

KOMATSU

WA150PZ-5

ENGINE POWER
74,0 kW / 99,2 HP @ 2.000 rpm

OPERATING WEIGHT
8.700 kg

BUCKET CAPACITY
1,5 - 1,7 m³

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WA150PZ-5

WALK-AROUND

The new WA150PZ-5 wheel loader: The perfect combination of performance, comfort and economy. Never-before experienced comfort in the SpaceCab™ cabin, enormous tractive force and lowest fuel consumption due to an innovative and efficient hydrostatic drive-line concept. Whisper-quiet in use, almost maintenance-free and incredibly productive. This is a wheel loader that has clearly earned its 5 stars!

Overwhelming Efficiency

- High-torque low-emission engine with intercooler
- Extremely low fuel consumption
- Highest tractive effort
- Large breakout force
- Excellent stability
- Electronically controlled HST-drive (hydrostatic) with 2-motor system
- ECSS load stabiliser (option)
- Maximum dumping height and reach:
Dumping height: 2.845 m
Dumping reach: 850 mm
(with 1,5 m³ universal bucket)

Diverse and Flexible

- Comprehensive range of attachments for a wide variety of uses

Excellent Driving Convenience

- SpaceCab™ cabin
- Optimum all-around view
- Low interior sound level
- Series production electric controlled air conditioning as standard
- Electronically controlled HST with variable shift control system
- Traction Control System (TCS)
- Adjustable steering column
- Air-cushioned driver seat
- PPC short levers with F/R switch
- PPC-Multifunction lever with integrated F/R switch (option)



Ecological

- Meets Step II emission regulations in Europe and USA
- Low exterior sound level
- More than 95% of all materials can be recycled

The 5 Star Loader

ENGINE POWER

74,0 kW / 99,2 HP @ 2.000 rpm

OPERATING WEIGHT

8.700 kg

BUCKET CAPACITY1,5 - 1,7 m³**Long Service Life and Reliable**

- Reliable original Komatsu components
- Robust torsionally resistant frame
- Maintenance-free fully hydraulic, wet disc service and parking brakes
- Heavy-duty Torque Proportional Axles
- Sealed DT wiring harness connector
- Electronically controlled HST with overrun protection system

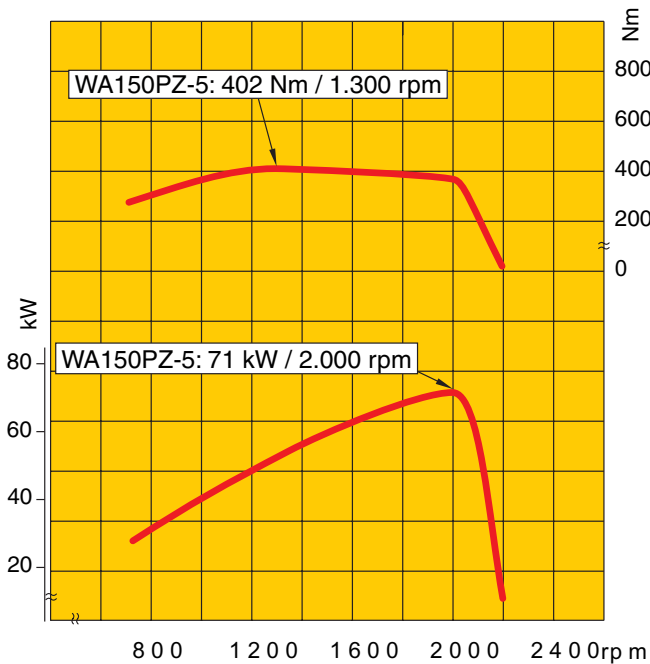
**Unique PZ-Kinematics**

- Combines two linkage systems in one
- High tilt-back force
- Parallel movement during fork application
- Superb visibility to front attachments

**Easy Maintenance**

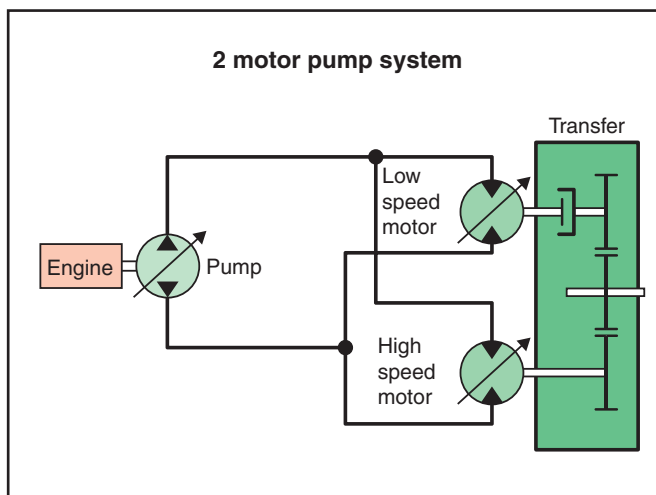
- EMMS monitoring system
- Swing-out fan drive
- Side-by-side type radiators for easy access and cleaning
- Gull-wing doors for easy ground level access
- Extended engine oil change interval
- Factory fitted automatic lubrication system (option)

HIGH PRODUCTIVITY



High torque at low engine speeds

The net output of the Komatsu SAA4D102E low-emission engine is 71 kW (95 HP) at only 2.000 rpm. This means a constant, high power output. The high engine torque and the new hydrostatic drive line (HST) contribute to a substantial improvement in fuel consumption and climbing abilities. In load & carry as well as in loading operations, faster work cycles are achieved with simultaneous savings in fuel costs.



Electronically controlled HST

The electronically controlled variable 2 pump motor system allows high-efficient and powerful operation. When the vehicle is travelling at high speed, the power transmitted between low-speed motor and axle is automatically cut off by the clutch for eliminating a drag-turning of the low-speed motor. Starting, gearshifting and piling-up on a slope is easy because there is no torque-off in the power train. Digging and scooping is easy as well, since maximum rimpull can be demonstrated even from zero travel speed.



Unique PZ-Kinematics

The benefits of two different linkage systems are unified in one. The traditional Z-bar linkage provides high initial breakout forces and quick dumping speeds. With the new PZ-kinematics parallel lifting becomes available while offering superb visibility to the front attachments.

BUCKETS AND ATTACHMENTS

The WA150PZ-5 is outstanding due to its versatility. Whether used industrially in structural or civil engineering, earthmoving, road construction, agriculture, forestry or the timber industry, in landscaping companies and nurseries or in community services, the right solution is always available for your requirements.

The optional 4-point quick-coupler adds increased versatility to the machine and thus allows high-intensity operation. Examples from the comprehensive range of original attachments are:



Universal bucket

This type of bucket is impressive because of its excellent penetration and loosening properties and its good material holding properties. This universal bucket can be equipped with flush mount adapters and interchangeable teeth.



Earthmoving bucket

The earthmoving bucket with a one-piece bucket bottom is suited both for earthworks and loading cohesive material. The slanted sides give powerful penetration. It is equipped either with flush mount adapters and interchangeable teeth or also with a rear removable edge.



Stock pile bucket

The stock pile bucket is the right solution for handling loose and relatively light materials. The straight sidewalls ensure a high bucket capacity, the rear edge makes levelling and cleaning up jobsites easy. This stock pile bucket can be equipped with flush mount adapters and interchangeable teeth or a bolt-on cutting edge.



4-in-1 bucket

Designed as a true multi-tool this bucket allows for four functions in one: scooping, loading, clamping and cutting of strong wires and roots. The optimum choice for landscaping and construction companies.



Mulch grab bucket

Perfectly suited for picking up bulky and compressible materials like gardening or plastic waste, etc. Without the side plates, this bucket can be used also as a grapple.



High dump bucket

For maximum dumping heights with light materials like coal or woodchips. The dump cylinders are located either inside or outside the bucket.

THE SPACECAB™



Perfect driving convenience and the best all-round visibility

The cabin is one of the largest in its class and offers unparalleled driving convenience comparable to that of a passenger car. The large frameless windscreen ensures an optimum view of the bucket and tyres. The slanted rear end gives an excellent view towards the rear. The cabin is mounted on viscose shock absorbers guaranteeing a low interior sound level. That together with air conditioning as standard ensures the operator's well-being just as much as the air-cushioned multi-adjustable drivers seat with optional seat heater. The easy-to-work hydraulic operating controls (finger tip control levers or multifunction lever) allow to operate the wheel loader conveniently and ergonomically. The operator's well-being is ensured over long and productive hours.

SIMPLE & CONVENIENT OPERATION

Compact monitoring system

Arranged directly in front of the driver, an anti-dazzle, illuminated display makes it possible under all lighting conditions to read all instruments and information clearly. The driver's seat and steering column are infinitely-adjustable, allowing an ergonomic and comfortable seating position for any driver. All switches are logically arranged, and are outstanding on account of their functionality and ease of familiarisation.



Easy and comfortable operation due to hydrostatic drive

The hydrostatic drive ensures maximum operating comfort. Speed and direction can be altered directly and without sudden jerks. The electronically controlled variable hydraulic motor enables full-auto shifting and eliminates gearshift and kick-down operations.



Variable shift control

With the variable shift control, independent of the position of the accelerator pedal, and without loss of driving force, the travelling speed can be adjusted infinitely. This "creep function" has distinct advantages when working with attachments like a rotary cutter or a sweeper and provides improved operability at confined sites plus easier dozing operations.



Smooth ergonomic hydraulic control

The new pilot control levers are designed as finger tip control levers for precise and fatigue-free control of the loading process. The position of the wristrest can be adjusted for all operators preferred height. A forward/reverse switch is located next to the levers so that the travel direction can be selected by touch.



Multi-function lever (option)

A multi-function lever with integrated forward/reverse switch is also available as optional equipment. The servo-assisted multi-function lever ensures the simplest and most comfortable operation of the equipment. Simultaneously, the driver can change between forward and reverse direction with the rocker switch. The multifunction lever is the right choice for earth moving jobs.



SIMPLE AND FAST MAINTENANCE



Simple and convenient access to service

The service doors are designed as gull-wing doors. They allow you convenient and safe access to the daily service points from the ground.



Easy maintenance due to swing-out fan

The swing-out cooling fan allows quick and easy cleaning of the radiator. The fan is hydraulically driven and separated from the engine compartment.

This innovative system features:

- Swing-out cooling fan for excellent access
- High-efficiency fan and shroud
- Very low-noise operation



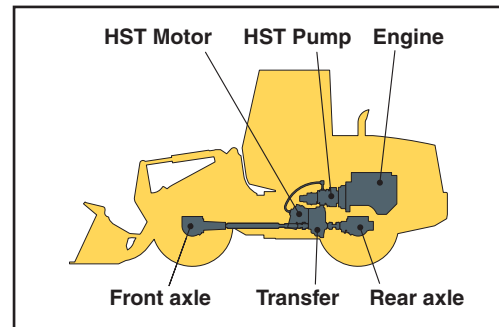
EMMS (Equipment Management Monitoring System)

This completely new type of monitoring system is clearly structured and easy to read because it is directly in the operators field of view. If there is a malfunction, it immediately displays the details in the chosen national language and in plain text in the display field. This system not only has an error memory and a self-diagnosis function, but also a service interval display. This significantly simplifies service work and the operator is notified on time of the regular oil and filter changes. The operator and customer-service engineer are constantly informed about the optimum machine state so that problems don't even occur in the first place.

LONGEVITY AND RELIABILITY

Quality you can rely on!

The engine, hydraulics, power train, front and rear axles are original Komatsu components. All of these component parts are subject to the highest quality requirements and strict quality assurance right down to the smallest screw. They are fully co-ordinated with one another, thus offering maximum efficiency and reliability.



Torsionally resistant frame

The frame design with hinge points far apart guarantees the high stability for the overall construction and reduces bearing stress in the torsional ranges. Steering angles of 40° give the WA150PZ-5 a high degree of manoeuvrability.



Robust HD-axes with TPD or LSD differential

The heavy-duty axles allow above-average service life even under the hardest working conditions. The WA150PZ-5 can be equipped with torque proportional or multiple-disc limited slip differentials to further increase tractive force.



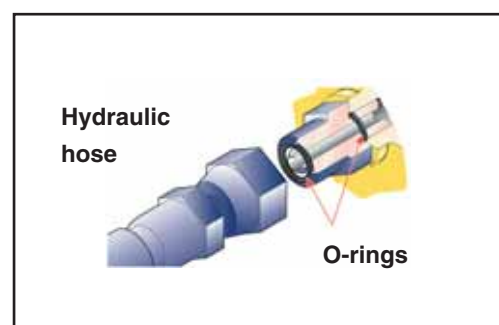
Reliable construction equipment engines

Komatsu's reliable engine, with thick walled crank case, was developed with low noise and robustness in mind. The integrated overrun protection system restricts the top speed when driving downhill, thus protecting the power train and drive system.

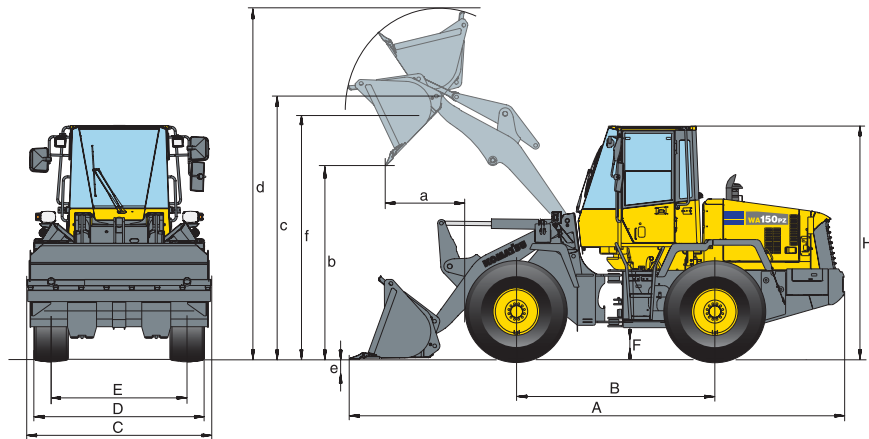


Reliability right down to the details

All of the hydraulic connections are reliably protected against oil loss by Komatsu's O-ring seals. The electrical system is also designed for long-lasting operation (without breakdowns) with its dust- and water-proof DT plug-and-socket connections in the wiring harnesses.



DIMENSIONS AND PERFORMANCE FIGURES



Working Specifications - Buckets

Bucket type		Universal		Universal with quick-coupler		Earthmoving		Stockpile	
		w/o teeth	with BOC	w/o teeth	with BOC	w/o teeth	with BOC	w/o teeth	with BOC
Bucket capacity (heaped, ISO 7546)	m ³	1,50	1,60	1,50	1,50	1,50	1,60	1,60	1,70
Sales Code	3942	C01	C03	C41	C43	C31	C33	C21	C23
Material density	t/m ³	1,80	1,65	1,80	1,65	1,80	1,65	1,65	1,55
Bucket weight without teeth	kg	650	740	650	740	735	835	740	830
Static tipping load, straight	kg	7.185	7.090	6.500	6.400	7.095	7.005	7.095	7.000
Static tipping load, 40° articulated	kg	6.180	6.085	5.555	5.450	6.090	6.000	6.085	5.995
Break-out force hydraulic	kN	91	86	81	76	91	86	88	83
Lifting capability hydr. at ground level	kN	103	101	93	91	103	101	102	100
Operating weight (without add. counterw.)	kg	8.615	8.705	8.880	8.970	8.695	8.740	8.705	8.795
Turning radius at corner of tyres	mm	4.735	4.735	4.735	4.735	4.735	4.735	4.735	4.735
Turning radius at bucket edge	mm	5.255	5.300	5.285	5.330	5.255	5.300	5.260	5.305
a Reach at 45°	mm	850	890	920	980	850	890	870	910
b Dump height at 45°	mm	2.845	2.805	2.760	2.720	2.845	2.805	2.800	2.760
c Hinge pin height	mm	3.695	3.695	3.695	3.695	3.695	3.695	3.695	3.695
d Height top edge of bucket	mm	4.890	4.890	5.075	5.075	5.010	5.010	5.010	5.010
e Digging depth	mm	85	105	100	120	85	105	85	105
f Max. loading height at 45°	mm	3.430	3.430	3.520	3.520	3.430	3.430	3.430	3.430
A Overall length, bucket grounded	mm	6.490	6.550	6.590	6.660	6.490	6.550	6.520	6.580
B Wheelbase	mm	2.600	2.600	2.600	2.600	2.600	2.600	2.600	2.600
C Bucket width	mm	2.415	2.415	2.415	2.415	2.415	2.415	2.415	2.415
D Width over tyres	mm	2.220	2.220	2.220	2.220	2.220	2.220	2.220	2.220
E Track width	mm	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780
F Ground clearance	mm	425	425	425	425	425	425	425	425
H Overall height	mm	3.065	3.065	3.065	3.065	3.065	3.065	3.065	3.065

Performance figures with fork tines

Sales code		C24
Fork tine length	mm	1.200
Max. reach at ground level	mm	860
Max. reach	mm	1.485
Max. reach at max. stacking height	mm	625
Max. height fork-carrier	mm	4.495
Hinge pin height	mm	3.695
Max. stacking height	mm	3.570
Height of forks at maximum reach	mm	1.700
Max. tipping load, straight	kg	4.790
Max. tipping load, articulated	kg	4.235
Max. payload as per EN 474-3, 80%	kg	3.385
Max. payload as per EN 474-3, 60%	kg	2.540
Weight in working order with fork tines	kg	8.620

All measurements with tyres 17.5 R25 L3.

Details of dumping heights and reach to cutting edge or bolt-on cutting edge.

Details given are for buckets without teeth; if equipped with teeth: dump height -140 mm, dump reach +140 mm, overall length +195 mm.

Change in data caused by equipment with teeth: weight +50 kg, stat. tipping load straight -50 kg, stat. tipping load 40° articulated -50 kg

SPECIFICATIONS



ENGINE

TypeKomatsu SAA4D102E
water-cooled, 4-stroke, turbocharged,
with air-to-air intercooler

Engine power
at rated engine speed2.000 rpm
ISO 14396.....74,0 kW / 99,2 HP
SAE J1349 (net engine power)71,0 kW / 95,2 HP

Max. torque / engine speed 402 Nm/1.300 rpm

No. of cylinders4

Bore x stroke 102 x 120 mm

Displacement.....3,9 ltr

Injection system..... Direct injection

Lubricating system Gear pump, pressure feed lubrication filter
Filter.....Main-flow filter

Electrical system24 V

Battery 105 Ah

Alternator..... 60 A

Air-filter type Dry-air filter with automatic dust emission
and preliminary purification including a dust display



TRANSMISSION

Drive system.....Electronically controlled hydrostatic transmission,
switchable in all directions under full power.
Fixed ratio gearbox. Variable speed limiter

Hydrostatic pump..... 1 variable piston pump

Hydrostatic motor2 variable piston motors

Speed ranges (forwards/backwards) 4/4

Max. travel speeds (forwards/backwards)(Tyres 17.5 R25)

1./2. speed range 13,6 km/h

3. speed range 21 km/h

4. speed range 39 km/h



CHASSIS AND TYRES

System..... 4-wheel drive

Front axle..... HD axle, semi-floating, fixed type
LSD/TPD-differential

Rear axleHD axle, semi-floating, center-pin support
LSD/TPD-differential, 30° swing angle

Reduction gear Spiral bevel gear

Differential Straight bevel gear pair

Final drive Planetary gear in an oil bath

Tyres 17.5 R25 (standard)



SERVICE REFILL CAPACITIES

Cooling system 17 ltr

Fuel tank..... 133 ltr

Motor oil..... 12,5 ltr

Hydraulic system 47 ltr

Axle (both front and rear axle).....28,5 ltr

Transfer.....4,4 ltr



BRAKES

Operating brakes Completely hydraulic dual-circuit system,
running in oil bath
multi-disc brakes
on all wheels,
service-free

Parking brake.....Operated mechanically,
running in oil bath
multi-disc brake,
service-free

Emergency brake Uses the parking brake



HYDRAULIC SYSTEM

Hydraulic pump..... Gear pump

Working pressure210 bar

Circulating capacity of the hydraulic pump 123 ltr/min

No. of boom/bucket cylinders.....2/1

Type Double-action

Bore diameter x stroke

Boom cylinder 110 x 628 mm

Bucket cylinder..... 110 x 628 mm

Hydraulic control lever Servo-controlled, 2-levers

Hydraulic cycle with rated load bucket filling

Raise time 5,8 s

Lowering time (empty) 3,6 s

Dumping time..... 1,3 s



STEERING SYSTEM

System..... Articulated frame steering

Type Completely hydraulic power steering

Steering angle to either side.....40°

Steering pump Gear pump

Working pressure 190 bar

Pumping capacity 123 ltr/min

No. of steering cylinders 2

Type Double-action

Bore diameter x stroke55 x 375 mm

Smallest turn (outer edge of the tyre 17.5 R25) 4.735 mm



CABIN

Two-door 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 air-conditioned pressurised cabin is mounted upon hydrobearings and is noise dampened.

WHEEL LOADER

STANDARD EQUIPMENT

- Z-bar boom with parallel movement (PZ-kinematics)
- PPC fingertip control, 2-levers
- 2-spool main control valve
- Counterweight
- Automatic return-to-dig
- Automatic boom kick-out
- Swing-out radiator fan drive
- Power train guard
- Heavy-duty axles
- TPD-differential front and rear
- Electronically controlled HST with 2-motor system
- Constant speed control in 1st speed range
- Alternator 60 A
- Starter motor 5,5 kW/24 V
- Batteries 105 Ah/2 × 12 V
- Combined brake/inching pedal
- Spacious double door driver's cab to DIN/ISO
- ROPS/FOPS frame to SAE
- All-round tinted glazing
- Front laminated glass
- Electr. controlled air conditioning
- Heated rear window
- Rear window wiper
- Air-suspended seat
- Sun visor
- EMMS (Equipment Management Monitoring System) with self-diagnostic function and maintenance display
- Seat belt (EU standard)
- Traction control system (TCS)
- Adjustable steering column
- Stereo-cassette radio
- 2 halogen main headlights
- 2 spotlights at front and rear
- Reversing light
- Horn
- Emergency steering system
- Vandalism protection
- Tool-set

The WA150PZ-5 is equipped in accordance with the safety regulations of the machinery guidelines 89/392 EWG ff and EN474, and corresponds in its exhaust gas emission values with the regulations of the EC 2000/14, VIII and EC 97/68 Stage II regulations.

OPTIONAL EQUIPMENT

- 3-spool main control valve
- Quick-coupler
- Electronically controlled load stabilizer (ECSS)
- Automatic central lubrication
- Limited-slip differential (LSD) front and rear
- Tyres 17.5 R25 L2, L3, L4, L5
- Universal bucket 1,5 m³
- Universal bucket 1,6 m³
- Earthmoving bucket 1,5 m³
- Earthmoving bucket 1,6 m³
- Stock pile bucket 1,6 m³
- Stock pile bucket 1,7 m³
- 4-in-1 bucket 1,2 m³ (quick-coupler mount only)
- All buckets direct or quick-coupler mount
- Various tooth systems, BOC, segments, (Komatsu/KVX™) and other optional bucket accessories are available on request
- Log grapples
- Special buckets
- Fork carrier and tines
- PPC control, 1-lever (Multi-function lever)
- Back-up alarm
- Beacon light
- Additional lights front and rear
- Front screen protective grid
- Turbo III pre-filter
- Battery main switch
- Fire extinguisher
- Electronic anti-theft lock with master key for fleet owners
- Electronic anti-theft lock
- Biodegradable oil for hydraulic system
- Rear roof rail
- 12 V power supply
- Special custom colour
- Wastehandler specification
- Anti-corrosion specification
- Wide core radiator
- Hydrostat-driven radiator fan with reversing function

Further equipment on request



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