

Engine Power

96 kW (129hp)

Operating Weight

8 ton

Bucket Capacity

1.6-1.9 m³

Kawasaki
KCM

Committed to the Future

60ZV

WHEEL LOADER



Performance that never quits...

Wheel loaders that deliver premium power...

Backed by more than a half century of innovative experience...

Durability and reliability you can count on...



As the oldest on-going manufacturer of rubber tired wheel loaders in the world, KCM specializes in the design and manufacture of articulated wheel loaders.

You get a machine with a half century heritage of successful innovations.

The power and productivity that KCM wheel loaders bring to the job is a result of that experience.

KCM loaders are designed with durability to provide years of reliable service.

Backed by a dealer network of heavy equipment experts and dedicated support staff in the KCM parts and service organization, your investment in a KCM loader is an excellent choice that will pay dividends for years to come.

POWER AND PERFORMANCE PROVIDE UNMATCHED PRODUCTIVITY



INCREASED POWER +14kW

With higher engine power the machines are now more productive.

INCREASED DUMPING CLEARANCE

Dumping clearance has increased by 80mm for easier loading.

INCREASED BRAKING POWER

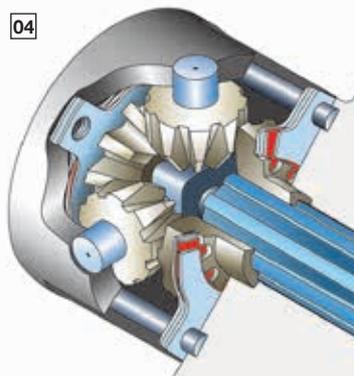
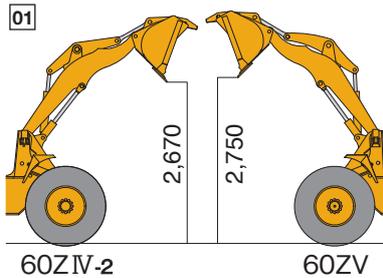
Improved braking power ensures safer operation.

WET DISC SERVICE BRAKE

Sealed wet disc brakes provide high capacity braking and protection from contamination. The dual circuit brake system separates the front and rear axles for added safety.

Z BAR-LINK AND CENTER PIN ARTICULATION

As a pioneer of the Z BAR-linkage, KCM loaders provide outstanding breakout force from a simple, reliable linkage. KCM center pin design is rugged and durable, providing thousands of hours of trouble free operation.



INCREASED BREAKOUT FORCE

Breakout force has increased by 3.8% for better digging ability.

INCREASED TIPPING LOAD

Tipping load has increased by 2.8% for better stability.

TPD

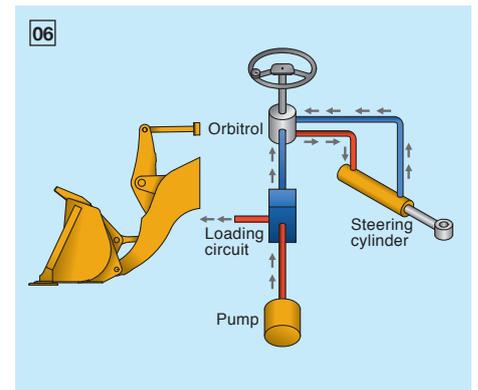
Standard Torque Proportioning Differentials (TPD) improve traction in slippery conditions.

LSD (OPT)

For applications with extreme traction requirements, the Limited Slip Differential option provides additional traction capability.

LOAD SENSING HYDRAULICS FOR THE STEERING SYSTEM

An energy efficient design of the hydraulic system allows for the steering pump flow to be merged with the loader circuit when not in use. This means full utilization of pump capacity for efficient operation in all conditions.



DURABLE AND DEPENDABLE

LIFT ARMS/BUCKETS ⁰¹

With the strongest lift arms and linkage in the industry, KCM loaders perform well in a wide variety of applications.

High breakout forces and excellent bucket rollback mean bigger loads and better load retention.

Buckets are designed for easy loading and are equipped with bolt-on heel plates for easy serviceability.

A bucket leveler is standard.

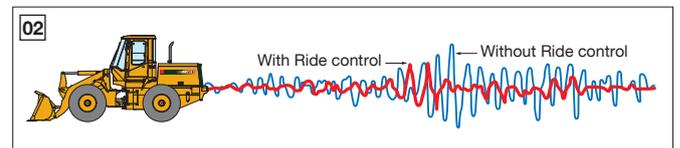


BUFFER RINGS IN HYDRAULIC CYLINDERS

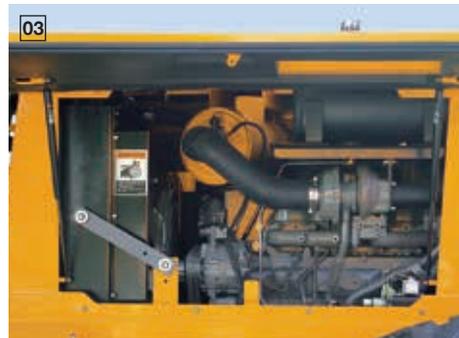
The hydraulic cylinders utilize a buffer ring to improve sealing capability to reduce leakage.

RIDE CONTROL FEATURE (OPT) ⁰²

Ride Control offers a smooth ride to improve load retention and increase travel speeds & productivity.



EASY ACCESS SIMPLIFIES SERVICING



EASY ACCESS SIMPLIFIES SERVICING ⁰³

Maintenance is enhanced with the "gull-wing" engine side covers that can be fully opened for better access.

Filters are conveniently located for easy changing and grease fittings are grouped to reduce maintenance time and ensure proper lubrication.

HALOGEN HEAD LAMPS (OPT)

Front and rear working lights are bright, halogen lamps for improved safety and visibility.

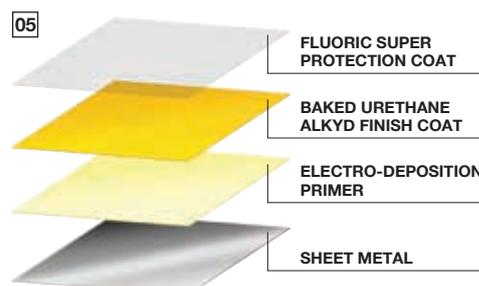
DT CONNECTORS ⁰⁴

Sealed Deutsch DT electrical connectors are used throughout the system to reduce corrosion and provide a positive electrical connection.



HIGH QUALITY FINISH PAINT FOR SHEET METAL PARTS ⁰⁵

KCM's sophisticated painting process utilizes ED (Electro-deposition) primer, a baked Urethane Alkyd finish coat as well as a fluoroc super protection coat for a durable and attractive finish.



SPECIAL PACKAGE



ROPS/FOPS CAB (OPT)

The operator's cab is fully certified to meet all ROPS (Rollover Protective Structure) and FOPS (Falling Object Protective Structure) regulations.

ROPS/FOPS cab with an operator's compartment that offers unmatched comfort and provides increased leg room.

Excellent visibility in all directions is enhanced with both inside and outside mirrors.

The front windshield mounted in rubber gaskets makes windshield replacement fast and easy.

Viscous mounting of the cab reduces vibration and noise.

TILT AND TELESCOPIC STEERING (OPT)

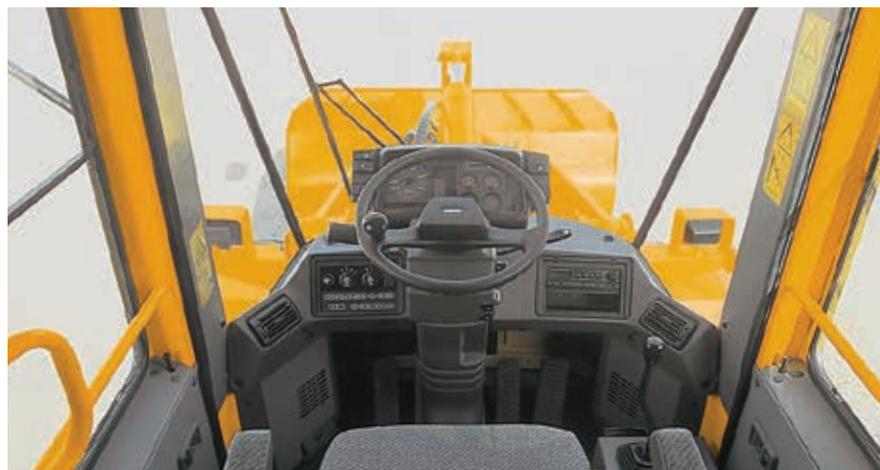
The tilt/telescopic steering column adjusts to suit a variety of operator sizes and offers greater comfort and efficiency.

HEATER AND AIR CONDITIONER (OPT)

The air conditioner/heater keeps the operator comfortable in any environment.

The high capacity vents provide adequate airflow for efficient defrosting and an even temperature distribution.

By pressurizing the cab, the climate control system keeps dust out of the cab.



ELECTRICAL SINGLE SHIFT TRANSMISSION CONTROL (OPT) 06

Single, twist grip transmission shift lever is conveniently mounted on the steering column.



DOWNSHIFT SWITCH (OPT) 07

The downshift switch located on the boom control lever provides for quick, convenient downshifting from 2nd gear to 1st gear for more efficient loading.

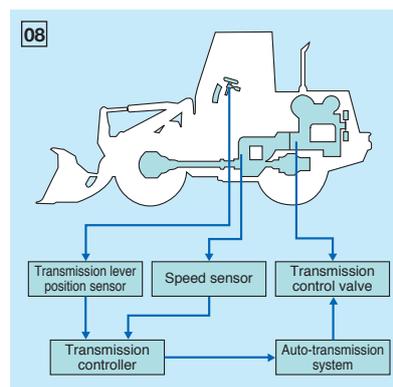


MULTI ADJUSTABLE FUNCTION OPERATOR'S SEAT

The fully adjustable suspension seat offers excellent comfort to reduce operator fatigue and increase productivity.

FULLY AUTOMATIC KAWASAKI TRANSMISSION (OPT) 08

The well proven KCM transmissions are now electronically controlled and feature a kick down function.



ONE-TOUCH OPEN-TOP RADIATOR GRILLE (OPT) 09

To facilitate cleaning the radiator, the radiator grille is fully-opened at the top, particularly useful on sites where clogging occurs and immediate cleaning is needed.



60ZV OPERATING SPECIFICATIONS

Engine

Make & model	ISUZU "BB-6BG1T" diesel engine
Type	4-cycle, water-cooled, direct injection, with turbocharger
Rated power	Gross 101 kW (135 hp) /2,200 rpm Net 96 kW (129 hp) /2,200 rpm
Maximum torque	Net 471 N·m (48 kgf·m) /1,600 rpm
Number of cylinders (bore X stroke)	6 105 mm X 125 mm
Total displacement	6.49 lit
Cooling type	Pusher type fan Pressurized radiator
Fuel injection pump	Bosch type
Governor	All-speed mechanical type
Air cleaner	Dry type (Double element)
Generator	AC 24V 1.2 kW (50 ampere)
Starter motor	DC 24V 4.5 kW(6 hp)
Batteries	DC 12V 65 Ah X 2

Transmission & Torque converter

Transmission make & type	KCM, Full power shift		
Torque converter make & type	KCM 3-element, one-stage, one-phase		
Traveling speed		Forward	Reverse
	1st	8.5 km/h	8.5 km/h
	2nd	16.0 km/h	16.0 km/h
	3rd	34.0 km/h	34.0 km/h
	Note	With 18.4 (L2)	

Axles & Final Drives

Type	4-wheel drive
Axle make & type	KCM Semi-floating type
Differential gear	Spiral bevel gear, torque proportioning, single stage reduction
Final reduction gear	Inboard mounted, Internal planetary gear
Rear axle oscillation angle	± 12°
Tire(standard)	18.4 (L2) Tubeless

Brake system

Service brake	4-wheel wet-disc Controlled by fully hydraulic system Dual circuits
Parking brake	Mechanical type located on front driveline

Steering system

Type	Articulated frame steering, hydraulic power steering unit, direct operated type
Steering valve	Orbitroll
Steering angle	40° to each side

Loading system

Type	Front end loading, Z bar linkage system	
Hydraulic cycle time	Lifting (at full load)	6.0 sec
	Lowering (empty)	3.0 sec
	Dumping	1.2 sec
	Total cycle time	10.2 sec

Hydraulic system

Oil pump	Loading & Steering pump	Gear type, 117 lit/min 6.9 MPa (70 kg/cm ²) @ 2,200 rpm
Lift cylinder	type	Double acting piston
	number,bore x stroke	2 X 110 mm bore X 641 mm stroke
Tilt cylinder	type	Double acting piston
	number,bore x stroke	1 X 120 mm bore X 464 mm stroke
Steering cylinder	type	Double acting piston
	number,bore x stroke	2 X 60 mm bore X 405 mm stroke
Relief set pressure	Control valve	20.6 MPa (210 kg/cm ²)
	Steering valve	17.2 MPa (175 kg/cm ²)

Service refill

Fuel tank	175 lit
Engine lubricant (including oil pan)	13 lit
Engine cooling water	47 lit
T/M & T/C	20 lit
Axle front/rear	40 lit
Brake equipment	2 lit
Hydraulic system (including oil tank)	100 lit

Weight change

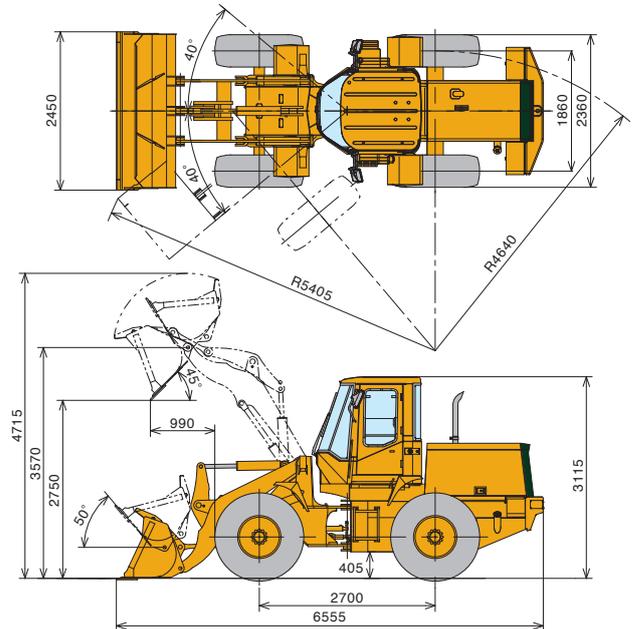
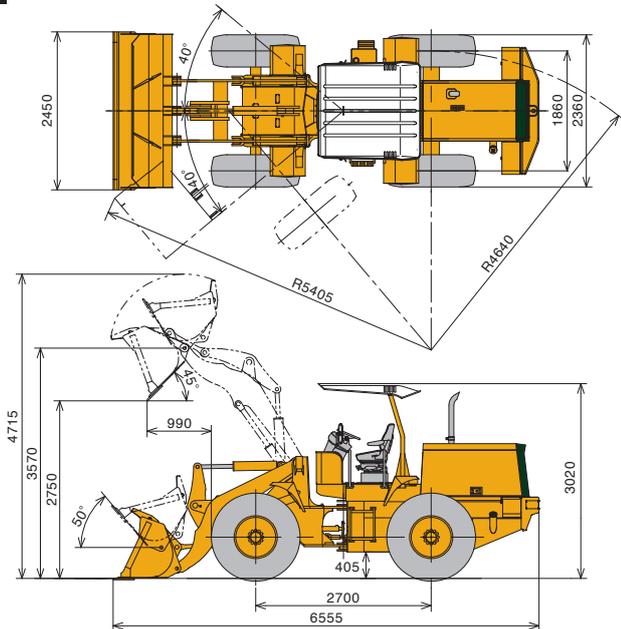
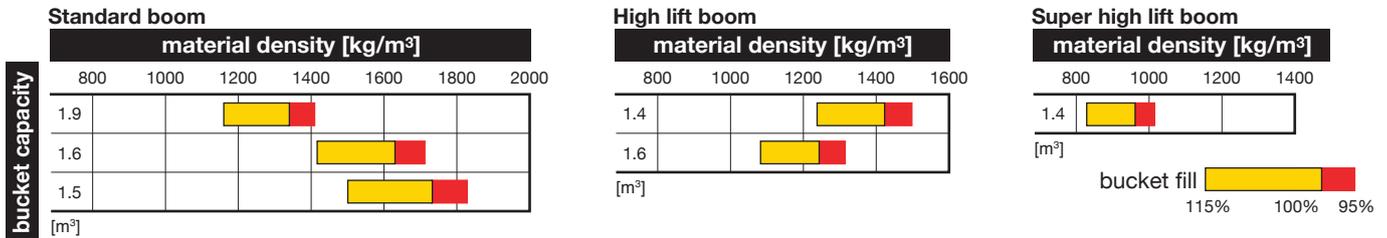
Option item	Operating weight(kg)	Tipping load(kg)		Overall width(mm) (outside tire)	Overall height(mm)	Tread	Overall length(mm)	
		Straight	Full turn					
ROPS/FOPS cab	+470	+360	+320	-	+95	-	-	
Open ROPS/FOPS canopy	+200	+160	+130	-	+95	-	-	
Enclosed steel cab	+300	+250	+200	-	+95	-	-	
Removal open canopy	-50	-40	-40	-	-130	-	-	
Tires	17.5-25-12PR (L2)	+160	+120	+100	-50	±0	-40	±0
	18.4-24-10PR (L2)	±0	±0	±0	±0	±0	±0	±0
Air conditioner	+70	+60	+50	-	-	-	-	
Additional counter weight	+310	+690	+590	-	-	-	+50	

Bucket

			Standard boom			High lift boom		Super high lift boom
			General purpose		Light material	Light material	Loose material	Light material
			Bolt-on edges	Teeth	Bolt-on edges	Bolt-on edges	Bolt-on edges	Bolt-on edges
			GSC	GST	LSC	GSC	HSC	HSC
								
Bucket capacity	heaped	m ³	1.6	1.5	1.9	1.6	1.4	1.4
	struck	m ³	1.4	1.3	1.7	1.4	1.2	1.2
Max. dumping clearance		mm	2,750	2,680	2,640	3,055	3,110	3,705
Max. dumping reach		mm	990	1,060	1,100	1,005	950	960
Max. hinge pin height		mm	3,570			3,870		4,470
Digging depth (with bucket level)		mm	75	90	75	75	75	75
Breakout force		kN	81.3	88.2	67.6	82.3	90.1	90.2
Bucket tilt-back angle		deg	50°		49°		47°	
Overall length		mm	6,555	6,665	6,715	6,850	6,770	7,355
Overall height	up to canopy top	mm	3,020					
	bucket full raise	mm	4,715	4,715	4,835	5,020	4,905	5,510
Overall width	outside tire	mm				2,360		
	outside bucket	mm				2,450		
Tread		mm				1,860		
Wheel base		mm				2,700		
Min. turning radius	at outside bucket	mm	5,405	5,435	5,450	5,530	5,505	5,780
	at center of outside tire	mm				4,640		
Min. ground		mm				405		
Full articulation angle		deg				40°		
Operating weight		kg	7,980	7,950	8,050	8,060	8,040	8,330
Static tipping load	straight	kg	6,570	6,600	6,500	5,570	5,590	4,170
	full turn	kg	5,630	5,660	5,560	4,630	4,650	3,230

The weight and load figure includes 18.4 (L2) tubeless tire, canopy, lubricant, coolant, full fuel tank and operator.

Bucket selection charts



STANDARD EQUIPMENT (Standard specifications may vary. Contact your KCM distributor for specifics.)

Electrical

50 ampere generator
Batteries; 12V-65AH 2 units
Electric starter
Lights
Headlight 2 units
Working light 2 units (rear)
Stop/Tail light 2 units
Backup light 2 units
Turn signal light 2 units

Gauges and indicators

Air cleaner warning lamp
Battery charge lamp
Brake oil warning lamp
Engine coolant temperature gauge and warning lamp
Engine oil pressure warning lamp
Fuel level gauge

High beam indicator lamp
Hour meter
Parking brake indicator lamp
Preheat indicator lamp
Speedometer
Torque convertor oil temperature warning lamp
Transmission declutch lamp
Turn signal indicator lamp
Working light indicator lamp

Operator environment

Adjustable operator seat with suspension
Boom/bucket control single lever
Electric single horn
Floor mat
Open canopy
Rearview mirrors (exterior)
Transmission declutch selector switch

Power train

Air cleaner (double elements dry type)
ISUZU BB-6BG1T diesel engine
Full hydraulic enclosed wet multi-disc brakes
KCM axles, torque proportioning differentials (front/rear)
KCM torque converter
Tires, 18.4 (L2) tubeless
3mm pitch plate fin radiator

Others

Drawbar hitch with pin
Handrails
Ladders, left and right
Loading linkage, sealed Z-bar type
Oil cooler (Hydraulic line)
Mudflaps

OPTIONAL ITEMS

Anti-corrosion specifications
Ashtray
Bucket leveler
KCM auto shift transmission
Auto shift indicator lamp
Down shift button
Neutral indicator lamp
Transmission control warning lamp
Kickout device
Back up alarm
Emergency steering
Front and rear wide fenders
Halogen headlights with high and low beams (2 front)
High lift boom arm / Super high lift boom arm
Hydraulic circuit for quick coupler pins
Hydraulic three spool valve system

Limited slip differential
Fork handling package
Open ROPS/FOPS canopy
Optional counter weight
Pre cleaner
Quick coupler
Ride control (speed sensitive automatic)
ROPS/FOPS cab / Enclose steel cab
Air conditioner
Cigarette lighter
Cup holder
Front and rear wiper and washers
Heater
Halogen working light 2 units (front)
Radio (AM/FM stereo with CD player)
Rearview mirrors (interior)
Seat belt

Storage compartment
Sun visor
Tinted safety glass
Laminated glass (front)
Several bucket and tire options are available
Double lever hydraulic control
Telescopic and tilt steering wheel
Transmission belly guard
Vandalism protection kit
4mm pitch plate fin radiator



This specification sheet may contain attachments and optional equipment which are not available in your area. Please contact your local KCM distributor for those items which you require.

Materials and specifications are subject to change without notice and without obligation on the part of the manufacturer.

The specifications supplied, while believed to be completely reliable, are not to be taken as warranty for which we assume legal responsibility.



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