

# SPECIFICATIONS

## ENGINE

Model ..... Komatsu SAA6D170E-7\*  
 Type ..... Water-cooled, 4-cycle  
 Aspiration ..... Komatsu variable geometry, turbo-charged, after-cooled, cooled EGR  
 Number of cylinders ..... 6  
 Bore ..... 170 mm  
 Stroke ..... 170 mm  
 Piston displacement ..... 23.15 ltr  
 Governor ..... All-speed, electronic  
 Horsepower:  
 SAE J1995 ..... Gross 396 kW 530 HP  
 ISO 9249 / SAE J1349 ..... Net 395 kW 529 HP  
 Rated rpm ..... 1800 rpm  
 Fan drive method for radiator cooling ..... Hydraulic  
 Fuel system ..... Direct injection  
 Lubrication system:  
 Method ..... Gear pump, force-lubrication  
 Filter ..... Full-flow type  
 Air cleaner ..... Dry type with double elements and dust evacuator, plus dust indicator

\*EPA Tier 4 Final emissions certified

## TRANSMISSION

Torque converter ..... three-elements, one-stage, two-phase  
 Transmission ..... Automatic full-powershift, planetary type

Travel speed	Forward*	Reverse*
1st	6.7 km/h	7.3 km/h
2nd	11.7 km/h (12.4 km/h)	12.8 km/h (13.5 km/h)
3rd	20.3 km/h (21.7 km/h)	22.0 km/h (23.7 km/h)
4th	33.8 km/h (37.7 km/h)	37.0 km/h (41.0 km/h)

\*P-mode Measured with 35/65-33 tyres ( ): Lock-up clutch ON

## AXLES AND FINAL DRIVES

Drive system ..... Four-wheel drive  
 Front ..... Fixed, full-floating  
 Rear ..... Centre-pin support, full-floating, 22° total oscillation  
 Reduction gear ..... Spiral bevel gear  
 Differential gear ..... Conventional type  
 Final reduction gear ..... Planetary gear, single reduction

## BRAKES

Service brakes ..... Hydraulically actuated, wet multiple-disc brakes actuate on four wheels  
 Parking brake ..... Wet multiple-disc brake  
 Emergency brake ..... One of dual service brake circuits is commonly used



## STEERING SYSTEM

Type ..... Articulated type, fully-hydraulic power steering  
 Steering angle ..... 43° each direction  
 Minimum turning radius at the centre of outside tyre ..... 7075 mm



## HYDRAULIC SYSTEM

Steering system:  
 Hydraulic pump ..... Piston type  
 Capacity ..... 163 ltr/min at rated rpm  
 Relief valve setting ..... 34.3 MPa 350 kgf/cm<sup>2</sup>  
 Hydraulic cylinders:  
 Type ..... Double-acting, piston type  
 Number of cylinders ..... 2  
 Bore x stroke ..... 100 mm x 486 mm  
 Loader control:  
 Hydraulic pump ..... Piston pump  
 Capacity ..... 239 + 239 ltr/min at rated rpm  
 Relief valve setting ..... 34.3 MPa 350 kgf/cm<sup>2</sup>  
 Hydraulic cylinders:  
 Type ..... Double-acting, piston type  
 Number of cylinders—bore x stroke:  
 Boom cylinder ..... 2- 200 mm x 1067 mm  
 Bucket cylinder ..... 1- 225 mm x 776 mm  
 Control valve ..... 2-spool type  
 Control positions:  
 Boom ..... Raise, hold, lower, and float  
 Bucket ..... Tilt-back, hold, and dump  
 Hydraulic cycle time (rated load in bucket)  
 Raise ..... 8.7 s  
 Dump ..... 2.3 s  
 Lower (Empty) ..... 4.1 s

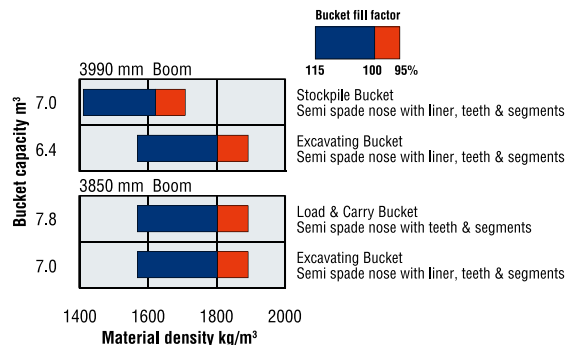


## SERVICE REFILL CAPACITIES

Cooling system ..... 150 ltr  
 Fuel tank ..... 718 ltr  
 Engine ..... 86 ltr  
 Hydraulic system ..... 443 ltr  
 Axle front ..... 185 ltr  
 rear ..... 193 ltr  
 Torque converter and transmission ..... 78 ltr  
 DEF tank ..... 60 ltr



## BUCKET SELECTION GUIDE

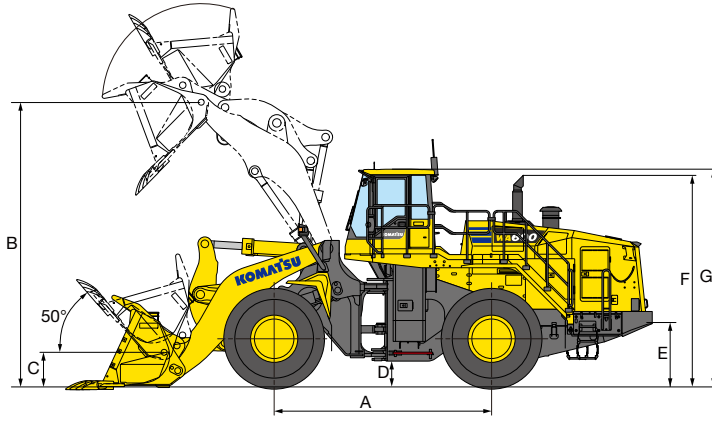


# SPECIFICATIONS



## DIMENSIONS

Measured with 35/65-33-36PR (L-4) tyres, ROPS/FOPS cab



Tread width (centre of tread to centre of tread)	2650 mm
Width over tyres	3590 mm
A Wheelbase	4500 mm
B Hinge pin height,	3850 mm boom
max. height	3990 mm boom
C Hinge pin height,	3850 mm boom
carry position	3990 mm boom
D Ground clearance	525 mm
E Hitch height	1320 mm
F Overall height, top of the stack	4375 mm
G Overall height, ROPS cab	4500 mm

	3990 mm Boom		3850 mm Boom	
	Excavating Bucket	Stockpile Bucket	Excavating Bucket	Load & Carry Bucket
	Spade nose Teeth and BSE *1	Spade nose Teeth and BSE *1	Spade nose Teeth and BSE *1	Spade nose Teeth and BSE *1
Bucket capacity: heaped	6.4 m <sup>3</sup>	7.0 m <sup>3</sup>	7.0 m <sup>3</sup>	7.8 m <sup>3</sup>
struck	5.3 m <sup>3</sup>	5.8 m <sup>3</sup>	5.8 m <sup>3</sup>	6.6 m <sup>3</sup>
Bucket width	3805 mm	3805 mm	3805 mm	3805 mm
Bucket weight	5975 kg	6152 kg	6152 kg	5791 kg
Dumping clearance, max. height and 45° dump angle *2	3965 mm	3915 mm	3700 mm	3615 mm
Reach at max. height and 45° dump angle *2	1835 mm	1885 mm	1915 mm	2000 mm
Reach at 2130 mm clearance and 45° dump angle	3030 mm	3065 mm	2920 mm	2970 mm
Reach with arm horizontal and bucket level*	4175 mm	4245 mm	4105 mm	4225 mm
Operating height (fully raised)	7925 mm	8040 mm	7280 mm	7885 mm
Overall length (bucket on ground)	12145 mm	12215 mm	12030 mm	12150 mm
Loader clearance circle (bucket at carry, outside corner of bucket)	17050 mm	17090 mm	16770 mm	16990 mm
Digging depth: 0°	130 mm	130 mm	130 mm	130 mm
10°	530 mm	540 mm	540 mm	560 mm
Static tipping load: straight	38220 kg	38036 kg	37845 kg	43265 kg
40° full turn	32675 kg	32520 kg	32805 kg	37080 kg
Breakout force	385 kN 39500 kgf	370 kN 38200 kgf	375 kN 38600 kgf	355 kN 36200 kgf
Operating weight	56280 kg	56460 kg	55400 kg	57460 kg

\*1 Bolt-on segment edges. \*2 At the end of the tooth

All dimensions, weights, and performance values based on SAE J732c and J742b standards.

Static tipping load, operating weight and overall length shown include lubricant, coolant, full fuel tank, ROPS cab, and operator.

Machine stability and operating weight affected by counterweight, tyre size, and other attachments.

Apply the following weight changes to operating weight, static tipping load and overall length.



## WEIGHT CHANGES

Tyres or attachments	Operating weight	Tipping load straight		Tipping load full turn		Width over tyres	Ground clearance	Change in vertical dimensions
		3990 mm Boom	3850 mm Boom	3990 mm Boom	3850 mm Boom			
	kg	kg	kg	kg	kg	mm	mm	mm
35/65-R33 (L-4)	-780	-565	-585	-485	-500	3615	460	-65
35/65-R33 (L-5)	-235	-175	-180	-150	-150	3615	460	-65



## STANDARD EQUIPMENT

### ENGINE:

- Air cleaner, double element with dust indicator
- Engine, Komatsu SAA6D170E-7 diesel
- Fuel pre-filter with water separator
- Hydraulic-driven fan with reverse rotation
- KDPF, SCR
- Komatsu SmartLoader Logic
- Pre-cleaner, 2x centrifugal type
- Radiator mask, swing out
- Radiator, modulating core

### ELECTRICAL SYSTEM:

- Alternator, 140 A, 24 V
- Batteries, large capacity, 2 x 12 V / 200 Ah
- Circuit breaker
- Komatsu Auto Idle Shutdown
- Lights
  - Access stair lamp, LH side
  - Back-up lights, LED
  - Directional signal
  - Engine bay light.
  - Front work Lamps, 2x Axle, LED, guarded.
  - Front work lamps, 2x Cabin, Halogen.
  - Hazard lamps
  - Head lamps, LH and RH side
  - LED Beacon & Guard.
  - Rear work lamps, 2x Cabin, 2x Radiator, Halogen
  - Side work lights, 2x LH and RH Side, LED.
  - Stop and tail lamps, LED and turn signal lamp
- Starting motor, 24 V x 2 / 11.0 kW

### CAB:

- 2 x DC12V electrical outlets
- Advanced Steering System
- Auto air conditioner
- AM/FM radio with AUX input jack
- Colour multi-monitor
- Electronically Controlled Suspension System (ECSS)
- Electronic pilot control fingertip control
- Floor mat
- Front wiper (with washer and intermittent)
- Rear defroster (electric)
- Rear window washer and wiper
- ROPS/FOPS (ISO 3471/ISO 3449) cab
- Seat, suspension type with reclining
- Seat belt (two-point)
- Starter receptacle
- Sun visor

### SAFETY EQUIPMENT:

- Back-up alarm
- Coxon pressure release radiator cap
- Emergency Egress Gate
- Emergency Stop Switch, 1x Cab, 3x External, ground level
- Emergency/Secondary Steering system
- Engine shutdown secondary switch
- Hand rails for platform
- Handrails, full deck and 100mm kickplates
- Horn, electric
- Lockable battery isolation switch
- Lockable starter isolation switch
- Parking brake, electric
- Rear view mirrors
- Rear view monitoring system
- Service brakes, wet disk type
- Wheel Check

### TYRES:

- 35/65R33(L5) – WA600-8
- 35-65R33(L4) – WA600-8LC
- Large bore tyre valves

### OTHER:

- 2-spool valve for boom and bucket control
- 3990 mm boom
- Additional counterweight (850 kg)
- Automatic digging system
- Automatic Greasing System, ground level refill
- Automatic shift transmission
- Brake cooling system
- Counterweight, standard
- Ecology guidance, ecology gauge
- Engine RPM set system
- Fast-fill Fuel system
- Front fenders
- Inline filters, steering and hydraulic
- Integrated load meter
- Jumpstart Receptacle
- KOMTRAX® with KOMTRAX PLUS® function and ground level download port
- Lift cylinders and bucket cylinder
- Lock-up clutch torque converter
- Modulation clutch
- Powertrain Underguard
- Rear access stair with handrail, RH side.
- Remote boom positioner, in-cab adjustable
- Remote bucket positioner, in-cab adjustable, three positions
- Service centre for Engine, Hydraulic, Transmission Oils (EVAC System).
- Transmission speed ranges, 4 forward and 4 reverse
- Vandalism protection kit
- Work equipment shock reduction control



## OPTIONAL EQUIPMENT

- 3850 mm boom
- 3-spool valve with lever and piping
- Additional Lighting
- Bluetooth AM/FM Radio
- Broadband reverse alarm
- Fire extinguishers
- Fire suppression systems
- Load-and-carry specification
- Rear Proximity/Reverse Sensors
- UHF Radio
- Various bucket options
- Weigh Scale system