

WA250-1

WHEEL LOADER



ROPS cab is an option.
Photo shown may include other optional equipment.

KOMATSU VANGUARD SERIES

- *Space-efficient, comfortable work area keeps operator productivity high.*
- *Powerful, fuel efficient Komatsu S6D105 engine.*
- *Z-bar loader linkage provides superior performance of work equipment.*
- *Torque proportioning differentials, 40° articulation, ±12.5° rear axle oscillation and long wheel base provide stability and maneuverability on any terrain.*
- *Wet disc brakes and sealed loader linkage pins provide high performance with minimal maintenance.*
- *All components are Komatsu made for superior reliability and availability.*

Flywheel horsepower: 130 HP (97 kW) @ 2500RPM

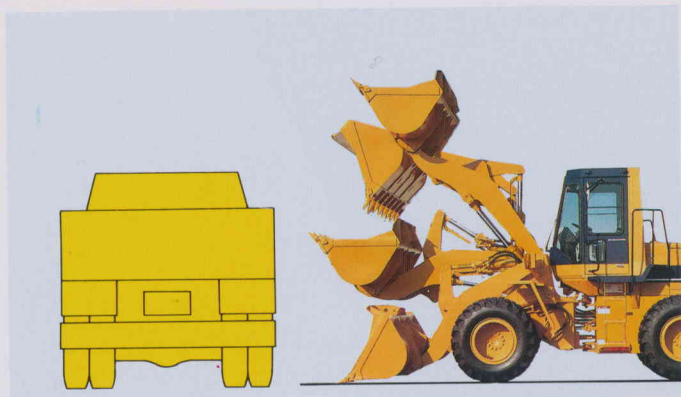
Bucket capacities: 1.8–2.7 m³ (2.35–3.5 yd³)

Operating weight: 11000 kg (24260 lb)

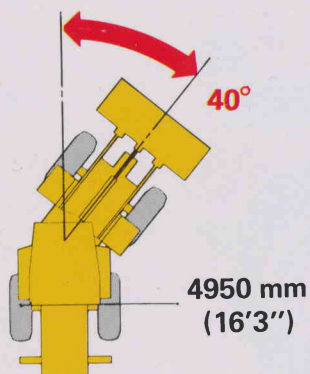
A Reliable Multi-Purpose Loader to Meet Divergent Jobsite Needs

High performance for greater production

The Komatsu WA250-1 Wheel Loader was designed for superior production with outstanding bucket and loader performance.

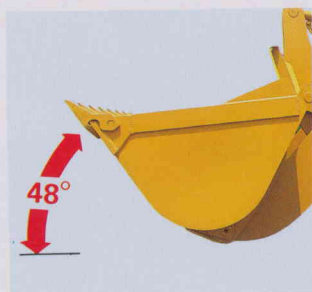


Extended dumping reach and clearance allow the operator to easily and efficiently load trucks and elevated hoppers. Sticky materials can be removed by shock dumping.



A long wheelbase with a 40° articulation on both sides enables sharp maneuvering even in limited work spaces.

A center pin-supported rear axle with a $\pm 12.5^\circ$ oscillation range, extra-long wheel base, wide tread and a 40° articulation angle assure stability over even the roughest terrain.



The large bucket penetrating force is properly balanced with the WA250-1's weight and drawbar pull for powerful excavation. The bucket's 48° roll back angle assures full buckets and prevents spillage of material.

Four forward and four reverse transmission speeds assure fast and efficient operations.



Spacious, comfortable cab

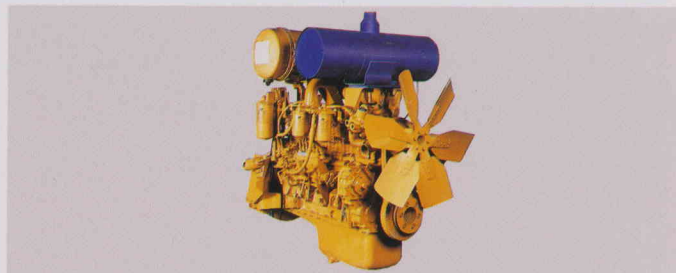
The optional cab is designed and laid out for maximum comfort and efficiency. The compartment features a wide field of vision, roomy work space and ergonomically arranged instruments, levers and pedals. Vibration and noise levels are kept at a minimum.



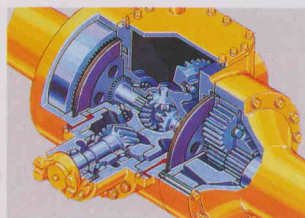
The speed and directional levers require only slight finger movements while the priority valve steering system guarantees smooth, constant steering.



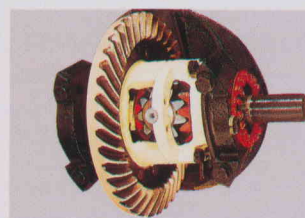
Simplified maintenance for minimum downtime



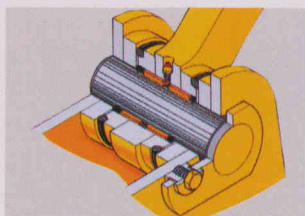
The extremely economical Komatsu S6D105 diesel engine delivers a powerful 130 HP (97 kW) and is rubber-cushion mounted to suppress noise and vibration. Engine starts and cutoffs are key-operated.



Adjustment-free, wet disc brakes assure braking performance even on muddy terrain. Fully enclosed, they are free from dirt and other contaminants.



The torque proportioning differentials minimize slippage, improve traction and increase the service life of tires.



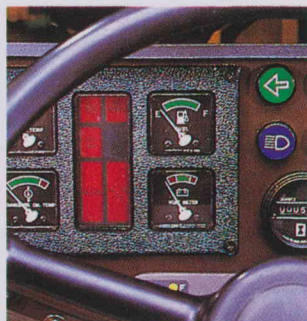
Sealed loader linkage pins require less maintenance.



The functional engine hoods open widely on both sides for easy access to the engine.



Work equipment levers are the direct control type which has good fine control performance. Little operating effort makes a comfortable operation possible.



The compact cluster gauges are conveniently located for easy checks.



The amount of hydraulic oil can be checked easily by an operator.



All components are designed and manufactured by Komatsu for maximum quality and reliability.

SPECIFICATIONS



ENGINE

The Komatsu S6D105 is a 4-stroke, water-cooled, overhead valve, direct-injection diesel engine. It includes six cylinders with a 105 mm (4.1") bore x 125 mm (4.9") stroke and a 6.49 ltr. (396 cu.in) piston displacement.

Flywheel horsepower:

130 HP (97 kW) at 2500 RPM (SAE J1349)
132 PS at 2500-RPM (DIN 6270 NET)

Direct-injection fuel system. All-speed mechanical governor. Gear-pump-driven force-lubrication with full-flow filters. All filters are spin-on type for easy maintenance. Dry, cyclo-pack air cleaner with dust evacuation valve for longer element service. 24 V/5.5 kW electric starting motor. 24 V/25 A alternator. 24 V(2 x 12 V)/140 Ah batteries.



TRANSMISSION

3-element, single-stage, single-phase torque converter. Full powershift, countershaft type transmission. A modulating function assures shockless speed and directional changes without braking. A neutral safety circuit allows starting only when the directional control lever is in neutral.

Travel speed km/h (MPH)

	Forward	Reverse
1st	0-7.4 (4.6)	0-7.7 (4.8)
2nd	0-11.3 (7.0)	0-11.6 (7.2)
3rd	0-20.1 (12.5)	0-20.7 (12.9)
4th	0-36.0 (22.4)	0-37.0 (23.0)



AXLES & FINAL DRIVES

Four-wheel drive system. A semi-floating front axle is fixed to the front frame. Center-pin-supported, semi-floating rear axle with a large oscillation of $\pm 12.5^\circ$. A spiral bevel gear for reduction and a planetary gear, single reduction final drive. Front and rear torque proportioning differentials minimize tire slippage on soft or wet terrain.



BRAKES

Service brakes: Hydraulically actuated, inboard-mounted, wet, disc brakes actuate all four-wheels. Two pedals provided. The right for normal braking; the left offers braking + transmission neutralizing.

Parking brake: Dry disc type applied on front output coupling of transmission.



TIRES

Front and rear: 17.5-25-12PR (L-2)
Rims: 14.00 x 25-SDC



STEERING SYSTEM

Center-pivot frame articulation. Full-hydraulic power assisted steering independent of engine RPMs. A wide articulation angle of 40° on each side for a minimum turning radius of 5740 mm (18'10") at the outside corner of the bucket.



BOOM & BUCKET

Z-bar loader linkage are designed for maximum rigidity and offer powerful excavation. Rap-out loader linkage design enables shock dumping to fall off sticky materials. Sealed loader linkage pins with dust seals extend greasing intervals. Bucket corner teeth (optional) not only minimize bucket wear but also increase penetrating force.



BUCKET CONTROLS

Little effort is required to operate the bucket and boom control levers, assuring smooth, responsive bucket/boom action. In addition, the bucket positioner and the boom kickout device (optional) facilitate repeated digging/loading operations.

Control positions:

Boom Raise, hold, lower and float
Bucket Tilt-back, hold and dump



HYDRAULIC SYSTEM

A gear pump for steering and loader control.

Capacity (discharge flow) at engine 2500 RPM

Loader 194 ltr. (51.3 U.S. gal)/min.

Relief valve setting:

Loader 210 kg/cm² (2990 PSI/20.6 MPa)

Steering. 190 kg/cm² (2700 PSI/18.6 MPa)

Control valves:

A 2-spool type control valve.

Hydraulic cylinders	Number of cylinders	Bore	Stroke
Boom	2	130 mm (5.12")	700 mm (2'4")
Bucket	1	150 mm (5.91")	474 mm (1'7")

Hydraulic cycle time (rated load in bucket):

Raise...5.2 sec./Dump...1.5 sec./Lower (empty)...3.0 sec.



SERVICE REFILL CAPACITIES

Cooling system 38 ltr. (10.0 U.S.gal)

Fuel tank 170 ltr. (44.9 U.S.gal)

Engine 17 ltr. (4.5 U.S.gal)

Brake oil tank 1 ltr. (0.3 U.S.gal)

Hydraulic system 63 ltr. (16.6 U.S.gal)

Differential and final drive case
(each side) 17 ltr. (4.5 U.S.gal)

Torque converter and
transmission 30 ltr. (7.9 U.S.gal)

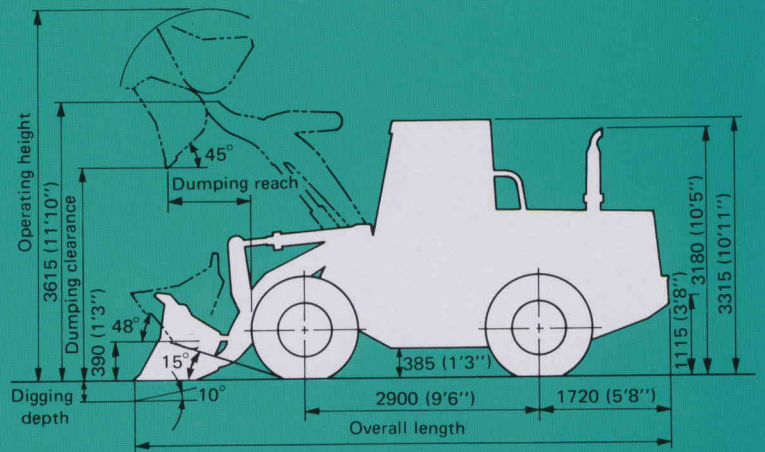


DIMENSIONS

Unit: mm(ft.in)

Dimensions vary with tires

Tire size	17.5-25	20.5-25
Tread	1930 mm (6'4")	1930 mm (6'4")
Width over tires	2375 mm (7'10")	2465 mm (8'1")
Change in vertical dimension	0	+70 mm (2.8")
Change in reach	0	-70 mm (2.8")
Change in digging depth		
0°	0	-70 mm (2.8")
10°	0	-70 mm (2.8")
Change in overall length		
Bucket on ground	0	-35 mm (1.4")
Bucket at carry	0	-40 mm (1.6")



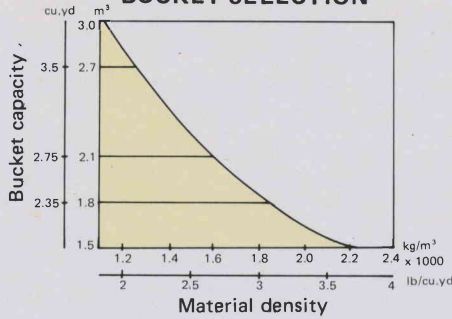
Bucket type		Loose material		Excavating	
		Bolt-on cutting edge	Bolt-on teeth	Bolt-on cutting edge	Bolt-on cutting edge
Bucket capacity	SAE rated	2.1 m ³ (2.75 cu.yd)	1.8 m ³ (2.35 cu.yd)	1.9 m ³ (2.5 cu.yd)	1.9 m ³ (2.5 cu.yd)
	Struck	1.8 m ³ (2.35 cu.yd)	1.6 m ³ (2.1 cu.yd)	1.7 m ³ (2.25 cu.yd)	1.7 m ³ (2.25 cu.yd)
Bucket width		2685 mm (8'10")	2685 mm (8'10")	2685 mm (8'10")	2685 mm (8'10")
Bucket weight		937 kg (2070 lb)	853 kg (1880 lb)	907 kg (2000 lb)	907 kg (2000 lb)
Static tipping load	Straight	8500 kg (18740 lb)	8420 kg (18570 lb)	8470 kg (18680 lb)	8470 kg (18680 lb)
	Full turn	7480 kg (16490 lb)	7400 kg (16320 lb)	7450 kg (16430 lb)	7450 kg (16430 lb)
Dumping clearance, max. height and 45° dump angle		2700 mm (8'10")	2640 mm (8'8")	2730 mm (8'11")	2730 mm (8'11")
Reach at 2130 mm (7') cut edge clearance and 45° dump angle		1480 mm (4'10")	1500 mm (4'11")	1475 mm (4'10")	1475 mm (4'10")
Reach at max. height and 45° dump angle		1100 mm (3'7")	1140 mm (3'9")	1060 mm (3'6")	1060 mm (3'6")
Reach with arm horizontal and bucket level		2240 mm (7'4")	2330 mm (7'8")	2190 mm (7'2")	2190 mm (7'2")
Operating height (fully raised)		4800 mm (15'9")	4800 mm (15'9")	4740 mm (15'7")	4740 mm (15'7")
Overall length	Bucket on ground	6920 mm (22'8")	7010 mm (23')	6867 mm (22'6")	6867 mm (22'6")
	Bucket at carry	6860 mm (22'6")	6930 mm (22'9")	6825 mm (22'8")	6825 mm (22'8")
Turning radius (bucket at carry, outside corner of bucket)		5740 mm (18'10")	5750 mm (18'10")	5730 mm (18'10")	5730 mm (18'10")
Digging depth	0°	124 mm (4.9")	138 mm (5.4")	124 mm (4.9")	124 mm (4.9")
	10°	307 mm (1')	336 mm (1'1")	298 mm (1')	298 mm (1')
Breakout force (bucket cylinder)		12560 kg (27690 lb)	14725 kg (32470 lb)	13285 kg (29290 lb)	13285 kg (29290 lb)
Operating weight		11000 kg (24260 lb)	10920 kg (24080 lb)	10970 kg (24190 lb)	10970 kg (24190 lb)

- All dimensions, weights and performance values based on SAE J-732C and J742b standards.
- Concerning increases or decreases according to tire size, refer to the table in DIMENSIONS.
- Static tipping load and operating weight shown include 17.5-25-12PR (L-2) tires with 520 kg (1150 lb) ballast in rear, lubricants, coolant, full fuel tank, ROPS cab and operator. Machine stability and operating weight are affected by counterweight, tire size and other attachments. Use either tire ballast or counterweight, not both. Add the following weight changes to operating weight and static tipping load.

Weight changes

Tires and options	Change in operating weight	Change in tipping load	
		Straight	Full turn
17.5-25-12PR (L-2) tubeless tires without ballast	-520 kg (1150 lb)	-740 kg (1630 lb)	-652 kg (1430 lb)
20.5-25-12PR (L-2) tubeless tires with ballast	0	-180 kg (400 lb)	-150 kg (330 lb)
20.5-25-12PR (L-2) tubeless tires without ballast	-270 kg (600 lb)	-560 kg (1230 lb)	-490 kg (1080 lb)
Remove ROPS cab	-500 kg (1100 lb)	-480 kg (1060 lb)	-440 kg (970 lb)
Install ROPS canopy	-265 kg (580 lb)	-240 kg (530 lb)	-220 kg (490 lb)
Additional counterweight in place of ballast	-215 kg (470 lb)	0	0

BUCKET SELECTION



- 2.1 m³ (2.75 cu.yd) **Loose material bucket with bolt-on cutting edge** (Loading and excavating soil, sand and a variety of other commonly handled materials.)
- 1.9 m³ (2.5 cu.yd) **Excavating bucket with bolt-on cutting edge.**
- 1.8 m³ (2.35 cu.yd) **Excavating bucket with bolt-on teeth** (Loading and excavating crushed rock and blasted rock.)
- 2.7 m³ (3.5 cu.yd) **Light material bucket with bolt-on cutting edge** (A lighter-weight, large capacity bucket.)

STANDARD EQUIPMENT

KOMATSU S6D105 diesel engine, battery, electric starting system, alternator, 4 forward & 4 reverse powershift transmission, torque proportioning type differential, hydraulic power steering, wet type disc brakes, automatic bucket

positioner, engine key stop, fan guard, adjustable seat, hitch, rops brackets, lighting system (head lights, rear working lights, stop & tail lights, turn indicators), ladders (right & left), 17.5-25-12PR (L+2) tires.

OPTIONAL EQUIPMENT

Work equipment:

Cutting edge (Bolt-on type)
Bucket teeth (Bolt-on type)
Bucket teeth (tip type)
Additional counterweight
Hydraulic adapter kit
3-spool valve

Operator's compartment:

ROPS canopy
ROPS cab
Air conditioner

Car radio
Floor mat
Heater and defroster
Rear wiper
Rear window washer
Seat belt
Sun visor
Suspension seat
Electric fan
Rear view mirror

Tires:

17.5-25-12PR (L-3)
20.5-25-12PR (L-3)

Others:

Backup alarm
Backup lamp
License plate lamp
Yellow warning lamp
Speedometer
Emergency steering

Vandalism protection kit

Fire extinguisher
Instrument panel cover
Front fender
Rear frame side cover
Jack
Boom kickout
Tool kit
Ordinary spare parts

This specification sheet may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.

KOMATSU

ÉQUIPEMENT FÉDÉRAL QUÉBEC LIMITÉE
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