

ENGINE

Model	Komatsu SAA6D140E-6
	Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel
Engine power	
at rated engine speed	1.900 rpm
ISO 14396	266 kW / 357 HP
ISO 9249 (net engine power)	263 kW / 353 HP
Max. torque / engine speed	1.785 Nm / 1.250 rpm
No. of cylinders	6
Bore × stroke	140 × 165 mm
Displacement	15,24 ltr
Fan drive type	Hydraulic
Alternator	90 A/24 V
Starter motor	11 kW/24 V
Filter	Main-flow filter with water separator
Air-filter type	Dry-air filter with automatic dust emission and preliminary purification including a dust display

TRANSMISSION

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

Speeds in km/h (with 29.5 R25 tyres)

Gear	1.	2.	3.	4.
Forward	7,5	12,9	22,2	35,5
with torque converter lock-up	–	13,1	23,7	37,3
Reverse	8,5	12,9	24,7	38,0
with torque converter lock-up	–	13,0	26,6	38,0

CHASSIS AND TYRES

System	4-wheel drive
Front axle	Komatsu HD axle, full-floating, (LSD-differential optional)
Rear axle	Komatsu HD axle, full-floating, 24° swing angle (LSD-differential optional)
Differential	Spiral bevel gear pair
Final drive	Planetary gear in an oil bath
Tyres	29.5 R25

SERVICE REFILL CAPACITIES

Cooling system	133 ltr
Fuel tank	473 ltr
Engine oil	37 ltr
Hydraulic system	337 ltr
Front axle	95 ltr
Rear axle	95 ltr
Torque converter and transmission	71 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

Type	Komatsu CLSS (Closed Centre Load Sensing System)
Hydraulic pump	Variable piston pump
Working pressure	350 kg/cm ²
Maximum pump flow	320 ltr/min
No. of hydraulic/bucket cylinders	2/1
Type	Double-action
Bore diameter × stroke	
Boom cylinder	160 × 989 mm
Bucket cylinder	185 × 675 mm
Hydraulic cycle with rated load bucket filling	
Raise time	7,2 s
Lowering time (empty)	4,2 s
Dumping time	1,7 s

STEERING SYSTEM

System	Articulated frame steering
Type	Completely hydraulic power steering
Steering angle to either side	40°
Steering pump	Variable piston pump
Working pressure	250 kg/cm ²
Pumping capacity	120 ltr/min
No. of steering cylinders	2
Type	Double-action
Bore diameter × stroke	100 × 486 mm
Smallest turn (outer edge of the tyre 29.5 R25)	7.050 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 emissions	Fully complies with EU Stage IIIB and EPA Tier 4 interim exhaust emission regulations
Noise levels	
LwA external	109 dB(A) (2000/14/EC Stage II)
LpA operator ear	72 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)*	
Hand/arm	≤ 2,5 m/s ² (uncertainty K = 1,12 m/s ²)
Body	≤ 0,5 m/s ² (uncertainty K = 0,24 m/s ²)

* for the purpose of risk assessment under directive 2002/44/EC, please refer to ISO/TR 25398:2006.

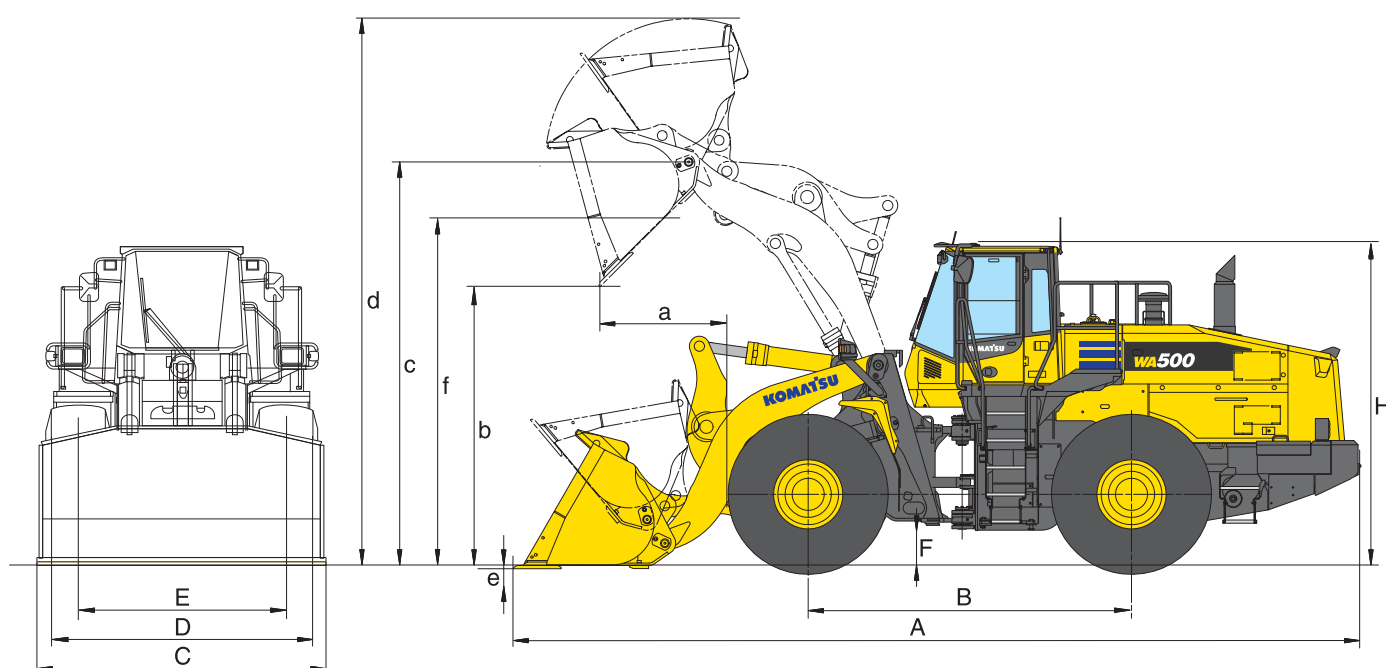
Dimensions & Performance Figures

MEASUREMENTS AND WORKING SPECIFICATIONS

Bucket type		Universal bucket		Rock bucket Straight edge		Rock bucket Spade nose	
		w. teeth	w. BOC	w. teeth	w. teeth & BOC	w. teeth	w. teeth & BOC
Bucket capacity (heaped, ISO 7546)	m ³	5,3	5,6	5,3	5,6	5,2	5,6
Sales code		3987 C02	C03	C29	C30	C32	C33
Material density	t/m ³	1,85	1,75	1,9	1,75	1,85	1,75
Bucket weight	kg	2.875	2.915	3.015	3.060	3.240	3.280
Static tipping load, straight	kg	26.760	26.530	26.695	26.445	26.125	25.965
Static tipping load, 40° articulated	kg	22.880	22.680	22.810	22.590	22.320	22.135
Break-out force hydraulic	kN	287	273	287	273	235	225
Lifting capability hydr. at ground level	kN	300	298	298	297	293	292
Operating weight	kg	35.095	35.335	35.435	35.480	35.660	35.700
Turning radius at corner of tyres	mm	6.870	6.870	6.870	6.870	6.870	6.870
Turning radius at bucket edge	mm	7.660	7.600	7.660	7.600	7.660	7.700
a Reach at 45°	mm	1.545	1.360	1.545	1.360	1.545	1.585
b Dumping height at 45°	mm	3.265	3.325	3.265	3.265	3.265	3.265
c Hinge pin height	mm	4.795	4.795	4.795	4.795	4.795	4.795
d Height top edge of bucket	mm	6.535	6.535	6.715	6.715	6.715	6.715
e Digging depth	mm	95	125	95	125	120	125
f Max. loading height at 45°	mm	4.420	4.420	4.420	4.420	4.420	4.420
A Overall length, bucket grounded	mm	9.890	9.680	9.890	9.680	9.900	10.000
B Wheel base	mm	3.780	3.780	3.780	3.780	3.780	3.780
C Bucket width	mm	3.430	3.440	3.430	3.440	3.430	3.440
D Width over tyres	mm	3.150	3.150	3.150	3.150	3.150	3.150
E Track width	mm	2.400	2.400	2.400	2.400	2.400	2.400
F Ground clearance	mm	460	460	460	460	460	460
H Overall height	mm	3.820	3.820	3.820	3.820	3.820	3.820

All measurements with tyres 29.5 R25 (XLDD1A).

Details of dumping heights and reach to cutting edge or bolt-on cutting edge (BOC) or teeth





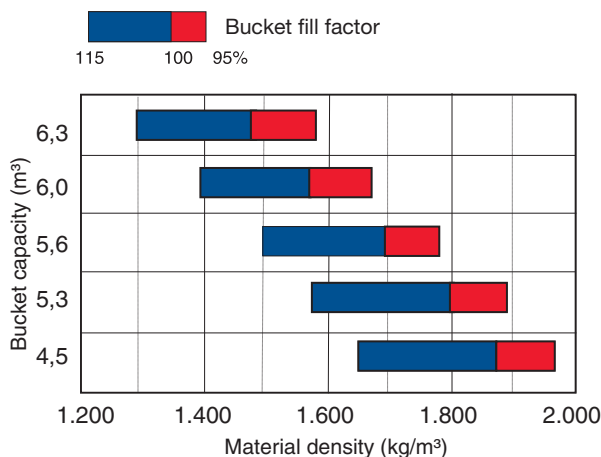
Stock pile bucket			Universal bucket (High lift)			
w/o. teeth	w. teeth	w. BOC	w/o. teeth	w. BOC	w. teeth	w. BOC
5,6	5,6	5,9	6,0	6,3	4,5	4,7
C10	C11	C12	C05	C07	C14	C15
1,77	1,75	1,65	1,65	1,6	1,88	1,8
2.765	2.975	3.020	2.870	3.125	2.570	2.620
24.805	24.520	26.270	24.840	26.060	21.190	21.065
21.220	20.935	22.440	21.230	22.245	18.030	17.915
277	277	264	264	252	320	303
300	297	295	297	292	254	253
34.985	35.195	35.440	35.090	35.545	35.170	35.215
6.870	6.870	6.870	6.870	6.870	6.870	6.870
7.590	7.680	7.620	7.610	7.640	7.840	7.780
1.360	1.580	1.395	1.415	1.445	1.545	1.355
3.455	3.235	3.280	3.340	3.225	3.800	3.945
4.795	4.795	4.795	4.795	4.795	5.205	5.205
6.605	6.605	6.605	6.685	6.685	6.795	6.795
95	95	95	95	125	170	200
4.420	4.420	4.420	4.420	4.420	4.845	4.845
9.630	9.940	9.730	9.705	9.805	10.205	10.190
3.780	3.780	3.780	3.780	3.780	3.780	3.780
3.430	3.430	3.440	3.430	3.440	3.430	3.440
3.150	3.150	3.150	3.150	3.150	3.150	3.150
2.400	2.400	2.400	2.400	2.400	2.400	2.400
460	460	460	460	460	460	460
3.820	3.820	3.820	3.820	3.820	3.820	3.820

TYPICAL MATERIAL DENSITY – LOOSE (IN kg/m³)

Basalt	1.960
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	1.660
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, dry	1.480
Clay, wet	1.660
Clay and gravel, dry	1.420
Clay and gravel, wet	1.540

CHANGE IN DATA CAUSED BY:

		Tyres XHA L3	Tyres XMINE L5
Operating weight	kg	-500	+635
Static tipping load, straight	kg	-360	+450
Static tipping load, 40° articulated	kg	-315	+400
Reach at 45°	mm	+20	+5
Dump height at 45°	mm	-20	+10
Width over tyres	mm	-20	+35
Overall height	mm	-20	+20



- Stock pile bucket Loading loosened material
- Stock pile bucket Loading loosened or broken material, or load & carry
- Universal and stock pile bucket Earthworks, broken material or load & carry
- Rock bucket Loading blasted and particularly abrasive material
- Rock bucket Loading blasted and particularly abrasive material in combination with high-lift boom