KOBELCO®

*Your competitive edge.*

| SK480LC | |
|---|---|
| WT | *108,045 lb* |
| HP | *315 @ 2,000 RPM* |
| BKT CAP | *1.5~4.0 yd³* |


**Dynamic Acera** Hydraulic Excavator

# FEATURES

## CAB & CONTROLS

### The Industry's Largest Cab

We've expanded the cab by 18% — making it the largest in the industry — to give the operator lots of elbow room while ensuring that each and every control is ergonomically positioned for maximum convenience and unrivaled productivity. Our design specialists also increased the total cab glass surface area by 36%, to make the operator feel more connected with the world outside and designed the controls so it's easy for operators to get in and out of the cab.

### Climate-Control Air Conditioning

This large-capacity system can effortlessly generate an impressive 18,253 BTUs (1.52 tons) of cool air or 20,237 BTUs of heat, to rapidly reach and maintain the operator's desired temperature. Five vents are carefully placed at foot level, chest level and to the rear, with one of the vents at the front right capable of being directed at the operator's face, like a refreshing breeze, and another at the window, like a defroster.

### Viscous Silicon-Filled Cab Mounts

By filling these sealed mounts with viscous silicon, we help eliminate the shocks and vibrations that can fatigue an operator and degrade his productivity over a long shift.

### AM/FM Radio

A 2-speaker AM/FM stereo radio, with operator pre-set station selections, is standard.

### Adjustability = Productivity

The adjustable, 7-position suspension seat lets any operator get completely comfortable, regardless of size or shape. The seat suspension can be adjusted to compensate for the operator's weight. The front and rear of the seat can be adjusted up and down. The angle of seatback recline is adjustable as is the front to back location of the seat. The arm rests adjust up and down and the head rest adjusts forward/backward as well as up/down. We designed the front window so the operator can easily position it to his liking: down and in place, or stored overhead up and out of the way. The bottom glass also can be easily removed and stored inside the cab.

### Adjustable-Height Control Levers

Because operators come in all different heights, we designed an adjustable height feature into our pilot control levers. By adjusting the lever height to three different heights, the operator doesn't have to feel uncomfortable no matter if he is short, average or tall.

There's certainly nothing trivial about all this effort because clearly, a relaxed, comfortable operator will be able to focus all his energies on the precise demands of the job. The more he focuses on the job, the more productive he'll be — hour after hour, day after day.

### Mode selector switch changes Engine power and speed

### Assist Mode

This setting puts the excavator into an economy mode and provides engine speed and pump flow to yield approximately 90% of maximum productivity. It is ideal for general utility work in crowded residential areas and also provides increased fuel economy and lower noise emissions. Constant engine rpm is maintained under varying load conditions for outstanding production efficiency.

### Manual Mode

This default mode maximizes output for the heavy operations that require the excavator's full performance. It delivers maximum speed and power for operations such as truck loading, trenching, mass excavation and high-speed travel.

### Breaker Mode

The Breaker Mode allows the operator to adjust the SK480LC's maximum pump flow to match a manufacturer's recommended flow rate for an attachment such as a breaker or nibbler/breaker, right from the cab. Once the desired flow rate is set, the volume of hydraulic oil in the breaker circuit will not exceed the adjusted level, even if the operator changes to the Assist Mode or the Manual Mode.

### Intelligent Total Control System (ITCS)

Rapid responsiveness is designed into the SK480LC. Our ITCS software improves productivity while ensuring that every part of this excavator feels like it is a natural extension of the operator: precise, productive and high performing.

### Auto-Acceleration System

This advanced system ever-so-smoothly eases engine RPMs from 1,000 RPM to full speed in direct, proportional response to the operator's control lever movements. The result: either a very deliberate acceleration for extremely precise operations, or an instant surge to full power.

# PRODUCTIVITY

## EXCEPTIONAL ENGINE

### Rock-Solid, Reliable, Mitsubishi Engine Meets "Tier II" Emission Standards

We've chosen the rock-solid, reliable Mitsubishi 6D24-TLA2B engine to power the Dynamic Acera SK480LC. That's because this design has been carefully engineered for exceptional performance over a long working life. Since each Kobelco dealer also offers certified Mitsubishi support, you enjoy one-stop repair and maintenance convenience that helps you minimize downtime and keep your excavators on the job even longer. It's this kind of performance that can give you a competitive advantage over the long run. Each Mitsubishi engine comes with a tremendous support program:

- The base warranty, which includes parts, labor, and mileage, covers defects in materials and workmanship for 1 year/unlimited hours or 2 years/2,000 hours, whichever comes first.
- Standard, extended coverage for major components, 3 years/10,000 hours.
- Extended warranty protection can be purchased beyond the base warranty period in variable years and hours through Kobelco's Ultracare Program.

### Electronic Engine Control System

The SK480LC's Mitsubishi engine features a state-of-the-art electronic control system. This control system utilizes a computer to control the quantity and timing of fuel injection to the engine. Because the computer responds faster than a mechanical-type governor to constantly changing engine loads during the digging cycle, the engine is more fuel efficient and the emissions are cleaner.

### Incredibly High Horsepower

The mighty Mitsubishi power plant that propels our SK480LC generates 315 net horsepower, an incredibly high rating in this class. And the more power these engines generate, the more productivity you generate. All the while, these super-efficient engines are designed to ensure maximum fuel economy and comply with worldwide emissions requirements.

### Auto Warm-Up System

We installed an automatic warm-up system that cuts the time necessary for the engine and the hydraulic systems to reach their optimum performance levels.

## HYDRAULIC PERFORMANCE

### The Industry's Best Lift Capability

Nothing in its class outlifts our SK480LC — over the front or side — and we can prove it. We've increased the SK480LC's stability by up to 7% over the front *and* by 9% over the side. We even bolstered our upper revolving frame and undercarriage so they could handle bigger loads, thereby, increasing the machine's overall weight. And should you need it, the Dynamic Acera's heavy-lift system can be switched on for an increased capacity at close radius with no time limit. These increases give the SK480LC the ability to handle large pipe, trench boxes or your most demanding jobs — without breaking a sweat.

### The Industry's Highest Breakout Force

Each SK480LC excavator boasts 10.6% higher arm forces than our previous model (SK400LC IV), making it the highest in its class. Likewise, each SK480LC features higher bucket forces than before, 4.5% higher, moving to the top of the category for brute force performance as well. When equipped with the standard 11'4'' (3.45 m) arm, the bucket digging force is 57,500 lb (256 kN) and the arm crowding force is 48,100 lb (214 kN).

Because instant power on demand is so critical to your ability to tackle the really tough jobs, we give you all the power you need — for as long as you need it. Even when a Dynamic Acera is operating at its normal capacity, your operator can boost it by another 10% simply by pressing the Power Boost button on the right-hand control lever. Unlike competitive systems — which seem to be more concerned with their structural shortcomings than your need for sustained power — Dynamic Acera excavators are designed to operate at their highest power levels for as long as you need them to. Bottom line: more power to you.

### Swing Priority

This exclusive system automatically and instantly delivers full swing power during combined swing/arm operations — with no special switches to select — making quick work of jobs like side digging and backfilling.

### Super-Strong Booms and Arms

To complement our enhanced lift capabilities, we redesigned the booms and arms. We reinforced them with very thick plates that increase rigidity by 11% to handle the massive new digging forces. We also added vertical reinforcing bars onto the arm's rock guard to make it even more resistant to damage. Additionally, both the boom and arm have been preconfigured with tapped blocks for auxiliary piping, making them more adaptable to your long-term needs.

### Boom and Arm Holding Valves

Operators often have to hold pipe or other heavy objects stationary while other crew members complete their work. To make sure these heavy loads don't budge, we've engineered our boom and arm holding valves to minimize attachment drift.

### Add-On Attachment Valves

Our engineers increased this excavator's functionality by designing it with an expandable main control valve. Up to three additional valves can be attached as options. Now it is much easier to install optional attachments.

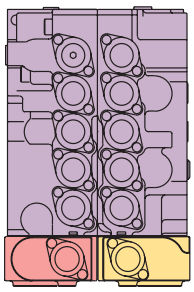
- Accommodates optional bi-directional and low-flow valves with full pressure regulation.
  - Breaker, breaker/nibbler and low-flow can all be installed on the SK480LC without disassembling the valve.
    - Flow to the bi-directional valve is switchable from single or double flow from the operators cab.

### Breaker Valve with Flow Control

Every excavator in the Dynamic Acera line features a breaker valve that protects your equipment investment by allowing pre-set maximum breaker flow rates — so operators are less likely to damage your excavator or attachments through over-aggressive use.

### Better Hoses, Better Seals

The metal hydraulic tubing in and around the main control valve has been replaced with flexible, long-lasting hoses that are easier to maintain. We also replaced the metal-to-metal seals with flexible O-ring seals (ORS) that not only seal better, but are more commonly available, easier to fix and longer lasting.



Breaker Valve  Optional Valve

# PERFORMANCE

## TREMENDOUS TRAVELER

### Independent Travel

When it's placed in Independent Travel, the SK480LC dedicates one pump strictly to travel, ensuring a smooth, constant propel speed without deviation during simultaneous travel/attachment operations. So even when an operator is carefully moving a large pipe across a job site, our independent travel mode means he can focus on that pipe without having to worry about his travel speed being affected.

### The World's Speed Champ

The SK480LC really moves! Its travel motors give you a choice of a high-speed setting — at **3.5 mph** (5.6 km/h), the world's fastest for this class — or a high torque setting — 2.2 mph (3.5 km/h) for close-quarters movement. The drawbar pull has been increased to 90,600 lb. (403 kN), the highest in its class. Now you can get in and out of tough situations in no time at all.

## UNCOMMON UNDERCARRIAGE

### Stronger Crawler Frame

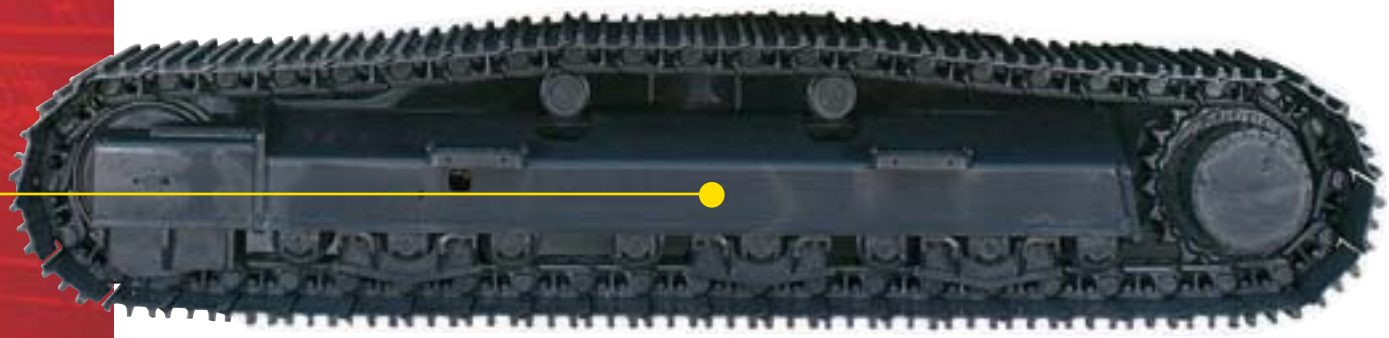
By thickening the plates that support our 3-piece crawler frame, Kobelco engineers were able to increase its sectional strength by 20%. This further enhances the rigidity of that portion of the frame protecting our strategic idler housing area. All of this careful design work pays off by helping your SK480LC stand up to tough operating conditions for many years to come.

### X-Shaped Carbody

The modified X-shape carbody is the ideal design for resisting the distortions that can result from the exceptional forces exerted by constant heavy lifting and severe traveling conditions. Our carbody axles are welded to the crawler frame along an unusually wide area, connecting from the bottom plate to the top surface of the crawler frame. This all adds up to more operational stability and operator confidence when working on those demanding jobs.

### Long-Life Components

The Dynamic Acera's heavy-duty idlers, lower rollers and carrier rollers are all lifetime-lubricated — to make sure that these critical components keep operating dependably over any surface, over a very long working life. The track links feature flexible seals to keep dirt out and initial lubrication in.



## SIMPLE SERVICING

### Optional Hydraulic Counterweight Removal System

The SK480LC's optional hydraulic counterweight removal system enables one person to quickly and easily remove or install the counterweight and eliminates the need of auxiliary lift equipment. A remote control device allows operation of the system from a distance.

### Self-Diagnostic Capabilities

The best way to deal with problems is to avoid them, which is why we've built a self-diagnostic function into the computer system. It constantly gathers and displays up to 68 different service items, to help ensure small problems don't turn into big expenses. This even includes checking hydraulic pressures conveniently from the operators cab.

### 100-Event Fault Code Memory

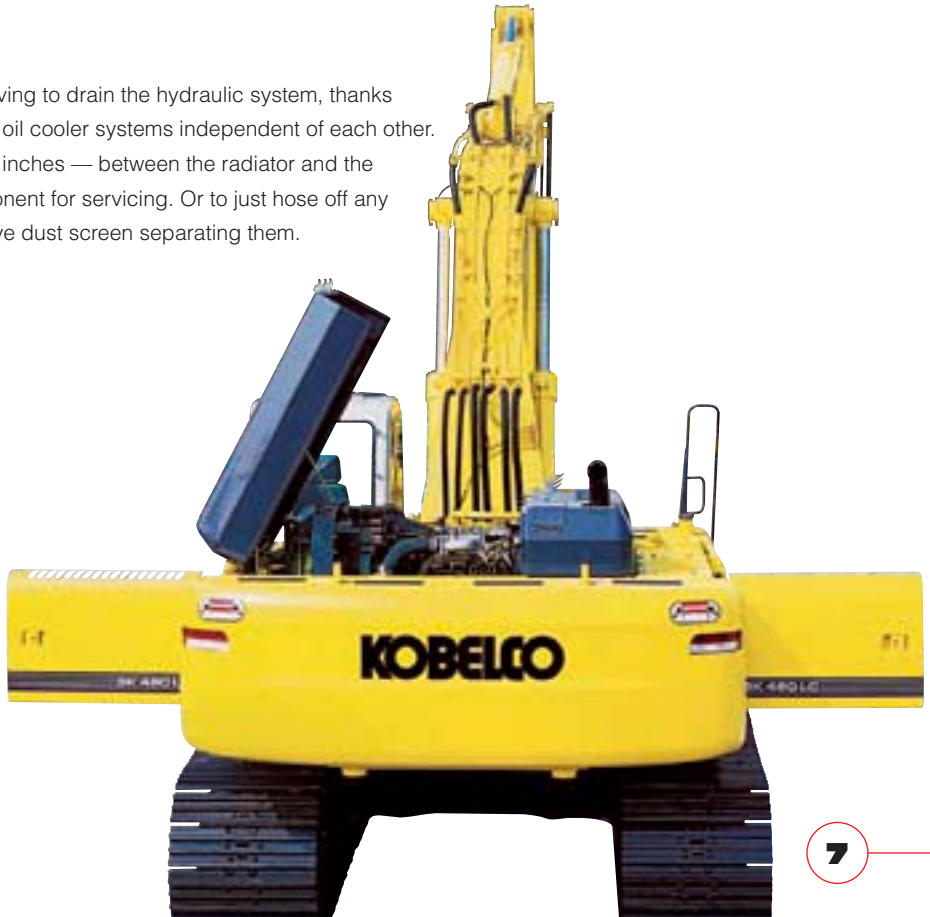
We've eliminated the need to use tools, gauges or laptop computers to remotely retrieve data for recent system faults. Now up to 100 fault codes, trouble locations and hours of each event are all accessible from the cab's control console, reducing downtime and keeping your excavator operating longer.

### Friction-Inhibiting Bushings

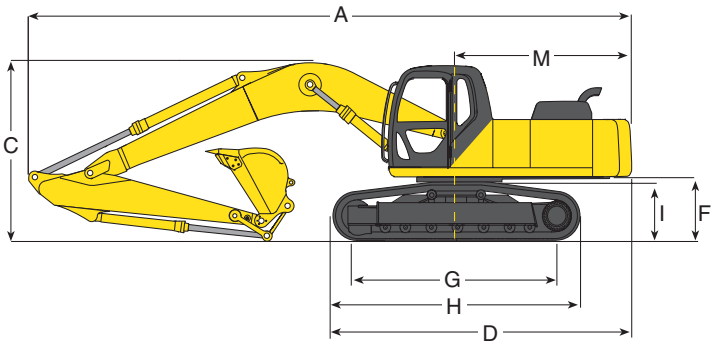
Kobelco engineering has substantially increased both the durability and longevity of the SK480LC's boom foot and boom-hoist cylinders. Our design engineers came up with special, wear-resistant brass bushings fortified with graphite inserts: a long-lasting solid lubricant that inhibits friction and, along with your routine maintenance procedures, helps maximize the life of these critical components.

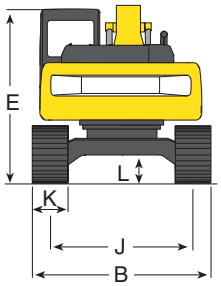
### Easy-Maintenance Radiator

Now you can remove the radiator without having to drain the hydraulic system, thanks to a new design that makes the radiator and oil cooler systems independent of each other. We've built in adequate space — about four inches — between the radiator and the oil cooler so it's easy to access either component for servicing. Or to just hose off any debris that has accumulated on the protective dust screen separating them.



# SPECS




## DIMENSIONS

Unit: ft in (m)

| ARM LENGTH | | 11' 4" | (3.45 m) |
|---|---|---|---|
| A | Overall length | 39' 4" | (11.98 m) |
| B | Overall width (with 900 mm shoe) | 12' 0" | (3.65 m) |
| C | Overall height (to top of boom) | 11' 6" | (3.51 m) |
| D | Basic machine length | 20' 11" | (6.38 m) |
| E | Overall height (to top of cab) | 10' 11" | (3.32 m) |
| F | Ground clearance of rear end* | 4' 5" | (1.35 m) |
| G | Center distance of tumblers | 14' 5" | (4.40 m) |
| H | Overall length of crawler | 17' 11" | (5.46 m) |
| I | Crawler height at tumbler center | 3' 11" | (1.20 m) |
| J | Track gauge | 9' 0" | (2.750 m) |
| K | Width of crawler shoe | 35.4" | (900 mm) |
| L | Ground clearance of undercarriage | 20.3" | (515 mm) |
| M | Tail swing radius | 12' 0" | (3.65 m) |

*Excludes height of grouser bar.

## HYDRAULIC SYSTEM

| | | |
|---|---|---|
| Pumps | 2 variable displacement + 1 fixed displacement | |
| Max discharge flow | 2 x 97.7 + 7.9 US gal/min (2 x 370 + 30 l/min) | |
| Operating pressure: | | |
| Implement | 4,550 psi | (31.4 MPa) |
| Travel | 4,980 psi | (34.3 MPa) |
| Swing | 3,700 psi | (25.5 MPa) |
| Power Boost/Heavy Lift | 4,980 psi | (34.3 MPa) |
| Pilot control | 710 psi | (4.9 MPa) |
| Control valves | 6 spool | |

## PERFORMANCE

| | |
|---|---|
| Travel speed | 3.5/2.2 mph (5.6/3.5 km/h) |
| Swing speed | 9.0 rpm |
| Gradeability | 35˚ (70%) |
| Drawbar pulling force | 90,600 lb (403 kN) |
| Swing torque | 118,009 lb-ft (160 kN • m) |

## BUCKET SELECTION CHART

| Bucket Duty | Capacity (SAE) Cubic Yard (m) | | Width Inches (m) | | Bucket Weight lb. | Arms 11' 4" | 13' 3" | 16' 1" |
|---|---|---|---|---|---|---|---|---|
| **General Purpose** | 1.5 | (1.146) | 30 | (.762) | 3,640 | H | H | H |
| | 2.0 | (1.529) | 36 | (.914) | 2,825 | H | H | M |
| | 2.375 | (1.815) | 42 | (1.066) | 3,035 | H | H | L |
| | 2.75 | (2.102) | 48 | (1.219) | 3,225 | H | M | X |
| | 3.125 | (2.389) | 54 | (1.37) | 3,380 | M | L | X |
| | 3.5 | (2.675) | 60 | (1.52) | 3,625 | L | X | X |
| **Heavy Duty** | 1.5 | (1.146) | 30 | (.762) | 2,840 | H | H | H |
| | 2.0 | (1.529) | 36 | (.914) | 3,040 | H | H | M |
| | 2.375 | (1.815) | 42 | (1.066) | 3,265 | H | M | L |
| | 2.75 | (2.102) | 48 | (1.219) | 3,470 | H | L | X |
| | 3.125 | (2.389) | 54 | (1.37) | 3,635 | M | X | X |
| | 3.50 | (2.675) | 60 | (1.52) | 3,895 | L | X | X |
| **Severe Duty** | 1.5 | (1.146) | 33 | (.838) | 3,155 | H | H | M |
| | 1.75 | (1.337) | 36 | (.914) | 3,300 | H | M | L |
| | 2.125 | (1.624) | 42 | (1.066) | 3,640 | H | L | X |
| | 2.5 | (1.911) | 48 | (1.219) | 3,950 | M | X | X |
| | 3.0 | (2.293) | 58 | (1.473) | 4,475 | L | X | X |

H - Used with material weight up to 3,000 lb/yd³ (1,780 kg/m³)

M - Used with material weight up to 2,500 lb/yd³ (1,483 kg/m³)

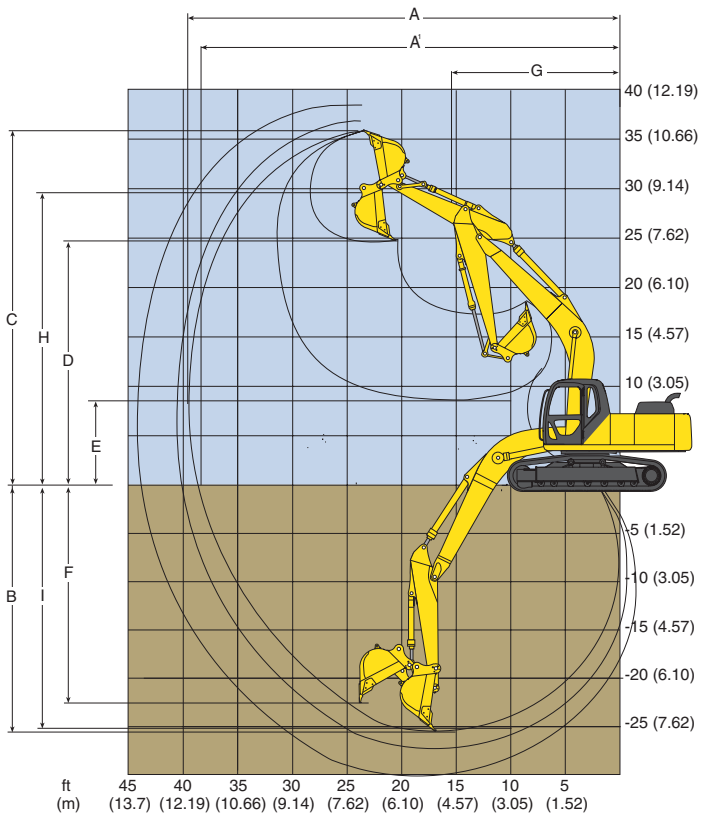
L - Used with material weight up to 2,000 lb/yd³ (1,186 kg/m³)

X - Not recommended

## WORKING RANGES

Unit: ft in (m)

| ATTACHMENTS | | Standard Arm | | Optional Arm | | Optional Arm | |
|---|---|---|---|---|---|---|---|
| | | 11' 4" | (3.45 m) | 13' 3" | (4.04 m) | 16' 1" | (4.9 m) |
| A | Max digging reach | 39' 7" | (12.07 m) | 41' 4" | (12.59 m) | 44' 3" | (13.48 m) |
| A' | Max digging reach at ground level | 38' 10" | (11.84 m) | 40' 7" | (12.38 m) | 43' 7" | (13.28 m) |
| B | Max digging depth | 25' 7" | (7.80 m) | 27' 6" | (8.39 m) | 30' 4" | (9.25 m) |
| C | Max digging height | 35' 11" | (10.95 m) | 36' 5" | (11.09 m) | 38' 5" | (11.71 m) |
| D | Max dumping clearance | 24' 11" | (7.59 m) | 25' 5" | (7.75 m) | 27' 3" | (8.31 m) |
| E | Min dumping clearance | 9' 2" | (2.79 m) | 7' 3" | (2.20 m) | 4' 5" | (1.34 m) |
| F | Max vertical wall digging depth | 22' 10" | (6.95 m) | 24' 5" | (7.43 m) | 27' 7" | (8.40 m) |
| G | Min front swing radius | 16' 10" | (5.14 m) | 17' 1" | (5.20 m) | 17' 5" | (5.30 m) |
| H | Height at min swing radius | 29' 8" | (9.05 m) | 29' 8" | (9.05 m) | 29' 8" | (9.05 m) |
| I | Digging depth for 8' (2.4 m) flat bottom | 25' 2" | (7.66 m) | 27' 1" | (8.26 m) | 30' 0" | (9.14 m) |




## REFILLING CAPACITIES

Unit: US gal (liters)

| | | |
|---|---|---|
| Fuel tank | 172 | (650) |
| Hydraulic oil reservoir | 107 | (405) |
| Hydraulic system including oil reservoir | 174.3 | (660) |
| Cooling system | 12.7 | (48) |
| Lubrication: Total Volume Engine oil | 13 | (49) |

## WEIGHTS

Bucket weight: 3,170 lb (1,440 kg)

| | | | | |
|---|---|---|---|---|
| Shoe width | 31.5" | (800 mm) | 35.4" | (900 mm) |
| Machine overall width | 11' 8" | (3.55 m) | 12' 0" | (3.65 m) |
| Ground pressure | 9.72 psi | (67 kPa) | 8.70psi | (60 kPa) |
| Operating weight | 106,900 lb | (48,500 kg) | 108,045lb | (49,000 kg) |

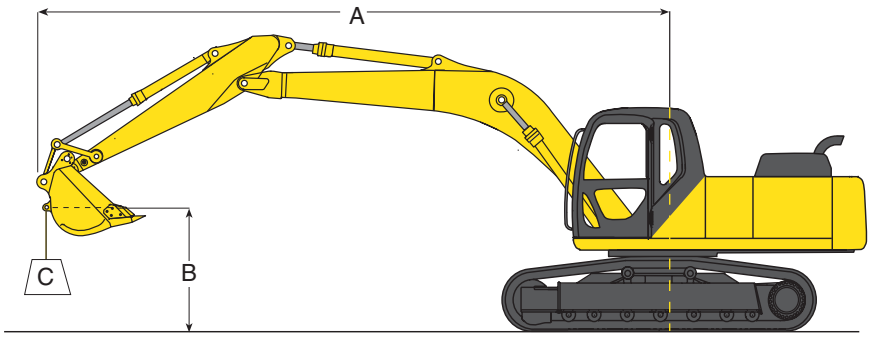
## DIGGING FORCE

Unit: lb (kN)

| | 11' 4" (3.45 m) Arm | | 13' 3" (4.04 m) Arm | | 16' 1" (4.9 m) Arm | |
|---|---|---|---|---|---|---|
| | SAE | ISO | SAE | ISO | SAE | ISO |
| Bucket digging force | *57,500 (255.8) | 64,998 (289.1) | 52,500 (233.5) | 59,346 (264.0) | 52,500 (233.5) | 59,346 (264.0) |
| Arm crowding force | *48,100 (214.0) | 49,687 (221.0) | 39,500 (175.7) | 40,804 (181.5) | 34,400 (153.0) | 35,535 (158.1) |

*Power Boost engaged

# SPECS




**A** Reach swing centerline to bucket hook
**B** Bucket hook height above/below ground
**C** Lifting capacities in pounds and kilograms
- Max discharge pressure: 4,980 psi (34.3 MPa)
- Track shoe: 35.5" (900 mm) triple grouser
- Boom: 23' 0" (7.0 m)

## LIFTING CAPACITIES

**Shoe: 35.4" (900 mm) triple grouser**

**SK480LC Arm: 11' 4" (3.45 m) Bucket: 2.35 yd³ (1.8 m³) SAE heaped Bucket Weight: 3,170 lb (1,440 kg)**

| A | 5' (1.5 m) | | 10' (3.0 m) | | 15' (4.6 m) | | 20' (6.1 m) | | 25' (7.6 m) | | 30' (9.1 m) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | C |
| **20** (6.1 m) | | | | | | | | | | | ***18,970** *8,600 | **16,250** 7,370 | **lb** kg |
| **15'** (4.6 m) | | | | | | | | | ***22,210** *10,070 | **21,450** 9,720 | ***20,180** *9,150 | **15,730** 7,130 | **lb** kg |
| **10'** (3.0 m) | | | | | ***43,340** *19,650 | ***43,340** *19,650 | ***31,050** *14,080 | **28,640** 12,990 | ***25,120** *11,390 | **20,300** 9,200 | ***21,800** *9,890 | **15,100** 6,840 | **lb** kg |
| **5'** (1.5 m) | | | | | ***51,310** *23,270 | **41,000** 18,590 | ***35,710** *16,190 | **26,820** 12,160 | ***27,900** *12,650 | **19,250** 8,730 | ***23,430** *10,620 | **14,490** 6,570 | **lb** kg |
| **Ground Level** | | | ***20,760** *9,410 | ***20,760** *9,410 | ***53,740** *24,370 | **39,510** 17,920 | ***38,790** *17,590 | **25,640** 11,630 | ***29,990** *13,600 | **18,470** 8,380 | **24,120** 10,940 | **14,030** 6,360 | **lb** kg |
| **-5'** (-1.5 m) | ***25,010** *11,340 | ***25,010** *11,340 | ***34,250** *15,530 | ***34,250** *15,530 | ***55,010** *24,940 | **39,140** 17,750 | ***39,950** *18,120 | **25,100** 11,380 | ***30,950** *14,040 | **18,060** 8,190 | **23,870** 10,820 | **13,800** 6,260 | **lb** kg |
| **-10'** (-3.0 m) | ***38,030** *17,250 | ***38,030** *17,250 | ***49,850** *22,600 | ***49,850** *22,600 | ***52,570** *23,840 | **39,410** 17,870 | ***39,070** *17,710 | **25,090** 11,380 | ***30,340** *13,760 | **18,030** 8,170 | | | **lb** kg |
| **-15'** (-4.6 m) | | | ***65,910** *29,890 | ***65,910** *29,890 | ***47,160** *21,380 | **40,240** 18,250 | ***35,560** *16,130 | **25,590** 11,600 | ***27,080** *12,280 | **18,480** 8,380 | | | **lb** kg |
| **-20'** (-6.1 m) | | | | | ***36,910** *16,740 | ***36,910** *16,740 | ***27,060** *12,270 | **26,810** 12,160 | | | | | **lb** kg |

## LIFTING CAPACITIES

**Shoe: 35.4" (900 mm) triple grouser**

**SK480LC Arm: 13' 3" (4.04 m) Bucket: 2.1 yd³ (1.6 m³) SAE heaped Bucket Weight: 2,930 lb (1,330 kg)**

| A | 5' (1.5 m) | | 10' (3.0 m) | | 15' (4.6 m) | | 20' (6.1 m) | | 25' (7.6 m) | | 30' (9.1 m) | | 35' (10.7 m) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | C |
| **25** (7.6 m) | | | | | | | | | | | ***16,860** *7,640 | ***16,860** *7,640 | | | **lb** kg |
| **20'** (6.1 m) | | | | | | | | | | | ***17,470** *7,920 | **16,580** 7,520 | | | **lb** kg |
| **15'** (4.6 m) | | | | | | | | | ***20,520** *9,300 | ***20,520** *9,300 | ***18,850** *8,540 | **15,990** 7,250 | ***15,710** *7,120 | **12,000** 5,440 | **lb** kg |
| **10'** (3.0 m) | | | ***30,120** *13,660 | ***30,120** *13,660 | ***39,120** *17,740 | ***39,120** *17,740 | ***28,740** *13,030 | ***28,740** *13,030 | ***23,580** *10,690 | **20,620** 9,350 | ***20,630** *9,360 | **15,280** 6,930 | ***18,900** *8,570 | **11,630** 5,270 | **lb** kg |
| **5'** (1.5 m) | | | ***16,480** *7,470 | ***16,480** *7,470 | ***48,280** *21,890 | **41,860** 18,980 | ***33,850** *15,350 | **27,230** 12,350 | ***26,630** *12,070 | **19,450** 8,820 | ***22,470** *10,190 | **14,590** 6,610 | **19,310** 8,750 | **11,250** 5,100 | **lb** kg |
| **Ground Level** | | | ***22,630** *10,260 | ***22,630** *10,260 | ***53,430** *24,230 | **39,730** 18,020 | ***37,590** *17,040 | **25,800** 11,700 | ***29,090** *13,190 | **18,540** 8,410 | ***24,000** *10,880 | **14,030** 6,360 | **18,990** 8,610 | **10,960** 4,970 | **lb** kg |
| **-5'** (-1.5 m) | ***22,580** *10,240 | ***22,580** *10,240 | ***32,580** *14,770 | ***32,580** *14,770 | ***54,990** *24,940 | **38,930** 17,650 | ***39,500** *17,910 | **25,030** 11,350 | ***30,530** *13,840 | **17,980** 8,150 | **23,760** 10,770 | **13,680** 6,200 | | | **lb** kg |
| **-10'** (-3.0 m) | ***33,510** *15,190 | ***33,510** *15,190 | ***45,090** *20,440 | ***45,090** *20,440 | ***53,740** *24,370 | **38,930** 17,650 | ***39,450** *17,890 | **24,820** 11,250 | ***30,590** *13,870 | **17,800** 8,070 | **23,700** 10,750 | **13,630** 6,180 | | | **lb** kg |
| **-15'** (-4.6 m) | ***46,090** *20,900 | ***46,090** *20,900 | ***61,360** *27,820 | ***61,360** *27,820 | ***49,660** *22,520 | **39,540** 17,930 | ***37,070** *16,810 | **25,110** 11,390 | ***28,600** *12,970 | **18,040** 8,180 | | | | | **lb** kg |
| **-20'** (-6.1 m) | | | ***58,080** *26,340 | ***58,080** *26,340 | ***41,570** *18,850 | **40,800** 18,500 | ***31,030** *14,070 | **26,000** 11,790 | | | | | | | **lb** kg |

## LIFTING CAPACITIES

**Shoe: 35.4" (900 mm) triple grouser**

**SK480LC Arm: 16' 1" (4.9 m) Bucket: 1.7 yd³ (1.35 m³) SAE heaped Bucket Weight: 2,760 lb (1,250 kg)**

| A | 5' (1.5 m) | | 10' (3.0 m) | | 15' (4.6 m) | | 20' (6.1 m) | | 25' (7.6 m) | | 30' (9.1 m) | | 35' (10.7 m) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | Over Front | Over Side/360° | C |
| **25** (7.6 m) | | | | | | | | | | | | | ***11,400** *5,170 | ***11,400** *5,170 | **lb** kg |
| **20'** (6.1 m) | | | | | | | | | | | | | ***15,090** *6,840 | **12,500** 5,670 | **lb** kg |
| **15'** (4.6 m) | | | | | | | | | | | ***16,540** *7,500 | **16,240** 7,360 | ***15,930** *7,220 | **12,130** 5,500 | **lb** kg |
| **10'** (3.0 m) | | | | | | | | | ***20,830** *9,440 | ***20,830** *9,440 | ***18,510** *8,390 | **15,420** 6,990 | ***17,080** *7,740 | **11,650** 5,280 | **lb** kg |
| **5'** (1.5 m) | | | ***23,730** *10,760 | ***23,730** *10,760 | ***42,600** *19,320 | ***42,600** *19,320 | ***30,370** *13,770 | **27,780** 12,590 | ***24,190** *10,970 | **19,650** 8,910 | ***20,600** *9,340 | **14,600** 6,620 | ***18,340** *8,320 | **11,150** 5,060 | **lb** kg |
| **Ground Level** | ***9,540** *4,320 | ***9,540** *4,320 | ***22,260** *10,090 | ***22,260** *10,090 | ***49,860** *22,610 | **40,070** 18,170 | ***34,970** *15,860 | **25,920** 11,750 | ***27,130** *12,300 | **18,500** 8,390 | ***22,480** *10,190 | **13,880** 6,290 | **18,770** 8,510 | **10,720** 4,860 | **lb** kg |
| **-5'** (-1.5 m) | ***17,660** *8,000 | ***17,660** *8,000 | ***28,400** *12,880 | ***28,400** *12,880 | ***53,460** *24,240 | **38,510** 17,460 | ***37,920** *17,190 | **24,760** 11,230 | ***29,220** *13,250 | **17,710** 8,030 | **23,460** 10,640 | **13,370** 6,060 | **18,460** 8,370 | **10,440** 4,730 | **lb** kg |
| **-10'** (-3.0 m) | ***26,470** *12,000 | ***26,470** *12,000 | ***37,680** *17,080 | ***37,680** *17,080 | ***54,020** *24,500 | **38,020** 17,240 | ***39,020** *17,690 | **24,230** 10,990 | ***30,130** *13,660 | **17,300** 7,840 | **23,190** 10,510 | **13,120** 5,950 | ***18,050** *8,190 | **10,390** 4,710 | **lb** kg |
| **-15'** (-4.6 m) | ***36,680** *16,630 | ***36,680** *16,630 | ***50,120** *22,730 | ***50,120** *22,730 | ***51,830** *23,500 | **38,260** 17,350 | ***38,080** *17,270 | **24,240** 10,990 | ***29,450** *13,350 | **17,300** 7,840 | ***23,260** *10,540 | **13,210** 5,990 | | | **lb** kg |
| **-20'** (-6.1 m) | ***49,410** *22,410 | ***49,410** *22,410 | ***67,300** *30,520 | ***67,300** *30,520 | ***46,330** *21,010 | **39,150** 17,750 | ***34,430** *15,610 | **24,780** 11,240 | ***26,170** *11,870 | **17,770** 8,060 | | | | | **lb** kg |
| **-25'** (-7.6 m) | | | | ***35,510** *16,100 | ***35,510** *16,100 | ***25,650** *11,630 | ***25,650** *11,630 | | | | | | | | **lb** kg |

**Notes:**

1. Do not attempt to lift or hold any load that exceeds these rated values at their specified load radii and heights.
2. Lifting capacities assume a machine standing on a level, firm, and uniform supporting surface. Operator must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, inexperienced personnel, weight of various other buckets, lifting slings, attachments, etc.
3. Ratings at bucket lift hook.
4. The previous rated loads are in compliance with SAE Hydraulic Excavator Lift Capacity Standard J 1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.
5. Operator should be fully acquainted with the operator's manual before operating this machine. Rules for safe operation of equipment should be followed at all times.
6. Capacities apply only to the machine as originally manufactured and normally equipped by KOBELCO Construction Machinery America LLC.

## SPECIFICATION SUMMARY

| | | | |
|---|---|---|---|
| **GENERAL** | | | |
| Operating weight with Bucket | lb (kg) | 108,045 | (49,000) |
| Bucket Capacity Range | yd³ (m³) | 1.5-4.0 | (1.15-3.1) |
| **ENGINES** | | | |
| Make and Model | Mitsubishi | 6D24-TLA2B | |
| Displacement | cu in (l) | 729 | (11.95) |
| Bore and Stroke | in (mm) | 5.12"x5.91" | (130x150) |
| Horsepower SAE NET | HP (kW) @ RPM | 315 (235) @ 2000 | |
| **WORKING RANGES** | (Std. Arm) | | |
| Standard Arm | ft in (m) | 11' 4" | (3.45) |
| Bucket Digging Force | lb (kN) | 57,500 | (256) |
| Arm Digging Force | lb (kN) | 48,100 | (214) |
| Ground Level Reach | ft in (m) | 38' 10" | (11.84) |
| Digging Depth | ft in (m) | 25' 7" | (7.80) |
| Dumping Height | ft in (m) | 24' 11" | (7.59) |
| Vertical Wall Digging Depth | ft in (m) | 22' 10" | (6.95) |
| Max. Lift Capacity-Side | lb (kg) | 18,470 | (8,380) |
| @ 25' Radius & Ground Level-Front | lb (kg) | 29,990 | (13,600) |
| **HYDRAULIC SYSTEM** | | | |
| Hydraulic Pump | No & type | 2VP+1FG | |
| Rated Oil Flow | gpm (l/m) | 2x97.7+7.9 | (2x370+30) |
| Operating Pressure | Implement-psi (MPa) | 4,550 | (31.4) |

| | | | |
|---|---|---|---|
| Travel | psi (MPa) | 4,980 | (34.3) |
| Swing | psi (MPa) | 3,700 | (25.5) |
| Heavy Lift | psi (MPa) | 4,980 | (34.3) |
| **UNDERCARRIAGE** | | | |
| Track Overall Length | ft in (m) | 17' 11" | (5.46) |
| Track Overall Width w/Std. Shoe | ft in (m) | 12' 0" | (3.65) |
| Track Shoe Selection | in (mm) | 35.4" | (900) |
| Travel Speed | mph (km/h) | 3.5/2.2 | (5.6/3.5) |
| Draw Bar Pull | lb (kN) | 90,600 | (403) |
| Ground Bearing Pressure | psi (kPa) | 8.70 | (60) |
| Ground Clearance | in (mm) | 20.3" | (515) |
| **SWING** | | | |
| Swing Speed | rpm | 9.0 | |
| Swing Torque | lb (kN-m) | 118,000 | (160) |
| Tail Swing Radius | ft in (m) | 12' 0" | (3.65) |
| **SHIPPING DIMENSIONS** | | | |
| Height | ft in (m) | 11' 6" | (3.51) |
| Width w/Std. Shoe | ft in (m) | 12' 0" | (3.65) |
| Length | ft in (m) | 39' 4" | (11.98) |
| **REFILL CAPACITIES** | | | |
| Fuel Tank | gal (l) | 172 | (650) |
| Hydraulic Reservoir | gal (l) | 107 | (405) |

## STANDARD EQUIPMENT

- AM/FM radio
- Arm, 11' 4" (3.45 m) with vertical ribbed rock guard and tapped blocks for auxiliary hydraulics
- Audible warning system for high coolant temperature, low engine oil pressure, clogged air filter and oil replacement interval filter and oil replacement interval
- Boom, 23' 0" (7.0 m)
- Boom and arm holding (anti-drift) valves
- Breaker valve with flow control
- Cab is die formed, modular steel, full-vision, sound insulated, windshield wiper, adjustable reclining operator's seat with lap safety belt, heater and defroster, cigarette lighter, ashtray, floor mat, cab light, control lever lock, tinted skylight with damper cylinder
- Climate control air conditioning
- Double pump flow for bucket in and out
- Dual element air cleaner
- Electric horn
- Emergency electronic bypass with mechanical throttle control
- Engine shuts down automatically for low oil pressure
- Heavy duty batteries (2 x 12-volt 145 AH)
- Heavy Lift
- Hydraulic track adjusters
- Independent travel
- Lifetime lubricated track rollers, idlers and sprockets, grease cylinder track adjuster, track link disassembly mechanism, long pitch sealed and strutted track links.
- Mitsubishi engine 6D24-TLA2B
- Mode selection:
  Manual Mode--full performance, default mode
  Assist Mode--simplified and useful economy mode
  Breaker Mode--electronic breaker flow control
- Multi-display monitor includes: system status, engine preheat status, low engine oil pressure warning, engine coolant temperature level warning, engine air cleaner restriction, battery charging system, low fuel level, CPU error indicator lamp, hour meter, fuel level gauge, water temperature gauge and tachometer.
- Power outlet, 24 volt to 12 volt converter
- Proportional auto accel system
- Removable cleanout screen for radiator
- Removable travel levers with toe tabs
- Self-lubricating bushings in boom foot and boom hoist cylinders
- Service diagnostics:
  Computer system displays 68 service items
  100 event fault code memory, accessible from cab's control console.
- Starting motor (24v/5.5 kW) 50 amp alternator
- Straight travel system
- Suspension seat is 7-way adjustable
- Swing and travel automatic parking brakes
- Swing flashers
- Swing priority (trenching system) functions automatically
- Swing shockless valve
- Three front and two rear work lights
- Track, 35.4" (900 mm) semi-triple grouser shoes
- Travel alarm
- Two lever control for boom, arm, bucket and swing: pilot operated wrist controls and foot pedals
- Two speed travel, automatic shift
- Viscous silicon-filled cab mounts
- Warm up function of engine and hydraulic system functions automatically

NOTE: Due to our policy of continual product improvement, all designs and specifications are subject to change without advance notice.

## OPTIONAL EQUIPMENT

- Arm, 11' 4" severe duty with rock guard
- Arm, 13' 3" (4.04 m) with rock guard
- Arm, 16' 1" (4.90 m) with rock guard
- Belly pan guard
- Boom and arm load (lock) valves
- Breaker and piping controls
- Combined one-way or two-way auxiliary hydraulics (one or two pump) with piping and hand/foot controls
- Control pattern changer (ISO/BHL)
- Front rain visor
- High & wide lower
- Hydraulic counterweight removal system
- Large selection of buckets
- Mass Excavator attachment
- One-way auxiliary hydraulics with piping and hand/foot controls (one pump)
- Vandalism guards


KOBELCO®

*Your competitive edge.*

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# SK480LC



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