

# WA180 PT-3 *active* The advantages at a glance.

*Gull wing engine side covers including rear fender and rear radiator grill open fully at a touch. These afford clean, easy and light maintenance.*

*Integrated ROPS/FOPS driver's cab mounted on rubber bearings reduces noise and vibration. Noise level in the cab 75 dB(A) 95/27/EC.*

*Exterior parts are treated with rust resistant undercoat and strong top coat. High quality paint assures good appearance.*

*6 cylinder KOMATSU low emission engine. Already conforms to the future EU standard tomorrow.*

*The parallel lift assure high lifting force and perfect parallelism. 2-mode (slow/fast mode) dumping speed is available and provide easy operation.*

*Hydraulically activated quick-hitch as standard assures high versatility and quick attachment change.*

*A kick down switch on the boom lever shifts from forward 2nd to 1st gear at a touch and provides larger rim pull.*

*The engine, torque converter and transmission as well as the hydraulic equipment and electrical parts under go strict quality control for enhanced reliability and durability.*

*Fully automatic four gear shift transmission affords superior maneuverability.*

*Torque proportioning differentials in both axles enable a smooth ride in muddy or sandy terrain.*

*Fully sealed wet disc type service and parking brakes provide full protection against dust. This ensures less maintenance and service.*

## Options

- High quality, modern and fully automatic air conditioning system assures always clean and the most comfort in the cab.
- ECSS reduces vibrations and protects driver and machine.
- Wide variety front attachments apply the machine to various applications.

### KOMATSU HANOMAG: The best of both worlds.

The wheel loaders are the WA-3 series of the first integrated products which have been jointly produced by KOMATSU and

KOMATSU HANOMAG in Hanover. Besides the production of wheel loaders, the factory in Hanover is also specialised in the construction and design of axles and transmissions.

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# WHEELED LOADER WA180 PT-3 ACTIVE



# KOMATSU

Engine output: **82 kW/112 HP/2.400 rpm**

Bucket sizes: **1.6–2.2 m<sup>3</sup>**

Operating weight: **10.43 ton**

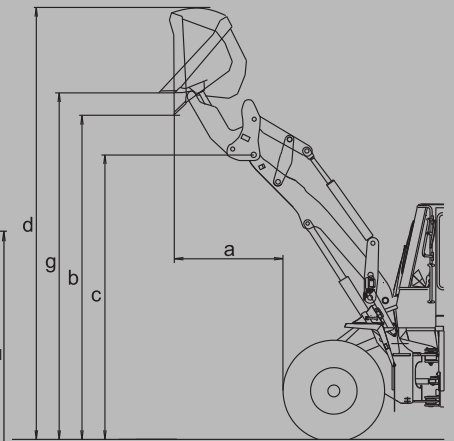
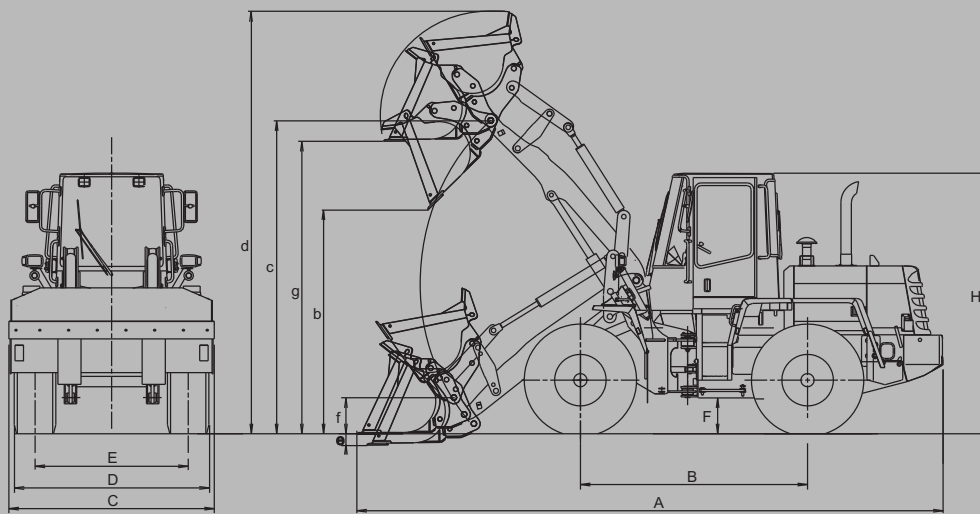
**NEW**  
PRELIMINARY



## WA180 PT-3 **active**

- Low emission and powerful Komatsu S6D102E engine provides an environmentally-friendly and fuel efficient operation
- Large bucket capacity and dumping clearance enhance overall productivity and working efficiency
- Easy change of front attachment with hydraulic quick coupler (standard)
- Perfect parallelism provides wider application and easy loading
- Full automatic four-gearshift transmission provides optimum speed, resulting in greater maneuverability
- Kick-down switch on the loader control lever improves pile-penetration and scooping operations
- Torque proportioning differentials ensure a smoother, positive ride on rough terrain for longer tire life
- Reduced outside noise level of 106 dB(A) meets 95/27/EC
- Rubber-mounted floor frame reduces vibration and noise. Noise level in the cab is 75 dB(A) by 95/27/EC
- Durable and ergonomically designed steps and handrails guarantee safety and comfort
- Adjustment-free service and parking brakes account for higher performance and reduced downtime
- Gull-wing engine side covers facilitate easy engine access and easy checking/replacement of engine oil or filters
- Rust-resistant high-quality paint assures good appearance and longer service life

# Dimensions and Operating Data.



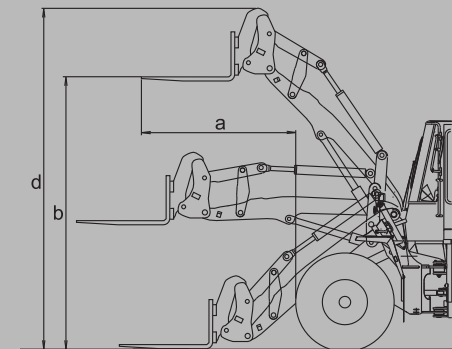
- B: Wheel base 2700 mm
- D: Width over tires 2310 mm
- E: Tread 1820 mm
- F: Ground clearance 425 mm
- H: Height of cab 3095 mm
- c: Hinge pin high 3760 mm
- Tire 17.5 R 25

	Standard	Loading	Light Material	High dump
Bucket Part Nr	417-70-H2200	417-70-H2300	417-70-H2650	417-70-H2900
Bucket SAE heaped	1.6 m <sup>3</sup>	1.7 m <sup>3</sup>	2.2 m <sup>3</sup>	1.9 m <sup>3</sup>
Density	1.8 ton/m <sup>3</sup>	1.7 ton/m <sup>3</sup>	1.3 ton/m <sup>3</sup>	1.2 ton/m <sup>3</sup>
Payload	2900 kg	2900 kg	2900 kg	2900 kg
C Bucket width	2500 mm	2500 mm	2700 mm	2700 mm
Bucket weight	770 kg (teeth)	840 kg (BOC)	790 kg	1100 kg
Static tipping load straight	6880 kg	6790 kg	6865 kg	5300 kg
Static tipping load articulated	5985 kg	5910 kg	5970 kg	4610 kg
Breakout force	88.0 kN	98.5 kN	90.6 kN	64.3 kN
Lift capacity (on ground)	77.4 kN	82.5 kN	79.8 kN	57.5 kN
Turning radius at corner of bucket teeth	5570 mm	—	—	—
Turning radius at corner of bucket	5525 mm	5550 mm	5655 mm	5770 mm
A Overall length	7070 mm (teeth) 6880 mm	— 6930 mm	— 7030 mm	— 7480 mm
a Dumping reach	1205 mm (teeth) 1070 mm	— 1090 mm	— 1180 mm	— 1600 mm
b Dumping clearance	2620 mm (teeth) 2745 mm	— 2700 mm	— 2640 mm	— 4500 mm
d Total height	5060 mm	5060 mm	5200 mm	5720 mm
e Digging depth	75 mm	95 mm	75 mm	75 mm
g Clearance at bucket horizontal	3395 mm	3575 mm	3595 mm	4690 mm
Operating weight	10245 kg	10315 kg	10265 kg	10575 kg

Engine emissions ISO 8178

- HC = 0,61 g/kWh (1,3)
- CO = 0,98 g/kWh (5,0)
- Nox = 8,16 g/kWh (9,2)
- PM = 0,34 g/kWh (0,7)

Figures in ( ) show the limit of new EC regulation of the year 2001.



### Fork

- b Dumping clearance (Fork clearance) 3640 mm
- a Dumping reach (Fork reach) 2100 mm
- d Total height 4540 mm
- Static tipping load, 0° (ISO 8313) 5200 kg
- Static tipping load, 40° 4525 kg
- Max. pay load EN 474, 80 % 3620 kg
- Lift capacity 65,5 kN

Bucket type	Capacity in m <sup>3</sup>	
Bucket	1.6	
Bucket	1.7	
Light-mat. bucket	2.2	
Material density	in (t/m <sup>3</sup> )	0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0


In most cases, the actual volume ranges higher than the ISO/SAE classification. The table specifies the optimum bucket with reference to the material.


Material	Bucket filling %	Density t/m <sup>3</sup>
Earth	100–115	1.5–1.6
Clay	110–120	1.5–1.7
Sand	100–110	1.4–1.8
Gravel	85–110	1.5–2.0
Rock	75–100	1.6–2.0


- not economical
- recommended
- fully utilised


# The specifications at a glance.


The actual standard equipment varies according to the sales territory. Please contact your KOMATSU distributor for any further information.


 <b>Engine</b>	
Make	KOMATSU
Model	S6D102 E1
Type	Diesel, Turbo
Power at engine speed	82 kW/112 hp (ISO 9249) 2,400 rpm
Max. torque	417 Nm (ISO 9249)
Number of cylinders	6
Bore/stroke	102/120 mm
Displacement	5,900 cm <sup>3</sup>
Compression ratio	17.3 : 1
Combustion principal	Direct injection, turbocharged
Cooling system	Two-circuit liquid cooling, with thermostat control
Electrical system	24 volt
Battery	2 x 12 volt, 110 Ah
Three-phase alternator	50 A
Air filter type	HD dry air filter


 <b>Transmission</b>	
Type	Fully automatic Full Powershift transmission with "kick down" system


 <b>Travel speeds</b>	
Forward	1st gear 0 - 7.2 km/h 2nd gear 0 - 12.0 km/h 3rd gear 0 - 22.0 km/h 4th gear 0 - 34.5 km/h
Reverse	1st gear 0 - 7.7 km/h 2nd gear 0 - 12.6 km/h 3rd gear 0 - 22.9 km/h 4th gear 0 - 35.0 km/h

 <b>Filling capacities</b>	
Fuel	170 l
Engine oil	19.5 l
Cooling system	21.5 l
Torque converter/transmission power shift	23.5 l
Front axle	14.0 l
Rear axle	14.0 l
Operating hydraulics system	41 l

 <b>Hydraulic system</b>	
Operating pressure	
Relief valve setting	210 bar
Delivery capacity	144 l/min
Loading times	
lifting (full load)	5.0 sec.
dumping	1.1 sec.
lowering	2.5 sec.
Automatic bucket lift kickout, automatic digging angle adjustment for Bucket and Fork changeable in cab.	

 <b>Chassis</b>	
System	All-wheel drive, planetary reduction gear in the differential housing
Front axle	HD axle with torque proportioning differential
Rear axle	HD axle with torque proportioning differential, oscillating suspension
Oscillating Tyres	12° per side 17.5 R25 17.5-25 445/80 R25

 <b>Steering system</b>	
Type	Hydrostatic
System	Articulated steering
Centre pivot	adjustment free
Steering angle	40° per side
Steering pump	
operating pressure	190 bar
delivery capacity	106 l/min
Min. turning radius	
outer edge, standard bucket	5570 mm
Emergency steering system	Via additional pump

 <b>Brakes</b>	
Operating brake	Hydraulically actuated, wet disc brakes on four wheels (all-wheel brake)
Hand brake	Wet disc brake in transmission

## **Standard equipment**

Sound-insulated high-comfort driver's cab with integrated (ROPS/FOPS) • openable windows • 2 halogen front headlights • 2 halogen working lights each at front and rear • vandalism protection • AM/FM cassette player • fully automatic transmission with additional kick down device • single-lever hydraulic actuation • service brake wet disc type • Torque proportioning differentials in front and rear axle • emergency steering system • automotive type instrument panel • Hydraulic quick-coupler attachment • 3 spool valve • automatic digging angle adjustment (return to dig) • bucket lift kickout 17.5 R25 tyres (radial) • loader linkage parallel design with 2 lift- and 2 dump cylinder– sealed bearing points • integrated sound insulation • registered according to StVZO • fully reclining seat with head rest • batteries 2 x 12 V 110 Ah alternator 50 A starting motor 24 V 4.5 kW.

The WA180PT-3 is equipped in accordance with safety regulations and its emission values correspond to the regulations of the international standard ISO 6393 and the EC directive 95/27/EC, noise levels:  $L_{WA} = 106$  dB(A),  $L_{pA} = 75$  dB(A).

## **Options**

load stabiliser (ECSS System) • back-up alarm • central lubricating system • special buckets • special tyres (e.g. rock, recycling, sand, clay etc.) • tyre protecting chains • catalytic converter • air-conditioning (cfc free) • speed limit (20 km/h) • TURBO II pre-filter • multi-function lever for hydraulic system + transmission (MFL) • Fire extinguisher.