

KOMATSU®

WA800-3

WA900-3

NET HORSEPOWER

WA800-3: 603 kW/808 HP @ 2.000 rpm

WA900-3: 637 kW/853 HP @ 2.000 rpm

OPERATING WEIGHT

WA800-3: 98.300 kg / WA900-3: 101.550 kg

BUCKET CAPACITY

WA800-3: 10 - 14 m³ / WA900-3: 11,5 - 13 m³

WA

**800
900**

WHEEL LOADER



WA800-3 / WA900-3

WALK-AROUND

Komatsu-integrated design

For the best value, reliability, and versatility. Hydraulics, power train, frame, and all other major components are engineered by Komatsu. You get a machine with components that are designed to work together to deliver higher production levels, greater reliability, and more versatility.

Major features

- High performance engine
- Low cab noise levels
- Excellent productivity with our 2 stage hydraulics
- Easy to service hydraulic brakes
- Extended oil filter change intervals
- Advanced Joystick Steering System (AJSS) (option)

Standard, High-lift and Load & Carry booms

are available in order to suit your application.

	Standard	High-Lift	Load & Carry
WA800-3	✓	✓	✓
WA900-3	✓	✓	-

Cylinder buffer rings

reduce shock loads to the cylinder packings and prolong cylinder life.

A full range of buckets and wear parts

see page 10 & 11

Low mounted bucket hinge pins

Low mounted for better pile penetration and double sealed for long life.

Automatic transmission (optional)

Standard equipped with kick-down and transmission hold switch.



Bucket capacity**WA800-3**

A large range of bucket sizes from 10 m³ to 14 m³ (Load & Carry)

WA900-3

A large range of bucket sizes from 11,5 m³ to 13 m³

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Cab damper mounting for low vibration levels

Both cabins use a viscous damping mount system. The new cabin damper mounting aids the reduction of vibrations to the operator's seat, resulting in less fatigue.

Easy access to engine for servicing

Large doors lock with cab key. Wide opening to all engine service points and filters.

Rear-mounted large-capacity fuel tank

allows for ground level fuelling.

New joystick steering system (AJSS) (optional)

for precise control in V-type loading applications.

Ground level greasing

in centralised service banks, reduces and simplifies maintenance.

12 cylinder engines

Both machines are fitted with the famous SA12V140 4 cycle turbocharged and aftercooled direct injection engine. Engine oil and filter change interval: 500 hrs.



WORKING ENVIRONMENT

The cab improvements on the WA800-3 and WA900-3 go well beyond providing a large cab with an optional comfortable air-ride seat. Improvements include the production-enhancing standard and optional features noted below:

At-a-glance instrument monitor

The main monitor panel is mounted in front of the operator and can be tilted for optimal viewing, allowing the operator to easily check gauges and warning lights. Depending on operation conditions and operation request, both machines can be delivered with a standard steering wheel or an Advanced Joystick Steering System (AJSS).

Automatic transmission

The optional automatic shift control gives the operator maximum control with a minimum of effort. The transmission hold switch allows the operator to select either automatic or manual shifting. The unique combination of the transmission hold and kick-down switches, located on the hydraulic boom lever, offers the operator optimum control in all conditions.

Advanced Joystick Steering System (AJSS) control (optional)

This system provides a precise steering operation that's sometimes needed on narrow, long quarry roads. The joystick steering is also ideal in V-shape cycle loading.

Low-effort brake pedals

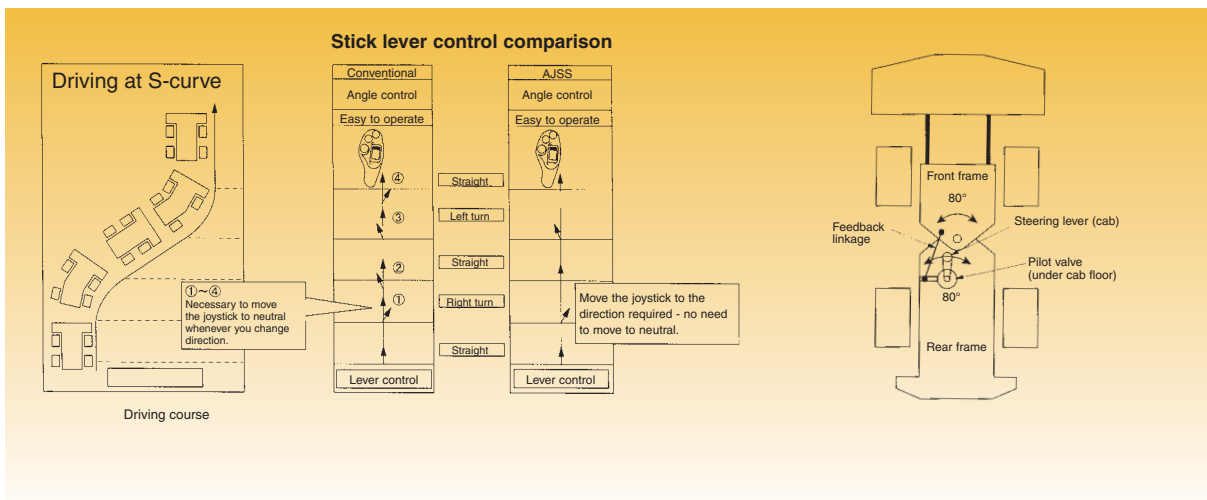
Actuate fully hydraulic brakes. Both the service and parking brakes are wet disc type for a long lifetime.

The EDIMOS II instrument gauge cluster display

The maintenance monitor panel shows all machine functions and systems, which are only a glance away on the side panel.

Easy steering

Komatsu's fully hydraulic steering provides a fast response with low effort, even at low engine RPM.



Two-door, walk-through cab

Komatsu is offering the safest cabin on the market, with an easy entry and exit from both sides of the cab.

Cabin damper mounting for low vibration levels

The silicone oil filled rubber mounts result in reducing the fatigue caused by mechanical vibrations and noise. This helps the operator to remain productive the whole day. It also increases the lifetime of all operator compartment components.

Low noise design

The noise levels are substantially reduced. Engine compartment noise isolation plus the specially designed low speed radiator cooling fan give class leading noise levels. Guaranteed sound level at the operator's ear:
LpA, 73 dB(A) (ISO 6394) on the WA800-3
LpA, 74 dB(A) (ISO 6394) on the WA900-3



The five-mode air conditioner ensures a stress free and productive working day



Large entrance to cabin



EDIMOS II maintenance monitor panel



KOMATSU DESIGNED POWER TRAIN

Komatsu's integrated design results in components that are matched to provide the most efficient use of power, whether you're excavating or stock handling.

Engine

The Komatsu SA12V140 delivers the power and efficiency to get the job done quickly and cost-effectively. It's a water-cooled, four-stroke cycle, 12-cylinder, turbocharged, air-to-air after cooled, direct injection engine with a piston displacement of 30,5 litres that produces high performance and excellent fuel economy.

Komatsu SA12V140 features include:

- Engine oil and filter change intervals: 500 hours.
- High pressure fuel rail injection (HPI) system provides excellent low-speed torque and optimum fuel efficiency.
- Large-capacity muffler mounted under the bonnet reduces noise. The noise level is now one of the lowest in its class.
- Wet-type cylinder liners dissipate heat more efficiently and are replaceable for engine rebuild.
- Dry type air cleaner. The dust indication makes the observation of dustfilter clogging easy.

Large gull-wing doors

Allow easy access to the engine and radiator for routine maintenance and cleaning.

Spin-on filters

Easily accessible lubrication points reduce maintenance time and the change of maintenance items.

Gear pump-driven forced lubrication

System has full flow filtration whilst all fuel and oil filters are spin-on for easy maintenance.



3-speed automatic transmission

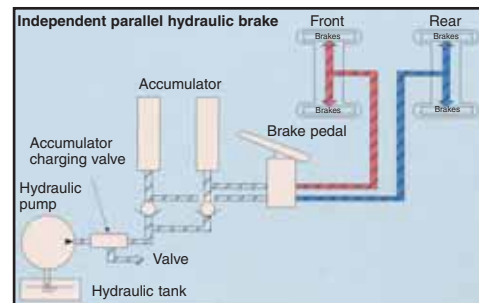
Provides maximum speed of 28,0 km/h in forward and 28,3 km/h in reverse. The transmission is a full power shift, planetary gear type.

Komatsu designed axles and final drives

Provide rugged reliability with low maintenance. Axle shafts are full-floating. The front axle is fixed, whilst the rear axle is a centre pin support design that provides a total oscillation of up to 22 degrees. The differential reduction gear is a heavy-duty spiral bevel gear, for strength and reliable performance. The rugged, out-board planetary final drives carry the total gear reduction of the drive train to the wheel, which is mounted to the axle hub.

Wet multi-disc service brakes (front and rear)

Fully sealed. Contaminants are kept out, reducing wear and maintenance. Brakes require no adjustments for wear, further reducing maintenance costs. There is no air system to bleed, which eliminates the condensation of water in the system that can lead to contamination and corrosion. The braking system's reliability has been increased with the use of two independent hydraulic circuits, providing hydraulic backup in the event that one circuit fails.

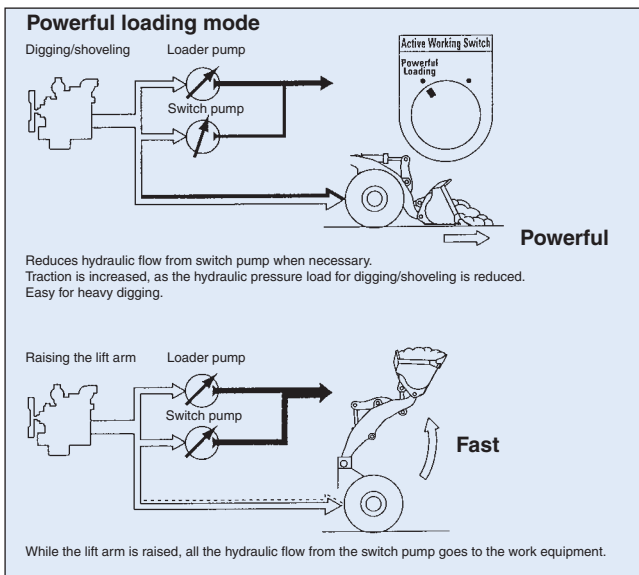


Two stage hydraulics

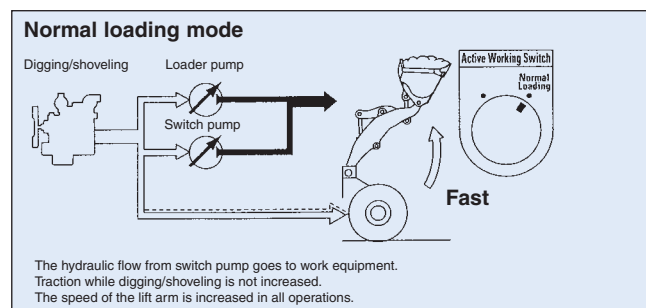
Realize high efficient operation by selecting the best mode

The machine can be equipped with an optional two mode active working system, a great improvement on the already well received two stage hydraulic system.

This system provides the most efficient hydraulic flow for your operation. The active working switch has two modes: powerful loading or normal loading. In powerful loading mode hydraulic flow towards the work equipment can be increased and reduced as and when required. In normal loading mode all hydraulic flow is transferred directly to the work equipment.



2 modes switch



EASY MAINTENANCE

Service with a smile

It would be better if most of us approached routine maintenance and service as something that made us smile. That's why Komatsu designed the WA800-3 and WA900-3 wheel loaders to make servicing as easy as possible. We know that by doing this, routine maintenance and servicing are less likely to be skipped, which can mean a reduction in costly downtime later. Here are some of the many service features found on these machines:

- Large service doors provide easy access to all engine service points and filters, and can be locked with the ignition key.
- Ground level greasing: all grease points are easily reached from ground level and grease banks are provided in strategic areas to reduce maintenance time.
- Large platforms provide easy access to cab windows.
- Full-hydraulic service and parking brakes eliminate air system maintenance.
- Cylinder buffer rings reduce shock loads to the cylinder packing and prolong cylinder life by 30%.
- Optional automatic lubrication system and wiggins fast fuel system are available to reduce maintenance time.



SERVICEABILITY AND CUSTOMER SUPPORT

The Komatsu dealer network guarantees you the lowest operating costs

When you purchase Komatsu equipment, you gain access to a broad range of programmes and services that have been designed to help you get the most from your investment. These all support substantial productivity, long and useful equipment lifetime, low operating costs, and a high trade-in or resale value.

- Many of the vital components of the WA800-3 and WA900-3 have been installed and proven totally reliable in other heavy-duty Komatsu earthmoving equipment.
- Komatsu's extensive parts warehouses and logistics system across Europe and around the globe ensure unparalleled parts availability.
- Continuous training programmes for Komatsu service personnel guarantee that your equipment is serviced properly and maintained in top running condition.
- The Komatsu Oil Wear Analysis (KOWA) programme offers sophisticated oil analysis to identify problems to be followed up during preventative, scheduled maintenance.
- KFWP (Komatsu's Flexible Warranty Programme) is available, providing a range of extended warranty options on the machine and its components. These can be chosen, based on individual needs and activities. This programme is designed to help reduce total operating costs.
- A Komatsu Repair & Maintenance Contract is a way to establish a fixed operating cost and ensure optimal machine availability for the duration of the contract.



BUCKETS AND CUTTING TOOLS



Universal buckets

This type of bucket with a long, flat bucket floor features an outstanding material retaining capacity. The universal bucket can be equipped with a V-shaped edge, bolt on edge or flush mount adapters and interchangeable Kmax™ teeth.



Rock buckets

Buckets with capacities up to 13 m³ are available for rock applications. The trapezoidal form supports outstanding material penetration. Welded or bolted wear plates made of abrasion resistant steel ensure a long service life. Stone deflectors are standard. All bucket areas in contact with the material are made of Hardox 400 or better steel.



Heavy duty rock buckets with Bladesaver™ II

The ideal bucket for hard abrasive rock conditions. The Bladesaver™ II increases profits by protecting the bucket investment and reduces repair works. It offers total bucket protection by using highly wear resistant exchangeable parts. A bolt on teeth system reduces welding on the bucket and prevents loss of teeth.



**Extra heavy-duty rock buckets with K VX™ teeth**

XHD rock buckets with K VX™ teeth as well as bolt on segments are available for highly abrasive materials. This extremely durable system as well as the standard stone deflectors guarantee maximum service life even under the most severe operating conditions. A bolt on teeth system reduces welding on the bucket.

**Ultra-wear resistant ground engaging equipment – Lower costs per tonne**

With the brands Komatsu K VX™, Kmax™ and Hensley™-Parts, Komatsu has extensive know-how, making it a leading supplier of GET in the global market. The comprehensive range of ultra-wear resistant teeth, segments and wear plates covers all applications even under the toughest working conditions.



MACHINE MATCHING SOLUTIONS

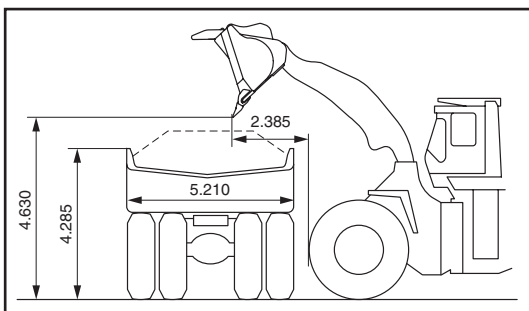
Easy loading

The WA800-3 & WA900-3 have been designed in order to provide a choice of machine, bucket size and boom to suit our customers loading and excavating requirements. Depending on the buckets used and the application, the WA800-3 & WA900-3 can load the following machines thanks to their superior reach and clearance.

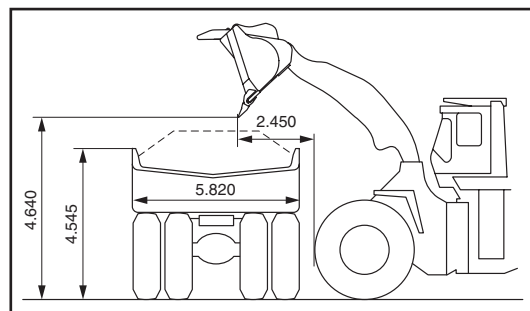
The HD785 (91 metric tonne maximum payload) can be loaded in 5 to 6 passes by the WA800-3.

The HD985 (105 metric tonne maximum payload) can be loaded in 4 to 5 passes by the WA900-3.

WA800-3 & HD785



WA900-3 & HD985



With its complete range of loading and hauling machines, Komatsu is able to offer several machine matching solutions with the goal of increasing your production and bottom line. Using our Optimum Fleet Recommendation or 'OFR' program, Komatsu has qualified production and application specialists available throughout Europe, willing to recommend and assist customers with detailed evaluations of their applications. Please contact your nearest Komatsu distributor for more information.



SPECIFICATIONS



ENGINE

Model.....Komatsu SA12V140
 Type.....Water-cooled, 4-stroke, turbocharger, aftercooled
 Rated capacity
 WA800-3 603 kW/808 HP (SAE J1349)
 WA900-3 637 kW/853 HP (SAE J1349)
 at engine speed2.000 rpm
 Torque/engine speed
 WA800-33.727 Nm/1.400 rpm
 WA900-3 4.090 Nm/1.300 rpm
 No. of cylinders 12
 Bore x stroke 140 x 165 mm
 Displacement..... 30,48 ltr
 Governor..... Mechanical, all speed
 Injection system..... High pressure direct injection
 Lubricating system Gear pump
 Air-filter type Dry type with dust indicator and auto dust evacuator



TRANSMISSION

Torque converter..... One-stage, one-phase, 3-element
 Transmission..... Powershift, planetary gear

Travel speeds			
Gear	1.	2.	3.
Forwards	7,0 km/h	12,3 km/h	28,0 km/h
Backwards	7,1 km/h	12,4 km/h	28,3 km/h

Travel speeds:

WA800-3 45/65-45-46PR(L5) tubeless tyre

WA900-3 45/65-45-58PR(L5) tubeless tyre



AXLES AND FINAL DRIVES

System..... 4-wheel drive
 Front axle..... HD axle, fixed, full-floating
 Rear axle HD axle, full-floating, 22° swing angle
 Reduction gear Spiral bevel gear
 Differential gear Straight bevel gear
 Final drive Planetary gear, single reduction



SERVICE REFILL CAPACITIES

Cooling system301 ltr
 Fuel tank..... 1.425 ltr
 Engine oil..... 132 ltr
 Hydraulic system725 ltr
 Axle (both front and rear axle).....720 ltr
 Torque converter and transmission 140 ltr
 Brake tank 31 ltr



BRAKES

Operating brakes Hydraulically actuated, wet multi-disc brakes
 on all wheels
 Parking brake..... Dry-disc, hydraulically-released,
 spring applied on front axle drive shaft



HYDRAULIC SYSTEM

Circulating capacities
 Loader pump..... 405 ltr/min
 Switch pump 405 ltr/min
 Steering pump 307 ltr/min
 Working pressure (relief valve setting)31,4 MPa
 Control valve hydraulics..... 2-spool
 No. of boom/bucket cylinders.....2/1
 Bore diameter x stroke
 Boom cylinder260 x 1.368 mm
 Bucket cylinder.....300 x 906 mm
 Hydraulic control lever positions
 Boom..... Raise, hold, lower, and float
 Bucket Tilt back, hold and dump
 Hydraulic cycle with rated load bucket filling
 Stroke time (raise time) 11,2 s
 Lowering time (empty) 4,8 s
 Dumping time..... 2,0 s



STEERING SYSTEM

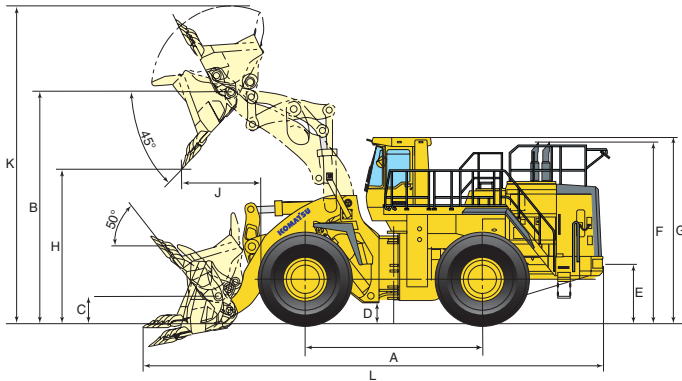
System..... Articulated frame steering
 Type Completely hydraulic power steering
 Steering angle to either side.....40°
 No. of steering cylinders 2
 Bore diameter x stroke 160 x 503 mm
 Smallest turn (outer edge of tyre)
 WA800-3 10.900 mm
 WA900-3 11.000 mm



ENVIRONMENT

Noise level / LpA operator ear
 WA800-3 73 dB(A) (ISO 6394)
 WA900-3 74 dB(A) (ISO 6394)

DIMENSIONS AND PERFORMANCE FIGURES



Dimensions			
		WA800-3	WA900-3
	Tread	3.350 mm	3.350 mm
	Width over tyres	4.585 mm	4.585 mm
A	Wheelbase	5.450 mm	5.450 mm
B	Hinge pin height, maximum height	6.785 mm	6.960 mm
C	Hinge pin height, carry position	850 mm	800 mm
D	Ground clearance	550 mm	550 mm
E	Hitch height	1.390 mm	1.300 mm
F	Overall height, exhaust stack	5.080 mm	5.080 mm
G	Overall height, ROPS cab	5.275 mm	5.275 mm

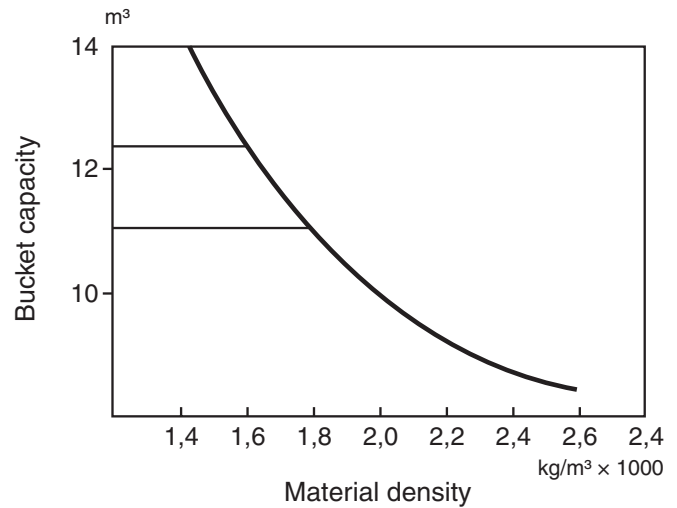
All measurements with tyres 45/65-45.

Measurements and working specifications		WA800-3			
		Standard Boom		High-lift Boom	Load & Carry Boom
Bucket type		Excavating spade nose	Stock handling spade nose	Spade nose	Spade nose
		with tip type teeth	with teeth	with teeth	with tip type teeth
Bucket capacity, heaped	m ³	11,0	12,3	10,0	14,0
Bucket capacity, struck	m ³	9,3	10,4	8,5	11,5
Bucket width (excluding tyre protectors)	mm	4.810	4.810	4.810	5.040
Bucket weight	kg	11.430	12.150	10.750	12.080
Static tipping load, straight	kg	57.400	56.680	55.160	64.700
Static tipping load, 40° articulated	kg	50.500	49.780	48.530	57.000
H Dump clearance, maximum height and 45° discharge angle (at end of tooth)	mm	4.630	4.525	5.200	3.810
J Reach at maximum height and 45° discharge angle	mm	2.385	2.495	2.310	2.680
Reach with boom horizontal and bucket level	mm	4.360	4.510		
K Operating height, fully raised	mm	9.300	9.430	9.625	8.740
Breakout force	kg	69.000	64.170	71.790	67.000
Digging depth, when digging angle 0°	mm	165	165	200	200
Digging depth, when digging angle 10°	mm	605	630	620	670
Operating weight	kg	98.300	99.020	99.820	100.900
L Overall length	mm	13.730	13.880	14.480	13.280
Turning radius, outside corner of bucket	mm	10.940	10.965	11.100	11.020
Turning radius, center of outside wheel	mm	9.200	9.200	9.200	9.200

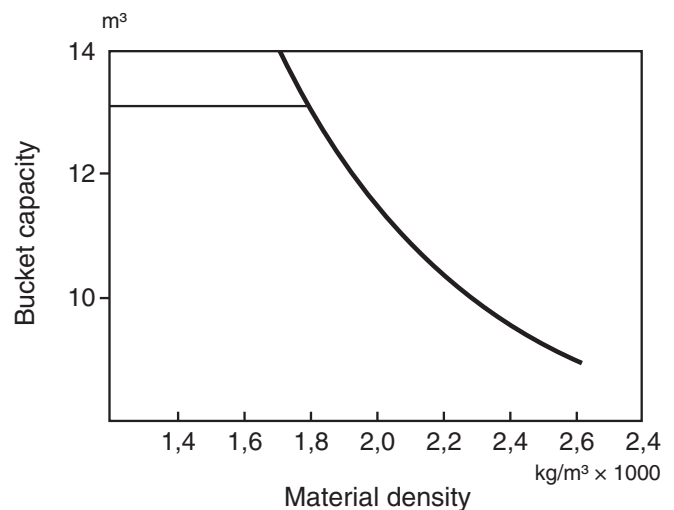
- Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers. SAE standard J732c and J742b.
- Static tipping load and operating weight shown include 45/65-45-50PR L-5 (WA800-3) / 45/65-45-58PR L-5 (WA900-3) tyres, enclosed cab, ROPS canopy, lubricant, full fuel tank, optional counterweight, and operator.
- Machine stability and operating weight are affected by counterweight, tyre size, and other weight changes to operating weights and static tipping load.

BUCKET SELECTION GUIDE

WA800-3



WA900-3



WA900-3	
Standard Boom	High-lift Boom
Excavating spade nose	Excavating spade nose
with tip type teeth	with tip type teeth
13,0	11,5
11,0	9,7
4.810	4.810
12.320	11.370
66.140	62.540
58.200	55.030
4.640	5.250
2.450	2.235
4.640	4640
9.680	9.680
67.900	71.700
165	160
645	610
101.550	101.920
14.270	14.790
11.000	11.200
9.200	9.200

This guide, representing bucket sizes for general purpose applications, will help you select the proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. Bucket fill factors represent the approximate amount of material as a percent of rated bucket capacity. Fill factors are primarily affected by material, ground conditions, breakout force, bucket profile, and the cutting edge of the bucket used. For bench excavating bucket sizes, please contact your nearest Komatsu distributor for more information.

WHEEL LOADER

STANDARD EQUIPMENT

Engine

- Komatsu SA12V140 engine
- Alternator 75 A
- Batteries 200 Ah (N200)

Cab

- ROPS/FOPS frame to SAE
- Air conditioner
- Electronic display/monitoring system (EDIMOS II)
- Tilttable steering wheel
- Air-suspended seat with seat belt (50 mm)
- Washer, front & rear
- Wiper, front & rear, front intermittent

Powertrain

- Electronically controlled transmission (4F, 4R)
- Hydraulically activated oil cooled disc service brakes
- Dry disc parking brake
- Full-floating axles

Hydraulics

- 2-spool main control valve
- Bucket positioner
- Automatic boom kick-out

Others

- Standard boom
- Counterweight 2.900 kg
WA900-3: 2.900 kg + 2.900 kg
- Corrosion resistor
- Front fenders
- PM service connectors

Safety

- Back-up alarm
- Rear-view mirrors
- Electric horn
- Secondary steering

Tyres

- 45/65 R45 radial tyres

Lights

- Reverse lights
- Stop and tail lights
- Turn signal with hazard switch (2 front, 2 rear)

OPTIONAL EQUIPMENT

Engine

- Batteries 200 Ah (C200)
- Alternator 90 A
- Engine shut off mechanical
- Air intake extension
- Radiator core protection grid
- Radiator anti-clogging type (WA800-3 only)

Cab

- Advanced Joystick Steering System (AJSS)
- Joystick steering (in conjunction with steering wheel)
- Radio-cassette

Tyres

- Rims for 45/65-45 tyres
- Bias and radial ply tyres
- Tyre inflation kit

Buckets

- Special buckets as requested

Machine

- Automatic shift control
- Active power-up system (two stage hydraulics)
- Counterweight, additional (1.600 kg) for high-lift arrangement (WA800-3)
- Counterweight for high-lift arrangement (2.900+1.400+1.600 kg) (WA900-3)
- Provision for fast fuel fill
- Auto greasing
- Boom for high-lift arrangement
- Boom for Load & Carry arrangement (WA800-3)
- Cold area arrangement (-30 °C to 40 °C)

- Remote boom positioner (WA800-3)
- In-line filter
- Power train underguard

Safety

- Rear under view mirror
- Side working light
- Fog lamp
- Fire extinguisher
- Beacon light (WA900-3)

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EESS017400 03/2005

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