

# WL50G[CE] WL60G[CE] WHEEL LOADER



The WL50G(WL60G) is a single-bucket, front-end, articulation, wheel loader. Wheel loader. It is adaptive to shovel or transfer such loose material as earth/clay, sand/gravel, aggregate and rock, and carrying out such tasks as towing, ground leveling, stacking and piling in building site, port, quay, station, yard and so on. So it is a multi-purpose and efficient earth-moving machine.

 **Intensus**

# WHEEL LOADER WL50G (CE) WL



## ENGINE

CUMMINS QSB6.7 for WL50G(CE) diesel engine and QSC8.3 for WL60G(CE) are in-line, vertical, water cooled, electronic injection, turbocharged and air-to-air after cooled. The four-stroke-cycle design for long, effective power strokes, and more efficient fuel combustion. The high-torque engine provides excellent fuel economy and durability. Adding pushing power heightens operating efficiency. Lower exhaust displacement, electric starting and stopping, have excellent performance and reliability.

Manufactured according to the Caterpillar 3306 Industrial Engine technical license, SDEC C6121 diesel engine features compact configuration, high performance, low emission, and electrical starting and stopping.



## TRANSMISSION

ZF-reversing transmission 4WG-200 provides four forward and three reverse speeds. Hydraulic-electricity shift makes operation easy. 3-element, single-stage torque converter has reliable performance and wonderful traction. KD is helpful to a step-up in productivity by decreasing the frequency of shifting, which can increase economy and engine life. With excellent carrying ability, ZF is match-able with 200 kW-output engines. Low pressure and starting protection ensure operator's safety.



# 60G (CE)

## CAB & CONTROL SYSTEM

Integral FOPS & ROPS cab of wheel loader has many advantages such as spaciousness, assemble convenience, safety and reliability, noise reducing, and excellent visibility. Owing to ergonomic design, the environment of the cab and control system is excellent, so as to make operation convenient and reduce driver's working intensity.

◆ Excellent all-around visibility, the larger windshield class without non-metal frame, adopts adhesion structure that forward view is excellent; the tilt engine hood improves reverse view.

◆ Adopted protect-ultraviolet radiation class and silkscreen press sunshade film that prevents damage of driver's eyes and skin from sunlight.

◆ Equipped with luxury seat that designed for maximum comfort and fully adjustable support.

◆ Excellent sealed ability of cab in which heating and cooling air-conditioner provide driver a good operation environment.

◆ Instrument panel and operation component arranged Rational make operation convenience.

◆ Equipped with front-wiper, rear mirror, lamp, cup-seat and optional radio, back-wiper alert lamp.



## MONITORING SYSTEM

All gauges and warning lights enable the operator to know the whole system state of the running machine. Neat layout of controls and instruments enables the operator to concentrate on the work at hand with less distraction. Warnings are visible and audible.



## AXLE

MERITOR axle is introduced from well-known technology of MERITOR in U.S.A. Large, heavy-duty axles protect internal components from the harsh environment and offer excellent serviceability and maintenance.

Axle made by Volvo heavy equipment (KOREA) is equipped with glide-restraining differential, and wet multi disc brakes, and having the maintenance-free advantage. It is featured with huge carrying ability, reliable performance, and long life..ZF axles are also optional for WL60G(CE).



## BRAKE SYSTEM

New type brake system in wheel loader adopts double pedal. The left pedal doesn't cut off power while the right cuts off power. The merging of parking brake and emergency brake has some functions such as: cutting off power, automatic starting-up and working, and protection of low air pressure.



## FRAMES

The structure of front and rear frames is simple, reducing stamping and irregularity weld line, optimum the important position, for bearing force can bearing various job conditions torque and striking load. The increased span of the pin decreases stress. Dustproof articulated points to prolong the center pin's life. The double thrust bearings are placed on the articulated parts to increase the driving stability. Front frame rigid, supporting for boom and cylinder, can absorb vibration and impact force.



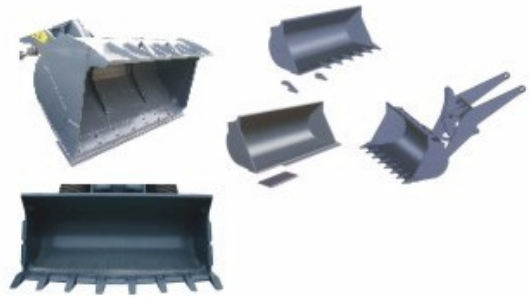
## CLAMP

It is suitable for loading, transporting piling the various logs, other longer material and elements. Optional equipment log



### MAINTENANCE & SERVICEABILITY

The design of wheel loader makes daily maintenance easy. Oil levels checking, new oil and grease be refilled for easy access, and filter element, electric system remove and replace. The unitary-folding hood cover easy for engine repair is controlled by the electric switch and pushed up by the cylinder. The side door open easily for engine oil level checking and replace element.



### BUCKET & WORKING DEVICE

Optimized working device, articulated points disposed rationally, single rocking arm, short pull rod, particular Z-bar roll-back linkage reduce shock, operation intensity and improve working efficiency. The bucket automatic leveling on any position, don't need adjust it when working again. Effecting working devices with optimized design automatic leveling and siding block, carrying ensure limited position and boom compact prevent the materials off, and working device from strike. Dual layer is dust-preventing. Each articulated point of wheel loader working. It's available to prevent dust and to assure the viscosity of the lubricating oil. Offer buckets, available to different conditions.



### HYDRAULIC SYSTEM

Working and steering hydraulic system adopts the double-pump flow technology, reducing energy loss, and increasing reliability. Pilot operating hydraulic system makes operation easy and flexible. Steering system adopts flow-amplified with hydraulic limited position. Being able to improve sucking oil of pump and prevent oil from pollution, hydraulic oil tank is completely sealed.



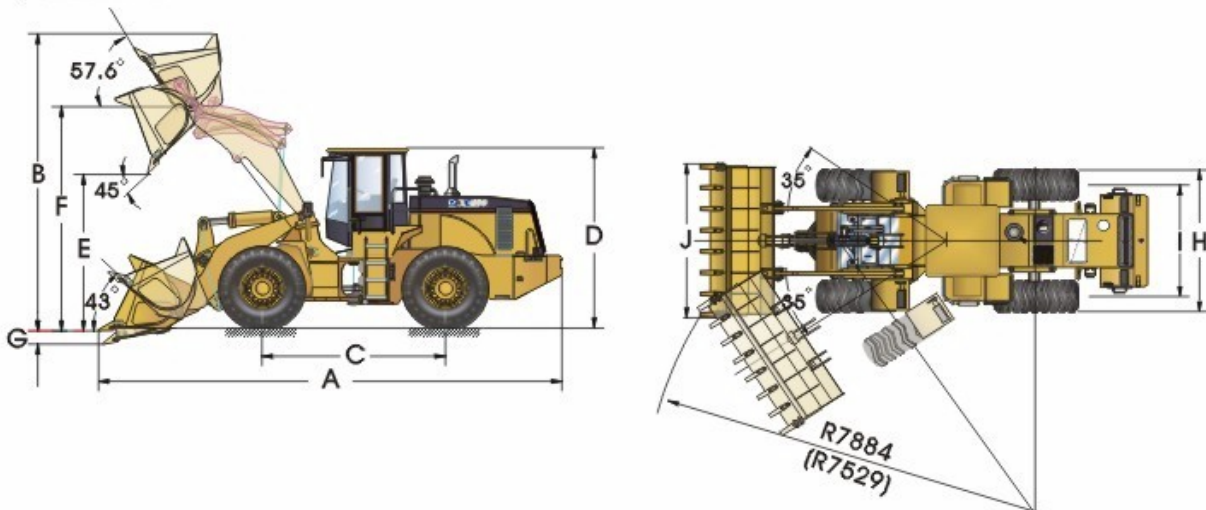
### SAFETY BLOCK

CE required safety block.





## ■ DIMENSIONS



	A	B	C	D	E	F	G	H	I	J
WL50G(CE)	8110mm	5220mm	3300mm	3508mm	3090mm	4110mm	80 mm	2800mm	2200mm	3000mm
WL60G(CE)	8680mm	5716mm	3400mm	3534mm	3250mm	4366mm	307 mm	2830mm	2200mm	3050mm

## ■ OPTIONAL BUCKET PARAMETER

Bucket type		WL50G(CE)				WL60G(CE)
		Rock bucket With teeth	General bucket With teeth	Light bucket With cutting edge		General bucket With teeth
Rated capacity	(m <sup>3</sup> )	2.5	3.0	3.5	4.0	3.5
Struck capacity	(m <sup>3</sup> )	2.1	2.5	3.0	3.4	2.9
Width	(mm)	3000	3000	3000	3210	3050
Max. dump clearance	(mm)	3090	3090	2950	2950	3250
Dump height,teeth	(mm)	2980	2980			3053
Dump reach	(mm)	1130	1130	1260	1260	1268
Overall length	(mm)	8110	8110	8160	8160	8680
Dump clearance	(mm)	5220	5220	5415	5415	5716
Horizontal passing radius	(mm)	7300	7300	7315	7415	7525
Breakout force	(KN)	170	170	144	144	198

## ■ STANDARD EQUIPMENT MAIN SPECIFICATIONS

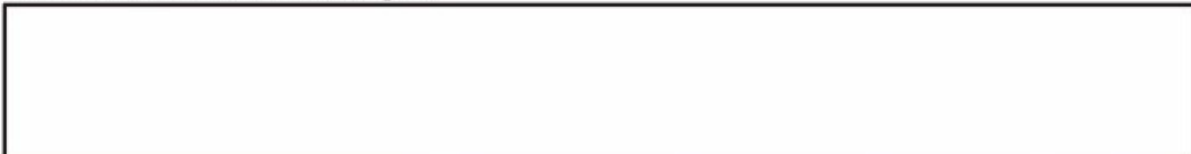
Bucket type	WL50G(CE)	WL60G(CE)
Bucket capacity	3.0m <sup>3</sup>	3.5m <sup>3</sup>
Rated load	5000 kg	6000 kg
Raising time	6 secretary	6.5 secretary
Total cycling time	11 secretary	12 secretary
Max. drawing force	145 KN	165 KN
Max. breakout force	170 KN	198KN
Articulation angle	35°	35°
Min. turn radius	6400mm	6462mm
Climb ability	28°	28°
Wheel base	3300mm	3400mm
Tread	2200mm	2200mm
Dumping clearance	3090mm	3250mm
Dumping reach	1130mm	1268mm
L×W×H	8110×3000×3508 mm	8680×3050×3534 mm
Operating weight	18t	20.5t
Clamp type		
Min. clamping diameter	∅450 / ∅800 mm	∅600 mm
Dumping clearance	3230mm	2934mm
Dumping reach	1845mm	1741mm
L×W×H	8414×2800×3480 mm	8880×2830×3435 mm
Operating weight	18t	21t

## ■ OPTIONAL SYSTEM AND EQUIPMENT

WL50G(CE)				
Engine	Shanghai C6121ZG091 Engine		Weifang WD615.67G3-31A Engine	
Axle	ZF AP-411/HK front axle		ZF AP-409/DK rear axle	
Tire	23.5-25-20 PR tire, tube 23.5-25-16 PR tire, tubeless			
Working device	Bucket 2.7 3.5 4.0 m <sup>3</sup> 3.5 4.56 5.2 yd <sup>3</sup>			
Cab	High dumping working device	Snow plough (3-way valve)	Clamp (3-way valve)	Rock bucket (2.5m <sup>3</sup> )
	Side dumping bucket (3-way valve)	High lift working device	Slide fork lift	Quick coupler
Others	FOPS & ROPS cab	Reverse siren	Boom lift limited position	AM / FM radio
	Anti-freezing facility and cleaning water sprayer			
Others	Central lubricating system	Automatic weighting system	Monitoring Camera	

	WL50G(CE)	WL60G(CE)
<b>ENGINE</b>		
Model	Electronic QSB6.7	Electronic QSC8.3
Type	4-stroke, direct-injection, water cooled, exhaust turbo charger, air-to-air after cooled	4-stroke, direct-injection, water cooled, exhaust turbo charger, air-to-air after cooled
Rated power	152.7kW/205HP	179kW/240HP
Rated speed	2200r/min	2200r/min
Max.torque	991N·m/1400r/min	1116N·m/1500rpm
Number of cylinders	6	
Bore × stroke	114 × 135mm/4.5" × 5.3"	114 × 135mm/4.5" × 5.3"
Displacement	8.27L/505.3 in <sup>3</sup>	8.3L/506 in <sup>3</sup>
Compression ratio	18:1	18:1
Batteries	2 × 12V/195 A·h	2 × 12V/120 A·h
Starter	24V 7.5kW	24V 7.5kW
Alternator	24V 60 A	24V 60 A
<b>TRANSMISSION</b>		
Make and model	ZF 4WG200 or HANGZHOU 4WG180	
Type	Power-shift (electric hydraulic) countershaft design with four forward and three reverse speeds	
Control	Single lever control	
Forward speeds	k m/h (MPH)	
1st	6.5 (3.99)	6.0 (3.7)
2nd	11.0 (6.75)	11.0 (6.8)
3rd	24.0 (14.74)	22.0 (13.6)
4th	38.0 (23.33)	35.0 (21.7)
Reverse speeds	k m/h (MPH)	
1st	6.5 (3.99)	6.0 (3.7)
2nd	11.0 (6.75)	11.0 (6.8)
3rd	24.0 (14.74)	22.0 (13.6)
<b>AXLE</b>		
Model	Meritor 20/18 MRF-C216NZE/NZF	ZF MG-L3105/309, VOLVO HEAVY EQUIPMENT (KOREA) 14541598/14541597
Driving system	Four-wheel driving	Four-wheel driving
Rear axle oscillation	Center oscillation	Center oscillation
Carrier assembly-Reduction ratio	4.625	5.167
Wheel end reduction assembly-Reduction ratio	4.94	4.777
<b>Brake</b>		
Type	Air-over-hydraulic disc on four wheels brakes	Hydraulic wet multi disc brakes
Driving brake system pressure	0.686 ~ 0.784 Mpa	8 Mpa
Emergency and stopping system pressure	0.45 Mpa	>8.8 Mpa
Parking brake	Inner-expanding shoe brake, air cylinder and spring energy reserve applied via a switch on the control stand panel.	Electric control, clamp disc type. Spring applied via a switch
<b>TIRES</b>		
Type	Tube	
Specification	23.5-25-16PR (L3)	
<b>Specifications for working hydraulic system</b>		
Working pump (gear)		
Max. flow rate	100ml/r	100ml/r
Max. working pressure	17.5MPa	18.5MPa
Control	Pilot	Pilot, double lever
Double-acting hydraulic cylinders	Bore × stroke	Bore × stroke
Loader arm	160mm(6.3") × 859mm(33.5")	160mm(6.3") × 869mm(34.2")
Bucket	180mm(7.1") × 567mm(22.3")	200mm(7.87") × 593mm(23.35")
Operating time		
Lift	6.5sec	6.5sec
Lower	3.5sec	4.0sec
Dump	1.5sec	1.5sec
<b>Specifications for steering hydraulic system</b>		
Type	Articulation, fully hydraulic power steering with flow-amplified system	
Steering pump (gear)		
Max. flow rate	63ml/r	80ml/r
Max. working pressure	16MPa	16MPa
Cylinder		
Bore × stroke	90 × 340mm	90 × 420mm
Max. steering angle	+35°	+35°
<b>SERVICE REFILL CAPACITIES</b>		
Fuel tank	230 liters	250 liters
Engine oil	22 liters	27.5 liters
Cooling system	50 liters	45 liters
Transmission	28 liters	34 liters
Hydraulic tank	200 liters	180 liters
Axle	38 liters	78 liters(front)/53liters(rear)
Brake	6kg	

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