 gpm

Cooling system

Circulating pump	Vane	409 L/min	108 gpm
Aux. cooling (optional)	Piston	81 L/min	21 gpm

Valves

Main	Three (3)	700 L/min	185 gpm
	Pump pressure	27579 kPa	4000 psi
Steering	One (1)	341 L/min	90 gpm
	Pump pressure	27580 kPa	4000 psi

Cylinders

Double-acting, single-stage (diameter and stroke), (standard and high lift)

Hoist	406 mm x 2108 mm	16 in x 83 in
Bucket	317.5 mm x 1086 mm	12.5 in x 42.75 in
Steering	191 mm x 762 mm	9.5 in x 30 in

Braking system

Primary brake system

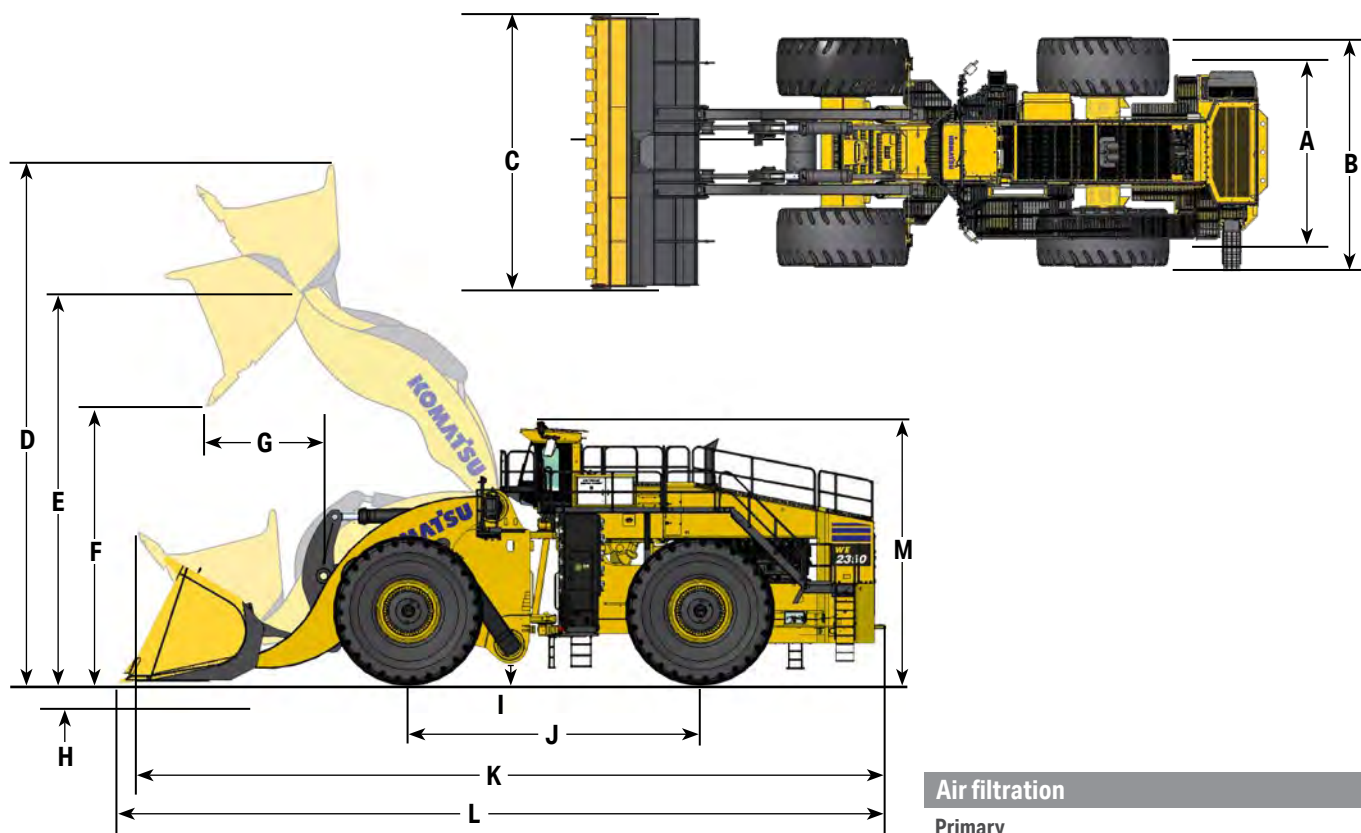
Electric dynamic braking system is controlled from the accelerator pedal and can bring the loader to a full stop without application of mechanical brakes.

Secondary brake system

- Air modulated traction motor speed disc brakes
- Single disc and caliper on each traction motor (4)
 - Emergency fail safe brakes are spring applied in the event of air pressure loss

Parking brake system

Spring applied, air release traction motor speed disc brakes



Overall dimensions

		Standard lift		High lift		Super high lift	
A	Tread	5.0 m	16 ft 5 in	5.0 m	16 ft 5 in	5.0 m	16 ft 5 in
B	Width outside tires	6.76 m	22 ft 2 in	6.76 m	22 ft 2 in	6.76 m	22 ft 2 in
C1	Rock bucket without deflectors	7.01 m	23 ft 0 in	7.01 m	23 ft 0 in	7.01 m	23 ft 0 in
C2	Rock bucket with deflectors	7.58 m	24 ft 10 in	7.58 m	24 ft 10 in	7.58 m	24 ft 10 in
C3	Coal bucket	8.36 m	27 ft 5 in	8.36 m	27 ft 5 in	8.36 m	27 ft 5 in
D	Height bucket fully raised	13.39 m	43 ft 11 in	13.89 m	45 ft 7 in	15.85 m	52 ft 0 in
E	Hinge - pin height	9.91 m	32 ft 6 in	10.59 m	34 ft 9 in	12.27 m	40 ft 3 in
F	Dump clearance	7.03 m	23 ft 1 in	8.01 m	26 ft 4 in	9.53 m	31 ft 3 in
G	Reach at full lift	3.18 m	10 ft 5 in	3.49 m	11 ft 5 in	3.94 m	12 ft 11 in
H	Digging depth	0.25 m	0 ft 10 in	0.25 m	0 ft 10 in	0.36 m	1 ft 2 in
I	Ground clearance	0.50 m	1 ft 8 in	0.50 m	1 ft 8 in	0.50 m	1 ft 8 in
J	Wheelbase	7.88 m	25 ft 10 in	7.88 m	25 ft 10 in	7.88 m	25 ft 10 in
K	Overall length carry position	19.87 m	65 ft 2 in	20.07 m	65 ft 10 in	21.84 m	71 ft 8 in
L	Overall length bucket down	20.27 m	66 ft 6 in	20.90 m	68 ft 7 in	22.76 m	74 ft 8 in
M	Height over cab	6.73 m	22 ft 1 in	6.73 m	22 ft 1 in	6.73 m	22 ft 1 in

* All dimensions are based on standard tires and standard rock bucket with GET unless otherwise noted.
 Note: Super high lift data based on 70yd³ coal bucket - rock bucket data available upon request.

Air filtration

Primary

- Self cleaning KLENZ filtration system
- Replaceable Filter Media meets the MERV15 rating
- 5000 hour filter life achievable
- Filtered air for engine, drive system cooling and pressurized cab

Secondary

Dual safety filters for engine

Fluid capacities

Fuel	4940 L	1305 gal
Hydraulic	1446 L	382 gal
SR converter cooling system	155 L	41 gal
Engine cooling system	492 L	130 gal
Crankcase (includes filters)		
Detroit	250 L	66 gal
Cummins	204 L	54 gal
Gearbox	27 L	7 gal
Planetaries (each)	151 L	40 gal

Structural

Frames are fabricated from high strength, low-alloy steel with excellent weld characteristics and extreme low temperature properties. The front axle is an integral, fixed part of the front frame. The rear axle center oscillates 12.5 degrees.

Unique forged ball and socket joints are utilized in multiple pivot locations (lift arms, rear axle, frame articulation, hoist cylinders). These joints are superior in absorbing and distributing multi-directional stresses. Features easily replaceable brass liners for long life and easy maintenance.

High strength castings are used in key areas of fabricated structures to reduce stress and improve structural life.

Tires/rims

Tires	70/70-57
Rims	60 x 57 with 6" flange

Standard features

- Access ladder lights
- Air clean-out hose in cab
- Air conditioning / heater-defroster (filtered and pressurized)
- Air dryer system
- Air horn
- Air tank bleed system
- Adjustable automatic lift height cut off
- Automatic bucket leveling control
- Automatic electrical cabinet lights
- Automatic lubrication system
- Auxiliary hydraulic oil cooler
- Back-up alarm, audible
- Battery disconnect switch
- Brake lights
- Central air regulator box
- Central service with fast fuel
- Data analysis and viewing software
- Data logging – downloadable production and maintenance logs
- Door interlock on electrical cabinet
- Drawbar with tow points
- Emergency stop buttons (cab and remote mounted)
- Engine compartment lights
- Fire extinguisher, manual, 9.07 kg (20 lb)
- FOPS – falling object protection system
- Idle timer
- Interior lights
- Isolation monitor
- Joystick hoist and bucket control
- Joystick steering control
- Jump start
- Ladder walkway (rear access w/retracting ladder)
- LED working lights (10 forward, 2 rear)
- LINCOS II alarms
- LINCOS II load weigh and monitoring
- Mirrors, rearview (parabolic)(2)
- Operator seat (11-way adjustable)
- Overspeed alarm
- Parking brake
- Retractable lap belt with shoulder harness
- Rock deflectors (bucket)
- ROPS – rollover protection structure
- Selectable throttle switch
- Starter disconnect switch
- Sun visor
- Tinted safety glass throughout
- Training seat (with lap belt)
- Turn signals
- Twelve (12) volt power supply in cab
- Twelve (12) volt power port (2)
- Walk around catwalk for cab
- Windshield washer reservoir (2.6 gal)
- Windshield wiper and washer (front and rear)

Optional features

- Auxiliary steering
- Beacon light kit
- Bucket GET options available
- Cold weather package – including:
 - Battery heater
 - Engine heating system (oil and water)
 - Grease reservoir heater
 - Hydraulic tank heater
- Exhaust discharge guard
- Fast fuel
- Fire detection and suppression system (manual)
- Fire suppression system (manual)
- Fluid sampling kit
- Lift arms – high lift
- Video camera (rear mount)
- Windshield protection kit

Buckets

Standard, ISO-rated capacity:
72574 kg / 160000 lb

High lift, ISO-rated capacity:
68039 kg / 150000 lb

Super high lift, ISO-rated capacity:
54431 kg / 120000 lb

Rock and coal bucket configurations available
Buckets sized to material density

Bucket hardware options

- Skid plates (replaceable)
- Lip wear protection
- Wear liner kits

For actual bucket configuration and sizing, consult your local representative.

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