# WHEEL LOADER

# WA800-3

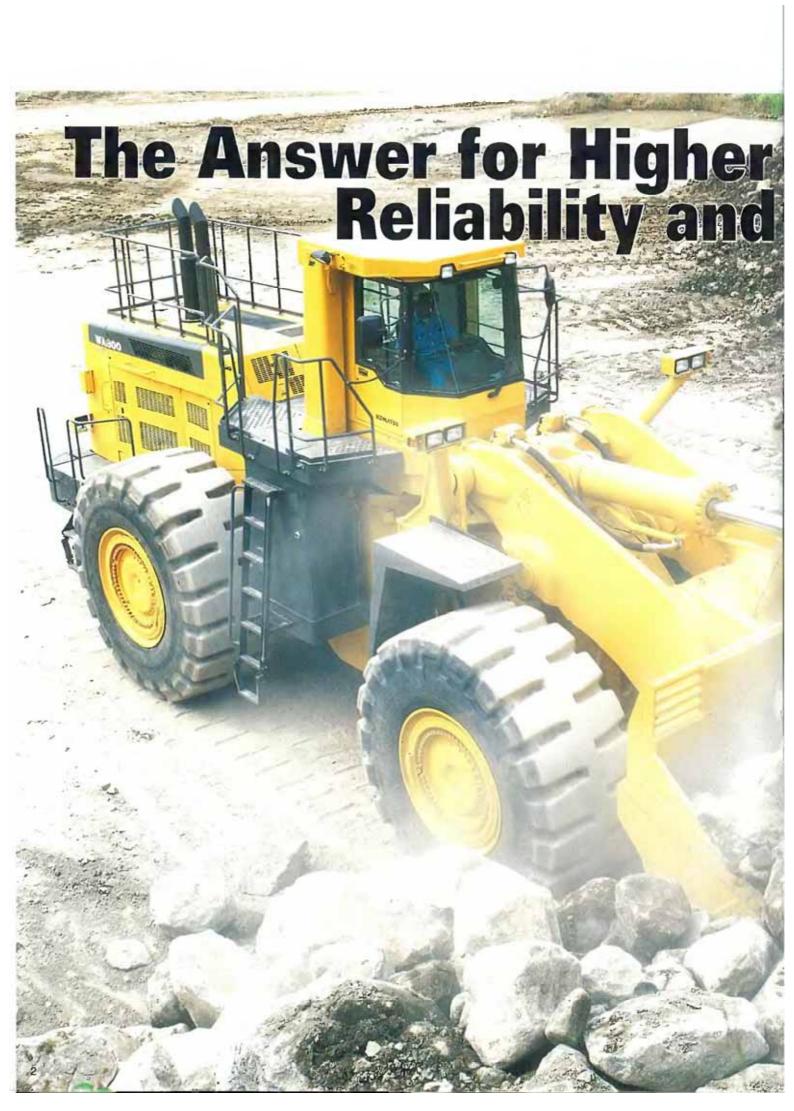
# **avance Loader**

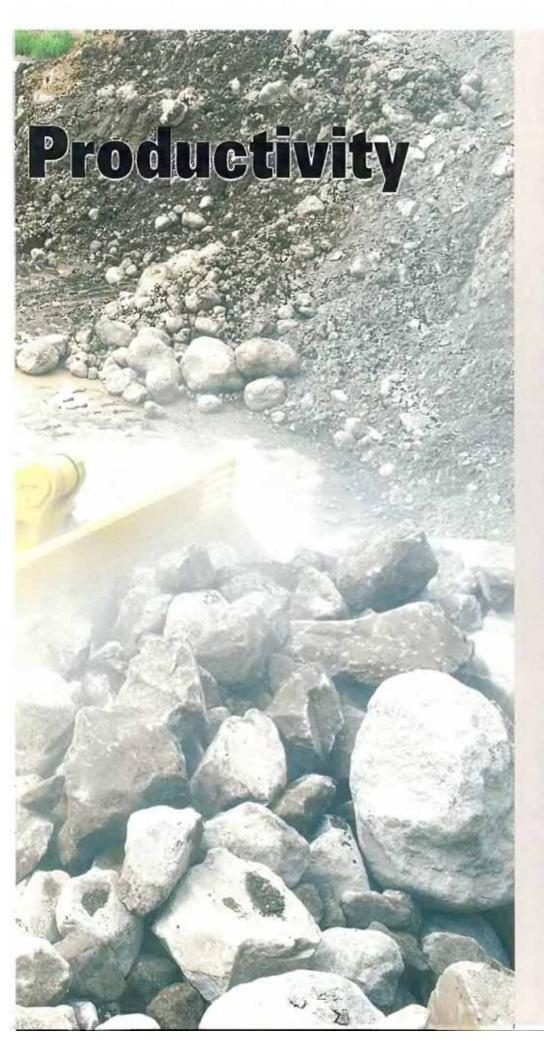
FLYWHEEL HORSEPOWER: 603kW 808 HP @2,000RPM BUCKET CAPACITIES: 11.0~12.3m3 14.4~16.1 cu.yd OPERATING WEIGHT: 98,300 kg 216,710 lb



- The powerful Komatsu SA12V140 engine provides fuel-efficient operation
- Roomy, quiet cab with high-capacity air conditioner substantially reduces operator fatigue
- Kick-down switch on the boom control lever improves pile penetration and scooping operations
- Electrically controlled transmission enables light fingertip control of all direction/gear shift changes
- Tiltable steering wheel and adjustable seat provide operator comfort and efficiency
- Komatsu viscous damping cab mounts reduce vibration and noise
- Adjustment-free service brake accounts for higher performance and reduced downtime
- High-quality components are used for superior reliability and availability







#### **Proven Power**

The world/field-proven Komatsu 12cylinder, direct-injection turbo-charged SA12V140 engine has all the capability needed for today's tough operations.

Flywheel horsepower

# 603kW 808HP @2,000RPM

#### Reliable Power Train

The engine, torque converter and transmission as well as the hydraulic equipment and electrical parts undergo strict quality control checks for enhanced reliability and durability.

#### **Durable Bucket**

Komatsu buckets are manufactured using high-tensile strength steel with replaceable welded wear plates for extended bucket life. Additional strength has been added to the bucket bottom corners, side edges and spill guard ends for increased durability.

**Bucket capacities** 

11.0<sub>m³</sub> (14.4cu.yd)

Stock Pile

12.3<sub>m³</sub> (16.1cu.yd)

#### Large Dumping Clearance

The WA800-3 was designed with ample dumping clearance for dump truck matching.

#### **High Breakout Force**

Komatsu wheel loaders have hightensile steel Z-bar loader linkages for maximum rigidity and maximum breakout force. Sealed loader linkage pins extend greasing intervals.

#### **Excellent Stability**

The WA800-3 has the widest tread in its class 3,350mm(11') and a long 5,450mm(17'11") wheelbase, for maximum machine stability.

# **Focus on Operator Comfort and**



#### Easy to Use Joystick Steering (Optional)

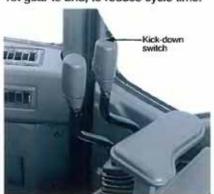
A joystick steering system has been incorporated to allow steering and forward/reverse selection to be effected by wrist and finger control without the operator having to move his arm from the rest. When transmission gear shifting is set to manual, the boom lever hold and kickdown switches change to up-shift and down-shift switches respectively.



Automatic transmission is used with joystick steering.

# Faster Pile-Penetration & Scooping

A kick-down switch down-shifts the transmission from forward 2nd to 1st gear, for increased rim pull and hence improved bucket filling. When the direction control lever is set to reverse, it automatically up-shifts from 1st gear to 2nd, to reduce cycle time.



# Ergonomically-Designed Controls

All controls are ergonomically designed to minimize operator fatigue. The steering wheel and instrument panel are similar to those of a car. The bucket and boom controls have PPC valves and short-stroke levers, to reduce operator effort. With the electrically-controlled transmission, direction and gearshift control levers can be finger-operated while holding the steering wheel with the same hand, allowing instant, positive direction and gearshift changes.

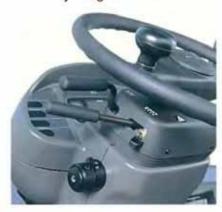
#### Comfortable Operator's Seat

The operator's seat has a reclining/air suspension design with headrest to support the operator comfortably during long operation. Also, it is easy to adjust seat height with air suspension.

# **Easy Maintenance**

#### Smooth Electronic Automatic Transmission (Optional)

With the electronic automatic transmission, you can always enjoy the optimum speed for the machine travelling conditions. Clutch engagement during gear shifting is so smooth that time lag and shock are small and ride comfort is ensured. When ascending or descending a slope or while operating, the automatic transmission can easily be set to the standard manual transmission by using the manual switch.



#### Tiltable Steering Column & One-Glance Monitors

The steering column can be easily tiltadjusted to the most comfortable position with one lever. Together with the two-spoke design, this guarantees better vision of the monitors.



#### Stair Light

The stair light, which illuminates the rear access stairs for about a minute, is operated by pushing a switch inside the cab, regardless of ignition key position.

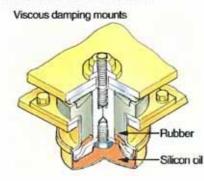
#### Roomy, Quiet Cab With Power Windows

The cab is large, with a comfortably spacious interior and power windows. Also, a wide viewing angle is guaranteed because the cab is pillar-less. By adopting a high-capacity air conditioner, Komatsu ensures operator comfort, no matter the exterior conditions. Other features designed with operators in mind include a lunchbox storage space.



#### Low Vibration & Noise

The cab rests on Komatsu viscous damping mounts (rubber and silicon oil) to reduce vibration and noise. All hydraulic equipment is mounted on high-resistance rubber to further reduce vibration and noise.



#### Auto-Greasing System (optional)

The periodic lubrication points, except for drive shaft, are greased automatically according to a preset amount and interval. Quick change grease cartridges make replacement easy and clean.

#### Simple Checks, Easy Maintenance

The main monitor and the maintenance monitor (EDIMOS II) are neatly arranged on the instrument panel for a quick, clear reading of machine functions at all times. The main monitor also has a diagnostic function.



#### **High-Quality Paint**

Most exterior plates are treated with a cationic electro-deposition undercoat and melamine baked final paint for rust resistance and longer service life.

#### Maintenance-Free Braking System

Service brakes employ two hydraulically-actuated independent circuits for increased safety and are adjustmentfree, fully-sealed, wet disc units, preventing intrusion of dirt and dust. Since the brake system does not use air, it provides many features such as absence of condensation, dependable braking even in cold conditions, no need for drainage, and rust free piping. What's more, charging time after engine starting is drastically shortened and pedal depressing effort is reduced.



#### **SPECIFICATIONS**



## **ENGINE**

Model	Komatsu SA12V140
Type	Water-cooled, 4-cycle
Aspiration	Turbocharged
No. of cylinders	12
Bore×stroke	140mm×165mm 5.5*×6.5*
Piston displacement	30.48 ltr. 1,860 cu.in
Performance:	
Flywheel horsepower	603 kw 808 HP (SAE J1349)
R 8	603 kw 820 PS (DIN 6270)
Rated RPM	2,000 RPM
Fuel system	Direct injection
Governor	Mechanical, all-speed control
Lubrication system:	
Lubrication method	Gear pump, pressurized lubrication
Filter	Full-flow type
Air cleaner	Dry type with automatic dust ejector and precleaner, cyclopac with vacuator



### TRANSMISSION

See IIIA	1401111001	0.4		
Torque conve	erter:			
Туре			lement, single-s gle-phase	stage,
Transmission	i.		3 (3)	
Туре			l-powershift, pla er type	inetary
Travel speed	km/h MPH			
Measured	with 45/65-4	5-46PR tires	S	
	1st	2nd	3rd	
Forward	7.0 4.3	<b>12.3</b> 7.6	28.0 17.4	
Reverse	7.1 4.4	<b>12.4</b> 7.7	<b>28.3</b> 17.6	



#### **AXLES & FINAL DRIVES**

Four-wheel drive
Fixed, full-floating
Center-pin-support, full-
floating ±11" total oscillation
Spiral bevel gear
Straight bevel gear
Planetary gear, single reduction, oil bath



Service brakes	4-wheel, systematic brake for
	front/rear wheel,
	hydraulically actuated, wet disc
Parking brake	Dry-disc type, hydraulic released,
	spring applied on front axle
	input shaft
Emergency brake	Uses parking brake



Type	Articulated type, full-
120 12	hydraulic power steering
	40° each direction
Minimum turning radius at the	
center of outside tire	9,200 mm 30' 2"

### HYDRAULIC SYSTEM

-	
Steering system:	
Hydraulic pump	Piston pump
Capacity	307 ltr./min. 81 U.S.
	gal/min. at rated RPM
Relief valve setting	320 kg/cm2 4,550 PSI
Hydraulic cylinders:	
Туре	Double-acting, piston type
No. of cylinders	2
Bore×stroke	160 mm×503 mm
	6.3*×19.8*
Loader control:	
Hydraulic pump	
Capacity	405 ttr./min. 107
	U.S.gal/min. at rated RPM
Relief valve setting	320 kg/cm² 4,550 PSI
Switch pump	Piston pump
Capacity	
	U.S.gal/min. at rated RPM
Hydraulic cylinders:	
	Double-acting, piston type
No. of cylinders-bore × s	stroke:
Boom cylinder	2- 260 mm×1,368 mm
	10.2"×53.9"
Bucket cylinder	1-300 mm×906 mm
	11.8"×35.7"
Control valve	Spool type
Control positions:	
	Raise, hold lower and float
Bucket	Tilt-back, hold and dump
Hydraulic cycle time (rate	d load in bucket)
Raise 11.2sec.	3 T S A S A S A S A S A S A S A S A S A S
Lower (Empty) 4.8	Bsec.



#### ROPS & CAB

Structure complies 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.

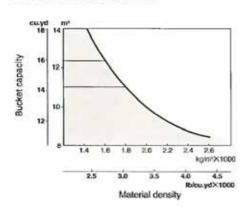
#### SERVICE REFILL CAPACITIES

Cooling system	301 ltr. 79.5 U.S.gal
	1,425 ltr. 376.5 U.S.gal
Engine	132 ltr. 34.9 U.S.gal
Hydraulic system	725 ltr. 191.5 U.S.gal
Axle (each front and rear)	360 ltr. 95.1 U.S.gal
Torque converter and transmission	140 ltr. 37.0 U.S.gal



45/65-45-46PR(L-5)

#### **BUCKET SELECTION**



	Heaped m³ cu.yd	Struck	width*	weight kg lb	force kg lb	
Excavating bucket (spade nose) with tipteeth	11.0 14.4	9.3 12.2	4,810 15'9"	11,430 25,200	<b>69,000</b> 152,120	
Stock Pile (spade nose) with teeth	<b>12.3</b> 16.1	10.4 13.6	4,810 15'9" "Excludir	12,150 26,790 ng tire prote	64,170 141,470 ectors	

Bucket

Brookout

Operating weight	Static tipping load kg lb					
	kg	lb .	Stra	ight	40° fu	il turn
Tires/Buckets		11	1	11	1	- 11
45/65-45-46PR(L-5)	98,300 216,710	99,020 218,300	57,400 126,540	56,680 124,960	50,500 111,330	49,780 109,740

All dimensions, weights and perforance values based on SAE J732c and J742b standards

II

Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, steel cab, ROPS canopy, air conditioner, tip type teeth and operator. Machine stability and operating weight are affected by counterweight, or ballast, tire size and other attachments. Use either 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 t	ipping load
		Straight	Full turn
Remove ROPS canopy	-1,385 kg -3,055 lb	-1,220 kg -2,690 lb	-1,180 kg -2,600 lb
Remove steel cab	- 430 kg - 950 lb	- 335 kg - 740 lb	- 330 kg - 730 lb
Install additional counterweight	+1,600 kg +3,530 lb	+3,850 kg +8,490 lb	+3,400 kg +7,500 lb

#### STANDARD EQUIPMENT

Engine and cooling system: Starter, Alternator, Preheater,

Electrical components: Headlights(2), Rear working lights(2), Brake lamps or tail lamps, Turn indicators (front and rear), Electric display/monitoring system/stair light

Gauges: Fuel level, Coolant temperature, Torque converter oil

Gauges: Fuel level, Coolant temperature, Torque converter oil temperature, Speedometer, Service meter Pilot lamps: Engine preheating, Working light on, Turn indicator on, Parking brake applied, Transmission cut-off Monitor lights: Engine oil level, Coolant level Caution lamps: Battery charging, Fuel level, Transmission oil filter clogging, Air cleaner filter clogging

Caution lamps with alarm: Engine oil pressure, Coolant level, Coolant temperature, Torque converter oil temperature, Parking and neutral, Brake oil pressure

Others: Sight gauges (burdeautic reservoir level, transmission oil level) Others: Sight gauges (hydraulic reservoir level, transmission oil level, brake oil level), Emergency brake, 45/65-45-46PR (L-5) tubeless tires, Bucket positioner, Boom kickout, Air suspension seat

#### Specifications with High-Lift Boom

		Spade Nose with teeth
Bucket capacity	m <sup>3</sup>	10.0
Rated Load	kg	18,000
Bucket width	mm	5,045 (4,760)
Dumping Clearance (teeth)	mm	5,580 (5,210)
Dumping Reach (teeth)	mm	2,075 (2,315)
Tire Size	-	45/65-45-46PR (L-5)

[ ] without tire guard

#### OPTIONAL EQUIPMENT

Front working lights(2), Side working lights(2), Air conditioner, Heater and defroster, Car radio, Sun visor, Fire extinguisher, Vandalism protection, Emergency steering, Yellow rotating lamp, Backup alarm, Underview mirror, Power-train underguard,

Ashtray and cigarette lighter,

Rear under view mirror, Room mirror, Seat belt, Fenders, Bucket teeth (weld-on/tip type), Bucket corner teeth, Sweeper wing, 10.0m³ (13.1 cu.yd) spade nose rock bucket for high-lift boom, High-lift boom, Counterweight for high-lift boom, Mesh chain, 45/65-45-50PR (L-5) tubeless tires, Heavy-duty bucket, ROPS canopy, Steel cab included front wiper, windshield washer and power windshield.

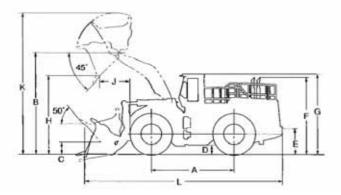
window, Fast fill fuel system, Auto-greasing kit, Joystick steering, Automatic transmission, Coal bucket (20.5m3), Auto-greasing system

#### Specifications with Short Boom Load & Carry

		Spade Nose with teeth
Bucket capacity	m <sup>3</sup>	14.0
Rated Load	kg	22,400
Bucket width	mm	5,040
Dumping Clearance (teeth)	mm	4,190 (3,820)
Dumping Reach (teeth)	mm	2,450 (2,690)
Tire Size	- 1	45/65-45-58PR (L-4)

Stone-handling version is applicable with short boom and special front attachment.

#### DIMENSIONS



		(Unit:mm ft.in)	
		45/65	45 tires
	Tread	3,350	11'
	Width over tires	4,585	15'
A	Wheelbase	5,450	17'11"
В	Hinge pin height,max. height	6,785	22'3"
С	Hinge pin height, carry position	850	2'9"
D	Ground clearance	550	1'10"
E	Hitch height	1,300	4'3"
F	Overall height, top of the stack	5,080	16'8"
G	Overall height, ROPS canopy	5,275	17'4"

#### Measured with 45/65-45 tires

	Buckets	1	11
H. Dumping clearance, max. height and 45° dump angle*		4,630 15'2"	4,525 14'10"
J. Reach at max. height and 45° dump angle*		2,385 7'10"	2,495 8'2"
Reach at 2130 mm (7") cut edge clearance and 45° dur	mp angle	3,455 11'4"	3,550 11'8"
Reach with arm horizontal and bucket level		4,360 14'4"	4,510 14'10"
K. Operating height (fully raised)		9,300 30'6"	9,430 30'11"
L. Overall length		13,730 45	13,880 45'6"
Loader clearance circle (bucket at carry, outside corner of bucket)		21,800 71'6"	21,930 71'11"
Digging depth (at teeth)	0"	165 6.5*	165 6.5"
Digging depth (at teeth)	10°	605 1'11"	630 2'1"

<sup>\*</sup>At the end of teeth

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