**STANDARD EQUIPMENT**

**ENGINE**
- Engine, SAA6D140E-5, diesel engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Starting motor (24V - 11kW), 60 amp alternator
- Removable clean-out screen for radiator
- Automatic engine shut-off for low engine oil pressure
- Engine oil pan drain valve
- Double element air cleaner x 2
- Fuel filters
- Fuel pre-filter
- Engine oil filter
- Corrosion register
- Radiator reserve tank

**CONTROL**
- Working mode selector (H-mode and S-mode)
- Swing rebound prevention system
- Straight propel system
- Two-speed travel with automatic shift down
- Sealed & lubricated track links
- Grease-type track adjusters
- Automatic swing brake

**HYDRAULIC**
- Arm regeneration system
- Auto warm up system
- Aluminum hydraulic oil cooler
- Hydraulic oil filter
- Drain filter

**MIRRORS & LIGHTS**
- Two rearview mirrors
- Four front and two rear working lights
- Swing flashers

**CAB & CONTROL**
- Two control levers, pilot-operated
- Tow eyes
- Horn, electric
- Integrated left and right side-type control box
- Cab, all-weather sound suppressed type
- Ashtray
- Cigarette lighter
- Cab light (interior)
- Coat hook
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
- 7-way adjustable suspension seat
- Rotatable seatbelt
- Headrest
- Handrails
- Heater and defroster
- Incurrent windshield wiper with double-spray washer
- Sunshade
- Skylight
- Tinted safety glass
- Pull-type front window and removable lower front window
- Easy-to-read multi-display monitor
- Automatic air conditioner
- Emergency escape hammer
- Radio, AM/FM Stereo with speakers

**OPTIONAL EQUIPMENT**

- Wide range of buckets
- Various optional arms
- Wide range of shoes
- Travel alarm
- Boom safety valve
- Front-guard protective structures
- Additional hydraulic circuit

---

**SK850 LC**

**Bucket Capacity:**
2.8 – 5.4 m³ ISO heaped

**Engine Power:**
370 kW (503 PS) / 1,800 min⁻¹ (rpm)

**Operating Weight:**
76,200 kg – 80,500 kg

Note: This catalog may contain attachments and optional equipment that are not available in your area. And it may contain photographs of machines with specifications that differ from those of machines sold in your area. Please consult your nearest KOBELCO distributor for those items you require. Due to our policy of continuous product improvements, all designs and specifications are subject to change without advance notice.

Copyright by KOBELCO CONSTRUCTION MACHINERY CO., LTD. No part of this catalog may be reproduced in any manner without notice.

---

**KOBELCO CONSTRUCTION MACHINERY CO., LTD.**

17-1, Higashigotanda 2-chome, Shinagawa-ku, Tokyo 141-8626 JAPAN

Tel: +81 (0) 3-5789-2146 Fax: +81 (0) 3-5789-2135

www.kobelco-kenki.co.jp/english_index.html

---

Inquiries To:

Bulletin No. ACERA GEOSPEC SK850LC-SEASIA-2-102
2011012000F Printed in Japan
Announcing ACERA GEOSPEC and The Concept of Beautiful Performance

When we set out to design our new ACERA GEOSPEC hydraulic excavators, we kept our eyes on the big picture. Of course we wanted machines that would sell well, but we didn’t want to emphasize one aspect of performance at the expense of other features. So, instead of narrowly focusing on fuel-efficient, economical operation, for example, or on environmental compatibility, or on any other particular feature, we sought to develop well-rounded machines that can balance seemingly contradictory demands.

Now, we’re proud to introduce the latest member of the ACERA GEOSPEC family—the 80-ton SK850LC. This machine has it all: the highest productivity in its class; a resilient power plant; outstanding durability proven in the field in large building demolition machines; easy transportability; and an environmentally responsible design that reduces fuel consumption and operating costs. In short, the SK850LC satisfies all of the tough conditions that must be met by a large excavator engaged in demanding, continuous operations. So welcome to the birth of a new standard of performance: the 80-ton ACERA GEOSPEC SK850LC. With its efficient, sleek design, it brings a whole new excavating style to the worksite that’s tuned to the natural beauty of our world.

The Power Wave of Change

Pursuing the “Three E’s”
The Perfection of Next-Generation, Network Performance

Enhancement
Greater Performance Capacity
- New hydraulic circuitry minimizes pressure loss
- High-efficiency, electronically controlled Common Rail Fuel Injection Engine
- Powerful travel and arm/bucket digging force
- High-power engine and high swing torque

Economy
Improved Cost Efficiency
- Advanced power plant that reduces fuel consumption
- Easy maintenance that reduces upkeep costs
- Maintenance walk ensures easy access and maintenance
- High structural durability and reliability that retain machine value longer

Environment
Features That Go Easy on the Earth
- Auto Idle Stop as standard equipment
- Noise reduction measures (with improvement of the sound quality) minimize noise and vibration

The “GEO” in GEOSPEC expresses our deep respect for our planet, and for the solid ground where excavators are in their element. This is accompanied by SPEC, which refers to the performance specifications needed to get the job done. We’ve built this all on the tradition of the urban-friendly ACERA series.
The GEOSPEC Difference:

Efficient Performance!

Great Productivity and Low Fuel Costs
Advanced hydraulic technology keeps fuel costs low matches pump output with a high efficiency engine that conserves fuel, resulting in great productivity and low fuel costs.

High Swing Torque
The use of high swing torque delivers a smoother, stronger and swing for faster, more efficient cycle times. It also provides plenty of start-up swing power for safe operation on slopes.

Swing torque: **268 kN•m**
Swing speed: **8.4 min⁻¹**

Plenty of Digging Force
Digging is smoother than ever with the newly shaped bucket.

Max. bucket digging force: **403 kN** (41.1 tf)
Max. arm crowding force: **311 kN** (31.7 tf)

Strongest Travel Power and Drawbar Pulling Force in Its Class!
The large-capacity motor delivers the strongest travel power and drawbar pulling force in the machine’s class, making it ideal for large civil engineering projects, rock-crushing work, and other power-intensive applications.

Travel speed: **4.2/2.7 km/h**
Drawbar pulling force: **637 kN** (65.0 tf)

Excellent Lateral Stability
The SK850LC has the widest crawlers in its class for outstanding lateral stability. Fitted with a 5.4 m² bucket, it can safely lift a maximum of 9.92 tons over the side, the most in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Thick Edge Penetration
The sharp edge penetrates more easily.

Leveling and other combined operations can be carried out with further refinements that make inching and combined operations easy and accurate, which automatically configures the selector valve.

Seamless, Smooth Combined Operations
The GEOSPEC machines have inherited the various systems that make inching and combined operations easy and accurate, allowing continuous, high-load operation. When the water temperature falls, the cooling system operates very quietly, contributing to both low noise and low fuel consumption.

New Cooling System
The cooling fan changes speed automatically according to the temperature of the cooling water in the radiator. This prevents overheating when the water temperature rises, allowing continuous, high-load operation. When the water temperature falls, the cooling system operates very quietly, contributing to both low noise and low fuel consumption.

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Extended Continuous Operation (Large-Capacity Fuel Tank)
The large-capacity fuel tank, combined with higher fuel efficiency, enables the SK850LC to operate continuously for twelve hours.

**Fuel tank:** 960L

*Continuous digging in S mode. Length of continuous operation will vary with type of operation and load on engine.*

2 NEXT-3E Technology
Next-Generation Electronic Engine Control
The high-pressure, common-rail fuel-injection engine features adjustable control to maximize fuel efficiency and provide powerful medium/low-speed torque. The result is a highly fuel-efficient engine.

New Hydraulic System
The next-generation engine control is governed by a new version of ITCS, which responds quickly to sudden changes in hydraulic load to ensure that the engine runs as efficiently as possible with a minimum of wasted output.

Next-Generation Electronic Engine Control
ITCS (Intelligent Total Control System) is an advanced, computerized system that provides comprehensive control of all machine functions.

Simple Select: Two Digging Modes
H-Mode: For heavy duty when a higher performance level is required.
S-Mode: For normal operations with lower fuel consumption.

3 NEXT-3E Technology
Total Tuning Through Advanced ITCS Control
The next-generation engine control is governed by a new version of ITCS, which responds quickly to sudden changes in hydraulic load to ensure that the engine runs as efficiently as possible with a minimum of wasted output.

Extended Continuous Operation (Large-Capacity Fuel Tank)
The large-capacity fuel tank, combined with higher fuel efficiency, enables the SK850LC to operate continuously for twelve hours.

**Fuel tank:** 960L

*Continuous digging in S mode. Length of continuous operation will vary with type of operation and load on engine.*

2 NEXT-3E Technology
Next-Generation Electronic Engine Control
The high-pressure, common-rail fuel-injection engine features adjustable control to maximize fuel efficiency and provide powerful medium/low-speed torque. The result is a highly fuel-efficient engine.

New Cooling System
The cooling fan changes speed automatically according to the temperature of the cooling water in the radiator. This prevents overheating when the water temperature rises, allowing continuous, high-load operation. When the water temperature falls, the cooling system operates very quietly, contributing to both low noise and low fuel consumption.

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Extended Continuous Operation (Large-Capacity Fuel Tank)
The large-capacity fuel tank, combined with higher fuel efficiency, enables the SK850LC to operate continuously for twelve hours.

**Fuel tank:** 960L

*Continuous digging in S mode. Length of continuous operation will vary with type of operation and load on engine.*

2 NEXT-3E Technology
Next-Generation Electronic Engine Control
The high-pressure, common-rail fuel-injection engine features adjustable control to maximize fuel efficiency and provide powerful medium/low-speed torque. The result is a highly fuel-efficient engine.

New Cooling System
The cooling fan changes speed automatically according to the temperature of the cooling water in the radiator. This prevents overheating when the water temperature rises, allowing continuous, high-load operation. When the water temperature falls, the cooling system operates very quietly, contributing to both low noise and low fuel consumption.

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Extended Continuous Operation (Large-Capacity Fuel Tank)
The large-capacity fuel tank, combined with higher fuel efficiency, enables the SK850LC to operate continuously for twelve hours.

**Fuel tank:** 960L

*Continuous digging in S mode. Length of continuous operation will vary with type of operation and load on engine.*

2 NEXT-3E Technology
Next-Generation Electronic Engine Control
The high-pressure, common-rail fuel-injection engine features adjustable control to maximize fuel efficiency and provide powerful medium/low-speed torque. The result is a highly fuel-efficient engine.

New Cooling System
The cooling fan changes speed automatically according to the temperature of the cooling water in the radiator. This prevents overheating when the water temperature rises, allowing continuous, high-load operation. When the water temperature falls, the cooling system operates very quietly, contributing to both low noise and low fuel consumption.

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Extended Continuous Operation (Large-Capacity Fuel Tank)
The large-capacity fuel tank, combined with higher fuel efficiency, enables the SK850LC to operate continuously for twelve hours.

**Fuel tank:** 960L

*Continuous digging in S mode. Length of continuous operation will vary with type of operation and load on engine.*

2 NEXT-3E Technology
Next-Generation Electronic Engine Control
The high-pressure, common-rail fuel-injection engine features adjustable control to maximize fuel efficiency and provide powerful medium/low-speed torque. The result is a highly fuel-efficient engine.

New Cooling System
The cooling fan changes speed automatically according to the temperature of the cooling water in the radiator. This prevents overheating when the water temperature rises, allowing continuous, high-load operation. When the water temperature falls, the cooling system operates very quietly, contributing to both low noise and low fuel consumption.

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)

Light-Touch Levers
The operating levers are light and easy to move, reducing operator fatigue over long hours of operation.

Compact Design
The SK850LC has the widest crawlers in its class. (Condition: rating over side, 10.7 m reach at G. L., 900 mm shoe)
The GEOSPEC Difference:
The Value and Quality of Sturdy Construction!

Large excavators are often used on steep, rough roads in mountains and quarries where they are expected to operate continuously for many hours at a time. They have to be durable. The high-strength construction of the SK850LC has already been proven through use in large KOBELCO building demolition machines, and has been carefully scrutinized through 30,000 hours of additional durability testing. It has the tough durability required in all of its components, including the upper and lower body and attachment.

**Stable Attachment Strength**
All components are either cast or forged, with HD type boom and arm provided as standard equipment. The balanced design ensures excellent durability even when using a large bucket, providing highly reliable attachment strength.

**Upper Frame with High Structural Strength**
FEM* analysis was used determine the best materials, select the steel plate, and create a high-strength design to resulting in an upper frame that features high structural strength.

**Strong Carbody Structure**
Strength is especially crucial in the carbody. The swing mechanism on the SK850LC is mounted without a column, thereby increasing the carbody’s cross-section size for greater strength.

**Large Components Used in the Crawler Frame**

*FEM (Finite Element Method)
Method of numerical analysis used in structural mechanics

**Emergency Acceleration (Dial) Permits Continued Operation in the Unlikely Event of Malfunction**
If the mechatronic system should happen to malfunction, the ECU will automatically put the engine into high idle (maximum RPM), allowing the operator to continue working until a service specialist can come to repair the machine. During emergency operation, the hydraulic pumps automatically sense any trouble and control hydraulic flow accordingly.

**Countermeasures Against Electrical System Failure**
All elements of the electrical system, including controller, have been designed for enhanced reliability.

**Excellent Transportability**
Counterweight Device
The counterweight device operates both vertically and horizontally for safe and efficient onsite assembly and disassembly.

**Four Disassembly and Transport Patterns**
The SK850LC can be disassembled and transported in four different ways, including no counterweight, with boom attached; main body only; main body without crawler frame; etc.

**Variable Gauge Crawler**
The variable gauge crawler extends the crawlers to a maximum width of 4,300 mm (with 750 mm shoes) for extremely stable operation, and retracts them to a compact minimum width of 3,500 mm for easier transport.
The GEOSPEC Difference:

Easy Maintenance That Supports Large-Scale Operation!

Daily maintenance checks are essential for the successful operation of large, continuously operating excavators. Inspections and maintenance must be quick and easy to maximize productivity. With its maintenance walk, the SK850LC provides easy access to essential components and systems so that more time is spent on the job.

Kobelco’s unique design covers the maintenance walk to create an air duct that helps to keep the radiator cool during machine operation.

Maintenance Walk Serves as an Air Duct During Operation

A small access port is located in front of the upper frame to make it easier to inspect the swing bearing, gear and bolt.

Easy Inspection of Swing Bearing, Gear and Bolt

The high-performance, large capacity filter is designed specially for the common-rail fuel injection engine.

High-Grade Fuel Filter with Superior Filtration Performance

The high-capacity hydraulic oil filter incorporates glass fiber with superior cleaning power and durability. With a replacement cycle of 1,000 hours and a construction that allows replacement of the filter element only, it’s both highly effective and highly economical.

Highly Durable Super-fine Filter

More Efficient Maintenance Inside the Cab

Monitor Display with Essential Information for Accurate Maintenance Checks

Display only the maintenance information that’s needed, when it’s needed.

Self-diagnostic function that provides early-warning detection and display of electrical system malfunctions. Record previous breakdowns, including irregular and transient malfunctions.
The GEOSPEC Difference:

**Designed from the Operator’s Point of View**

**Plenty of Foot Room**

**Comfortable 1,005 mm-Wide Cab.**

**Wide Field of View Liberates the Operator**

The wide field of view easily clears ISO standards, while the peripheral view reduces blind spots to a minimum.

- A long wiper covers a wide area for a broad view in bad weather.
- Back mirrors provide a safe view of the rear.
- Reinforced green glass windows meet European standards.

**Wide-Access Cab Ensures Smooth Entry and Exit**

The left control box lifts up with the safety lock lever to add 10° to the cab entry angle for easy entrance and exit.

**Reduced Vibration for Fatigue-Free Operation**

The rigid cab construction and liquid-filled viscous cab mounts minimize cab vibration. In addition, the use of new lower rollers on the crawlers cuts travel vibration in half compared with previous models.

**Creating a Comfortable Operating Environment**

- Seat can be reclined to horizontal position
- Powerful automatic air conditioner
- Spacious luggage tray
- Two-speaker FM radio with station select (Optional)
- New interior design and materials create an elegant feel

The GEOSPEC Difference:

**Designed for the Environment and the Future!**

**Automatic Acceleration/Deceleration Function Reduces Engine Speed**

Engine speed is automatically reduced when the control lever is placed in neutral, effectively saving fuel and reducing noise and exhaust emissions. The engine quickly returns to full speed when the lever is moved out of neutral.

**Low Noise Level and Mild Sound Quality**

The electronically controlled common-rail engine has a unique fuel injection system that runs quietly. Also, the hydraulic pumps have been redesigned to produce a more pleasant sound during pressure relief. In short, the GEOSPEC series meets all requirements cited in latest EU stage II.

**Auto Idle Stop Provided as Standard Equipment**

This function saves fuel and cuts emissions by shutting down the engine automatically when the machine is on stand by. It also stops the hourmeter, which helps to retain the machine’s asset value.

**Meets EMC (Electromagnetic Compatibility) Standards in Europe.**

Measures have been taken to ensure that the GEOSPEC machines do not cause electromagnetic interference.

**Safety Features That Take Various Scenarios into Consideration**

- Swing flashers/rear working lights
- Thermal guard prevents contact with hot components during engine inspections
- Hand rails meet European standards
- Retractable seatbelt requires no manual adjustment

**Photos: Specifications may vary in your areas.**
**Engine**

- **Model:** SK850LC
- **Type:** Direct injection, water-cooled, 4-cycle electrically-controlled common rail system
- **Rated power output:** 370 kW (503 PS) SAE NET at 1,800 min⁻¹ (ISO14396: 2002)
- **Max. torque:** 2,197 Nm at 1,350 min⁻¹ (rpm)
- **Electrical system:** D.C. 24V
- **Starter:** 24 V, 11 kW
- **Alternator:** 60 AMP
- **Batteries:** 2 x 12 V – 190Ah

**Hydraulic System**

- **Pump:** Two variable displacement pumps + 1 gear pump
- **Max. discharge flow:** 2 x 504 L/min, 1 x 30 L/min
- **Relief valve setting:**
  - Boom, arm and bucket: 33.0 MPa (337 kgf/cm²)
  - Travel circuit: 33.0 MPa (337 kgf/cm²)
  - Swing circuit: 30.0 MPa (306 kgf/cm²)
  - Control circuit: 5.0 MPa (50 kgf/cm²)

**Swing System**

- **Swing motor:** Axial-piston motor
- **Brake:** Hydraulic disc brake
- **Swing speed:** 8.4 km/h
- **Swing torque:** 246 kNm
- **Tail swing radius:** 4,600 mm
- **Min. front swing radius:** 6,340 mm

**Travel System**

- **Travel motors:** 2 x axial-piston motor, two-step motors
- **Travel brakes:** Hydraulic disc brake
- **Parking brakes:** Oil disc brake per motor
- **Travel shoes:** 51 each side
- **Travel speed:** 4.2/2.7 km/h
- **Crane turning force:** 637 kN (65,000 kgf) (J1309)
- **Gradeability:** 70 % (35°)
- **Ground clearance:** 850 mm

**Boom, Arm & Bucket**

- **Boom cylinders:** 210 mm x 1,800 mm
- **Arm cylinder:** 220 mm x 2,175 mm
- **Bucket cylinder:** 200 mm x 1,570 mm

**Cab & Control**

- **All-weather, sound-suppressed steel cab mounted on the silicon-sealed viscous mounts and equipped with a heavy, insulated floor mat.**
- **Two hand levers and two foot pedals for travel**
- **Two hand levers for excavating and swing**
- **Electric rotary-type engine throttle**

**Refilling Capacities & Lubrications**

- **Fuel tank:** 960 L
- **Cooling system:** 76 L
- **Engine oil:** 58 L
- **Travel reduction gear:** 2 x 22 L
- **Swing reduction gear:** 2 x 21 L
- **Hydraulic oil tank:** 473 L tank oil level 856 L hydraulic system

**Specifications**

- **Use Backhoe bucket**
- **Bucket capacity**
  - ISO heaped m³: 2.8, 3.5, 4.6, 5.4
  - Struck m³: 2.1, 2.6, 3.4, 4.0
- **Weight kg**
  - 2.9 m short arm + 7.25 m short boom: 2,370, 2,610, 3,270, 3,630

###Boom, Arm and Bucket Combinations

<table>
<thead>
<tr>
<th>Bucket</th>
<th>Arm</th>
<th>Bucket</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6 m</td>
<td>3.6 m</td>
<td>3.6 m</td>
</tr>
<tr>
<td>Weight: 4,340 kg</td>
<td>Weight: 4,130 kg</td>
<td>Weight: 3,700 kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mass Excavation Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backhoe bucket and arm combination</td>
</tr>
<tr>
<td>Bucket capacity</td>
</tr>
<tr>
<td>ISO heaped m³</td>
</tr>
<tr>
<td>Struck m³</td>
</tr>
<tr>
<td>Weight kg</td>
</tr>
<tr>
<td>3.6 m standard arm</td>
</tr>
<tr>
<td>ISO heaped m³</td>
</tr>
<tr>
<td>Struck m³</td>
</tr>
<tr>
<td>Weight kg</td>
</tr>
<tr>
<td>4.4 m long arm</td>
</tr>
<tr>
<td>ISO heaped m³</td>
</tr>
<tr>
<td>Struck m³</td>
</tr>
<tr>
<td>Weight kg</td>
</tr>
<tr>
<td>2.9 m short arm + 7.25 m short boom</td>
</tr>
<tr>
<td>ISO heaped m³</td>
</tr>
<tr>
<td>Struck m³</td>
</tr>
<tr>
<td>Weight kg</td>
</tr>
</tbody>
</table>
Specifications

Dimensions

<table>
<thead>
<tr>
<th>Application</th>
<th>Short Arm</th>
<th>Standard Arm</th>
<th>Long Arm</th>
<th>Mass Excavator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm length</td>
<td>3.6 m</td>
<td>4.4 m</td>
<td>5.4 m</td>
<td>6.4 m</td>
</tr>
<tr>
<td>Boom length</td>
<td>14,600</td>
<td>14,530</td>
<td>14,480</td>
<td>13,590</td>
</tr>
<tr>
<td>A Overall length</td>
<td>4,850</td>
<td>4,760</td>
<td>4,680</td>
<td>4,930</td>
</tr>
<tr>
<td>B Overall height (to top of boom)</td>
<td>(Extended)</td>
<td>3,500</td>
<td>3,300</td>
<td>3,300</td>
</tr>
<tr>
<td>C Overall width</td>
<td>(Retracted)</td>
<td>1,560</td>
<td>650/750/900</td>
<td>650/750/900</td>
</tr>
<tr>
<td>D Overall height (to top of cab)</td>
<td>5,140</td>
<td>5,050</td>
<td>5,050</td>
<td>5,050</td>
</tr>
<tr>
<td>E Ground clearance of rear end*</td>
<td>4,480</td>
<td>4,480</td>
<td>4,480</td>
<td>4,480</td>
</tr>
<tr>
<td>F Tail swing radius</td>
<td>5,140</td>
<td>5,140</td>
<td>5,140</td>
<td>5,140</td>
</tr>
<tr>
<td>G Ground clearance**</td>
<td>3,500</td>
<td>3,500</td>
<td>3,500</td>
<td>3,500</td>
</tr>
<tr>
<td>H Tumbler distance</td>
<td>750</td>
<td>750</td>
<td>750</td>
<td>750</td>
</tr>
<tr>
<td>I Overall length of crawler</td>
<td>6,370</td>
<td>6,370</td>
<td>6,370</td>
<td>6,370</td>
</tr>
<tr>
<td>J Track gauge</td>
<td>(Extended)</td>
<td>750</td>
<td>750</td>
<td>750</td>
</tr>
<tr>
<td>K Shoe width</td>
<td>(Retracted)</td>
<td>650/750/900</td>
<td>650/750/900</td>
<td>650/750/900</td>
</tr>
<tr>
<td>L Overall width of upperstructure</td>
<td>3,500</td>
<td>3,500</td>
<td>3,500</td>
<td>3,500</td>
</tr>
<tr>
<td>M Overall length of upperstructure</td>
<td>6,170</td>
<td>6,170</td>
<td>6,170</td>
<td>6,170</td>
</tr>
</tbody>
</table>

Operating Weight & Ground Pressure

**Short Arm Application (In standard trim, with 8.25 m standard boom, 2.9 m short arm, and 4.6 m³ bucket)**

| Shoe width | 650 | 750 | 900 |
| Overall width | 4,440 | 4,440 | 4,440 |
| Ground pressure | 107.1 | 107.1 | 107.1 |
| Operating weight | 76,750 | 78,700 | 80,500 |

**Standard Arm Application (In standard trim, with 8.25 m standard boom, 3.6 m standard arm, and 3.5 m³ bucket)**

| Shoe width | 650 | 750 | 900 |
| Overall width | 4,440 | 4,440 | 4,440 |
| Ground pressure | 107.1 | 107.1 | 107.1 |
| Operating weight | 76,750 | 78,700 | 80,500 |

**Long Arm Application (In standard trim, with 8.25 m standard boom, 4.4 m long arm, and 2.8 m³ bucket)**

| Shoe width | 650 | 750 | 900 |
| Overall width | 4,440 | 4,440 | 4,440 |
| Ground pressure | 107.1 | 107.1 | 107.1 |
| Operating weight | 76,750 | 78,700 | 80,500 |

**Mass Excavator Arm Application (In standard trim, with 7.25 m short boom, 2.9 m short arm, and 5.4 m³ bucket)**

| Shoe width | 650 | 750 | 900 |
| Overall width | 4,440 | 4,440 | 4,440 |
| Ground pressure | 107.1 | 107.1 | 107.1 |
| Operating weight | 76,750 | 78,700 | 80,500 |

Transportation Plan

**Configuration**

<table>
<thead>
<tr>
<th>Plan 1</th>
<th>Description</th>
<th>Total weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base machine without counterweight and bucket, with lower structure, 8.25 m standard boom and 3.6 m standard arm.</td>
<td>62,700 kg</td>
<td></td>
</tr>
<tr>
<td>Plan 2</td>
<td>Base machine without counterweight, bucket and arm, with lower structure and 8.25 m standard boom.</td>
<td>58,900 kg</td>
</tr>
<tr>
<td>Plan 3</td>
<td>Base machine with lower structure, without counterweight, bucket, arm and boom.</td>
<td>48,800 kg</td>
</tr>
<tr>
<td>Plan 4</td>
<td>Base machine with carbody, without counterweight, bucket, arm,boom and lower structure.</td>
<td>24,900 kg</td>
</tr>
</tbody>
</table>

*Counterweight: 13,400 kg

*Without including height of shoe lug
### SK850LC Specifications

#### Lifting Capacities

<table>
<thead>
<tr>
<th>Application</th>
<th>Short Arm</th>
<th>Standard Arm</th>
<th>Long Arm</th>
<th>Mass Excavator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm length</td>
<td>2.9 m</td>
<td>3.6 m</td>
<td>4.4 m</td>
<td>5.4 m</td>
</tr>
<tr>
<td>Boom length</td>
<td>8.25 m</td>
<td>7.25 m</td>
<td>5.4 m</td>
<td>5.4 m</td>
</tr>
<tr>
<td>Reach</td>
<td>18 m</td>
<td>15 m</td>
<td>13 m</td>
<td>13 m</td>
</tr>
<tr>
<td>Mass/Excavator</td>
<td>17,190 kg</td>
<td>22,790 kg</td>
<td>25,290 kg</td>
<td>33,060 kg</td>
</tr>
</tbody>
</table>

#### Working Ranges

<table>
<thead>
<tr>
<th>Application</th>
<th>Short Arm</th>
<th>Standard Arm</th>
<th>Long Arm</th>
<th>Mass Excavator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm length</td>
<td>2.9 m</td>
<td>3.6 m</td>
<td>4.4 m</td>
<td>5.4 m</td>
</tr>
<tr>
<td>Boom length</td>
<td>8.25 m</td>
<td>7.25 m</td>
<td>5.4 m</td>
<td>5.4 m</td>
</tr>
<tr>
<td>Reach</td>
<td>18 m</td>
<td>15 m</td>
<td>13 m</td>
<td>13 m</td>
</tr>
<tr>
<td>Mass/Excavator</td>
<td>17,190 kg</td>
<td>22,790 kg</td>
<td>25,290 kg</td>
<td>33,060 kg</td>
</tr>
</tbody>
</table>

#### Digging Force (ISO 6015)

<table>
<thead>
<tr>
<th>Application</th>
<th>Short Arm</th>
<th>Standard Arm</th>
<th>Long Arm</th>
<th>Mass Excavator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm length</td>
<td>2.9 m</td>
<td>3.6 m</td>
<td>4.4 m</td>
<td>5.4 m</td>
</tr>
<tr>
<td>Boom length</td>
<td>8.25 m</td>
<td>7.25 m</td>
<td>5.4 m</td>
<td>5.4 m</td>
</tr>
<tr>
<td>Reach</td>
<td>18 m</td>
<td>15 m</td>
<td>13 m</td>
<td>13 m</td>
</tr>
<tr>
<td>Mass/Excavator</td>
<td>17,190 kg</td>
<td>22,790 kg</td>
<td>25,290 kg</td>
<td>33,060 kg</td>
</tr>
</tbody>
</table>

#### Notes:
1. Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and height. Weight of all accessories must be deducted from the above lift capacities.
2. Lift capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for job conditions such as soft or uneven ground, not level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc.
3. Bucket lift hook defined as lift point.
4. The above lifting capacities are in compliance with ISO 10567. They do not exceed 87% of the hydraulic lifting capacity or 75% of tipping load. Lift capacities marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.
5. Operator should be fully acquainted with the Operator’s and Maintenance Instructions before operating this machine. Rules for safe operation of equipment should be adhered to at all times.
6. Lift capacities apply to only machinery as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.
Lifting Capacities

Short Arm Application

<table>
<thead>
<tr>
<th>Radius (m)</th>
<th>3.0 m</th>
<th>4.5 m</th>
<th>6.0 m</th>
<th>7.5 m</th>
<th>9.0 m</th>
<th>10.5 m</th>
<th>Max. Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 m</td>
<td>15,770</td>
<td>17,300</td>
<td>19,860</td>
<td>19,900</td>
<td>19,900</td>
<td>18,990</td>
<td>17,700</td>
</tr>
<tr>
<td>3.0 m</td>
<td>17,300</td>
<td>19,860</td>
<td>21,420</td>
<td>21,460</td>
<td>21,500</td>
<td>20,380</td>
<td>18,990</td>
</tr>
<tr>
<td>4.5 m</td>
<td>19,860</td>
<td>21,420</td>
<td>23,010</td>
<td>23,060</td>
<td>23,060</td>
<td>21,980</td>
<td>19,560</td>
</tr>
<tr>
<td>6.0 m</td>
<td>21,420</td>
<td>23,010</td>
<td>24,620</td>
<td>24,660</td>
<td>24,660</td>
<td>23,580</td>
<td>20,900</td>
</tr>
<tr>
<td>9.0 m</td>
<td>23,010</td>
<td>24,620</td>
<td>26,260</td>
<td>26,300</td>
<td>26,300</td>
<td>25,080</td>
<td>22,320</td>
</tr>
<tr>
<td>10.5 m</td>
<td>24,620</td>
<td>26,260</td>
<td>28,020</td>
<td>28,060</td>
<td>28,060</td>
<td>26,720</td>
<td>23,820</td>
</tr>
<tr>
<td>12.0 m</td>
<td>26,260</td>
<td>28,020</td>
<td>30,810</td>
<td>30,850</td>
<td>30,850</td>
<td>29,520</td>
<td>26,520</td>
</tr>
</tbody>
</table>

Standard Arm Application

<table>
<thead>
<tr>
<th>Radius (m)</th>
<th>3.0 m</th>
<th>4.5 m</th>
<th>6.0 m</th>
<th>7.5 m</th>
<th>9.0 m</th>
<th>10.5 m</th>
<th>Max. Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 m</td>
<td>15,770</td>
<td>17,300</td>
<td>19,860</td>
<td>19,900</td>
<td>19,900</td>
<td>18,990</td>
<td>17,700</td>
</tr>
<tr>
<td>3.0 m</td>
<td>17,300</td>
<td>19,860</td>
<td>21,420</td>
<td>21,460</td>
<td>21,500</td>
<td>20,380</td>
<td>18,990</td>
</tr>
<tr>
<td>4.5 m</td>
<td>19,860</td>
<td>21,420</td>
<td>23,010</td>
<td>23,060</td>
<td>23,060</td>
<td>21,980</td>
<td>19,560</td>
</tr>
<tr>
<td>6.0 m</td>
<td>21,420</td>
<td>23,010</td>
<td>24,620</td>
<td>24,660</td>
<td>24,660</td>
<td>23,580</td>
<td>20,900</td>
</tr>
<tr>
<td>9.0 m</td>
<td>23,010</td>
<td>24,620</td>
<td>26,260</td>
<td>26,300</td>
<td>26,300</td>
<td>25,080</td>
<td>22,320</td>
</tr>
<tr>
<td>10.5 m</td>
<td>24,620</td>
<td>26,260</td>
<td>28,020</td>
<td>28,060</td>
<td>28,060</td>
<td>26,720</td>
<td>23,820</td>
</tr>
<tr>
<td>12.0 m</td>
<td>26,260</td>
<td>28,020</td>
<td>30,810</td>
<td>30,850</td>
<td>30,850</td>
<td>29,520</td>
<td>26,520</td>
</tr>
</tbody>
</table>

Long Arm Application

<table>
<thead>
<tr>
<th>Radius (m)</th>
<th>3.0 m</th>
<th>4.5 m</th>
<th>6.0 m</th>
<th>7.5 m</th>
<th>9.0 m</th>
<th>10.5 m</th>
<th>Max. Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 m</td>
<td>15,770</td>
<td>17,300</td>
<td>19,860</td>
<td>19,900</td>
<td>19,900</td>
<td>18,990</td>
<td>17,700</td>
</tr>
<tr>
<td>3.0 m</td>
<td>17,300</td>
<td>19,860</td>
<td>21,420</td>
<td>21,460</td>
<td>21,500</td>
<td>20,380</td>
<td>18,990</td>
</tr>
<tr>
<td>4.5 m</td>
<td>19,860</td>
<td>21,420</td>
<td>23,010</td>
<td>23,060</td>
<td>23,060</td>
<td>21,980</td>
<td>19,560</td>
</tr>
<tr>
<td>6.0 m</td>
<td>21,420</td>
<td>23,010</td>
<td>24,620</td>
<td>24,660</td>
<td>24,660</td>
<td>23,580</td>
<td>20,900</td>
</tr>
<tr>
<td>9.0 m</td>
<td>23,010</td>
<td>24,620</td>
<td>26,260</td>
<td>26,300</td>
<td>26,300</td>
<td>25,080</td>
<td>22,320</td>
</tr>
<tr>
<td>10.5 m</td>
<td>24,620</td>
<td>26,260</td>
<td>28,020</td>
<td>28,060</td>
<td>28,060</td>
<td>26,720</td>
<td>23,820</td>
</tr>
<tr>
<td>12.0 m</td>
<td>26,260</td>
<td>28,020</td>
<td>30,810</td>
<td>30,850</td>
<td>30,850</td>
<td>29,520</td>
<td>26,520</td>
</tr>
</tbody>
</table>

Mass Excavator Application

<table>
<thead>
<tr>
<th>Radius (m)</th>
<th>3.0 m</th>
<th>4.5 m</th>
<th>6.0 m</th>
<th>7.5 m</th>
<th>9.0 m</th>
<th>10.5 m</th>
<th>Max. Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 m</td>
<td>15,770</td>
<td>17,300</td>
<td>19,860</td>
<td>19,900</td>
<td>19,900</td>
<td>18,990</td>
<td>17,700</td>
</tr>
<tr>
<td>3.0 m</td>
<td>17,300</td>
<td>19,860</td>
<td>21,420</td>
<td>21,460</td>
<td>21,500</td>
<td>20,380</td>
<td>18,990</td>
</tr>
<tr>
<td>4.5 m</td>
<td>19,860</td>
<td>21,420</td>
<td>23,010</td>
<td>23,060</td>
<td>23,060</td>
<td>21,980</td>
<td>19,560</td>
</tr>
<tr>
<td>6.0 m</td>
<td>21,420</td>
<td>23,010</td>
<td>24,620</td>
<td>24,660</td>
<td>24,660</td>
<td>23,580</td>
<td>20,900</td>
</tr>
<tr>
<td>9.0 m</td>
<td>23,010</td>
<td>24,620</td>
<td>26,260</td>
<td>26,300</td>
<td>26,300</td>
<td>25,080</td>
<td>22,320</td>
</tr>
<tr>
<td>10.5 m</td>
<td>24,620</td>
<td>26,260</td>
<td>28,020</td>
<td>28,060</td>
<td>28,060</td>
<td>26,720</td>
<td>23,820</td>
</tr>
<tr>
<td>12.0 m</td>
<td>26,260</td>
<td>28,020</td>
<td>30,810</td>
<td>30,850</td>
<td>30,850</td>
<td>29,520</td>
<td>26,520</td>
</tr>
</tbody>
</table>

Notes:
1. Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and height. Weight of all accessories must be deducted from the above lift capacities.
2. Lift capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc.
3. Bucket lift hook defined as lift point.
4. The above lifting capacities are in compliance with ISO 10567. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Lifting capacities marked with an asterisk (*) are limited by hydraulic capacity, rather than tipping load.
5. Operator should be fully acquainted with the Operator’s and Maintenance Instructions before operating this machine. Rules for safe operation of equipment should be adhered to at all times.
6. Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.
STANDARD EQUIPMENT

ENGINE
- Engine, SAA6D140E-5, diesel engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Starting motor (24V - 11kW), 60 amp alternator
- Removable clean-out screen for radiator
- Automatic engine shut-off for low engine oil pressure
- Engine oil pan drain valve
- Double element air cleaner x 2
- Fuel filters
- Fuel pre-filter
- Engine oil filter
- Corrosion register
- Radiator reserve tank
- Working mode selector (H-mode and S-mode)

SWING SYSTEM & TRAVEL SYSTEM
- Swing rebound prevention system
- Straight propel system
- Two-speed travel with automatic shift down
- Sealed & lubricated track links
- Grease-type track adjusters
- Automatic swing brake

HYDRAULIC
- Arm regeneration system
- Auto warm up system
- Aluminum hydraulic oil cooler
- Hydraulic oil filter
- Drain filter

MIRRORS & LIGHTS
- Two rearview mirrors
- Four front and two rear working lights

CAB & CONTROL
- Working mode selector (H-mode and S-mode)
- Two control levers, pilot-operated
- Tie eyes
- Horn, electric
- Integrated left-right slide-type control box
- Cab, all-weather sound suppressed type
- Ashtray
- Cigarette lighter
- Cap light (interior)
- Coat hook
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
- 7-way adjustable suspension seat
- Retractable seatbelt
- Headrest
- Handrails
- Heater and defroster
- Inertiment windshield wiper with double-spray washer
- Sunshade
- Skylight
- Tinted safety glass
- Full-type front window and removable lower front window
- Easy-to-read multi-display monitor
- Automatic air conditioner
- Emergency escape hammer
- Radio, AM/FM Stereo with speakers

STANDARD EQUIPMENT

OPTIONAL EQUIPMENT
- Wide range of buckets
- Various optional arms
- Wide range of shoes
- Travel alarm
- Boom safety valve
- Front-guard protective structures
- Additional hydraulic circuit

Note: Standard and optional equipment may vary. Consult your KOBELCO dealer for specifics.

Note: This catalog may contain attachments and optional equipment that are not available in your area. And it may contain photographs of machines with specifications that differ from those of machines sold in your areas. Please consult your nearest KOBELCO distributor for those items you require. Due to our policy of continuous product improvements all designs and specifications are subject to change without advance notice. Copyright by KOBELCO CONSTRUCTION MACHINERY CO., LTD. No part of this catalog may be reproduced in any manner without notice.

KOBELCO CONSTRUCTION MACHINERY CO., LTD.
17-1, Hisagahigashiyodogawa 2-chome, Shinagawa-ku, Tokyo 141-8626, JAPAN
Tel: +81 (0) 3-5789-2146 Fax: +81 (0) 3-5789-2135
www.kobelco-kenki.co.jp/english_index.html

Inquiries To:

Bulletin No. ACERA GEOSPEC SUPER SK580LC-SEASIA-2-102
2011012000IF Printed in Japan