

KOBELCO

SK180-10 SK180LC-10

SK180 SK180_{LC}

■ **Bucket Capacity:**

0.63 m³

■ **Engine Power:**

100 kW/2,000 min⁻¹

■ **Operating Weight:**

18,800 – 21,100 kg



We Save You Fuel
Achieving a Low-Carbon Society

Power Meets Efficiency



SK180 SK180_{LC}



To urban centers, and to mines around the world. Kobelco's all-out innovation brings you durable earth-friendly construction machinery that's equal to any task, at sites all over the planet. Increased power and even greater fuel economy bring higher efficiency to any project. Kobelco SK180 SK180LC machines are also more durable than ever, able to withstand the rigors of the toughest job sites. It all adds up to new levels of value that are a step ahead of the times. Also, this machine conforms to Stage V Exhaust Emission Standards, thanks to its significantly reduced NOx* emissions. While focusing on the global environment of the future, Kobelco offers next-generation productivity to meet the need for lower life cycle costs and exceed the expectations of customers the world over.

*NOx: Nitrogen Oxide

Evolution Continues, with Improved Fuel Efficiency.

Efficient Performance!

Top-Class Powerful Digging

The highly efficient hydraulic system minimizes fuel consumption while maximizing power. With nimble movement and outstanding digging power, this excavator improves job productivity.

Hydraulic System: Revolutionary Technology Saves Fuel

ECO-mode: Engineered for Economy

Kobelco's ECO-mode maximizes the operating efficiency of the engine and other components to achieve much greater fuel efficiency. Just press a button to choose the operation mode best suited to the task at hand and the working conditions.

■ Optimal operation with three modes

H H-mode . . . Maximum power for maximum productivity on your toughest jobs

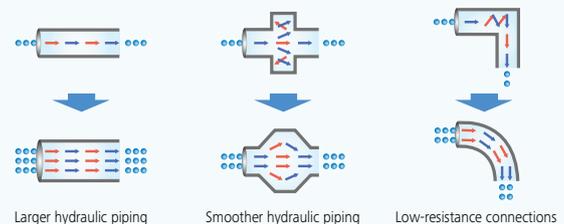
S S-mode . . . Ideal balance of productivity and fuel efficiency for a range of urban engineering projects

E ECO-mode . . . Minimum fuel consumption for utility projects and other work that demands precision

Hydraulic Circuit Reduces Energy Loss

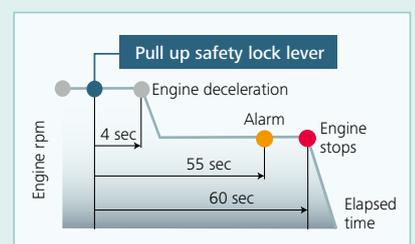
We have made every effort to enhance fuel efficiency by minimizing hydraulic pressure resistance, improving the hydraulic line layout to control friction resistance loss and minimizing valve resistance.

Improved hydraulic piping is an effective means of reducing pressure loss.



AIS (Auto Idle Stop)

If the safety lock lever is left up, the engine will stop automatically. This eliminates wasteful idling during standby, saving fuel and reducing CO₂ emissions as well.



The significant reduction of in-line resistance and pressure loss boosts fuel efficiency. The electronic-control common-rail engine features high-pressure fuel injection and multiple injection with improved precision. It is fitted with an EGR cooler which greatly reduce PM and NOx emissions and meets Stage V Standards.



Engine meets Stage V Standards

Reduces Fuel Consumption and Minimizes Exhaust Emissions

Hino engines are renowned for fuel efficiency and environmental performance, and Kobelco has tuned these power plants especially for construction machinery. The pressure within the common rail fuel injection system, the VG turbo, and the exhaust gas after-treatment system reduce exhaust PM*1 while the large-capacity EGR cooler sharply reduces the formation of NOx gases.

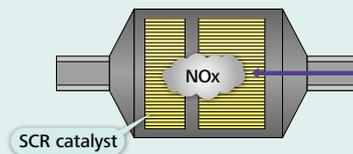
*1 PM: Particulate Matter



SCR*2 System with DEF/Urea **NEW**

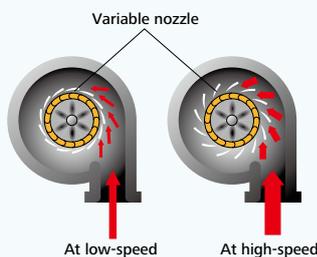
The engine exhaust system has an SCR system that converts NOx emissions into harmless nitrogen and water. Combining this with a post-exhaust gas treatment system that captures and disposes of PM, the SK180/SK180LC has a much cleaner exhaust that meets Stage V exhaust emission standards.

*2 SCR: Selective Catalytic Reduction



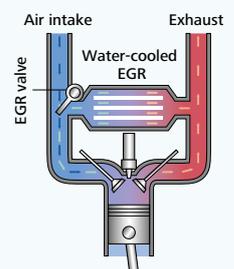
VG Turbo Reduces PM

The variable-geometry turbocharger adjusts air intake to maximize combustion efficiency. At low engine speeds the nozzles are closed, the turbo speed increased and air intake is boosted. This helps lower fuel consumption.



EGR Cooler Reduces NOx

While ensuring sufficient oxygen for combustion, cooled emission gases are mixed with the air intake and re-circulated into the engine. The lowered oxygen temperature lowers the combustion temperature and increases combustion efficiency.



More Power and Higher Efficiency.

The highly efficient hydraulic system minimizes fuel consumption while maximizing power. With nimble movement and ample digging power, this excavator promises to improve your job productivity.

Improved Fuel Efficiency Contributes to High Performance

Superior Digging Volume

Powerful digging force delivers outstanding performance.

■ Max. Bucket Digging Force

Normal: **114kN**

With power boost: **126kN**

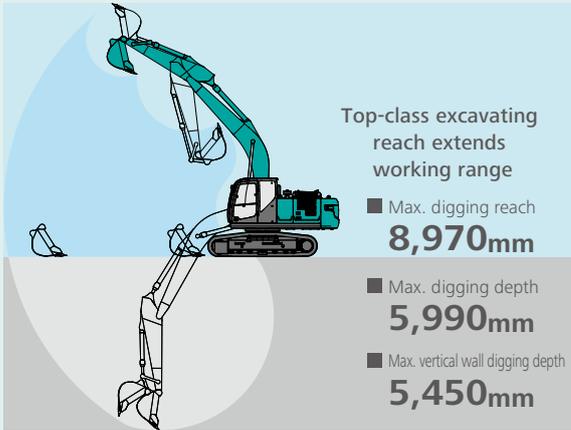
■ Max. Arm Crowding Force

Normal: **82.3kN**

With power boost: **90.6kN**

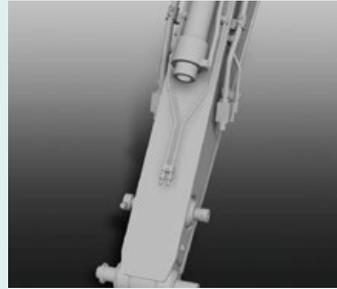


Get More Done Faster with Superior Operability



*Values are for STD arm (2.6 m)

Piping for Quick Hitch



A quick hitch hydraulic line, which speeds up attachment changes, is equipped as standard.

A Light Touch on the Lever Means Smoother, Less Tiring Work **NEW**



It takes 25% less effort to work the operation lever, which reduces fatigue over long working hours or continued operations.

Top Class Traveling Force

Powerful traveling force and drawbar pulling force deliver plenty of speed when climbing slopes or negotiating bad roads, and the agility to change direction swiftly and smoothly.

■ Drawbar Pulling Force: **231kN**



Operator-friendly Features Include Controls that Are Easy to See, Easy to Use



Multi-Display in Color

Brilliant colors and graphic displays are easy to recognize on the LCD multi-display in the console. The display shows fuel consumption, maintenance intervals, and more.

- 1 Analog gauge provides an intuitive reading of fuel level and engine water temperature
- 2 Green indicator light shows low fuel consumption during operation
- 3 PM accumulation display (left)/Urea level gauge (right)
- 4 Fuel consumption
- 5 Digging mode switch
- 6 Monitor display switch

One-Touch Attachment Mode Switch

A simple flick of a switch converts the hydraulic circuit and flow amount to match attachment changes. Icons help the operator to confirm the proper configuration at a glance.



PM accumulation/
Urea accumulation display

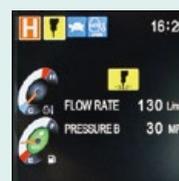


Fuel consumption

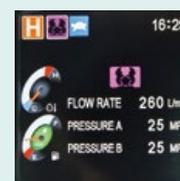
Maintenance

| | INTERVAL | EXPOSURE |
|-------------|----------|----------|
| ENGINE OIL | 500 | 495 |
| FUEL FILTER | 500 | 495 |
| HYD. FILTER | 1000 | 995 |
| HYD. OIL | 5000 | 4995 |

Maintenance



Breaker mode



Nibbler mode

Increased Power, with Enhanced Durability to Maintain the Machine's Value

Improved Filtration System Reliability

Clean, contaminant-free fuel and hydraulic fluid are essential to stable performance. The improved filtration systems reduce the risk of mechanical trouble and enhance longevity and durability.

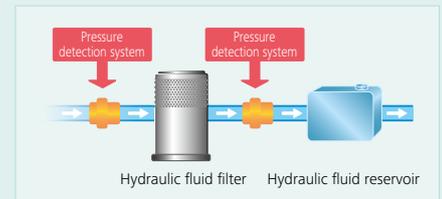
Hydraulic Fluid Filter **NEW**

Recognized as the best in the industry, our premium-fine filter separates out even the smallest particles. New cover prevents contamination when changing filters.



Hydraulic Fluid Filter Clog Detector **NEW**

Pressure sensors at the inlet and outlet of the hydraulic fluid filter monitor differences in pressure to determine the degree of clogging. If the difference in pressure exceeds a predetermined level, a warning appears on the multi-display, so any contamination can be removed from the filter before it reaches the hydraulic fluid reservoir.



Double-Element Air Cleaner **NEW**

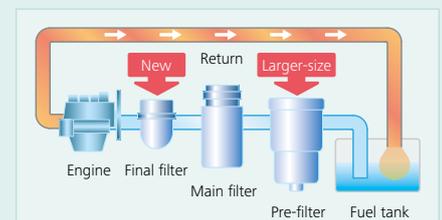


The large-capacity element features a double-filter structure that keeps the engine running clean even in industrial environments.



Fuel Filter

The pre-filter, with built-in water separator, is a new addition that features a final stage to maximize filtering performance.



Increase in
productivity
means
"Power"

Structural design increases strength,
while eliminating hydraulic problems.
Enhanced durability takes
productivity to a new level.



Built to Operate in Tough Working Environments

500 Hour Attachment Lubrication Interval

The self-lubrication bushings are used at the attachment pins and the bushings with high abrasion resistant property are used at the pins around the bucket. The lubrication cycle of the lubrication points around the bucket is 250 hours and that of other lubrication points is 500 hours.



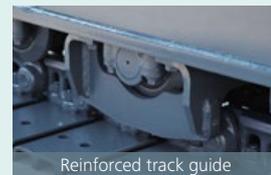
*Additionally the two piece bucket bushings protect the side of the arm from contact and then wear from the bucket ears. Should the bucket bushings need replacement, they can be replaced separately from the larger main bushing, reducing costs.

Reliable Construction

Forged and cast components are used throughout. Under-side of arm reinforced with a rock guard to prevent damage to arm. Track guides help prevent the crawlers from coming off the rollers.



Reinforced arm with rock guard



Reinforced track guide

Comfortable Cab is Now Safer than Ever.

A work environment that is quieter and more comfortable. A cab that puts the operator first is key to improved safety.



Comfort

Super-Airtight Cab



The high level of air-tightness keeps dust out of the cab.

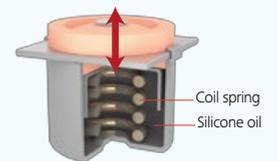
Quiet Inside

The high level of air-tightness ensures a quiet, comfortable cabin interior.

Low Vibration

Coil springs absorb small vibrations, and high suspension mounts filled with silicone oil reduce heavy vibration. The long stroke achieved by this system provides excellent protection from vibration.

Twice the stroke of a conventional mount



Broad View Liberates the Operator

The front window features one large piece of glass without a center pillar on the right side for a wide, unobstructed view.

Air Conditioner NEW Register behind the Seat



The large air-conditioner has registers on the back pillars that blow from behind and to the right and left of the operator's seat. They can be adjusted to put a direct flow of cool/warm air on the operator, which means a more comfortable operating environment.

More Comfortable Seat Means Higher Productivity



Seat suspension absorbs vibration



Seat recliner can be pushed back flat



Double slides allow adjustment for optimum comfort



Large Cab Is Easy to Get In and Out of

The expanded cab provides plenty of room for a large door, more headroom and smoother entry and exit.

Interior Equipment Adds to Comfort and Convenience



AM/FM Bluetooth®(hands-free) radio



USB connector/12V power outlet



Spacious storage tray



Large cup holder

Safety

ROPS Cab

ROPS (Roll-Over-Protective Structure)-compliant cab clears ISO standards (ISO-12117-2: 2008) and ensures greater safety for the operator should the machine tip over.



- TOP Guard is fitted as standard.



Expanded Field of View for Greater Safety



Rear view camera

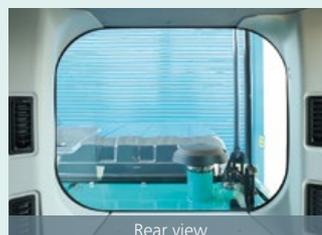


A rear view camera is installed as standard to simplify checking for safety behind the machine. The picture appears on the color monitor.



Rearview mirror

Greater safety assured by rearview mirror.



Rear view

Rear view shows the area directly behind the cab.



Hammer for emergency exit

GEOSCAN

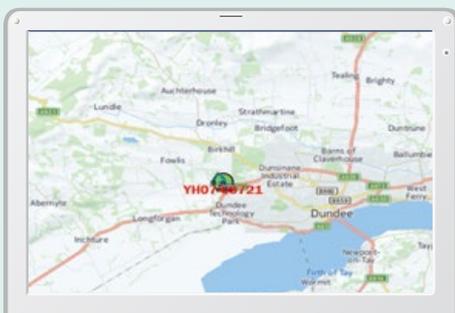
Excavator Remote Monitoring System



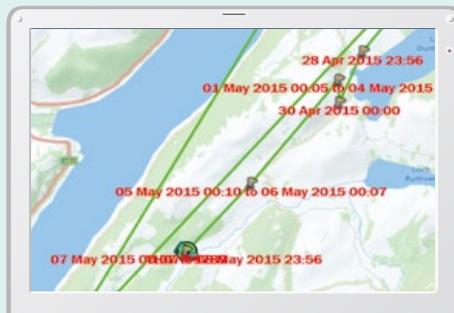
Direct Access to Operational Status

Location Data

• Accurate location data can be obtained even from sites where communications are difficult.



Latest location



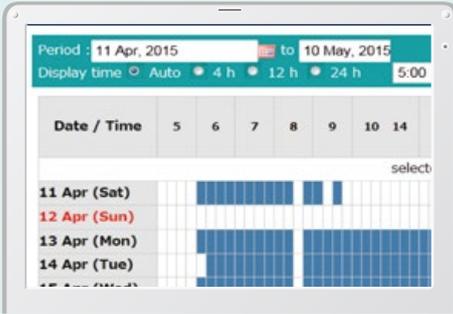
Location records

| Period: 11 Apr, 2015 to 10 May, 2015 Search | | |
|---|-------------|-------|
| Type of Operation | Working Hrs | Ratio |
| Total Working Hrs | 169 Hrs | 100 % |
| Digging Hrs | 72.2 Hrs | 43 % |
| Traveling Hrs | 18.3 Hrs | 11 % |
| Idle Hrs | 15.9 Hrs | 9 % |
| Opt Att Hrs | 62.5 Hrs | 37 % |
| Crane Mode Hrs | 0 Hrs | 0 % |

Work data

Operating Hours

- A comparison of operating times of machines at multiple locations shows which locations are busier and more profitable.
- Operating hours on site can be accurately recorded, for running time calculations needed for rental machines, etc.



Daily report

Fuel Consumption Data

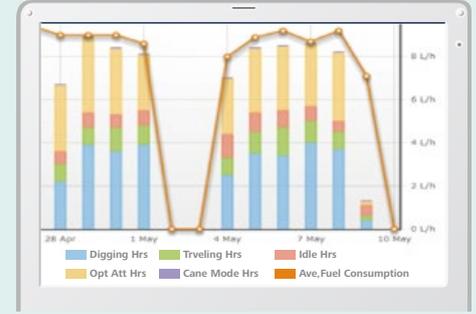
- Data on fuel consumption and idling times can be used to indicate improvements in fuel consumption.

| Work mode | Working Hrs | Total Fuel Consumption |
|--------------|---------------|------------------------|
| H mode | 2:06 | 24.5 L |
| S mode | 0:00 | 0.0 L |
| E mode | 169:19 | 1489.7 L |
| TOTAL | 171:25 | 1514.2 L |

Fuel consumption

Graph of Work Content

- The graph shows how working hours are divided among different operating categories, including digging, idling, traveling and optional operations.



Work status

Maintenance Data and Warning Alerts

Machine Maintenance Data

- Provides maintenance status of separate machines operating at multiple sites.
- Maintenance data is also relayed to KOBELCO service personnel, for more efficient planning of periodic servicing.

| Model | Serial No. | Hour Meter | Engine Oil |
|----------------------|---|------------|------------|
| SK135SRLC-3/SK140SRL | YH07-09721 0.38/0.35 | 734 Hr | 434 |
| SK135SRLC-3/SK140SRL | YH07-09789 0.38/0.35 | 73 Hr | 429 |
| SK210LC-9 | YQ13-10454 0.8/0.7 | 960 Hr | 58 |
| SK210LC-9 | YQ13-10481 0.8/0.7 | 549 Hr | 498 |
| SK75SR- | YT08-30374 | | |

Maintenance

Warning Alerts

- This system warns an alert if an anomaly is sensed, preventing damage that could result in machine downtime.

Alarm Information Can Be Received through E-mail

- Alarm information or maintenance notice can be received through E-mail, using a computer or cell phone.



Alarm messages can be received on mobile device.

Daily/Monthly Reports

- Operational data downloaded onto a computer helps in formulating daily and monthly reports.

Security System

Engine Start Alarm

- The system can be set an alarm if the machine is operated outside designated time.

Engine start alarm outside prescribed work time

Area Alarm

- It can be set an alarm if the machine is moved out of its designated area to another location.

Alarm for outside of reset area



Easy, On-the-Spot Maintenance NEW

There is ample space in the engine compartment for a mechanic to do maintenance work inside. The distance between steps is lower so entry and exit is easier. And the mechanic can work in comfort, without contortions or unnatural body positions. Finally, the hood is lighter and easier to raise and lower.



Step/Handrail



DEF/Urea tank

Positioned where the step opens.

Maintenance Work, Daily Checks, Etc., Can Be Done from Ground Level

The layout allows for easy access from the ground for many daily checks and regular maintenance tasks.



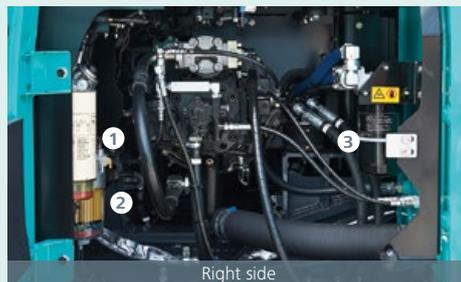
Left side



Fuel filter with built-in water separator



Pre-fuel filter with built-in water separator



Right side



Engine oil filter

Laid out for easy access to radiator and cooling system elements

- ① Fuel filter with built-in water separator
- ② Pre-fuel filter with built-in water separator
- ③ Engine oil filter

Efficient Maintenance Keeps the Machine in Peak Operating Condition.



| MAINTENANCE | | | |
|-------------|----------|----------------|--------------|
| | INTERVAL | REMAINING TIME | EXCHANGE DAY |
| ENGINE OIL | 500 Hr | 495 Hr | --/--/-- |
| FUEL FILTER | 500 Hr | 495 Hr | --/--/-- |
| HYD. FILTER | 1000 Hr | 995 Hr | --/--/-- |
| HYD. OIL | 5000 Hr | 4995 Hr | --/--/-- |

6.7h

Machine Information Display Function

Examples of displaying maintenance information

- Displays only the maintenance information that's needed, when it's needed
- Self-diagnostic function provides early-warning detection and display of electrical system malfunctions
- Service-diagnostic function makes it easier to check the status of the machine
- Record function of previous breakdowns including irregular and transient malfunction

More Efficient Maintenance Inside the Cab



Easy-access fuse box

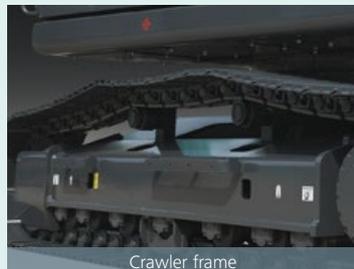
More finely differentiated fuses make it easier to locate malfunctions.



Air conditioner filters

Internal and external air conditioner filters can be easily removed without tools for cleaning.

Easy Cleaning



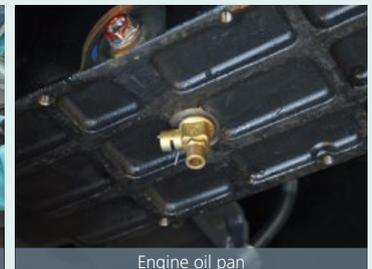
Crawler frame

Special crawler frame design is easily cleaned of mud.



Detachable two-piece floor mat

Detachable two-piece floor mat with handles for easy removal. A floor drain is located under floor mat.



Engine oil pan

Engine oil pan equipped with drain valve.

Long-life hydraulic oil:
5,000
hours

Long-Interval Maintenance

Long-life hydraulic oil reduces cost and labor.

Replacement cycle:
1,000
hours

Highly Durable Premium-fine Filter

The high-capacity hydraulic oil filter incorporates glass fiber with superior cleaning power and durability.





Engine

| | |
|--------------------|--|
| Model | J05EVA-KSDL |
| Type | Direct injection, water-cooled, 4-cycle diesel engine with intercooler, turbocharger (complies with Stage V) |
| No. of cylinders | 4 |
| Bore and stroke | 112 mm x 130 mm |
| Displacement | 5.123 L |
| Rated power output | 95 kW/2,000 min ⁻¹ (ISO 9249) |
| | 100 kW/2,000 min ⁻¹ (ISO14396) |
| Max. torque | 482 N·m/1,600 min ⁻¹ (ISO 9249) |
| | 502 N·m/1,600 min ⁻¹ (ISO 14396) |



Hydraulic System

| Pump | |
|----------------------|---|
| Type | Two variable displacement pumps + One gear pump |
| Max. discharge flow | 2 × 160 L/min, 1 x 20 L/min |
| Extra gear pump | 1 x 44 L/min |
| Relief valve setting | |
| Boom, arm and bucket | 34.3 MPa |
| Power Boost | 37.8 MPa |
| Travel circuit | 34.3 MPa |
| Swing circuit | 28.0 MPa |
| Control circuit | 5.0 MPa |
| Pilot control pump | Gear type |
| Main control valves | 8-spool |
| Oil cooler | Air cooled type |



Swing System

| | |
|---------------|--|
| Swing motor | Axial piston motor |
| Brake | Hydraulic; locking automatically when the swing control lever is in neutral position |
| Parking brake | Oil disc brake, hydraulic operated automatically |
| Swing speed | 12.3 min ⁻¹ |
| Swing torque | 52.6 kN·m |



Attachments

Backhoe bucket and combination

| Type | Backhoe bucket | |
|-----------------|---------------------|----------------|
| Bucket capacity | ISO heaped | m ³ |
| | | 0.63 |
| Opening width | With side cutter | mm |
| | Without side cutter | mm |
| | | 1,075 |
| Bucket weight | | kg |
| | | 975 |
| Combination | 2.6 m standard arm | |
| | 3.1 m long arm | |
| | | 500 |
| | | ⊙ |
| | | ⊙ |



Travel System

| | | |
|-----------------------|-------------------------------------|--------------|
| Travel motors | 2 × Axial piston , two speed motors | |
| Travel brakes | Hydraulic brake per motor | |
| Parking brakes | Oil disc brake per motors | |
| Travel shoes | SK180 | 45 each side |
| | SK180LC | 49 each side |
| Travel speed | 4.7/2.8 km/h | |
| Drawbar pulling force | 231 kN (ISO 7464) | |
| Gradeability | 70 % {35 deg} | |



Cab & Control

| Cab | |
|--|--|
| All-weather, sound-suppressed steel cab mounted on the high suspension mounts filled with silicone oil and equipped with a heavy, insulated floor mat. | |
| Control | |
| Two hand levers and two foot pedals for travel | |
| Two hand levers for excavating and swing | |
| Electric rotary-type engine throttle | |



Boom, Arm & Bucket

| | |
|-----------------|-------------------|
| Boom cylinder | 110 mm x 1,156 mm |
| Arm cylinder | 125 mm x 1,285 mm |
| Bucket cylinder | 105 mm x 1,025 mm |



Refilling Capacities & Lubrications

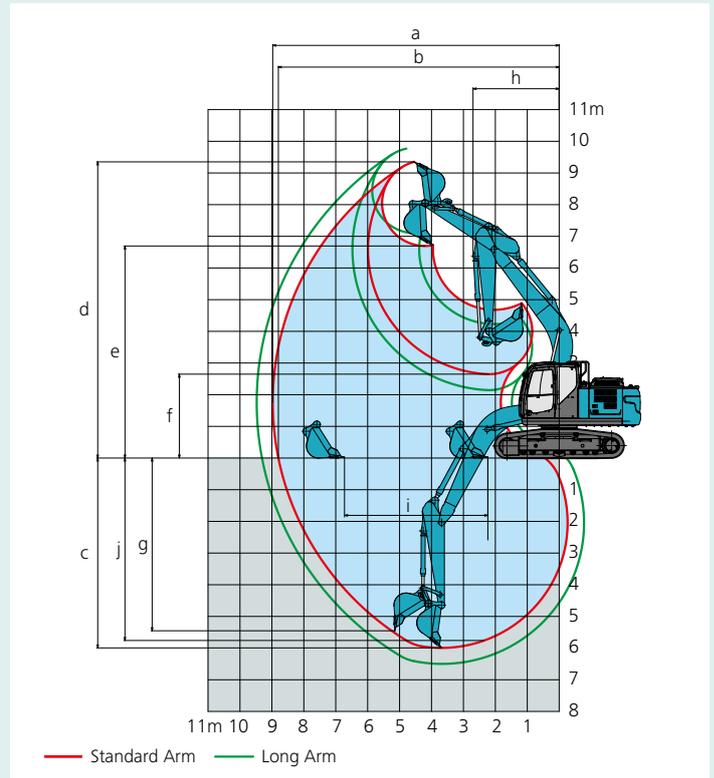
| | |
|-----------------------|------------------------|
| Fuel tank | 280 L |
| Cooling system | 19 L |
| Engine oil | 20.5 L |
| Travel reduction gear | 2 × 5.0 L |
| Swing reduction gear | 2.7 L |
| Hydraulic oil tank | 122 L tank oil level |
| | 200 L hydraulic system |
| DEF/Urea tank | 33.9 L |



Working Ranges

Unit: m

| Boom | 5.2 m | |
|--|---------------------|---------------------|
| Arm length | Standard 2.6 m | Long 3.1 m |
| a- Max. digging reach | 8.97 | 9.49 |
| b- Max. digging reach at ground level | 8.80 | 9.32 |
| c- Max. digging depth | 5.99 | 6.49 |
| d- Max. digging height | 9.35 | 9.77 |
| e- Max. dumping clearance | 6.70 | 7.10 |
| f- Min. dumping clearance | 2.65 | 2.15 |
| g- Max. vertical wall digging depth | 5.45 | 5.95 |
| h- Min. swing radius | 2.71 | 2.74 |
| i- Horizontal digging stroke at ground level | 4.49 | 5.35 |
| j- Digging depth for 8' (2.4 m) flat bottom | 5.76 | 6.31 |
| Bucket capacity (ISO heaped) | 0.63 m ³ | 0.63 m ³ |



Digging Force (ISO 6015)

Unit: kN

| Boom | 5.2 m | |
|----------------------|----------------|------------|
| Arm length | Standard 2.6 m | Long 3.1 m |
| Bucket digging force | 114 | 114 |
| | 126* | 126* |
| Arm crowding force | 82.3 | 71.7 |
| | 90.6* | 78.8* |

*Power Boost engaged.

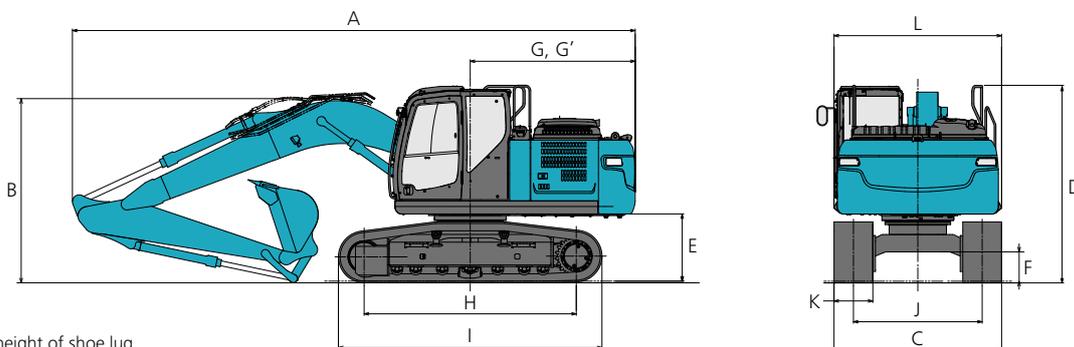


Dimensions

| Arm length | | Standard 2.6 m | Long 3.1 m |
|--|---------|----------------|------------|
| A Overall length | | 8,700 | 8,710 |
| B Overall height (to top of boom) | | 2,960 | 3,080 |
| C Overall width of crawler | SK180 | 2,490 | |
| | SK180LC | 2,800 | |
| D Overall height (to top of hand rail) | | 3,080 | |
| E Ground clearance of rear end* | | 1,050 | |
| F Ground clearance* | | 460 | |
| G Tail swing radius | | 2,550 | |
| G' Distance from center of swing to rear end | | 2,550 | |

Unit: mm

| | | |
|-----------------------------------|---------|-------|
| H Tumbler distance | SK180 | 3,280 |
| | SK180LC | 3,660 |
| I Overall length of crawler | SK180 | 4,070 |
| | SK180LC | 4,450 |
| J Track gauge | SK180 | 1,990 |
| | SK180LC | 2,200 |
| K Shoe width | SK180 | 500 |
| | SK180LC | 600 |
| L Overall width of upperstructure | | 2,490 |



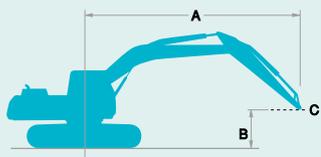
*Without including height of shoe lug.

Operating Weight & Ground Pressure

In standard trim, with standard boom, 2.6m arm, and 0.63 m³ ISO heaped bucket

| Shaped | | Triple grouser shoes (even height) | | | |
|--------------------------|-------------|------------------------------------|--------|--------|--------|
| Shoe width | mm | 500 | 600 | 700 | 790 |
| Overall width of crawler | SK180 mm | 2,490 | 2,590 | 2,690 | 2,780 |
| | SK180LC mm | — | 2,800 | 2,900 | 2,990 |
| Ground pressure | SK180 kPa | 52 | 44 | 38 | 34 |
| | SK180LC kPa | — | 41 | 36 | 32 |
| Operating weight | SK180 kg | 18,800 | 19,000 | 19,400 | 19,600 |
| | SK180LC kg | — | 19,600 | 20,000 | 20,200 |

Lift Capacities



A – Reach from swing centerline to arm top

B – Arm top height above/below ground

C – Lift point

* Max. discharge pressure: 37.8 MPa

| SK180 | | Standard Arm: 2.6 m Bucket: without Shoe: 500 mm | | | | | | | | | | | HEAVY LIFT | |
|--------|----|--|---------|---------|--------|--------|--------|--------|-------|--------|-------|---------------|------------|--------|
| A \ B | | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | At Max. Reach | | Radius |
| | | | | | | | | | | | | | | |
| 7.5 m | kg | | | | | *4,320 | *4,320 | | | | | *3,100 | *3,100 | 4.96 m |
| 6.0 m | kg | | | | | | | *3,930 | 3,760 | | | *2,770 | *2,770 | 6.32 m |
| 4.5 m | kg | | | | | *5,430 | *5,430 | *4,750 | 3,680 | | | *2,700 | *2,700 | 7.11 m |
| 3.0 m | kg | | | *10,260 | 9,740 | *6,600 | 5,350 | *5,220 | 3,520 | *2,930 | 2,490 | *2,770 | 2,480 | 7.52 m |
| 1.5 m | kg | | | | | *7,670 | 4,960 | 5,450 | 3,340 | *3,840 | 2,420 | *2,990 | 2,370 | 7.61 m |
| G. L. | kg | | | *7,330 | *7,330 | *8,100 | 4,740 | 5,310 | 3,210 | | | *3,400 | 2,410 | 7.40 m |
| -1.5 m | kg | *7,010 | *7,010 | *11,130 | 8,650 | *7,790 | 4,690 | 5,260 | 3,170 | | | *4,220 | 2,670 | 6.86 m |
| -3.0 m | kg | *11,550 | *11,550 | *9,160 | 8,840 | *6,620 | 4,760 | | | | | *4,670 | 3,330 | 5.89 m |
| -4.5 m | kg | | | *5,500 | *5,500 | | | | | | | *3,960 | *3,960 | 4.21 m |

| SK180 | | Long Arm: 3.1 m Bucket: without Shoe: 500 mm | | | | | | | | | | | HEAVY LIFT | |
|--------|----|--|--------|---------|--------|--------|--------|--------|-------|--------|-------|---------------|------------|--------|
| A \ B | | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | At Max. Reach | | Radius |
| | | | | | | | | | | | | | | |
| 7.5 m | kg | | | | | | | | | | | *2,260 | *2,260 | 5.73 m |
| 6.0 m | kg | | | | | | | *3,910 | 3,820 | | | *2,040 | *2,040 | 6.93 m |
| 4.5 m | kg | | | | | *4,870 | *4,870 | *4,370 | 3,720 | *2,630 | 2,560 | *1,970 | *1,970 | 7.66 m |
| 3.0 m | kg | | | *8,960 | *8,960 | *6,070 | 5,450 | *4,900 | 3,540 | *3,950 | 2,490 | *2,000 | *2,000 | 8.04 m |
| 1.5 m | kg | | | *7,790 | *7,790 | *7,290 | 5,010 | 5,460 | 3,340 | 3,890 | 2,400 | *2,130 | 2,120 | 8.13 m |
| G. L. | kg | | | *7,550 | *7,550 | *7,960 | 4,730 | 5,280 | 3,180 | 3,810 | 2,330 | *2,370 | 2,150 | 7.93 m |
| -1.5 m | kg | *6,000 | *6,000 | *10,460 | 8,510 | *7,900 | 4,620 | 5,200 | 3,110 | | | *2,830 | 2,340 | 7.43 m |
| -3.0 m | kg | *9,530 | *9,530 | *10,060 | 8,650 | *7,060 | 4,650 | *5,070 | 3,140 | | | *3,790 | 2,810 | 6.55 m |
| -4.5 m | kg | | | *7,050 | *7,050 | *4,910 | 4,850 | | | | | *3,980 | *3,980 | 5.09 m |

| SK180LC | | Standard Arm: 2.6 m Bucket: without Shoe: 600 mm | | | | | | | | | | | HEAVY LIFT | |
|---------|----|--|---------|---------|---------|--------|--------|--------|--------|--------|-------|---------------|------------|--------|
| A \ B | | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | At Max. Reach | | Radius |
| | | | | | | | | | | | | | | |
| 7.5 m | kg | | | | | *4,320 | *4,320 | | | | | *3,100 | *3,100 | 4.96 m |
| 6.0 m | kg | | | | | | | *3,930 | *3,930 | | | *2,770 | *2,770 | 6.32 m |
| 4.5 m | kg | | | | | *5,430 | *5,430 | *4,750 | 4,190 | | | *2,700 | *2,700 | 7.11 m |
| 3.0 m | kg | | | *10,260 | *10,260 | *6,600 | 6,150 | *5,220 | 4,020 | *2,930 | 2,860 | *2,770 | *2,770 | 7.52 m |
| 1.5 m | kg | | | | | *7,670 | 5,750 | *5,700 | 3,840 | *3,840 | 2,790 | *2,990 | 2,730 | 7.61 m |
| G. L. | kg | | | *7,330 | *7,330 | *8,100 | 5,520 | *5,940 | 3,710 | | | *3,400 | 2,790 | 7.40 m |
| -1.5 m | kg | *7,010 | *7,010 | *11,130 | 10,290 | *7,790 | 5,460 | *5,720 | 3,670 | | | *4,220 | 3,080 | 6.86 m |
| -3.0 m | kg | *11,550 | *11,550 | *9,160 | *9,160 | *6,620 | 5,540 | | | | | *4,670 | 3,840 | 5.89 m |
| -4.5 m | kg | | | *5,500 | *5,500 | | | | | | | *3,960 | *3,960 | 4.21 m |

| SK180LC | | Long Arm: 3.1 m Bucket: without Shoe: 600 mm | | | | | | | | | | | HEAVY LIFT | |
|---------|----|--|--------|---------|---------|--------|--------|--------|--------|--------|--------|---------------|------------|--------|
| A \ B | | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | At Max. Reach | | Radius |
| | | | | | | | | | | | | | | |
| 7.5 m | kg | | | | | | | | | | | *2,260 | *2,260 | 5.73 m |
| 6.0 m | kg | | | | | | | *3,910 | *3,910 | | | *2,040 | *2,040 | 6.93 m |
| 4.5 m | kg | | | | | *4,870 | *4,870 | *4,370 | 4,240 | *2,630 | *2,630 | *1,970 | *1,970 | 7.66 m |
| 3.0 m | kg | | | *8,960 | *8,960 | *6,070 | *6,070 | *4,900 | 4,050 | *3,950 | 2,860 | *2,000 | *2,000 | 8.04 m |
| 1.5 m | kg | | | *7,790 | *7,790 | *7,290 | 5,800 | *5,460 | 3,840 | *4,510 | 2,770 | *2,130 | *2,130 | 8.13 m |
| G. L. | kg | | | *7,550 | *7,550 | *7,960 | 5,500 | *5,830 | 3,680 | 4,560 | 2,700 | *2,370 | *2,370 | 7.93 m |
| -1.5 m | kg | *6,000 | *6,000 | *10,460 | 10,150 | *7,900 | 5,390 | *5,790 | 3,610 | | | *2,830 | 2,710 | 7.43 m |
| -3.0 m | kg | *9,530 | *9,530 | *10,060 | *10,060 | *7,060 | 5,430 | *5,070 | 3,640 | | | *3,790 | 3,260 | 6.55 m |
| -4.5 m | kg | | | *7,050 | *7,050 | *4,910 | *4,910 | | | | | *3,980 | *3,980 | 5.09 m |

Notes:

- Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities.
- 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.
- Arm top pin is defined as lift point.
- The above lift capacities are in compliance with ISO 10567. They do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Lift capacities marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.
- 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.
- Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

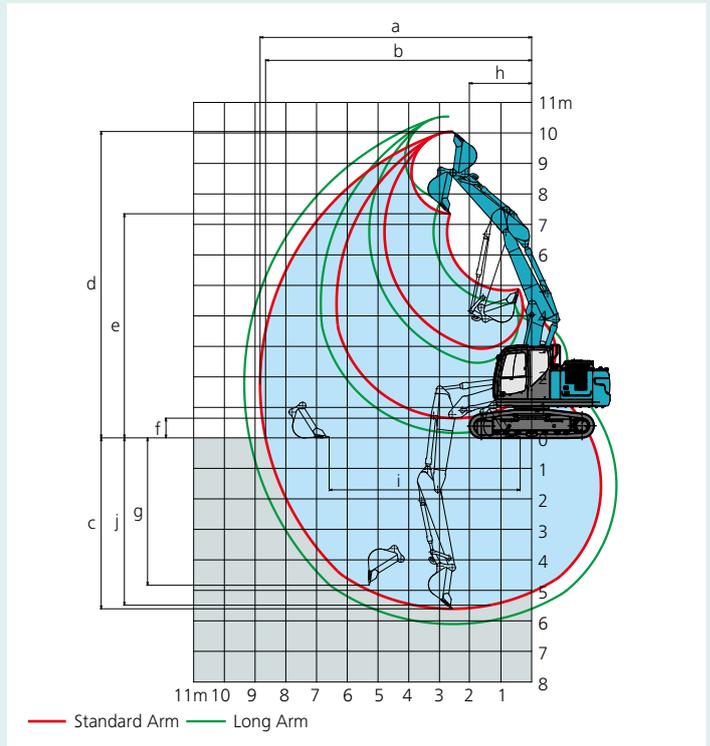
2 Piece Boom Specifications



Working Ranges

Unit: m

| Arm length | Standard 2.6 m | Long 3.1 m |
|--|---------------------|---------------------|
| a- Max. digging reach | 8.84 | 9.36 |
| b- Max. digging reach at ground level | 8.66 | 9.19 |
| c- Max. digging depth | 5.60 | 6.12 |
| d- Max. digging height | 10.05 | 10.52 |
| e- Max. dumping clearance | 7.35 | 7.83 |
| f- Min. dumping clearance | 0.645 | 0.145 |
| g- Max. vertical wall digging depth | 4.83 | 5.39 |
| h- Min. swing radius | 2.06 | 2.20 |
| i- Horizontal digging stroke at ground level | 6.22 | 7.23 |
| j- Digging depth for 8' (2.4 m) flat bottom | 5.49 | 6.01 |
| Bucket capacity (ISO heaped) | 0.63 m ³ | 0.63 m ³ |



Digging Force (ISO 6015)

Unit: kN

| Arm length | Standard 2.6 m | Long 3.1 m |
|----------------------|-------------------|---------------|
| Bucket digging force | 114 126* | 114 126* |
| Arm crowding force | 82.3 90.6* | 71.7 78.8* |

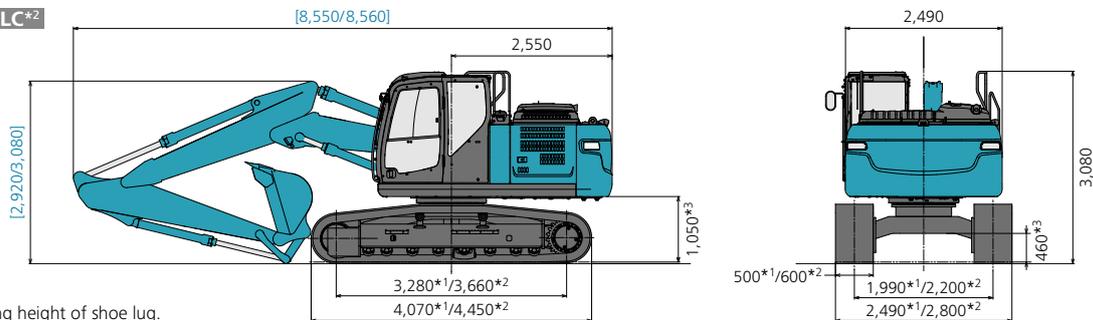
*Power Boost engaged.



Dimensions [2.6 m arm/3.1m arm]

Unit: mm

SK180*1/SK180LC*2



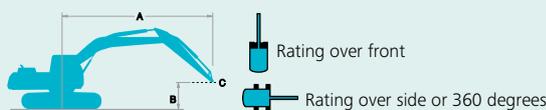
*3 Without including height of shoe lug.

Operating Weight & Ground Pressure

In standard trim, with 2 piece boom, 2.6m arm, and 0.63 m³ ISO heaped bucket

| Shaped | | Triple grouser shoes (even height) | | | | |
|--------------------------|---------|------------------------------------|--------|--------|--------|--------|
| Shoe width | mm | 500 | 600 | 700 | 790 | |
| Overall width of crawler | SK180 | mm | 2,490 | 2,590 | 2,690 | 2,780 |
| | SK180LC | mm | — | 2,800 | 2,900 | 2,990 |
| Ground pressure | SK180 | kPa | 54 | 45 | 39 | 35 |
| | SK180LC | kPa | — | 42 | 37 | 33 |
| Operating weight | SK180 | kg | 19,400 | 19,600 | 20,000 | 20,200 |
| | SK180LC | kg | — | 20,100 | 20,600 | 20,800 |

Lift Capacities



A – Reach from swing centerline to arm top
B – Arm top height above/below ground
C – Lift point
* Max. discharge pressure: 37.8 MPa

| SK180LC | | Boom: 2 Piece Boom Standard Arm: 2.6 m Bucket: without Shoe: 600 mm | | | | | | | | HEAVY LIFT | | |
|---------|----|---|---------------------------------|-------------------|---------------------------------|-------------------|---------------------------------|-------------------|---------------------------------|-------------------|---------------------------------|--------|
| A | B | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | At Max. Reach | | |
| | | Rating over front | Rating over side or 360 degrees | Rating over front | Rating over side or 360 degrees | Rating over front | Rating over side or 360 degrees | Rating over front | Rating over side or 360 degrees | Rating over front | Rating over side or 360 degrees | |
| 7.5 m | kg | | | | | *4,010 | *4,010 | | | *3,200 | *3,200 | 4.75 m |
| 6.0 m | kg | | | | | *5,410 | *5,410 | *3,500 | *3,500 | *2,830 | *2,830 | 6.15 m |
| 4.5 m | kg | | | *6,910 | *6,910 | *6,710 | 6,650 | *3,990 | *3,990 | *2,730 | *2,730 | 6.96 m |
| 3.0 m | kg | *19,920 | *19,920 | *11,500 | *11,500 | *7,540 | 6,190 | *3,680 | *3,680 | *2,790 | *2,790 | 7.38 m |
| 1.5 m | kg | *19,300 | *19,300 | *12,570 | 10,530 | *8,080 | 5,730 | *4,010 | 3,820 | *2,990 | 2,770 | 7.48 m |
| G. L. | kg | *16,090 | *16,090 | *8,240 | *8,240 | *7,840 | 5,460 | *5,080 | 3,680 | *3,400 | 2,830 | 7.26 m |
| -1.5 m | kg | | | *8,770 | *8,770 | *6,700 | 5,390 | *4,840 | 3,630 | *3,870 | 3,150 | 6.71 m |
| -3.0 m | kg | | | *5,510 | *5,510 | *4,470 | *4,470 | | | *2,960 | *2,960 | 5.72 m |

| SK180 | | Boom: 2 Piece Boom Standard Arm: 2.6 m Bucket: without Shoe: 500 mm | | | | | | | | | | HEAVY LIFT |
|--------|----|---|---------|---------|--------|--------|--------|--------|--------|---------------|--------|------------|
| A | | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | At Max. Reach | | Radius |
| B | | | | | | | | | | | | |
| 7.5 m | kg | | | | | *4,010 | *4,010 | | | *3,200 | *3,200 | 4.75 m |
| 6.0 m | kg | | | | | *5,410 | *5,410 | *3,500 | *3,500 | *2,830 | *2,830 | 6.15 m |
| 4.5 m | kg | | | *6,910 | *6,910 | *6,710 | 5,830 | *3,990 | 3,690 | *2,730 | *2,730 | 6.96 m |
| 3.0 m | kg | *19,920 | *19,920 | *11,500 | 9,870 | *7,540 | 5,380 | *3,680 | 3,510 | *2,790 | 2,520 | 7.38 m |
| 1.5 m | kg | *19,300 | *19,300 | *12,570 | 8,870 | *8,080 | 4,940 | *4,010 | 3,310 | *2,990 | 2,400 | 7.48 m |
| G. L. | kg | *16,090 | *16,090 | *8,240 | *8,240 | *7,840 | 4,680 | *5,080 | 3,170 | *3,400 | 2,450 | 7.26 m |
| -1.5 m | kg | | | *8,770 | 8,480 | *6,700 | 4,610 | *4,840 | 3,130 | *3,870 | 2,710 | 6.71 m |
| -3.0 m | kg | | | *5,510 | *5,510 | *4,470 | *4,470 | | | *2,960 | *2,960 | 5.72 m |

| SK180 | | Boom: 2 Piece Boom Long Arm: 3.1 m Bucket: without Shoe: 500 mm | | | | | | | | | | HEAVY LIFT | | |
|--------|----|---|---------|---------|--------|--------|--------|--------|--------|--------|--------|---------------|--------|--------|
| A | | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | At Max. Reach | | Radius |
| B | | | | | | | | | | | | | | |
| 9.0 m | kg | | | *3,810 | *3,810 | | | | | | | *3,220 | *3,220 | 3.27 m |
| 7.5 m | kg | | | | | *4,040 | *4,040 | | | | | *2,340 | *2,340 | 5.54 m |
| 6.0 m | kg | | | | | *4,360 | *4,360 | *3,800 | *3,800 | | | *2,090 | *2,090 | 6.78 m |
| 4.5 m | kg | | | *4,600 | *4,600 | *5,060 | *5,060 | *3,140 | *3,140 | *2,110 | *2,110 | *2,000 | *2,000 | 7.52 m |
| 3.0 m | kg | *17,700 | *17,700 | *10,560 | 10,320 | *7,150 | 5,490 | *2,810 | *2,810 | *3,630 | 2,470 | *2,030 | *2,030 | 7.91 m |
| 1.5 m | kg | *26,860 | *26,860 | *9,580 | 8,950 | *7,890 | 5,000 | *3,040 | *3,040 | 3,900 | 2,370 | *2,140 | 2,140 | 8.00 m |
| G. L. | kg | *18,600 | *18,600 | *8,420 | 8,410 | *7,930 | 4,670 | *4,000 | 3,140 | 3,820 | 2,300 | *2,380 | 2,170 | 7.80 m |
| -1.5 m | kg | *6,280 | *6,280 | *9,870 | 8,340 | *7,110 | 4,540 | *5,170 | 3,060 | | | *2,840 | 2,370 | 7.28 m |
| -3.0 m | kg | | | *6,920 | *6,920 | *5,290 | 4,580 | *3,560 | 3,110 | | | *2,950 | 2,880 | 6.38 m |
| -4.5 m | kg | *13,470 | *13,470 | *6,700 | *6,700 | | | | | | | *1,300 | *1,300 | 4.87 m |

| SK180LC | | Boom: 2 Piece Boom Long Arm: 3.1 m Bucket: without Shoe: 600 mm | | | | | | | | | | HEAVY LIFT | | |
|---------|----|---|---------|---------|---------|--------|--------|--------|--------|--------|--------|---------------|--------|--------|
| A | | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | At Max. Reach | | Radius |
| B | | | | | | | | | | | | | | |
| 9.0 m | kg | | | *3,810 | *3,810 | | | | | | | *3,220 | *3,220 | 3.27 m |
| 7.5 m | kg | | | | | *4,040 | *4,040 | | | | | *2,340 | *2,340 | 5.54 m |
| 6.0 m | kg | | | | | *4,360 | *4,360 | *3,800 | *3,800 | | | *2,090 | *2,090 | 6.78 m |
| 4.5 m | kg | | | *4,600 | *4,600 | *5,060 | *5,060 | *3,140 | *3,140 | *2,110 | *2,110 | *2,000 | *2,000 | 7.52 m |
| 3.0 m | kg | *17,700 | *17,700 | *10,560 | *10,560 | *7,150 | 6,300 | *2,810 | *2,810 | *3,630 | 2,850 | *2,030 | *2,030 | 7.91 m |
| 1.5 m | kg | *26,860 | *26,860 | *9,580 | *9,580 | *7,890 | 5,790 | *3,040 | *3,040 | *3,930 | 2,750 | *2,140 | *2,140 | 8.00 m |
| G. L. | kg | *18,600 | *18,600 | *8,420 | *8,420 | *7,930 | 5,450 | *4,000 | 3,650 | *4,210 | 2,670 | *2,380 | *2,380 | 7.80 m |
| -1.5 m | kg | *6,280 | *6,280 | *9,870 | *9,870 | *7,110 | 5,320 | *5,170 | 3,560 | | | *2,840 | 2,760 | 7.28 m |
| -3.0 m | kg | | | *6,920 | *6,920 | *5,290 | *5,290 | *3,560 | *3,560 | | | *2,950 | *2,950 | 6.38 m |
| -4.5 m | kg | *13,470 | *13,470 | *6,700 | *6,700 | | | | | | | *1,300 | *1,300 | 4.87 m |

Notes:

- Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities.
- 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.
- Arm top pin is defined as lift point.
- The above lift capacities are in compliance with ISO 10567. They do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Lift capacities marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.
- 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.
- Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

STANDARD EQUIPMENT

ENGINE

- Engine, HINO J05EVA-KSDL, diesel engine with turbocharger and intercooler, Stage V compliant
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Batteries (2 x 12V - 92Ah)
- Starting motor (24V - 5 kW), 60 amp alternator
- Automatic engine shut-down for low engine oil pressure
- Engine oil pan drain cock
- Double element air cleaner

CONTROL

- Working mode selector (H-mode, S-mode and ECO-mode)
- Power Boost
- Heavy lift
- NG&B piping (Proportional hand controlled)

SWING SYSTEM & TRAVEL SYSTEM

- Swing rebound prevention system
- Straight propel system
- Two-speed travel with automatic shift down
- Sealed & lubricated track links
- Travel alarm

■ Grease-type track adjusters

- Lower under cover
- Automatic swing brake

HYDRAULIC

- Arm regeneration system
- Auto warm up system
- Aluminum hydraulic oil cooler
- Quick Hitch piping
- Hydraulic fluid filter clog detector

MIRRORS, LIGHTS AND CAMERAS

- Rear view mirrors
- Rear view camera
- Three front working lights (two for boom and one for right storage box)

CAB & CONTROL

- Two control levers, pilot-operated
- Horn, electric
- Cab light (interior)
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat

■ Headrest

- Handrails
- Intermittent windshield wiper with double-spray washer
- Skylight
- Tinted safety glass
- Pull-up type front window and removable lower front window
- Easy-to-read multi-display color monitor
- Automatic air conditioner
- Emergency escape hammer
- Suspension seat
- Radio (AUX & Bluetooth®)
- Top guard (ISO 10262: 1998 Level II)
- Remote machine monitoring system "GEOSCAN"
- Cab interference prevention system

OPTIONAL EQUIPMENT

- Wide range of shoes
- Additional track guide
- Extra NG&B piping (proportional hand controlled)
- Air suspension seat
- Two cab lights
- Rain visor
- Front-guard (ISO 10262: 1998 Level II)

Note: Standard and optional equipment may vary. Consult your KOBELCO dealer for specifics. Bluetooth® is a registered trademark of the Bluetooth SIG Inc.

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