

KOMATSU®

FLYWHEEL HORSEPOWER
125 kW **168 HP @ 2000 rpm**

OPERATING WEIGHT
36 333 kg **80,101 lb**

PC220LL-8

Purpose Built Forestry Excavator

Road Builder, Log Loader-Heel Type and Butt-n-Top

PC
220
LL



Photo may include optional equipment

FORESTRY EXCAVATOR

WALK-AROUND

Komatsu's new forestry excavators

feature advanced technology, purpose built *forestry-tough* upper and lower structures and Komatsu designed forestry attachments.

Attachment Options

	Road Builder	Log Loader Heel Type
Base Machine	X	X
Boom Arm	X	Komatsu 38' Boom
Bucket	X	N/A
Thumb	X	N/A
Grapple	N/A	X



Undercarriage Performance

	PC220LC-8	PC220LL-8	Index%
Drawbar Pull	20 570 kg 45,350 lbs	25 512 kg 56,244 lbs	124%

Undercarriage

PC220LL-8	Gauge	Overall Width	Ground Clearance
High/Wide	2 921 mm 9'7"	3 621 mm 11'11"	711 mm 28"

Undercarriage Features - High/Wide

- Increased drawbar pull 25 512 kg 56,244 lb.
- Heavy duty forestry type idler recoil springs
- Double flange carrier rollers (trunnion mount)
- Full length "ski" type track roller guards
- Front idler track frame stiffener plates
- PC220LL-8 features PC300 class structures
- Sloped track roller frames for easy cleaning and debris shedding
- One class larger PC300 greased 8½" (216 mm) pitch strutted track links



Komatsu purpose-built cab shown (tilting)

Cab Options

Komatsu Excavator cab with forestry TOPS/FOPS guard	Cab w/guard 381 mm 15" fixed riser	Cab w/ guard 1219 mm 48" riser (tilt function for transport)	Cab w/guard 1524 mm 60" riser (tilt function for transport)
Komatsu purpose-built forestry cab	TOPS/OPS Cab 203 mm 8" fixed riser	TOPS/OPS Cab 1219 mm 48" riser (tilt function for transport)	TOPS/OPS Cab 1524 mm 60" riser (tilt function for transport)

FLYWHEEL HORSEPOWER
125 kW **168 HP @ 2000 rpm**

OPERATING WEIGHT
36 333 kg **80,101 lb**

- Heavy duty engine/hydraulic pump compartment service access doors (6mm 0.25")
- Full length walkways (non-skid surface) with heavy duty revolving frame undercovers
- (2) additional service valves (2P, 1P)
- PC220LL-8 features PC300 class swing bearing, swing drive motor

Swing Performance

	PC220LC-8	PC220LL-8	Index%
Swing Torque	8 065 kg-m 58,334 ft.lbs.	10 494 kg-m 75,903 ft.lbs.	130%

Counterweight Options

Standard Counterweight	Heavy Counterweight	Auxiliary Fuel Counterweight
Standard 5050 kg 11,133 lb	Optional 6 662 kg 14,687 lb +1 612 kg (3554 lb)	Optional 5423 kg 11956 lb plus 543 L (143 gal) additional fuel

Track Shoe Options

PC220LL-8	700 mm 28"	800 mm 31.5"
Double Grouser Shoe	Optional	N/A
Triple Grouser Shoe	Standard	Optional



KOMTRAX™

KOMTRAX equipped machines can send location, SMR and operation maps to a secure website utilizing wireless technology. Machines also relay error codes, cautions, maintenance items, fuel levels, and much more.

FEATURES



Komatsu purpose-built forestry cab, OPS/TOPS compliant with 8" cab riser cab riser.



Komatsu purpose-built forestry cab features large color display, climate control, large skylight, 3 12v power points, AM/FM/CD stereo radio and 5 lb fire extinguisher.



Komatsu purpose-built forestry cab wet arm wiper and 12mm polycarbonate windows. Optional 1 1/4" 32mm window available for processing head applications. (1 1/4" front window shown)



Special high/wide carbod body with PC300 class final drives and undercarriage components provide high gradeability and tractive effort. Heavy duty engine and hydraulic pump compartment service access doors, full length walkways, right hand log guard.

SPECIFICATIONS



ENGINE

Model **Komatsu SAA6D107E-1**
 Type **Water-cooled, 4-cycle, direct injection**
 Aspiration **Turbocharged and aftercooled**
 No. of cylinders **6**
 Bore **107 mm 4.21"**
 Stroke **124 mm 4.88"**
 Piston displacement **6.69 ltr 408 in³**
 Horsepower
 SAE J1995 **Gross 134 kW 179 HP**
 ISO 9249/SAE J1349 **Net 125 kW 168 HP**
 Rated rpm **2000 rpm**
 Fan drive type **Mechanical**
 Governor **All-speed, electronic**
 EPA Tier 3 and EU stage 3A emission certified



HYDRAULIC SYSTEM

Type **HydrauMind (Hydraulic Mechanical Intelligence New Design) closed-center system with load sensing valves and pressure compensated valves**
 No. of selectable working modes **5**
 Main pump:
 Type **Variable displacement piston**
 Pumps for **Boom, arm, bucket, swing, and travel circuits**
 Maximum flow **439 ltr/min 116 U.S. gal/min**
 Supply for control circuit **Self-reducing valve**
 Hydraulic motors:
 Travel **2 x axial piston motors with parking brake**
 Swing **1 x axial piston motor with swing holding brake**
 Relief valve setting:
 Implement circuits **37.3 MPa 380 kg/cm² 5,400 psi**
 Travel circuit **37.3 MPa 380 kg/cm² 5,400 psi**
 Swing circuit **28.9 MPa 295 kg/cm² 4,190 psi**
 Pilot circuit **3.2 MPa 33 kg/cm² 470 psi**
 Hydraulic cylinders:
 Number of cylinders—bore x stroke x rod diameter
 Boom **2 – 135 mm x 1335 mm x 90 mm 5.3" x 52.6" x 3.7"**
 Arm **1 – 140 mm x 1635 mm x 100 mm 5.5" x 64.4" x 3.9"**
 Bucket **1 – 130 mm x 1020 mm x 90 mm 5.1" x 40.2" x 3.5"**



DRIVES AND BRAKES

Steering control **Two levers with pedals**
 Drive method **Hydrostatic**
 Maximum drawbar pull **25 512 kg 56,244 lb**
 Gradeability **70%**
 Maximum travel speed:
 High **5.3 km/h 3.3 mph**
 Mid **4.0 km/h 2.5 mph**
 Low **2.5 km/h 1.6 mph**
 Service brake **Hydraulic lock**
 Parking brake **Mechanical disc brake**



SWING SYSTEM

Drive method **Hydrostatic**
 Swing reduction **Planetary gear**
 Swing circle lubrication **Grease bathed**
 Swing lock **Mechanical disc brake**
 Swing speed **8.4 rpm**
 Swing torque **10 494 kg-m 75,903 ft.lbs.**



UNDERCARRIAGE

Center frame **X-frame**
 Track frame **Box-section**
 Seal of track **Sealed track**
 Track adjuster **Hydraulic**
 No. of shoes **48 per side**
 No. of carrier rollers **2 per side**
 No. of track rollers **8 per side**



COOLANT AND LUBRICANT CAPACITY (REFILLING)

Fuel tank **400 ltr 105.7 U.S. gal**
 Coolant **20.6 ltr 5.4 U.S. gal**
 Engine **23.1 ltr 6.1 U.S. gal**
 Final drive, each side **8.5 ltr 2.2 U.S. gal**
 Swing drive **13.4 ltr 3.5 U.S. gal**
 Hydraulic tank **135 ltr 35.7 U.S. gal**



OPERATING WEIGHT (APPROXIMATE)

Operating weight, including operator, lubricant, coolant, full fuel tank, logging and road building fronts, standard equipment, and typical options (no grapples or buckets are included).

	Shoes	Operating Weight	Ground Pressure
Log Loader (heel type)	700 mm 28" Double Grouser	36 333 kg 80,101 lb	0.60 kg/cm ² 8.53 psi
	700 mm 28" Double Grouser	35 365 kg 77,966 lb	0.59 kg/cm ² 8.39 psi

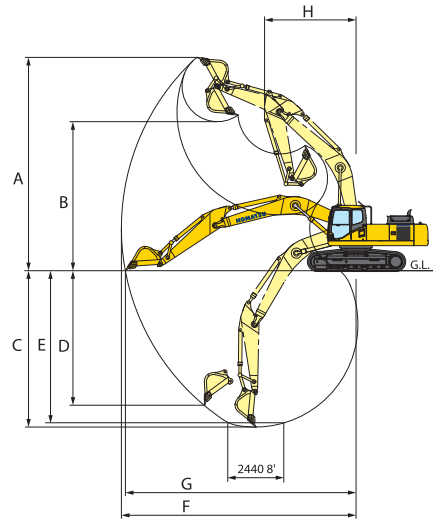
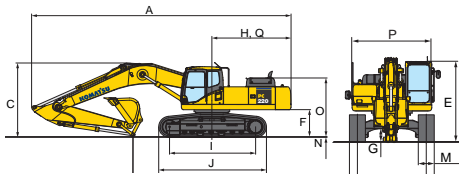
DIMENSIONS



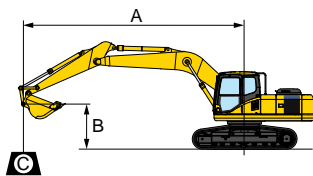
DIMENSIONS ROAD BUILDER

Road Builder		
	Arm length	3045 mm 10'0"
A	Overall length	9767 mm 32'1"
B	Length on ground (transport)	5320 mm 17'5"
C	Overall height to top of boom	3228 mm 10'7"
D	Overall width	3621 mm 11'11"
E	Overall height to top of cab (riser)	
	Komatsu purpose-built cab - 203 mm 8"	3966 mm 13'0"
	Komatsu excavator cab with top - 381 mm 15"	3966 mm 13'0"
F	Ground clearance, counterweight	1385 mm 4'7"
G	Ground clearance, (minimum)	711 mm 28"
H	Tail swing radius	2940 mm 9'8"
I	Track length on ground	4014 mm 13'2"
J	Track length	4937 mm 16'2"
K	Track gauge	2921 mm 9'7"
L	Width of crawler	3621 mm 11'11"
M	Shoe width	700 mm 28"
N	Grouser height (double grouser)	49.5 mm 1.95"
P	Machine cab width	3226 mm 10'7"
Q	Distance, swing center to rear end	2905 mm 9'6"

	Arm	3045 mm 10'0"
A	Max. digging height	10512 mm 34'6"
B	Max. dumping height	7535 mm 24'9"
C	Max. digging depth	6529 mm 21'5"
D	Max. vertical wall digging depth	5664 mm 18'7"
E	Max. digging depth of cut for - 2440 mm 8' level	6354 mm 20'10"
F	Max. digging reach	10196 mm 33'5"
G	Max. digging reach at ground level	9943 mm 32'7"
H	Min. swing radius	3450 mm 11'4"



LIFTING CAPACITY - ROAD BUILDER



- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- ☉: Rating at maximum reach

Road Builder includes:

- Boom length 5850 mm **19'2"**
- Bucket 1.0 m³ **1.31 yd³** (SAE heaped)
- Bucket weight 722 kg **1,592 lb**
- Track shoes: 700 mm **28"**
- With heavy counterweight 6662 kg **14,687 lb**
- **15"** KA riser WCB frt. window guard
- Battery box guard
- Full roller guard

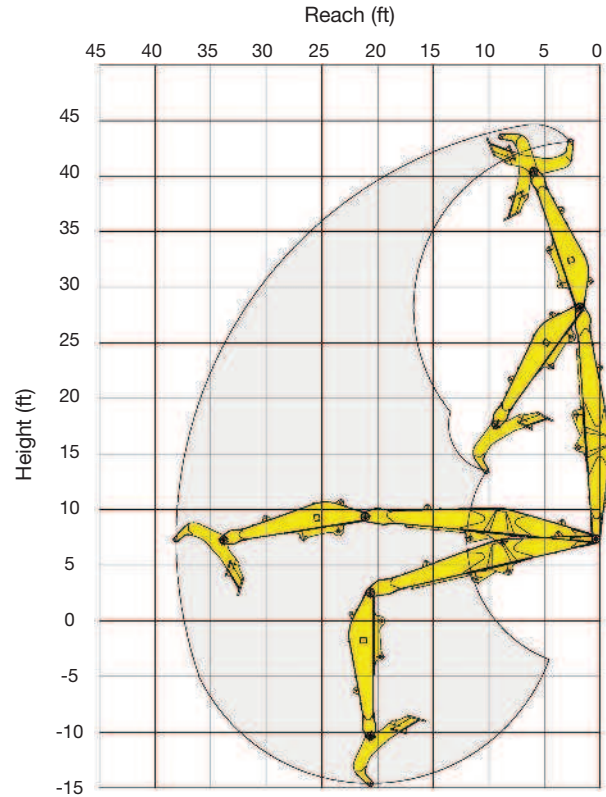
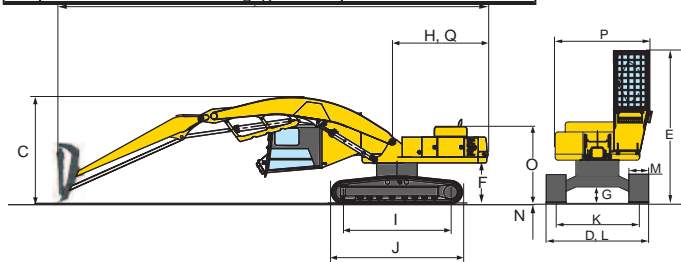
PC220LL-8		Arm: 3048 mm 10'0"										kg/lb	
A	B	1.5 m 5'		3 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		☉ MAX	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.5 m 25'								*4850 *10,750	*4850 *10,750			*3250 *7,250	*3250 *7,250
6.0 m 20'								*5200 *11,500	*5200 *11,500	*4500 *9,900	*4500 *9,900	*3150 *7,000	*3150 *7,000
4.5 m 15'						*7000 *15400	*7000 *15400	*6150 *13600	*6150 *13600	*5800 *12800	*5800 *12800	*3200 *7150	*3200 *7150
3.0 m 10'				*14900 *32900	*14900 *32900	*9650 *21350	*9650 *21350	*7450 *16500	*7450 *16500	*6450 *14250	*6450 *14250	*3400 *7550	*3400 *7550
1.5 m 5'				*7050 *15550	*7050 *15550	*12100 *26750	*12100 *26750	*8800 *19400	*8800 *19400	*7200 *15850	6750 14900	*3800 *8400	*3800 *8400
0 m 0'				*9200 *20300	*9200 *20300	*13600 *30050	*13600 *30050	*9800 *21600	9150 20250	*7750 *17150	6600 14650	*4400 *9750	*4400 *9750
-1.5 m -5'		*8600 *19000	*8600 *19000	*13350 *29450	*13350 *29450	*14100 *31100	14050 31000	*10250 *22600	9050 20000	*8000 *17600	6600 14550	*5500 *12200	*5500 *12200
-3.0 m -10'		*13000 *28700	*13000 *28700	*19350 *42650	*19350 *42650	*13600 *29950	*13600 *29950	*9950 *22000	9100 20100			*7850 *17300	7300 16150
-4.5 m -15'				*16900 *37300	*16900 *37300	*11650 *25750	*11650 *25750					*9100 *20050	*9100 *20050

* Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO 10567 standards. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



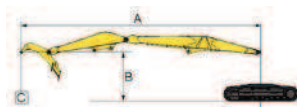
DIMENSIONS – LOG LOADER, HEEL TYPE (KOMATSU 11615 mm 38' REACH)

Heel Type			
A	Overall length	14 180 mm	46'6"
C	Overall height to top of boom	2895 mm	9'6"
D	Overall width	3621 mm	11'11"
E	Overall height to top of cab (riser)		
	w/ 203 mm 8"	3966 mm	13'0"
	w/ 381 mm 15"	3966 mm	13'0"
	w/ 1219 mm 48"	4804 mm	15'9"
	w/ 1219 mm 48" (transport; tilted)	3610 mm	11'10"
	w/ 1524 mm 60"	5109 mm	16'9"
	w/ 1524 mm 60" (transport; tilted)	3610 mm	11'10"
F	Ground clearance, counterweight	1385 mm	4'7"
G	Ground clearance, (minimum)	711 mm	2'4"
H	Tail swing radius	2940 mm	9'8"
I	Track length on ground	4014 mm	13'2"
J	Track length	4937 mm	16'2"
K	Track gauge	2921 mm	9'7"
L	Width of crawler	3621 mm	11'11"
M	Shoe width	700 mm	28"
N	Grouser height (triple grouser)	49.5 mm	1.95"
P	Machine cab width	3226 mm	10'7"
Q	Distance, swing center to rear end	2905 mm	9'6"



LIFTING CAPACITY - LOG LOADER

Log Loader - Heel Type



- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- ⊙: Rating at maximum reach

Conditions:

- Boom length 7061 mm **23'2"**
- Arm length 4178 mm **13'8"**
- Track shoes:
 - 700 mm **28" (double grouser)**
- With heavy counterweight without grapple

PC220LL-8		kg/lb											
A	B	4.6 m 15'		6.1 m 20'		7.6 m 25'		9.1 m 30'		10.7 m 35'		⊙ MAX	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
10.7 m	35'			*9450	*9450	*9000	7250					*8500	*6700
				*20900	*20900	*19850	16050					*18800	*14850
9.1 m	30'			*8950	*8950	*8400	7500	7250	*5400			7050	*5200
				*19750	*19750	*18500	16600	16050	*11900			15550	*11450
7.6 m	25'			*9050	*9050	*8350	7550	7400	5500			6000	*4400
				*19950	*19950	*18400	16650	16350	12150			13250	*9700
6.1 m	20'			*9600	*9600	*8650	7450	7400	5500	5650	4150	5400	*3950
				*21250	*21250	*19050	16500	16300	12150	12500	9200	11900	*8700
4.6 m	15'	*11400	*11400	*10650	10450	*9150	7300	7300	5400	5650	4150	5050	*3700
		*25200	*25200	*23450	23050	*20200	16100	16100	11950	12500	9150	11150	*8150
3.0 m	10'	*15300	*15300	*11850	10000	*9550	7050	7150	5300	5600	4100	4900	*3550
		*33800	*33800	*26150	22050	*21100	15550	15850	11650	12350	9050	10800	*7850
1.5 m	5'	*17400	*14850	*12800	9500	*9300	6800	7050	5150	5550	4050	4900	*3550
		*38350	*32750	*28300	21000	*20550	15000	15500	11350	12250	8950	10800	*7850
0.0 m	0'	*950	*950	*12800	9150	*9100	6600	6900	5050	5500	4000	5000	*3650
		*2150	*2150	*28200	20150	*20050	14550	15250	11150	12150	8850	11050	*8050
-1.5 m	-5'	*650	*650	*6050	*6050	*8950	6450	6850	4950	*5200	4000	*4300	*3850
		*1450	*1450	*13400	*13400	*19750	14250	15100	11000	*11550	8850	*9550	*8550
-3.0 m	-10'	*600	*600	*3200	*3200	*8400	6450	*6150	5000				
		*1350	*1350	*7100	*7100	*18600	14200	*13550	11000				

* Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO 10567 standards. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



STANDARD EQUIPMENT

- Alternator, 60 Amp heavy duty, 24V
- AM/FM radio
- Auto-decel
- Automatic AC with defroster
- Auto deaeration system for fuel line
- Automatic engine warm-up system
- Batteries, 24V large capacity
- Boom and arm holding valves
- Cab, damper mounted
- Control handles, Thumb or Grapple
- Counterweight 5 050 kg 11,133 lb
- Dry type air cleaner, double element
- Doors, HD Engine and Hydraulic Pump Doors 6 mm 1/4" Thick
- Electric horn
- EMMS monitoring system
- Engine, Komatsu SAA6D107E-1,
- tier 3 compliant
- Engine overheat prevention system
- Fan guard structure
- Final drives, PC270class
- Fuel system 10 micron pre-filter
- High pressure in-line hydraulic filters
- Hydraulic track adjusters (each side)
- KOMTRAX™
- Large 7" TFT LCD monitor
- Power maximizing system
- PPC hydraulic control system
- Radiator & oil cooler dustproof net
- Rearview mirrors (LH & RH)
- Revolving frame, HD with undercovers
- Seat belt, 76 mm 3" retractable
- Seat, suspension
- Service valves (2 additional)
- Shoes, triple grouser: 700 mm 28"
- Ski type full length track guide guards
- Slip resistant foot plates
- Starting motor 5.5 kW/24V x 1
- Suction fan
- Swing bearing & drive, PC300 class
- Travel alarm
- Travel, 3 speed
- Undercarriage, High-Wide Forestry with high drawbar pull
711 mm 28" clearance
2 921 mm 9'7" gauge
- Walkways, full length
- Working mode selection system



OPTIONAL EQUIPMENT

- Track Shoe Options
 - 700 mm 28" double grouser shoes
 - 800 mm 31.5" triple grouser shoes
- Road Builder/Excavator Booms
 - 5850mm 19'2" std
 - 5850mm 19'2" HD
 - 5850mm 19'2" HD with one actuator piping (requires dealer installed piping between main valve & boom)
- Road Builder/Excavator Arms
 - 3045mm 10'0" std
 - 3045mm 10'0" HD
 - 3045mm 10'0" HD with one actuator piping (requires dealer installed piping between main valve & boom)
 - 3500mm 11'6" long
- Komatsu 38' log loader boom, heel type
- Boom cylinders only
- Counterweights
 - 6662kg 14687 lb heavy counterweight
 - Extra fuel counterweight (addn'l 543L, 143gal)
- Arm holding valve for allied vendor logging front (loose)
- Soft swing control
- Grip strut walkways
- Straight travel pedal
- Battery box log guard
- Komatsu Purpose Built Forestry Cab; OPS/TOPS compliant, includes: antenna, AM/FM/CD radio, floor mat, intermittent washer and wiper, 5 lb fire extinguisher, front/rear escape windows defroster fan with fan guard, 3 12v power outlets, heating & A/C, sliding seat with 76 mm 3" retractable seat belt
- Komatsu Purpose Built Forestry Cab options
 - 203 mm 8" fixed riser
 - 1 219mm 48" tilting riser
 - 1 524mm 60" tilting riser
 - HID Xenon cab mount work lights,
 - 32mm 1.25" Polycarbonate front window protection
- Komatsu Excavator cab with Forestry Guarding; includes: antenna, AM/FM radio, floor mat, intermittent washer and wiper, heating and A/C, sliding seat with 76 mm .3" retractable seat belt
- Komatsu Excavator cab with with forestry TOPS/FOPS guarding —Options:
 - 381 mm 15" fixed riser
 - 1 219mm 48" tilting riser
 - 1 524mm 60" tilting riser
 - WCB Front window guard
- Riserless arrangement for installation of aftermarket riser and cab guard
- Riserless, cab less for installation of aftermarket rear entry cab and riser



Valmet

Komatsu Forest

www.komatsuforest.com

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