

KOMATSU®

PW220-7 Material handling specification

NET HORSEPOWER
118 kW 158 HP @ 1.950 rpm

OPERATING WEIGHT
26.000 kg (Lifting cab)

ATTACHMENT CAPACITY
0,5 m³ (Multi-tine grab)
1,09 m³ (Clamshell)

PW
220

HYDRAULIC WHEELED EXCAVATOR



PW220-7

WALK-AROUND

The PW220-7 is a rugged, productive, all-European machine. Designed and expressly built for European markets, it delivers productivity, reliability and operator comfort in a robust, environmentally-friendly package. Komatsu's exclusive, on-board, HydraulMind system assists in all operations, providing enhanced machine performance that's always perfectly matched to the task.

What's new on Dash 7:

- High lifting capacity
- Low fuel consumption
- Easier maintenance and serviceability
- Improved operator comfort
- Low dynamic operator noise
- Meets EC Stage II emission regulations
- Multi-function colour monitor
- PW220-7 has a standard width of 2,75 m

Excellent reliability and durability

- Heavy-duty work equipment
- Reliable major components designed and built by Komatsu
- Exceptionally reliable electronic devices

Advanced Attachment Control

The PW220-7 can be optionally equipped to handle a wide variety of attachments. The advanced attachment control system features:

- Operator selectable hydraulic flow control
- Adjustable presets for rapid attachment changeover

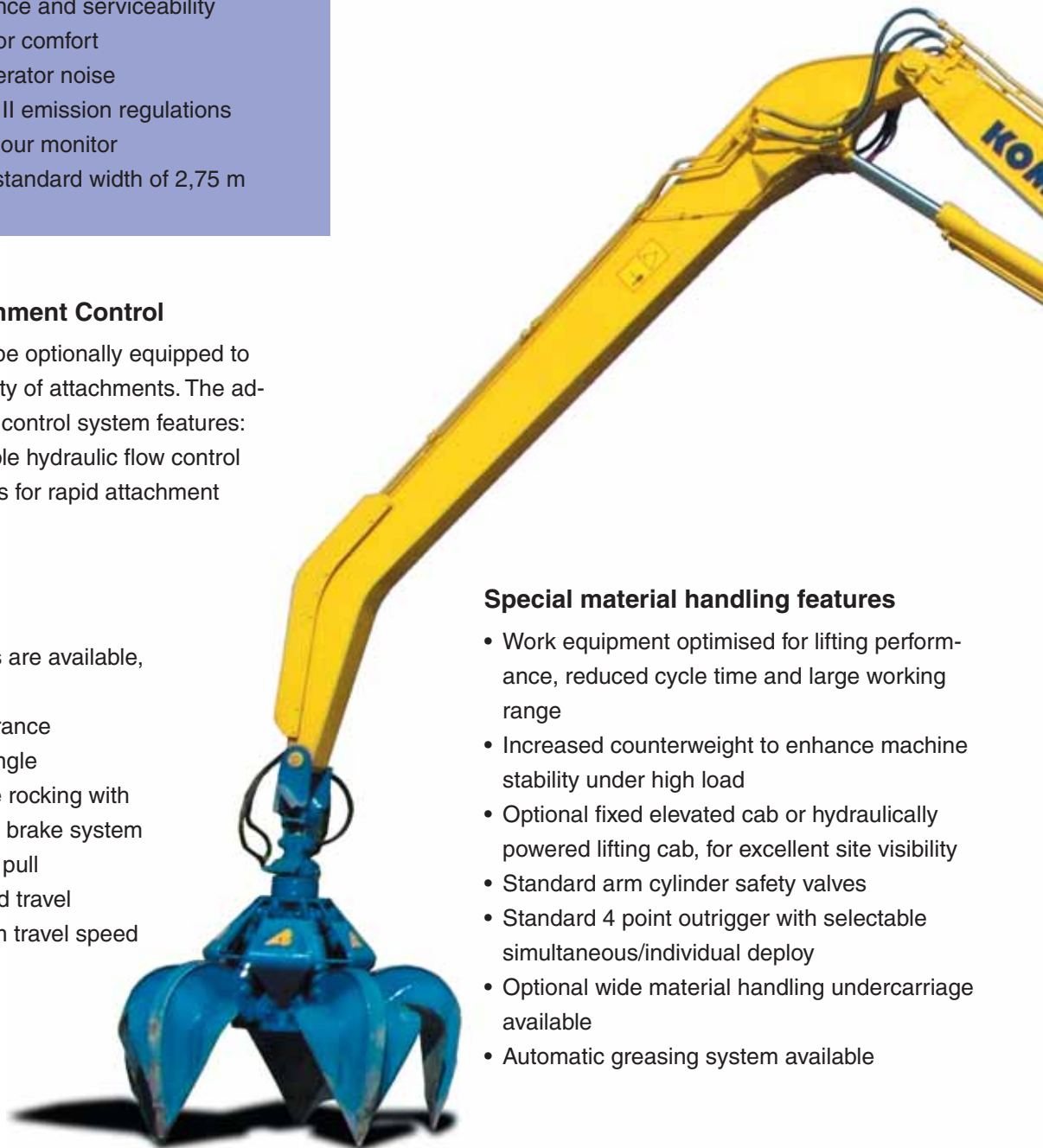
Undercarriage

Two undercarriages are available, both featuring:

- High ground clearance
- High oscillation angle
- Virtually zero axle rocking with outboard wet disc brake system
- Powerful drawbar pull
- Automatic 3 speed travel
- 20 km/h maximum travel speed

Special material handling features

- Work equipment optimised for lifting performance, reduced cycle time and large working range
- Increased counterweight to enhance machine stability under high load
- Optional fixed elevated cab or hydraulically powered lifting cab, for excellent site visibility
- Standard arm cylinder safety valves
- Standard 4 point outrigger with selectable simultaneous/individual deploy
- Optional wide material handling undercarriage available
- Automatic greasing system available



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26.000 kg (Lifting cab)

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MAX HORIZONTAL REACH
12.650 mm

In harmony with the environment

- The low emission engine meets EC Stage II emissions standards with increased power and machine productivity
- The economy mode reduces fuel consumption
- Low operating noise
- Designed for easy end-of-life recycling

Special safety features for hydraulic lifting cab

- Emergency cab down buttons inside cab and on cab lift mechanism
- Steps and handrail for emergency exit from cab in raised position
- Removable rear window glass

SpaceCab™

The new PW220-7's cabin space has been increased by 14%, offering an exceptionally roomy operating environment.

- Sealed and pressurised cab with air conditioning
- Low-noise design
- Low-vibration design with cabin damper mounting
- Cab moved forward for better visibility
- Ergonomic control levers
- Seat specially designed for wheeled machines, with exceptional extra comfort



SPECIFICATIONS



ENGINE

Model Komatsu SAA6D102E-2
 Type Direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel
 Rated capacity 118 kW/158 HP (ISO 9249 Net) at engine speed 1.950 rpm
 No. of cylinders 6
 Bore/stroke 102/120 mm
 Displacement 5,88 ltr
 Battery 2 × 12 V/95 Ah
 Alternator 24 V/45 A
 Starter motor 24 V/5,5 kW
 Air filter type Double element type with monitor panel dust indicator and auto dust evacuator
 Cooling Suction type cooling fan with radiator fly screen



HYDRAULIC SYSTEM

Type HydrauMind. Closed-centre system with load sensing and pressure compensation valves
 Main pump 2 variable displacement piston pumps supplying boom, arm, attachment, attachment rotate, swing and travel circuits
 Maximum pump flow 2 × 218,4 ltr/min
 Relief valve settings
 Implement 380 kg/cm²
 Travel 380 kg/cm²
 Swing 295 kg/cm²
 Pilot circuit 36,7 kg/cm²
 Attachment 250 kg/cm²



STEERING SYSTEM

Steering control Hydraulic steering system supplied from a separate gear pump and controlled through LS orbitrol & priority valves
 Minimum turning radius for 2,75 m wide axles 7.050 mm (to center of outer wheel)



TRANSMISSION

Type Fully automatic power shift transmission with permanent 4 wheel drive
 Travel motors one variable displacement axial piston motor
 Maximum pressure 380 kg/cm²
 3 travel modes
 Hi / Lo / Creep 20,0 / 9,5 / 2,0 km/h
 Max. tractive effort 12.000 kg
 Axle oscillation 11° lockable in any position from the operator cab



BRAKE SYSTEM

Type Dual circuit hydraulic braking system supplied from a separate gear pump
 Service brakes Pedal actuated wet multi-disc brakes integrated into the axle hubs
 Parking brake Electrically actuated wet multi-disc “spring actuation hydraulic release” brake integrated into the transmission



SWING SYSTEM

Type Axial piston motor driving through planetary double reduction gearbox
 Swing lock Electrically actuated wet multi-disc brake integrated into swing motor. An additional mechanical pin can be engaged from inside the operator cab.
 Swing speed 0 - 12,4 rpm



ENVIRONMENT

Engine emissions Fully complies with EC Stage II exhaust emission regulations
 Noise levels
 LwA external 104 dB(A) (2000/14/EC)
 LpA operator ear 74 dB(A) (ISO 6369 dynamic test)



COOLANT AND LUBRICANT CAPACITY (REFILLING)

Fuel tank 370,0 ltr
 Radiator 23,0 ltr
 Engine oil 26,3 ltr
 Swing drive 6,6 ltr
 Hydraulic tank 166,0 ltr
 Transmission 2,9 ltr
 Front differential 13,5 ltr
 Rear differential 14,0 ltr
 Front axle hub 2,85 ltr
 Rear axle hub 2,0 ltr
 Swing pinion grease amount 33,0 ltr

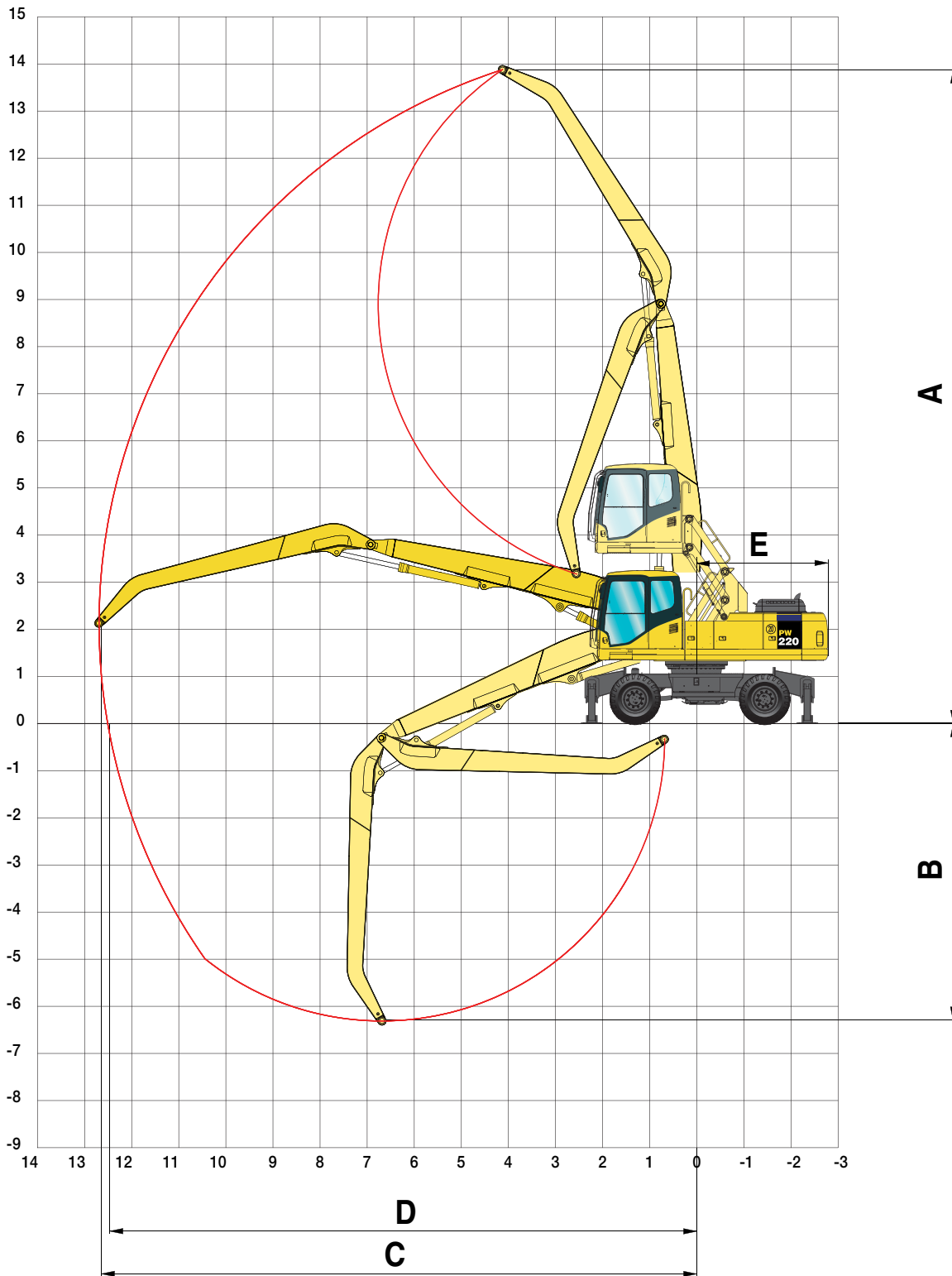


OPERATING WEIGHT (APPR.)

Operating weight, including 6,8 m industrial material handling boom, 6,0 m arm, operator, lubricant, coolant, full fuel tank and the standard equipment.

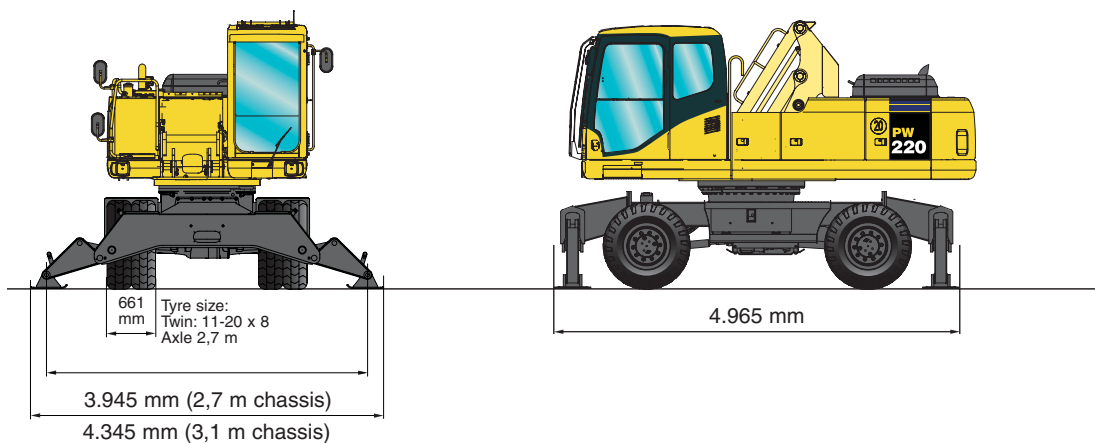
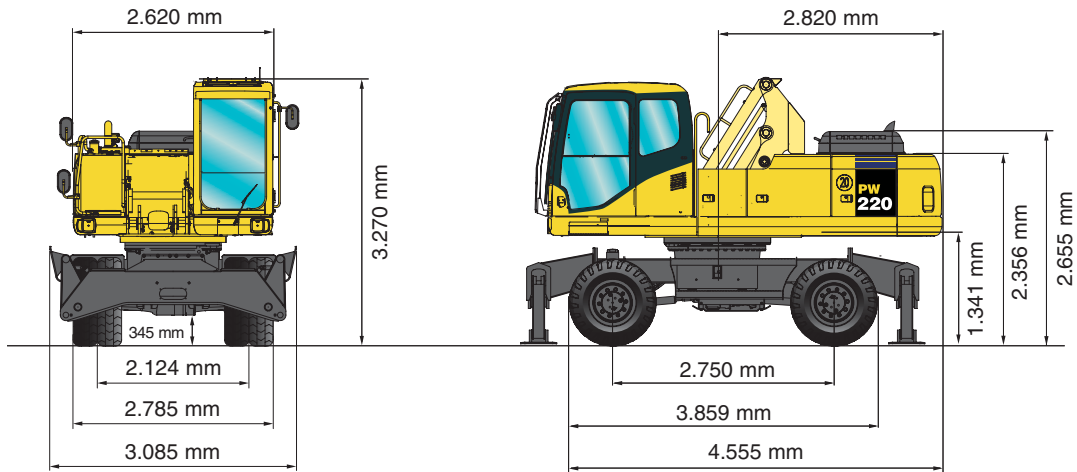
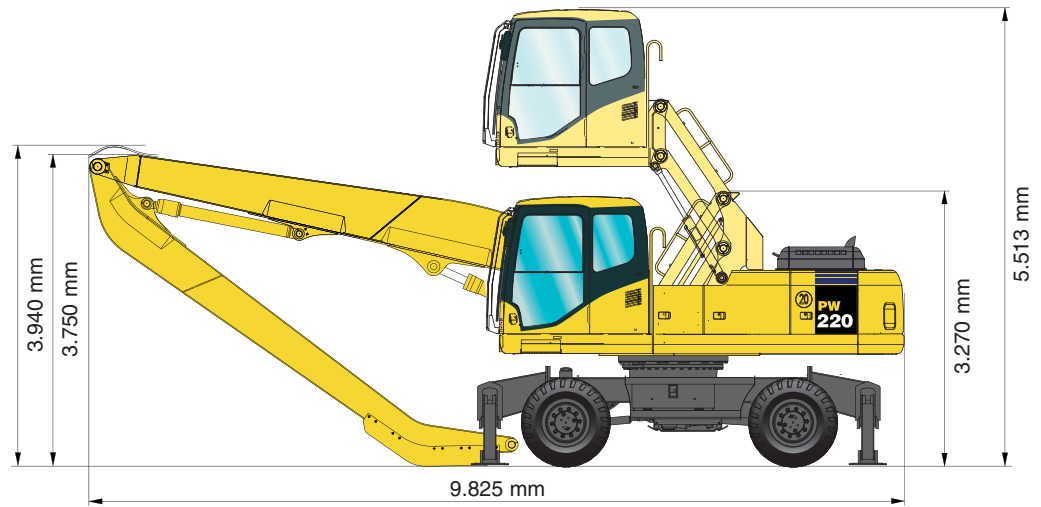
MATERIAL HANDLING SPECIFICATION	
Boom (straight)	6.800 mm
Arm (gooseneck)	6.000 mm
Operating weight	26.000 kg

WORKING RANGE



MATERIAL HANDLING SPECIFICATION		
A	Max. pin height	13.875 mm
B	Max. pin depth	6.295 mm
C	Max. pin reach	12.650 mm
D	Max. pin reach at ground level	12.470 mm
E	Tail swing radius	2.780 mm

DIMENSIONS



Allowed attachments



Log grapple



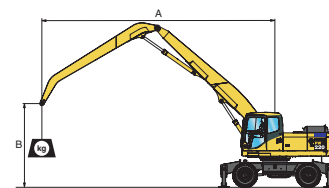
Multi-tine grab



Clamshell

LIFTING CAPACITY

B	A	MAX		12 m		10,5 m		9 m		7,5 m	
		Front	360°	Front	360°	Front	360°	Front	360°	Front	360°
13,5 m	Outriggers raised	*6150	*6150								
	2,7 m chassis, 4 outriggers supporting	*6150	*6150								
	3,1 m chassis, 4 outriggers supporting	*6150	*6150								
12 m	Outriggers raised	*4800	3800							5400	4000
	2,7 m chassis, 4 outriggers supporting	*4800	*4800							*5650	*5650
	3,1 m chassis, 4 outriggers supporting	*4800	*4800							*5650	*5650
10,5 m	Outriggers raised	3800	2750					4100	3000	5600	4200
	2,7 m chassis, 4 outriggers supporting	*4250	*4250					*5800	4950	*7200	6800
	3,1 m chassis, 4 outriggers supporting	*4250	*4250					*5800	5600	*7200	*7200
9 m	Outriggers raised	3100	2250			3150	2300	4200	3100	5700	4250
	2,7 m chassis, 4 outriggers supporting	*3950	3800			*4300	3850	6550	5050	*7000	6850
	3,1 m chassis, 4 outriggers supporting	*3950	*3950			*4300	*4300	6550	5700	*7000	*7000
7,5 m	Outriggers raised	2700	1950			3200	2300	4150	3100	5650	4200
	2,7 m chassis, 4 outriggers supporting	*3800	3350			5050	3900	6550	5050	*7100	6800
	3,1 m chassis, 4 outriggers supporting	*3800	3800			5050	4400	6550	5700	*7100	*7100
6 m	Outriggers raised	2450	1750	2500	1750	3150	2300	4100	3000	5500	4050
	2,7 m chassis, 4 outriggers supporting	*3750	3050	*3950	3050	5050	3850	6450	4950	*7400	6650
	3,1 m chassis, 4 outriggers supporting	*3750	3450	*3950	3450	5050	4350	6450	5600	*7400	*7400
4,5 m	Outriggers raised	2300	1600	2450	1750	3100	2200	3950	2900	5250	3850
	2,7 m chassis, 4 outriggers supporting	*3750	2850	4000	3000	4950	3750	6300	4800	*7900	6400
	3,1 m chassis, 4 outriggers supporting	*3750	3250	4000	3450	4950	4250	6300	5450	*7900	7300
3 m	Outriggers raised	2200	1550	2400	1700	3000	2100	3800	2700	4950	3600
	2,7 m chassis, 4 outriggers supporting	3650	2750	3950	2950	4850	3650	6150	4650	8150	6100
	3,1 m chassis, 4 outriggers supporting	3650	3150	3950	3400	4850	4150	6150	5250	8150	6950
1,5 m	Outriggers raised	2150	1500	2350	1650	2850	2000	3600	2550	4650	3300
	2,7 m chassis, 4 outriggers supporting	3600	2700	3850	2900	4700	3550	5950	4450	7800	5800
	3,1 m chassis, 4 outriggers supporting	3600	3100	3850	3350	4700	4050	5950	5100	7800	6650
0 m	Outriggers raised	2200	1500	2300	1600	2800	1900	3450	2400	4400	3050
	2,7 m chassis, 4 outriggers supporting	3650	2700	3800	2850	4600	3450	5750	4300	7500	5500
	3,1 m chassis, 4 outriggers supporting	3650	3100	3800	3300	4600	3950	5750	4900	7500	6350
-1,5 m	Outriggers raised	2250	1550			2700	1850	3300	2300	4200	2850
	2,7 m chassis, 4 outriggers supporting	3750	2800			4550	3400	5600	4150	7300	5300
	3,1 m chassis, 4 outriggers supporting	3750	3200			4550	3900	5600	4800	7300	6150
-3 m	Outriggers raised	2400	1650			2700	1850	3250	2200	4100	2800
	2,7 m chassis, 4 outriggers supporting	*3800	3000			4500	3350	5550	4100	7150	5200
	3,1 m chassis, 4 outriggers supporting	*3800	3450			4500	3850	5550	4700	7150	6050
-4,5 m	Outriggers raised	2650	1850			2750	1850	3250	2200	4100	2750
	2,7 m chassis, 4 outriggers supporting	*3100	*3100			3500	3400	*5250	4100	*6750	5200
	3,1 m chassis, 4 outriggers supporting	*3100	*3100			*3500	*3500	*5250	4700	*6750	6000
-6 m	Outriggers raised									4200	2850
	2,7 m chassis, 4 outriggers supporting									*4500	*4500
	3,1 m chassis, 4 outriggers supporting									*4500	*4500



A - Reach from swing centre

B - Bucket hook height

Front - Rating over front

360° - Rating over side

MAX - Rating at maximum reach

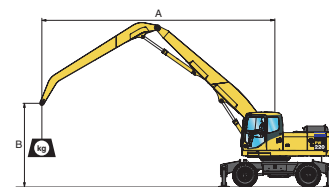
Lifting capacities are stated in kg, on the tip of the arm, for machine on firm, level supporting surface.

The weight of any attachment used should be deducted from the values shown, to calculate payload.

Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated by *).

Lifting capacity of the machine is limited by machine stability, hydraulic capacity and maximum permissible load of the attachment.

B	A	6 m		4,5 m		3 m		1,5 m		0 m	
		Front	360°	Front	360°	Front	360°	Front	360°	Front	360°
13,5 m	Outriggers raised										
	2,7 m chassis, 4 outriggers supporting										
	3,1 m chassis, 4 outriggers supporting										
12 m	Outriggers raised	7850	5850								
	2,7 m chassis, 4 outriggers supporting	*8400	*8400								
	3,1 m chassis, 4 outriggers supporting	*8400	*8400								
10,5 m	Outriggers raised										
	2,7 m chassis, 4 outriggers supporting										
	3,1 m chassis, 4 outriggers supporting										
9 m	Outriggers raised										
	2,7 m chassis, 4 outriggers supporting										
	3,1 m chassis, 4 outriggers supporting										
7,5 m	Outriggers raised										
	2,7 m chassis, 4 outriggers supporting										
	3,1 m chassis, 4 outriggers supporting										
6 m	Outriggers raised	7850	5800								
	2,7 m chassis, 4 outriggers supporting	*8200	*8200								
	3,1 m chassis, 4 outriggers supporting	*8200	*8200								
4,5 m	Outriggers raised	7450	5450								
	2,7 m chassis, 4 outriggers supporting	*9100	*9100								
	3,1 m chassis, 4 outriggers supporting	*9100	*9100								
3 m	Outriggers raised	6950	5000	10900	7650	*17000	14400				
	2,7 m chassis, 4 outriggers supporting	*10200	8650	*13050	*13050	*17000	*17000				
	3,1 m chassis, 4 outriggers supporting	*10200	9950	*13050	*13050	*17000	*17000				
1,5 m	Outriggers raised	6400	4500	9750	6600	*14650	11600				
	2,7 m chassis, 4 outriggers supporting	11100	8050	*15050	12650	*14650	*14650				
	3,1 m chassis, 4 outriggers supporting	11100	9300	*15050	15000	*14650	*14650				
0 m	Outriggers raised	5950	4050	8950	5900	*8450	*8450				
	2,7 m chassis, 4 outriggers supporting	10550	7550	*15800	11700	*8450	*8450				
	3,1 m chassis, 4 outriggers supporting	10550	8800	*15800	14050	*8450	*8450				
-1,5 m	Outriggers raised	5750	3850	8450	5450	*8900	*8900	*5700	*5700		
	2,7 m chassis, 4 outriggers supporting	10300	7350	*15150	11200	*8900	*8900	*5700	*5700		
	3,1 m chassis, 4 outriggers supporting	10300	8550	*15150	13500	*8900	*8900	*5700	*5700		
-3 m	Outriggers raised	5550	3700	8300	5350	*10550	9650	*7600	*7600		
	2,7 m chassis, 4 outriggers supporting	10100	7150	*13350	11050	*10550	*10550	*7600	*7600		
	3,1 m chassis, 4 outriggers supporting	10100	8400	*13350	13300	*10550	*10550	*7600	*7600		
-4,5 m	Outriggers raised	5550	3700	8350	5350	*12950	9800				
	2,7 m chassis, 4 outriggers supporting	*8500	7150	*10550	*10550	*12950	*12950				
	3,1 m chassis, 4 outriggers supporting	*8500	8350	*10550	*10550	*12950	*12950				
-6 m	Outriggers raised	5700	3800								
	2,7 m chassis, 4 outriggers supporting	*5850	*5850								
	3,1 m chassis, 4 outriggers supporting	*5850	*5850								



A - Reach from swing centre

B - Bucket hook height

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360° - Rating over side

MAX - Rating at maximum reach

Lifting capacities are stated in kg, on the tip of the arm, for machine on firm, level supporting surface.

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Lifting capacity of the machine is limited by machine stability, hydraulic capacity and maximum permissible load of the attachment.

HYDRAULIC WHEELED EXCAVATOR



STANDARD EQUIPMENT

- Komatsu SAA6D102E-2 turbocharged direct injection diesel engine, complies with European Stage II emissions
- Double element type air cleaner with dust indicator and auto dust evacuator
- Suction type cooling fan
- Automatic fuel line de-aeration
- Engine key stop
- Material handling boom and gooseneck arm, with twin arm cylinders and including piping and hoses for rotating grapple and arm cylinders
- Safety valves on boom and arm cylinders
- Automatic engine warm up system
- PowerMax function
- Auto-deceleration function
- Electronic closed-centre load sensing (E-CLSS) hydraulic system (HydrauMind)
- 4 outriggers, selectable simultaneous deploy
- Pump and engine mutual control (PEMC) system
- Multi-function color monitor with equipment management monitoring system (EMMS)
- 4-working mode selection system: Active, Economy, Breaker, Lifting
- In-line filter for hydraulics
- Special counterweight for industrial handling work
- Oscillating front axle (11°) with automatic and manual cylinder locking
- Dual circuit hydraulic brakes with outboard wet multi-disc service brakes
- Heavy duty revolving frame for industrial handling
- Spring actuated parking brake (hydraulic release) incorporated into transmission
- Engine ignition can be password secured on request
- Engine overheat prevention system
- Adjustable PPC wrist control levers for arm, boom and swing
- PPC control pedals and levers for steering and travel
- Operation and maintenance manual
- Space Cab™, Highly pressurised and tightly sealed viscous mounted cab with tinted safety glass windows, opening roof hatch with window, pull up type front window with locking device, removable lower window, front window wiper with intermittent feature, sun blind roller, magazine rack, 12 V cigarette lighter, ashtray, floor mat, machine cab handrails, suspension seat with tilttable left hand console, automatic weight adjustment, adjustable arm rests and retractable seat belt, climate control system, hot and cold box
- Overload warning device
- Refuelling pump
- Toolkit
- Lockable fuel cap and covers
- Fully automatic 3 speed transmission driving through front and rear planetary axles
- Orbitrol type hydraulic steering acting on front wheels
- Standard colour scheme and decals
- Alternator 24 V/45 A
- Batteries 2 x 12 V/95 Ah
- Starting motor 24 V/5,5 kW

OPTIONAL EQUIPMENT

- 2,75 m chassis with four sets of twin solid tyres and rims
- 3,1 m chassis with four sets of twin tyres and rims
- Hydraulic lifting operator cab, parallel link
- Fixed height high operator cab with walkway/ladder access
- Cold weather battery 120 Ah
- Heated air suspension seat
- Radio cassette
- OPG front guard
- Lower wiper
- Rotating beacon preparation
- Rain visor (not for use with OPG)
- Engine room lamp
- Auto greasing system
- Additional large capacity cab roof lights (3)
- Bio degradable oil
- Customized paint

KOMATSU®

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UESS009502 10/2004

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