STANDARD EQUIPMENT

ENGINE AND RELATED ITEMS:
- Air cleaner, double element, dry
- Variable speed cooling fan, with fan guard
- Engine, Komatsu SAA6D140E-5

ELECTRICAL SYSTEM:
- Alternator, 50 amp, 24 V
- Batteries, 170 Ah, 2 x 12 V
- Starting motors, 11kW
- Working lights-2 boom, 2 cab top front, 1 cab bottom
- Step light with timer
- Auto decelerator

UNDERCARRIAGE:
- **610 mm** 24" double grouser
- 8 track/3 carrier rollers (each side)
- Hydraulic track adjusters (each side)
- Variable track gauge
- Sealed track

GUARDS AND COVERS:
- Dust-proof net for radiator and oil cooler
- Pump/engine room partition cover
- Travel motor guards
- Strengthened revolving frame underguard
- OPG top guard (operator protective guards ISO 10262 level 2 (FOG))

OPERATOR ENVIRONMENT:
- Damper mount, all-weather, sound-suppressed cab with tinted safety glass windows, lockable door, intermittent window wiper and washer, floormat, cigarette lighter and ashtray
- Multi-function color monitor, electronically-controlled throttle dials, electric service meter, gauges (coolant temperature, hydraulic oil temperature and fuel level), caution lights (electric charge, engine oil pressure, and air cleaner clogging), indicator lights (engine preheating and swing lock light) level check lights (coolant, engine oil, and hydraulic oil level), self-diagnostic system with trouble data memory
- Rear view mirror (R,H)
- Seat, fully adjustable with suspension
- Cab with fixed front window

HYDRAULIC CONTROLS:
- Fully hydraulic, with Electronic Open-Center Load-Sensing (EOLSS) and engine speed sensing (pump and engine mutual control system)
- Two axial piston motors for swing with single-stage relief valve
- One axial piston motor per track for travel with counter balance valve
- Two variable capacity piston pumps
- Two control valves, 5+4 spools (boom, arm, bucket, swing, and travel)
- Control levers, wrist control levers for arm, boom, bucket, and swing with PPC system
- Control levers and pedals for steering and travel with PPC system
- Oil cooler
- In-line filter
- Heavy lift mode system
- Shockless boom control
- Swing priority selection system
- Two-mode setting for boom

DRIVE AND BRAKE SYSTEM:
- Brakes, hydraulic lock travel brakes, oil disc parking
- Hydrostatic two travel speed system with planetary triple reduction final drive

OTHER STANDARD EQUIPMENT:
- Automatic swing holding brake
- Counterweight, **11850 kg** 26,120 lb
- Horn, electric
- Marks and plates, English
- Paint, Komatsu standard
- Large handrails
- One-touch engine oil drainage
- PM tune-up service connector
- Remote greasing for radiator fan drive
- Travel alarm
- Rear reflector
- Anti-slip plates
- Corrosion resistor

OPTIONAL EQUIPMENT

- Alternator, 75 Amp, 24 V
- Air suspension seat
- Arms (Backhoe):
  PC850-8:
  —**3600 mm** 11'10" HD arm assembly
  PC850SE-8:
  —**2945 mm** 9'8" SE arm assembly
  —**3600 mm** 11'10" HD arm assembly
- Auto air conditioner
- Booms (Backhoe):
  PC850-8:
  —**8040 mm** 26'5" boom assembly
  PC850SE-8:
  —**7100 mm** 23'4" boom assembly
- Cab front guard (ISO 10262 level 2)
- Catwalk
- Coolant heater
- Double flange track roller
- 12V electric supply
- Fire extinguisher
- General tool kit
- Grease gun, electric pump with indicator
- Interconnected horn and warning light
- Large-capacity batteries
- Lower wiper
- Provision for fast fuel fill
- Radio AM/FM
- Rain visor
- Rear view mirror (L,H)
- Seat belt **78 mm** 3"
- Shoes:
  —**710 mm** 28" double grouser
- Spare parts for first service
- Track frame undercover (center)
- Vandalism protection locks

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KOMATSU®

CEN00073-04

KOMATSU®

HORSEPOWER
Gross: 370 kW 496 HP @ 1800 rpm
Net: 363 kW 487 HP @ 1800 rpm

OPERATING WEIGHT
PC850-8: 78700–79500 kg
173,500–175,270 lb
PC850SE-8: 78300–79100 kg
172,620–174,380 lb

PC850-8 BACKHOE
PC850SE-8 BACKHOE

ecot3

PC 850

Photo may include optional equipment.

HYDRAULIC EXCAVATOR

Courtesy of Machine.Market

WALK-AROUND

HORSEPOWER
Gross: 370 kW 496 HP @ 1800 rpm
Net: 363 kW 487 HP @ 1800 rpm

OPERATING WEIGHT
PC850-8: 78700–79500 kg
173,500–175,270 lb
PC850SE-8: 78300–79100 kg
172,620-174,380 lb

Productivity Features

- ***High Work Equipment Speed***
  Increased arm dumping and bucket dumping speed realize efficient loading operation.
- ***Heavy Lift Mode***
  The heavy lift mode increases lifting force by 10%.
- ***Large Digging Force***
  High operation efficiency with large digging force for severe applications.
- ***Two-mode Setting for Boom***
  Switch selection allows either powerful digging or smooth boom operation.
- ***Twin Swing Motor System*** provides excellent swing performance, even on slopes.
- ***Large Drawbar Pull and Steering Force*** provide excellent mobility.
- ***Swing Priority Mode***
  The swing priority mode improves efficiency for loading dump trucks.
- ***Shockless Boom***
  Switch selection reduces chassis vibration after sudden stops.

See page 5.

Easy Maintenance

- ***Easy Cleaning of Cooling Unit***
  Fan reverse-rotation function facilitates clogged radiator cleaning.
- ***Centralized Arrangement of Engine Checkpoints***
- ***Anti-slip Plates*** for improved foot traction
- ***Large Handrail, Step and Catwalk*** provide easy access to the engine and hydraulic equipment.
- ***Increased Fuel Tank Capacity***

See page 10.

Excellent Reliability and Durability

- ***KMAX Bucket Teeth*** offer superior penetration and long-term sharpness.
- ***Fuel Pre-filter*** with water separator equipped as standard.
- ***O-ring Face Seals,*** which have excellent sealing performance, are used for the hydraulic hoses.
- ***High-pressure In-line Filtration***
  The cool-running hydraulic system is protected with the most extensive filtration system available, including a high pressure in-line filter for each main pump.
- ***Highly Reliable Electronic Devices***
  Exclusively designed electronic devices have passed severe testing.
  • Controllers • Sensors • Connectors
  • Heat resistant wiring • Circuit breaker
- ***Boom Foot Hoses*** are arranged under the boom foot, improving hose life and safety.

See page 6.

Ecology and Economy Features

- ***Komatsu SAA6D140E-5 Engine Meets Tier 3 Emissions Regulations.***
  • World's first cooled EGR system with bypass-assist type electronically controlled venturi
  • Offers high power and low fuel consumption, while conforming to Tier 3 emission regulations.
  • Reduces NOx emission approximately 40%.
  • Equipped with an electronically controlled variable speed fan.
- ***Economy Mode Four-level Setting***
  Enables operator to select the appropriate Economy mode level to match production requirement with lowest fuel consumption.
- ***Reduction of Ambient Noise***
  Meets the EU Stage 2 noise regulations.
  • Electronically controlled variable speed fan drive
  • Large hybrid fan
  • Glasswool-furnished low-noise muffler and noise reducing cover around the muffler

See page 4.

Photo may include optional equipment.

Working Environment

- ***Large Comfortable Cab***
  • Low noise and vibration with cab damper mounting
  • Large-capacity air conditioner (optional)
  • Pressurized cab prevents external dust from entering
  • OPG top guard level 2 (by ISO 10262 standard) capable with optional bolt-on top guard.

See pages 8, 9.

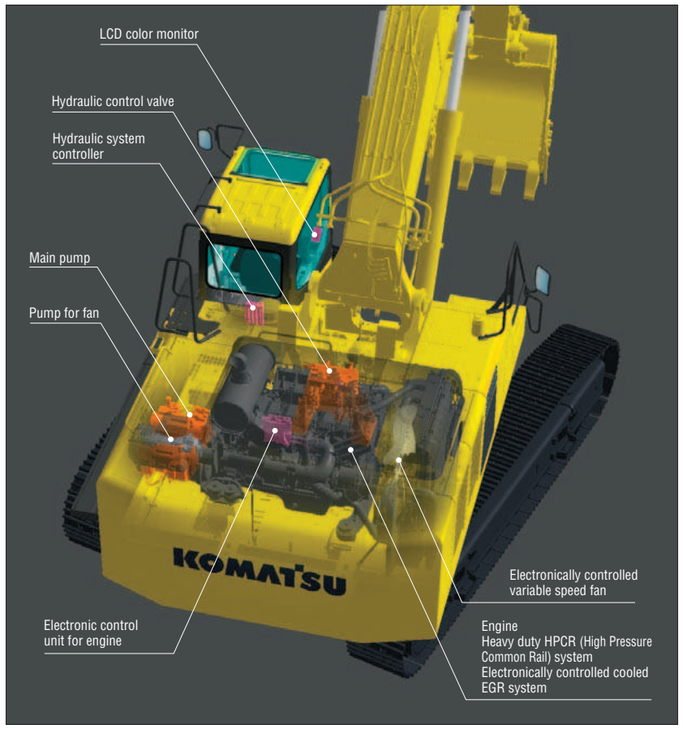
Advanced Monitor Features

- Machine condition can be checked with Equipment Management Monitoring System (EMMS). See page 11.
- Two working modes combine with heavy lift mode for maximum productivity. See page 5.

PRODUCTIVITY & ECOLOGY 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.



Environment-friendly Clean Engine Mounted

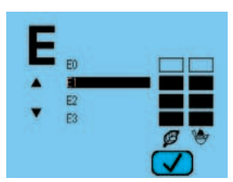
The PC850-8, which is equipped with the Komatsu SAA6D140E-5 engine, meets the Tier 3 emission regulations in North America (EPA) and EU Stage 3A. The SAA6D140E-5 engine adopts the world’s first cooled EGR system with electronically controlled bypass-assist type venturi. NOx emission is reduced 40%, while maintaining high power and low fuel consumption.

This is an image photo: may differ from the actual engine.

Electronically Controlled Variable Speed Fan Contributes to Low Fuel Consumption and Low Noise

The electronic control system sets the rotational speed of the cooling fan according to the coolant, hydraulic oil, and ambient temperature; effectively uses the engine output to prevent wasteful fuel consumption; and reduces noise during low-speed fan rotation.

Lower and Economical Fuel Consumption Using Economy Mode



Enables operator to set the Eco mode to up to four levels according to working conditions so that production requirement is achieved at lowest possible fuel consumption.

Reduction of Ambient Noise (optional)

Reduced noise by adoption of an electronically controlled variable speed fan drive, large hybrid fan, low-noise muffler and cover with glasswool, to meet EU Stage 2 noise regulations.

Large Digging Force

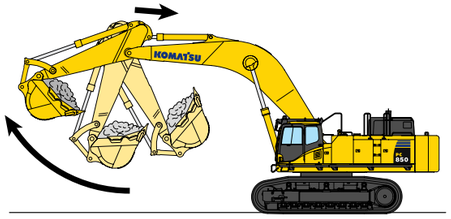
Thanks to the high engine output and an excellent hydraulic system, this machine demonstrates powerful digging force.

Maximum arm crowd force (ISO):
298 kN 30.4 ton

Maximum bucket digging force (ISO):
363 kN 37.0 ton

Work Equipment Speed Increased

An arm quick return circuit is provided for arm dumping. This returns a portion of oil flow directly to the hydraulic tank at arm dumping to reduce the hydraulic pressure loss. Combined with increased bucket dumping speed, faster loading work is realized.

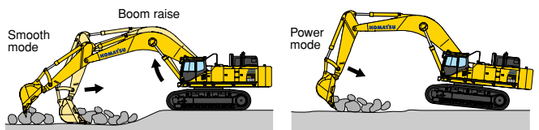


Large Drawbar Pull and Steering Force

Since the machine has a large drawbar pull and a high steering force, it demonstrates excellent mobility even when it is being used on inclined sites.

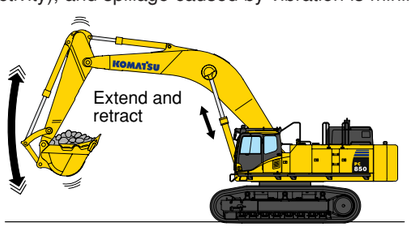
Two-mode Setting for Boom

Smooth mode provides easy operation for gathering blasted rock and scraping operations. When maximum digging force is needed, switch to **power mode** for more effective excavating.



Shockless Boom Control

The PC850-8 boom circuit features a shockless valve (double-check slow return valve) to automatically reduces the amount of vibration present when operating the boom. Operator fatigue is reduced (which can improve safety and productivity), and spillage caused by vibration is minimized.



Working Mode Selection

Power and Economy Mode

The PC850-8 excavator is equipped with two working modes. Each mode is designed to match engine flow, pump speed, and system pressure to the current application, giving the operator flexibility to match equipment performance to the job at hand.

Working Mode	Application	Advantage
P	Power Mode	● Maximum production/power ● Fast cycle time
E (E0,E1,E2,E3)	Economy Mode	● Good cycle time ● Good fuel economy

Heavy Lift Mode

Gives the operator 10% more lifting force on the boom when needed for handling rock or heavy lifting applications.

Swing Priority Setting

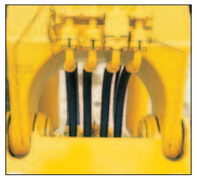
The swing priority setting allows the operator to use the same easy motion for 180˚ loading as 90˚ loading operations. By altering the oil flow, this setting allows you to select either boom or swing as the priority for increased production.

Selection	Result
ON	Oil flow to the swing motor is increased. 180˚loading operations are most efficient.
OFF	Oil flow to the boom is increased. 90˚loading operations are most efficient.

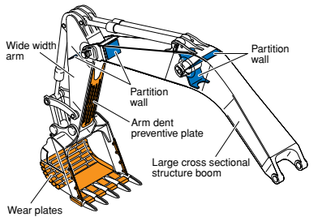
RELIABILITY FEATURES

Excellent Reliability and Durability

Boom Foot Hoses
The boom foot hoses are arranged under the boom foot to reduce hose bend during operation, extending hose life and improving operator safety.



Strengthened Boom and Arm
Thanks to the large cross-sectional structure employing a high tensile strength steel with a thick plate, partition wall, etc., the boom and arm exhibit excellent durability and are highly resistant to bending and torsional stress.

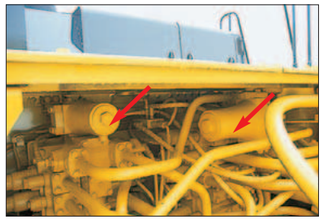


O-ring Face Seal
The hydraulic hose seal method has been changed from a conventional taper seal to an O-ring seal. This provides improved sealing performance during operation.

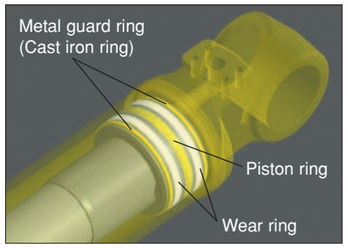
Frame Structure
The revolving frame mount and center frame mount on the swing circle are no welding structure so that force is transmitted directly to the thick plate of the frame without passing through any welding.

Fuel Pre-filter (with Water Separator)
Removes water and contaminants from fuel to enhance the fuel system reliability.

High-pressure In-line Filtration
The PC850-8 has the most extensive filtration system available, providing in-line filters as standard equipment. An in-line filter in the outlet port of each main hydraulic pump reduces failures caused by contamination.



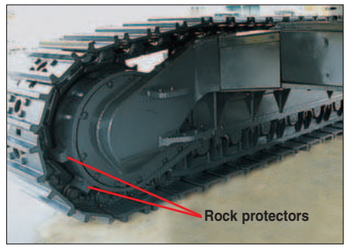
Metal Guard Rings
Metal guard rings protect all the hydraulic cylinders and improve reliability.



Heat-resistant Wiring
Heat-resistant wiring is utilized for the engine electric circuit and other major component circuit.

Circuit Breaker
With circuit breaker, the machine can be easily restarted after repair.

Sturdy Undercarriage
The undercarriage is strengthened to provide excellent reliability and durability when working on rocky ground or blasted rock.

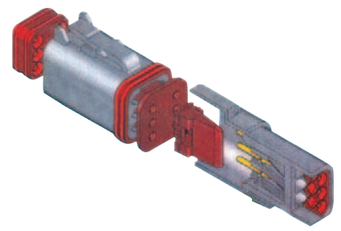


Sturdy guards shield the travel motors and piping against damage from rocks.

Track roller guard (full length)

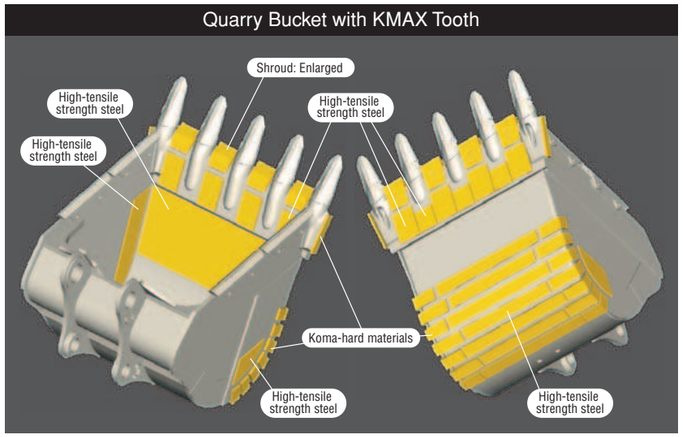
Strengthened Revolving Frame Underguard
Guards the machine body against being hit by rocks from below and prevents hydraulic components and the engine from being damaged.

DT-type Connectors
DT-type connectors seal tight and have higher reliability.

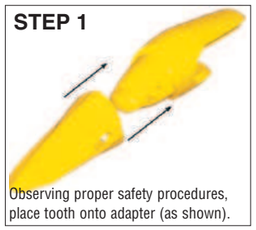


Strengthened Quarry Bucket Provides Outstanding Wear-resistance
The bucket for specific use in quarry is impact and wear resistant, providing high performance and long life. Koma-hard materials* provide excellent wear resistance. Combined with adoption of long-life KMAX teeth, durability of bucket is drastically enhanced.

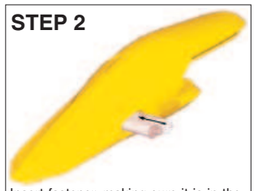
* Koma-hard materials (KVX materials):
Komatsu developed, wear-resistant, reinforced materials. Brinell hardness: 500 or more (180kgf/mm² class). Features high wear-resistance and little quality change from the heat generated during rock loading, maintaining long term hardness.



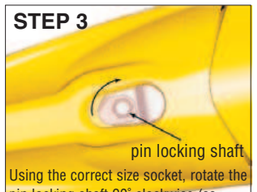
KMAX Tooth
- Unique bucket tooth shape, superior digging performance
- Long-term high sharpness
- Great penetration performance
- Hammerless, safe, and easy tooth replacement
  (Tooth replacement time: Halves the conventional machine.)



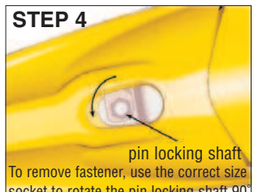
Observing proper safety procedures, place tooth onto adapter (as shown).



Insert fastener, making sure it is in the unlocked position (as shown).



Using the correct size socket, rotate the pin locking shaft 90° clockwise (as shown) to finish the installation.



To remove fastener, use the correct size socket to rotate the pin locking shaft 90° counter-clockwise (as shown). Remove fastener and tooth. Repeat steps 1-3 for a new installation.

Courtesy of Machine Market

WORKING ENVIRONMENT

***The cab interior** is spacious and provides a comfortable working environment...*

Large Comfortable Cab

Comfortable Cab

New PC850-8's cab offers an exceptionally comfortable operating environment. The large cab enables full flat reclining of the seat back with headrest.

Pressurized Cab

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

Low Noise Design

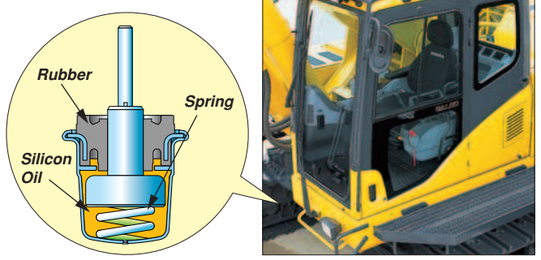
Noise level is remarkably reduced, not only engine noise but also swing and hydraulic relief noise.

Low Vibration with Cab Damper Mounting

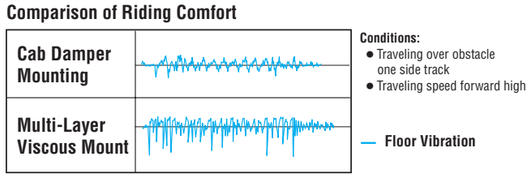
PC850-8 uses a new, improved cab damper mount system that incorporates longer stroke and the addition of a spring. The new cab damper mounting combined with a strengthened left and right side deck, aids vibration reduction at the operator's seat.

Vibration at floor is reduced from 120 dB (VL) to 115 dB (VL).

dB (VL) is index for expressing size of vibration.



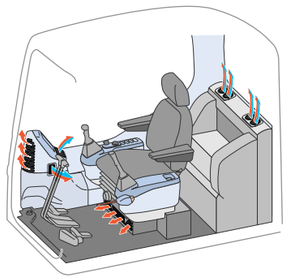
Comparison of Riding Comfort



Vertical direction on graph shows size of vibration.

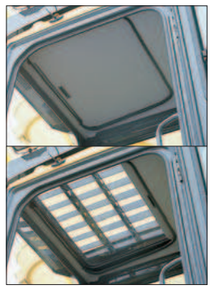
Automatic Air Conditioner (optional)

A 6,900 kcal air conditioner is utilized. 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.



Rigid and Safe Operator's Cab

OPG top guard
The OPG top guard securely protects the operator's cab and conforms to the ISO standard.



Single sheet fixed glass
The glass installed in the machine has excellent visibility since it is laminated to prevent shortening and has less vibration.

See-through skylight equipped with a sun shade
The upward visibility is excellent.

Additional head lamp
Night operation is safe.

Lower wiper (optional)
Lower windshield wiper improves visibility in rain.

Warning light (optional)

Horn interconnected with warning light (optional) give visual and audible notice of the excavator's operation when activated.

Seat with headrest reclined full flat

Photo may include optional equipment.

Multi-position Controls

The multi-position, PPC (proportional pressure control) levers allow the operator to work in comfort while maintaining precise control. A double-slide mechanism allows the seat and control levers to move together or independently, allowing the operator to position the controls for maximum productivity and comfort.

Seat Sliding Amount: 340 mm 13.4", increased 120 mm 4.7"

Defroster (optional)

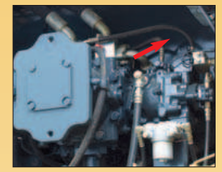
Cab Frame Mounted Wiper

Bottle Holder and Magazine Rack

Safety Features

Step light with timer
provides light for about one minute to allow the operator to get off the machine safely.

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



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

Anti-slip Plates
Spiked plates on working surfaces provide anti-slip performance.

Anti-Slip Plates

Horn interconnected with warning light (optional) give visual and audible notice of the excavator's operation when activated.

EASY MAINTENANCE FEATURES

Komatsu Designed the PC850-8 for Easy Service Access.

Easy Checking and Maintenance of Engine

Engine check points are concentrated on one side of the engine to facilitate daily checks. Thermal guards are placed around high-temperature parts such as turbocharger.

One-touch Drain Cock

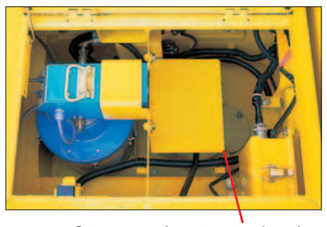
Easier, cleaner engine oil changes.

Reduced Maintenance Costs

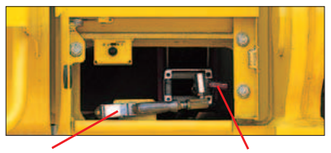
Hydraulic oil filter replacement is extended from 500 to 1000 hours.Engine oil and filter replacement intervals are extended from 250 to 500 hours.

Electric Operated Grease Gun Equipped with Hose Reel (optional)

Greasing is made easy with the electric operated grease gun and indicator.



Grease can drum storage location



Grease gun
The grease gun can be reached from ground level.

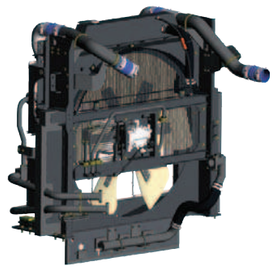
Indicator

Wide Catwalk and Large Handrails

Easier, safer operator cab access and maintenance checks.

Easy Cleaning of Radiator

Reverse-rotation function of the hydraulic driven fan facilitates cleaning of the cooling unit. In addition, this function contributes to reducing warming-up run time in low temperature and discharging hot air from the engine room to keep appropriate heat balance.



Convenient Utility Space

Utility space provides great convenience to store tools, spare parts, etc.

Increased Fuel Tank Capacity

Fuel tank capacity is increased from **880 ltr** 232 U.S. gal to **980 ltr** 259 U.S. gal to extend operating hours before refueling.

Steps Connected to the Machine Cab

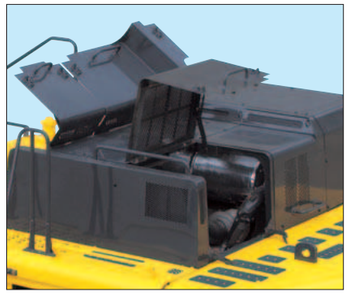
Steps allows access from left hand catwalk to top of machine for engine check and maintenance.

Dust Indicator with 5-step Indication

Informs of air cleaner clogging in 5 steps to warn of filter condition.

Divided Type Engine Cover

The divided engine cover allows inspection points around the engine to be easily accessed.



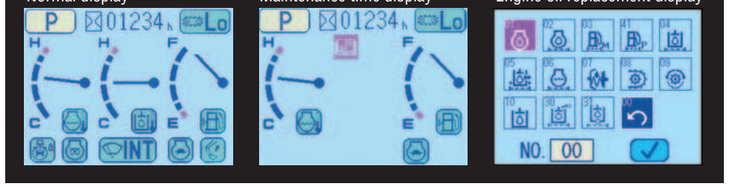
High-Quality EMMS Self-diagnostic System

EMMS
Equipment Management Monitoring System

- **Abnormality Checking Function**
  In case any abnormality should occur, the monitoring system checks whether hydraulic pressure, solenoid ON/OFF status, engine speed, electrical connections, etc. are in the normal conditions to keep the machine downtime to a minimum.
- **Maintenance History Memory Function**
  Maintenance records such as replacement of engine oil, hydraulic oil, filters, etc. can be stored.
- **Trouble Data Memory Function**
  All the trouble data are stored to serve as references for future trouble-shooting.

Maintenance display of the EMMS multi-color monitor (Example)

Normal display | Maintenance time display | Engine oil replacement display



Abnormal information & checking Function display of the EMMS multi-color monitor (Example)

Battery charging abnormal display | Error code display | Display for night work

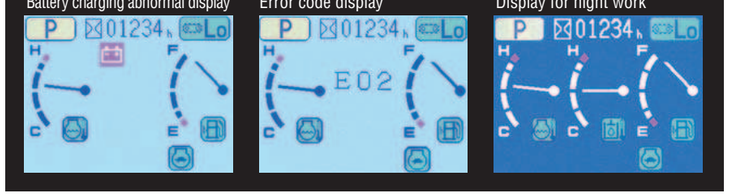


Photo may include optional equipment.

Courtesy of Machine.Market

SPECIFICATIONS

ENGINE

Model . . . . . Komatsu SAA6D140E-5
Type . . . . . 4-cycle, water-cooled, direct injection
Aspiration . . . . . Turbocharged, aftercooled, cooled EGR
Number of cylinders 6
Bore . . . . . **140 mm** 5.51"
Stroke . . . . . **165 mm** 6.50"
Piston displacement . . . . . **15.24 ltr** 930 in³
Governor . . . . . All-speed, electronic
Horsepower:
SAE J1995 . . . . . Gross **370 kW** 496 HP
ISO 9249 / SAE J1349* . . . . . Net **363 kW** 487 HP
Rated rpm . . . . . 1800 rpm
Fan drive type . . . . . Hydraulic

Meets EPA Tier 3 and EU Stage 3A emission regulations.
*Net horsepower at the maximum speed of radiator cooling fan is 338 kW 453HP.

HYDRAULIC SYSTEM

Type . . . . . Open-center load-sensing system
Number of selectable working modes 2

Main pump:
Type . . . . . Variable-capacity piston pumps
Pumps for . . . . . Boom, arm, bucket, swing, and travel circuits
Maximum flow . . . . . **2 x 494 ltr/min** 2 x 130.5 U.S. gpm

Fan drive pump . . . . . Variable capacity piston type

Fan drive pump . . . . . Variable capacity piston type

Hydraulic motors:
Travel . . . . . 2 x axial piston motor with parking brake
Swing . . . . . 2 x axial piston motor with swing holding brake

Relief valve setting:

Implement circuits	**31.4 MPa**	320 kg/cm²	4,550 psi
Travel circuit	**34.3 MPa**	350 kg/cm²	4,980 psi
Swing circuit	**28.4 MPa**	290 kg/cm²	4,120 psi
Heavy lift circuit	**34.3 MPa**	350 kg/cm²	4,980 psi
Pilot circuit	**2.9 MPa**	30 kg/cm²	430 psi

Hydraulic cylinders:
Number of cylinders—bore x stroke

Boom	**2 – 200 mm x 1950 mm**	7.9" x 76.8"
Arm	**2 – 185 mm x 1610 mm**	7.3" x 63.4"
Bucket		
Std	**1 – 185 mm x 1820 mm**	7.3" x 71.7"
SE	**1 – 225 mm x 1420 mm**	8.9" x 55.9"

SWING SYSTEM

Driven method . . . . . Hydraulic motors
Swing reduction . . . . . Planetary gear
Swing circle lubrication . . . . . Grease-bathed
Swing lock . . . . . Oil disc brake
Swing speed . . . . . 6.8 rpm

DRIVES AND BRAKES

Steering control . . . . . Two levers with pedals
Drive method . . . . . Fully hydrostatic
Travel motor . . . . . Axial piston motor, in-shoe design
Reduction system . . . . . Planetary double reduction
Maximum drawbar pull . . . . . **559 kN** 57000 kg 125,660 lb
Gradeability 70%
Maximum travel speed
Low . . . . . **2.8 km/h** 1.7 mph
High . . . . . **4.2 km/h** 2.6 mph
Service brake . . . . . Hydraulic lock
Parking brake . . . . . Oil disc brake

UNDERCARRIAGE

Center frame . . . . . H-leg frame
Track frame . . . . . Box-section
Seal of track . . . . . Sealed
Track adjuster . . . . . Hydraulic
No. of shoes . . . . . 47 each side
No. of carrier rollers . . . . . 3 each side
No. of track rollers . . . . . 8 each side

COOLANT AND LUBRICANT CAPACITY (REFILLING)

Fuel tank	**980 ltr**	258.9 U.S. gal
Radiator	**100 ltr**	26.4 U.S. gal
Engine	**58 ltr**	15.3 U.S. gal
Final drive, each side	**20 ltr**	5.3 U.S. gal
Swing drive	**24.5 x 2 ltr**	6.5 x 2 U.S. gal
Hydraulic tank	**440 ltr**	116.2 U.S. gal

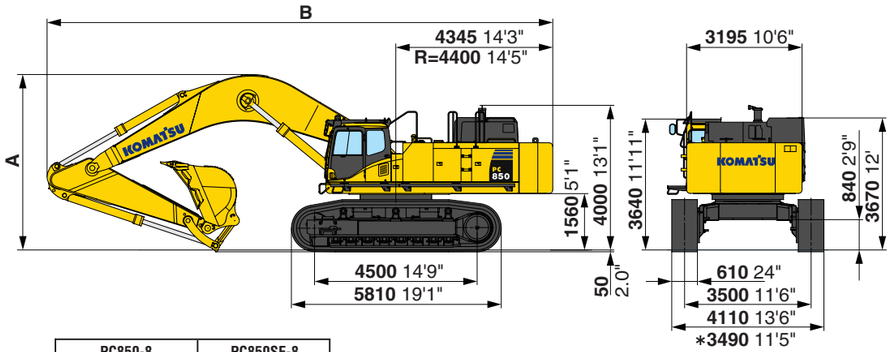
OPERATING WEIGHT (APPROXIMATE)

PC850-8: Operating weight, including **8040 mm** 26'5" boom, **3600 mm** 11'10" arm, SAE heaped **3.4 m³** 4.45 yd³ backhoe bucket, operator, lubricant, coolant, full fuel tank, and the standard equipment.

PC850SE-8: Operating weight, including **7100 mm** 23'4" boom, **2945 mm** 9'8" arm, SAE heaped **4.3 m³** 5.62 yd³ backhoe bucket, operator, lubricant, coolant, full fuel tank, and the standard equipment.

Shoes	PC850-8 Operating Weight	PC850-8 Ground Pressure	PC850SE-8 Operating Weight	PC850SE-8 Ground Pressure
610 mm 24"	**78700 kg** 173,500 lb	**128 kPa** 1.31 kgf/cm² 18.6 psi	**78300 kg** 172,620 lb	**127 kPa** 1.30 kgf/cm² 18.5 psi
710 mm 28"	**79500 kg** 175,270 lb	**112 kPa** 1.14 kgf/cm² 16.2 psi	**79100 kg** 174,380 lb	**111 kPa** 1.13 kgf/cm² 16.1 psi

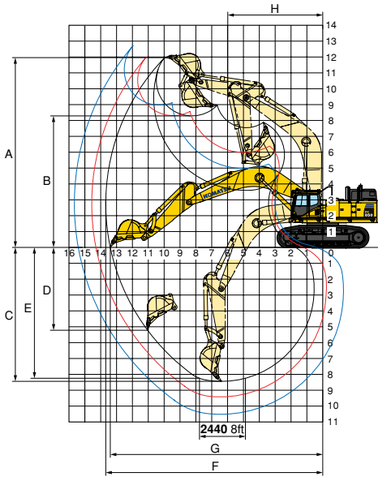
BACKHOE DIMENSIONS



	PC850-8	PC850SE-8
	8.04 m 26'5" boom	**7.1 m** 23'4" boom
	3.6 m 11'10" arm	**2.9 m** 9'8" arm
A Overall Height	**4850 mm** 15'11"	**4615 mm** 15'2"
B Overall Length	**13995 mm** 45'11"	**13130 mm** 43'1"

WORKING RANGE

Unit: **mm** ft in



	PC850-8	PC850SE-8	
Boom length	**8040 mm** 26'5"	**7100 mm** 23'4"	
Arm length	**3600 mm** 11'10"	**2945 mm** 9'8"	**3600 mm** 11'10"
A Max. digging height	**11955 mm** 39'3"	**11330 mm** 37'2"	**11055 mm** 36'3"
B Max. dumping height	**8235 mm** 27'0"	**7525 mm** 24'8"	**7430 mm** 24'5"
C Max. digging depth	**8445 mm** 27'8"	**7130 mm** 23'5"	**7790 mm** 25'7"
D Max. vertical wall digging depth	**5230 mm** 17'2"	**4080 mm** 13'5"	**4260 mm** 14'0"
E Max. digging depth of cut for 8' level	**8310 mm** 27'3"	**6980 mm** 22'11"	**7680 mm** 25'2"
F Max. digging reach	**13660 mm** 44'10"	**12265 mm** 40'3"	**12710 mm** 41'8"
G Max. digging reach at ground level	**13400 mm** 44'0"	**11945 mm** 39'2"	**12400 mm** 40'8"
H Min. swing radius	**5985 mm** 19'8"	**5645 mm** 18'6"	**5440 mm** 17'10"
Bucket digging force (SAE)	**316 kN** 32200 kgf / 70,990 lb	**391 kN** 39900 kgf / 87,960 lb	**316 kN** 32200 kgf / 70,990 lb
Arm crowd force (SAE)	**285 kN** 29100 kgf / 64,150 lb	**331 kN** 33800 kgf / 74,520 lb	**285 kN** 29100 kgf / 64,150 lb
Bucket digging force (ISO)	**363 kN** 37000 kgf / 81,570 lb	**431 kN** 43900 kgf / 96,780 lb	**363 kN** 37000 kgf / 81,570 lb
Arm crowd force (ISO)	**298 kN** 30400 kgf / 67,020 lb	**341 kN** 34800 kgf / 76,720 lb	**298 kN** 30400 kgf / 67,020 lb

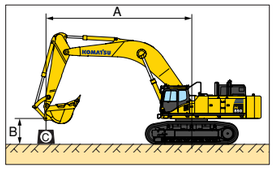
BACKHOE BUCKET, ARM, AND BOOM COMBINATION

BUCKET CAPACITY (HEAPED) SAE, PCSA m³ yd³	CECE m³ yd³	WIDTH Without side shrouds mm in	With side shrouds mm in	WEIGHT (with side shrouds) kg lb	ARM LENGTH m ft in	
PC850-8 (use with 8.04 m boom)					**3.6** 11'10"	
3.4 4.45	**3.0** 3.92	**1820** 71.7"	**1870** 73.6"	**3500** 7,720	○	
PC850SE-8 (use with 7.1 m boom)					**2.9** 9'8"	**3.6** 11'10"
4.0* 5.23	**3.5** 4.58	**2000** 78.7"	**2105** 82.9"	**4000** 8,820	○	○
4.0 5.23	**3.5** 4.58	**2000** 78.7"	**2105** 82.9"	**3435** 7,570	○	—
4.3 5.62	**3.8** 4.97	**2150** 84.6"	**2255** 88.8"	**3870** 8,530	○	—
4.5 5.87	**4.0** 5.23	**2230** 87.8"	**2330** 91.9"	**4050** 8,930	□	—

*For heavy duty

These charts are based on over-side stability with fully loaded bucket at maximum reach.
○ : General purpose use, density up to 1.8 t/m³ 3,000 lb/yd³ □ : General purpose use, density up to 1.5 t/m³ 2,500 lb/yd³
— : Not useable

LIFTING CAPACITY



PC850-8

Equipment:
- Boom: **8.04 m** 26'5"
- Arm: **3.6 m** 11'10"
- Bucket: **3.4 m³** 4.45 yd³
- Shoe: **610 mm** 24"
- Counterweight: **11.85 ton** 26,120 lb

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

HEAVY LIFTING "OFF"

Unit: **kg** lb

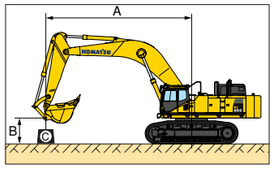
A / B	☢ Maximum		9.0 m 29'		7.5 m 24'		6.0 m 19'		4.5 m 14'		3.0 m 9'	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
6.0 m 19'	***9300** *20,500	**8650** 19,000	***11050** *24,400	***11050** *24,400	***12800** *28,200	***12800** *28,200						
3.0 m 9'	**9600** 21,200	**7250** 15,900	***13250** *29,200	**12250** 27,000	***16450** *36,200	***16450** *36,200	***22050** *48,600	***22050** *48,600				
0 m 0'	**9600** 21,200	**7100** 15,700	**14400** 31,800	**10900** 24,000	***18700** *41,200	**14650** 32,400	***24850** *54,800	**20950** 46,200	***19900** *43,900	***19900** *43,900		
–3.0 m –9'	**11500** 25,400	**8600** 19,000	**14000** 30,900	**10500** 23,200	***18150** *40,000	**14200** 31,300	***23400** *51,600	**20650** 45,600	***30950** *68,300	**30950** 68,300	***26100** *57,500	***26100** *57,500
–6.0 m –19'	***12600** *27,700	***12600** *27,700			***12900** *28,500	***12900** 28,500	***17100** *37,700	***17100** *37,700	***21900** *48,300	***21900** 48,300		

HEAVY LIFTING "ON"

Unit: **kg** lb

A / B	☢ Maximum		9.0 m 29'		7.5 m 24'		6.0 m 19'		4.5 m 14'		3.0 m 9'	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
6.0 m 19'	***10550** *23,200	**8650** 19,000	***12850** *28,400	***12850** *28,400	***14750** *32,500	***14750** *32,500						
3.0 m 9'	**9600** 21,200	**7250** 15,900	***15400** *34,000	**12250** 27,000	***19000** *41,800	***16700** *36,900	***25300** *55,700	***23850** *52,600				
0 m 0'	**9600** 21,200	**7100** 15,700	**14400** 31,800	**10900** 24,000	**19450** 42,900	**14650** 32,400	**28200** 62,200	**20950** 46,200	***22150** *48,800	***22150** *48,800		
–3.0 m –9'	**11500** 25,400	**8600** 19,000	**14000** 30,900	**10500** 23,200	**18950** 41,800	**14200** 31,300	***27050** 59,600	**20650** 45,600	***35650** *78,600	**35050** 77,300	***28900** *63,700	***28900** *63,700
–6.0 m –19'	***14850** *32,800	**14850** 32,700			***15250** *33,600	**15200** 33,600	***20000** *44,100	***20000** *44,100	***25600** *56,400	***25600** *56,400		

* Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE standard No. J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



PC850SE-8

Equipment:
- Boom: **7.1 m** 23'4"
- Arm: **2.9 m** 9'8"
- Bucket: **4.3 m³** 5.62 yd³
- Shoe: **610 mm** 24"
- Counterweight: **11.85 ton** 26,120 lb

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

HEAVY LIFTING "OFF"

Unit: **kg** lb

A / B	☢ Maximum		9.0 m 29'		7.5 m 24'		6.0 m 19'		4.5 m 14'		3.0 m 9'	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
6.0 m 19'	***12650** *27,900	**11500** 25,300	***13150** *29,000	***13150** *29,000	***14700** *32,400	***14700** *32,400						
3.0 m 9'	**12500** 27,500	**9650** 21,300	***15000** *33,100	**12700** 28,000	***18200** *40,100	**17450** 38,500	***23800** *52,500	***23800** *52,500				
0 m 0'	**12800** 28,200	**9800** 21,600	**15300** 33,700	**11750** 25,900	***20250** *44,700	**15800** 34,900	***26650** *58,800	**22650** 49,900	***28900** *63,800	***28900** *63,800		
–3.0 m –9'	***14900** *32,800	**12700** 28,000			***18350** *40,500	**15700** 34,600	***23950** *52,800	**22650** 49,900	***31500** *69,500	***31500** *69,500	***36900** *81,300	***36900** *81,300

HEAVY LIFTING "ON"

Unit: **kg** lb

A / B	☢ Maximum		9.0 m 29'		7.5 m 24'		6.0 m 19'		4.5 m 14'		3.0 m 9'	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
6.0 m 19'	***14550** *32,100	**11500** 25,300	***15100** *33,300	**13950** 30,700	***16800** *37,000	***16800** *37,000						
3.0 m 9'	**12500** 27,500	**9650** 21,300	**16300** 35,900	**12700** 28,000	***20850** *45,900	**17450** 38,500	***27100** *59,700	**25150** 55,500				
0 m 0'	**12800** 28,200	**9800** 21,600	**15300** 33,700	**11750** 25,900	**20650** 45,500	**15800** 34,900	**30000** 66,200	**22650** 49,900	***32000** *70,500	***32000** *70,500		
–3.0 m –9'	**16550** 36,400	**12700** 28,000			**20500** 45,200	**15700** 34,600	***27450** *60,500	**22650** 49,900	***36050** *79,500	**36050** 79,500	***40700** *89,700	***40700** *89,700

* Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE standard No. J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

TRANSPORTATION GUIDE

Transportation specifications (length x height x width)

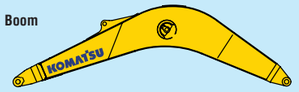
Backhoe

Specs shown include the following equipment:
PC850-8: Boom **8040 mm** 26'5", Arm **3600 mm** 11'10", Bucket **3.4 m³** 4.45 yd³, Shoes **610 mm** 24" double grouser
PC850SE-8: Boom **7100 mm** 23'4", Arm **2945 mm** 9'8", Bucket **4.3 m³** 5.62 yd³, Shoes **610 mm** 24" double grouser

3 Kits Transportation

Work equipment assembly (Backhoe)
Weight : PC850-8 : **18.9 t** 20.8 U.S.ton
PC850SE-8 : **18.6 t** 20.5 U.S.ton

Boom



PC850-8 : **8.1 t : 8380 x 2695 x 1500**
8.9 U.S.ton : 27'6" x 8'10" x 4'11"
PC850SE-8 : **7.3 t : 7430 x 2695 x 1500**
8.0 U.S.ton : 24'5" x 8'10" x 4'11"

Arm

PC850-8 : **4.5 t : 4770 x 1420 x 750**
5.0 U.S.ton : 15'8" x 4'8" x 2'6"
PC850SE-8 : **4.9 t : 4080 x 1695 x 755**
5.4 U.S.ton : 13'5" x 5'7" x 2'6"

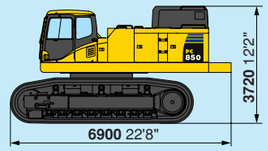
Bucket

PC850-8 : **3.8 t : 2390 x 1880 x 1870**
4.2 U.S.ton : 7'10" x 6'2" x 6'2"
PC850SE-8 : **3.9 t : 2200 x 1950 x 2255**
4.3 U.S.ton : 7'3" x 6'5" x 7'5"

Boom & Arm cylinder

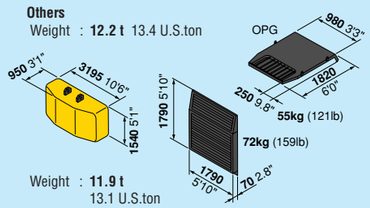
Total 2.5 t 2.8 U.S.ton

Base machine
(Both PC850-8 and PC850SE-8 are designed with the same weight and dimensions.)



Width : **3535** 11'7"
Weight : **48.1 t** 53.0 U.S.ton

Others
Weight : **12.2 t** 13.4 U.S.ton



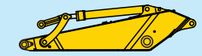
4 Kits Transportation

Work equipment assembly (Backhoe)
Weight : PC850-8 : **18.9 t** 20.8 U.S.ton
PC850SE-8 : **18.6 t** 20.5 U.S.ton

Boom

PC850-8 : **8.1 t : 8380 x 2695 x 1500**
8.9 U.S.ton : 27'6" x 8'10" x 4'11"
PC850SE-8 : **7.3 t : 7405 x 2465 x 1500**
8.0 U.S.ton : 24'4" x 8'1" x 4'11"

Arm



PC850-8 : **4.5 t : 4770 x 1420 x 750**
5.0 U.S.ton : 15'8" x 4'8" x 2'6"
PC850SE-8 : **4.9 t : 4080 x 1695 x 755**
5.4 U.S.ton : 13'5" x 5'7" x 2'6"

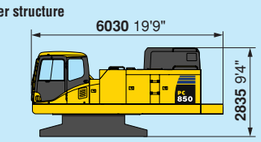
Bucket

PC850-8 : **3.8 t : 2390 x 1880 x 1870**
4.2 U.S.ton : 7'10" x 6'2" x 6'2"
PC850SE-8 : **3.9 t : 2200 x 1950 x 2255**
4.3 U.S.ton : 7'3" x 6'5" x 7'5"

Boom & Arm cylinder

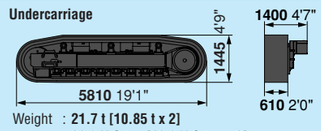
Total 2.5 t 2.8 U.S.ton

Upper structure



Width : **3290** 10'10"
Weight : **26.4 t** 29.1 U.S.ton

Undercarriage



Weight : **21.7 t [10.85 t x 2]**
23.9 U.S.ton [12.0 U.S.ton x 2]

Others
Weight : **12.2 t** 13.4 U.S.ton