



STANDARD EQUIPMENT

- Alternator, 60 ampere, 24 v
- Anti-slip plates
- Auto-decel
- Automatic engine warm-up system
- Cab, OPG top guard level 2 capable with optional bolt-on top guard
- Counterweight
- Dry type air cleaner, double element
- Electric horn
- EMMS monitoring system
- Engine, Komatsu SAA6D107E-1
- Engine overheat prevention system
- Fan guard structure
- Hydraulic track adjusters (each side)
- In-line filter
- Multi-function color monitor
- Power maximizing system
- PPC hydraulic control system
- Radiator and oil cooler dust proof net
- Rear reflector
- Rearview mirrors, RH, LH, rear, sidewise
- Track shoe
 - PC270-8, 600 mm 24" triple grouser
 - PC270LC-8, 700 mm 28" triple grouser
- Starting motor, 4.5 kW/24 V x 1
- Travel alarm
- Working light, 2 (boom and RH)
- Working mode selection system



OPTIONAL EQUIPMENT

- Additional filter system for poor-quality fuel
- Air conditioner with defroster
- Air conditioner with large blower
- Arms
 - 2500 mm 8'2" HD arm assembly
 - 3045 mm 10'0" HD arm assembly
 - 3500 mm 11'6" HD arm assembly
- Batteries, large capacity
- Bolt-on top guard, [Operator Protective Guards level 2 (FOG)]
- Boom and arm holding valve
- Boom, 5850 mm 19'2"
- Boom, 5850 mm 19'2" with attachment piping
- Cab front guard
 - Full height guard
 - Half height guard
- Deck guard
- Heavy duty travel motor
- One service valve
- Power supply, 12-V
- Seat belt, retractable
- Seat, suspension
- Shoes, triple grouser
 - PC270-8: 700 mm 28", 800 mm 31.5"
 - PC270LC-8: 600 mm 24", 800 mm 31.5"
- Track frame undercover
- Track roller guards (full length)



SPECIAL PURPOSE BUCKET

- Bucket
 - Play adjustment mechanism

For a complete line up of available attachments, please contact your local Komatsu distributor

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PC270-8
PC270LC-8

HORSEPOWER

Gross: 149 kW 200 HP @ 2050 rpm

Net: 140 kW 187 HP @ 2050 rpm

OPERATING WEIGHT

PC270-8: 27140–28050 kg

59,830–61,840 lb

PC270LC-8: 28040–29020 kg

61,820–63,980 lb

ecot3

PC
270



Photo may include optional equipment.

HYDRAULIC EXCAVATOR

WALK-AROUND

Ecology and Economy Features

- **Low fuel consumption by total control of the engine, hydraulic and electronic system.**

Reduces fuel consumption by approx. 10%. (Compared with the PC270-7)

- **Low emission engine**

A powerful, turbocharged and air-to-air aftercooled Komatsu SAA6D107E-1 provides **140 kW** 187 HP. This engine meets EPA Tier 3 and EU Stage 3A emission regulations, without sacrificing power or machine productivity.

- Economy mode improves fuel consumption.
- Eco-gauge for energy-saving operations
- Extended idling caution for fuel conservation

- **Low operation noise**

The dynamic noise is lowered by 1 dB compared with the PC270-7, realizing a low noise operation.

- **Large Drawbar Pull**

Provides superb steering and slope climbing performance.

See pages 4 and 5.

Safety Design

- Cab dedicated to hydraulic excavator for protecting the operator in the event of a roll over accident.
- Anti-slip plates for safe work on machine
- Safety enhancement with large side-view, sidewise, and rear mirrors added.
- Rear view monitoring system for easy checking behind the machine (optional)
- OPG top guard level 2 capable with optional bolt-on top guard

See page 7.



Large Comfortable Cab

- Low-noise cab, similar to passenger car
- Low vibration with cab damper mounting
- Highly pressurized cab with optional air conditioner
- Operator seat and console with armrest that enables operations in the appropriate operational posture

See page 6.

Large TFT LCD monitor

- Easy-to-see and use 7" large multi-function color monitor
- Can be displayed in 12 languages for global support.

TFT : Thin Film Transistor
LCD : Liquid Crystal Display

See page 8.

Easy Maintenance

- Long replacement interval of engine oil, engine oil filter, and hydraulic filter
- Remote mounted engine oil filter and fuel drain valve for easy access
- Equipped with the fuel pre-filter as standard (with water separator)
- Side-by-side cooling concept enables individual cooling modules to be serviced.
- Equipped with the EMMS monitoring system

See page 9.

HORSEPOWER
Gross: 149 kW 149 HP @ 2050 rpm
Net: 140 kW 187 HP @ 2050 rpm

OPERATING WEIGHT
PC270-8: 27140 – 28050 kg
59,830 – 61,840 lb
PC270LC-8: 28040 – 29020 kg
61,820 – 63,980 lb

BUCKET CAPACITY
1.14 – 1.26 m³
1.49 – 1.65 yd³

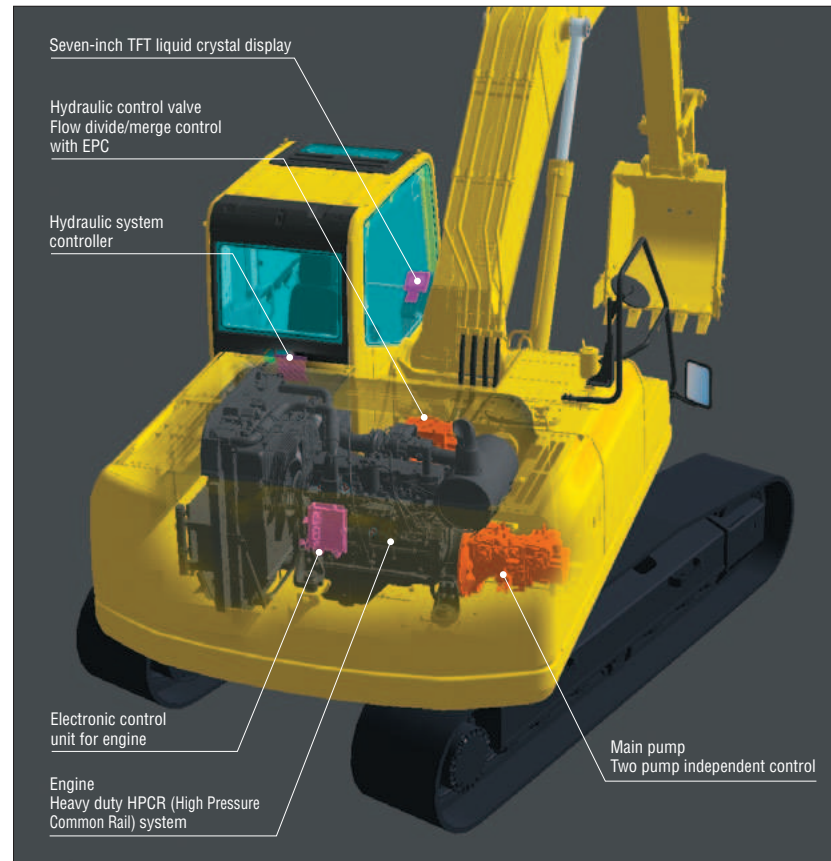
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ECOLOGY & ECONOMY FEATURES

Komatsu Technology



Komatsu develops and produces all major components, such as engines, electronics and hydraulic components, in house. With this "Komatsu Technology," and adding customer feedback, Komatsu is achieving great advancements in technology. To achieve both high levels of productivity and economical performance, Komatsu has developed the main components with a total control system. The result is a new generation of high performance and environment friendly excavators.



Low Fuel Consumption

The newly-developed Komatsu SAA6D107E-1 [ecot3] engine enables NOx emissions to be significantly reduced with the accurate multi-staged fuel injection by the engine controller. It improves total engine durability using the high-pressure fuel injection system developed specifically for construction machinery. This excavator significantly reduces hourly fuel consumption using the highly-efficient matching techniques of the engine and hydraulic unit and also provides features that promote energy-saving operations such as the E mode and Eco-gauge.

Fuel consumption 10% reduced

Compared with the PC270-7 at P mode and 100% working efficiency. Fuel consumption varies depending on job conditions.

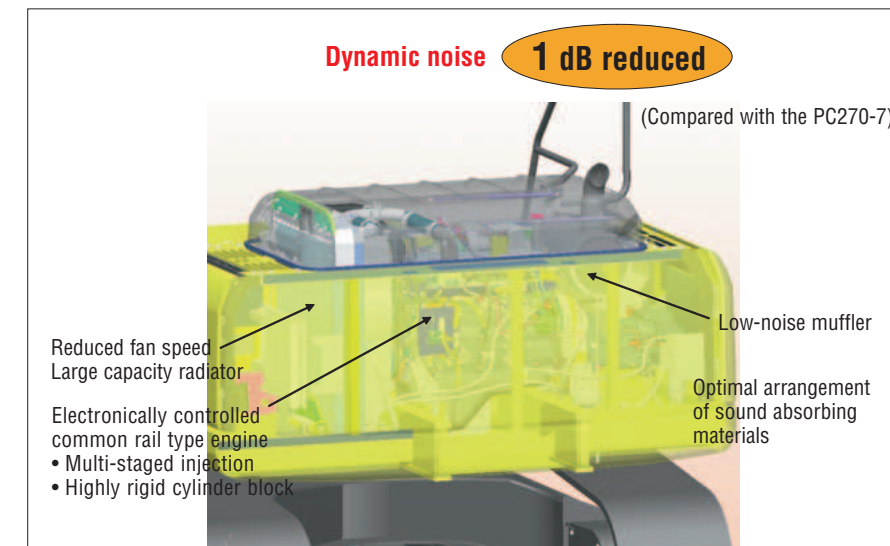
Low Emission Engine

Komatsu SAA6D107E-1 meets EPA Tier 3 and EU Stage 3A emission regulations and reduced NOx emission by 29 % compared with the PC270-7.



Low Operation Noise

Enables a low noise operation using the low-noise engine and methods to cut noise at source.



Idling Caution

To prevent unnecessary fuel consumption, an idling caution is displayed on the monitor, if the engine idles for 5 minutes or more.



Large Maximum Drawbar Pull

PC270-8's maximum drawbar pull provides superb slope climbing performance. The optional heavy duty travel motor gives an extra 6% increase.

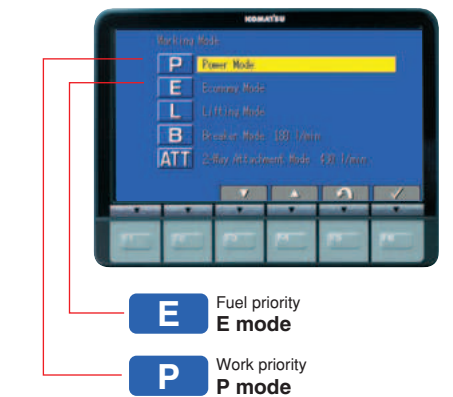
Working Modes Selectable

Two established work modes are further improved.

P mode – Power or work priority mode has low fuel consumption, but fast equipment speed and maximum production and power are maintained.

E mode – Economy or fuel priority mode further reduces fuel consumption, but maintains the P-mode-like working equipment speed for light duty work.

You can select Power or Economy modes using a one-touch operation on the monitor panel depending on work-loads.



Eco-gauge that Assists Energy-saving Operations

Equipped with the Eco-gauge that can be recognized at a glance on the right of the multi-function color monitor for environment-friendly energy-saving operations. Allows focus on operation in the green range with reduced CO2 emissions and efficient fuel consumption.



Eco-gauge

WORKING ENVIRONMENT

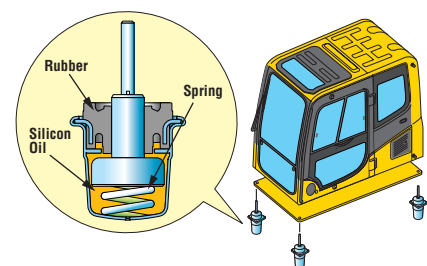


Low Cab Noise

The newly-designed cab is highly rigid and has excellent sound absorption ability. Thorough improvement of noise source reduction and use of low noise engine, hydraulic equipment, and air conditioner allows this machine to generate a low level of noise similar to that of a passenger car.

Low Vibration with Cab Damper Mounting

PC270-8 uses viscous damper mounting for cab that incorporates longer stroke and the addition of a spring. The new cab damper mounting combined with high rigidity deck aids vibration reduction at operator seat.



Wide Newly-designed Cab

Newly-designed wide spacious cab includes seat with reclining backrest. The seat height and longitudinal inclination are easily adjusted using a pull-up lever. You can set the appropriate operational posture of armrest together with the console. Reclining the seat further enables you to place it into the fully flat state with the headrest attached.

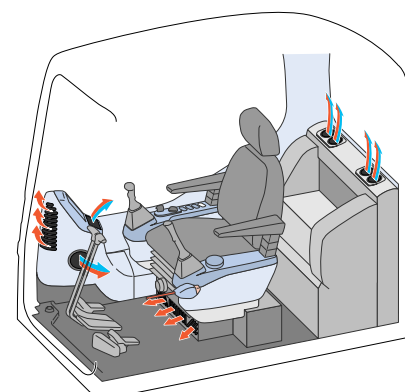


Pressurized Cab

Optional air conditioner, air filter and a higher internal air pressure (+6.0 mm Aq +0.2"Aq) prevent external dust from entering the cab.

Automatic Air Conditioner (optional)

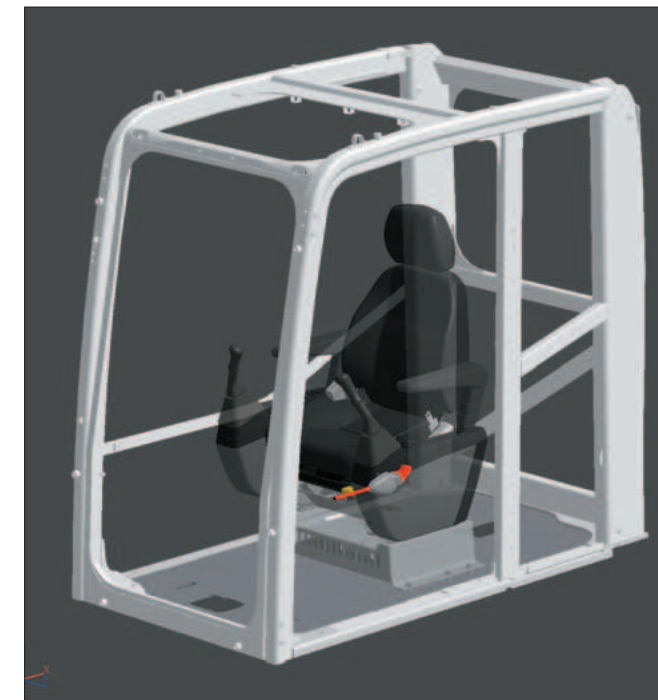
Enables you to easily and precisely set cab atmosphere with the instruments on the large LCD. The bi-level control function keeps the operator's head and feet cool and warm respectively. This improved air flow function keeps the inside of the cab comfortable throughout the year. Defroster function keeps front glass clear.



Safety Features

Cab Dedicated to Hydraulic Excavator

The cab is designed specifically for hydraulic excavators and gains reinforced strength from the pipe-structured cab framework. The cab framework provides the high durability and impact resistance with very high impact absorbency. The seat belt keeps the operator in the seat of the cab during a roll over.



Anti-slip Plates

Highly durable anti-slip plates maintain superior traction performance for the long term.



Pump/engine Room Partition

Pump/engine room partition prevents oil from spraying onto the engine if a hydraulic hose should burst.

Lock Lever

Locks the hydraulic pressure to prevent unintentional movement. Neutral start function allows machine to be started only in lock position.



Large Side-view, Rear, and Sidewise Mirrors

Enlarged left-side mirror and addition of rear and side mirror allow the PC270-8 to meet the new ISO visibility requirements.



Rear View Monitoring System (optional)

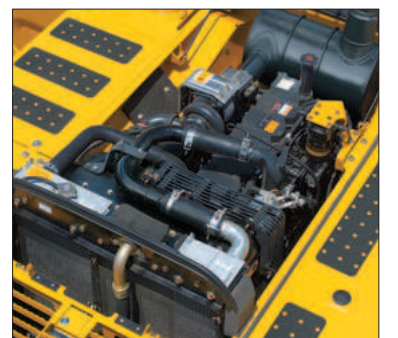
The operator can view the rear of the machine with a color monitor screen.



Monitor for rear view camera

Thermal and Fan Guards

Thermal and fan guards are placed around high-temperature parts of the engine and fan drive.



MAINTENANCE FEATURES

Large LCD Color Monitor

Large Multi-lingual LCD Monitor

A large user-friendly color monitor enables safe, accurate and smooth work. Improved screen visibility is achieved by the use of TFT liquid crystal display that can easily be read at various angles and lighting conditions. Simple and easy to operate switches. Industry first function keys facilitate multi-function operations. Displays data in 12 languages to globally support operators around the world.



- Indicators**
- 1 Auto-decelerator
 - 2 Working mode
 - 3 Travel speed
 - 4 Engine water temperature gauge
 - 5 Hydraulic oil temperature gauge
 - 6 Fuel gauge
 - 7 Eco-gauge
 - 8 Function switches menu

- Basic operation switches**
- 1 Auto-decelerator
 - 2 Working mode selector
 - 3 Traveling selector
 - 4 Buzzer cancel
 - 5 Wiper
 - 6 Windshield washer

Mode Selection

The multi-function color monitor has Power mode, Economy mode, Lifting mode, Breaker mode and Attachment mode.

Working Mode	Application	Advantage
P	Power mode	<ul style="list-style-type: none"> Maximum production/power Fast cycle time
E	Economy mode	<ul style="list-style-type: none"> Excellent fuel economy
L	Lifting mode	<ul style="list-style-type: none"> Hydraulic pressure is increased by 7%
B	Breaker operation	<ul style="list-style-type: none"> Optimum engine rpm, hydraulic flow
ATT	Attachment mode	<ul style="list-style-type: none"> Optimum engine rpm, hydraulic flow, 2 way

Lifting Mode

When the Lifting mode is selected, lifting capacity is increased 7% by raising hydraulic pressure.

EMMS

(Equipment Management Monitoring System)

Monitor Function

Controller monitors engine oil level, coolant temperature, battery charge and air clogging, etc. If controller finds any abnormality, it is displayed on the LCD.



Maintenance Function

Monitor informs replacement time of oil and filters on LCD when the replacement interval is reached.



Trouble Data Memory Function

Monitor stores abnormalities for effective troubleshooting.

Side-by-side Cooling

Since radiator, aftercooler and oil cooler are arranged in parallel, it is easy to clean, remove and install them. Radiator, aftercooler, and oil cooler made of aluminum have high cooling efficiency and are easily recycled.



Equipped with the Fuel Pre-filter (with Water Separator)

Removes water and contaminants in the fuel to prevent fuel problems. (With built-in priming pump)



Washable Cab Floor Mat

The PC270-8's cab floor mat is easy to keep clean. The gently inclined surface has a flanged floor mat and drainage holes to facilitate runoff.



Easy Access to Engine Oil Filter and Fuel Drain Valve

Engine oil filter and fuel drain valve are remote mounted to improve accessibility.



Equipped with the Eco-drain Valve as Standard.

Prevents clothes and the ground from becoming contaminated due to oil leakage when replacing the engine oil.



Large-capacity Fuel Tank and Rustproof Treatment

400-liter (106 U.S. gal) high-capacity fuel tank. Effective corrosion resistance using rustproof treatment.

Sloping Track Frame

Prevents dirt and sand from accumulating and allows easy mud removal.

Gas Assisted Engine Hood Damper Cylinders

The engine hood can be easily opened and closed with the assistance of the gas assisted engine hood damper cylinders.



Long-life Oil, Filter

Uses high-performance filtering materials and long-life oil. Extends the oil and filter replacement interval.



Hydraulic oil filter (Eco-white element)

- Engine oil & Engine oil filter every 500 hours
- Hydraulic oil every 5000 hours
- Hydraulic oil filter every 1000 hours

Air Conditioner Filter (optional)

The air conditioner filter is removed and installed without the use of tools facilitating filter maintenance.



Internal air conditioner filter External air conditioner filter

Long Work Equipment Greasing Interval (optional)

High quality BMRC bushings and resin shims are optionally available for work equipment pins excluding bucket, extending greasing interval to 500 hours.

SPECIFICATIONS



ENGINE

Model Komatsu SAA6D107E-1
 Type Water-cooled, 4-cycle, direct injection
 Aspiration Turbocharged, aftercooled
 Number of cylinders 6
 Bore **107 mm** 4.21"
 Stroke **124 mm** 4.88"
 Piston displacement **6.69 ltr** 408 in³
 Horsepower:
 SAE J1995 Gross **149 kW** 200 HP
 ISO 9249 / SAE J1349 Net **140 kW** 187 HP
 Rated rpm 2050 rpm
 Fan drive method for radiator cooling Mechanical
 Governor All-speed control, electronic
 EPA Tier 3 and EU Stage 3A certified



HYDRAULICS

Type .. HydrauMind (Hydraulic Mechanical Intelligence New Design) system, closed-center system with load sensing valves and pressure compensated valves
 Number of selectable working modes 4
 Main pump:
 Type Variable displacement piston type
 Pumps for Boom, arm, bucket, swing, and travel circuits
 Maximum flow **450 ltr/min** 119 U.S. gal/min
 Supply for control circuit Self-reducing valve
 Hydraulic motors:
 Travel 2 x axial piston motor with parking brake
 Swing 1 x axial piston motor with swing holding brake
 Relief valve setting:
 Implement circuits **37.3 MPa** 380 kgf/cm² 5,400 psi
 Travel circuit **37.3 MPa** 380 kgf/cm² 5,400 psi
 Swing circuit **28.9 MPa** 295 kgf/cm² 4,190 psi
 Pilot circuit **3.2 MPa** 33 kgf/cm² 470 psi
 Hydraulic cylinders:
 (Number of cylinders – bore x stroke x rod diameter)
 Boom **2-140 mm x 1300 mm x 100 mm** 5.5" x 51.2" x 3.9"
 Arm **1-150 mm x 1635 mm x 110 mm** 5.9" x 64.3" x 4.3"
 Bucket **1-140 mm x 1009 mm x 100 mm** 5.5" x 39.7" x 3.9"



DRIVES AND BRAKES

Steering control Two levers with pedals
 Drive method Hydrostatic
 Maximum drawbar pull **249 kN** 25400 kgf 56,000 lb
 *(**264 kN** 26900 kgf 59,300 lb)
 Gradeability 70%, 35°
 Maximum travel speed: High **5.5 km/h** 3.4 mph *(**4.5 km/h** 2.8 mph)
 (Auto-Shift) Mid **4.1 km/h** 2.5 mph *(**3.3 km/h** 2.1 mph)
 Low **3.0 km/h** 1.9 mph *(**2.8 km/h** 1.8 mph)
 Service brake Hydraulic lock
 Parking brake Mechanical disc brake
 *with optional heavy duty travel motor



SWING SYSTEM

Drive method Hydrostatic
 Swing reduction Planetary gear
 Swing circle lubrication Grease-bathed
 Service brake Hydraulic lock
 Holding brake/Swing lock Mechanical disc brake
 Swing speed 10.5 rpm



UNDERCARRIAGE

Center frame X-frame
 Track frame Box-section
 Seal of track Sealed track
 Track adjuster Hydraulic
 Number of shoes (each side)
 PC270-8 45
 PC270LC-8 48
 Number of carrier rollers 2 each side
 Number of track rollers (each side)
 PC270-8 7
 PC270LC-8 8



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 **8.2 ltr** 2.2 U.S. gal
 Hydraulic tank **132 ltr** 34.9 U.S. gal



OPERATING WEIGHT (APPROXIMATE)

Operating weight including **5850 mm** 19'2" one-piece boom, **3045 mm** 10'0" arm, SAE heaped **1.26 m³** 1.65 yd³ backhoe bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Shoes	PC270-8		PC270LC-8	
	Operating Weight	Ground Pressure	Operating Weight	Ground Pressure
600 mm 24"	27140 kg 59,830 lb	55 kPa 0.56 kgf/cm ² 7.96 psi	28040 kg 61,820 lb	52 kPa 0.53 kgf/cm ² 7.54 psi
700 mm 28"	27700 kg 61,070 lb	48 kPa 0.49 kgf/cm ² 6.97 psi	28640 kg 63,140 lb	46 kPa 0.47 kgf/cm ² 6.68 psi
800 mm 31.5"	28050 kg 61,840 lb	42 kPa 0.43 kgf/cm ² 6.15 psi	29020 kg 63,980 lb	40 kPa 0.41 kgf/cm ² 5.83 psi

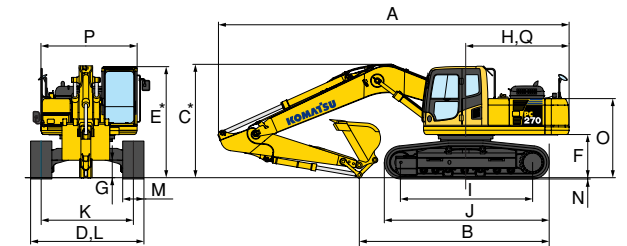


DIMENSIONS

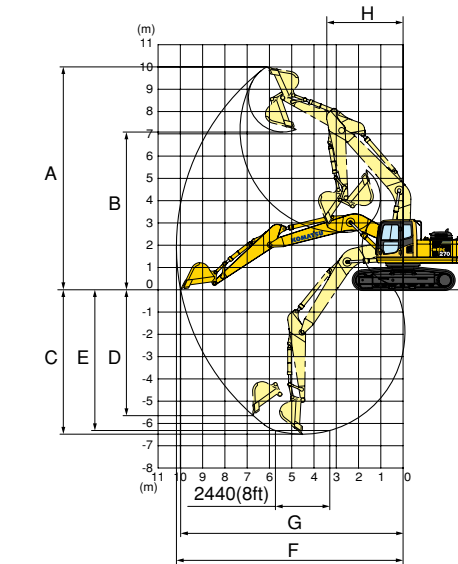
	2500 mm	3045 mm	3500 mm
A Overall length	9940 mm 32'7"	9860 mm 32'4"	9890 mm 32'5"
B Length on ground (transport): PC270-8 : PC270LC-8	6090 mm 12'0" 6255 mm 20'6"	5330 mm 17'6" 5495 mm 18'0"	4930 mm 16'2" 5095 mm 16'9"
C Overall height (to top of boom)*	3310 mm 10'10"	3205 mm 10'6"	3280 mm 10'9"

	PC270-8	PC270LC-8
D Overall width	3190 mm 10'6"	3290 mm 10'10"
E Overall height (to top of cab)*	3175 mm 10'5"	3180 mm 10'5"
F Ground clearance, counterweight	1215 mm 4'0"	1215 mm 4'0"
G Ground clearance (minimum)	498 mm 1'8"	498 mm 1'8"
H Tail swing radius	2940 mm 9'8"	2940 mm 9'8"
I Track length on ground	3700 mm 12'2"	4030 mm 13'3"
J Track gauge	4625 mm 15'2"	4955 mm 16'3"
K Track gauge	2590 mm 8'6"	2590 mm 8'6"
L Width of crawler	3190 mm 10'6"	3290 mm 10'10"
M Shoe width	600 mm 24"	700 mm 28"
N Grouser height	30 mm 1.2"	36 mm 1.4"
O Machine cab height	2225 mm 7'4"	2225 mm 7'4"
P Machine cab width	2710 mm 8'11"	2710 mm 8'11"
Q Distance, swing center to rear end	2905 mm 9'6"	2905 mm 9'6"

*: Including grouser height



WORKING RANGE



	2500 mm	3045 mm	3500 mm
A Max. digging height	9620 mm 31'7"	10000 mm 32'10"	10130 mm 33'3"
B Max. dumping height	6720 mm 22'1"	7035 mm 23'1"	7200 mm 23'7"
C Max. digging depth	5940 mm 19'6"	6460 mm 21'2"	6940 mm 22'9"
D Max. vertical wall digging depth	4800 mm 15'9"	5650 mm 18'6"	5930 mm 19'5"
E Max. digging depth of cut for 8' level	5750 mm 18'10"	6320 mm 20'9"	6790 mm 22'3"
F Max. digging reach	9650 mm 31'8"	10100 mm 33'2"	10570 mm 34'8"
G Max. digging reach at ground level	9450 mm 31'0"	9990 mm 32'9"	10390 mm 34'1"
H Min. swing radius	3500 mm 11'6"	3430 mm 11'3"	3490 mm 11'5"
SAE rating			
Bucket digging force at power max.	176 kN 17900 kgf/39,460 lb	176 kN 17900 kgf/39,460 lb	176 kN 17900 kgf/39,460 lb
Arm crowd force at power max.	165 kN 16800 kgf/37,040 lb	136 kN 13900 kgf/30,640 lb	123 kN 12500 kgf/27,560 lb
ISO rating			
Bucket digging force at power max.	198 kN 20200 kgf/44,530 lb	198 kN 20200 kgf/44,530 lb	198 kN 20200 kgf/44,530 lb
Arm crowd force at power max.	170 kN 17300 kgf/38,140 lb	138 kN 14100 kgf/31,080 lb	126 kN 12800 kgf/28,220 lb



BACKHOE BUCKET, ARM, AND BOOM COMBINATION

Bucket Capacity (heaped)	Width	Weight	Number of Teeth	Arm Length				
				2.5m 8'2"	3.0m 10'0"	3.5m 11'6"		
1.14 m³ 1.49 yd ³	1.00 m³ 1.31 yd ³	1300 mm 51.2"	1405 mm 55.3"	793 kg 1,750 lb	5	○	○	○
1.26 m³ 1.65 yd ³	1.10 m³ 1.44 yd ³	1400 mm 55.1"	1505 mm 59.3"	845 kg 1,860 lb	5	○	○	○

○: General purpose use, density up to **1.8 ton/m³** 1.52 U.S. ton/yd³ ●: Light duty work, density up to **1.2 ton/m³** 1.01 U.S. ton/yd³
 □: General purpose use, density up to **1.5 ton/m³** 1.26 U.S. ton/yd³ ✕: Not usable

