

Engine Power

**71** kW (95hp)

Operating Weight

**7** ton

Bucket Capacity

**1.3-1.6** m<sup>3</sup>

 **Kawasaki**

**50 ZV**

**WHEEL LOADER**



# **P**erformance that never quits...

**Wheel loaders that deliver premium power...**

**Backed by more than 45 years of innovative experience...**

**Durability and reliability you can count on...**



**A**s the oldest on-going manufacturer of rubber tired wheel loaders in the world, Kawasaki specializes in the design and manufacture of articulated wheel loaders.

**Y**ou get a machine with a 45-year heritage of successful innovations.

**T**he power and productivity that Kawasaki wheel loaders bring to the job is a result of that experience.

**K**awasaki 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 Kawasaki parts and service organization, your investment in a Kawasaki loader is an excellent choice that will pay dividends for years to come.

# POWER AND PERFORMANCE PROVIDE UNMATCHED PRODUCTIVITY



## INCREASED POWER +5kW

With higher engine power the machines are now more productive.

## INCREASED DUMPING CLEARANCE <sup>01</sup>

Dumping clearance has increased by 80mm for easier loading.

## INCREASED BRAKING POWER

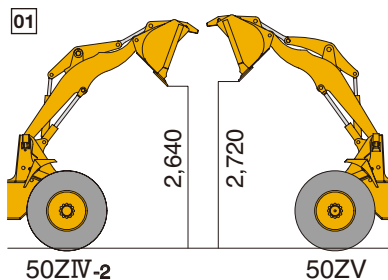
Improved braking power ensures safer operation.

## WET DISC SERVICE BRAKE <sup>02</sup>

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 <sup>05</sup>

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



## INCREASED BREAKOUT FORCE

Breakout force has increased by 4.8% for better digging ability.

## INCREASED TIPPING LOAD

Tipping load has increased by 3.2% for better stability.

## TPD <sup>03</sup>

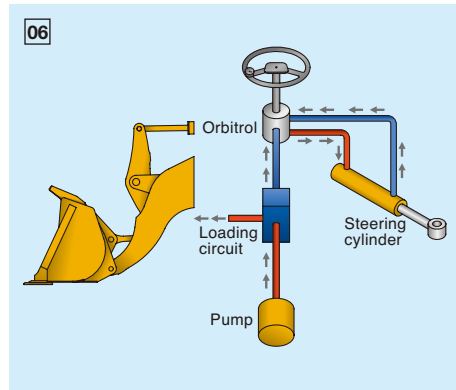
Standard Torque Proportioning Differentials (TPD) improve traction in slippery conditions.

## LSD (OPT) <sup>04</sup>

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

## LOAD SENSING HYDRAULICS FOR THE STEERING SYSTEM <sup>06</sup>

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 <sup>01</sup>

With the strongest lift arms and linkage in the industry, Kawasaki 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.

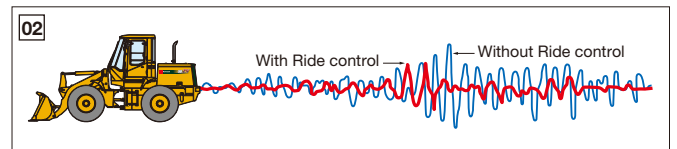


## BUFFER RINGS IN HYDRAULIC CYLINDERS

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

## RIDE CONTROL FEATURE (OPT) <sup>02</sup>

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



# EASY ACCESS SIMPLIFIES SERVICING



## EASY ACCESS SIMPLIFIES SERVICING <sup>03</sup>

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.

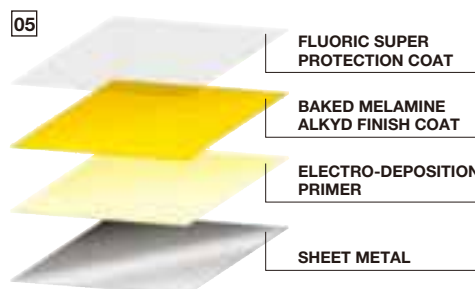
## DT CONNECTORS <sup>04</sup>

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 <sup>05</sup>

Kawasaki's sophisticated painting process utilizes ED (Electro-deposition) primer, a baked Melamine 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.



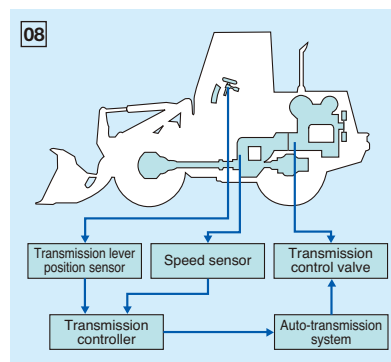
## MULTI ADJUSTABLE FUNCTION OPERATOR'S SEAT

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

## FULLY AUTOMATIC KAWASAKI TRANSMISSION (OPT) 08

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

## RADIO (OPT)



## 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.



# 50ZV OPERATING SPECIFICATIONS

## Engine

Make & model	CUMMINS "B4.5T" diesel engine
Type	4-cycle, water-cooled, direct injection, with turbocharger
Rated power	Gross 74 kW(99 hp)/2,100 rpm Net 71 kW(95 hp)/2,100 rpm
Maximum torque	Net 409 N·m(41.7 kgf·m)/1,500 rpm
Number of cylinders (bore x stroke)	4 102 mm x 138 mm
Total displacement	4.50 lit
Cooling type	Pusher type fan Pressurized radiator
Fuel injection pump	Delphy type
Governor	All-speed mechanical type
Air cleaner	Dry type(Double element)
Generator	AC 24V 1.2 kW(50 ampere)
Starter motor	DC 24V 3.7 kW(5 hp)
Batteries	DC 12V 65 Ah x 2

## Transmission & Torque converter

Transmission make & type	Kawasaki, Full power shift		
Torque converter make & type	Kawasaki 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 16.9(L2)	

## Axles & Final Drives

Type	4-wheel drive
Axle make & type	Kawasaki Semi-floating type
Differential gear	Spiral bevel gear, torque proportioning
Final reduction gear	Inboard mounted, planetary gear
Rear axle oscillation angle	± 12 °
Tire(standard)	16.9(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	Orbitrol
Steering angle	40 ° to each side

## Loading system

Type	Front end loading, Z bar linkage system	
Hydraulic cycle time	Lifting(at full load)	5.4 sec
	Lowering(empty)	2.8 sec
	Dumping	1.0 sec
	Total cycle time	9.2 sec

## Hydraulic system

Oil pump	Loading & Steering pump	Gear type, 100 lit/min 6.9 MPa(70 kg/cm <sup>2</sup> ) @ 2,100 rpm
Lift cylinder	type	Double acting piston
	numbe x bore x stroke	2 x 100 mm x 593 mm
Tilt cylinder	type	Double acting piston
	numbe x bore x stroke	1 x 100 mm x 462 mm
Steering cylinder	type	Double acting piston
	numbe x bore x stroke	2 x 60 mm x 340 mm
Relief set pressure	Control valve Steering valve	20.6 MPa(210 kg/cm <sup>2</sup> ) 17.2 MPa(175 kg/cm <sup>2</sup> )







## Service refill

Fuel tank	120 lit
Engine lubricant(including oil pan)	10 lit
Engine cooling water	42 lit
T/M & T/C	20 lit
Axle front/rear	36 lit
Brake equipment	2 lit
Hydraulic system(including oil tank)	75 lit

## Weight change

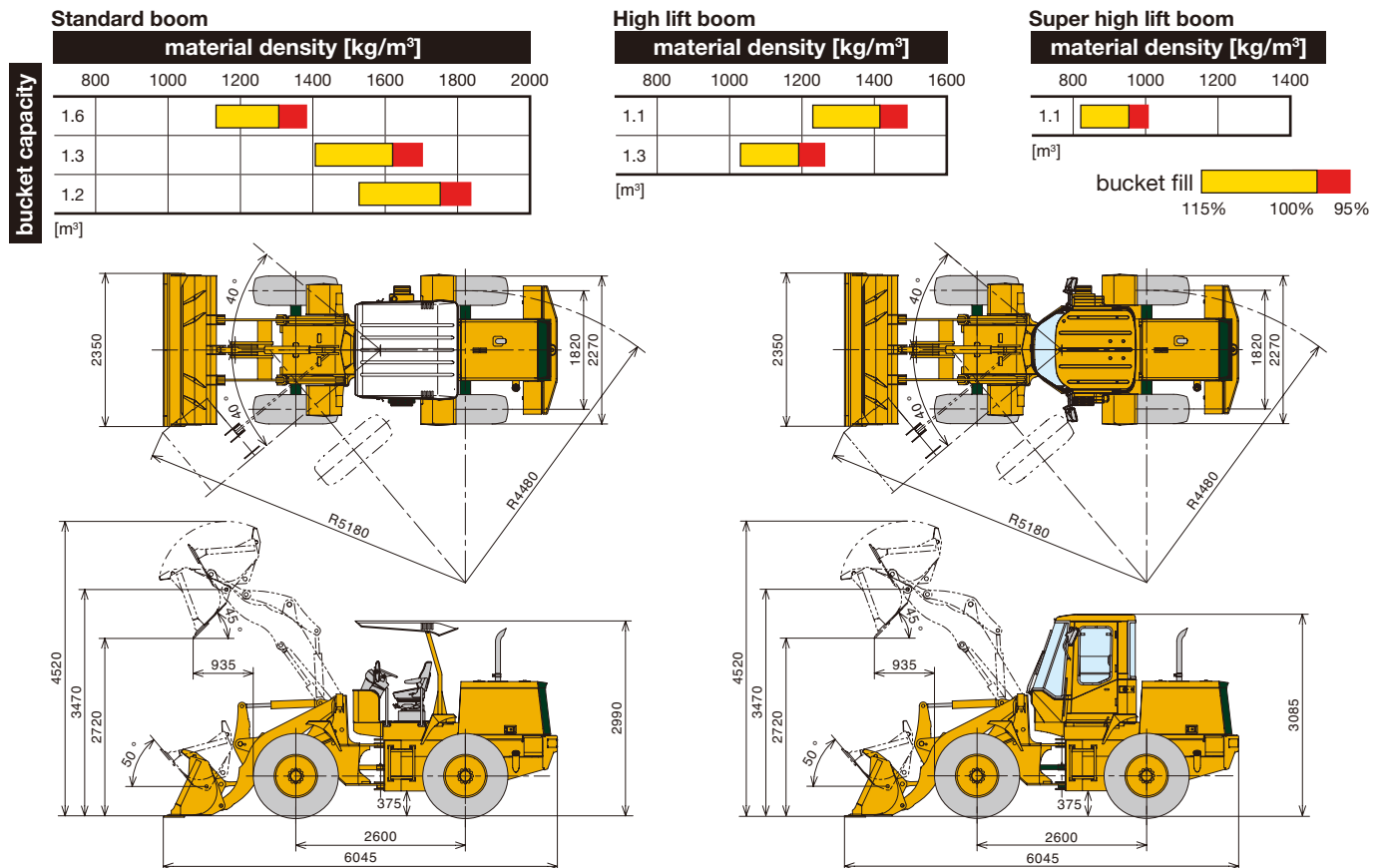
Option item	Operating weight(kg)	Tipping load(kg)		Overall width(mm) (outside tire)	Overall height(mm)	Overall length(mm)
		Straight	Full turn			
ROPS/FOPS cab	+470	+360	+320	-	+95	-
Open ROPS/FOPS canopy	+200	+160	+130	-	+95	-
Enclosed steel cab	+300	+250	+200	-	+95	-
Removal open canopy	-50	-40	-40	-	-115	-
Tires	15.5-25-8PR (L2)	+80	+60	+50	-75	± 0
	15.5-25-12PR (L2)	+80	+60	+50	-75	± 0
	16.9-24-10PR (L2)	± 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 <sup>3</sup>	1.3	1.2	1.6	1.3	1.1	1.1
	struck	m <sup>3</sup>	1.1	1.0	1.4	1.1	0.9	0.9
Max. dumping clearance		mm	2,720	2,635	2,655	3,020	3,085	3,685
Max. dumping reach		mm	935	990	1,000	945	880	905
Max. hinge pin height		mm	3,470			3,770		4,370
Digging depth (with bucket level)		mm	75	90	75	75	75	75
Breakout force		kN	63.7	70.6	56.8	63.7	71.5	71.5
Bucket tilt-back angle	at carry position	deg	50 °			49 °		48 °
Overall length		mm	6,045	6,155	6,140	6,335	6,245	6,845
Overall height	up to cab top	mm	2,990					
	bucket full raise	mm	4,520	4,520	4,620	4,820	4,700	5,335
Overall width	outside tire	mm	2,270					
	outside bucket	mm	2,350	2,350	2,450	2,350	2,350	2,350
Tread		mm	1,820					
Wheel base		mm	2,600					
Min. turning radius	at outside bucket	mm	5,180	5,220	5,250	5,295	5,270	5,325
	at center of outside tire	mm	4,480					
Min. ground		mm	375					
Full articulation angle		deg	40 °					
Operating weight	with canopy	kg	6,710	6,680	6,760	6,790	6,760	6,900
Static tipping load	straight	kg	5,200	5,220	5,120	4,400	4,430	3,370
	full turn	kg	4,460	4,480	4,380	3,660	3,690	2,630

The weight and load figure includes 16.9 (L2) tubeless tire, canopy, lubricant, coolant, full fuel tank and operator.

## Bucket selection charts



## STANDARD EQUIPMENT (Standard specifications may vary. Contact your Kawasaki dealer 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 (single element dry type)  
Cummins B4.5T diesel engine  
Full hydraulic enclosed wet multi-disc brakes  
Kawasaki axles, torque proportioning differentials (front/rear)  
Kawasaki torque converter  
Tires, 16.9 (L2) tubeless  
3mm pitch plate fin radiator

### Others

Drawbar hitch with pin  
Handrails  
Ladders, left and right  
Loading linkage, sealed Z-bar type

## OPTIONAL ITEMS

Additional counter weight  
Anti-corrosion specifications  
Ashtray  
Bucket leveler  
Double elements dry type air cleaner  
Kawasaki 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 arm / Super high lift arm

Hydraulic circuit for quick coupler pins  
Hydraulic three spool valve system  
Limited slip differential  
Fork handling package  
Mudflaps  
Oil cooler (Hydraulic line)  
Open ROPS/FOPS canopy  
Pre cleaner  
Quick coupler  
Ride control (speed sensitive automatic)  
ROPS/FOPS cab / Enclose steel cab  
Air conditioner  
CD player with radio (AM/FM stereo)  
Cigarette lighter  
Cup holder  
Front and rear wiper and washers  
Heater

Halogen working light 2 units (front)  
Radio (AM/FM stereo)  
Rearview mirrors (interior)  
Seat belt  
Storage compartment  
Sun visor  
Tinted safety glass  
Laminated glass (front)  
Working light 2 units (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

# 50 ZV



<http://www.khi.co.jp/kenki/english/>

This specification sheet may contain attachments and optional equipment which are not available in your area. Please contact your local Kawasaki dealer 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.