# KOMATSU

# WE2350-2

Wheel Loader General Specifications





Reliability





Operating capacities, weights and dimensions						
	Standard lift High lift		t	Super high lift		
Bucket capacity	40.52 m <sup>3</sup>	53 yd <sup>3</sup>	$38.23\text{m}^3$	50 yd <sup>3</sup>	53.5 m <sup>3</sup>	70 yd <sup>3</sup>
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

Model

#### **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

16V series 4000 12V series 4000

16 cylinders 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.

R-42°, L-41°	
19.43 m	63 ft 9 in
19.52 m	64 ft 0 in
	19.43 m

#### 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
	ranuem piston	17 17 17 1 L/111111	43/43 gpiii
Tier two engine	B		
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
ŭ	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.

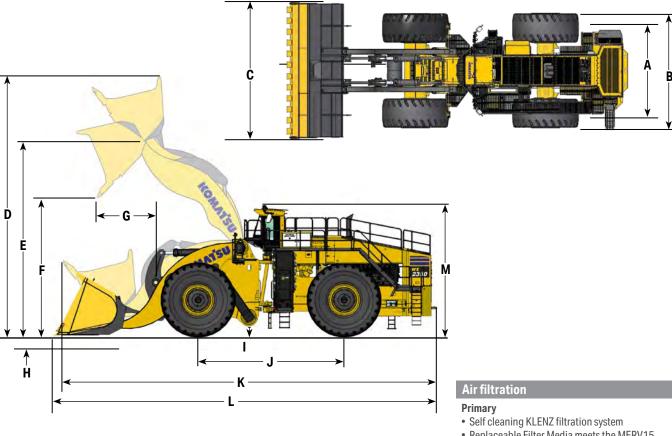
#### Secondary brake system

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**

		Stand	ard lift	High	lift	Super h	igh lift
Α	Tread	5.0 m	16 ft 5 in	5.0 m	16 ft 5 in	5.0 m	16ft 5in
В	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	7.01 m	23 ft 0 in	7.01 m	23 ft 0 in	7.01 m	23 ft 0 in
C2	deflectors Rock bucket	7.58 m	24 ft 10 in	7.58 m	24 ft 10 in	7.58 m	24 ft 10 in
C3	with deflectors 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	34ft 9in	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
Н	Digging depth	0.25 m	0 ft 10 in	0.25 m	0 ft 10 in	0.36 m	1ft 2in
ı	Ground clearance	0.50 m	1ft 8in	0.50 m	1ft 8in	0.50 m	1ft 8in
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	65ft 2in	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
М	Height over cab	6.73 m	22 ft 1 in	6.73 m	22 ft 1 in	6.73 m	22 ft 1 in

<sup>\*</sup>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.

- 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 Crankcase (includes filters)	492 L	130 gal
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, lowalloy 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 multidirectional 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)
- · LINCS II alarms
- · LINCS 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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