

KOBELCO®

Your competitive edge.

SK330LC

WT 77,800 lb

HP 247 @ 2,200 RPM

BKT CAP .875 - 2.75 cu yd



Dynamic Acera Hydraulic Excavator

PRODUCTIVITY



CAB & CONTROLS

Large, Comfortable Cab

We've expanded the cab by 18%—making it the largest in the industry—to give the operator lots of elbowroom 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. A 2-speaker, AM/FM stereo radio, with operator pre-set station selections, is standard. Viscous silicon-filled cab mounts help eliminate the shocks and vibrations that can fatigue an operator and degrade his productivity over a long shift.

The climate-control air conditioning system can effortlessly generate an impressive 18,250 BTUs (1.52 tons) of cool air in the summer or 20,200 BTUs of heat in the winter. Any time of the year, the operator's desired temperature can be rapidly reached and maintained.

Adjustability = Productivity

The adjustable, 7-position suspension seat lets any operator get completely comfortable regardless of size or shape. You can even move the seat forward or backward completely independent of the control lever consoles. We also 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.

Our NeuralNet Command System Reacts to the Operator

One of the most impressive innovations we have designed into the Dynamic Acera line is our NeuralNet Command System. Its "fuzzy logic" software works much like the technology that makes advanced military aircraft ultra-responsive to a pilot's every wish: analyzing a simple hand movement and translating it into a series of coordinated control messages. All of which makes command automatic, intuitive and extremely efficient.

Assist Mode

This mode leverages the "fuzzy logic" of our revolutionary NeuralNet Command System, available only on Dynamic Acera excavators. During operation, constant engine RPM is maintained under varying load conditions for outstanding production efficiency. It recognizes various tasks and automatically responds, assisting the operator by adjusting the machine's response to the job's conditions. By eliminating the need for an operator to manually select from 6-10 individual work mode options per task, the Assist Mode helps him concentrate on his job, instead of pushing buttons. That leads to easier operation and more productivity — every task, every day.



DIGGING



LEVELING



SCATTERING



COMPACTING



STANDBY

Manual Mode

This default mode maximizes output for the heavy operations that require the excavator's full performance. It delivers the highest possible level of production for truck loading, mass excavation or any task requiring continuous maximum speed and power.

Breaker Mode

This new hydraulic setting lets operators quickly adjust the pump flow rates for various attachments, like breakers and nibbler/breakers, right from the cab. When the breaker mode is set, the flow volume is automatically controlled by whatever setting the operator chooses. When it is not set, the flow volume defaults to the normal rate.

Intelligent Total Control System (ITCS)

Rapid responsiveness is designed into the SK330LC. 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 performance.

A graphic display on the monitor screen of the command module displays system performance, confirming each work mode setting.

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.

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.

EXCEPTIONAL ENGINE



Rock-Solid Reliable, Mitsubishi Engine Meets "Tier 2" Emission Standards

We've chosen the rock-solid, reliable Mitsubishi 6D16-TLA2A engine to power the Dynamic Acera SK330LC. The mighty Mitsubishi power plant generates 247 net horsepower, which is the industry's highest rating in this class. 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 engine 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.

SIMPLE SERVICING

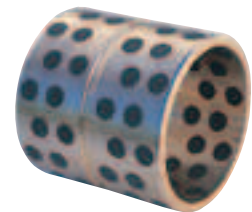
Self-Diagnostic Capabilities and 60-Event Fault Code Memory

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 operator's cab.

We've eliminated the need to use tools, gauges or laptop computers to remotely retrieve data for recent system faults. Now up to 60 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 SK330LC'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

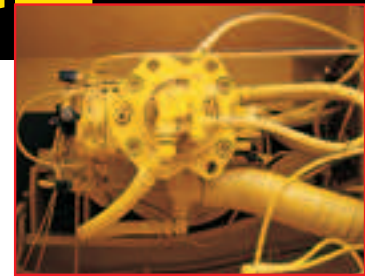
Now you can remove the radiator without having to drain the hydraulic system, thanks to a new design that makes the radiator and oil cooler systems independent of each other. We've built in adequate space — about four inches — between the radiator and the oil cooler so it's easy to access either component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



PERFORMANCE



HYDRAULIC PERFORMANCE



The Industry's Best Lift Capacity

Nothing in its class out lifts our SK330LC and we can prove it. We've increased the SK330LC's stability, both over the front and over the sides, making it rock solid. We even bolstered our upper revolving frame and undercarriage so they could handle bigger loads. Should you need it, the Heavy Lift System can be switched on for an increased capacity at close radius with no time limit. These increases give the SK330LC the ability to handle large pipe, trench boxes or your most demanding jobs—without breaking a sweat.

The Industry's Highest Breakout Forces

The SK330LC excavator boasts higher arm and bucket forces than comparably equipped competitor machines in the same weight class. Furthermore, the operator can boost power by another 10% simply by pressing the Power Boost button on the right-hand control lever, unleashing the industry's highest breakout forces. Unlike competitive systems, Dynamic Acera excavators are designed to operate at their highest power levels for as long as you need them to. Bottom line: we give you all the power you need for as long as you need it.

Swing Priority

This exclusive system automatically and instantly delivers full swing power during combined swing/arm operations—without any special switches to select—making quick work of jobs like side digging and backfilling.

Unique Travel System

The SK330LC's travel motors give you a choice of a high-speed setting—at 3.6 mph (5.8 km/h), the world's fastest for this class—or a high torque setting—2.1 mph (3.4 km/h) for close-quarters movement. The drawbar pull has been increased to 63,800 lbs. (284 kN): the highest in its class. When the operator selects Independent Travel, one pump becomes dedicated to travel, ensuring a smooth constant propel speed without deviation during simultaneous travel/attachment operations. Delicate operations like carrying a large pipe across the job site become simple because in Independent Travel the operator can focus on the pipe without having to worry about his travel speed being affected.

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.

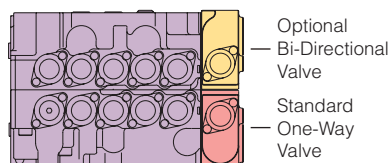
Standard Auxiliary Valve with Flow Control

Every excavator in the Dynamic Acera line features a standard auxiliary valve; which is part of an expandable main control valve. The functionality of the SK330LC has been enhanced to include a standard one-way auxiliary valve, making it easy to install piping and controls for auxiliary hydraulics. So, in a matter of hours, you'll be ready to add on your attachments.

The maximum flow available to the auxiliary attachment can be pre-set from inside the cab, so operators are less likely to damage your excavator or attachment through over aggressive use.

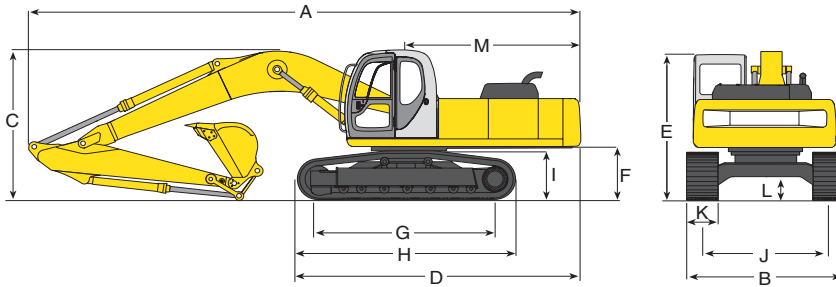
Two bi-directional auxiliary hydraulic options are available:

- High-flow auxiliary valve is switchable between one-pump flow and two-pump flow from the operators cab.
- Low-flow rotation system is independent flow source for multi-functioning applications using attachments such as thumbs and twist buckets.



HYDRAULIC SYSTEM

Pump	2 variable displacement	
Max discharge flow	2 x 66.8 US gal/min (2 x 253 L/min)	
Operating pressure:		
Implement	4,980 psi	(34.3 MPa)
Travel	4,980 psi	(34.3 MPa)
Swing	3,990 psi	(27.5 MPa)
Power Boost/Heavy lift	5,470 psi	(37.8 MPa)
Pilot control circuit	710 psi	(4.9 MPa)
Control valves	6 spool	



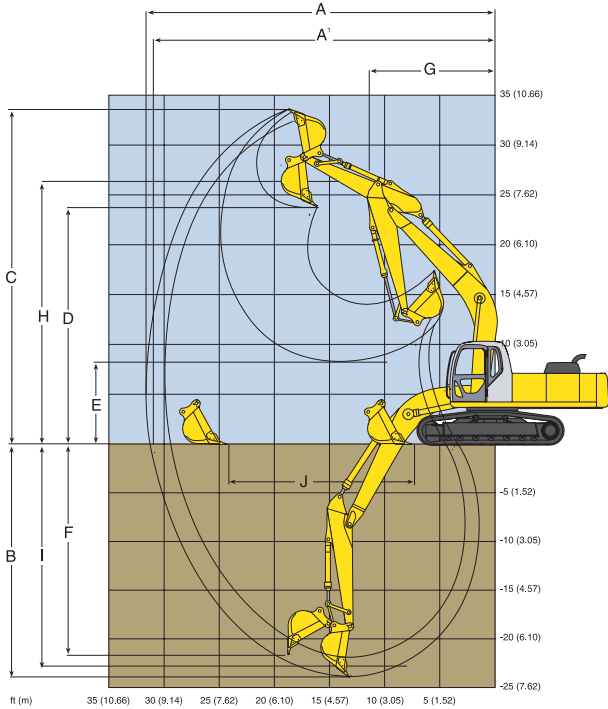
DIMENSIONS		Unit ft-in (m)	
ARM LENGTH		10' 10" (3.33)	13' 7" (4.15)
A	Overall length	36' 9" (11.20)	36' 10" (11.23)
B	Overall width (with 800mm shoe)	11' 2" (3.40)	11' 2" (3.40)
C	Overall height (to top of boom)	11' 0" (3.36)	11' 8" (3.55)
D	Basic machine length	19' 8" (5.99)	19' 8" (5.99)
E	Overall height (to top of cab)*	10' 3" (3.12)	10' 3" (3.12)
F	Ground clearance of rear end*	3' 11" (1.20)	3' 11" (1.20)
G	Center distance of tumbler	13' 3" (4.05)	13' 3" (4.05)
H	Overall length of crawler	16' 4" (4.98)	16' 4" (4.98)
I	Crawler height at tumbler center*	3' 5" (1.05)	3' 5" (1.05)
J	Track gauge	8' 6" (2.60)	8' 6" (2.60)
K	Width of crawler shoe	31.5" (800 mm)	31.5" (800 mm)
L	Ground clearance of undercarriage*	19.7" (500 mm)	19.7" (500 mm)
M	Tail swing radius	11' 6" (3.50)	11' 6" (3.50)

*Excludes height of grouser bar.

WEIGHTS		Bucket weight: 2,100 lbs (954 kg)	
Shoe width	in (mm)	27.6 (700)	31.5 (800)
Machine overall width ft-in (mm)		10' 10" (3.30)	11' 2" (3.40)
Ground pressure	psi (kPa)	8.06 (55.5)	7.18 (49.5)
Operating weight	lb (kg)	76,500 (34,700)	77,800 (35,300)

BUCKET SELECTION CHART								
Bucket Duty	Capacity (SAE)		Width		Bucket Weight lb (kg)		Arm ft-in (m)	
	Cubic Yard (m³)		Inches (m)				10'10"(3.3)	13'7"(4.15)
General Purpose	.875	(.669)	24"	(.609)	1,925	(873)	H	H
	1.25	(.956)	30"	(.762)	2,105	(955)	H	H
	1.50	(1.146)	36"	(.914)	2,365	(1,073)	H	M
	1.75	(1.337)	42"	(1.066)	2,550	(1,157)	H	L
	2.0	(1.529)	48"	(1.219)	2,700	(1,225)	M	X
	2.375	(1.815)	54"	(1.371)	3,825	(1,735)	L	X
	2.75	(2.10)	54"	(1.371)	4,050	(1,837)	L	X
Heavy Duty	.875	(.669)	24"	(.609)	2,070	(939)	H	H
	1.25	(.956)	30"	(.762)	2,265	(1,027)	H	H
	1.50	(1.146)	36"	(.914)	2,545	(1,154)	H	M
	1.75	(1.337)	42"	(1.066)	2,740	(1,243)	M	L
	2.0	(1.529)	48"	(1.219)	2,905	(1,318)	L	X
	2.375	(1.815)	54"	(1.371)	3,040	(1,379)	L	X
Severe Duty	1.00	(.764)	27"	(.685)	2,330	(1,057)	H	H
	1.25	(.956)	33"	(.762)	2,585	(1,172)	H	H
	1.50	(1.146)	36"	(.914)	2,690	(1,220)	H	M
	1.75	(1.337)	42"	(1.066)	2,945	(1,336)	M	L
	2.0	(1.529)	48"	(1.219)	3,160	(1,433)	L	X

H - Used with material weight up to 3,000 lbs/cu yd (1,780 kg/m³)
 M - Used with material weight up to 2,500 lbs/cu yd (1,483 kg/m³)
 L - Used with material weight up to 2,000 lbs/cu yd (1,186 kg/m³)
 X - Not recommended



This chart is a graphic representation of the working ranges for the SK330LC equipped with a 10' 10" (3.3 m) arm.

WORKING RANGES

Unit: ft-in (m)

ATTACHMENTS	Standard Arm	Optional Arm
	10' 10" (3.3)	13' 7" (4.15)
A Max digging reach	36' 10" (11.22)	39' 4" (11.98)
A' Max digging reach at ground level	36' 2" (11.03)	38' 9" (11.80)
B Max digging depth	24' 7" (7.49)	27' 4" (8.34)
C Max digging height	34' 5" (10.49)	35' 3" (10.75)
D Max dumping clearance	23' 11" (7.29)	24' 10" (7.57)
E Min dumping clearance	8' 7" (2.62)	5' 10" (1.77)
F Max vertical wall digging depth	21' 7" (6.57)	23' 11" (7.29)
G Min front swing radius	14' 1" (4.29)	14' 4" (4.37)
H Height at min swing radius	28' 5" (8.65)	28' 5" (8.65)
I Digging depth for 8' (2.4m) flat bottom	24' 0" (7.31)	27' 1" (8.25)
J Horiz digging stroke at ground level	19' 0" (5.79)	24' 1" (7.34)

DIGGING FORCE

Unit: lb (kg)

	10' 10" (3.3 m) Arm		13' 7" (4.15 m) Arm	
	SAE	ISO	SAE	ISO
Bucket digging force	*48,900 (*22,181)	*54,500 (*24,721)	44,500 (20,185)	49,600 (22,500)
Arm crowding force	*39,500 (*17,920)	*40,100 (*18,189)	30,700 (13,925)	31,160 (14,130)

*Power boost engaged.

PERFORMANCE

Travel speed	3.6/2.1 mph (5.8/3.4 km/h)
Swing speed	9.1 rpm
Gradeability	35° (70%)
Drawbar pulling force	63,800 lbs (284 kN)

REFILLING CAPACITIES

Unit: US gal (liters)

Fuel tank	148 (560)
Hydraulic oil reservoir	54.4 (206)
Hydraulic system including oil reservoir	92.7 (351)
Cooling system	9.0 (34)
Lubrication: Engine oil	7.4 (28)

SPECIFICATION SUMMARY

GENERAL			
Operating weight with Bucket	lb (kg)	77,800	(35,290)
Bucket Capacity Range	cu yd (m ³)	.875-2.75	(.67-2.10)
ENGINE			
Make and Model	Mitsubishi	6D16-TLA2A	
Displacement	cu in (L)	460	(7.545)
Bore and Stroke	in (mm)	4.65"x4.53"	(118 x 115)
Horsepower SAE NET	HP/RPM (KW/RPM)	247@2,200	(184@2,200)
WORKING RANGES (Std. Arm)			
Standard Arm	ft-in (m)	10' 10"	(3.3)
Bucket Digging Force	lb (kg)	48,900	(22,180)
Arm Digging Force	lb (kg)	39,500	(17,920)
Ground Level Reach	ft-in (m)	36' 2"	(11.03)
Max. Digging Depth	ft-in (m)	24' 7"	(7.49)
Max. Dumping Height	ft-in (m)	23' 11"	(7.29)
Max. Vertical Wall Digging Depth	ft-in (m)	21' 7"	(6.57)
Max. Lift Capacity-Side	lb (kg)	13,000	(5,890)
@ 25' Radius & Ground Level-Front	lb (kg)	21,010	(9,530)
HYDRAULIC SYSTEM			
Hydraulic Pump	No & type	2VP+1FG	
Rated Oil Flow	gpm (L/m)	2x66.8+5.5	(2x253+21)
Operating Pressure	Implement-psi (MPa)	4,980	(34.3)

Travel-psi	(MPa)	4,980	(34.3)
Swing-psi	(MPa)	3,980	(27.5)
Heavy Lift-psi	(MPa)	5,470	(37.8)
UNDERCARRIAGE			
Track Overall Length	ft-in (m)	16' 4"	(4.98)
Track Overall Width w/Std. Shoe	ft-in (m)	11' 2"	(3.40)
Track Shoe	in (mm)	31.5"	(800)
Travel Speed	mph (km/h)	3.6/2.1	(5.8/3.4)
Draw Bar Pull	lb (kg)	63,800	(28,940)
Ground Bearing Pressure	psi (kg/cm ²)	7.19	(2.51)
Ground Clearance	in (mm)	19.7"	(500)
SWING			
Swing Speed	rpm	9.1	
Tail Swing Radius	ft-in (m)	11' 6"	(3.50)
Swing Torque	lb-ft (kN • m)	87,844	(119)
SHIPPING DIMENSIONS			
Height	ft-in (m)	11' 0"	(3.36)
Width w/Std. Shoe	ft-in (m)	11' 2"	(3.40)
Length	ft-in (m)	36' 9"	(11.20)
REFILL CAPACITIES			
Fuel Tank	gal (L)	148	(560)
Hydraulic Reservoir	gal (L)	54.4	(206)

STANDARD EQUIPMENT

- AM/FM radio
- Arm: 10' 10" (3.3 m) with vertical ribbed rock guard and tapped blocks for auxiliary piping
- Audible warning system for high coolant temperature, low engine oil pressure, clogged air filter and oil replacement interval
- Boom: 21' 4" (6.5 m)
- Boom and arm holding (anti-drift) valves
- Breaker valve with flow control
- Cab is die formed, modular steel, full-vision, sound insulated, with viscous silicon-filled mounts, windshield wiper, heater and defroster, cigarette lighter, ashtray, floor mat, cab light, control lever lock, tinted skylight with damper cylinder
- Climate control air conditioning/heating system
- Display monitor mounted on multi-function console provides status of following: aging of engine oil, fuel and hydraulic filters, system status, engine preheat, low engine oil pressure, engine coolant temperature, air cleaner restriction, battery charging, fuel level, CPU error and tachometer. Beneath monitor are switches for auto-decel, windshield washer and wiper, mode selector and swing flashers
- Double pump flow for bucket in
- Dual element air cleaner
- Electric horn
- Emergency electronic bypass
- Engine shuts down automatically for low oil pressure
- Heavy duty batteries (2 x 12 volt 136 AH)
- Heavy Lift
- Hydraulic track adjusters
- Independent travel
- Lifetime lubricated track rollers, idlers and sprockets
- Mitsubishi engine, model 6D16-TLA2A
- Mode selection
 - Manual Mode—full performance, default mode
 - Assist Mode—simplified and useful economy mode
 - Breaker Mode—electronic breaker flow control
- Power Boost
- Power outlet, 24 volt to 12 volt converter
- Proportional auto accel system
- Removable cleanout screen for radiator

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

- Removable travel levers with toe tabs
- Self-lubricating bushings in boom foot and boom hoist cylinders
- Service diagnostics:
 - Computer system displays 68 service items
 - 60 event fault code memory, accessible from cab
- Starting motor (24 v/5.0 KW) 35 amp alternator
- Straight travel system
- Suspension seat—7-way adjustable
- Swing and travel automatic parking brakes
- Swing flashers recessed into counterweight. Off/on switch located on multi-function console in cab
- Swing priority (trenching system) functions automatically
- Swing shockless valve
- Track shoes: 31.5" (800 mm) semi-triple grouser
- Travel—two speed with automatic shift
- Two lever control for boom, arm, bucket and swing; pilot operated wrist controls and foot pedals
- Warm up function of engine and hydraulic system functions automatically
- Work lights—three front and two rear

OPTIONAL EQUIPMENT

- Arm: 13' 7" (4.15 m) with rock guard
- Belly pan guard
- Boom and arm load (lock) valves
- Combined one-way or two-way auxiliary hydraulic piping (one or two pump) with hand or foot controls
- Control pattern changer (ISO/BHL)
- Front rain visor
- High & wide lower
- Hydraulic oil for cold or tropical environments
- Independent low-flow rotation system
- Large selection of buckets
- Long reach attachment with heavier counterweight
- Mass Excavator attachment
- Single pedal travel
- Track shoe: 27.6" (700 mm) double bar grouser
- Vandalism guards

KOBELCO®

Your competitive edge.

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