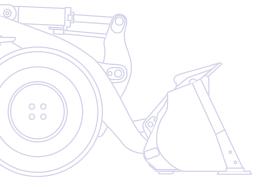
## KOMATSU



Wheel Loader

**WA470-6** 





ENGINE POWER 204 kW / 274 HP @ 2.000 rpm OPERATING WEIGHT

22.970 - 24.290 kg

BUCKET CAPACITY 4,1 - 6,0 m<sup>3</sup>

### Walk-Around

Efficient and productive, the WA470-6 wheel loader features Komatsu's advanced power-train technology and a top-performance engine that delivers high power and torque at low revs. Whatever the job, the WA470-6 will handle it with excellent fuel efficiency thanks to an outstanding tractive force and Komatsu's Closed Load Sensing System (CLSS) hydraulics. Its exclusive SpaceCab<sup>TM</sup> offers unrivalled operator comfort and an excellent view of the bucket and wheels. Reliability, economy, safety and ease of service – the WA470-6 sets new standards for this class of wheel loaders.

### **High productivity & low fuel consumption**

- High-torque and low-consumption ecot3 Komatsu engine
- Meets EU Stage IIIA and EPA Tier III
- High-capacity torque converter
- Torque converter lock-up (option)
- Automatic transmission with mode selection



### **Excellent stability and manoeuvrability**

- Superior dumping height and reach
- Wide tread and long wheelbase
- Boom suspension system for minimum spillage
- Komatsu CLSS hydraulic system

### **WA470**-6

**ENGINE POWER** 204 kW / 274 HP @ 2.000 rpm

> **OPERATING WEIGHT** 22.970 - 24.290 kg

**BUCKET CAPACITY** 4,1 - 6,0 m<sup>3</sup>

### First-class operator comfort

- Two-door SpaceCab™
- Outstanding 360° visibility
- Deluxe heated, air-suspended driver seat
- Large armrest and adjustable console
- Electronically controlled air conditioning



### **Easy maintenance**

- Radiator with auto reversible fan speeds up cleaning
- Factory fitted automatic lubrication system
- Large gull-wing doors for easy access to service points
- Equipment Management and Monitoring System (EMMS)







- Low Consumption, especially in
- Load & Carry with
- Large Converter



Komatsu Satellite Monitoring System

### Simple & convenient handling

- Smooth ergonomic hydraulic control
- Multi-function lever (option)
- Intelligent gas pedal
- Joystick steering (option)

### High Productivity & Low Fuel Consumption

#### Low consumption ecot3 engine

The Komatsu SAA6D125E-5 engine provides high torque, a better performance at low speed and low fuel consumption. This ecot3 engine features a new combustion chamber design with optimised ignition and combustion timing. The operating pressure of the new common rail system was increased for improved injection and fuel efficiency. The air-to-air intercooler reduces the temperature of the compressed air supplied by the turbo charger to the cylinders, and further improves fuel consumption. The engine reaches its max. performance of 212 kW at already 1.700 rpm.

### Advanced Komatsu power train design

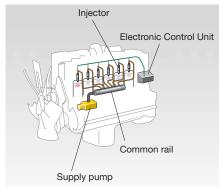
With its high-capacity torque converter, the completely redesigned Komatsu drive train offers optimum efficiency and an unparalleled rimpull-to-weight ratio. By delivering high rimpull at low speeds, it makes child's play of heavy jobs like penetration of dense material such as aggregate. This means higher productivity in V-Shape loading, even in confined spaces. For Load & Carry applications, the WA470-6 also has plenty of acceleration and can achieve high speeds, even on grades or steep ramps leading to feed hoppers.

#### Meets EU Stage IIIA

The new Komatsu ecot3 engine technology reduces NOx and particle emissions, fuel consumption and noise level. The Komatsu SAA6D125E-5 is certified for EPA Tier III and EU Stage IIIA emission regulations.

### Automatic transmission with mode selection

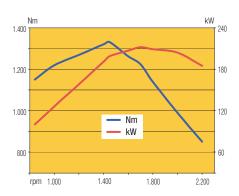
The operator can select manual shifting or has the choice between two levels of automatic shifting. Auto "Low" mode keeps the engine in a lower rpm range for fuel efficiency while also giving tractive force at the touch of the accelerator pedal. Auto "High" mode will set the gear shift timing at higher speeds.



High pressure common rail fuel injection



Air-to-air charge air cooling system





### Faster load & carry

The optional new sequential torque converter lockup 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.





### Excellent Stability and Manoeuvrability

### Wide tread and long wheelbase

A 2.300 mm wide tread and a long wheel base of 3.450 mm give the WA470-6 outstanding stability – enough to handle rough terrain and fast load & carry cycles with minimum spillage and maximum comfort. With 37° steering articulation to both sides, the WA470-6 is extremely manoeuvrable in tight spaces for faster loading cycles.

### Superior dumping height and reach

The long lifting frame allows an enormous dumping height of 3.085 mm and a reach of 1.280 mm that is just as impressive (with a 4,5 m³ universal bucket, measured to the cutting edge). With this working range, loading high feeders or trucks becomes easy and fast.

### **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 WA470-6 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.







### **Boom suspension system**

The boom suspension system reduces the shocks in the boom when driving with loads. Material can be transported at higher speeds with minimum spillage. When travelling below 7 km/h, the boom suspension is automatically deactivated for precise pallet loading into trucks.





### Simple & Convenient Handling

### Smooth ergonomic hydraulic control – EPC option

The new control levers are fingertip controlled for precise and fatiguefree operating. The position of the levers and of the entire console can be adjusted to suit any operator. EPC equipment for controlling the hydraulic system is also available in option. It offers a vibration-free modulating function for slowing and stopping bucket movements when lowering. For major ease of operation the upper and lower boom cut-out position can be pre-set with a switch. As a third feature, EPC equipment has a semiautomatic excavating function for simple filling of buckets.

### PPC-Multifunction lever (option)

The servo-assisted 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.

### Intelligent gas pedal

Our innovative new thrust-sensing gas pedal automatically helps the operator match the timing of gear shifts to the load. In heavy-duty work, requiring high rimpull and maximum acceleration, the operator tends to press heavily on the gas pedal. The machine 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 the best fuel efficiency.

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

A new joystick steering system is available in option. It allows gear shifting with push buttons and ensures that steering can be wrist operated easily and conveniently when loading. You may pre-select the steering speed in 2 stages, depending upon whether fast V-loading or precise load & carry is required.









### First-Class Operator Comfort

### Large SpaceCab™

Komatsu's SpaceCab™ is among the most spacious in its class and it has been lengthened for greater leg room. It offers a driving convenience comparable to that of a passenger car. The cabin is mounted on viscose shock absorbers that guarantee low vibrations and sound levels.

### Outstanding 360° visibility

The large frameless windscreen ensures an optimum view of the bucket and tyres. The slanted engine hood gives an excellent view to the rear.

#### Air-suspended, heated seat

The high comfort air-suspended seat, with lumbar support and multiple possibilities for adjustments, ensures the operator's well being during the entire working day. All seats are equipped with a heating function to provide an easy start on cold days.

### Electronically controlled air conditioning

With the electronically controlled air conditioning fitted as standard, the operator can feel at ease regardless of the outside temperature. Concentration and productivity stays high all day.

#### Additional comfort

Further standard features of the Komatsu SpaceCab™ are the CD radio, a "hot and cool" box for beverages, several storage spaces and adjustable arm rests on both sides.

### Safe, convenient access

For easy and safe entry, on each side of the cabin the WA470-6 has an access ladder with self-cleaning, anti-slip steps inclined forward at 8°. The cab doors are hinged at the rear for the widest possible opening angle.









### 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 all filters collected in a centralised arrangement, machine downtime is reduced to a minimum.

### State-of-the-art monitoring

The equipment management and monitoring system (EMMS) is clearly structured and easy to read. If a malfunction occurs, it is immediately displayed as plain text in the selected language. The system features an error memory, a selfdiagnosis function and a display of service intervals. The EMMS gives timely notification of required oil and filter replacements. All information can also be accessed off-site via KOMTRAX™. The operator and customer service engineer are constantly informed about the machine's state so that problems can be prevented before they occur.

#### Auto reverse fan

To minimize manual cleaning, a reversible fan blows dust out, automatically or on demand. The "automatic reverse" function allows to set the cleaning length interval to perfectly adjust to the working conditions.

### Factory fitted automatic lubrication system

The automatic lubrication system reduces the daily service work to the absolute minimum. Robust piping ensures consistent lubrication and operating reliability, and significantly increases the machine's service life. The system is electronically monitored and features a signal light in the cabin.

### Customer service and spare parts supply

When you buy Komatsu, you buy a lot more than just a machine. Our service support accompanies you throughout the entire life of your wheel loader. Programs for preventative maintenance are as much a part of the offer as the complete range of dealer services and repair programmes. In case of malfunction, Komatsu's close-knit network of dealers and excellent parts service ensures minimum machine downtime.



Auto reverse fan



Automatic central lubrication



EMMS (Equipment Management Monitoring System)



Easy access to service points



### 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.

KOMTRAX™ can assist you with:

### Full machine monitoring

Get detailed operation data to know when your machines are used and how productive they are.

### **Total Fleet Management**

Keep track of the location of your machines at all times and discourage unapproved usage or theft.

### Complete machine status

Receive warnings, alerts and cautions, via a web site or by e-mail, to help with maintenance planning and for longer machine life.

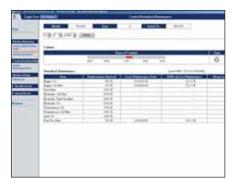
For further details on KOMTRAX™, please ask your Komatsu dealer for the latest KOMTRAX™ brochure.



### **KOMTRAX**<sup>TM</sup>



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.



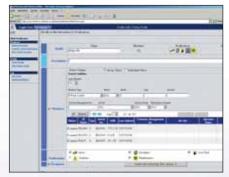
Maintenance planning - To increase productivity and improve maintenance planning, alerts indicate when items such as filters or oil must be replaced.



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



Machine tracking during transport - When your machine is transported, KOMTRAX™ sends travel messages to the web site or by e-mail to inform you of its progress, and confirms when it reaches its destination.



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.



### Robust and Reliable

### 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.

#### Wet multi-disc service brake

The multi-disc service brake is encapsulated and runs in an oil bath. The brake stays clean and operates at low temperature for increased service intervals and a long lifetime.

### 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.









### 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.



We adapt our wheel loaders to the different conditions that exist on waste handling job sites. Along with heavy duty attachments, we offer solutions to protect your machine against damage.

### **Timber industry**

A wide range of options specifically developed for the timber industry are available: log grapples, wood chip buckets, cameras, as well as various protections and pre-filters.

### Scoria applications

One of hardest job for wheel loaders is in steel mills. Heat, dust and confined space require an optimum customizing of the base machine with extra features such as heat protected hoses, armoured glass, or bottom plates.













### **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 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.



Heavy duty bucket



### Hydraulic quick coupler

The ideal bucket for hard and abra-The WA470-6 can change attachments in a matter of seconds with sive conditions. Increase profits by protecting the bucket investment a market compatible or HD wedge and reduce repair works. Komatsu type quick coupler. With the wedge offers total bucket protection by ustype quick coupler, featuring a ing highly wear resistant exchangeunique and innovative design, the offset to the original connection able parts. A bolt-on teeth system reduces welding on the bucket and points is reduced to a minimum. prevents loss of teeth. 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 WA470-6 is also perfectly suited to work in the timber industry. The robust design of the lifting frame and axles ensures maximum durability.

### Specifications ===

#### **ENGINE**

Model Komatsu SAA6D125E-5
Common rail direct injection, water-cooled
emissionised, turbocharged, after-cooled diese
Engine power
at rated engine speed2.000 rpm
ISO 14396204 kW / 274 HF
ISO 9249 (net engine power)203 kW / 272 HF
Max. torque / engine speed1.360 Nm / 1.400 rpm
No. of cylinders6
Bore × stroke125 × 150 mm
Displacement11,04 ltr
Fan drive typeHydraulid
Lubricating system Gear pump, water-cooled oil cooler
piston cooling nozzles
Filter Main-flow filter with water separator
Air-filter type Dry-air filter with automatic dust emission
and preliminary purification including a dust display

#### **TRANSMISSION**

Type	Automatic powershift transmission
Torque converter	One-stage, one-phase, 3-element

#### Speeds in km/h (with 26.5 R25 tyres)

Gear	1.	2.	3.	4.
Forward	7,6	13,2	22,7	36,2
with torque converter lock-up	-	13,5	23,6	39
Reverse	7,9	13,5	23,5	37,3
with torque converter lock-up	-	13,8	24,3	39

#### **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	Straight bevel gear pair
Final drive	Planetary gear in an oil bath
Tyres	26.5 R25

#### **SERVICE REFILL CAPACITIES**

Cooling system	60 ltr
Fuel tank	413 ltr
Engine oil	38 ltr
Hydraulic system	173 ltr
Front axle	60 ltr
Rear axle	56 ltr
Torque converter and transmission	65 ltr

#### **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**

#### STEERING SYSTEM

-	Articulated frame steering
Type	Completely hydraulic power steering
Steering angle to either side	37°
Steering pump	Variable piston pump
Working pressure	250 bar
Pumping capacity	195 ltr/min
No. of steering cylinders	2
Type	Double-action
Bore diameter × stroke	90 × 441 mm
Smallest turn (outer edge of the	he tyre 26.5 R25)6.990 mm

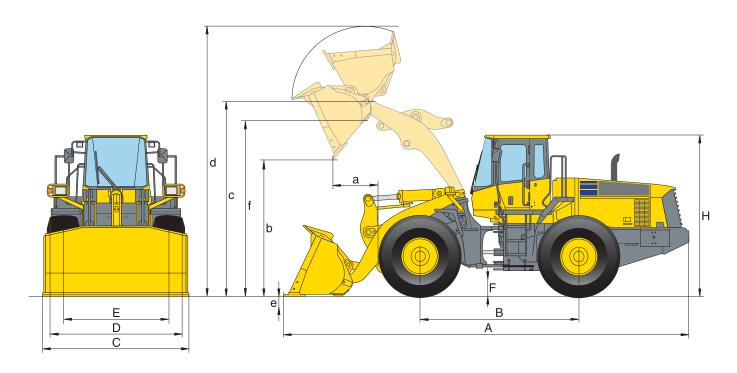
#### **CABIN**

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.

#### **ENVIRONMENT**

Engine emissionsFully complies with EU Stage IIIA
and EPA Tier III exhaust emission regulations
Noise levels
LwA external107 dB(A) (2000/14/EC Stage II)
LpA operator ear72 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)*
Hand/arm≤ 2,5 m/s² (uncertainty K = 0,38 m/s²)
Body≤ 0,5 m/s² (uncertainty K = 0,13 m/s²)
* for the purpose of risk assessment under directive 2002/44/EC,
please refer to ISO/TR 25398:2006.

### Dimensions & Performance Figures



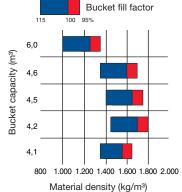
#### MEASUREMENTS AND WORKING SPECIFICATIONS

			Universal			Earthr	noving
	w. teeth	w. BOC	w/o teeth	w. teeth	w. BOC	w. teeth	w. BOC
m³	4,1	4,25	4,5	4,5	4,65	4,2	4,35
3966	C02	C03	C11	C12	C13	C42	C45
t/m³	1,8	1,7	1,65	1,6	1,55	1,7	1,65
kg	2.015	2.090	1.923	2.085	2.162	2.187	2.257
kg	18.505	18.275	18.650	18.430	18.180	18.285	18.035
kg	16.510	16.300	16.660	16.440	16.200	16.300	16.060
kN	194	183	194	193	183	192	181
kN	232	230	232	232	230	231	229
kg	23.060	23.140	22.970	23.130	23.210	23.235	23.305
mm	6.990	6.990	6.990	6.990	6.990	6.990	6.990
mm	7.670	7.625	7.665	7.745	7.700	7.675	7.630
mm	1.465	1.315	1.280	1.465	1.315	1.480	1.330
mm	2.900	3.010	3.085	2.900	3.010	2.885	2.995
mm	4.335	4.335	4.335	4.335	4.335	4.335	4.335
mm	5.975	5.975	5.975	5.975	5.975	5.950	5.950
mm	125	155	125	125	155	125	155
mm	4.025	4.025	4.025	4.025	4.025	4.020	4.020
mm	9.230	9.070	8.970	9.230	9.070	9.250	9.090
mm	3.450	3.450	3.450	3.450	3.450	3.450	3.450
mm	2.995	3.000	3.160	3.165	3.170	2.995	3.000
mm	2.975	2.975	2.975	2.975	2.975	2.975	2.975
mm	2.300	2.300	2.300	2.300	2.300	2.300	2.300
mm	505	505	505	505	505	505	505
mm	3.470	3.470	3.470	3.470	3.470	3.470	3.470
	3966 t/m³ kg kg kg kN kN kg mm	m³         4,1           3966         C02           t/m³         1,8           kg         2.015           kg         18.505           kg         16.510           kN         194           kN         232           kg         23.060           mm         6.990           mm         7.670           mm         1.465           mm         2.900           mm         4.335           mm         5.975           mm         125           mm         4.025           mm         3.450           mm         2.995           mm         2.300           mm         505	m³         4,1         4,25           3966         C02         C03           t/m³         1,8         1,7           kg         2.015         2.090           kg         18.505         18.275           kg         16.510         16.300           kN         194         183           kN         232         230           kg         23.060         23.140           mm         6.990         6.990           mm         7.670         7.625           mm         1.465         1.315           mm         2.900         3.010           mm         4.335         4.335           mm         5.975         5.975           mm         125         155           mm         4.025         4.025           mm         9.230         9.070           mm         2.995         3.000           mm         2.975         2.975           mm         505         505	w. teeth         w. BOC         w/o teeth           m³         4,1         4,25         4,5           3966         C02         C03         C11           t/m³         1,8         1,7         1,65           kg         2.015         2.090         1.923           kg         18.505         18.275         18.650           kg         16.510         16.300         16.660           kN         194         183         194           kN         232         230         232           kg         23.060         23.140         22.970           mm         6.990         6.990         6.990           mm         7.670         7.625         7.665           mm         1.465         1.315         1.280           mm         2.900         3.010         3.085           mm         4.335         4.335         4.335           mm         5.975         5.975           mm         125         155         125           mm         4.025         4.025         4.025           mm         2.930         9.070         8.970           mm         2.995 </td <td>w. teeth         w. BOC         w/o teeth         w. teeth           m³         4,1         4,25         4,5         4,5           3966         C02         C03         C11         C12           t/m³         1,8         1,7         1,65         1,6           kg         2.015         2.090         1.923         2.085           kg         18.505         18.275         18.650         18.430           kg         16.510         16.300         16.660         16.440           kN         194         183         194         193           kN         232         230         232         232           kg         23.060         23.140         22.970         23.130           mm         6.990         6.990         6.990         6.990           mm         7.670         7.625         7.665         7.745           mm         1.465         1.315         1.280         1.465           mm         2.900         3.010         3.085         2.900           mm         4.335         4.335         4.335         4.335           mm         5.975         5.975         5.975</td> <td>m³         4,1         4,25         4,5         4,5         4,65           3966         C02         C03         C11         C12         C13           t/m³         1,8         1,7         1,65         1,6         1,55           kg         2.015         2.090         1.923         2.085         2.162           kg         18.505         18.275         18.650         18.430         18.180           kg         16.510         16.300         16.660         16.440         16.200           kN         194         183         194         193         183           kN         232         230         232         232         230           kg         23.060         23.140         22.970         23.130         23.210           mm         6.990         6.990         6.990         6.990         6.990           mm         7.670         7.625         7.665         7.745         7.700           mm         1.465         1.315         1.280         1.465         1.315           mm         2.900         3.010         3.085         2.900         3.010           mm         5.975         5.975</td> <td>w. teeth         w. BOC         w/o teeth         w. teeth         w. BOC         w. teeth           m³         4,1         4,25         4,5         4,5         4,65         4,2           3966         C02         C03         C11         C12         C13         C42           t/m³         1,8         1,7         1,65         1,6         1,55         1,7           kg         2.015         2.090         1.923         2.085         2.162         2.187           kg         18.505         18.275         18.650         18.430         18.180         18.285           kg         16.510         16.300         16.660         16.440         16.200         16.300           kN         194         183         194         193         183         192           kN         232         230         232         232         230         231           kg         23.060         23.140         22.970         23.130         23.210         23.235           mm         6.990         6.990         6.990         6.990         6.990         6.990           mm         7.670         7.625         7.665         7.745         7.7</td>	w. teeth         w. BOC         w/o teeth         w. teeth           m³         4,1         4,25         4,5         4,5           3966         C02         C03         C11         C12           t/m³         1,8         1,7         1,65         1,6           kg         2.015         2.090         1.923         2.085           kg         18.505         18.275         18.650         18.430           kg         16.510         16.300         16.660         16.440           kN         194         183         194         193           kN         232         230         232         232           kg         23.060         23.140         22.970         23.130           mm         6.990         6.990         6.990         6.990           mm         7.670         7.625         7.665         7.745           mm         1.465         1.315         1.280         1.465           mm         2.900         3.010         3.085         2.900           mm         4.335         4.335         4.335         4.335           mm         5.975         5.975         5.975	m³         4,1         4,25         4,5         4,5         4,65           3966         C02         C03         C11         C12         C13           t/m³         1,8         1,7         1,65         1,6         1,55           kg         2.015         2.090         1.923         2.085         2.162           kg         18.505         18.275         18.650         18.430         18.180           kg         16.510         16.300         16.660         16.440         16.200           kN         194         183         194         193         183           kN         232         230         232         232         230           kg         23.060         23.140         22.970         23.130         23.210           mm         6.990         6.990         6.990         6.990         6.990           mm         7.670         7.625         7.665         7.745         7.700           mm         1.465         1.315         1.280         1.465         1.315           mm         2.900         3.010         3.085         2.900         3.010           mm         5.975         5.975	w. teeth         w. BOC         w/o teeth         w. teeth         w. BOC         w. teeth           m³         4,1         4,25         4,5         4,5         4,65         4,2           3966         C02         C03         C11         C12         C13         C42           t/m³         1,8         1,7         1,65         1,6         1,55         1,7           kg         2.015         2.090         1.923         2.085         2.162         2.187           kg         18.505         18.275         18.650         18.430         18.180         18.285           kg         16.510         16.300         16.660         16.440         16.200         16.300           kN         194         183         194         193         183         192           kN         232         230         232         232         230         231           kg         23.060         23.140         22.970         23.130         23.210         23.235           mm         6.990         6.990         6.990         6.990         6.990         6.990           mm         7.670         7.625         7.665         7.745         7.7

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#### CHANGE IN DATA CAUSED BY:

	Add. counter-weight (rear)	Heavy counter- weight (rear)	Tyres 26.5 R25 XLD D1A L4	Tyres 26.5 R25 XMINE D2 L5
Operating weight	+ 400 kg	+ 1.085 kg	+ 392 kg	+ 1.124 kg
Static tipping load, straight	+ 1.020 kg	+ 2.620 kg	+ 294 kg	+ 840 kg
Static tipping load, 37° articulated	+ 890 kg	+ 2.290 kg	+ 265 kg	+ 760 kg
Overall length, bucket grounded	+ 165 mm	+ 123 mm	_	_
Reach at 45°	-	_	- 35 mm	- 29 mm
Dump height at 45°	-	_	+ 35 mm	+ 45 mm
Width over tyres	-	_	+ 17 mm	+ 45 mm
Overall height	=	_	+ 35 mm	+ 45 mm



Light materials bucket Ideal 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

Universal/Earth-moving bucket (high-lift mount) Ideal for road-building or earthworks, or for load & carry uses

Stockpile			Heavy Duty		Light material	Universal (High-lift)*
w/o teeth	w. teeth	w. BOC	w. teeth	w. BOC	w. BOC	w/o teeth
4,6	4,6	4,75	4,1	4,25	6,0	4,1
C43	C44	C70	C36	C37	C20	C01
1,55	1,55	1,55	1,75	1,65	1,2	1,55
2.267	2.422	2.570	2.388	2.450	2.305	1.865
18.165	17.950	17.690	18.055	17.835	18.490	16.410
16.180	15.970	15.775	16.060	15.860	16.465	14.520
182	182	172	195	184	167	189
229	229	228	231	230	228	195
23.315	23.470	23.620	23.435	23.500	23.350	24.290
6.990	6.990	6.990	6.990	6.990	6.990	6.990
7.615	7.695	7.645	7.665	7.625	7.765	7.830
1.350	1.535	1.380	1.460	1.310	1.460	1.455
3.015	2.835	2.945	2.905	3.015	2.935	3.600
4.335	4.335	4.335	4.335	4.335	4.335	4.850
5.980	5.980	5.980	5.950	5.950	6.265	6.485
125	125	155	125	155	105	265
4.020	4.020	4.020	4.020	4.020	4.065	4.530
9.065	9.325	9.130	9.225	9.065	9.190	9.740
3.450	3.450	3.450	3.450	3.450	3.450	3.450
2.990	2.995	3.000	2.995	3.000	3.250	2.990
2.975	2.975	2.975	2.975	2.975	2.975	2.975
2.300	2.300	2.300	2.300	2.300	2.300	2.300
505	505	505	505	505	505	505
3.470	3.470	3.470	3.470	3.470	3.470	3.470
3.470	3.470	3.470	3.470	3.470	3.470	3.470

### TYPICAL MATERIAL DENSITY - LOOSE (IN kg/m³)

Bauxite, Kaolin       1.420         Earth, dry, ex store       1.510         Earth, wet, excavated       1.600         Gypsum, broken       1.810         Gypsum, crushed       1.600         Granite, broken       1.540         Limestone, broken       1.540         Limestone, crushed       1.540         Gravel, unscreened       1.930         Gravel, dry       1.510         Gravel, dry       1.690         Gravel, wet, 6-50 mm       2.020         Sand, dry, loose       1.420         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay and gravel, dry       1.420         Clay and gravel, wet       1.540	Basalt	1.960
Earth, wet, excavated 1.600 Gypsum, broken 1.810 Gypsum, crushed 1.600 Granite, broken 1.660 Limestone, broken 1.540 Limestone, crushed 1.540 Gravel, unscreened 1.930 Gravel, dry 1.510 Gravel, dry, 6-50 mm 2.020 Sand, dry, loose 1.420 Sand, damp 1.690 Sand, wet 1.840 Sand and clay, loose 1.600 Sand and gravel, dry 1.720 Sandstone 1.510 Slate 1.250 Slag, broken 1.750 Stone, crushed 1.660 Clay, natural 1.660 Clay, wet 1.660 Clay, wet 1.660 Clay and gravel, dry 1.420	Bauxite, Kaolin	1.420
Gypsum, broken       1.810         Gypsum, crushed       1.600         Granite, broken       1.660         Limestone, broken       1.540         Limestone, crushed       1.540         Gravel, unscreened       1.930         Gravel, dry       1.510         Gravel, dry, 6-50 mm       1.690         Gravel, wet, 6-50 mm       2.020         Sand, dry, loose       1.420         Sand, damp       1.690         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, wet       1.660         Clay and gravel, dry       1.420	Earth, dry, ex store	1.510
Gypsum, crushed       1.600         Granite, broken       1.660         Limestone, broken       1.540         Limestone, crushed       1.540         Gravel, unscreened       1.930         Gravel, dry       1.510         Gravel, dry, 6-50 mm       1.690         Gravel, wet, 6-50 mm       2.020         Sand, dry, loose       1.420         Sand, damp       1.690         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, wet       1.660         Clay and gravel, dry       1.420	Earth, wet, excavated	1.600
Granite, broken       1.660         Limestone, broken       1.540         Limestone, crushed       1.540         Gravel, unscreened       1.930         Gravel, dry       1.510         Gravel, dry, 6-50 mm       1.690         Gravel, wet, 6-50 mm       2.020         Sand, dry, loose       1.420         Sand, damp       1.690         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, wet       1.660         Clay and gravel, dry       1.420	Gypsum, broken	1.810
Limestone, broken       1.540         Limestone, crushed       1.540         Gravel, unscreened       1.930         Gravel, dry       1.510         Gravel, dry, 6-50 mm       1.690         Gravel, wet, 6-50 mm       2.020         Sand, dry, loose       1.420         Sand, damp       1.690         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay and gravel, dry       1.420	Gypsum, crushed	1.600
Limestone, crushed       1.540         Gravel, unscreened       1.930         Gravel, dry       1.510         Gravel, dry, 6-50 mm       1.690         Gravel, wet, 6-50 mm       2.020         Sand, dry, loose       1.420         Sand, damp       1.690         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Granite, broken	1.660
Gravel, unscreened       1.930         Gravel, dry       1.510         Gravel, dry, 6-50 mm       1.690         Gravel, wet, 6-50 mm       2.020         Sand, dry, loose       1.420         Sand, damp       1.690         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, wet       1.660         Clay and gravel, dry       1.420	Limestone, broken	1.540
Gravel, dry       1.510         Gravel, dry, 6-50 mm       1.690         Gravel, wet, 6-50 mm       2.020         Sand, dry, loose       1.420         Sand, damp       1.690         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Limestone, crushed	1.540
Gravel, dry, 6-50 mm       1.690         Gravel, wet, 6-50 mm       2.020         Sand, dry, loose       1.420         Sand, damp       1.690         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, wet       1.660         Clay and gravel, dry       1.420	Gravel, unscreened	1.930
Gravel, wet, 6-50 mm       2.020         Sand, dry, loose       1.420         Sand, damp       1.690         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Gravel, dry	1.510
Sand, dry, loose       1.420         Sand, damp       1.690         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Gravel, dry, 6-50 mm	1.690
Sand, damp       1.690         Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Gravel, wet, 6-50 mm	2.020
Sand, wet       1.840         Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Sand, dry, loose	1.420
Sand and clay, loose       1.600         Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Sand, damp	1.690
Sand and gravel, dry       1.720         Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Sand, wet	1.840
Sandstone       1.510         Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Sand and clay, loose	1.600
Slate       1.250         Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Sand and gravel, dry	1.720
Slag, broken       1.750         Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Sandstone	1.510
Stone, crushed       1.600         Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Slate	1.250
Clay, natural       1.660         Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Slag, broken	1.750
Clay, dry       1.480         Clay, wet       1.660         Clay and gravel, dry       1.420	Stone, crushed	1.600
Clay, wet 1.660 Clay and gravel, dry 1.420	Clay, natural	1.660
Clay and gravel, dry 1.420	Clay, dry	1.480
	Clay, wet	1.660
Clay and gravel, wet 1.540	Clay and gravel, dry	1.420
	Clay and gravel, wet	1.540

<sup>\*</sup> with heavy counterweight

### **WA470-6**

### Standard and Optional Equipment

# ENGINE Komatsu SAA6D125E-5 turbocharged common rail direct injection diesel engine EU Stage IIIA/EPA Tier III compliant Fuel filter with water separator Engine cooling fluid corrosion resistor Alternator 50 A/24 V Starter motor 11 kW/24 V

#### **CHASSIS AND TYRES**

Batteries 2  $\times$  180 Ah/2  $\times$  12 V

Heavy-duty axles	•
Front fenders	•
Limited-slip differential (LSD) front and rear	0
Tyres 26.5 R25 L2, L3, L5	0
Full rear fenders	0

#### **SAFETY EQUIPMENT**

Emergency steering system	•
Horn	•
Vandalism protection	•
Back-up alarm	•
Battery main switch	•
Handrails on left/right	•
Front screen protective grid	0
Beacon light	0
Electronic anti-theft lock	0
Roof rail	0
Rear view camera system	0
Additional convex rear view mirror	0
Optical back-up alarm (strobe light)	0

#### LIGHTING SYSTEM

2 halogen main headlights	•
2 spotlights at front and rear	•
Reversing light	•
Additional lights front and rear	0
Xenon working lights	0
Step light	0

#### CABIN

Spacious double door driver's cab to DIN/ISO	•
ROPS/FOPS frame according to SAE	•
Air-suspended, heated seat	•
Air conditioner	•
CD radio	•
Hot and cool box	•
All-round tinted glazing	•
Front laminated glass	•
Heated rear window	•
Rear window wiper	•
Sun visor	•
Seat belt (EU standard)	•
Adjustable steering column	•
12 V power supply	0
Fire extinguisher	0
Sun roller blind	0
Automatic climate control system	0

#### TRANSMISSION AND BRAKES

Electronically controlled ECMV automatic transmission with mode selector and variable transmission cut-off	•
Working mode selection system	•
Large-capacity torque converter	•
Fully hydraulic brake system	•
Torque converter lock-up	0
Joystick steering with integrated F/R transmission function, 2-stage	0

#### **HYDRAULIC SYSTEM**

2-spool main control valve	•
PPC fingertip control, two levers	•
Automatic return-to-dig	•
3-spool main control valve	0
PPC control, 1-lever (Multi-function lever) with integrated F/R transmission function	0
Electronic 2-lever control (EPC) including: - Bucket stop modulation - Boom stop pre-setting - Semiautomatic dig function	0
Biodegradable oil for hydraulic system	0

#### **SERVICE AND MAINTENANCE**

Hydrostat-driven radiator fan with automatic reversing function	•
EMMS (Equipment Management Monitoring System) with self-diagnostic function and maintenance display	•
KOMTRAX™ - Komatsu satellite monitoring system	•
Tool-set	•
Automatic central lubrication	•
Filling tool for central lubrication system	0
Turbo II air pre-cleaner cyclone type	$\overline{\circ}$

#### **OTHER EQUIPMENT**

Counterweight	•
Electronically controlled load stabilizer (ECSS)	•
Special custom colour	0
Add. counterweight 400 kg	0
Heavy counterweight +1.085 kg for log grapple applications	0
Anti-corrosion specification	0
Waste-handler specification	0
Cold area kit (engine and cab pre-heating)	0

#### **ATTACHMENTS**

High-lift equipment	С
Hydraulic quick-coupler	С
Universal buckets	С
Earthmoving buckets	С
Stock pile buckets	C
High-dump buckets	С
Log grapples	C
Fork carrier and tines	C
Waste handling buckets	C
Light material buckets	С

Further equipment on request

The WA470-6 is equipped in accordance with the safety regulations of the machinery guidelines 89/392 EWG ff and EN474.

- standard equipment
- optional equipment

Your Komatsu partner:



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