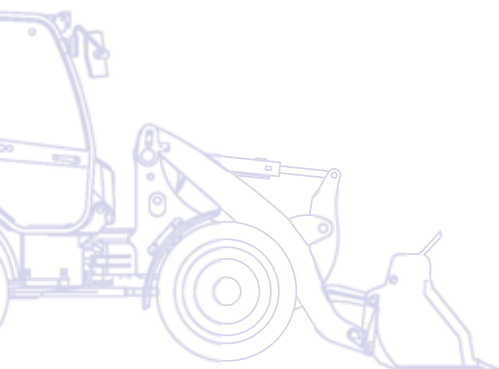


KOMATSU

WA
90



Wheel Loader **WA90-6**



ENGINE POWER
59,0 kW / 79,1 HP @ 2.350 rpm

OPERATING WEIGHT
6.475 - 6.740 kg

BUCKET CAPACITY
0,9 - 1,6 m³

Walk-Around

Small but powerful! Our new Dash 6 compact wheel loaders further improve the features and benefits of their successful predecessors. No matter what the job is, the new models are more flexible, more versatile, and deliver top class performance. Compact and safe, comfortable and reliable, these powerful Dash 6 machines reflect Komatsu's long experience in wheel loader manufacturing, and the company's ongoing commitment to both security and a cleaner environment.

Productive and safe

- Superior breakout power
- Low centre of gravity
- Excellent all-round visibility
- Reversing light, back-up alarm and heated rear window

Total versatility

- Easy Fork (EF) cinematic for parallel movement during fork application
- Highest payloads and tipping loads
- Hydraulic quick-coupler
- LSD axles
- 100% differential lock (optional)



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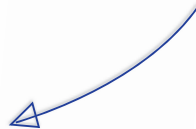
First-class operator comfort

- Largest cab in this class
- Quiet and ergonomic working environment
- Long wheel base for superior travelling comfort
- PPC multifunction lever
- High capacity air conditioning (optional)
- Electronic Controlled Suspension System (ECSS) (optional)



Powerful and environmentally friendly

- Powerful Komatsu ecot3 common rail engine
- Meets EU Stage IIIA and EPA Tier III
- Low operating costs
- Large 90 A alternator



Easy maintenance

- Tilting cab
- Longitudinally installed engine
- Wide opening engine hood
- Easy-access radiator
- Quick-access service side cover



KOMTRAX

Komatsu Satellite
Monitoring System

First-Class Operator Comfort



Simply more comfort

Just get in and get started – the well conceived cabin guarantees easy operation. All controls and gauges are ergonomically positioned to allow comfortable use. The multifunction lever enables convenient work equipment handling and directional control. For an even smoother ride, a comfortable seat, a radio and an automatic inching function are available on request.



Large glass surfaces and the standard heated rear window offer great visibility of the surrounding area – no matter the job. Optimal noise insulation, easy-to-reach buttons and adjustable vents complete a comfortable work environment.

Diverse and flexible

Komatsu's compact wheel loaders are an optimal choice for a wide range of applications. On construction sites, in the recycling industry or for agricultural jobs, with the hydraulic quick-coupler and a wide range of attachments, these machines are extremely versatile. When working with Komatsu pallet forks, the operator can rely on EF cinematic to transport loads parallel to the ground without readjusting the fork tines.

On uneven grounds the optional ECSS load stabiliser reduces shocks and increases productivity and comfort. The optional 100% differential lock axles can be activated for extra traction force. Other optional equipment such as a speed restriction of 20 km/h, a wide core radiator, additional working lights or an immobilizer, are available on request.



Powerful and Environmentally Friendly

Full power for the highest performance

Environmentally friendly, the new Komatsu ecot3 engine is part of a long Komatsu tradition of efficiency and reliability and meets EU Stage IIIA & TIER III emission regulations. As the engine is optimised for tough construction applications it delivers high torque even at low rpm. With high rimpull and enough reserves even in the most difficult ground conditions it still features a low fuel consumption.

A fully automatic, hydrostatic transmission sends power to all four wheels while the large 140 l fuel tank guarantees long and uninterrupted working hours.





High productivity

If you're looking for a small machine with huge performances, then this compact wheel loader is made for you. With its amazing lifting and dumping height and superior breakout power, it works like a bigger machine. When equipped with one of Komatsu's extremely robust and easy to fill buckets, or with pallet forks, high payloads guarantee maximum productivity.

Highest safety

The low centre of gravity enhances stability and compact dimensions ensure an exceptional all-round visibility, resulting in maximum operational safety. Standard safety features such as the ROPS/FOPS cab, back-up alarm, reversing light and large mirrors add up to make the WA90-6 a truly safe machine.



Easy Maintenance

A reliable partner

Komatsu compact wheel loaders are known around the world for their robustness and durability. All maintenance and service can be done easily and quickly thanks to their unique tilting cab. The engine hood can be opened widely for a quick daily inspection, the electric equipment is well protected behind a maintenance cover inside the cab, and the easy-to-clean radiator is conveniently accessible.



Fast, easy and comfortable access to daily inspection points



Convenient air filter access



Side cover for quick maintenance access

Komatsu Satellite Monitoring System



KOMTRAX™ is a revolutionary machine tracking system designed to save you time and money. You can now monitor your equipment anytime and anywhere. Use valuable machine data received via the KOMTRAX™ web site to optimise your maintenance planning and machine performances.

With KOMTRAX™, you can:

- Check when & where your machines are at work
- Be informed of unauthorized machine use or movement
- Set and receive e-mail notification for security alarms

For further details on KOMTRAX™, please ask your Komatsu dealer for the latest KOMTRAX™ brochure.



Machine working time - With the "daily working record" chart, get precise engine running time data: when your machine was started and when it was shut down, as well as total engine running time.



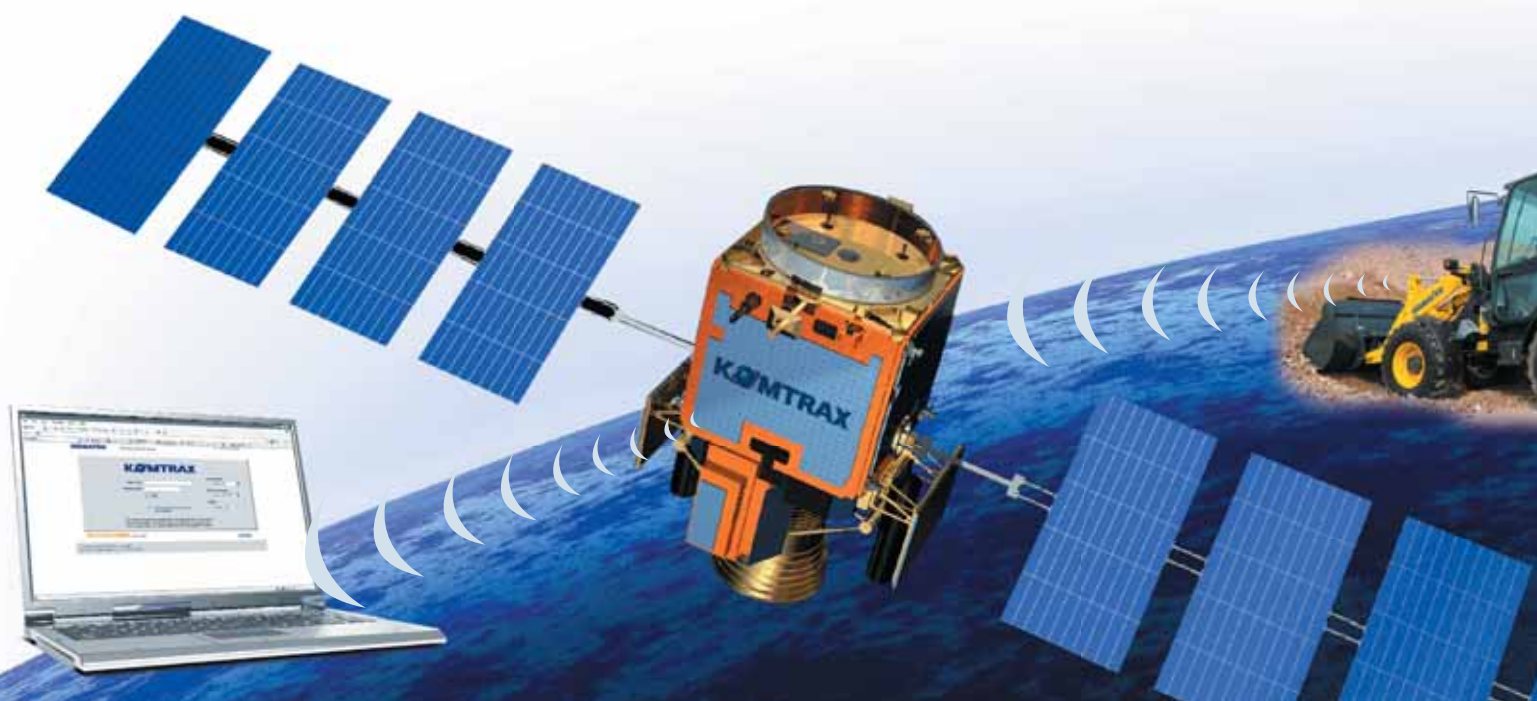
Fleet location - The machine list instantly locates all your machines, even those in other countries.



Alarm notifications - You can receive notification of alarms both via the KOMTRAX™ website and by e-mail.



Added security - The "engine lock" feature allows to program when a machine's engine can be started. And with "geo-fence", KOMTRAX™ sends notification every time your machine moves in or out of a predetermined operating area.



Specifications

ENGINE

Model	Komatsu SAA4D95LE-5
Engine power	
at rated engine speed	2.350 rpm
ISO 14396	59,0 kW/79,1 HP
Max. torque/engine speed	280 Nm/1.600 rpm
No. of cylinders	4
Bore × stroke	95 × 115 mm
Displacement	3,3 ltr
Injection system	Common rail direct injection
Electrical system	12 V
Battery	92 Ah
Alternator	90 A
Air filter type	Dry air filter with pre-filter and safety cartridge

TRANSMISSION

Drive system	Hydrostatic transmission, switchable in all directions under full power
Hydrostatic pump	1 variable piston pump
Hydrostatic motor	1 variable piston motor
Speed ranges (forwards/backwards)	2/2
Travel speeds (forwards/backwards) 20 km/h version	
1. speed range	0 - 6,0 km/h
2. speed range	0 - 20 km/h
Travel speeds (forwards/backwards) 30 km/h version	
1. speed range	0 - 7,3 km/h
2. speed range	0 - 30 km/h

CHASSIS AND TYRES

Type	Low build rear axle oscillation for optimum stability and for best performance in earthmoving applications
System	4-wheel drive
Axles	Planetary rigid axles with automatic limited slip differentials in both axles 100% locking differentials as option
Oscillation	Rear axle oscillation for optimum stability, oscillation angle 10°
Tyres	405/70 R20 (standard)

SERVICE REFILL CAPACITIES

Cooling system	11,5 ltr
Fuel tank	140 ltr
Engine oil	11,5 ltr
Hydraulic system	80 ltr
Front axle	9,2 ltr
Rear axle	9,2 ltr
Transfer box	1,3 ltr

BRAKES

Operating brakes	Combined inch brake pedal actuates maintenance free wet-disc type brakes in the front axle. Self-braking via the hydrostatic drive.
Parking brake	Dry disc

HYDRAULIC SYSTEM

System	Open hydraulic system
Working pressure	270 bar
Circulating capacity of the hydraulic pump	75 ltr/min
No. of boom/bucket cylinders	2/1
Type	Double-action
Bore diameter × stroke	
Boom cylinder	80 × 689 mm
Bucket cylinder	100 × 476 mm
Hydraulic control lever	Multifunction lever
Kinematic	Z-Kinematic with highest breakout force. Parallel movement when using dedicated fork tines.
Hydraulic cycle with rated load bucket filling	
Raise time	4,8 s
Lowering time (empty)	3,5 s
Dumping time	1,6 s

STEERING SYSTEM

System	Articulated frame steering
Type	Hydrostatic
Steering angle to either side	42°
Steering pump	Gear pump
Working pressure	175 bar
No. of steering cylinders	2
Type	Double-action
Bore diameter × stroke	60 × 369 mm
Smallest turn (outer edge of the tyre 405/70 R20)	4.040 mm

CABIN

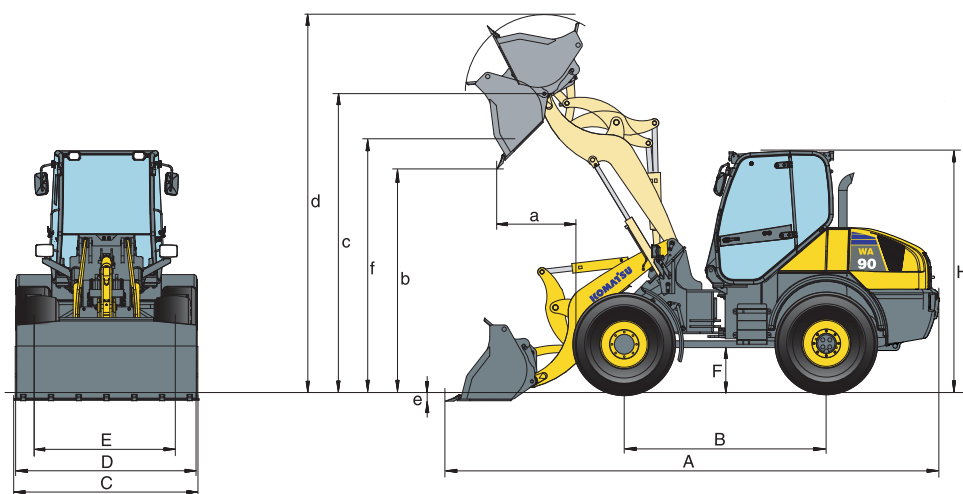
Cabin in conformity with ISO 3471 with ROPS (roll over protective structure) in conformity with SAE J1040c and FOPS (falling object protective structure) in conformity with ISO 3449. The pressurised cabin is mounted upon hydrobearings and is noise dampened. Tilttable for best servicing access.

ENVIRONMENT

Engine emissions	Fully complies with EU Stage IIIA and EPA Tier III exhaust emission regulations
Noise levels	Noise levels (external/internal) fully comply 2000/14/EC Stage II and 98/37/EC
Vibration levels (EN 12096:1997)*	
Hand/arm	≤ 2,5 m/s ² (uncertainty K = 0,73 m/s ²)
Body	≤ 0,5 m/s ² (uncertainty K = 0,59 m/s ²)

* for the purpose of risk assessment under directive 2002/44/EC, please refer to ISO/TR 25398:2006.

Dimensions & Performance Figures



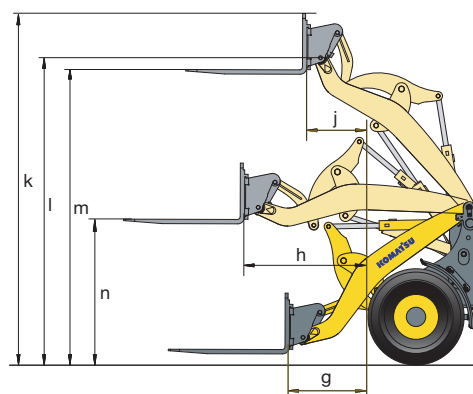
MEASUREMENTS AND WORKING SPECIFICATIONS

		Universal		Light materials	4-in-1
		w. teeth	w/o teeth	w/o teeth	w. teeth
Bucket capacity (heaped, ISO 7546)	m³	1,1	1,1	1,6	0,9
Sales code		C61	C11	C13	C16
Material density	t/m ³	1,8	1,8	1,25	1,8
Bucket weight without teeth	kg	383	360	461	625
Static tipping load, straight	kg	5.010	5.030	4.910	4.800
Static tipping load, 40° articulated	kg	4.265	4.290	4.170	4.050
Breakout force hydraulic	kN	71,4	71,4	59,5	74,2
Lifting capability hydr. at ground level	kN	67,3	67,3	59,3	60,3
Operating weight	kg	6.500	6.475	6.580	6.740
Turning radius at corner of tyres	mm	4.040	4.040	4.040	4.040
Turning radius at bucket edge	mm	4.500	4.500	4.650	4.550
a Reach at 45°	mm	1.030	950	1.140	1.120
b Dump height at 45°	mm	2.600	2.640	2.440	2.505
c Hinge pin height	mm	3.450	3.450	3.450	3.450
d Height top edge of bucket	mm	4.370	4.370	4.445	4.300
e Digging depth	mm	95	95	135	95
f Max. loading height at 45°	mm	3.120	3.120	3.080	3.120
A Overall length, bucket grounded	mm	5.850	5.860	6.130	6.035
B Wheelbase	mm	2.300	2.300	2.300	2.300
C Bucket width	mm	2.050	2.050	2.200	2.050
D Width over tyres	mm	2.015	2.015	2.015	2.015
E Track width	mm	1.590	1.590	1.590	1.590
F Ground clearance	mm	350	350	350	350
H Overall height	mm	2.820	2.820	2.820	2.820

All measurements with tyres 405/70 R20

PERFORMANCE FIGURES WITH FORK TINES

Sales code	C24
Fork tine type	FEM IIA
Fork tine length	mm 1.200
g Max. reach at ground level	mm 850
h Max. reach	mm 1.385
j Max. reach at max. stacking height	mm 700
k Max. height fork-carrier	mm 3.900
l Hinge pin height	mm 3.450
m Max. stacking height	mm 3.245
n Height of forks at maximum reach	mm 1.580
Max. tipping load, straight	kg 3.750
Max. tipping load, articulated	kg 3.200
Max. payload as per EN 474-3, 80%	kg 2.560
Max. payload as per EN 474-3, 60%	kg 1.920
Weight in working order with fork tines	kg 6.420



Wheel Loader

WA90-6

Standard and Optional Equipment

ENGINE

Komatsu SAA4D95LE-5 ecot3 common rail direct injection diesel engine, EU Stage IIIA compliant	●
Alternator 90 A/12 V	●
Starter motor 2,2 kW/12 V	●
Battery 92 Ah/12 V	●

TRANSMISSION AND BRAKES

Combined inch/brake pedal	●
Creeping function	○

CHASSIS AND TYRES

Heavy-duty axles	●
LSD-differential front and rear	●
100% manual locking differentials front and rear	○
Various tyre types and sizes on request	○

HYDRAULIC SYSTEM

3-spool main control valve	●
Multifunction lever	●
Hydraulic quick-coupler	●
Electrical actuation of 3rd hydraulic circuit	●
4th hydraulic circuit	○
Loader control with return-to-dig	○
Auto-inch valve	○
Biodegradable oil for hydraulic system	○

SERVICE AND MAINTENANCE

KOMTRAX™ - Komatsu satellite monitoring system	●
Tool-set	●
Air cleaner system with cyclone pre-cleaner	○
Wide core radiator, radiator fan with reversing function	○
Automatic central lubrication	○

CABIN

Spacious driver's cab with heating	●
Tilting cab	●
ROPS/FOPS frame according to SAE	●
All-round tinted glazing	●
Front laminated glass	●
Heated rear window	●
Rear window wiper	●
Sun visor	●
Adjustable steering column	●
Suspended seat	●
Seat belt (EU standard)	●
Adjustable wrist rest with integrated small storage box	●
Large storage box at left hand side	●
Instrument panel with gauges for speed, coolant temperature, fuel level, air filter warning light etc.	●
12 Volt power supply	●
Adjustable high comfort seat	○
Air conditioning	○
Radio	○
Sun reflection decal for cab/canopy roof	○

SAFETY EQUIPMENT

Emergency steering system	●
Back-up alarm	●
Horn	●
Beacon light	○
Immobilizer	○
Immobilizer with master key	○
Anti-drop valve	○
Battery main switch	○
Fire extinguisher	○

LIGHTING SYSTEM

Halogen headlights	●
Reversing lights	●
Additional lights front and rear	○
Xenon headlights, halogen rear lights	○

OTHER EQUIPMENT

Z-bar boom (parallel movement when using dedicated fork tines)	●
Counterweight	●
Electronically controlled suspension system load stabilizer (ECSS)	○
Special custom colour	○
Bucket level indicator	○

ATTACHMENTS

Bucket with or without teeth	○
4-in-1 bucket	○
Light material buckets	○
Fork carrier and tines	○
Cutting edge guard	○

Further work equipment, accessories and special application arrangements on request

All buckets and attachments quick-coupler mounted

Other attachments on request

- standard equipment
- optional equipment

Your Komatsu partner:

KOMATSU

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