

ENGINE

Model	Komatsu SAA6D125E-5 Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel
Engine power	
at rated engine speed	2.000 rpm
ISO 14396	224 kW / 300 HP
ISO 9249 (net engine power)	223 kW / 299 HP
Max. torque / engine speed	1.390 Nm / 1.400 rpm
No. of cylinders	6
Bore × stroke	125 × 150 mm
Displacement	11,04 ltr
Fan drive type	Hydraulic
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

Type	Komatsu CLSS (Closed Centre Load Sensing System)
Hydraulic pump	Variable piston pump
Working pressure	350 bar
Maximum pump flow	260 ltr/min
No. of hydraulic/bucket cylinders	2/1
Type	Double-action
Bore diameter × stroke	
Boom cylinder	140 × 881 mm
Bucket cylinder	180 × 572 mm
Hydraulic cycle with rated load bucket filling	
Raise time	5,9 s
Lowering time (empty)	3,5 s
Dumping time	1,9 s

STEERING SYSTEM

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 tyre 26.5 R25)	7.000 mm

CABIN

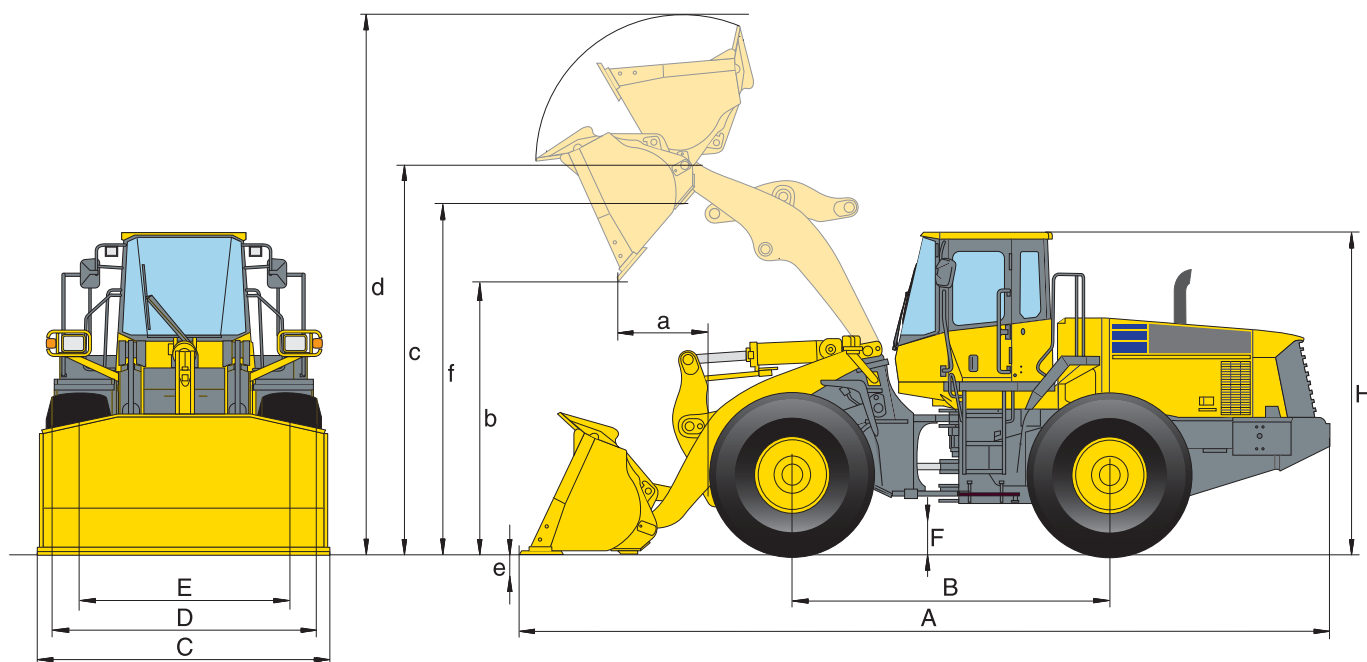
Two-door SpaceCab™ in conformity with ISO 3471 with ROPS (roll over protective structure) in conformity with SAE J1040c and FOPS (falling object protective structure) in conformity with ISO 3449. The air-conditioned pressurised cabin is mounted upon hydrobearings and is noise dampened.

ENVIRONMENT

Engine emissions	Fully complies with EU Stage IIIA and EPA Tier III exhaust emission regulations
Noise levels	
LwA external	108 dB(A) (2000/14/EC Stage II)
LpA operator ear	73 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)*	
Hand/arm	≤ 2,5 m/s ² (uncertainty K = 0,66 m/s ²)
Body	≤ 0,5 m/s ² (uncertainty K = 0,21 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		Earthmoving			Stock pile with flat bottom	
		w.teeth	with BOC	w/o teeth	w.teeth	with BOC
Bucket capacity (heaped, ISO 7546)	m ³	4,5	4,65	4,9	4,9	5,0
Sales code	3967	C42	C43	C44	C45	C46
Material density	t/m ³	1,8	1,8	1,6	1,6	1,6
Bucket weight	kg	2.365	2.445	2.335	2.495	2.570
Static tipping load, straight	kg	20.705	20.465	20.735	20.520	20.295
Static tipping load, 37° articulated	kg	18.325	18.100	18.365	18.145	17.935
Break-out force hydraulic	kN	240	227	228	228	217
Lifting capability hydr. at ground level	kN	263	261	262	262	260
Operating weight (without add. counterw.)	kg	25.400	25.480	25.370	25.530	25.605
Turning radius at corner of tyres	mm	7000	7000	7.000	7000	7000
Turning radius at bucket edge	mm	7760	7715	7700	7780	7735
a Reach at 45°	mm	1.542	1.389	1.410	1.595	1.440
b Dump height at 45°	mm	3.032	3.143	3.165	2.980	3.090
c Hinge pin height	mm	4.483	4.483	4.485	4.485	4.485
d Height top edge of bucket	mm	6.110	6.110	6.140	6.140	6.140
e Digging depth	mm	130	160	130	130	160
f Max. loading height at 45°	mm	4.160	4.160	4.160	4.160	4.160
A Overall length, bucket grounded	mm	9.420	9.420	9.235	9.495	9.330
B Wheelbase	mm	3.450	3.450	3.450	3.450	3.450
C Bucket width	mm	3.165	3.170	3.160	3.165	3.170
D Width over tyres	mm	2.975	2.975	2.975	2.975	2.975
E Track width	mm	2.300	2.300	2.300	2.300	2.300
F Ground clearance	mm	500	500	500	500	500
H Overall height	mm	3.465	3.465	3.465	3.465	3.465

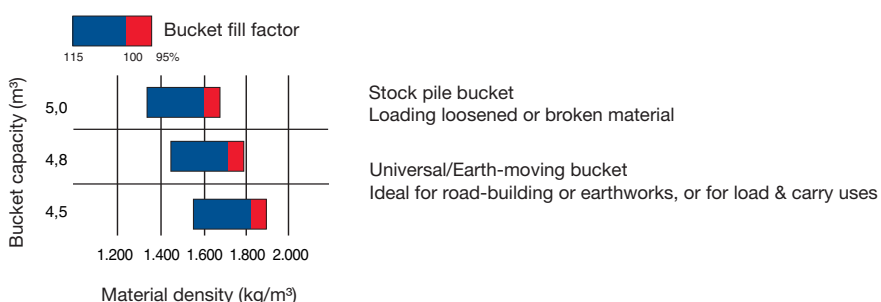
All measurements with tyres 26.5 R25.

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



CHANGE IN DATA CAUSED BY:

	Without add. counterweight (rear)	Tyres 26.5 R25 XLD D1A L4	Tyres 26.5 R25 XMINE D2 L5
Operating weight	- 400 kg	+ 392 kg	+ 1.124 kg
Static tipping load, straight	- 1.020 kg	+ 280 kg	+ 795 kg
Static tipping load, 37° articulated	- 890 kg	+ 250 kg	+ 720 kg
Overall length, bucket grounded	- 165 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



TYPICAL MATERIAL DENSITY – LOOSE (IN kg/m³)

Stock pile with raised bottom			Universal		
w/o teeth	w.teeth	with BOC	w/o teeth	w.teeth	with BOC
4,9	4,9	5,0	4,65	4,65	4,80
C15	C16	C17	C01	C02	C03
1,6	1,6	1,6	1,8	1,7	1,7
2.135	2.295	2.270	2.105	2.260	2.345
20.835	20.620	20.395	21.125	20.915	20.670
18.465	18.245	18.035	18.740	18.530	18.305
228	228	217	244	244	232
262	262	260	263	263	263
25.370	25.530	25.605	25.140	25.295	25.380
7.000	7000	7000	7.000	7000	7000
7700	7780	7735	7.675	7.750	7.710
1.410	1.595	1.440	1.360	1.530	1.375
3.165	2.980	3.090	3.230	3.045	3.160
4.485	4.485	4.485	4.485	4.485	4.485
6.140	6.140	6.140	6.170	6.170	6.170
130	130	160	130	130	160
4.160	4.160	4.160	4.160	4.160	4.160
9.235	9.495	9.330	9.140	9.400	9.235
3.450	3.450	3.450	3.450	3.450	3.450
3.160	3.165	3.170	3.160	3.165	3.170
2.975	2.975	2.975	2.975	2.975	2.975
2.300	2.300	2.300	2.300	2.300	2.300
500	500	500	500	500	500
3.465	3.465	3.465	3.465	3.465	3.465

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