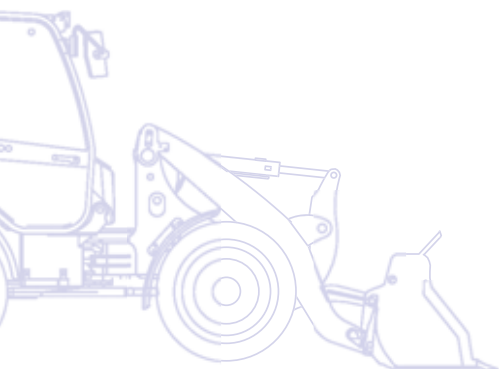


KOMATSU

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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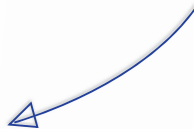
First-class operator comfort

- 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.



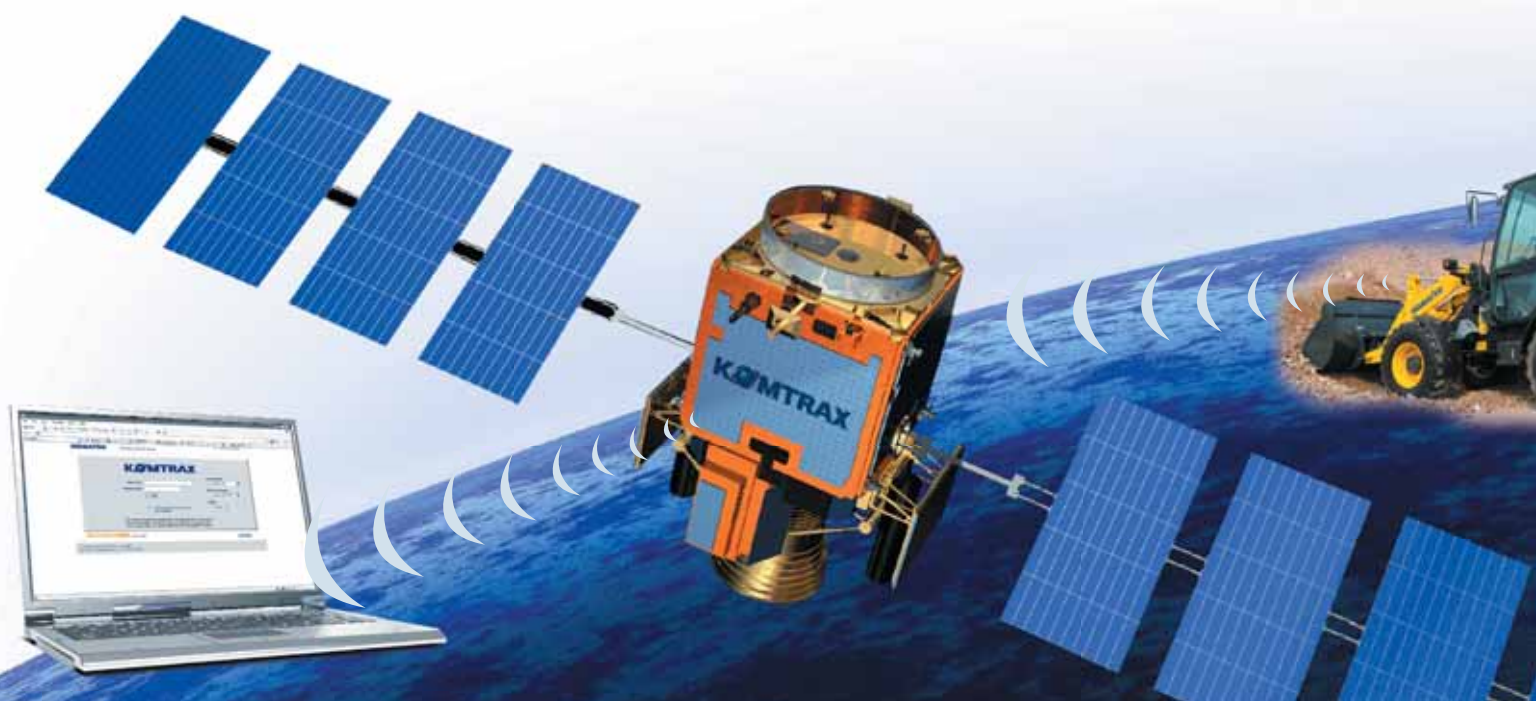
Fleet location - The machine list instantly locates all your machines, even those in other countries.



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 |

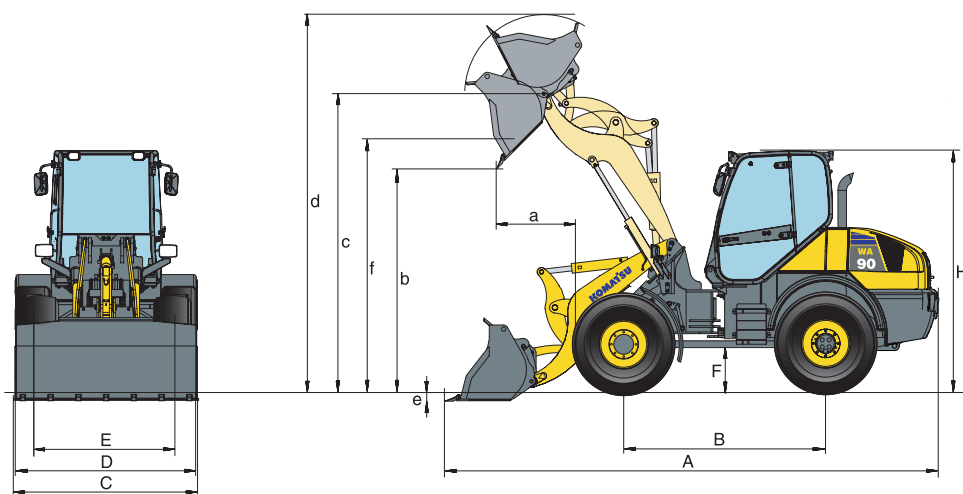
CABIN

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 |

Dimensions & Performance Figures



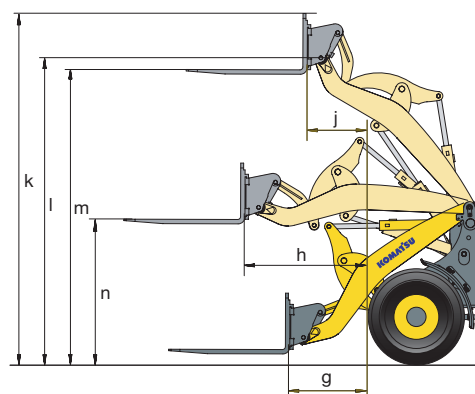
MEASUREMENTS AND WORKING SPECIFICATIONS

| | | 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 | ● |
| 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 | ○ |

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 | ○ |
| Radio pre-setting | ○ |
| 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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