

**VOLVO EXCAVATOR**

# EC330CL

78,450 – 81,590 lb, 247 hp



**MORE CARE. BUILT IN.**



# SPECIFICATIONS

## Engine

The next-generation Volvo diesel engine uses Volvo Advanced Combustion Technology (V-ACT) to deliver lower emissions and maintain superior performance and fuel efficiency. The EPA Tier 3 compliant engine uses precise, high-pressure fuel injectors, turbo charger and air to air intercooler and electronic engine controls to optimize machine performance.

<b>Engine</b>	Volvo D12D EBE3	
<b>Max. power, at</b>	28 r/s	<b>1,700 r/min</b>
<b>Net (ISO 9249, SAE J1349)</b>	184 kW	<b>247 hp</b>
<b>Gross (SAE J1995)</b>	198 kW	<b>265 hp</b>
<b>Max. torque at 1,275 r/min</b>	1,475 Nm	<b>1,088 lb.ft</b>
<b>No. of cylinders</b>	6	
<b>Displacement</b>	12.1 l	<b>738 cu.in</b>
<b>Bore</b>	131 mm	<b>5.16"</b>
<b>Stroke</b>	150 mm	<b>5.91"</b>

## Electrical system

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard.

<b>Voltage</b>	24 V
<b>Batteries</b>	2 x 12 V
<b>Battery capacity</b>	200 Ah
<b>Alternator</b>	28 V / 80 A

## Service refill capacities

<b>Fuel tank</b>	620 l	<b>164 gal</b>
<b>Hydraulic system, total</b>	500 l	<b>132 gal</b>
<b>Hydraulic tank</b>	220 l	<b>58 gal</b>
<b>Engine oil</b>	42 l	<b>11 gal</b>
<b>Engine coolant</b>	60 l	<b>16 gal</b>
<b>Swing reduction unit</b>	6 l	<b>1.6 gal</b>
<b>Travel reduction unit</b>	2 x 5.5 l	<b>2 x 1.5 gal</b>

## Swing system

The swing system uses an axial piston motor, driving a planetary gearbox for maximum torque. An automatic holding brake and anti-rebound valve are standard.

<b>Max. swing speed</b>	9.7 r/min
<b>Max. swing torque</b>	119.1 kNm

## Drive

Each track is powered by an automatic two-speed shift travel motor. Track brakes are multi-disc, spring-applied and hydraulically released. The travel motor, brake and planetary gears are well protected within the track frame.

<b>Max. drawbar pull</b>	256.9 kN
<b>(tractive effort)</b>	<b>57,770 lb</b>
<b>Max. travel speed</b>	3.3/4.5 km/h
	<b>2.1/2.8 mph</b>
<b>Gradeability</b>	35° <b>70%</b>

## Undercarriage

The undercarriage has a robust X-shaped frame. Greased and sealed track links are standard.

<b>Track pads</b>	2 x 48
<b>Link pitch</b>	215.9 mm <b>8.5"</b>
<b>Shoe width,</b>	600/700/800/900 mm
<b>triple grouser</b>	<b>24"/28"/32"/36"</b>
<b>Shoe width,</b>	
<b>double grouser</b>	600 mm <b>24"</b>
<b>Bottom rollers</b>	2 x 8
<b>Top rollers</b>	2 x 2

## Hydraulic system

The hydraulic system, also known as the "Integrated work mode control" is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, boom, arm and swing priority along with boom, arm and bucket regeneration provides optimum performance. The following important functions are included in the system:

**Summation system:** Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity.

**Boom priority:** Gives priority to the boom operation for faster raising when loading or performing deep excavations.

**Arm priority:** Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.

**Swing priority:** Gives priority to swing functions for faster simultaneous operations.

**Regeneration system:** Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity.

**Power boost:** All digging and lifting forces are increased.

**Holding valves:** Boom and arm holding valves prevent the digging equipment from creeping.

## Main pump:

Type: 2 x variable displacement axial piston pumps

Maximum flow: 2 x 280 l/min **2 x 74 gpm**

## Pilot pump:

Type: Gear pump

Maximum flow: 25.5 l/min **6.7 gpm**

## Hydraulic motors:

Travel: Variable displacement axial piston motor with mechanical brake

Swing: Fixed displacement axial piston motor with mechanical brake

## Relief valve setting:

Implement.....	31.4/34.3 Mpa
.....	<b>4,550/4,980 psi</b>
Travel circuit.....	34.3 Mpa <b>4,980 psi</b>
Swing circuit.....	25.5 Mpa <b>3,700 psi</b>
Pilot circuit.....	3.9 Mpa <b>570 psi</b>

## Hydraulic cylinders:

Boom.....	2
Bore x Stroke.....	ø160 x 1,530 mm
	<b>ø6.3 x 60.2"</b>
Arm.....	1
Bore x Stroke.....	ø175 x 1,750 mm
	<b>ø6.9 x 68.9"</b>
Bucket.....	1
Bore x Stroke.....	ø145 x 1,285 mm
	<b>ø5.7 x 50.6"</b>
ME bucket.....	1
Bore x Stroke.....	ø160 x 1,250 mm
	<b>ø6.3 x 49.2"</b>

## Cab

The new-design Volvo Care Cab, with operator protective structure provides security, along with more interior space, leg room and foot space. Audio system with remote control. 3 cup holders, 3 high-capacity outlets. Independently adjustable joystick consoles.

Excellent all around-visibility provided through maximum cab glass, transparent roof hatch and 2-piece sliding door window. The lift-up front windshield can easily be secured at the ceiling and the removable lower front glass can be stored in the side door. Interior lighting consists of one reading light and one cab light with timer.

The pressurized and filtered cab air is supplied by a 14-vent climate-control system, providing fast defrosting and high cooling and heating performance. Viscous/spring-mounted suspension cushions operator from vibrations.

Deluxe seat with adjustable height, tilt, recline, forward-back settings, retractable seat belt and selectable horizontal suspension for reduced whole body vibration.

Adjustable easy-to-read 6.4" LCD color monitor provides real time information of machine functions, important diagnostic information and a wide variety of work tool settings. LCD monitor is switchable to rear view camera monitor (option).

## Sound Level:

**Sound level in cab according to ISO 6396**  
..... LpA 73 dB(A)

**External sound level according to ISO 6395 and EU Directive 2000/14/EC**  
..... LwA 105 dB(A)

## Ground pressure

• **EC330CL** with 6.45 m, **21' 2"** boom, 3.2 m, **10' 6"** arm, 1,110 kg, **2,450 lb** bucket, 7,250 kg, **15,990 lb** counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm, <b>24"</b>	35,030 kg, <b>77,240 lb</b>	66 KPa, <b>9.6 psi</b>	3,190 mm, <b>10' 6"</b>
	700 mm, <b>28"</b>	35,670 kg, <b>78,650 lb</b>	57.5 KPa, <b>8.3 psi</b>	3,290 mm, <b>10' 10"</b>
	800 mm, <b>32"</b>	36,070 kg, <b>79,530 lb</b>	50.9 KPa, <b>7.4 psi</b>	3,390 mm, <b>11' 1"</b>
	900 mm, <b>36"</b>	36,450 kg, <b>80,370 lb</b>	45.7 KPa, <b>6.6 psi</b>	3,490 mm, <b>11' 5"</b>
Double grouser	600 mm, <b>24"</b>	35,570 kg, <b>78,430 lb</b>	66.9 KPa, <b>9.7 psi</b>	3,190 mm, <b>10' 6"</b>

## Max. permitted buckets

Note: 1. Bucket size based on ISO 7451, heaped material with a 1:1 angle of repose.

2. "Max. permitted sizes" are for reference only and are not necessarily available from the factory.

3. Bucket widths are less than bucket's tip radius.

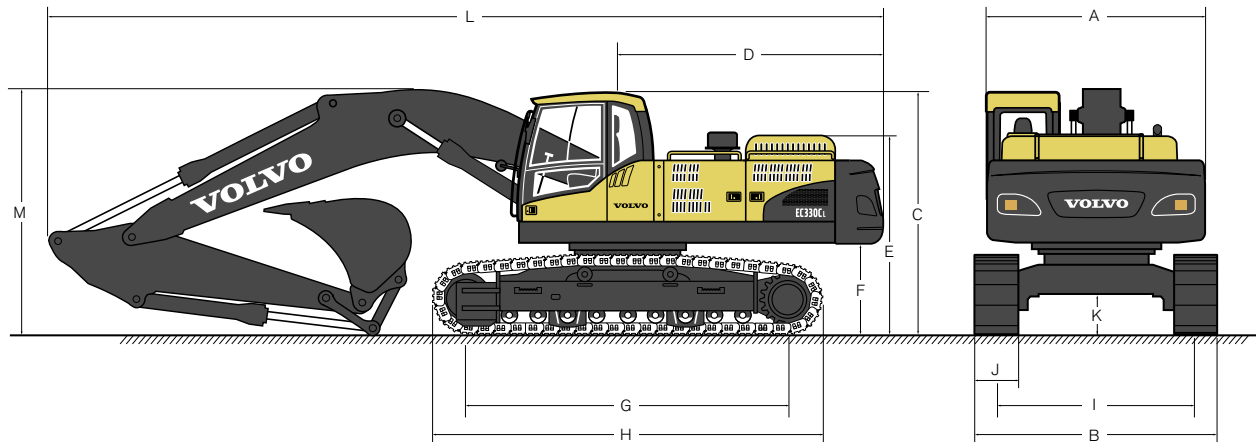
• **EC330CL** with **direct fit bucket**

Description	Max. bucket volume / weight	6.45 m, <b>21' 2"</b> boom			6.2 m, <b>20' 4"</b> ME boom
		2.6 m, <b>8' 6"</b> arm	3.2 m, <b>10' 6"</b> STD. arm	3.9 m, <b>12' 10"</b> arm	2.6 m, <b>8' 6"</b> ME arm
GP bucket 1.5 t/m <sup>3</sup> , <b>2,530 lb/yd<sup>3</sup></b>	l / kg	2,350 / 2,000	2,175 / 1,850	1,925 / 1,625	2,450 / 2,075
	yd <sup>3</sup> / lb	<b>3.07 / 4,409</b>	<b>2.85 / 4,080</b>	<b>2.52 / 3,580</b>	<b>3.20 / 4,575</b>
GP bucket 1.8 t/m <sup>3</sup> , <b>3,030 lb/yd<sup>3</sup></b>	l / kg	2,075 / 1,775	1,925 / 1,650	1,700 / 1,450	2,175 / 1,850
	yd <sup>3</sup> / lb	<b>2.71 / 3,913</b>	<b>2.52 / 3,640</b>	<b>2.22 / 3,200</b>	<b>2.84 / 4,079</b>
HD bucket 1.8 t/m <sup>3</sup> , <b>3,030 lb/yd<sup>3</sup></b>	l / kg	1,975 / 1,975	1,825 / 1,825	1,625 / 1,625	2,050 / 2,050
	yd <sup>3</sup> / lb	<b>2.58 / 4,354</b>	<b>2.39 / 4,020</b>	<b>2.13 / 3,580</b>	<b>2.68 / 4,519</b>
HD bucket 2.0 t/m <sup>3</sup> , <b>3,370 lb/yd<sup>3</sup></b>	l / kg	1,850 / 1,850	1,700 / 1,700	1,500 / 1,500	1,925 / 1,925
	yd <sup>3</sup> / lb	<b>2.42 / 4,079</b>	<b>2.22 / 3,750</b>	<b>1.96 / 3,300</b>	<b>2.52 / 4,244</b>

• **EC330CL** with **quick fit bucket**

Description	Max. bucket volume / weight	6.45 m, <b>21' 2"</b> boom			6.2 m, <b>20' 4"</b> ME boom
		2.6 m, <b>8' 6"</b> arm	3.2 m, <b>10' 6"</b> STD. arm	3.9 m, <b>12' 10"</b> arm	2.6 m, <b>8' 6"</b> ME arm
GP bucket 1.5 t/m <sup>3</sup> , <b>2,530 lb/yd<sup>3</sup></b>	l / kg	2,175 / 1,850	2,000 / 1,700	1,750 / 1,475	2,275 / 1,925
	yd <sup>3</sup> / lb	<b>2.84 / 4,079</b>	<b>2.62 / 3,750</b>	<b>2.89 / 3,250</b>	<b>2.98 / 4,244</b>
GP bucket 1.8 t/m <sup>3</sup> , <b>3,030 lb/yd<sup>3</sup></b>	l / kg	1,925 / 1,625	1,775 / 1,500	1,550 / 1,300	2,025 / 1,725
	yd <sup>3</sup> / lb	<b>2.52 / 3,583</b>	<b>2.32 / 3,310</b>	<b>2.03 / 2,870</b>	<b>2.65 / 3,803</b>
HD bucket 1.8 t/m <sup>3</sup> , <b>3,030 lb/yd<sup>3</sup></b>	l / kg	1,825 / 1,825	1,675 / 1,675	1,475 / 1,475	1,900 / 1,900
	yd <sup>3</sup> / lb	<b>2.39 / 4,023</b>	<b>2.19 / 3,690</b>	<b>1.93 / 3,250</b>	<b>2.49 / 4,189</b>
HD bucket 2.0 t/m <sup>3</sup> , <b>3,370 lb/yd<sup>3</sup></b>	l / kg	1,700 / 1,700	1,575 / 1,575	1,375 / 1,375	1,775 / 1,775
	yd <sup>3</sup> / lb	<b>2.22 / 3,748</b>	<b>2.06 / 3,470</b>	<b>1.80 / 3,030</b>	<b>2.32 / 3,913</b>

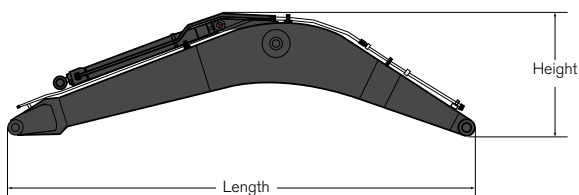
## Dimensions



Description		6.2 m, 20' 4" ME boom		6.45 m, 21' 2" boom	
		2.6 m, 8' 6" ME arm	2.6 m, 8' 6" arm	3.2 m, 10' 6" STD. arm	3.9 m, 12' 10" arm
A. Overall width of upper structure	mm, ft-in	2,990, 9' 10"	2,990, 9' 10"	2,990, 9' 10"	2,990, 9' 10"
B. Overall width	mm, ft-in	3,390, 11' 1"	3,390, 11' 1"	3,390, 11' 1"	3,390, 11' 1"
C. Overall height of cab	mm, ft-in	3,197, 10' 6"	3,197, 10' 6"	3,197, 10' 6"	3,197, 10' 6"
D. Tail swing radius	mm, ft-in	3,450, 11' 4"	3,450, 11' 4"	3,450, 11' 4"	3,450, 11' 4"
E. Overall height of engine hood	mm, ft-in	2,700, 8' 10"	2,700, 8' 10"	2,700, 8' 10"	2,700, 8' 10"
F. Counterweight clearance *	mm, ft-in	1,210, 4' 0"	1,210, 4' 0"	1,210, 4' 0"	1,210, 4' 0"
G. Tumbler length	mm, ft-in	4,020, 13' 2"	4,020, 13' 2"	4,020, 13' 2"	4,020, 13' 2"
H. Track length	mm, ft-in	4,960, 16' 3"	4,960, 16' 3"	4,960, 16' 3"	4,960, 16' 3"
I. Track gauge	mm, ft-in	2,590, 8' 6"	2,590, 8' 6"	2,590, 8' 6"	2,590, 8' 6"
J. Shoe width	mm, in	800, 32"	800, 32"	800, 32"	800, 32"
K. Min. ground clearance *	mm, ft-in	500, 1' 8"	500, 1' 8"	500, 1' 8"	500, 1' 8"
L. Overall length	mm, ft-in	10,910, 35' 10"	10,910, 35' 10"	10,910, 35' 10"	10,910, 35' 10"
M. Overall height of boom	mm, ft-in	3,700, 12' 2"	3,580, 11' 9"	3,350, 11' 0"	3,590, 11' 9"

\* Without shoe grouser

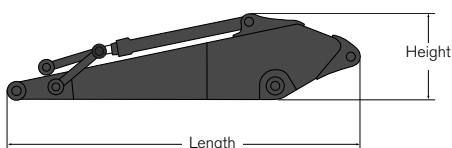
### • Boom



Description		6.2 m, 20' 4" ME	6.45 m, 21' 2"
Length	mm, ft-in	6,460, 21' 2"	6,700, 22' 0"
Height	mm, ft-in	1,740, 5' 9"	1,800, 5' 11"
Width	mm, ft-in	820, 2' 8"	820, 2' 8"
Weight	kg, lb	3,290, 7,250	3,060, 6,750

\* Includes arm cylinder, piping and pin

### • Arm

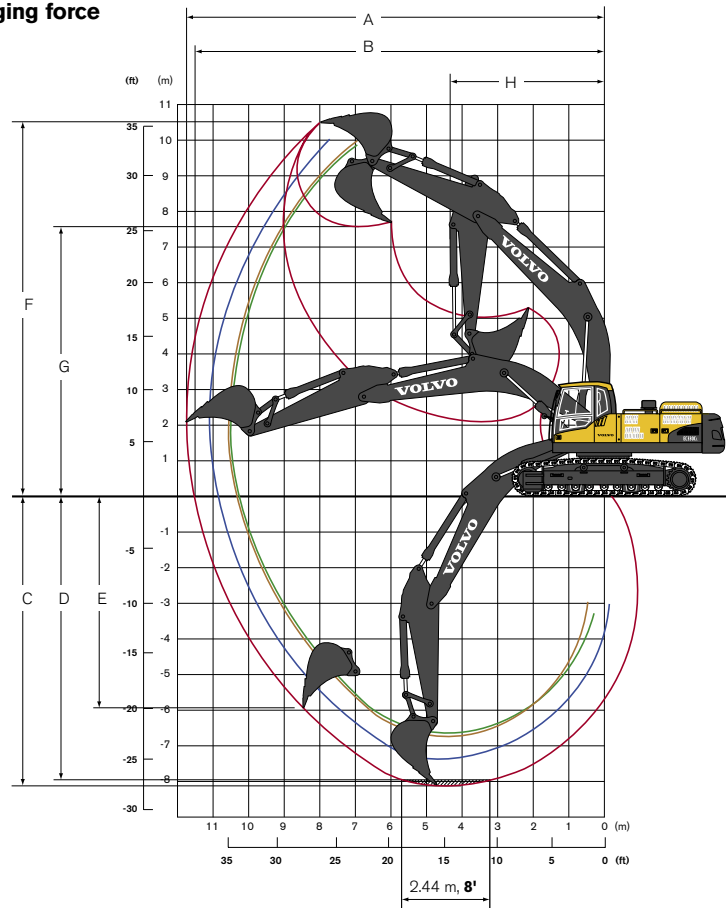


Description		2.6 m, 8' 6"	3.2 m, 10' 6"	3.9 m, 12' 10"
Length	mm, ft-in	4,360, 14' 4"	4,360, 14' 4"	5,080, 16' 8"
Height	mm, ft-in	1,145, 3' 9"	1,145, 3' 9"	1,140, 3' 9"
Width	mm, ft-in	560, 1' 10"	560, 1' 10"	560, 1' 10"
Weight	kg, lb	2,030, 4,480	2,053, 4,530	2,155, 4,750

\* Includes bucket cylinder, linkage and pin



## Working ranges & digging force



Machine with pin-on bucket			6.2 m, 20' 4" ME boom	6.45 m, 21' 2" boom		
			2.6 m, 8' 6" ME arm	2.6 m, 8' 6" arm	3.2 m, 10' 6" STD. arm	3.9 m, 12' 10" arm
A. Max. digging reach	mm, ft-in		10,420, 34' 2"	10,480, 34' 5"	11,000, 36' 1"	11,640, 38' 2"
B. Max. digging reach on ground	mm, ft-in		10,190, 33' 5"	10,260, 33' 8"	10,790, 35' 5"	11,440, 37' 6"
C. Max. digging depth	mm, ft-in		6,720, 22' 1"	6,890, 22' 7"	7,490, 24' 7"	8,200, 26' 11"
D. Max. digging depth (8' level)	mm, ft-in		6,540, 21' 5"	6,690, 21' 11"	7,320, 24' 0"	8,050, 26' 5"
E. Max. vertical wall digging depth	mm, ft-in		4,800, 15' 9"	5,110, 16' 9"	5,510, 18' 1"	6,140, 20' 2"
F. Max. cutting height	mm, ft-in		10,070, 33' 0"	10,160, 33' 4"	10,320, 33' 10"	10,600, 34' 9"
G. Max. dumping height	mm, ft-in		6,830, 22' 5"	7,050, 23' 2"	7,240, 23' 9"	7,520, 24' 8"
H. Min. front swing radius	mm, ft-in		4,120, 13' 6"	4,330, 14' 2"	4,280, 14' 1"	4,260, 14' 0"













Digging forces with pin-on bucket			6.2 m, 20' 4" ME boom	6.45 m, 21' 2" boom		
			2.6 m, 8' 6" ME arm	2.6 m, 8' 6" arm	3.2 m, 10' 6" STD. arm	3.9 m, 12' 10" arm
Bucket radius		mm, in	1,810, 71"	1,623, 64"	1,623, 64"	1,623, 64"
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN lb	208/228 46,970/51,380	192/209 43,220/47,190	192/209 43,220/47,190	192/209 43,220/47,190
	ISO 6015	kN lb	236/258 53,050/57,990	215/236 48,330/53,050	215/236 48,330/53,050	215/236 48,330/53,050
Tearout force - arm (Normal/Power boost)	SAE J1179	kN lb	182/200 41,010/44,980	190/207 42,780/46,750	157/172 35,500/38,810	137/150 30,870/33,740
	ISO 6015	kN lb	188/206 42,260/46,300	195/213 43,830/47,880	161/176 36,190/39,560	140/153 31,470/34,390
Rotation angle, bucket		deg.	164	177	177	177

## Lifting capacity

At the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick fit from the following values.

### • EC330CL

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	4.5 m, 15'				6.0 m, 20'				7.5 m, 25'				9.0 m, 30'				Max. reach				
																						Max. m/ft
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb			
Boom 6.45 m, 21' 2" + Arm 2.6 m, 8' 6" + Shoe 800 mm, 32" + Counterweight 6,700 kg, 14,770 lb	9 m 30'																					
	7.5 m 25'					*9.9	*22,030	*9.9	*22,030									*10.1	*22,400	8.3	18,830	7.0/22.7
	6.0 m 20'					*10.7	*23,330	10.6	22,870	*10.0	*22,180	7.4	15,940					*10.9	*22,240	6.7	14,960	7.9/25.9
	4.5 m 15'	*15.6	*33,550	*15.6	*33,550	*12.2	*26,510	10.1	21,870	*10.6	*23,290	7.2	15,570					8.9	19,880	5.8	13,030	8.5/27.9
	3.0 m 10'					*14.0	*30,390	9.6	20,730	10.7	23,180	6.9	15,030					8.3	18,540	5.4	12,070	8.8/28.9
	1.5 m 5'					14.7	31,700	9.1	19,800	10.5	22,630	6.7	14,530					8.2	18,190	5.3	11,780	8.8/29
	0 m 0'	*21.2	*48,090	13.5	29130	14.4	31,110	8.9	19,290	10.3	22,280	6.5	14,220					8.5	18,780	5.4	12,100	8.5/28.2
	-1.5 m -5'	*21.3	*46,400	13.5	29,210	14.4	30,980	8.8	19,170	10.3	22,240	6.5	14,180					9.3	20,610	5.9	13,220	8.0/26.4
	-3.0 m -10'	*19.4	*42,190	13.7	29,680	14.5	31,300	9.0	19,450									11.1	24,740	7.0	15,760	7.1/23.5
	-4.5 m -15'	*15.7	*33,570	14.2	30,690													*11.8	*26,000	9.8	22,240	5.8/18.8
-6 m -20'																						
Boom 6.45 m, 21' 2" + Arm 3.2 m, 10' 6" + Shoe 800 mm, 32" + Counterweight 6,700 kg, 14,770 lb	9 m 30'																					
	7.5 m 25'									*8.4	*18,607	7.6	16,843					*7.3	*16,330	7.3	*16,330	7.6/24.9
	6.0 m 20'									*9.2	*20,360	7.5	16,300					*7.1	*15,840	6.0	13,550	8.5/27.8
	4.5 m 15'	*14.0	*30,070	*14.0	*30,770	*11.3	*24,570	10.3	22,350	*10.0	*21,860	7.3	15,850	*7.9	*17,438	5.4	12,081	*7.2	*15,950	5.4	11,970	9.0/29.7
	3.0 m 10'	*18.0	*38,760	14.8	32,140	*13.2	*28,730	10.4	22,390	10.8	23,430	7.0	15,250	8.2	17,640	5.3	11,530	*7.5	*16,620	5.5	11,160	9.3/30.6
	1.5 m 5'	*21.0	*45,360	13.9	30,150	14.8	32,040	9.3	20,100	10.5	22,800	6.8	14,680	8.0	17,360	5.2	11,260	7.6	16,770	4.9	10,880	9.3/30.7
	0 m 0'	*22.1	*47,990	13.6	29,290	14.5	31,270	9.0	19,420	10.3	22,350	6.6	14,270	7.9	17,548	5.2	11,260	7.8	17,210	5.0	11,120	9.1/29.9
	-1.5 m -5'	*21.9	*47,570	13.5	29,130	14.4	30,970	8.8	19,160	10.2	22,160	6.5	14,100					8.4	18,620	5.4	11,980	8.6/28.3
	-3.0 m -10'	*20.5	*44,530	13.6	29,420	14.4	31,100	8.9	19,270	10.3	22,340	6.6	14,270					9.7	21,680	6.2	13,880	7.8/25.6
	-4.5 m -15'	*17.6	*37,930	14.0	30,180	*13.2	*28,180	9.1	19,860									*11.6	*25,590	8.1	18,250	6.5/21.3
-6 m -20'																						
Boom 6.45 m, 21' 2" + Arm 3.9 m, 12' 10" + Shoe 800 mm, 32" + Counterweight 6,700 kg, 14,770 lb	9 m 30'																	*6.1	*13,770	*6.1	*13,770	7.2/23.3
	7.5 m 25'									*7.9	*17,620	7.8	16,810					*5.7	*12,760	*5.7	*12,760	8.4/27.4
	6.0 m 20'									*8.3	*18,220	7.7	16,590	*6.8	*13,050	5.6	12,100	*5.6	*12,420	5.3	11,990	9.2/30.2
	4.5 m 15'					*10.1	*21,980	*10.1	*21,980	*9.1	*19,980	7.4	16,070	8.4	18,090	5.5	11,930	*5.6	*12,510	4.8	10,720	9.7/31.9
	3.0 m 10'	*16.0	*34,550	15.3	33,170	*12.1	*26,380	9.9	21,540	*10.2	*22,360	7.1	15,410	8.2	17,740	5.3	11,600	*5.8	*12,510	4.8	10,720	9.7/31.9
	1.5 m 5'	*19.6	*42,400	14.2	30,780	*14.1	*30,640	9.4	20,350	10.6	22,900	6.8	14,760	8.0	17,360	5.2	11,250	*6.2	*13,850	4.4	9,790	9.9/32.8
	0 m 0'	*21.6	*46,800	13.6	29,450	14.5	31,370	9.0	19,490	10.3	22,330	6.6	14,240	7.9	17,060	5.0	10,970	*6.9	*15,300	4.5	9,950	9.7/32.1
	-1.5 m -5'	*22.1	*47,900	13.4	28,960	14.3	30,860	8.8	19,040	10.2	22,010	6.4	13,950	7.8	16,930	5.0	10,860	7.4	16,500	4.7	10,590	9.3/30.6
	-3.0 m -10'	*21.3	*46,270	13.4	29,020	14.3	30,790	8.8	18,980	10.2	21,990	6.4	13,930					8.4	18,700	5.4	11,970	8.5/28.1
	-4.5 m -15'	*19.2	*41,540	13.7	29,550	14.4	31,170	8.9	19,310									10.4	23,380	6.6	14,880	7.4/24.3
-6 m -20'	*14.8	*31,400	14.2	30,710													*11.1	*24,470	9.9	22,740	5.7/18.4	
ME boom 6.2 m, 20' 4" + ME arm 2.6 m, 8' 6" + Shoe 800 mm, 32" + Counterweight 6,700 kg, 14,770 lb	9 m 30'																					
	7.5 m 25'					*10.3	*22,980	*10.3	*22,980									*10.5	*23,350	8.9	20,320	6.6/21.6
	6.0 m 20'					*10.9	*23,780	10.6	22,940	*10.4	*23,050	7.3	15,850					*10.4	*23,000	7.0	15,830	7.6/25.0
	4.5 m 15'	*15.3	*33,060	*15.3	*33,060	*12.3	*26,670	10.2	22,000	*10.8	*23,750	7.2	15,570					9.4	20,890	6.1	13,660	8.2/27.1
	3.0 m 10'	*19.2	*41,270	14.6	31,560	*14.0	*30,410	9.6	20,860	10.8	23,250	6.9	15,050					8.7	19,390	5.7	12,600	8.5/28.1
	1.5 m 5'	*21.6	*42,760	13.8	29,830	14.8	31,880	9.2	19,910	10.5	22,700	6.7	14,560					8.6	19,010	5.5	12,270	8.5/28.2
	0 m 0'	*22.1	*48,080	13.5	29,220	14.5	31,240	8.9	19,350	10.3	22,360	6.6	14,250					8.9	19,670	5.7	12,640	8.3/27.3
	-1.5 m -5'	*21.3	*46,410	13.6	29,260	14.4	31,100	8.9	19,230	10.3	22,360	6.5	14,250					9.8	21,740	6.2	13,890	7.7/25.5
	-3.0 m -10'	*19.2	*41,750	13.8	29,750	14.6	31,470	9.0	19,550									11.9	26,550	7.5	16,810	6.8/22.4
	-4.5 m -15'	*14.8	*31,600	14.3	30,910													*11.9	*26,180	10.9	24,820	5.4/17.5
-6 m -20'																						












- Notes:
- Machine in "Fine Mode-F" (Power Boost) for lifting capacities.
  - The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
  - Rated loads 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.

## Lifting capacity

At the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick fit from the following values.

### • EC330CL

<div> Across undercarriage</div> <div> Along undercarriage</div>	Lifting hook related to ground level	4.5 m, 15'				6.0 m, 20'				7.5 m, 25'				9.0 m, 30'				Max. reach				
																				Max. m/ft		
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb					
Boom 6.2 m, 20' 4" + Arm 2.6 m, 8' 6" + Shoe 800 mm, 32" + Counterweight 7,250 kg, 15,990 lb	9 m 30'																					
	7.5 m 25'					*10.3	*22,980	*10.3	*22,980							10.5	23,350	9.3	21,110	6.7/21.64		
	6.0 m 20'					*10.9	*23,780	*10.9	*23,780	*10.4	*23,050	7.6	16,510			10.4	23,000	7.3	16,490	7.68/25.02		
	4.5 m 15'	*15.3	*33,060	*15.3	*33,060	*12.3	*26,670	10.6	22,880	*10.8	*23,750	7.5	16,230			9.7	21,640	6.4	14,260	8.27/27.06		
	3.0 m 10'	*19.2	*41,270	15.2	32,860	*14.0	*30,410	10.0	21,740	11.1	24,080	7.2	15,710			9.1	20,100	5.9	13,170	8.56/28.08		
	1.5 m 5'	*21.6	*46,760	14.4	31,120	15.3	33,010	9.6	20,780	10.9	23,530	7.0	15,220			8.9	19,720	5.8	12,850	8.58/28.17		
	0 m 0'	*22.1	*48,080	14.1	30,520	15.0	32,380	9.3	20,230	10.7	23,190	6.9	14,910			9.2	20,410	6.0	13,230	8.33/27.34		
	-1.5 m -5'	*21.3	*46,410	14.2	30,550	14.9	32,240	9.3	20,100	10.7	23,190	6.9	14,910			10.2	22,540	6.5	14,530	7.79/25.52		
	-3.0 m -10'	*19.2	*41,750	14.4	31,040	14.6	*31,470	9.4	20,430							12.1	26,840	7.9	17,570	6.88/22.44		
	-4.5 m -15'	*14.8	*31,600	14.8	*31,600											11.9	26,180		25,870	5.41/17.46		
-6 m -20'																						
Boom 6.45 m, 21' 2" + Arm 2.6 m, 8' 6" + Shoe 800 mm, 32" + Counterweight 7,250 kg, 15,990 lb	9 m 30'																					
	7.5 m 25'						*22,030		*22,030							10.1	22,400	8.6	19,580	7.01/22.69		
	6.0 m 20'					*10.7	*23,330	*10.7	*23,330	*10.0	*22,180	7.7	16,600			10.0	22,240	6.9	15,590	7.95/25.93		
	4.5 m 15'	*15.6	*33,550	*15.6	*33,550	*12.2	*26,510	10.5	22,750	*10.6	*23,290	7.5	16,230			9.3	20,600	6.1	13,610	8.53/27.91		
	3.0 m 10'					*14.0	*30,390	10.0	21,600	11.1	24,010	7.2	15,680			8.7	19,220	5.7	12,620	8.81/28.89		
	1.5 m 5'					15.2	32,840	9.5	20,670	10.8	23,460	7.0	15,190			8.5	18,870	5.5	12,330	8.83/28.98		
	0 m 0'	*21.2	*48,090	14.1	30,420	14.9	32,250	9.3	20,160	10.7	23,110	6.8	14,880			8.8	19,490	5.7	12,670	8.59/28.18		
	-1.5 m -5'	*21.3	*46,400	14.1	30,510	14.9	32,120	9.2	20,050	10.7	23,060	6.8	14,830			9.6	21,380	6.2	13,840	8.06/26.41		
	-3.0 m -10'	*19.4	*42,190	14.3	30,970	*14.9	*32,170	9.4	20,330							11.5	25,650	7.4	16,470	7.19/23.46		
	-4.5 m -15'	*15.7	*33,570	14.8	31,980											11.8	26,000	10.2	23,190	5.80/18.75		
-6 m -20'																						
Boom 6.45 m, 21' 2" + Arm 3.2 m, 10' 6" + Shoe 800 mm, 32" + Counterweight 7,250 kg, 15,990 lb	9 m 30'																					
	7.5 m 25'									*8.4		7.9										
	6.0 m 20'									*9.2	*20,360	7.8	16,960					*7.3	16,330	7.3	16,330	7.66/24.86
	4.5 m 15'	*14.0	*30,070	*14.0	*30,070	*11.3	*24,570	10.7	23,220	*10.0	*21,860	7.6	16,510	*7.9		5.7		*7.1	15,840	6.3	14,130	8.53/27.84
	3.0 m 10'	*18.0	*38,760	15.4	33,430	*13.2	*28,730	10.2	22,020	*11.0	*24,000	7.3	15,910	8.5	18,300	5.6	12,060	*7.2	15,950	5.6	12,510	9.07/29.69
	1.5 m 5'	*21.0	*45,360	14.5	31,450	*15.0	*32,470	9.7	20,970	10.9	23,630	7.1	15,340	8.3	18,010	5.4	11,790	*7.5	16,620	5.2	11,670	9.34/30.61
	0 m 0'	*22.1	*47,990	14.2	30,580	15.0	32,410	9.4	20,300	10.7	23,170	6.9	14,930	8.2		5.3		8.1	17,870	5.2	11,650	9.13/29.94
	-1.5 m -5'	*21.9	*47,570	14.1	30,430	14.9	32,110	9.2	20,030	10.6	22,990	6.8	14,760					8.7	19,320	5.6	12,550	8.63/28.29
	-3.0 m -10'	*20.5	*44,530	14.2	30,720	14.9	32,230	9.3	20,140	10.7	23,170	6.9	14,930					10.1	22,480	6.5	14,520	7.82/25.56
	-4.5 m -15'	*17.6	*33,930	14.6	31,480	13.2	28,180	9.5	20,730							11.6	25,590	8.4	19,050	6.58/21.33		
-6 m -20'																						
ME boom 6.45 m, 21' 2" + ME arm 3.9 m, 12' 10" + Shoe 800 mm, 32" + Counterweight 7,250 kg, 15,990 lb	9 m 30'															*6.1	13,770	*6.1	13,770	7.25/23.32		
	7.5 m 25'									*7.9	*17,620	*7.9	17,470					*5.7	12,760	*5.7	12,760	8.44/27.42
	6.0 m 20'									*8.3	*18,220	8.0	17,250	*6.8	*13,050	5.8	12,630	*5.6	12,420	5.6	12,420	9.23/30.15
	4.5 m 15'					*10.1	*21,980	*10.1	*21,980	*9.1	*19,980	7.7	16,730	*8.6	18,740	5.7	12,450	*5.6	12,510	5.0	11,220	9.73/31.86
	3.0 m 10'	*16.0	*34,550	15.9	34,460	*12.1	*26,380	10.3	22,410	*10.2	*22,360	7.4	16,070	8.5	18,390	5.6	12,130	*5.8	12,970	4.7	10,520	9.98/32.73
	1.5 m 5'	*19.6	*42,400	14.8	32,080	*14.1	*30,640	9.8	21,220	11.0	23,730	7.1	15,420	8.3	18,010	5.4	11,780	6.2	13,850	4.6	10,270	10.0/32.8
	0 m 0'	*21.6	*46,800	14.2	30,740	15.1	32,510	9.4	20,360	10.7	23,160	6.9	14,900	8.2	17,710	5.3	11,500	6.9	15,300	4.7	10,440	9.78/32.1
	-1.5 m -5'	*22.1	*47,900	14.0	30,250	14.8	32,000	9.2	19,920	10.6	22,840	6.7	14,610	8.1	17,580	5.2	11,390	7.7	17,140	5.0	11,110	9.33/30.56
	-3.0 m -10'	*21.3	*46,270	14.0	30,320	14.8	31,930	9.2	19,850	10.5	22,820	6.7	14,590					8.7	19,410	5.6	12,550	8.58/28.06
	-4.5 m -15'	*19.2	*41,540	14.3	30,840	14.5	31,180	9.3	20,190							10.8	24,090	6.9	15,570	7.46/24.27		
-6 m -20'	*14.8	*31,400	14.8	31,400											11.1	24,470	10.3	23,710	5.76/18.43			

- Notes:
- Machine in "Fine Mode-F" (Power Boost) for lifting capacities.
  - The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
  - Rated loads 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.

## STANDARD EQUIPMENT

### Engine

Turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler that meets EPA (Environmental Protection Agency) Tier 3 emission standards  
Air filter with indicator  
Intake air pre-heater  
Electric engine shut-off  
Fuel filter and water separator  
Alternator, 80 A

### Electric/Electronic control system

Contronics  
– Advanced mode control system  
– Self-diagnostic system  
Machine status indication  
Engine speed sensing power control  
Automatic idling system  
One-touch power boost  
Safety stop/start function  
Adjustable LCD color monitor  
Master electrical disconnect switch  
Engine restart prevention circuit  
High-capacity halogen lights:  
– Frame-mounted 2  
– Boom-mounted 4  
Travel alarm  
Batteries, 2 x 12 V / 200 Ah  
Start motor, 24 V / 7 kW

### Hydraulic system

Automatic sensing hydraulic system  
– Summation system  
– Boom priority  
– Arm priority  
– Swing priority  
Hydraulic piping:  
– Hammer & shear: 2-pump flow

– Oil leak (drain) line  
– Quick fit piping  
Cab adjustment of auxiliary hydraulic pressure and flow  
Boom and arm regeneration valves  
Swing anti-rebound valves  
Boom and arm holding valves  
Multi-stage filtering system  
Boom cylinders (x2)  
Cylinder cushioning  
Cylinder contamination seals  
Auxiliary hydraulic valve  
Automatic two-speed travel motors  
Hydraulic oil, ISO VG 46

### Superstructure

Access way with handrail  
Full height counterweight:  
7,250 kg, **15,990 lb**  
Tool storage area  
Service walkway with anti-slip grating  
Undercover (heavy-duty 4.5 mm, **0.18"**)

### Cab and interior

Fabric seat with heater  
2-button control for hammer/shear auxiliary hydraulics  
Control joysticks with 4 switches each  
Travel pedals with hand levers  
Pilot control pattern change  
Heater & air-conditioner, automatic  
Hydraulic dampening cab mounts  
Adjustable operator seat and joystick control console  
Hydraulic safety lock lever  
Cab, all-weather sound suppression, includes:  
– Ashtray  
– Cup holder (x3)

– Lighter  
– Door locks  
– Tinted glass  
– Floor mat  
– Horn  
– Large storage area  
– Pull-up type front window  
– Removable lower windshield  
– Seat belt, 3-inch retractable  
– Safety glass, light tinted  
– Sun shields, front, roof, rear  
– Windshield wiper with washer and intermittent feature  
– AM/FM stereo with CD player and MP3 input; includes antenna in glass  
Anti-vandalism kit assembly preparation  
Master key  
Opening top hatch  
Straight travel pedal

### Undercarriage

Hydraulic track adjusters  
Greased and sealed track link  
Track guard  
Undercover (4.5 mm, **0.18"**)  
Standard roller guard

### Track equipment

Track pads 800 mm, **32"** with triple grousers

### Digging equipment

Boom: 6.45 m, **21' 2"** general purpose  
Arm: 3.2 m, **10' 6"** heavy-duty without wear strips  
Centralized lubrication points

### Service

Tool kit, daily maintenance  
CareTrack

## OPTIONAL EQUIPMENT

### Engine

Block heater: 120 V  
Oil-bath pre-cleaner  
Diesel coolant heater, programmable  
Water separator with heater  
Fuel filler pump: 50 l/min, **13.2 gpm**  
with automatic shut-off

### Electric

Extra lights:  
– Cab front top-mounted 2  
– Cab rear-mounted 1  
– Counterweight-mounted 1  
Anti-theft system  
Rotating warning beacon

### Hydraulic system

Hose rupture valve: boom, arm  
Overload warning device  
Hydraulic piping:  
– Additional return filter  
– Slope & rotator

– Grapple  
Volvo hydraulic quick fit, S3 size  
Hydraulic oil, ISO VG 32  
Hydraulic oil, ISO VG 68  
Hydraulic oil, biodegradable 32  
Hydraulic oil, biodegradable 46  
Boom float function

### Superstructure

Full height counterweight:  
6,700 kg, **14,770 lb**

### Cab and interior

Fabric seat  
Fabric seat with heater and air suspension  
Control joystick with semi-long levers  
Control joystick with proportional control  
Falling object guard (FOG)  
– Frame-mounted  
– Cab-mounted  
Cab-mounted falling object protective structure (FOPS)

Protective screen for front window  
Rain shield  
Lower wiper with intermittent control  
Anti-vandalism kit  
Rear view camera

### Undercarriage

Full track guard  
Undercover (heavy-duty 10 mm, **0.39"**)

### Track equipment

600 mm, **24"/700 mm, 28"/900 mm, 36"**  
track pads with triple grousers  
600 mm, **24"** track pads with double grouser

### Digging equipment

Boom: 6.2 m, **20' 4"** mass excavation  
Arm: 2.6 m, **8' 6"**  
3.9 m, **12' 10"** with or without wear strips

### Service

Tool kit

Standard and optional equipment may vary by market. Please consult your local Volvo dealer for details.



## NOTES

## NOTES

## NOTES



Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 175 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different – **More care. Built in.**



*Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.*

# **VOLVO**

## **Volvo Construction Equipment**

**Volvo Construction Equipment North America, Inc.**

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