

KOMATSU

WA380-8



Wheel loader

Engine power
143 kW / 192 HP @ 2100 rpm

Operating weight
18155 - 19765 kg

Bucket capacity
3.2 - 6.5 m³

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Increased fuel efficiency and environmental performance

Powerful and environmentally friendly

- EU Stage V engine
- Komatsu SmartLoader Logic
- E-Light engine mode
- Large-capacity torque converter with standard lock-up
- Adjustable idle shutdown

First-class comfort

- New, air-suspended operator seat with integrated EPC lever console
- Large multifunctional monitor
- Low-noise design
- Rear-view camera system

Maximised efficiency

- High efficiency buckets
- Superior dumping height and reach
- Wide tread and long wheelbase

State-of-the-art controls

- Automatic digging system
- Electronic Pilot Control (EPC) standard
- Intelligent gas pedal

Easy maintenance

- Wide core radiator with auto reverse fan
- Factory fitted automatic lubrication system
- Improved gull-wing type engine doors

Komtrax

- Komatsu Wireless Monitoring System
- 4G mobile communications
- Integrated communication antenna
- Increased operational data and fuel savings



A maintenance program
for Komatsu customers



Komatsu SmartLoader Logic

The WA380-8 provides Komatsu SmartLoader Logic, a fully automatic engine control system. Without interfering with normal operations, this technology acquires data from various sensors in the vehicle and delivers optimal engine torque for each work phase. It limits torque during less demanding operations and reduces fuel usage without decreasing production.

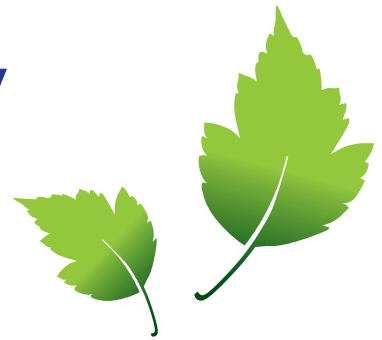
Large-capacity torque converter with standard lock-up

With its large-capacity torque converter, the completely redesigned Komatsu drive train offers optimum efficiency and an unparalleled rimpull-to-weight ratio. By delivering high rimpull at low speeds, it makes child's play of heavy jobs like penetration of dense material such as aggregate. This means higher productivity in V-Shape loading, even in confined spaces.

New E-Light mode

The new E-Light mode is switched on by default for low fuel consumption priority. The engine matches power to the current working phase to achieve higher fuel efficiency. For more fuel economy, the electronically controlled hydraulics pumps for the work and steering system prevent wasted hydraulic flow and deliver the exact amount of oil required for all movements of the machine.

Powerful and environmentally friendly

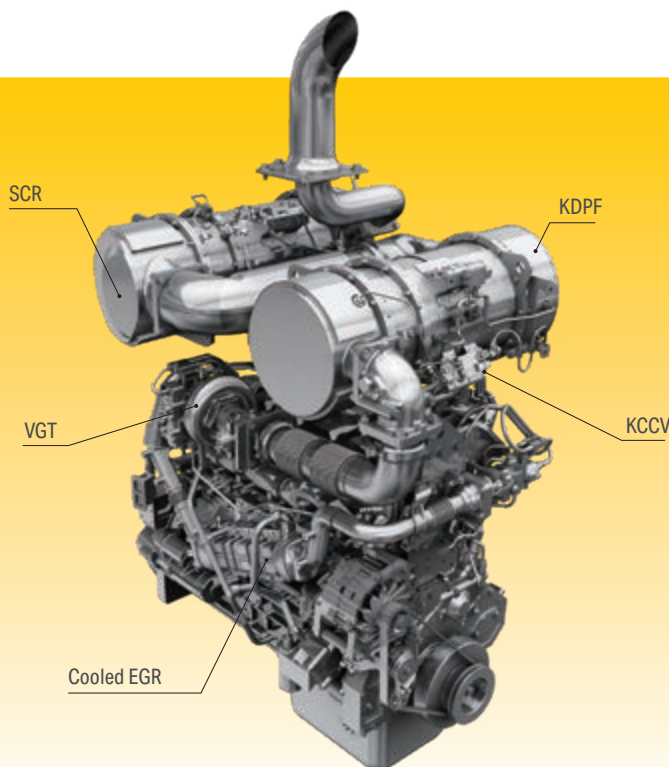
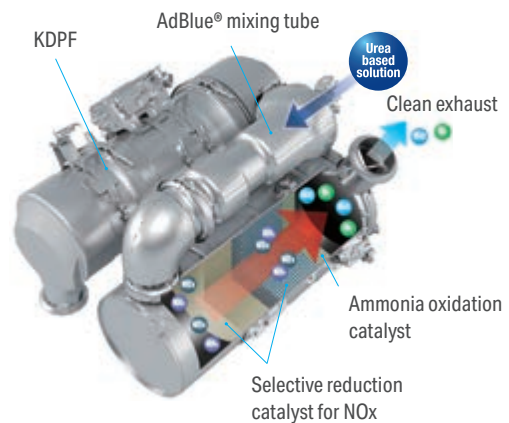


Komatsu EU Stage V

The Komatsu EU Stage V engine is productive, dependable and efficient. With ultra-low emissions, it provides a lower environmental impact and a superior performance to help reduce operating costs and lets the operator work in complete peace of mind.

Heavy-duty aftertreatment

The aftertreatment system combines a Komatsu Diesel Particulate Filter (KDPF) and Selective Catalytic Reduction (SCR). The SCR injects the correct amount of AdBlue® into the system at the proper rate to break down NOx into water (H₂O) and non-toxic nitrogen gas (N₂). NOx emissions are reduced by 80% vs. EU Stage IIIB engines.



High-Pressure Common Rail (HPCR)

To achieve complete fuel burn and lower exhaust emissions, the heavy-duty High-Pressure Common Rail fuel injection system is computer controlled to deliver a precise quantity of pressurised fuel into the redesigned engine combustion chamber by multiple injections.

Exhaust Gas Recirculation (EGR)

Cooled EGR is a technology well-proven in current Komatsu engines. The increased capacity of the EGR cooler now ensures very low NOx emissions and a better engine performance.

Komatsu Closed Crankcase Ventilation (KCCV)

Crankcase emissions (blow-by gas) are passed through a CCV filter. The oil mist trapped in the filter is returned back to the crankcase while the filtered gas is returned to the air intake.

Variable Geometry Turbo (VGT)

The VGT provides optimal airflow to the engine combustion chamber under all speed and load conditions. Exhaust gas is cleaner, fuel economy is improved while machine power and performance are maintained.

Maximised efficiency

Faster Load & Carry

The sequential torque converter lock-up system delivers unbeatable productivity and fuel efficiency in Load & Carry and short distance transport applications. The operator can engage the system from 2nd to 4th gear. It noticeably increases travel speed, particularly when going uphill, thanks to the larger tractive force. It also significantly reduces fuel consumption by eliminating converter losses.

Superior dumping height and reach

The long lifting frame allows an enormous dumping height of 2790 mm and a reach of 1235 mm that is just as impressive (with a 3.2 m³ bucket, measured to the tooth tip). With this working range, loading high feeders or trucks becomes easy and fast.

New high efficiency buckets

Soil slips easily from the redesigned bucket, and digging work is more efficient. Operations are easier and productivity improved, especially in combination with the new auto digging system.

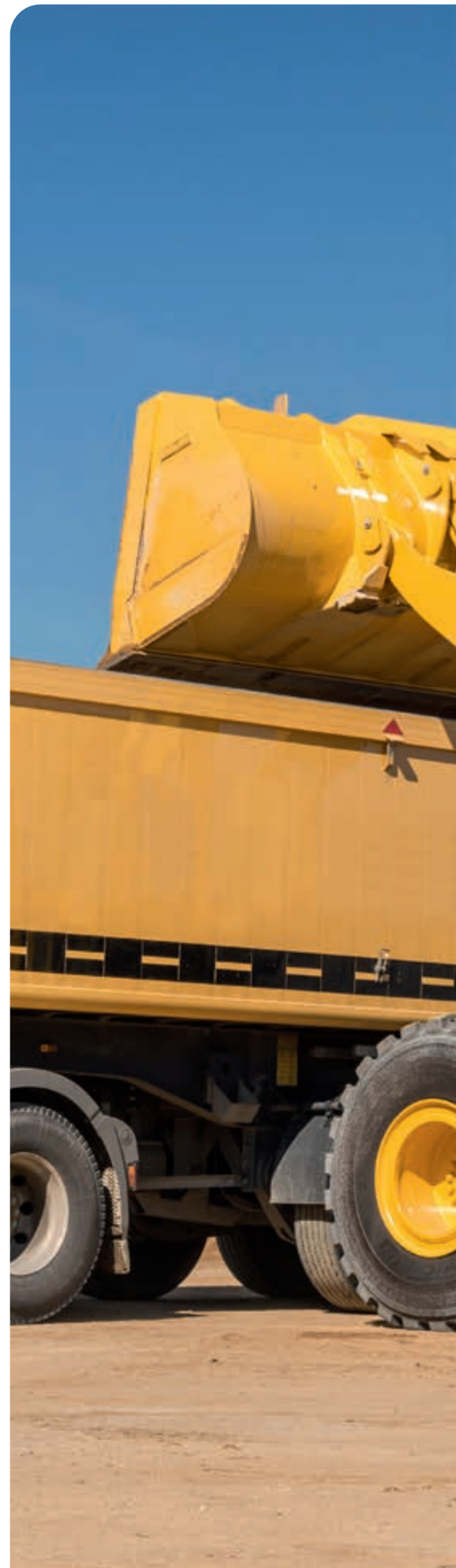
Precision control

Komatsu's CLSS hydraulics enables extremely precise control of the work equipment, and ensures that the bucket, boom and hydraulically driven attachments can all move smoothly at the same time. The WA380-8 also features variable-displacement pumps on both the hydraulic and steering systems. These pumps deliver the exact amount of oil required, dramatically improving fuel efficiency.



Factory installed RDS weighing system (option)

The RDS Loadmaster alpha 100 is an advanced and trade-approved on-board weighing system specifically designed to operate in the fastest loading environments and toughest conditions. The Loadmaster compensates for uneven, sloped ground and restricted loading areas to reduce your cycle times and maximise tonnes-per-hour performance. The RDS Loadmaster alpha 100 factory installation enhances the assembly's accuracy and the quality of the system.





First-class comfort

Increased comfort

In the wide Komatsu SpaceCab™, a standard air-suspended high-back seat, heated for improved comfort and with fully adjustable armrests, is the centre of a comfortable and low-fatigue working environment. High visibility and ergonomic controls further assist to maximise the operator's productivity.

Perfect operator convenience

In addition to the standard radio, the WA380-8 has an auxiliary input for connecting external devices and play music through the cab speakers. Two 12-volt power ports are also incorporated in the cab. Proportional controls are fitted as standard for safe and precise operation of attachments. The cab features large trays and storage boxes for tools and manuals and a hot and cool box.

New automatic digging system

The new automatic digging system actuates the bucket tilt and lifting operations by detecting the sensing pressure applied to the work equipment. The system adapts to different types of material with no human intervention required. Operator fatigue is greatly reduced and ideal load capacity ensured.



State-of-the-art controls

New, fully air suspended operator station

The wide spacious cab features a new, fully air suspended operator seat that includes the side consoles mounted together with a high back, fully adjustable, standard heated seat for improved comfort. A seat ventilation is optionally available to maximise comfort.

"By Wire" operating

The Electronic Pilot Control (EPC) lever console is integrated with the seat and can be easily adjusted to suit any operator. The short levers are fingertip controlled for precise and fatigue-free operating, with a no-vibration modulating function for slowing and stopping a lowering bucket. The upper and lower boom cut-out position can be pre-set with a switch.

Intelligent gas pedal

To reduce fuel usage, Komatsu's innovative thrust-sensing gas pedal automatically helps you match the timing of gear shifts to the load. In heavy-duty work, requiring high rimpull and maximum acceleration, we tend to press heavily on the gas pedal. The WA380-8 anticipates this and shifts up gears as late as possible. In light-duty work, where fuel consumption is a major factor, the operator will intuitively press the gas pedal lightly. Again, the machine anticipates this – and shifts up gears as early as possible to achieve highest fuel efficiency.

Rear view camera

A standard fitment camera gives an exceptionally clear view of the rear work zone on the wide-screen colour monitor panel. The low profile camera is adjustable and integrated into the engine hood's shape.

EPC-multi-function lever (option)

The EPC-multi-function lever with an integrated forward/reverse switch allows the simplest and most comfortable operation of the equipment. With one hand the driver can simultaneously control the attachment and switch between forward and reverse. The multi-function lever is the perfect choice for earth moving jobs.

Komatsu short lever steering (K-SLS) (option)

The new finger-type joystick steering allows more accurate steering by the operator who can now sit relaxed in the new air-suspended and fully adjustable seat to control the machine with no big effort needed for frequent steering. Less fatigue and work in a perfectly adapted operating position will improve concentration and the quality and efficiency of the work.



Komatsu short lever steering (K-SLS) (option)



Hot and cool box



EPC-Multifunction lever (option)



Lower operating costs

Komatsu ICT contributes to the reduction of operating costs by assisting to comfortably and efficiently manage operations. It raises the level of customer satisfaction and the competitive edge of our products.

Large TFT colour monitor

A large user-friendly colour monitor enables safe, accurate and smooth work. Multilingual and with all essential information available at a glance, it features simple and easy-to-operate switches and multifunction keys that provide fingertip access to a wide range of functions and operating information.

Eco guidance

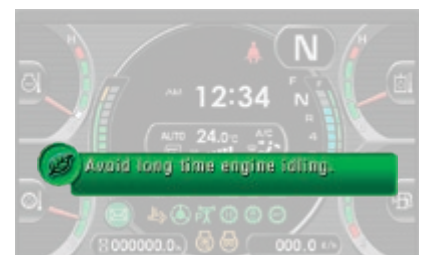
The monitor panel displays instant guidance messages to help promote energy saving, and the Eco-gauge indicates the actual fuel consumption: keep the Eco-gauge in the green zone for better fuel efficiency. To further improve savings, logs can be consulted for operations, Eco guidance and fuel consumption. The information is available in Komtrax and can be used for operator trainings and jobsite optimisation.



Information at a glance: basic dashboard LCD monitor



A multifunction monitor displays and controls a wealth of operational and maintenance information



Eco guidance supports energy saving in real time (e.g. avoid long time engine idling)

Information & communication technology



Knowledge

You get quick answers to basic and critical questions about your machines – what they're doing, when they did it, where they're located, how they can be used more efficiently and when they need to be serviced. Performance data is relayed by wireless communication technology (satellite, GPRS or 4G depending on model) from the machine to a computer and to the local Komatsu distributor – who's readily available for expert analysis and feedback.

Convenience

Komtrax enables convenient fleet management on the web, wherever you are. Data is analysed and packaged specifically for effortless and intuitive viewing in maps, lists, graphs and charts. You can foresee eventual maintenance issues and required spare parts, and troubleshoot a problem before Komatsu technicians arrive on site.



The way to higher productivity

Komtrax uses the latest wireless monitoring technology. Compatible on PC, smartphone or tablet, it delivers insightful and cost saving information about your fleet and equipment, and offers a wealth of information to facilitate peak machine performance. By creating a tightly integrated web of support it allows proactive and preventive maintenance and helps to efficiently run a business.

Power

The detailed information that Komtrax puts at your fingertips 24 hours a day, 7 days a week gives the power to make better daily and long-term strategic decisions – at no extra cost. Problems can be anticipated, maintenance schedules customised, downtime minimised and machines kept where they belong: working on the jobsite.



Easy maintenance



Easy access to service points

For easy and safe opening the gull-wing doors are supported by gas springs. The large doors give a convenient access from ground level to all daily service points. With long service intervals and filters collected in a centralised arrangement, machine downtime is reduced to a minimum.

Komatsu Care

Komatsu Care is a maintenance program that comes as standard with your new Komatsu machine. It covers factory-scheduled maintenance, performed with Komatsu Genuine parts by Komatsu-trained technicians. Depending on your machine's engine, it also offers extended coverage of the Komatsu Diesel Particulate Filter (KDPF) and of the Selective Catalytic Reduction (SCR). Please contact your local Komatsu distributor for terms and conditions.



Wide core radiator with auto reverse fan

A wide core radiator prevents clogging even when working in a dusty environment. To minimize manual cleaning, a reversible fan blows dust out, automatically or on demand. The "automatic reverse" function allows to set the cleaning length and the time between cleaning to adjust perfectly to the working conditions.

Equipment Management and Monitoring System (EMMS)

The large high resolution monitor panel displays various machine information and allows for multiple settings. The "Operation Records" menu shows records of the average fuel consumption, idling hours, and other features. Abnormality codes are clearly displayed and stored to alert you and simplify troubleshooting. The monitor also provides for advanced monitoring of the system parameters through the Service Mode to aid in troubleshooting and reduce downtime.



AdBlue® tank

The AdBlue® tank is located on the right hand side of the machine behind a ladder for easy access.

Diesel particulate filter regeneration

No interruption or extension of daily work is required to regenerate the diesel particle filter system. Due to its superior Komatsu technology, KDPF regeneration takes place automatically, at any time.





Maintenance	Interval	Remain
Air Cleaner Cleaning or Change	---	---
Coolant Change	500 h	490 h
Fuel Pre-filter Change	500 h	490 h
Engine Oil Change	500 h	490 h
Engine Oil Filter Change	500 h	490 h

Basic maintenance screen



Aftertreatment device regeneration screen for the KDPF



AdBlue® level gauge and refill guidance



Tailored solutions



Working gear division

Komatsu wheel loaders combined with a wide range of genuine Komatsu attachments provide the perfect solution for any industry sector. For special applications our “Working Gear” division offers purpose-built machines and attachments. The tailor made solutions allow high performance and outstanding reliability even under toughest conditions.

Waste & Recycling

Renowned for high quality standards and reliability, Komatsu meets the huge demand placed on machines by the waste management industry with a wide range of options and modifications available ex factory for our base machines. This provides the flexibility to adapt the Komatsu wheel loader range to the specific requirements of different waste handling applications and jobsite conditions. Whether you choose the full waste specification or individual components, you’re guaranteed increased machine performance, availability and efficiency.

Salt & Chemical

A corrosive environment is one of the toughest challenges for any machine. Upgraded with a special coating on the metal parts and with various optional modifications to fit the application at hand, Komatsu “Salt & Chemical” configured wheel loaders hold up even under the most aggressive conditions. Reduced downtime, less maintenance and repair costs and a long lifetime: Komatsu machines perform as well and last as long as in a non-corrosive environment.

Quality you can rely on

Designed and built by Komatsu

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

Heavy-duty axles

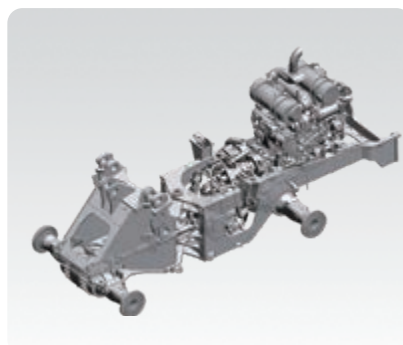
The heavy-duty axles allow exceptional service life even under the toughest working conditions. The optional limited slip differentials are most suitable for soft and slippery ground like sand or wet soil.

Robust torsion-resistant main frame

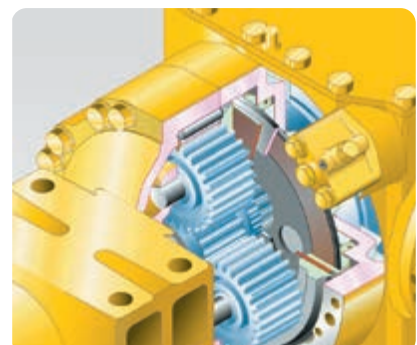
The frame design with hinge points far apart guarantees the high stability for the overall construction and reduces bearing stress in the torsional ranges.

Axle oil cooling system

Overheated axle oil can cause a decline in productivity due to required machine cool downs. To maintain high efficiency in Load & Carry applications, the Komatsu WA380-8 is equipped as standard with an axle oil cooling system that keeps oil at a constant temperature even over long hauling distances.

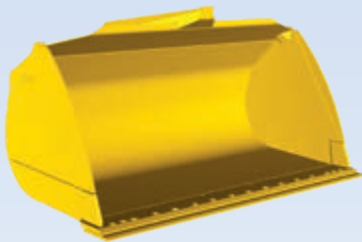


Robust torsion-resistant main frame

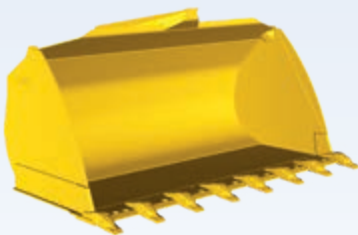


Wet multi-disc service brake

Buckets and attachments



High efficiency buckets with raised bottom



High efficiency buckets with flat bottom

New high efficiency bucket range

The new Komatsu buckets enable easier bucket fill and significantly higher fill factors, contributing to more efficiency and less fuel consumption. They feature a longer bottom allowing for more content, a wider opening for an easier fill and a new rear shape that enables material to flow easily into the bucket. Their rounded sides give them a higher fill factor, and an integrated spill guard protects the bucket linkage. Flush screws (with BOC) reduce resistance when filling and keep material from clogging when dumping.

High dump buckets

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

Mulch grab buckets

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.

Hydraulic quick coupler

The WA380-8 can change attachments in a matter of seconds with the HD hydraulic quick-coupler, available as optional equipment.



Specifications

Engine	
Model	Komatsu SAA6D107E-3
Type	Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel
Engine power	
at rated engine speed	2100 rpm
ISO 14396	143 kW / 192 HP
ISO 9249 (net engine power)	142 kW / 191 HP
Max. torque / engine speed	941 Nm / 1450 rpm
No. of cylinders	6
Bore × stroke	107 × 124 mm
Displacement	6.69 l
Fan drive type	Hydraulic
Alternator	50 A / 24 V
Starter motor	5.5 kW / 24 V
Filter	Main-flow filter with water separator
Air-filter type	Dry-air filter with automatic dust emission and preliminary purification including a dust display
Fuel	Diesel fuel, conforming to EN590 Class 2/ Grade D. Paraffinic fuel capability (HVO, GTL, BTL), conforming to EN 15940:2016

Transmission	
Type	Automatic powershift transmission
Torque converter	One-stage, one-phase, 3-element, with lock-up clutch

Speeds in km/h (with 23.5 R25 tyres)				
Gear	1.	2.	3.	4.
Forward	6.6	11.7	20.9	36.1
with torque converter lock-up	-	12.4	22.5	40.0
Reverse	7.1	12.4	22.3	38.6
with torque converter lock-up	-	13.3	24.1	40.0

Chassis and tyres	
System	4-wheel drive
Front axle	Komatsu HD axle, semi-floating (LSD-differential optional)
Rear axle	Komatsu HD axle, semi-floating, 26° swing angle (LSD-differential optional)
Differential	Spiral bevel gear pair
Final drive	Planetary gear in an oil bath
Tyres	23.5 R25

WA380-8E0

Brakes	
Operating brakes	Hydraulically actuated, wet multi-disc brakes on all wheels
Parking brake	Wet multi-disc
Emergency brake	Uses the parking brake

Hydraulic system	
Type	Komatsu CLSS (Closed Centre Load Sensing System)
Hydraulic pump	Variable piston pump
Working pressure	320 kg/cm ²
Maximum pump flow	205 l/min
No. of hydraulic/bucket cylinders	2/1
Type	Double-action
Bore diameter × stroke	
Boom cylinder	130 × 713 mm
Bucket cylinder	150 × 535 mm
Hydraulic cycle with rated load bucket filling	
Raise time	5.9 s
Lowering time (empty)	3.3 s
Dumping time	1.8 s

Steering system	
System	Articulated frame steering
Type	Completely hydraulic power steering
Steering angle to either side	40°
Steering pump	Variable piston pump
Working pressure	250 kg/cm ²
Pumping capacity	137 l/min
No. of steering cylinders	2
Type	Double-action
Bore diameter × stroke	75 × 442 mm
Smallest turn (outer edge of the tyre 23.5 R25)	6320 mm

Cabin	
Two-door SpaceCab™ 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.	

Service refill capacities

Fuel tank	300 l
Engine oil	23 l
Hydraulic system	142 l
Cooling system	60.6 l
Front axle	40 l
Rear axle	40 l
Torque converter and transmission	54 l
AdBlue® tank	36 l

Environment

Engine emissions	Fully complies with EU Stage V exhaust emission regulations
Noise levels	
LwA external	106 dB(A) (2000/14/EC Stage II)
LpA operator ear	68 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)	
Hand/arm	≤ 2.5 m/s ² (uncertainty K = 0.98 m/s ²)
Body	≤ 0.5 m/s ² (uncertainty K = 0.34 m/s ²)
Contains fluorinated greenhouse gas HFC-134a (GWP 1430). Quantity of gas 1.0 kg, CO ₂ equivalent 1.43 t.	



Typical material density – loose (in kg/m³)

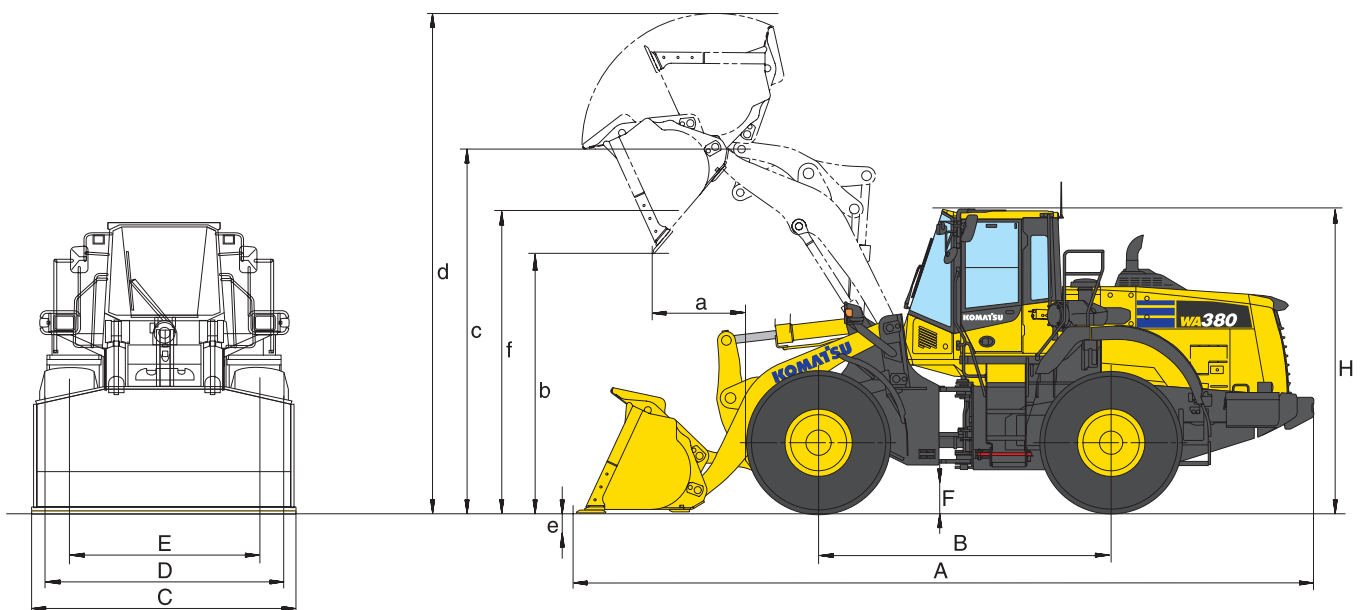
Basalt	1960	Gravel, unscreened	1930	Sandstone	1510
Bauxite, kaolin	1420	Gravel, dry	1510	Slate	1250
Earth, dry, ex store	1510	Gravel, dry, 6 - 50 mm	1690	Slag, broken	1750
Earth, wet, excavated	1600	Gravel, wet, 6 - 50 mm	2020	Stone, crushed	1600
Gypsum, broken	1810	Sand, dry, loose	1420	Clay, natural	1660
Gypsum, crushed	1600	Sand, damp	1690	Clay, dry	1480
Granite, broken	1660	Sand, wet	1840	Clay, wet	1660
Limestone, broken	1540	Sand and clay, loose	1600	Clay and gravel, dry	1420
Limestone, crushed	1540	Sand and gravel, dry	1720	Clay and gravel, wet	1540

Dimensions and performance figures

Measurements and working specifications

Bucket type		Bucket with raised bottom			
		w. teeth	w. BOC	w. teeth	w. BOC
Bucket capacity (heaped, ISO 7546)	m³	3.2	3.35	3.6	3.75
Sales code	3829	C31	C32	C14	C15
Material density	t/m ³	1.85	1.75	1.65	1.55
Bucket weight	kg	1670	1780	1760	1870
Static tipping load, straight	kg	15015	14755	14925	14660
Static tipping load, articulated	kg	13110	12865	13025	12771
Break-out force hydraulic	kN	164	153	156	146
Lifting capability hydr. at ground level	kN	165	161	161	159
Operating weight	kg	18155	18270	18245	18360
Turning radius at corner of tyres	mm	6320	6320	6320	6320
Turning radius at bucket edge	mm	7305	7365	7320	7280
a Reach at 45°	mm	1235	1110	1275	1154
b Dumping height at 45°	mm	2790	2895	2750	2855
c Hinge pin height	mm	4095	4095	4095	4095
d Height top edge of bucket	mm	5735	5735	5810	5810
e Digging depth	mm	90	120	90	120
f Max. loading height at 45°	mm	3785	3785	3785	3785
A Overall length, bucket grounded	mm	8350	8210	8405	8270
B Wheel base	mm	3300	3300	3300	3300
C Bucket width	mm	2990	2990	2990	2990
D Width over tyres	mm	2765	2765	2765	2765
E Track width	mm	2160	2160	2160	2160
F Ground clearance	mm	455	455	455	455
H Overall height	mm	3395	3395	3395	3395

All measurements with tyres 23.5 R25 (XHA) and standard counterweight.
 Details of dumping heights and reach to cutting edge or bolt-on cutting edge (BOC) or teeth.



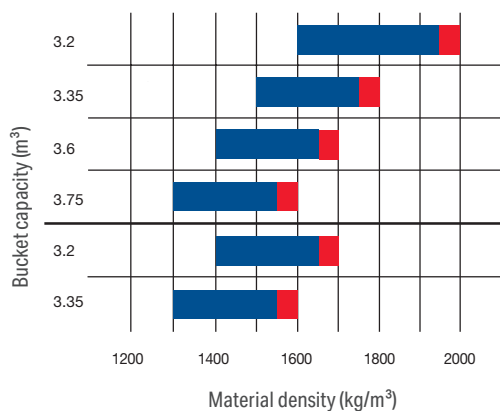
Direct mount (pin-on)

Bucket with flat bottom				Change in data caused by:					
w. teeth	w. BOC	w. teeth	w. BOC	Wear protection set (Bucket with flat bottom)	High Lift (with additional counterweight)	Super High Lift *	Additional counterweight (rear)	Additional counterweight (rear + sides)	Tyres XMINE L5
3.2	3.35	3.6	3.75						
C42	C45	C36	C37	S81 + S83	B24 + A25	B23	A15	A15 + A25	D12
1.85	1.75	1.65	1.55		- 0.30	- 0.90	+ 0.10	+ 0.10	
1710	1820	1799	1911	130					
14920	14670	14830	14566	- 150	- 2705	- 4525	+ 825	+1070	+ 585
13020	12785	12932	12682	- 155	- 2490	- 2960	+ 690	+ 900	+ 510
164	153	156	146		- 10				
164	160	163	158	- 1.5	- 40				
18200	18310	18285	18400	+ 130	+ 755	+ 1460	+ 325	+ 450	+ 720
6320	6320	6320	6320						
7305	7364	7320	7280		+ 285				
1235	1110	1275	1154		+ 140	+ 350			- 25
2795	2895	2750	2854		+ 530	+ 1200			+ 45
4095	4095	4095	4095		+ 530	+ 1105			
5735	5735	5810	5810		+ 530	+ 1105			
90	120	90	120		+ 55	+ 135			
3805	3805	3800	3805		+ 520	+ 1095			
8345	8210	8405	8270		+ 595	+ 935	+ 190	+ 190	
3300	3300	3300	3300						
2990	2990	2990	2990						
2765	2765	2765	2765						+ 35
2160	2160	2160	2160						
455	455	455	455						+ 45
3395	3395	3395	3395						+ 45

* with additional counterweight (rear + sides) (A15 + A25)

Bucket selection guide

115 100 95%
Bucket fill factor



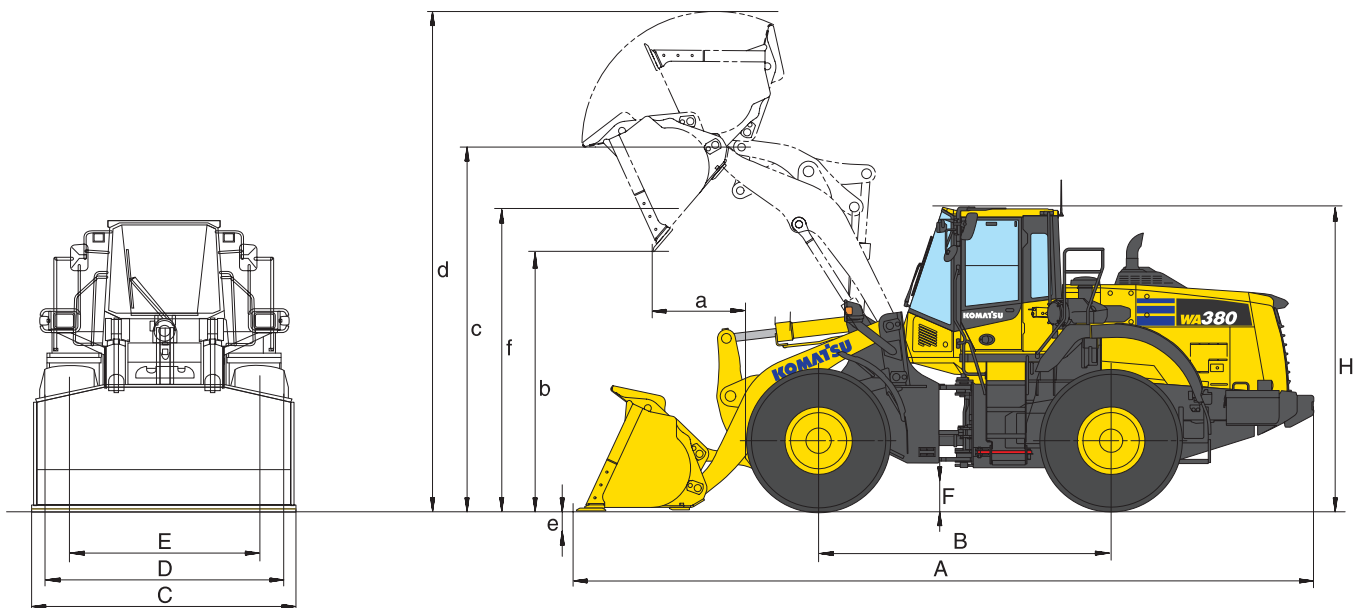
- Bucket with teeth
- Bucket with BOC
- Bucket with teeth
- Bucket with BOC
- Bucket with teeth (High Lift mount)
- Bucket with BOC (High Lift mount)

Dimensions and performance figures

Measurements and working specifications

Bucket type		Bucket with raised bottom			
		w. teeth	w. BOC	w. teeth	w. BOC
Bucket capacity (heaped, ISO 7546)	m³	3.2	3.35	3.6	3.75
Sales code	3829	S06	C72	S07	C75
Material density	t/m ³	1.70	1.60	1.50	1.45
Bucket weight	kg	1545	1655	1635	1745
Static tipping load, straight	kg	13710	13470	13685	13425
Static tipping load, articulated	kg	11915	11685	11885	11640
Break-out force hydraulic	kN	132	125	127	120
Lifting capability hydr. at ground level	kN	151	147	150	145
Operating weight	kg	18570	18680	18660	18770
Turning radius at corner of tyres	mm	6320	6320	6320	6320
Turning radius at bucket edge	mm	7380	7335	7395	7355
a Reach at 45°	mm	1440	1315	1485	1360
b Dumping height at 45°	mm	2585	2690	2545	2645
c Hinge pin height	mm	4095	4095	4095	4095
d Height top edge of bucket	mm	5935	5935	6010	6010
e Digging depth	mm	90	120	90	120
f Max. loading height at 45°	mm	3785	3785	3785	3785
A Overall length, bucket grounded	mm	8635	8500	8695	8560
B Wheel base	mm	3300	3300	3300	3300
C Bucket width	mm	2990	2990	2990	2990
D Width over tyres	mm	2765	2765	2765	2765
E Track width	mm	2160	2160	2160	2160
F Ground clearance	mm	455	455	455	455
H Overall height	mm	3395	3395	3395	3395

All measurements with tyres 23.5 R25 (XHA) and standard counterweight.
 Details of dumping heights and reach to cutting edge or bolt-on cutting edge (BOC) or teeth.



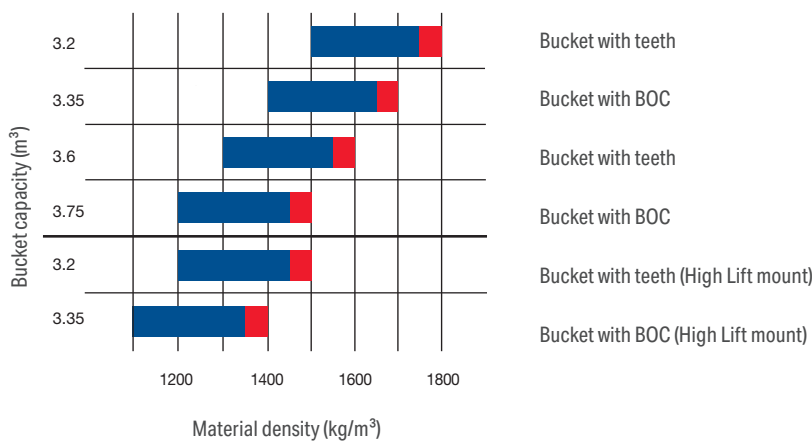
Quick coupler mount

Bucket with flat bottom				Change in data caused by:					
w. teeth	w. BOC	w. teeth	w. BOC	Wear protection set (Bucket with flat bottom)	High Lift (with additional counterweight)	Super High Lift *	Additional counterweight (rear)	Additional counterweight (rear + sides)	Tyres XMINE L5
3.2	3.35	3.6	3.75						
S16	C79	S17	C77	S81 + S83	B24 + A25	B23	A15	A15 + A25	D12
1.70	1.60	1.50	1.45		- 0.30	- 0.90	+ 0.10	+ 0.10	
1615	1725	1705	1815	130					
13645	13405	13550	13310	- 150	- 2705	- 4525	+ 825	+1070	+ 585
11850	11620	11755	11530	- 155	- 2490	- 2960	+ 690	+ 900	+ 510
132	125	127	120		- 10				
150	146	149	144	- 1.5	- 40				
18640	18755	18730	18840	+ 130	+ 755	+ 1460	+ 325	+ 450	+ 720
6320	6320	6320	6320						
7380	7335	7395	7355		+ 285				
1440	1315	1485	1360		+ 140	+ 350			- 25
2585	2690	2545	2645		+ 530	+ 1200			+ 45
4095	4095	4095	4095		+ 530	+ 1105			
5575	5575	6010	6010		+ 530	+ 1105			
90	120	90	120		+ 55	+ 135			
3805	3805	3805	3805		+ 520	+ 1095			
8638	8500	8698	8560		+ 595	+ 935	+ 190	+ 190	
3300	3300	3300	3300						
2990	2990	2990	2990						
2765	2765	2765	2765						+ 35
2160	2160	2160	2160						
455	455	455	455						+ 45
3395	3395	3395	3395						+ 45

* with additional counterweight (rear + sides) (A15 + A25)

Bucket selection guide

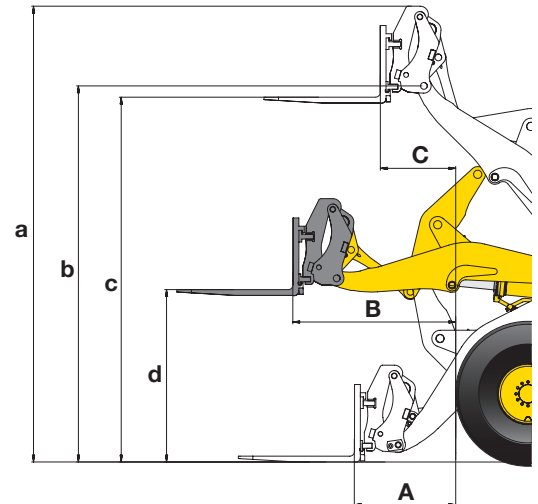
115 100 95%
Bucket fill factor



Dimensions and performance figures

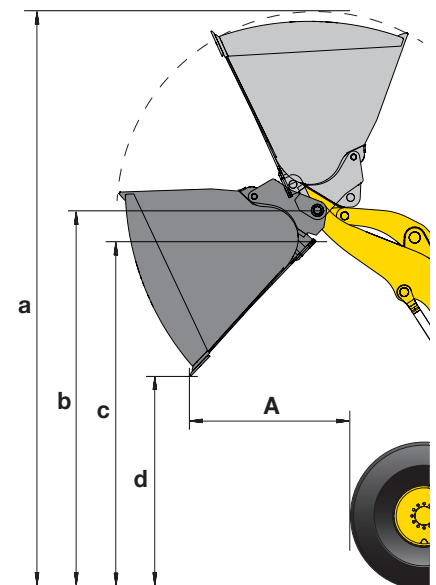
Fork tines

Sales code		C24
Fork tine length	mm	1500
A Max. reach at ground level	mm	1020
B Max. reach	mm	1680
C Max. reach at max stacking height	mm	820
a Max. height fork-carrier	mm	4930
b Hinge pin height	mm	4095
c Max. stacking height	mm	3925
d Height of forks at max. reach	mm	1885
Max. tipping load, straight	kg	10270
Max. tipping load, articulated	kg	9180
Max. payload as per EN 474-3, 80%	kg	7000
Max. payload as per EN 474-3, 60%	kg	5370
Weight in working order with fork tines	kg	18165



Light material bucket

		High Lift	
Sales code	Q364	Q854	
Bucket capacity (heaped, ISO 7546)	m ³	5.0	5.0
Tube style spill guard		without	with
Bucket mount (direct/quick-coupler)		QC	QC
Material density	t/m ³	1.0	0.8
Bucket width	mm	2990	2990
Bucket weight	kg	2000	2000
A Reach at 45°	mm	1530	1670
a Height top edge of bucket	mm	6210	6740
b Hinge pin height	mm	4095	4625
c Max. loading height at 45°	mm	3720	4250
d Dump height at 45°	mm	2500	3030
Static tipping load, 40° articulated (L3 tyres)	kg	12550	9295
Static tipping load, 40° articulated (L5 tyres)	kg	13115	9735
Operating weight (L3 tyres)	kg	18900	19895
Operating weight (L5 tyres)	kg	19715	20710



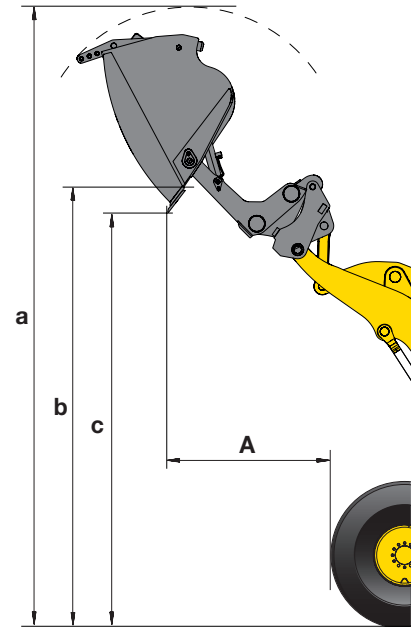
Typical material density – loose (in kg/m³)

Basalt	1960	Gravel, unscreened	1930	Sandstone	1510
Bauxite, kaolin	1420	Gravel, dry	1510	Slate	1250
Earth, dry, ex store	1510	Gravel, dry, 6 - 50 mm	1690	Slag, broken	1750
Earth, wet, excavated	1600	Gravel, wet, 6 - 50 mm	2020	Stone, crushed	1600
Gypsum, broken	1810	Sand, dry, loose	1420	Clay, natural	1660
Gypsum, crushed	1600	Sand, damp	1690	Clay, dry	1480
Granite, broken	1660	Sand, wet	1840	Clay, wet	1660
Limestone, broken	1540	Sand and clay, loose	1600	Clay and gravel, dry	1420
Limestone, crushed	1540	Sand and gravel, dry	1720	Clay and gravel, wet	1540

All measurements with tyres 23.5 R25 (XHA) and additional counterweight.

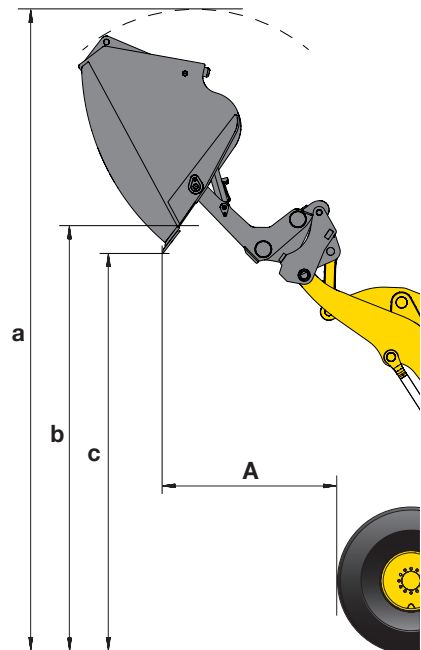
High-dump bucket (waste handling)

		High Lift			
		Q863	Q864	Q865	Q866
Sales code		Q863	Q864	Q865	Q866
Bucket capacity (heaped, ISO 7546)	m ³	6.0	6.0	4.5	4.5
Tube style spill guard		with	with	with	with
Bucket mount (direct/quick-coupler)		direct	QC	direct	QC
Material density	t/m ³	0.8	0.8	0.8	0.8
Bucket width	mm	2990	2990	2990	2990
Bucket weight	kg	3000	2800	2530	2470
A Reach at 45°	mm	1600	1870	1815	2065
a Height top edge of bucket	mm	6665	7010	7060	7255
b Max. loading height at 45°	mm	4470	4615	5210	5235
c Dump height at 45°	mm	4175	4395	4985	5075
Static tipping load, 40° articulated (L3 tyres)	kg	12555	12115	9295	8485
Static tipping load, 40° articulated (L5 tyres)	kg	13130	12670	9725	8910
Operating weight (L3 tyres)	kg	19360	19910	19890	20365
Operating weight (L5 tyres)	kg	20185	20725	20700	21180



High-dump bucket (bulk materials)

		High Lift			
		Q413	Q414	Q461	Q462
Sales code		Q413	Q414	Q461	Q462
Bucket capacity (heaped, ISO 7546)	m ³	4.5	4.5	6.0	6.0
Tube style spill guard		without	without	without	without
Bucket mount (direct/quick-coupler)		direct	QC	direct	QC
Material density	t/m ³	1.1	1.1	0.6	0.6
Bucket width	mm	2990	2990	2990	2990
Bucket weight	kg	2530	2470	3000	2800
A Reach at 45°	mm	1675	1925	1740	2010
a Height top edge of bucket	mm	6530	6725	7195	7540
b Max. loading height at 45°	mm	4680	4715	4990	5135
c Dump height at 45°	mm	4455	4547	4705	4925
Static tipping load, 40° articulated (L3 tyres)	kg	12435	11570	8470	8350
Static tipping load, 40° articulated (L5 tyres)	kg	12985	12105	8895	8785
Operating weight (L3 tyres)	kg	18895	19370	21160	20695
Operating weight (L5 tyres)	kg	19710	20185	21175	21510



Typical material density (in ton/m³) for light material and high-dump buckets

Waste glass, fine	1.4	Waste paper, loose	0.6
Waste glass, coarse	1.0	Waste paper, processed	1.0
Compost, dry	0.8	Hard coal, high density	1.2
Compost, wet	1.0	Hard coal, low density	0.9
Wood chips, saw dust	0.5	Domestic waste, loose & dry	0.8

Standard and optional equipment

Engine

Komatsu SAA6D107E-3 turbocharged common rail direct injection diesel engine	●
EU Stage V compliant	●
Engine mode selection system: Power, Economy, E-Light	●
Komatsu SmartLoader Logic	●
Adjustable idle shutdown	●
Auto-deceleration function	●
Fuel filter with water separator	●
Batteries 2 × 180 Ah / 2 × 12 V	●

Chassis and tyres

Heavy-duty axles	●
Front fenders	●
Full rear fenders	●
Limited-slip differential (LSD) front and rear	○
Tyres 23.5 R25 L2, L3, L5	○

Hydraulic system

2-spool main control valve	●
EPC fingertip control, two levers, including:	
- Bucket stop modulation	●
- Boom stop pre-setting	●
- Automatic dig function	●
Automatic return-to-dig	●
3-spool main control valve	○
EPC fingertip control, three levers	○
EPC 1-lever (multifunction lever) with sliding proportional control for attachments	○
Biodegradable oil for hydraulic system	○

Transmission and brakes

Electronically controlled ECMV automatic transmission with mode selector and variable transmission cut-off	●
Transmission shift mode selection system	●
Large-capacity torque converter	●
Torque converter lock-up	●
Auto-kickdown	●
Axle oil cooling system	●

Cabin

Spacious double door driver's cab to DIN/ISO	●
ROPS/FOPS frame according to SAE	●
Heated, high back air suspension seat, console mounted height adjustable arm rests	●
Retractable seat belt	●
Automatic climate control system	●
Multi-function video compatible colour monitor with Equipment Management and Monitoring System (EMMS) and efficiency guidance	●
DAB+ digital radio w. auxiliary input (MP3 jack)	●
Hot and cool box	●
Heated rear window	●
Rear window wiper	●
Adjustable steering column	●
2 × 12 V power supply	●
Heated, high back air suspension seats with pneumatically adjustable lumbar support, console mounted height adjustable arm rests	○
3-point seat belt	○
Sun roller blind	○
Komatsu short lever steering (K-SLS)	○

Lighting system

2 halogen main headlights	●
2 spotlights at front and rear	●
Reversing light	●
Additional lights front and rear	○
LED working lights	○

Service and maintenance

Hydrostat-driven radiator fan with automatic reversing function	●
Wide core radiator	●
Komtrax – Komatsu Wireless Monitoring System (4G)	●
Komatsu Care – a maintenance program for Komatsu customers	●
Tool-set	●
Automatic central lubrication	●
Filling tool for central lubrication system	○
Turbo II air pre-cleaner, cyclone type	○

Safety equipment

Emergency steering system	●
Vandalism protection	●
Back-up alarm	●
Battery main switch	●
Handrails on left/right	●
Rear-view camera system	●
Front screen protective grid	○
Fire extinguisher	○
Beacon light	○
Roof rail	○
Rear view mirror, heated and remote control	○
Optical back-up alarm (strobe light)	○

Attachments

High Lift equipment	○
Super High Lift equipment	○
Hydraulic quick-coupler	○
High efficiency buckets with flat or raised bottom	○
High-dump buckets	○
Fork carrier and tines	○
Waste handling buckets	○
Light material buckets	○

Other equipment

Counterweight (A05)	●
Electronically controlled load stabilizer (ECSS II)	●
Special custom colour	○
Add. counterweight rear (325 kg)	○
Add. counterweight rear and side (450 kg)	○
Salt & Chemical specification	○
Waste & Recycling specification	○
Load & Trading specification	○
Weighing system RDS Loadmaster alpha100	○
Cold area kit (engine and cab pre-heating)	○

Further equipment on request

- standard equipment
- optional equipment



A wide range of buckets and attachments is available. Your Komatsu distributor is ready to assist you with the selection of suitable options.

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.

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