

# KOMATSU

WA  
115



WA115-3

## WA115-3

### WHEEL LOADER

**NET HORSEPOWER**  
65 kW 87 HP

**OPERATING WEIGHT**  
7.500 kg

**BUCKET CAPACITY**  
1,2 - 2,2 m<sup>3</sup>

## AT A GLANCE

Thanks to its compact design, excellent stability and extreme flexibility, the new WA115-3 is the ideal solution for industrial use. The delta-parallel boom ensures powerful operations at every height and an outstanding view of the work equipment. The low-emission Komatsu engine, with an external noise emission of only 101 dB(A), treats the environment well too, and due to the engine side covers, is very easy to service and maintain. With the rubber-mounted ROPS ComfortCab, internal vibration and noise is also reduced to a minimum.

*Sliding windows fitted as standard and a high-performance (optional) air conditioner ensure an optimum climate in the cab.*

*A third hydraulic control circuit for operating the attachments is fitted as standard, with an option of electronic actuation.*

*Parallel delta boom for greatest possible lifting power at every height, and optimum view of the work equipment. (Page 6)*

*Simple changing of attachments by means of hydraulic 4-point quick coupler. (Page 5)*

Maximum flexibility in using the comprehensive range of Komatsu *Original Attachments*. (Page 5)



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Simple operation by means of a servo-controlled *multi-function lever*. (Page 7)

*Unrestricted rear view* due to a very short rear overhang.

Smooth-running, 4-cylinder *Komatsu emissionized engine*. Holding the „Blue Angel“ award on account of its outstanding quietness. (Page 4)

*Optimum service access* from all sides due to lateral engine cover doors. (Page 4)

*Hydrostatic transmission* for evenly-balanced, high penetration power, and a maintenance-free brakes. (Page 4)

*Rear axle oscillation* assures the utmost stability.

*Robust axles*, fitted with automatic multiple-disc limited-slip differentials front and rear.



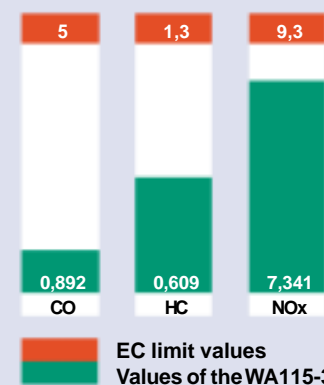
# WA115-3 Wheel loader



## Hydrostatic transmission

The hydrostatic drive ensures excellent traction and maximum operating comfort. Speed and direction can be altered directly and without sudden jerks. Greater efficiency through less gear-changing, as the driver is able to concentrate totally on the task at hand. Wear and maintenance costs are reduced substantially thanks to a reduction in heat generation and to the hydrostatic braking. Two speed ranges are available as an option.

Exhaust gas limit values in g/kWh as per ISO 8178



## Environmentally friendly – inside and out

Both internal and external noise levels of the engine are among the lowest in this class, and it has been awarded the „Blue Angel Award“ due to its very quiet operation. It goes almost without saying that the 4-cylinder Komatsu emissionized engine is outstanding in fuel economy and smoothness of running, and meets the EC Stage II limit values with plenty to spare.



## Simple and convenient access for maintenance

Access to the daily inspection and service points is convenient with the wide-opening bonnet and the side engine-covers, and can easily be reached in safety from ground level. In particular, radiator cleaning has been made very much simpler, and ensures maximum utilisation in industrial and agricultural operations, such as compost manufacture. Central lubrication, which is available as an option, reduces daily maintenance to an absolute minimum.



## 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 a 24-hour spare parts service ensures you minimum downtime.

# ATTACHMENTS

The WA115-3 is outstanding due to its versatility. Whether it is used industrially in structural or civil engineering, road construction, agriculture, forestry or the timber industry, in landscaping companies and nurseries or in community services, the right solution is always available for your requirements. The 4-point quick-coupler as standard equipment guarantees the machine's versatility and thus makes possible high-intensity operation. A universal coupler is also available as an option, allowing the use of other brands of accessory too without problems.

Examples from the comprehensive range of original attachments are:

- Earth-moving bucket
- Light material bucket
- High dump bucket
- Mulch grab bucket
- Sweeper
- Telescopic crane arm
- 4-in-1 bucket
- Side dump bucket
- Fork carrier and tines



# OPTIMUM VIEW



### **Exceptional driver comfort and the best all-round visibility**

The driver's cab of the WA115-3 offers driver comfort comparable with a car. The extensive, flat windows ensure optimum views of tyres and equipment - at every height of lift! The extremely short, wedge-shaped engine cover also gives optimum views to the rear. The low internal noise level is only 73 dB(A), and with the infinitely-adjustable steering column and the exemplary cab ventilation with nine air-vents contributes to the driver's feeling of comfort, as does the highly-adjustable driver's seat with seat heating and air-suspension (option). Optionally available to perfect the cab climate is air-conditioning, and rear screen heating keeps the screen free of condensation. The easily-reached operating switches and the multi-function lever make for comfortable and ergonomic operation. The driver feels good for long, productive hours!

# SIMPLE & CONVENIENT OPERATION

## Compact monitoring system

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



## Multi-function lever as standard equipment

The servo-assisted multi-function lever ensures the simplest and most comfortable operation of the equipment. Simultaneously, the driver can change between forwards and reverse direction with the rocker switch.



## Electric operation of the 3rd control circuit (optional)

The 3rd. control circuit can optionally be operated by means of a rocker switch on the multi-function lever.

In this way, all three control circuits can be controlled comfortably and precisely with only one hand. In the standard versions, light and accurate operation of the 3rd. control circuit is guaranteed, thanks to "Constant Flow Function", by means of a short lever.



## Manual variable speed limiting (optional)

With the manually-variable speed limiter, independent of the position of the accelerator pedal, and without loss of driving force, means that travelling speed can be adjusted infinitely. This "creep function" has distinct advantages when working with a rotary cutter or a sweeper.

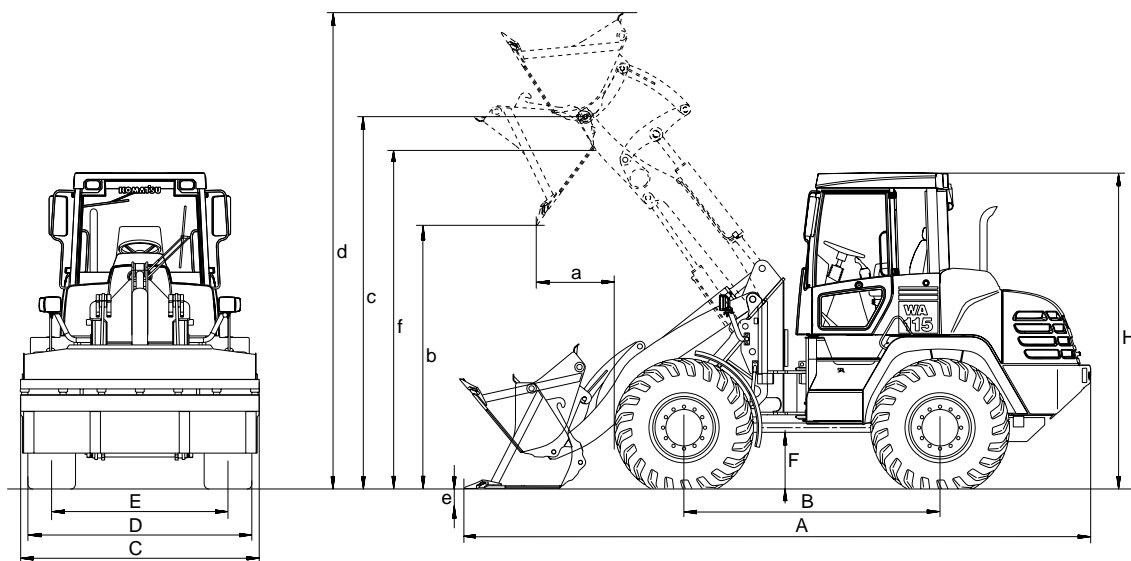


## Pleasant and practical cab equipment

The equipping of the light and welcoming driver's cab takes account of the driver's needs right down to the last detail. A number of shelves, drinks holders, lockable cupboards and the optional cassette-radio round off the driver's comforts.



# DIMENSIONS & WORKING VALUES



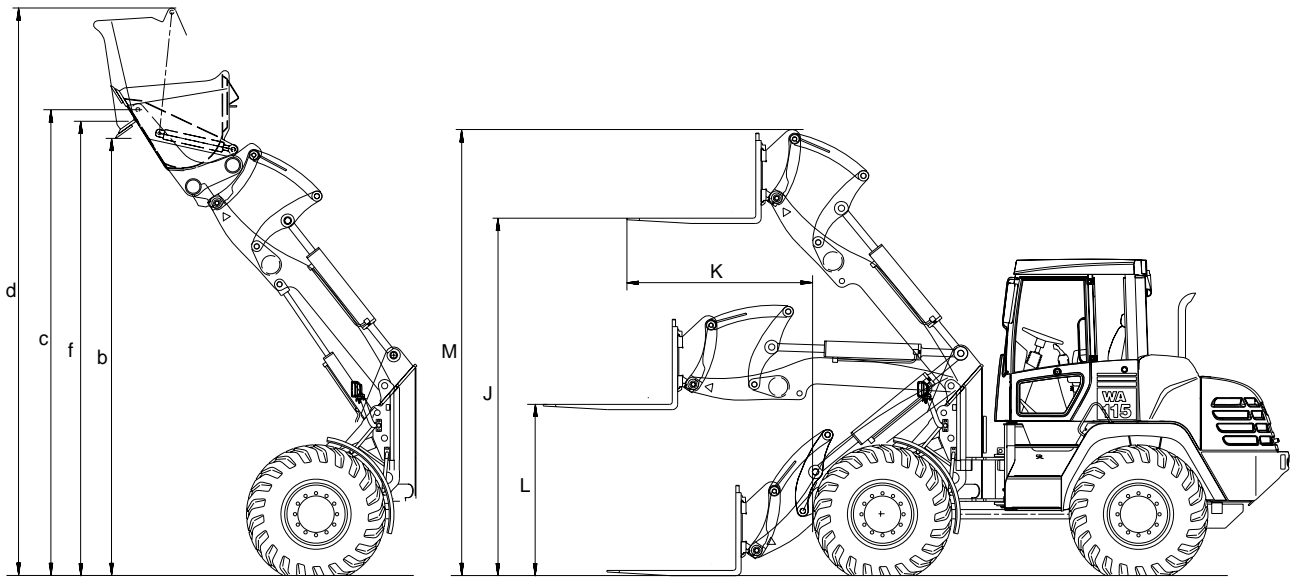
## Working values – use of buckets

Bucket type		Universal	Multi purpose	Mulch grab	Side dump	Stock pile	High dump	Light mat.
<b>Bucket capacity (heaped, ISO 7546)</b>	<b>m<sup>3</sup></b>	<b>1,3</b>	<b>1,2</b>	<b>1,3</b>	<b>1,2</b>	<b>1,5</b>	<b>1,7</b>	<b>2,2</b>
Sales Code	3912	C11	C16	C35	C40	C14	C30	C15
Dumping weight	t/m <sup>3</sup>	1,8	1,8	1,6	1,8	1,6	1,0	1,0
Bucket weight without teeth	kg	555	810	805	885	600	1.225	875
Stat. tipping load, straight	kg	6.065	6.545	5.600	5.230	6.115	4.605	5.395
Stat. tipping load, 40° articulated	kg	5.310	5.750	4.875	4.385	5.355	3.980	4.670
Break-out force hydraulic	kN	73,3	71,5	72,0	57,4	67,5	44,0	53,0
Lifting capability hydr. at ground level	kN	76,7	76,9	76,0	58,4	77,0	60,0	74,0
Operating weight	kg	7.455	7.735	7.720	7.800	7.560	8.120	7.800
Turning radius at corner of tyres	mm	4.520	4.520	4.520	4.520	4.520	4.520	4.520
Turning radius at bucket edge	mm	4.915	4.950	4.920	4.985	4.930	5.200	5.100
a Reach at 45°	mm	815	810	885	995	860	1.420	1.055
b Dumping height at 45°	mm	2.775	2.770	2.700	2.585	2.720	4.020	2.460
c Centre hinge pin height	mm	3.595	3.595	3.595	3.595	3.595	3.595	3.595
d Height bucket top edge	mm	4.590	4.550	4.690	4.755	4.690	4.875	4.750
e Dig depth	mm	85	96	88	103	83	138	125
f Max. loading height at 45°	mm	3.245	3.245	3.270	3.200	3.315	4.360	3.245
A Overall length, bucket grounded	mm	5.975	5.980	6.100	6.250	6.025	6.600	6.350
B Wheelbase	mm	2.450	2.450	2.450	2.450	2.450	2.450	2.450
C Bucket width	mm	2.300	2.300	2.300	2.300	2.310	2.500	2.500
D Width over tyres	mm	2.200	2.200	2.200	2.200	2.200	2.200	2.200
E Track width	mm	1.700	1.700	1.700	1.700	1.700	1.700	1.700
F Ground clearance	mm	378	378	378	378	378	378	378
H Overall height	mm	3.010	3.010	3.010	3.010	3.010	3.010	3.010

All measurements with tyres 455/70 R24 SPT 9. If fitted with tyres sized 15.5 R25: dump heights -14 mm, dump reaches +14 mm. Details given are for buckets without teeth; if equipped with teeth: dump height -134 mm, dump reach +134 mm, overall length +134 mm.



# DIMENSIONS & WORKING VALUES



## Typical material density - loose (in kg/m<sup>3</sup>)

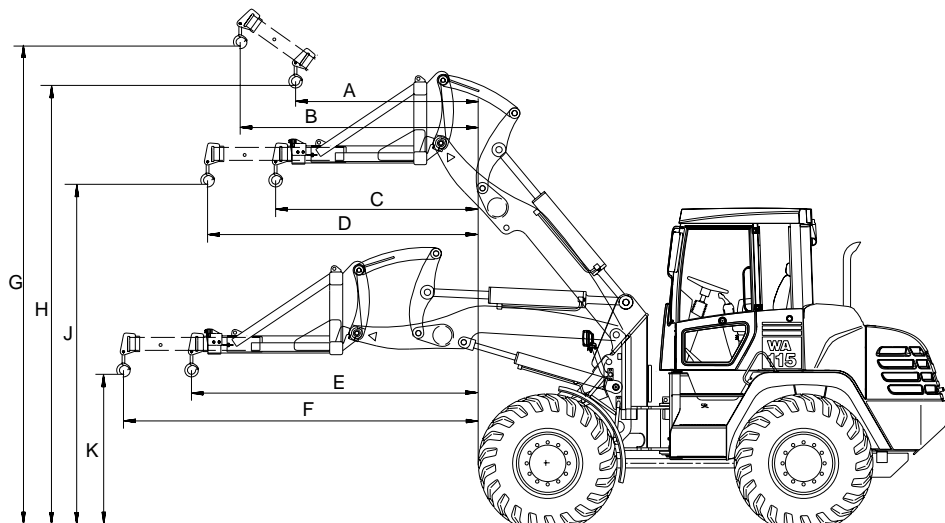
Basalt .....	1960
Bauxite, Kaolin .....	1420
Earth, dry, ex store .....	1510
Earth, wet, excavated .....	1600
Gypsum, broken .....	1810
Gypsum, crushed .....	1600
Granite, broken .....	1660
Limestone, broken .....	1540
Limestone, crushed .....	1540
Gravel, unscreened .....	1930
Gravel, dry .....	1510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

## Performance figures with fork tines

J	Max. stacking height	3.400 mm
K	Max. reach	1.305 mm
L	Height of forks at maximum reach	1.620 mm
M	Top edge, fork-tines	4.250 mm
	Weight in working order with fork tines	7.190 kg
	Max. tipping load, straight ISO 8313	4.810 kg
	Max. tipping load, articulated	4.265 kg
	Max. payload as per EN 474-3, 80%	3.420 kg
	Max. payload as per EN 474-3, 60%	2.565 kg

All measurements as fitted with tyres 455/70 R24 SPT 9.  
Fork-carrier and tines in standard version.  
(With forks length 1.200 mm)

# DIMENSIONS & WORKING VALUES



Performance figures with crane arm	
A	1.690 mm
B	2.205 mm
C	1.875 mm
D	2.505 mm
E	2.655 mm
F	3.280 mm
Capacity: E	1.400 kg
Capacity: F	1.200 kg
G	4.495 mm
H	4.130 mm
J	3.205 mm
K	1.435 mm
Weight in working order with crane arm	7.265 kg

All measurements with tyres 455/70 R24 SPT 9.  
Crane arm in standard version

# TECHNICAL DATA



## ENGINE

Type .....	Komatsu S4D 106-1HC water-cooled, 4-stroke, turbocharger
Rated capacity .....	65 kW/87 HP (ISO 9249)
at engine speed .....	2.200 rpm
Torque .....	max. 366 Nm (ISO 9249)
No. of cylinders .....	4
Bore/stroke .....	106/125 mm
Displacement .....	4.412 cc.
Type of combustion .....	Direct injection
Cooling system .....	Dual circuit, liquid coolant, thermostat-controlled
Electrical system .....	12 V
Battery .....	1 x 12 V, 92 Ah
Alternator .....	80 A
Air filter type .....	Dry air filter with pre-filter and safety cartridge



## TRANSMISSION

Hydrostatic transmission, switchable in all directions under full power.  
Fixed ratio gear-box on the rear axle. Variable speed limiter.

Transmission 20 km/h-version	
Hydrostatic pump .....	1 variable piston pump
Hydrostatic motor .....	1 variable piston motor
Transmission 35 km/h-version	
Hydrostatic pump .....	1 variable piston pump
Hydrostatic motor .....	2 variable piston motors
Speed ranges	
Forwards/backwards .....	2/2
Travelling speeds, 20 km/h-version	
Speed range 1 .....	0 - 7,0 km/h
Speed range 2 .....	0 - 20 km/h
Travelling speeds, 35 km/h-version	
Speed range 1 .....	0 - 15 km/h
Speed range 2 .....	0 - 35 km/h



## CHASSIS AND TYRES

System .....	4-wheel drive
Axles .....	Planetary rigid axles with 45% limited-slip differential in both axles
Oscillating angle rear axle .....	+/- 12°
Tyres .....	455/70 R24 SPT 9 (standard) 405/70 R24 or 16/70-24 405/80 R25 or 15,5 R25



## STEERING SYSTEM

System .....	Articulated frame steering
Type .....	Hydrostatic steering (closed center)
Steering angle to either side .....	38,5°
Steering pump .....	Gear pump
Working pressure .....	175 bar
Minimum turning radius (outer corner of tyre) .....	4,52 m



## BRAKES

Operating brakes .....	Combined inch brake pedal actuates brakes on all four wheels maintenance-free via the hydrostatic drive. Axle-integrated, oil-bath submerged multiple-disc brakes.
Parking brake .....	Mechanically-operated, oil-bath submerged multiple-disc brake.



## HYDRAULIC SYSTEM

System .....	Closed hydraulic system
Working pressure .....	210 bar
Circulating capacity of the hydraulic pump .....	115 l/min
Lifting time .....	4,9 s
Lowering time .....	3,7 s
Dumping time .....	1,5 s



## SERVICE REFILL CAPACITIES

Fuel tank .....	120 l
Engine cooling system .....	15 l
Engine oil .....	14 l
Hydraulic system .....	85 l
Front- and rear-axle, each	
Differential .....	4,5 l
Planet drive .....	2 x 1,5 l
Transmission ratios	
20 km/h-version .....	1,6 l
35 km/h-version .....	1,0 l

## STANDARD EQUIPMENT

- Standard bucket 1,3 m<sup>3</sup> (SAE heaped)
- Parallel linkage
- integrated hydraulic KOMATSU 4-point quick-coupler
- electrically-actuated quick coupler
- „Return-to-dig“
- 3rd control circuit for attachment hydraulics
- Hitch
- 455/70 R 24 tyres
- Quick-check panel

- Two-door safety cab, as per ISO 3471
- with roof protection ROPS/FOPS
- All-round tinted glass
- Sliding side-window, on the right
- Heated rear window
- Adjustable high-comfort operator seat
- Safety belt (EC standard)
- Heating
- PPC hydraulic system
- Multi-function lever for transmission/hydraulics

- Working hours meter
- Temperature indicator for engine cooling system
- Fuel indicator
- 2 main lights
- 2 each halogen working lights front and rear
- 2 turning lights
- 2 turning lights, rear

General operating certification, in accordance with German Road Traffic Regulations.  
The WA115-3 is equipped in

accordance with the safety regulations of the machinery guidelines 89/662 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

WA115-3: Awarded the Blue Angel on account of quietness in operation: noise values LwA 101 dB(A), LpA 73 dB(A)

## OPTIONAL EQUIPMENT

- ALS Automatic Load Stabiliser
- Integrated quick coupler in brand-compatible version
- Electr. actuation 3rd circuit
- Light materials bucket 2,2 m<sup>3</sup>
- Multi purpose bucket 1,2 m<sup>3</sup>
- Stock pile bucket 1,5 m<sup>3</sup>
- Mulch grab bucket 1,3 m<sup>3</sup>

- Side dump bucket 1,2 m<sup>3</sup>
- High dump bucket 1,7 m<sup>3</sup>
- Fork carrier and tines
- Telescopic crane-arm
- Sweeper
- Over-centre valve
- Beacon light
- Back-up alarm
- Cab air safety system

- Exhaust gas particles filter
- Turbo III pre-filter
- Electronic anti-theft lock
- Creep function for transmission
- 35 km/h version
- Battery main switch
- Fire extinguisher
- Bio-hydraulic oil for hydraulic equipment

- Air-suspended, heated seat
- Radio
- Air conditioning
- Special livery

Further features on application

# KOMATSU

[www.komatsueurope.com](http://www.komatsueurope.com)