NET HORSEPOWER

215 kW 288 HP @ 2.000 rpm max. 224 kW 301 HP @ 1.760 rpm

OPERATING WEIGHT

max. 25.700 kg

BUCKET CAPACITY

4,2 - 6,2 m³



KOMATSU®

WA480-5

Wheel Loader

WA480-5

WALK-AROUND

The new WA480-5 wheel loader: The perfect combination of performance, comfort and economy. Never-before experienced comfort in the SpaceCab cabin, enormous tractive force and the lowest fuel consumption in it's class. And it's whisper-quiet in use, almost maintenance-free and incredibly productive with semiautomatic loading function (optional equipment). This is a wheel loader that has clearly earned its 5 stars!

Overwhelming Productivity

- High-torque low-emission engine with the latest common-rail injection
- Extremely low fuel consumption
- · Choice of operating modes for working hydraulics and transmission
- Superior dumping height and reach
- Series production ECSS load stabiliser

• Semiautomatic loading function (option)



- SpaceCab™ cabin
- · Optimum all-around view
- Interior noise level is only 71 dB(A)*
- · Air conditioning as standard

For more detail, see page 10

- 2-way adjustable steering column
- · Air-cushioned high comfort seat
- Operation with PPC short levers or EPC fingertip control (option)

 KOMTRAX Komatsu Tracking System (option) For more detail, see page 4 KOMATSU

Diverse and Flexible

· Comprehensive range of attachments for a wide variety of uses For more detail, see page 12



Ecological

- Meets TIER II emission regulations
- Exterior noise level 107 dB(A)*

*ISO 6395 dynamic noise levels (2000/14/EC)

NET HORSEPOWER 215 kW 288 HP

OPERATING WEIGHT max. 25.700 kg

BUCKET CAPACITY 4,2 - 6,2 m³

Long Service Life and Reliable

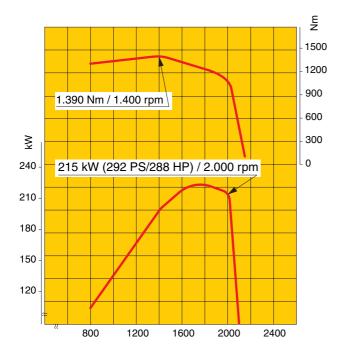
- Reliable original Komatsu components
- Robust torsionally resistant frame
- Maintenance-free fully hydraulic, wet disc service and parking brakes
- Heavy-duty axles
- Sealed DT wiring harness connector For more detail, see page 7



Easy Maintenance

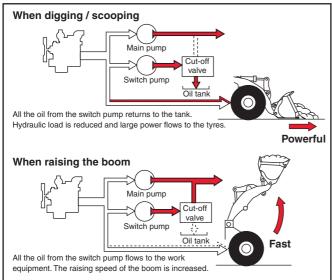
- EMMS monitoring system
- Cab controlled reversible fan
- Swing-out oil and air to air charge cooler for easy access and cleaning
- · Gull-wing doors for easy ground level access
- Extended engine oil change interval
- Centralised lubrication system as standard For more detail, see page 8

Overwhelming Productivity



Extremely high-torque engine

The Komatsu low emission engine SAA6D125E-3 produces 215 kW (288 HP) at 2.000 rpm. When the engine is loaded below the rated speed, the power increases continually because of a higher injection quantity. This means that you can achieve greater traction and lifting power in conjunction with this great increase in torque, producing very fast working cycles. The engine reaches its peak performance of 224 kW (301 HP) in its typical speed range of 1.760 rpm.



New 2-stage hydraulic system

The working hydraulic system adapts itself excellently to your specific needs: The main and switch pump together supply great capacity for high-speed loading cycles. The main pump alone supplies a reduced oil quantity for force and the maximum tear-out strength. And there's something new: when you press the kick-down switch, the alternate pump is switched off. This means that the maximum tractive force is available while simultaneously lifting the bucket. This is important, for example, when loading feed hoppers on a steep ramp.



Maximum dumping height and reach

The long lifting frame allows an enormous dumping height of 3.240 mm and a reach of 1.350 mm that is just as impressive (with 4,5 m³ universal bucket, measured to the cutting edge).

With this working range, loading high-sided semi-trailers with a payload of 30 tonnes becomes child's play.



Mode selector switch for working hydraulic

The operator can easily change between two hydraulic speed modes depending on the job. Fast and powerful for operations such as hopper feeding – or ergonomic, precise control for applications like log-grapple handling.



Mode selector switch for the transmission

The transmission of the WA480-5 can also be adapted brilliantly to every need with the selector switch. The transmission selector switch allows the operator to select between manual transmission shifting and three automatic modes (high, medium and low). You can also find the perfect setting from saving the maximum fuel and the highest power by moving the gear-changing time depending upon speed.



New Options for even greater Productivity



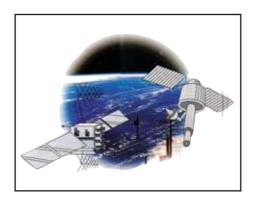
Faster Load & Carry with torque converter lockup

The operator may also utilise direct drive in third and fourth gear for optimum efficiency in Load & Carry. Clearly the speed increases, especially when driving uphill where the wheel loader travels significantly faster because of the increase in tractive force. At the same time, the converter loss is eliminated, thus clearly reducing fuel consumption.



Semiautomatic dig

Something new in the world is Komatsu's patented function of semiautomatic bucket filling. A pre-programmed bucket filling process is carried out with the aid of the electrical pilot control. This means that it is no longer necessary to manually move the bucket lever when driving into material. This also means that operators with little experience still have productive loading cycles. And for the professionals, it's noticeably easier to operate with greater convenience.



KOMTRAX: Track your machine – anytime, anywhere (option)

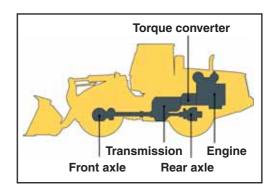
The Komatsu Tracking System, Komtrax, provides a revolutionary new way to monitor your equipment, anytime and anywhere. It lets you pinpoint the precise location of your machines and obtain real-time service-hour meter readings over an internet connection. The Komtrax system consists of an electronic control unit, a GPS transmitter and a satellite antenna installed in your machine. It connects to a system of GPS and telecommunications satellites to provide locations and exchange data. Designed to be future-proof, the Komtrax system will meet your needs today and tomorrow.



LONGEVITY AND RELIABILTY

Quality you can rely on!

The engine, transmission, torque converter, 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 WA480-5 a high degree of manoeuvrability.



Robust HD-axles

The heavy-duty axles allow above-average service life even under the hardest working conditions. The WA480-5 can also have the optional equipment of multiple-disc limited slip differentials to further increase tractive force.



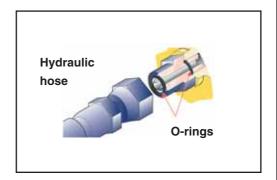
Reliable construction equipment engines

Komatsu's reliable engine, with thick walled crank case, was developed with low noise and robustness in mind.



Reliability right down to the details

All of the hydraulic connections are reliably protected against oil loss by Komatsu's O-ring seals. Komatsu's hydraulic cylinders are equipped with special guide rings to protect and support the cylinder rods. 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.



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.



Reversible hydraulic radiator fan and swingout coolers

The radiator fan can be switched to reverse operation from the cabin for work in dusty environments. Furthermore, oil cooler and air to air charge cooler can be swung out for easy access and fast cleaning.



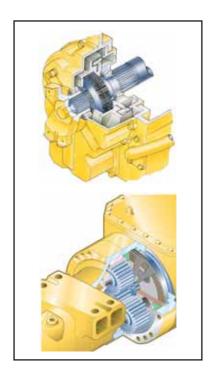


EMMS (Equipment Management Monitoring System)

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.

Maintenance-free braking system

The fully hydraulic dual-circuit service brake with multi-disc brakes running in an oil bath offers you the highest degree of safety and a long service life. Something new is the fact that the braking system can be operated with even greater precision. Since it functions completely hydraulically, you no longer have the drawbacks of a compressed air braking system. The benefits of the new system are that weathering has no effect on it, it is available for work immediately after starting the engine and it's maintenance free. The multi-disc internal parking brake is also maintenance free.



Centralised lubrication system as standard

The centralised lubrication system reduces the daily service work to the absolute minimum. Its robust piping with protective equipment in all areas ensures consistant lubrication amounts, operating reliability and electronic monitoring with a malfunction signal in the cabin. This increases the machine's service readiness and service life while lowering repair and service costs.



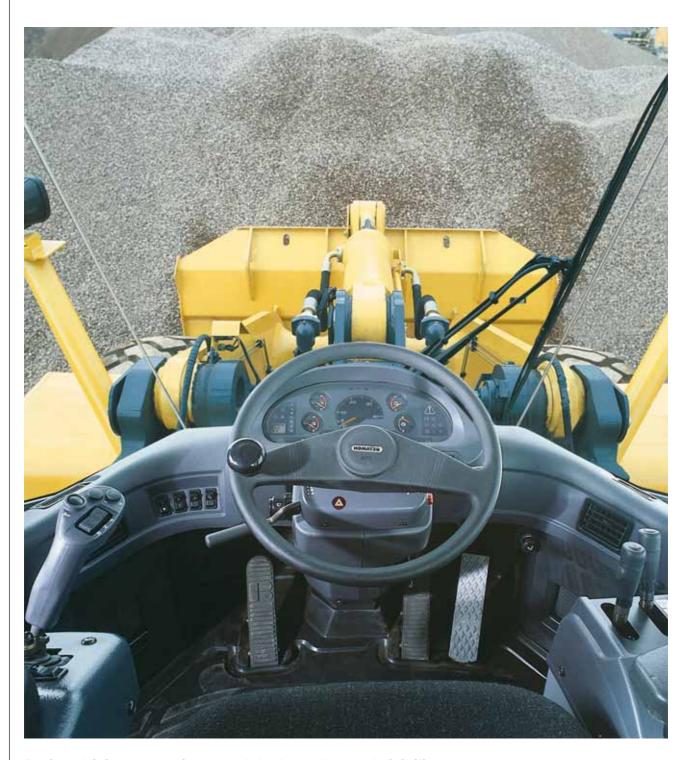
Customer service and spare parts supply

When you buy a Komatsu construction machine, you buy a lot more than just the product alone. Our service support accompanies you throughout the entire life of your wheel loader. Programs for preventative maintenance are just as much a part of what we offer as the complete range of dealer service and repair programmes.

And, if there is a malfunction, Komatsu's close-knit network of dealers and excellent parts service ensures you minimum downtime.



THE SPACE CAB



Perfect driving convenience and the best all-round visibility

The cabin is the largest in its class and offers you unparalleled driving convenience comparable to that of a passenger car. The large frameless windscreen, ensures an optimum view of the bucket and tyres, and the slanted rear end also gives an excellent view towards the rear. The cabin is mounted on viscose shock absorbers guaranteeing an interior noise level of only 71 dB(A), one of the lowest in this class. That together with air conditioning as standard ensures the operator's well-being just as much as the air-cushioned multi-adjustable premium drivers seat with head rest, seat heater and lumbar support. The easy-to-work hydraulic operating controls on the multi-adjustable hydraulic console makes it possible to operate the wheel loader conveniently and ergonomically. The operator's well-being is ensured over long and productive hours.

SIMPLE & CONVENIENT OPERATION

Adjustable steering column with built-in monitor unit

The steering column with continuous tilt and height adjustment incorporates the monitoring system allowing the entire unit to be brought into the most favourable position for each individual operator. The two-spoke steering wheel makes it possible to read all of the displays and instruments without any problems.



Automatic transmission with variable transmission cut-off

The electronically controlled automatic transmission with mode selection allows you to conveniently adjust to each job. The operator can continuously adjust the transmission cut-off activated through the left brake pedal: for instance, reacting to high cut-off pressure when excavating or low pressure for smooth braking when approaching lorries.



New and easy-to-use joystick steering (option)

A new Joystick steering system is available as optional equipment, and ensures that steering can be wrist operated easily and conveniently in loading operations. This system allows you to change the direction of travel and gear shifting with push buttons on the joystick. And you may pre-select the steering speed in 2 stages, depending upon whether fast V-loading or precise Load & Carry is required.



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 levers and the location of the entire console can be adjusted for all operators preferred height and reach. EPC equipment is also available as optional equipment for controlling the working hydraulic system. Apart from the electronic pilot control of the finger levers, EPC offers a modulating function for slowing and stopping bucket movements when lowering, that is vibration-free. Furthermore, the upper and lower boom cut out position can be pre-set with a switch that ensures major ease of operation for the operator when work is constantly changing such as in loading lorries. As a third feature, EPC equipment has a semiautomatic excavating function for simple filling buckets (also refer to page 6).







BUCKETS AND ATTACHMENTS



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 relativly 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.



Rock bucket

V-shaped buckets offer excellent penetration properties for medium heavy-duty rock jobs.

Robust hardox design wear plates ensure a long service life. We have a selection of optional equipment with the high wear-resistant KVXTM cutting tools for extremely abrasive jobs.



Hydraulic quick coupler

The WA480-5 can change attachments in a matter of seconds with the HD wedge type quick coupler. With its unique and innovative design, the offset to the orginal connection points is reduced to a minimum. Thus, lifting forces remain almost the same compared to a direct mounted bucket.



A comprehensive range of attachments

The log grapple: With its sturdy structure and its great hydraulic power and a special tilting cylinder, the WA480-5 is also perfectly suited to work in the timber industry. The robust design of the lifting frame and axles ensures maximum durability.

SPECIFICATIONS



ENGINE

Type	Komatsu SAA6D125E-3
wat	er-cooled, 4-stroke, turbocharger
Rated capacity	215 kW/288 HP (SAE J1349)
at engine speed	2.000 rpm
Maximum capacity	224 kW/301 HP (SAE J1349)
at engine speed	1.760 rpm
Torque/engine speed	max. 1.390 Nm/1.400 rpm
No. of cylinders	6
Bore × stroke	125 × 150 mm
Displacement	11,04 l
Injection system	Common-rail,
COI	ntrolled by characteristic diagram
Lubricating systemGear pun	np, pressure feed lubrication filter
Filter	Main-flow filter
Electrical system	24 V
Battery	143 Ah
Alternator	50 A
Air-filter type Dry-air fi	ilter with automatic dust emission
and preliminary pu	urification including a dust display



TRANSMISSION

Torque conve	rter		One-stage, one-phase, 3-element		
Transmission			Automatic powershift transmission		
Speeds in km/h					
Gear	1.	2.	3.	4.	
with 26.5	R25 tyre	es / with t	torque c	onverter lockup:	
forwards	6,0	11,5	21,5	37,6	
backwards	6,3	12,1	22,6	39,6	
with 26.5	R25 tyre	es / witho	ut torqu	e converter lockup:	
forwards	6,0	11,5	20,6	33,6	
backwards	6,3	12,1	21,5	34,3	



CHASSIS AND TYPES

System	4-wheel drive
Front axle	HD axle, semi-floating,
	(LSD-differential optional)
Rear axle	HD axle, semi-floating,
	30° swing angle (LSD-differential optional)
Countershaft	Spiral bevel gear
Differential	Straight bevel gear pair
Final drive	Planetary gear in an oil bath
Tyres	26.5 R25 (standard)



SERVICE REFILL CAPACITIES

Cooling system	50 l
Fuel tank	417 l
Motor oil	47 l
Hydraulic system	295 l
Axle (both front and rear axle)	55 l
Torque converter and transmission	65 l



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



HYDRAULIC SYSTEM

Hydraulic pump	Gear pump
Working pressure	210 bar
Circulating capacity of the hydraulic pump	294 + 131 l/min
No. of hydraulic/bucket cylinders	2/1
Type	Double-action
Bore diameter × stroke	
Hydraulic cylinder	180 × 881 mm
Bucket cylinder	225 × 572 mm
Hydraulic control lever	. Pre-controlled, 2-levers
Hydraulic cycle with rated load bucket filling	
Stroke time	6,0 s
Lowering time (empty)	3,7 s
Dumping time	1.4 s



STEERING SYSTEM

System	Articulated frame steering
Туре	. Completely hydraulic power steering
Steering angle to either side	40°
Steering pump	Gear pump
Working pressure	210 bar
Pumping capacity	142 l/min
No. of steering cylinders	2
Туре	Double-action
Bore diameter × stroke	100 × 441 mm
Smallest turn (outer edge of the	e tyre 26.5 R25) 6.240 mm



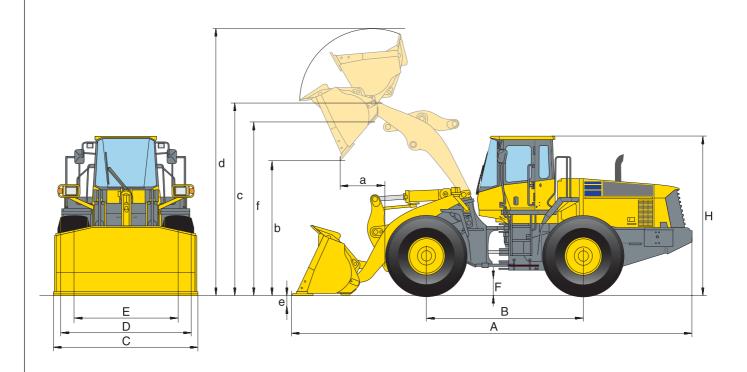
CABIN

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.

The noise level in the cabin is in accordance with the dynamic measurement in conformity with ISO 6396:

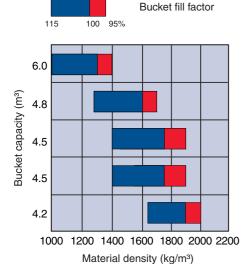
with blower: 72 dB(A) without blower: 71 dB(A)

DIMENSIONS AND PERFORMANCE FIGURES



	Bucket type		Universal		Stockpile		Earthmoving		
			w/o teeth	with BOC	w/o teeth	with BOC	w/o teeth	with BOC	
	Bucket capacity (heaped, ISO 7546)	m³	4,5	4,7	4,9	5,0	4,5	4,7	
	Sales Code	3919-	C01	C03	C44	C46	C41	C43	
	Material density	t/m³	1,80	1,75	1,65	1,60	1,80	1,70	
	Bucket weight without teeth	kg	2.010	2.245	2.300	2.535	2.165	2.400	
	Static tipping load, straight	kg	20.040	19.805	19.750	19.515	19.885	19.650	
	Static tipping load, 40° articulated	kg	17.390	17.155	17.100	16.865	17.235	17.000	
	Break-out force hydraulic	kN	227	216	213	204	224	213	
	Lifting capability hydr. at ground level	kN	270	264	263	258	269	263	
	Operating weight (without add. counterw.)	kg	24.750	24.985	25.040	25.275	24.905	25.140	
	Turning radius at corner of tyres	mm	6.240	6.240	6.240	6.240	6.240	6.240	
	Turning radius at bucket edge	mm	6.985	7.040	6.995	7.050	7.015	7.070	
а	Reach at 45°	mm	1.350	1.405	1.365	1.420	1.420	1.475	
b	Dump height at 45°	mm	3.240	3.088	3.225	3.150	3.170	3.095	
С	Hinge pin height	mm	4.487	4.487	4.487	4.487	4.487	4.487	
d	Height top edge of bucket	mm	6.170	6.170	6.150	6.150	6.180	6.180	
е	Digging depth	mm	135	165	135	165	135	165	
f	Max. loading height at 45°	mm	4.380	4.380	4.380	4.380	4.380	4.380	
Α	Overall length, bucket grounded	mm	9.410	9.485	9.435	9.510	9.510	9.585	
В	Wheelbase	mm	3.450	3.450	3.450	3.450	3.450	3.450	
С	Bucket width	mm	3.170	3.170	3.170	3.170	3.170	3.170	
D	Width over tyres	mm	2.975	2.975	2.975	2.975	2.975	2.975	
E	Track width	mm	2.300	2.300	2.300	2.300	2.300	2.300	
F	Ground clearance	mm	525	525	525	525	525	525	
Н	Overall height	mm	3.500	3.500	3.500	3.500	3.500	3.500	

Change in data cause	d by:		
		Add. counter- weight	Equipment with teeth
Weight	kg	+ 400	+ 150
Stat. tipping load, straight	kg	+ 1.060	- 150
Stat. tipping load, 40° angle	kg	+ 895	- 150
Overall length (A)	mm	+ 190	_



Light materials bucket

e.g. for industrial use such as loading lightweight recycling materials or wood chips or shavings

Stock pile bucket Loading loosened or broken material

Universal/Earth-moving bucket Ideal for road-building or earthworks, or for load & carry uses

Heavy-Duty bucket Loading and loosening of particularly abrasive materials

Rock bucket for using directly at the rock-face

Rock (trapez.)	Heavy	Duty
with teeth	w/o teeth	with BOC
4,2	4,5	4,7
C31	C35	C37
1,90	1,80	1,70
2.345	2.165	2.400
19.705	19.885	19.650
17.055	17.235	17.000
185	224	213
270	269	263
25.085	24.905	25.140
6.240	6.240	6.240
6.985	6.995	7.050
1.580	1.365	1.420
2.905	3.225	3.150
4.487	4.487	4.487
6.165	6.090	6.090
135	135	165
4.380	4.380	4.380
9.740	9.435	9.510
3.450	3.450	3.450
3.170	3.170	3.170
2.975	2.975	2.975
2.300	2.300	2.300
525	525	525
3.500	3.500	3.500

Typical material density – loose (in kg/m³)
Basalt1.960
Bauxite, Kaolin1.420
Earth, dry, ex store1.510
Earth, wet, excavated1.600
Gypsum, broken1.810
Gypsum, crushed1.600
Granite, broken1.660
Limestone, broken1.540
Limestone, crushed1.540
Gravel, unscreened1.930
Gravel, dry1.510
Gravel, dry, 6-50 mm1.690
Gravel, wet, 6-50 mm2.020
Sand, dry, loose1.420
Sand, damp1.690
Sand, wet1.840
Sand and clay, loose1.600
Sand and gravel, dry1.720
Sandstone1.510
Slate1.250
Slag, broken1.750
Stone, crushed1.600
Clay, natural1.660
Clay, dry1.480
Clay, wet1.660
Clay and gravel, dry1.420
Clay and gravel, wet1.540

WHEEL LOADER

STANDARD EQUIPMENT

- · Automatic return-to-dig
- · Automatic boom kick-out
- Counterweight
- Hydrostat-driven radiator fan with reversing function
- Swing-out oil and air to air charge cooler
- · 2-spool main control valve
- Central automatic lubrication
- Electronically controlled, load stabilizer (ECSS) 2nd generation
- Fully hydraulic brake system
- Corrosion resistor
- Power train guard
- Tyres 26.5 R25 L-3
- Heavy-duty axles
- Electronically controlled ECMV Seat belt (EU standard)

- automatic transmission with mode selector and variable transmission cut-off
- Alternator 50 A
- Starter motor 11 kW/24 V
- Batteries 143 Ah/2×12 V
- · Spacious double door driver's cab to DIN/ISO
- ROPS/FOPS frame to SAE
- All-round tinted glazing
- · Front laminated glass · Electronically controlled
- air conditioning
- Heated rear window
- Rear window wiper
- · Air-suspended, heated seat Sun visor

- PPC fingertip control, two levers
- EMMS (Equipment Management Monitoring System) with self-diagnostic function and maintenance display
- · Vertically- and horizontallyadjustable steering column with integrated monitor
- Stereo-cassette radio
- 2 halogen main headlights
- · 2 spotlights at front and rear
- Reversing light
- Horn
- · Handrails on left/right
- Emergency steering system
- · Vandalism protection

Tool-set

The WA480-5 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

- · High-lift equipment including high-lift counterweight 1.040 kg (available shortly)
- 3-spool main control valve
- Add. counterweight 400 kg
- Limited-slip differential (LSD) front and rear
- Torque converter lock-up
- Tyre guard chains
- Universal bucket 4,7 m³
- Earthmoving bucket 4,5 m³
- Earthmoving bucket 4,7 m³
- Stock pile bucket 4,9 m³ • Stock pile bucket 5,0 m³
- Heavy-duty bucket 4,5 m³
- Heavy-duty bucket 4,7 m³
- Trapezoidal rock bucket 4.2 m³
- Light materials bucket 6,2 m³

- · Various tooth systems, BOC. segments, (Komatsu/KVX™) and other optional bucket accessories are available on request
- Quick coupler
- Log grapples
- Special buckets
- Batteries 180 Ah/2×12 V
- Joystick steering with integrated F/R transmission function, 2-stage
- PPC control, 1-lever (Multi-function lever)
- Electronic 2-lever control (EPC) Fire extinguisher includina:
- Bucket stop modulation
- Boom stop pre-setting

- Semi-automatic dig function
- KOMTRAX Komatsu Tracking System
- CD-radio
- Back-up alarm
- Beacon light
- · Additional lights front and rear
- Front screen protective grid
- Cab air safety system
- Exhaust gas particles filter • Turbo II pre-filter
- · Electronic anti-theft lock
- Full rear fenders
- · Battery main switch
- · Biodegradable oil for hydraulic system
- · Special paintwork

- Wastehandler specification
- Steelhandler specification
- Tunnel specification
- Anti-Corrosion specification

Further equipment on request.

KOMATSU®

Komatsu Europe International NV

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