KOMATSU

WE1350-3
wheel loader

Safety

Reliability

Productivity

Photo may include optional equipment

Bucket capacity

Standard lift	22.94 m^3	30 yd^3
High lift	21.41 m^3	28 yd^3

Operating payload

Standard lift	40 823 kg	90,000 lbs.
High lift	38 102 kg	84,000 lbs.

Operating weight

Standard lift	194 228 kg	428,200 lbs.
High lift	196 496 kg	433,200 lbs.

WE1350-3

Operating capacities, weights and dimensions - standard lift

Bucket capacity	22.94 m^3	30 yd^3
Operating payload	40 823 kg	90,000 lb
Static tipping loads		
Straight	108 776 kg	239,809 lb
Full 45° turn	98 849 kg	217,925 lb
Breakout force	978 kN	219,772 lb
Operating weight	194 228 kg	428,200 lb

Operating capacities, weights and dimensions - high-lift

Bucket capacity	21.41 m^3	28 yd^3
Operating payload	38 102 kg	70,000 lb
Static tipping loads		
Straight	100 068 kg	220,612 lb
Full 42° turn	90 936 kg	200,480 lb
Breakout force	1 004 kN	225,687 lb
Operating weight	196 496 kg	433,200 lb

Note: Standard rock bucket based on a material density of 1780 kg/m^3 (3000 lb/yd^3)

Working ranges

Engine	1 249 kW	1,676 hp
KESS*	820 kW	1,100 hp
Payload		
Standard	40 823 kg	90,000 lbs.
High-lift	38 102 kg	84,000 lbs.
Bucket capacity sized to material density		
Truck match	181-236 tonne	200-260 ton

** Kinetic Energy Storage System (KESS) has HP available for acceleration events and parasitic loads*

Power module

Diesel power options	
Cummins diesel engine	Tier 4
Model	QSK 50 16 cylinders
Type	4-cycle turbocharged
Rated power	1 193 kW (1,600 hp) @ 1,800 rpm
MTU Detroit diesel engine	Tier 4
Model	12V series 4000 12 cylinders
Type	4-cycle turbocharged
Rated power	1249 kW (1,676 hp) @ 1,800 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		40°
Turning radius		
Standard-lift	13.50 m	44 ft 4 in
High-lift	13.76 m	45 ft 2 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		11.8 Seconds
Dump		3.0 Seconds
Float		5.0 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
  - SR KESS - Kinetic Energy Storage System
  - Parts commonality - power conversion modules identical for motor and generator

Travel speed	Forward and reverse 0-19.31 km/h (0-12 mph)
Generator	G100 SR generator
Traction motors	• B40A SR motor • SR all wheel drive (independent SR motor for each wheel)
Planetary gearing	Model 51A2
	• 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 140.8:1

Hydraulic system

HPD drive box	• Pressurized, cooled, and filtered lubrication • Ratio 1:1		
Pumps (maximum flow rate at 1,800 rpm)			
Main	piston (4)	1,404 L/min	371 gpm
Steering	piston	342 L/min	89 gpm
Fan/blower drive	tandem piston	171/171 L/min	45/45 gpm
Accessory	piston	81 L/min	21 gpm
Cooling system			
Circulating pump	vane	409 L/min	108 gpm
Valves			
Main	three (3)	700 L/min	185 gpm
	pump pressure	27 980 kPa	4,000 psi
Steering	one (1)	341 L/min	90 gpm
	pump pressure	23 443 kPa	3,400 psi
Cylinders	Double-acting, single-stage (diameter and stroke), standard and high-lift		
Hoist		343 mm x 1 892 mm	13.5 in x 74.5 in
Bucket		254 mm x 1 054 mm	10 in x 41.5 in
Steering		190 mm x 762 mm	7.5 in x 30 in

Braking system

Primary	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	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	Spring applied, air release traction motor speed disc brakes

General specifications

Air filtration

Primary	• Self cleaning KLENZ filtration system • Replaceable Filter Media meets the MERV15 rating • 5,000 hour filter life achievable • Filtered air for engine, drive system cooling and pressurized cab
Secondary	Dual safety filters for engine

Structural

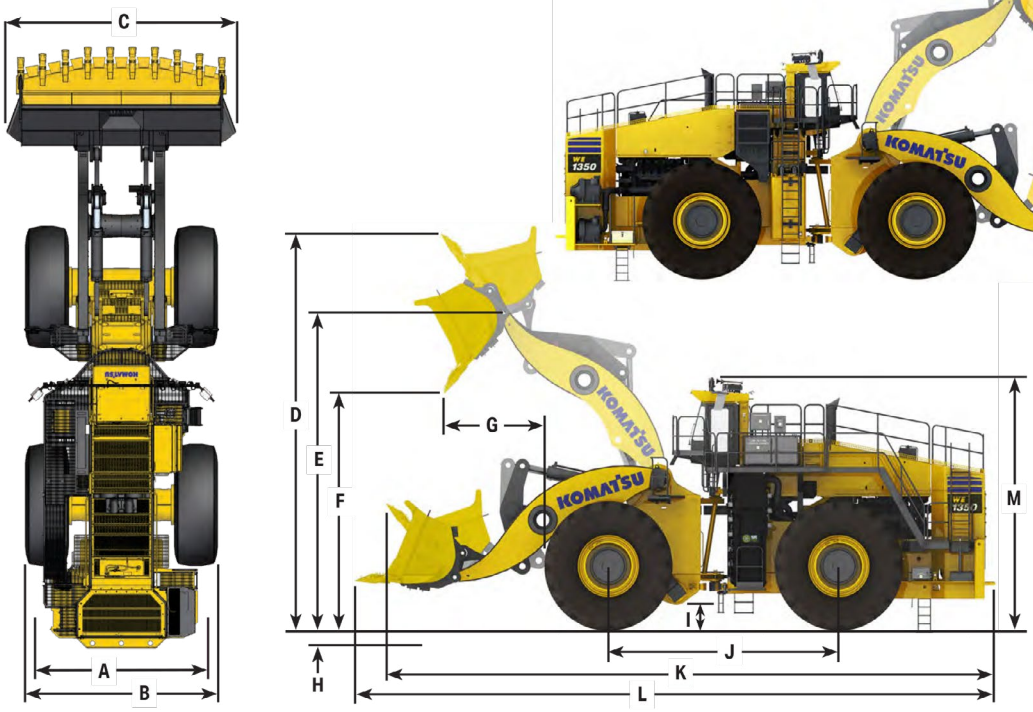
Frames are fabricated from high strength, low alloy steel with excellent weld characteristics and extreme low temperature properties. The front axle is an integral, fixed part of the front frame. The rear axle center oscillates 11 degrees.

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.

Fluid capacities

Fuel	3 501 L	925 gal
Hydraulic	1 419 L	375 gal
SR converter cooling system	117 L	31 gal
Engine cooling system	382 L	101 gal
Crankcase (includes filters)		
Detroit	330 L	87 gal
Cummins	216 L	57 gal
Gearbox	27 L	7 gal
Planetaries (each)	136 L	36 gal



Overall dimensions

		Standard lift		High-lift	
A	Tread	4.45 m	14 ft 7 in	4.45 m	14 ft 7 in
B	Width outsole tires	5.77 m	18 ft 11 in	5.77m	18 ft 11 in
C[1]	Rock bucket without deflectors	6.40 m	21 ft 0 in	6.40 m	21 ft 0 in
C[2]	Rock bucket with deflectors	6.71 m	20 ft 0 in	6.71 m	22 ft 0 in
C[3]	Coal bucket	7.44 m	24 ft 5 in	7.44 m	24 ft 5 in
D	Height - bucket fully raised	11.40 m	37 ft 5 in	11.73 m	38 ft 6 in
E	Hinge - pin height	8.71 m	28 ft 7 in	9.14 m	30 ft 0 in
F	Dump clearance	6.42 m	21 ft 1 in	7.06 m	23 ft 2 in
G	Reach at full lift	2.69 m	8 ft 10 in	2.79 m	9 ft 2 in
H	Digging depth	.50 m	0 ft 6 in	.25 m	0 ft 10 in
I	Ground clearance	.62 m	2 ft 0 in	.62 m	2 ft 0 in
J	Wheel base	6.56 m	21 ft 6 in	6.56 m	21 ft 6 in
K	Overall length - carry position	16.93 m	55 ft 7 in	17.52 m	57 ft 6 in
L	Overall length - bucket down	17.31 m	56 ft 10 in	17.70 m	58 ft 1 in
M	Height - over cab	6.69 m	22 ft 10 in	6.69 m	22 ft 10 in

Note: All dimensions are based on standard tires and standard rock bucket with GET unless otherwise noted.

Standard and optional equipment

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	●
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 lbs.)	●
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	●
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)	●
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	○
Training seat (with lap belt)	○
Video camera (rear mount)	○
Windshield protection kit	○

Tires

50/80-57 L-4	●
Rims - 36 x 57 with 6" flange	●
55/80R-57	○
Rims - 44 x 57 with 5" flange	○

Buckets

Standard, ISO-rated capacity	40 823 kg / 90,000 lbs.
High-lift, ISO-rated capacity	38 102 kg / 84,000 lbs.

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.

Standard equipment	●
Optional equipment	○

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