

ENGINE

Model Komatsu SAA6D125E-6
Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel

Engine power
at rated engine speed 2.000 rpm
ISO 14396 204 kW / 273 HP
ISO 9249 (net engine power) 203 kW / 272 HP

Max. torque / engine speed 1.330 Nm / 1.450 rpm

No. of cylinders 6

Bore × stroke 125 × 150 mm

Displacement 11,04 ltr

Fan drive type Hydraulic

Alternator 50 A/24 V

Starter motor 7,5 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 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	39,0
Reverse	7,9	13,5	23,5	37,3
with torque converter lock-up	–	13,8	24,3	39,0

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 Spiral bevel gear pair

Final drive Planetary gear in an oil bath

Tyres 26.5 R25

SERVICE REFILL CAPACITIES

Cooling system 80 ltr

Fuel tank 380 ltr

Engine oil 68 ltr

Hydraulic system 173 ltr

Front axle 57 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

Type Komatsu CLSS (Closed Centre Load Sensing System)

Hydraulic pump Variable piston pump

Working pressure 350 kg/cm²

Maximum pump flow 260 ltr/min

No. of hydraulic/bucket cylinders 2/1

Type Double-action

Bore diameter × stroke

Boom cylinder 140 × 764 mm

Bucket cylinder 160 × 575 mm

Hydraulic cycle with rated load bucket filling

Raise time 6,1 s

Lowering time (empty) 3,1 s

Dumping time 1,6 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/cm²

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 tyre 26.5 R25) 6.630 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 107 dB(A) (2000/14/EC Stage II)

LpA operator ear 70 dB(A) (ISO 6396 dynamic test)

Vibration levels (EN 12096:1997)*

Hand/arm ≤ 2,5 m/s² (uncertainty K = 2,31 m/s²)

Body ≤ 0,5 m/s² (uncertainty K = 0,48 m/s²)

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

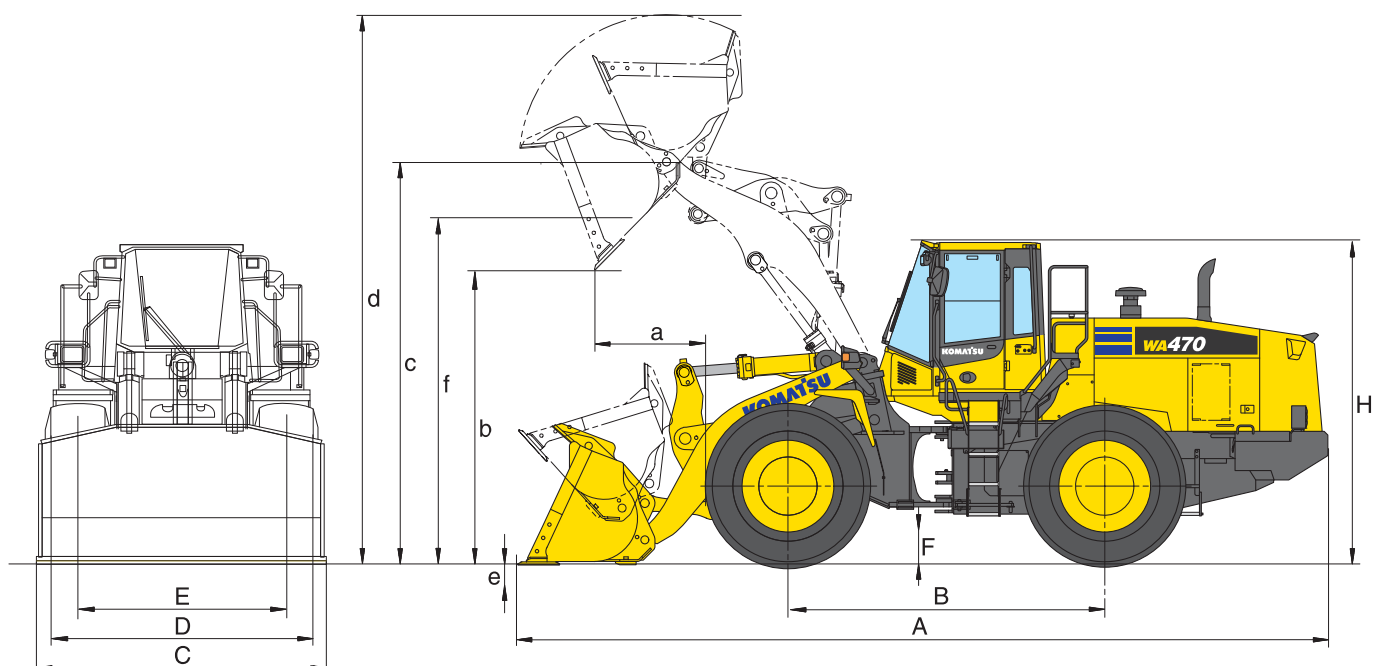
Dimensions & Performance Figures

MEASUREMENTS AND WORKING SPECIFICATIONS

Bucket type	Universal bucket				Earthmoving bucket		
		w. teeth	w. BOC	w. teeth	w. BOC	w. teeth	w. BOC
Bucket capacity (heaped, ISO 7546)	m ³	4,1	4,25	4,5	4,65	4,2	4,35
Sales code		3989 C02	C03	C12	C13	C42	C45
Material density	t/m ³	1,8	1,7	1,6	1,55	1,75	1,65
Bucket weight	kg	2.015	2.090	2.085	2.160	2.185	2.255
Static tipping load, straight	kg	19.235	19.185	19.155	19.095	19.185	19.040
Static tipping load, 40° articulated	kg	16.580	16.530	16.505	16.440	16.415	16.385
Break-out force hydraulic	kN	194	183	193	183	192	181
Lifting capability hydr. at ground level	kN	232	230	232	230	231	229
Operating weight	kg	23.825	23.880	23.910	23.975	23.810	24.035
Turning radius at corner of tyres	mm	6.990	6.990	6.990	6.990	6.990	6.990
Turning radius at bucket edge	mm	7.670	7.625	7.745	7.700	7.670	7.630
a Reach at 45°	mm	1.465	1.315	1.465	1.315	1.480	1.330
b Dumping height at 45°	mm	2.900	3.010	2.900	3.010	2.885	2.995
c Hinge pin height	mm	4.335	4.335	4.335	4.335	4.335	4.335
d Height top edge of bucket	mm	5.975	5.975	5.975	5.975	5.950	5.950
e Digging depth	mm	125	155	125	155	125	155
f Max. loading height at 45°	mm	4.025	4.025	4.025	4.025	4.020	4.020
A Overall length, bucket grounded	mm	9.090	8.930	9.090	8.930	9.140	8.950
B Wheel base	mm	3.450	3.450	3.450	3.450	3.450	3.450
C Bucket width	mm	2.995	3.000	3.165	3.170	2.990	3.000
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	505	505	505	505	505	505
H Overall height	mm	3.475	3.475	3.475	3.475	3.475	3.475

All measurements with tyres 26.5 R25 (XHA).

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





Stock pile bucket with flat bottom		Stock pile bucket with raised bottom		Heavy Duty bucket		Light material	Universal (High-lift)*
w. teeth	w. BOC	w. teeth	w. BOC	w. teeth	w. BOC	w. teeth	w. teeth
4,6	4,75	4,8	5,0	4,1	4,25	6,0	4,1
C44	C70	C16	C17	C36	C37	C21	C03
1,6	1,55	1,6	1,55	1,75	1,65	1,2	1,55
2.420	2.570	2.295	2.270	2.388	2.450	2.305	1.865
18.945	18.897	18.988	18.925	18.960	18.920	19.325	19.290
16.290	16.243	16.334	16.270	16.305	16.265	16.675	16.634
182	172	182	172	195	184	167	189
229	228	229	228	231	230	228	195
24.145	24.198	24.163	24.230	24.130	24.175	23.725	23.830
6.990	6.990	6.990	6.990	6.990	6.990	6.990	6.990
7.695	7.645	7.710	7.740	7.665	7.625	7.765	7.830
1.535	1.380	1.535	1.380	1.460	1.310	1.460	1.455
2.835	2.945	2.835	2.945	2.905	3.015	2.935	3.600
4.335	4.335	4.335	4.335	4.335	4.335	4.335	4.850
5.980	5.980	5.980	5.980	5.950	5.950	6.265	6.485
125	155	125	155	125	155	105	265
4.020	4.020	4.020	4.020	4.020	4.020	4.065	4.530
9.185	8.990	9.130	9.160	9.085	8.925	9.050	9.600
3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450
2.995	2.995	2.995	2.995	2.995	2.995	3.250	2.990
2.975	2.975	3.165	3.170	2.975	2.975	2.975	2.975
2.300	2.300	2.300	2.300	2.300	2.300	2.300	2.300
505	505	505	505	505	505	505	505
3.475	3.475	3.475	3.475	3.475	3.475	3.475	3.475

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:

		Add. counterweight	Heavy counterweight	StVZO counterweight	Tyres GP-4D	Tyres XMINE L5
Operating weight	kg	+385	+1.055	-670	+370	+1.125
Static tipping load, straight	kg	+984	+2.600	-1.370	+325	+840
Static tipping load, 40° articulated	kg	+820	+2.270	-1.135	+280	+760
Overall length	mm	+190	+120	0	-	-
Reach at 45°	mm	-	-	-	-15	-30
Dump height at 45°	mm	-	-	-	+15	+30
Width over tyres	mm	-	-	-	+30	+45
Overall height	mm	-	-	-	+15	+30

