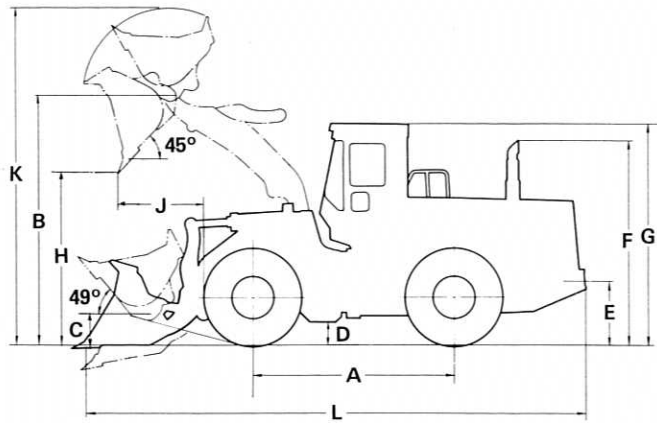


DIMENSIONS



Measured with 26.5-25 tires

Bucket	I	II	III
H. Dumping clearance, max. height and 45° dump angle	3275 10'9"	3110 10'2"	3215 10'7"
Reach at 2130 mm (7') cut edge clearance and 45° dump angle	1995 6'7"	2085 6'10"	2030 6'8"
J. Reach at max. height and 45° dump angle	1320 4'4"	1465 4'10"	1375 4'6"
Reach with arm horizontal and bucket level	2730 8'11"	2950 9'8"	2810 9'3"
K. Operating height (fully raised)	6135 20'2"	6215 20'5"	6025 19'9"
L. Overall length	8895 29'2"	9125 29'11"	8975 29'5"
Loader clearance circle (bucket at carry, outside corner of bucket)	14350 47'1"	14350 47'1"	14390 47'3"
Digging depth	0°	115 4.5"	125 4.9"
	10°	340 1'1"	385 1'3"

Measured with 29.5-25 tires

Bucket	I	II	III
H. Dumping clearance, max. height and 45° dump angle	3325 10'11"	3160 10'4"	3265 10'9"
Reach at 2130 mm (7') cut edge clearance and 45° dump angle	1945 6'5"	2035 6'8"	1980 6'6"
J. Reach at max. height and 45° dump angle	1270 4'2"	1415 4'8"	1325 4'4"
Reach with arm horizontal and bucket level	2680 8'10"	2900 9'6"	2760 9'1"
K. Operating height (fully raised)	6185 20'4"	6265 20'7"	6075 19'11"
L. Overall length	8855 29'1"	9085 29'10"	8935 29'4"
Loader clearance circle (bucket at carry, outside corner of bucket)	14350 47'1"	14350 47'1"	14390 47'1"
Digging depth	0°	65 2.6"	75 3"
	10°	290 11.4"	335 1'1"

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

WHEEL LOADER

WA500-1

FLYWHEEL HORSEPOWER: 291 HP 217 kW @2100 RPM
BUCKET CAPACITIES: 4.0 ~ 4.4 m³ 5.2 ~ 5.8 cu.yd
OPERATING WEIGHT: 28425 kg 62,670 lb



Model shown may include optional equipment.

KOMATSU: The Quality is Standard

- Komatsu components throughout the machine assure years of reliability and high-performance service.
- Adjustment-free wet disc brakes for steady braking and extended service life.
- Electronic Display and Monitoring System for minimized maintenance.
- Sealed loader linkage pin for extended maintenance intervals.
- A large breakout force with Z-bar loader linkage and fuel-efficient, powerful Komatsu S6D140 turbocharged diesel engine for high productivity.
- Fingertip control with Electrically Controlled Transmission.
- Kick-down switch instantly shifts the transmission from F2 to F1 for quick and easy loading cycles.
- A tiltable steering wheel and fully adjustable suspension seat.
- Reduced operating effort through Proportional Pressure Control (PPC).

KOMATSU

SPECIFICATIONS

ENGINE

Model	Komatsu S6D140
Type	Water-cooled, 4-cycle
Aspiration	Turbocharged
No. of cylinders	6
Bore x stroke	140 mm x 165 mm 5.5" x 6.5"
Piston displacement	15.2 ltr. 928 cu.in
Performance:	
Flywheel horsepower	291 HP 217 kW (SAE J1349) 295 PS 217 kW (DIN 6270)
Rated RPM	2100 RPM
Fuel system	Direct injection
Governor	Mechanical, all-speed control
Lubrication system:	
Lubrication method	Gear pump, force-lubrication
Filter	Full-flow type
Air cleaner	Dry type with double elements and dust evacuator, plus dust indicator

TRANSMISSION

Torque converter:	
Type	3-element, single-stage, single-phase
Transmission:	
Type	Full-powershift, planetary-gear type
Travel speed: km/h MPH	
Measured with 26.5-25 tires	
1st 2nd 3rd 4th	
Forward 7.3 4.5 12.6 7.8 21.1 13.1 34.2 21.3	
Reverse 7.8 4.8 13.4 8.3 22.5 14.0 36.4 22.6	
Measured with 29.5-25 tires	
Forward 7.5 4.7 12.9 8.0 21.8 13.5 34.9 21.7	
Reverse 8.2 5.1 14.0 8.7 23.6 14.7 37.5 23.3	

AXLES & FINAL DRIVES

Drive system	Four-wheel drive
Front	Fixed, full-floating
Rear	Center-pin-support, full-floating 30° total oscillation
Reduction gear	Spiral bevel gear
Differential gear	Straight bevel gear
Final reduction gear	Planetary gear, single reduction

BRAKES

Service brakes	4-wheel air-over-hydraulic, wet, multiple-disc brakes
Parking brake	Dry-disc type, air-released, spring-applied on front drive shaft
Emergency brake	Parking brake is automatically applied when air pressure drops.

STEERING SYSTEM

Type	Articulated type, separate-type power steering with mechanical feed-back
Steering angle	40° each direction
Minimum turning radius at the center of outside tire	6080 mm 19'11"

HYDRAULIC SYSTEM

Steering system:	
Hydraulic pump	Gear pump
Capacity	171 ltr./min. 45.2 U.S. gal/min. at rated RPM
Relief valve setting	210 kg/cm ² 3000 PSI
Hydraulic cylinders:	
Type	Double-acting, piston type
No. of cylinders	2
Bore x stroke	110 mm x 486 mm 4.3" x 19.1"
Loader control:	
Hydraulic pump	Gear pump
Capacity	217 + 217 ltr./min., 57.3 + 57.3 U.S. gal/min. at rated RPM
Relief valve setting	210 kg/cm ² 3000 PSI
Hydraulic cylinders:	
Type	Double-acting, piston type
No. of cylinders — bore x stroke:	
Boom cylinder	2 — 200 mm x 825 mm 7.9" x 32.5"
Bucket cylinder	1 — 225 mm x 565 mm 8.9" x 22.2"
Control valve	2-spool type
Control positions:	
Boom	Raise, hold, lower and float
Bucket	Tilt-back, hold and dump
Hydraulic cycle time (rated load in bucket)	
Raise ... 7.3 sec. Dump ... 1.7 sec. Lower ... 3.5 sec.	

ROPS AND CAB

Dimensions comply with ISO 3471 and SAE J1040c ROPS (Roll-Over Protective Structure) standards, as well as ISO 3449 FOPS (Falling Object Protective Structure) standards. The cab is mounted on rubber pads and well insulated.

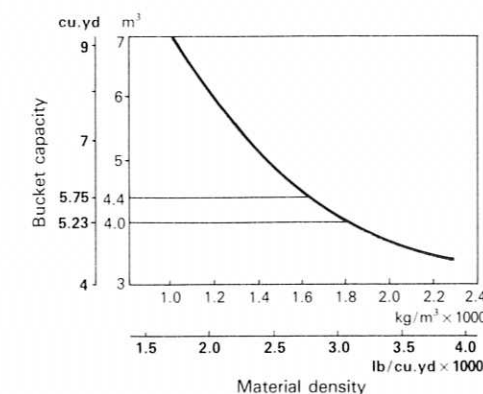
SERVICE REFILL CAPACITIES

Cooling system	80 ltr. 21.1 U.S. gal
Fuel tank	435 ltr. 114.9 U.S. gal
Engine	32 ltr. 8.5 U.S. gal
Hydraulic system	150 ltr. 39.6 U.S. gal
Axle (each front and rear)	78 ltr. 20.6 U.S. gal
Torque converter and transmission	62 ltr. 16.4 U.S. gal

TIRES

Select ideal tires depending on job requirements.
26.5-25-20PR (L-3)
29.5-25-22PR (L-3)

BUCKET SELECTION



	Capacity Heaped m³ cu. yd	Struck	Bucket width mm ft.in	Bucket weight kg lb	Breakout force kg lb
I Excavating bucket (straight edge) with teeth	4.0 5.2	3.3 4.3	3400 11'2"	2225 4910	27000 59520
II Excavating bucket (spade nose) with teeth	4.0 5.2	3.3 4.3	3400 11'2"	2525 5570	22700 50040
III Light material bucket (straight edge) without teeth	4.4 5.8	3.8 5.0	3400 11'2"	2240 4940	25200 55560

Tires/Bucket	Operating weight kg lb			Static tipping load kg lb								
				Straight			35° turn			40° full turn		
	I	II	III	I	II	III	I	II	III	I	II	III
26.5-25-20PR (L-3)	27615 60880	27885 61470	27285 60150	21050 46410	20560 45330	19700 43430	18850 40900	18410 40590	17640 38890	18225 40180	17680 38980	16940 37350
29.5-25-22PR (L-3)	28155 62070	28425 62670	27825 61340	21450 47290	20960 46210	20100 44310	18920 41710	18780 41400	18010 39700	18575 40950	18030 39750	17290 38120

- All dimensions, weights and performance values based on SAE J732c and J742b standards.
- Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, steel cab, ROPS canopy, front & rear half fenders, tip type teeth and operator. Machine stability and operating weight are affected by counterweight or ballast, tire size and other attachments. Use either counterweight or ballast, not both. Apply the following weight changes to operating weight and static tipping load.

WEIGHT CHANGES

	Change in operating weight		Change in tipping load	
			Straight	Full turn
Remove ROPS canopy	- 570 kg	- 1260 lb	- 520 kg	- 1150 lb
Remove steel cab	- 310 kg	- 680 lb	- 260 kg	- 570 lb
Remove front half fender	- 100 kg	- 220 lb	- 35 kg	- 80 lb
Remove rear half fender	- 175 kg	- 380 lb	- 175 kg	- 380 lb
Remove teeth	- 315 kg	- 690 lb	+ 410 kg	+ 900 lb
Install additional counterweight	+ 700 kg	+ 1540 lb	+ 1680 kg	+ 3700 lb

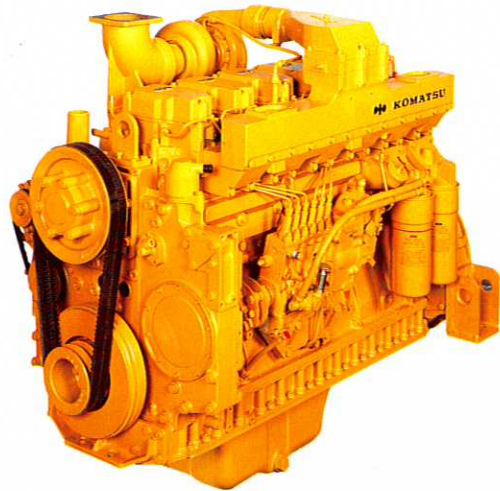
STANDARD EQUIPMENT

291HP/2100RPM KOMATSU S6D140 diesel engine, 2x12V/170AH battery, 35A alternator, wet type disc brake, boom kickout, electronic display/monitoring system/electrically controlled transmission, tiltable steering wheel, engine key stop, ROPS bracket, speedometer, air over hydraulic brakes, adjustable suspension seat, ladders (right & left), front compartment, head lamps, rear working lights, turn indicators (front & rear), air horn, fan guard, counterweight (1280 kg/2820 lbs), 4 x 26.5-25-20 rock type tubeless tires.

OPTIONAL EQUIPMENT

Cutting edge (bolt-on type)	Rear frame side cover
Bucket teeth (bolt-on type)	Power train guard
Bucket teeth (tip type)	Tool kit
Bucket corner teeth	Ordinary spare parts
Additional counterweight	Canvas canopy
Hydraulic adapter kit	Floor mat
3-spool valve	Heater and defroster
ROPS canopy	Front half fender
Steel cab with front wiper and windshield washer	Rear half fender
Air conditioner	Seat belt
Emergency steering	Sun visor
Vandalism protection kit	Electric fan
Instrument panel cover	Rearview mirror
Front fender	Backup alarm
Fire extinguisher	Front working lights for cab

RELIABLE KOMATSU COMPONENTS ENGINE



Reliable power: The engine is power-matched with Komatsu's heavy-duty construction equipment for unbeatable performance and durability.

Economical operation: The direct-injection system and special fuel-saving Komatsu engine design provide maximum fuel economy.

Easy maintenance: All filters are spin-on type and concentrated on one side of the machine to facilitate daily operating checks and maintenance.

Low-noise operation: Ideal engineering, design and construction keep engine noise and vibration to a minimum.

TRANSMISSION

The full powershift, planetary-gear transmission with 4 forward and 4 reverse speeds is suitable for all jobsite conditions. The transmission control system includes a modulation valve to modulate increase in the oil pressure used to operate the clutch. This eliminates shocks and reduces stress on the power train when changing speeds, resulting in less operator fatigue and improved transmission durability. A neutral safety circuit allows starting only when the directional control lever is in neutral.

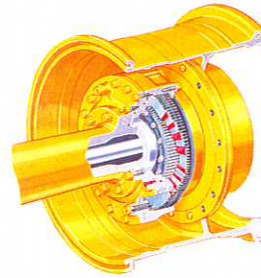
AXLES

The center-pin-supported rear axle oscillates vertically and, along with an extra-long wheelbase and wide tread, assures machine stability over the toughest terrain.

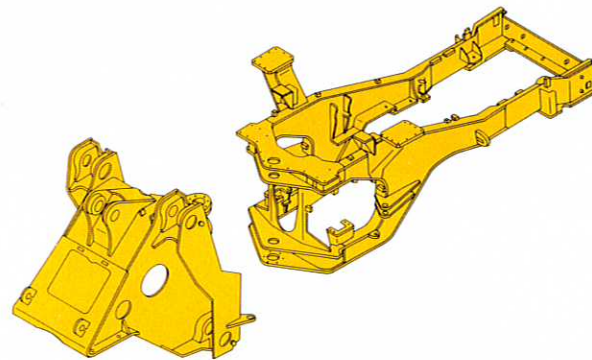
BRAKES

Adjustment-free wet multiple-disc brakes ensure braking even on muddy terrain. They are sealed to stay free of dirt and other abrasive contaminants.

Two brake pedals are provided for normal braking. In addition, the left pedal can be used to simultaneously brake and neutralize the transmission by simply actuating a switch.

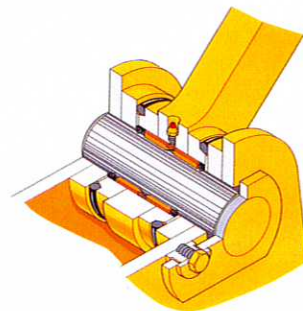


FRAME



High frame rigidity: The test loads applied in designing the loader linkage and frame were determined based on data obtained in the field. The result assures maximum durability even under the most severe load conditions. The rigid frames are highly resistant to both vertical and horizontal distortion.

BOOM & BUCKET



Z-bar loader linkages are made of high-tensile-strength steel for maximum rigidity and powerful excavation. Sealed loader linkage pins with dust seals and cord rings extend greasing intervals. The bucket is also made of high-tensile-strength steel. Bucket corner teeth minimize bucket wear and increase the penetration force.

CONTROLS



Operator's cab: Designed and laid out for maximum comfort and efficiency, the cab offers a wide field of vision, plenty of work space and logically arranged instruments, levers and pedals. Vibration and noise are also kept to a minimum. The adjustable steering wheel tilts within a 100 mm (4") range for operating convenience. The suspension seat is fully adjustable for maximum operator comfort.

Fingertip control:

The electrically controlled transmission requires just a light touch to shift, making gear changes as easy as flicking the turn signal lever.



Smooth, light-touch work equipment control:

A proportional pressure control valve assures smooth, responsive work equipment control in proportion to lever stroke. The unique kick-down switch improves loading efficiency. In addition, the armrest and wrist rest reduce operator fatigue.

HIGH PERFORMANCE FOR GREATER PRODUCTIVITY

Outstanding bucket and loader performance with faster, smoother traveling account for greater productivity. High dumping clearance, long dumping reach and excellent visibility make it easier to load dump trucks. The unique kick-down switch improves loading efficiency. Pressing it while advancing in 2nd gear smoothly shifts the gear down to the 1st position without time delay. Once the bucket is loaded, a simple flick of the directional lever to reverse automatically puts the transmission in R2 for faster reverse cycle times.



VALUE-ADDED FEATURES FOR MINIMAL MAINTENANCE

Advanced monitoring system: The operator performs all daily checks without leaving his seat, through direct readings on each machine function. Warning lights and buzzers alert the operator of any malfunction.



Engine hood: Its side covers open widely for easy access to the engine and related components.



YOU CAN COUNT ON OUR SERVICE

Training schools worldwide: Every Komatsu mechanic, salesperson and parts man goes to training school to upgrade their servicing ability.



Product support programs: We'll help you buy the right machines for your operation. Survey on-the-job efficiency. And provide comprehensive service programs for minimum operation cost and minimum downtime.



24-hour parts hotline: Just call your Komatsu parts representative. You'll be in instant touch with our worldwide communications system, for rush service and rush orders on 490,000 parts.