

Volvo ECR145E, ECR235E in detail

Engine			
The latest generation, Volvo engine Tier 4f emissions compliant diesel engine fully meets the demands of the latest, emissions regulations. Featuring Volvo Advanced Combustion Technology (V-ACT), it is designed to deliver superior performance and fuel efficiency. The engine uses precise, high pressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance. Air Filter: 3-stage with precleaner Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.			

ECR145E			
Engine	Volvo	D4J	
Max power at	r/s / r/min	33 / 2,000	
Net, ISO 9249/SAE J1349	kW hp	89	119
Gross, ISO 14396/SAE J1995	kW hp	90	121
Max torque	Nm lbf ft	566	417
at engine speed	r/s / r/min	1,500	
No. of cylinders		4	
Displacement	l in ³	4.0	244
Bore	mm in	101	3.98
Stroke	mm in	126	4.96

ECR235E			
Engine	Volvo	D6J	
Max power at	r/s / r/min	30 / 1,800	
Net, ISO 9249/SAE J1349	kW hp	128	172
Gross, ISO 14396/SAE J1995	kW hp	129	173
Max torque	Nm lbf ft	850	627
at engine speed	r/s / r/min	1,350	
No. of cylinders		6	
Displacement	l in ³	5.7	348
Bore	mm in	98	3.86
Stroke	mm in	126	4.96

Electrical system	ECR145E	ECR235E
Well protected high-capacity electrical system. 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. Contronics provides advanced monitoring of machine functions and important diagnostic information.		
Voltage	V	24 24
Batteries	V / Ah	2 x 12 / 100 2 x 12 / 150
Alternator	V / Ah	28 / 110 28 / 110
Start motor	V / kW	24 x 5.5 24 x 5.5

Swing system	ECR145E	ECR235E
The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and antirebound valve are standard		
Max. slew speed	r/min	12.7 12
Max. slew torque	kNm lbf ft	41.9 30,910 83.0 61,220

Drive	ECR145E	ECR235E
Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released. The travel motor, brake and planetary gears are well protected within the track frame.		
Max. drawbar pull	kN lbf	119 26,760 208.9 46,970
Max. travel speed	km/h mph	3.0/5.5 1.9/3.4 3.0/5.5 1.9/3.4
Gradeability	°	35 35

Undercarriage	ECR145E	ECR235E
Robust X-shaped frame with greased and sealed track chains as standard.		
Track shoe	2 x 46 2 x 49	
Link pitch	mm in	171 6.8 190 7.5
Shoe width, triple grouser	mm in	500/ 600/ 750 20/ 24/ 30 600/ 700/ 800/ 900 24/ 28/ 32/ 36
Shoe width, triple grouser, HD	mm in	600/ 700 24/ 28 600 24
Shoe width, double grouser	mm in	- - 700 28
Shoe width, rubber grouser	mm in	500 20 600 24
Bottom rollers	2 x 7 2 x 8	
Top rollers	2 x 1 2 x 2	

Hydraulic system	ECR145E	ECR235E
The hydraulics system, combined with the fully electronic control system and advanced ECO mode, has been optimized to work in harmony with engine to match the engine power, reduce power loss and improve controllability and response time. 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. 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	l/min	gpm	2 x 124	2 X 33	2 x 207	2 x 55
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Pilot pump, Type Gear pump

Maximum flow	l/min	gpm	1 x 20	1 x 5	1 x 18	1 x 5
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Relief valve setting:

Implement	MPa	psi	32.4/ 34.3	4,690/ 4,980	34.3/ 36.3	4,980/ 5,260
Travel circuit	MPa	psi	34.3	4,980	34.3	4,980
Slew circuit	MPa	psi	26.5	3,840	27.9	4,050
Pilot circuit	MPa	psi	3.9	570	3.9	570

Hydraulic motors

Travel: Variable displacement axial piston motor with mechanical brake

Slew: Fixed displacement axial piston motor with mechanical brake

Hydraulic cylinders			ECR145E		ECR235E	
Mono boom			2		2	
Bore x Stroke	ø x mm	ø x in	105 x 1 055	4.1 x 41.5	130 x 1 420	5.1 x 55.9
1st boom of 2 piece boom			2		2	
Bore x Stroke	ø x mm	ø x in	110 x 980	4.3 x 38.6	130 x 1 345	5.1 x 53.0
2nd boom of 2 piece boom			1		1	
Bore x Stroke	ø x mm	ø x in	160 x 765	6.3 x 30.1	160 x 1 070	6.3 x 42.1
Arm			1		1	
Bore x Stroke	ø x mm	ø x in	120 x 1 028	4.7 x 40.5	135 x 1 520	5.3 x 59.8
Bucket			1		1	
Bore x Stroke	ø x mm	ø x in	100 x 865	3.9 x 34.1	120 x 1 065	4.7 x 41.9
Dozer blade			2		2	
Bore x Stroke	ø x mm	ø x in	130 x 270	5.1 x 10.6	140 x 320	5.5 x 12.6

Service refill capacities	ECR145E	ECR235E
Fuel tank	l gal	200 53 286 76
Hydraulic system, total	l gal	200 53 280 74
Hydraulic tank	l gal	59 16 126 33
AdBlue tank	l gal	15.5 4 24.9 7
Engine oil	l gal	15.5 4 25 7
Engine coolant	l gal	26 7 30 8
Swing reduction unit	l gal	3.9 1 7 2
Travel reduction unit	l gal	2 x 2.2 2 x 1 2 x 5 2 x 1

Cab

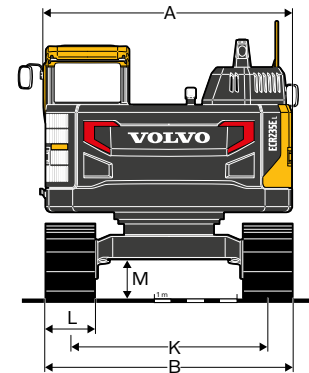
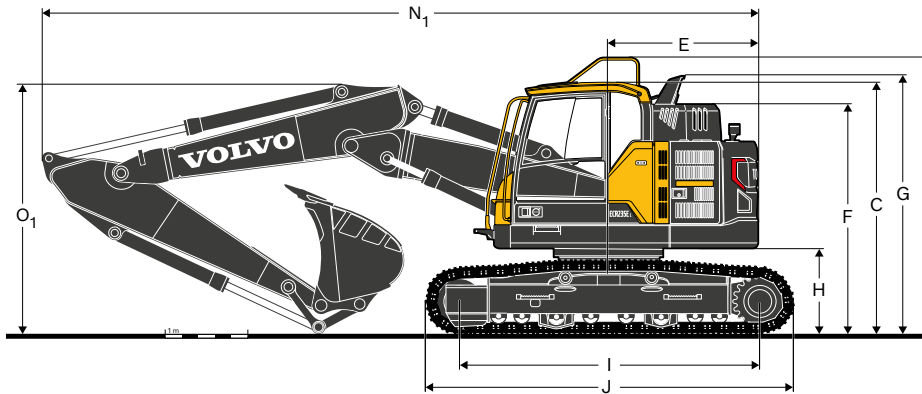
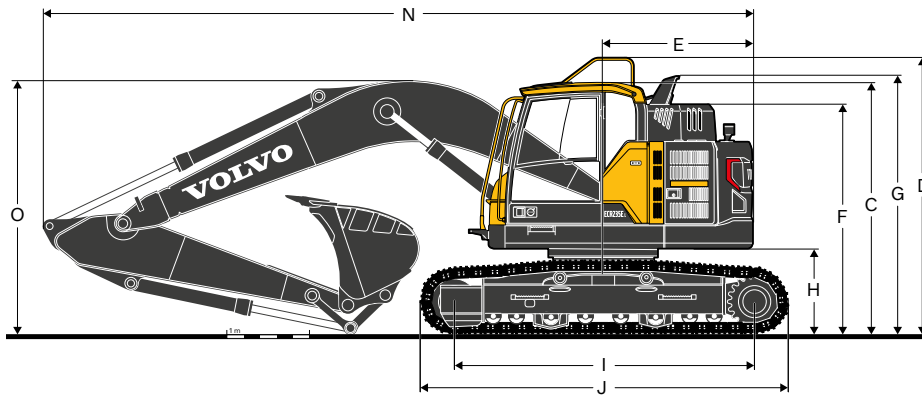
The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the side door.

Integrated air-conditioning and heating system: The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents.

Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety.

Sound Level	ECR145E	ECR235E
Sound pressure level in cab according to ISO 6396		
L _{pA} (standard)	dB	71 71
L _{pA} (tropical)	dB	72 72
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
L _{WA} (standard)	dB	97 101
L _{WA} (tropical)	dB	98 102

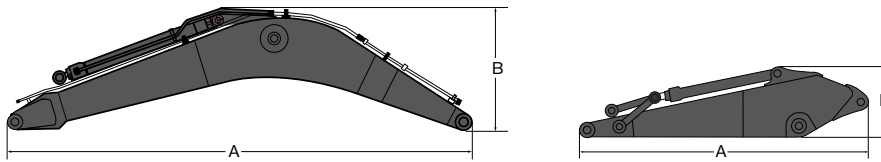
Specifications



Description	Unit	ECR145EL						ECR235EL			
Boom	m, ft in	4.6, 15'1" mono and 4.72, 15'6" 2-piece						5.7, 18'8" mono and 5.76, 18'11" 2-piece			
Arm	m ft in	2.1	6'11"	2.5	8'2"	3.0	9'10"	2.5	8'2"	2.9	9'6"
A Overall width of upper structure	mm ft in	2 490	8'2"	2 490	8'2"	2 490	8'2"	2 990	9'10"	2 990	9'10"
B Overall width	mm ft in	2 690	8'10"	2 690	8'10"	2 690	8'10"	3 090	10'2"	3 090	10'2"
C Overall height of cab	mm ft in	2 895	9'6"	2 895	9'6"	2 895	9'6"	2 965	9'9"	2 965	9'9"
D Overall height of guardrail(unfolded)	mm ft in	3 075	10'1"	3 075	10'1"	3 075	10'1"	3 365	11'0"	3 365	11'0"
D' Overall height of guardrail(folded)	mm ft in	-	-	-	-	-	-	2 925	9'7"	2 925	9'7"
E Tail swing radius	mm ft in	1 494	4'11"	1 494	4'11"	1 494	4'11"	1 810	5'11"	1 810	5'11"
F Overall height of engine hood	mm ft in	2 545	8'4"	2 545	8'4"	2 545	8'4"	2 780	9'1"	2 780	9'1"
G Overall height of diffuser	mm ft in	2 775	9'1"	2 775	9'1"	2 775	9'1"	3 035	9'11"	3 035	9'11"
H Counterweight clearance *	mm ft in	900	2'11"	900	2'11"	900	2'11"	1 025	3'4"	1 025	3'4"
I Tumbler length	mm ft in	3 040	10'0"	3 040	10'0"	3 040	10'0"	3 660	12'0"	3 660	12'0"
J Track length	mm ft in	3 750	12'4"	3 750	12'4"	3 750	12'4"	4 460	14'8"	4 460	14'8"
K Track gauge	mm ft in	1 990	6'6"	1 990	6'6"	1 990	6'6"	2 390	7'10"	2 390	7'10"
L Shoe width	mm ft in	700	2'4"	700	2'4"	700	2'4"	700	2'4"	700	2'4"
M Min. ground clearance *	mm ft in	430	1'5"	430	1'5"	430	1'5"	460	1'6"	460	1'6"
N Overall length	mm ft in	7 400	24'3"	7 405	24'4"	7 345	24'1"	9 070	29'9"	9 010	29'7"
N ₁ Overall length	mm ft in	7 505	24'7"	7 470	24'6"	7 370	24'2"	9 090	29'10"	9 065	29'9"
O Overall height of boom	mm ft in	2 760	9'1"	2 900	9'6"	3 250	10'8"	3 330	10'11"	3 190	10'6"
O ₁ Overall height of boom	mm ft in	2 710	8'11"	2 910	9'7"	3 470	11'5"	3 060	10'0"	3 030	9'11"

* Without shoe grouser.

₁ 2-piece boom



ECR145E

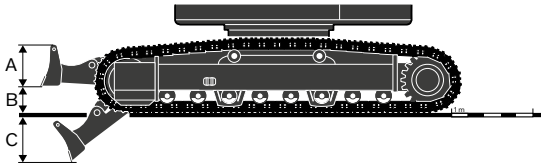
Description	Unit	mono		2-piece		Description	Unit								
Boom	m ft in	4.6	15'1"	4.72	15'6"	Arm	m ft in	2.1	6'11"	2.5	8'2"	3.0	9'10"	3.0	9'10"
A Length	mm ft in	4 770	15'8"	4 885	16'0"	A Length	mm ft in	2 790	9'2"	3 195	10'6"	3 690	12'1"	3 690	12'1"
B Height	mm ft in	1 370	4'6"	1 135	3'9"	B Height	mm ft in	680	2'3"	675	2'3"	750	2'6"	750	2'6"
Width	mm ft in	545	1'9"	545	1'9"	Width	mm ft in	275	0'11"	275	0'11"	275	0'11"	275	0'11"
Weight	kg lb	1 130	2,490	1 450	3,200	Weight	kg lb	560	1,230	624	1,380	684	1,510	684	1,510

ECR235E

Description	Unit	mono		2-piece		Description	Unit								
Boom	m ft in	5.7	18'8"	5.76	18'11"	Arm	m ft in	2.5	8'2"	2.9	9'6"	2.9	9'6"	2.9	9'6"
A Length	mm ft in	5 910	19'5"	5 965	19'7"	A Length	mm ft in	3 525	11'7"	3 910	12'10"	3 910	12'10"	3 910	12'10"
B Height	mm ft in	1 770	5'10"	1 300	4'3"	B Height	mm ft in	860	2'10"	860	2'10"	860	2'10"	860	2'10"
Width	mm ft in	670	2'2"	670	2'2"	Width	mm ft in	440	1'5"	440	1'5"	440	1'5"	440	1'5"
Weight	kg lb	2 000	4,410	2 570	5,670	Weight	kg lb	975	2,150	1 000	2,200	1 000	2,200	1 000	2,200

* Includes cylinder, piping and pin, excludes boom cyl. Pin

* Includes cylinder, linkage and pin

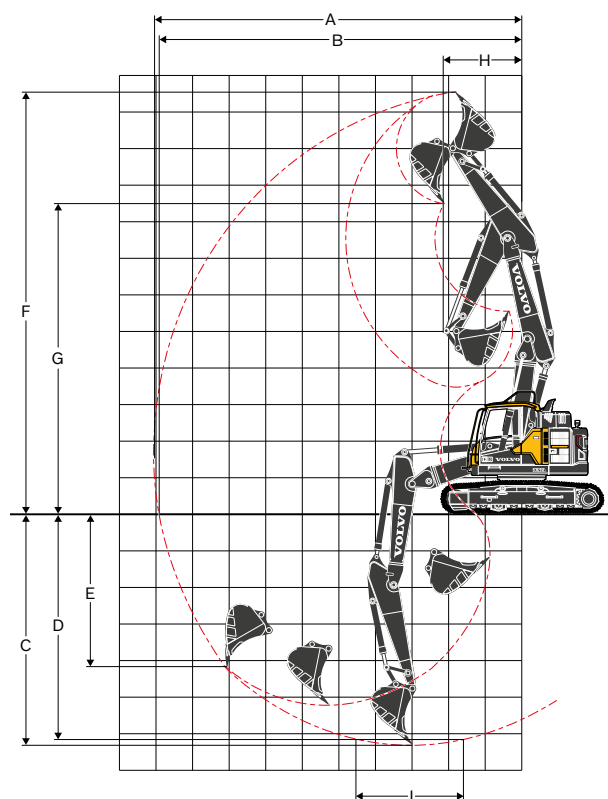
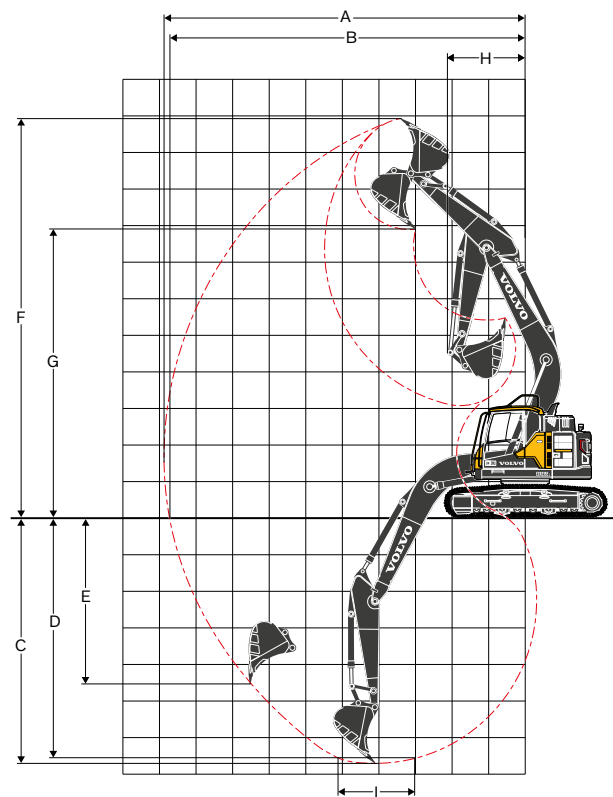


Front dozer blade

Description	Unit		ECR145E		ECR235E	
A Height	mm	ft in	585	1'11"	600	2'0"
Width 500mm / 20" shoe	mm	ft in	2 490	8'2"	-	-
Width 600mm / 24" shoe	mm	ft in	2 590	8'6"	2 990	9'10"
Width 700mm / 28" shoe	mm	ft in	2 690	8'10"	3 090	10'2"
Width 800mm / 32" shoe	mm	ft in	-	-	3 190	10'6"
Weight	kg	lb	460	1,010	790	1,740
B Lift height	mm	ft in	478	1'7"	610	2'0"
C Digging depth	mm	ft in	601	2'0"	480	1'7"

Specifications

WORKING RANGES



WORKING RANGES

Description		Unit	ECR145E											
Boom		m, ft in	4.6 / 15'1" mono						4.72 / 15'6" 2-piece					
Arm		m ft in	2.1	6'11"	2.5	8'2"	3.0	9'10"	2.1	6'11"	2.5	8'2"	3.0	9'10"
A	Max. digging reach	mm ft in	7 990	26'3"	8 360	27'5"	8 850	29'0"	8 220	27'0"	8 610	28'3"	9 100	29'10"
B	Max. digging reach on ground	mm ft in	7 840	25'9"	8 215	26'11"	8 720	28'7"	8 070	26'6"	8 465	27'9"	8 970	29'5"
C	Max. digging depth	mm ft in	5 130	16'10"	5 530	18'2"	6 030	19'9"	5 235	17'2"	5 640	18'6"	6 145	20'2"
D	Max. digging depth (l = 2.44m level)	mm ft in	4 880	16'0"	5 310	17'5"	5 850	19'2"	5 115	16'9"	5 525	18'2"	6 040	19'10"
E	Max. vertical wall digging depth	mm ft in	3 954	13'0"	4 325	14'2"	4 855	15'11"	4 155	13'8"	4 523	14'10"	5 015	16'5"
F	Max. cutting height	mm ft in	9 090	29'10"	9 415	30'11"	9 860	32'4"	9 380	30'9"	9 740	31'11"	10 205	33'6"
G	Max. dumping height	mm ft in	6 550	21'6"	6 875	22'7"	7 310	24'0"	6 830	22'5"	7 190	23'7"	7 660	25'2"
H	Min. front swing radius	mm ft in	1 929	6'4"	2 130	7'0"	2 505	8'3"	2 330	7'8"	2 590	8'6"	3 010	9'11"

DIGGING FORCES WITH DIRECT FIT BUCKET

Bucket radius		mm ft in	1274	4'2"	1274	4'2"	1274	4'2"	1274	4'2"	1274	4'2"	1274	4'2"
Breakout force - bucket	Normal	SAE J1179	kN lb	80.5 18,100	80.5 18,100	80.5 18,100	80.5 18,100	80.5 18,100	80.5 18,100	80.5 18,100	80.5 18,100	80.5 18,100	80.5 18,100	80.5 18,100
	Powerboost	SAE J1179	kN lb	85.4 19,200	85.4 19,200	85.4 19,200	85.4 19,200	85.4 19,200	85.4 19,200	85.4 19,200	85.4 19,200	85.4 19,200	85.4 19,200	85.4 19,200
	Normal	ISO 6015	kN lb	91.1 20,480	91.1 20,480	91.1 20,480	91.1 20,480	91.1 20,480	91.1 20,480	91.1 20,480	91.1 20,480	91.1 20,480	91.1 20,480	91.1 20,480
	Powerboost	ISO 6015	kN lb	96.6 21,720	96.6 21,720	96.6 21,720	96.6 21,720	96.6 21,720	96.6 21,720	96.6 21,720	96.6 21,720	96.6 21,720	96.6 21,720	96.6 21,720
Tearout force - dipper arm	Normal	SAE J1179	kN lb	69.5 15,630	62.1 13,950	55.3 12,430	69.5 15,630	62.1 13,950	55.3 12,430	69.5 15,630	62.1 13,950	55.3 12,430	69.5 15,630	62.1 13,950
	Powerboost	SAE J1179	kN lb	73.8 16,580	65.8 14,800	58.6 13,180	73.8 16,580	65.8 14,800	58.6 13,180	73.8 16,580	65.8 14,800	58.6 13,180	73.8 16,580	65.8 14,800
	Normal	ISO 6015	kN lb	71.4 16,060	63.5 14,280	56.3 12,670	71.4 16,060	63.5 14,280	56.3 12,670	71.4 16,060	63.5 14,280	56.3 12,670	71.4 16,060	63.5 14,280
	Powerboost	ISO 6015	kN lb	75.8 17,030	67.3 15,140	59.8 13,430	75.8 17,030	67.3 15,140	59.8 13,430	75.8 17,030	67.3 15,140	59.8 13,430	75.8 17,030	67.3 15,140
Rotation angle, bucket			°	175	175	175	175	175	175	175	175	175	175	175

Description		Unit	ECR235E							
Boom		m, ft in	5.7 / 18'8" mono				5.76 / 18'11" 2-piece			
Arm		m ft in	2.5	8'2"	2.9	9'6"	2.5	8'2"	2.9	9'6"
A	Max. digging reach	mm ft in	9 510	31'2"	9 890	32'5"	9 690	31'9"	10 085	33'1"
B	Max. digging reach on ground	mm ft in	9 340	30'8"	9 735	31'11"	9 660	31'8"	9 930	32'7"
C	Max. digging depth	mm ft in	6 350	20'10"	6 755	22'2"	5 950	19'6"	6 355	20'10"
D	Max. digging depth (l = 2.44m level)	mm ft in	6 120	20'1"	6 550	21'6"	5 840	19'2"	6 250	20'6"
E	Max. vertical wall digging depth	mm ft in	5 220	17'2"	5 685	18'8"	4 910	16'1"	5 325	17'6"
F	Max. cutting height	mm ft in	10 600	34'9"	10 915	35'10"	11 150	36'7"	11 515	37'9"
G	Max. dumping height	mm ft in	7 560	24'10"	7 870	25'10"	8 095	26'7"	8 460	27'9"
H	Min. front swing radius	mm ft in	2 395	7'10"	2 170	7'1"	2 235	7'4"	2 160	7'1"

DIGGING FORCES WITH DIRECT FIT BUCKET

Bucket radius		mm ft in	1 528	5'0"	1 528	5'0"	1 528	5'0"	1 528	5'0"
Breakout force - bucket	Normal	SAE J1179	kN lb	125.0 28,090	125.0 28,100	125.0 28,100	125.0 28,090	125.0 28,100	125.0 28,100	125.0 28,100
	Power boost	SAE J1179	kN lb	132.1 29,700	132.2 29,710	132.1 29,700	132.1 29,700	132.2 29,710	132.2 29,710	132.1 29,700
	Normal	ISO 6015	kN lb	141.3 31,760	141.3 31,770	141.3 31,760	141.3 31,760	141.3 31,770	141.3 31,770	141.3 31,770
	Power boost	ISO 6015	kN lb	149.4 33,580	149.4 33,590	149.4 33,580	149.4 33,580	149.4 33,590	149.4 33,590	149.4 33,590
Tearout force - dipper arm	Normal	SAE J1179	kN lb	117.2 26,350	101.3 22,780	117.2 26,350	101.3 22,780	117.2 26,350	101.3 22,780	117.2 26,350
	Power boost	SAE J1179	kN lb	123.9 27,860	107.1 24,080	123.9 27,860	107.1 24,080	123.9 27,860	107.1 24,080	123.9 27,860
	Normal	ISO 6015	kN lb	120.7 27,130	103.9 23,360	120.7 27,130	103.9 23,360	120.7 27,130	103.9 23,360	120.7 27,130
	Power boost	ISO 6015	kN lb	127.6 28,680	109.9 24,700	127.6 28,680	109.9 24,700	127.6 28,680	109.9 24,700	127.6 28,680
Rotation angle, bucket			°	175	175	175	175	175	175	175

Specifications

MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe width		Operating weight		Ground pressure		Overall width		Operating weight		Ground pressure		Overall width	
	mm	in	kg	lb	kPa	psi	mm	in	kg	lb	kPa	psi	mm	in
	ECR145EL													
	4.6m / 15'1" boom, 2.5m / 8'2" arm, 480kg, 660l / 1,060lb bucket, 3 200kg / 7,060 counterweight													
	4.72m / 15'6" 2-piece boom, 2.5m / 8'2" arm, 480kg, 660l / 1,060lb bucket, 3 200kg / 7,060lb counterweight													
Triple grouser	500	20	14 960	32,980	44.1	6.4	2 490	8'2"	15 350	33,840	46.1	6.7	2 490	8'2"
	600	24	15 150	33,420	37.3	5.4	2 590	8'6"	15 540	34,270	38.2	5.5	2 590	8'6"
	750	30	15 540	34,260	30.4	4.4	2 740	9'0"	15 930	35,120	31.4	4.6	2 740	9'0"
Triple grouser, HD	600	20	15 220	33,570	38.2	5.5	2 590	8'6"	15 610	34,420	38.2	5.5	2 590	8'6"
	700	28	15 430	34,030	32.4	4.7	2 690	8'10"	15 820	34,890	33.3	4.8	2 690	8'10"
Rubber grouser	500	20	14 990	33,060	45.1	6.5	2 490	8'2"	15 380	33,910	46.1	6.7	2 490	8'2"
Add on rubber grouser	500	20	15 410	33,980	46.1	6.7	2 490	8'2"	15 800	34,830	47.1	6.8	2 490	8'2"
	ECR145EL with dozer blade													
	4.6m / 15'1" boom, 2.5m / 8'2" arm, 480kg, 660l / 1,060lb bucket, 3 200kg / 7,060 counterweight													
	4.72m / 15'6" 2-piece boom, 2.5m / 8'2" arm, 480kg, 660l / 1,060lb bucket, 3 200kg / 7,060lb counterweight													
Triple grouser	500	20	15 830	34,900	47.1	6.8	2 490	8'2"	16 220	35,760	48	7.0	2 490	8'2"
	600	24	16 040	35,360	40.2	5.8	2 590	8'6"	16 420	36,220	41.2	6	2 590	8'6"
	750	30	16 420	36,210	32.4	4.7	2 740	9'0"	16 810	37,070	33.3	4.8	2 740	9'0"
Triple grouser, HD	600	20	16 100	35,510	40.2	5.8	2 590	8'6"	16 490	36,370	41.2	6.0	2 590	8'6"
	700	28	16 320	35,980	34.3	5.0	2 690	8'10"	16 710	36,840	35.3	5.1	2 690	8'10"
Rubber grouser	500	20	15 860	34,980	47.1	6.8	2 490	8'2"	16 250	35,840	48	7.0	2 490	8'2"
Add on rubber grouser	500	20	16 280	35,900	48	7.0	2 490	8'2"	16 670	36,760	49	7.1	2 490	8'2"
	ECR235EL													
	5.7m / 18'8" boom, 2.9m / 9'6" arm, 950kg, 1 090l / 2,090lb bucket, 6 200kg / 13,670lb counterweight													
	5.76m / 18'11" 2-piece boom, 2.9m / 9'6" arm, 950kg, 1 090l / 2,090lb bucket, 6 200kg / 13,670lb counterweight													
Triple grouser	600	24	24 615	54,280	51	7.4	2 990	9'10"	25 180	55,520	52	7.5	2 990	9'10"
	700	28	25 080	55,300	44.1	6.4	3 090	10'2"	25 650	56,550	45.1	6.5	3 090	10'2"
	800	32	25 360	55,910	39.2	5.7	3 190	10'6"	25 920	57,160	40.2	5.8	3 190	10'6"
	900	36	25 650	56,560	35.3	5.1	3 290	10'10"	26 220	57,810	36.3	5.3	3 290	10'10"
Triple grouser, HD	600	24	25 820	56,930	53.9	7.8	2 990	9'10"	25 350	55,890	53	7.7	2 990	9'10"
Double grouser	700	28	25 340	55,870	45.1	6.5	3 090	10'2"	25 905	57,120	46.1	6.7	3 090	10'2"
Rubber grouser	600	24	24 740	54,560	51	7.4	2 990	9'10"	25 480	56,170	53	7.7	2 990	9'10"
Add on rubber grouser	600	24	25 340	55,870	53	7.7	2 990	9'10"	26 070	57,490	53.9	7.8	2 990	9'10"
	ECR235EL with dozer blade													
	5.7m / 18'8" boom, 2.9m / 9'6" arm, 950kg, 1 090l / 2,090lb bucket, 6 200kg / 13,670lb counterweight													
	5.76m / 18'11" 2-piece boom, 2.9m / 9'6" arm, 950kg, 1 090l / 2,090lb bucket, 6 200kg / 13,670lb counterweight													
Triple grouser	600	24	26 000	57,320	53.9	7.8	2 990	9'10"	26 560	58,570	54.9	8	2 990	9'10"
	700	28	26 480	58,380	47.1	6.8	3 090	10'2"	27 040	59,630	48	7.0	3 090	10'2"
	800	32	26 770	59,030	41.2	6.0	3 190	10'6"	27 335	60,270	42.2	6.1	3 190	10'6"
	900	36	27 060	59,680	37.3	5.4	3 290	10'10"	27 630	60,920	38.2	5.5	3 290	10'10"
Triple grouser, HD	600	24	27 200	59,980	55.9	8.1	2 990	9'10"	26 730	58,940	54.9	8.0	2 990	9'10"
Double grouser	700	28	26 740	58,950	47.1	6.8	3 090	10'2"	27 300	60,200	48	7.0	3 090	10'2"
Rubber grouser	600	24	26 120	57,600	53.9	7.8	2 990	9'10"	26 860	59,220	55.9	8.1	2 990	9'10"
Add on rubber grouser	600	24	26 720	58,920	54.9	8.0	2 990	9'10"	27 455	60,540	56.9	8.2	2 990	9'10"

BUCKET SELECTION GUIDE

Bucket type		Capacity		Cutting width		Weight		Teeth	ECR145E							
									600mm / 24' shoe, 3 200kg / 7,060lb counterweight							
									4.6m / 15'1" boom			4.72m / 15'6" 2-piece boom				
		m³	yd³	mm	in	kg	lb	EA	2.1m / 6'11" arm	2.5m / 8'2" arm	3.0m / 9'10" arm	2.1m / 6'11" arm	2.5m / 8'2" arm	3.0m / 9'10" arm		
Direct fit Buckets	General purpose	0.25	0.33	450	17.72	330	729	3	C	C	C	C	C	C		
		0.33	0.43	600	23.62	361	797	3	C	C	C	C	C	C		
		0.42	0.55	750	29.53	392	864	3	C	C	C	C	C	C		
		0.54	0.71	900	35.43	440	971	4	C	C	C	C	C	C		
		0.66	0.86	1050	41.34	480	1,059	4	C	C	C	C	C	C		
	Heavy duty	0.77	1.01	1200	47.24	541	1,193	5	C	C	B	C	C	B		
		0.25	0.33	450	17.72	320	705	3	D	D	D	D	D	D		
		0.33	0.43	600	23.62	352	777	3	D	D	D	D	D	D		
		0.42	0.55	750	29.53	384	848	3	D	D	D	D	D	D		
		0.54	0.71	900	35.43	445	981	4	D	D	D	D	D	D		
Bucket type		Capacity		Cutting width		Weight		Teeth	ECR145E							
									700mm / 28' shoe, 3 200kg / 7,060lb counterweight							
									4.6m / 15'1" boom			4.72m / 15'6" 2-piece boom				
		m³	yd³	mm	in	kg	lb	EA	2.1m / 6'11" arm	2.5m / 8'2" arm	3.0m / 9'10" arm	2.1m / 6'11" arm	2.5m / 8'2" arm	3.0m / 9'10" arm		
Direct fit Buckets	General purpose	0.25	0.33	450	17.72	330	729	3	C	C	C	C	C	C		
		0.33	0.43	600	23.62	361	797	3	C	C	C	C	C	C		
		0.42	0.55	750	29.53	392	864	3	C	C	C	C	C	C		
		0.54	0.71	900	35.43	440	971	4	C	C	C	C	C	C		
		0.66	0.86	1050	41.34	480	1,059	4	C	C	C	C	C	C		
	Heavy duty	0.77	1.01	1200	47.24	541	1,193	5	C	C	B	C	C	B		
		0.25	0.33	450	17.72	320	705	3	D	D	D	D	D	D		
		0.33	0.43	600	23.62	352	777	3	D	D	D	D	D	D		
		0.42	0.55	750	29.53	384	848	3	D	D	D	D	D	D		
		0.54	0.71	900	35.43	445	981	4	D	D	D	D	D	D		
Bucket type		Capacity		Cutting width		Weight		Teeth	ECR235E							
									600mm / 24' shoe, 6 200kg / 13,670lb counterweight				700mm / 28' shoe, 6 200kg / 13,670lb counterweight			
									5.7m / 18'8" boom		5.76m / 18'11" 2-piece boom		5.7m / 18'8" boom		5.76m / 18'11" 2-piece boom	
		m³	yd³	mm	in	kg	lb	EA	2.5m / 8'2" arm	2.9m / 9'6" arm	2.5m / 8'2" arm	2.9m / 9'6" arm	2.5m / 8'2" arm	2.9m / 9'6" arm		
Direct fit Buckets	General purpose	0.48	0.63	600	23.62	666	1,468	3	C	C	C	C	C	C	C	
		0.59	0.77	750	29.53	711	1,568	3	C	C	C	C	C	C	C	
		0.75	0.98	900	35.43	792	1,746	4	C	C	C	C	C	C	C	
		0.92	1.20	1050	41.34	862	1,900	4	C	C	C	C	C	C	C	
		1.09	1.43	1200	47.24	951	2,096	5	C	C	C	C	C	C	C	
		1.27	1.66	1350	53.15	1038	2,289	5	C	C	C	B	C	C	C	
	Heavy duty	0.48	0.63	600	23.62	738	1,628	3	C	B	B	B	C	B	B	B
		0.48	0.63	600	23.62	675	1,488	3	C	C	C	C	C	C	C	C
		0.75	0.98	900	35.43	872	1,922	4	C	C	C	C	C	C	C	C
		0.75	0.98	900	35.43	808	1,783	4	C	C	C	C	C	C	C	C
		0.92	1.20	1050	41.34	951	2,098	4	C	C	C	C	C	C	C	C
		0.92	1.20	1050	41.34	888	1,959	4	C	C	C	C	C	C	C	C
		1.09	1.43	1200	47.24	1046	2,307	5	C	B	B	B	C	B	B	B
		1.09	1.43	1200	47.24	983	2,168	5	B	A	A	A	B	A	B	A

Maximum material density

	kg/m ³	lb/yd ³	
A	1 200 - 1 300	2,000 - 2,200	Coal, Caliche, Shale
B	1 400 - 1 600	2,300 - 2,700	Wet earth and clay, Limestone, Sandstone
C	1 700 - 1 800	2,800 - 3,100	Granite, Wet sand, Well blasted rock
D	> 1 900	> 3,200	Wet mud, Iron ore

Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.

The recommendations are given as a guide only, based on typical operation conditions.

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

Specifications

LIFTING CAPACITY ECR145EL

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 coupler from the following values.

	Lifting hook related to ground level	1.5m, 5 ft		3.0m, 10 ft		4.5m, 15 ft		6.0m, 20 ft		7.5m, 25 ft		Max. Reach		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	
Boom : 4.6m, 15'1" Arm : 2.1m, 6'11" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb	7.5 m kg	-	-	-	-	-	-	-	-	-	-	*5 360	*5 360	2.8m
	25 ft lb	-	-	-	-	-	-	-	-	-	-	*12,520	*12,520	8.4 ft
	6 m kg	-	-	*4 360	*4 360	*4 190	3 870	-	-	-	-	*4 220	3 280	5.0m
	20 ft lb	-	-	*9,600	*9,600	*9,300	8,300	-	-	-	-	*9,380	7,460	16.0 ft
	4.5 m kg	-	-	*5 220	*5 220	*4 360	3 810	3 840	2 410	-	-	3 830	2 400	6.0m
	15 ft lb	-	-	*11,270	*11,270	*9,500	8,210	-	-	-	-	8,530	5,350	19.6 ft
	3 m kg	-	-	*7 560	6 690	*5 090	3 620	3 790	2 360	-	-	3 300	2 060	6.6m
	10 ft lb	-	-	*16,180	14,450	*11,030	7,820	8,160	5,090	-	-	7,300	4,550	21.5 ft
	1.5 m kg	-	-	-	-	5 720	3 420	3 700	2 280	-	-	3 130	1 940	6.7m
	5 ft lb	-	-	-	-	12,320	7,380	7,980	4,920	-	-	6,910	4,270	22.0 ft
	0 m kg	-	-	*5 520	*5 520	5 580	3 290	3 630	2 220	-	-	3 230	1 980	6.5m
	0 ft lb	-	-	*12,930	12,810	12,000	7,100	7,840	4,790	-	-	7,120	4,380	21.4 ft
	-1.5 m kg	*5 200	*5 200	*8 140	5 980	5 540	3 260	-	-	-	-	3 680	2 240	5.9m
	-5 ft lb	*11,730	*11,730	*17,690	12,860	11,920	7,030	-	-	-	-	8,140	4,970	19.5 ft
	-3.0 m kg	-	-	*6 040	*6 040	*4 140	3 330	-	-	-	-	*3 610	3 030	4.8m
	-10 ft lb	-	-	*12,980	*12,980	*8,710	7,210	-	-	-	-	*7,930	6,780	15.7 ft
Boom : 4.6m, 15'1" Arm : 2.5m, 8'2" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb	7.5 m kg	-	-	*4 380	*4 380	-	-	-	-	-	-	*4 270	*4 270	3.7m
	25 ft lb	-	-	*9,980	*9,980	-	-	-	-	-	-	*9,730	*9,730	11.3 ft
	6 m kg	-	-	-	-	*3 750	*3 750	-	-	-	-	*3 440	2 850	5.5m
	20 ft lb	-	-	-	-	*8,310	*8,310	-	-	-	-	*7,650	6,430	17.6 ft
	4.5 m kg	-	-	*4 420	*4 420	*4 000	3 850	*3 710	2 430	-	-	*3 220	2 170	6.4m
	15 ft lb	-	-	*9,730	*9,730	*8,730	8,290	*8,170	5,230	-	-	*7,120	4,830	21.0 ft
	3 m kg	-	-	*6 780	*6 780	*4 770	3 650	3 800	2 370	-	-	3 030	1 880	6.9m
	10 ft lb	-	-	*14,530	*14,530	*10,340	7,890	8,180	5,100	-	-	6,700	4,160	22.7 ft
	1.5 m kg	-	-	-	-	*5 630	3 430	3 700	2 270	-	-	2 880	1 780	7.1m
	5 ft lb	-	-	-	-	*12,200	7,400	7,960	4,900	-	-	6,360	3,920	23.2 ft
	0 m kg	-	-	*6 130	5 920	5 560	3 270	3 610	2 200	-	-	2 950	1 810	6.9m
	0 ft lb	-	-	*14,260	12,740	11,970	7,060	7,790	4,740	-	-	6,520	3,990	22.6 ft
	-1.5 m kg	*4 770	*4 770	*8 600	5 900	5 500	3 210	3 580	2 170	-	-	3 310	2 010	6.4m
	-5 ft lb	*10,730	*10,730	*18,660	12,690	11,830	6,930	7,730	4,690	-	-	7,310	4,460	20.8 ft
	-3.0 m kg	*9 220	*9 220	*6 790	6 000	*4 680	3 260	-	-	-	-	*3 560	2 590	5.3m
	-10 ft lb	*20,870	*20,870	*14,620	12,910	*10,000	7,040	-	-	-	-	*7,840	5,780	17.4 ft
Boom : 4.6m, 15'1" Arm : 3.0m, 9'10" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb	7.5 m kg	-	-	-	-	*3 460	*3 460	-	-	-	-	*3 360	*3 360	4.6m
	25 ft lb	-	-	-	-	*7,130	*7,130	-	-	-	-	*7,580	*7,580	14.4 ft
	6 m kg	-	-	-	-	*3 220	*3 220	*3 030	2 440	-	-	*2 830	2 380	6.1m
	20 ft lb	-	-	-	-	*7,130	*7,130	-	-	-	-	*6,290	5,360	19.7 ft
	4.5 m kg	-	-	-	-	*3 510	*3 510	*3 350	2 440	-	-	*2 670	1 880	7.0m
	15 ft lb	-	-	-	-	*7,660	*7,660	*7,360	5,250	-	-	*5,900	4,190	22.7 ft
	3 m kg	-	-	*5 740	*5 740	*4 300	3 680	*3 650	2 350	-	-	*2 670	1 650	7.4m
	10 ft lb	-	-	*12,100	*12,100	*9,340	7,940	*7,960	5,070	-	-	*5,890	3,660	24.3 ft
	1.5 m kg	-	-	-	-	*5 260	3 420	3 670	2 240	2 610	1 590	2 570	1 560	7.6m
	5 ft lb	-	-	-	-	*11,400	7,380	7,900	4,830	-	-	5,670	3,450	24.8 ft
	0 m kg	-	-	*6 540	5 850	5 510	3 220	3 560	2 140	-	-	2 620	1 580	7.4m
	0 ft lb	-	-	*15,210	12,580	11,860	6,940	7,670	4,620	-	-	5,780	3,490	24.3 ft
	-1.5 m kg	*4 120	*4 120	*8 920	5 750	5 410	3 130	3 510	2 090	-	-	2 880	1 730	6.9m
	-5 ft lb	*9,260	*9,260	*19,370	12,370	11,630	6,740	7,560	4,520	-	-	6,370	3,830	22.6 ft
	-3.0 m kg	*7 550	*7 550	*7 500	5 820	*5 090	3 140	-	-	-	-	*3 340	2 130	6.0m
	-10 ft lb	*17,050	*17,050	*16,170	12,510	*10,950	6,770	-	-	-	-	*7,350	4,750	19.5 ft
	-4.5 m kg	-	-	*4 580	*4 580	-	-	-	-	-	-	*2 830	*2 830	4.4m
	-15 ft lb	-	-	*9,520	*9,520	-	-	-	-	-	-	*6,130	*6,130	14.0 ft
Boom : 4.6m, 15'1" Arm : 2.1m, 6'11" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb Dozer blade down	7.5 m kg	-	-	-	-	-	-	-	-	-	-	*5 360	*5 360	2.8m
	25 ft lb	-	-	-	-	-	-	-	-	-	-	*12,520	*12,520	8.4 ft
	6 m kg	-	-	*4 360	*4 360	*4 190	*4 190	-	-	-	-	*4 220	3 720	5.0m
	20 ft lb	-	-	*9,600	*9,600	*9,300	*9,300	-	-	-	-	*9,380	8,450	16.0 ft
	4.5 m kg	-	-	*5 220	*5 220	*4 360	4 310	*3 980	2 740	-	-	*3 910	2 730	6.0m
	15 ft lb	-	-	*11,270	*11,270	*9,500	9,300	-	-	-	-	*8,630	6,090	19.6 ft
	3 m kg	-	-	*7 560	*7 560	*5 090	4 130	*4 150	2 690	-	-	*3 930	2 350	6.6m
	10 ft lb	-	-	*16,180	*16,180	*11,030	8,900	*9,060	5,810	-	-	*8,650	5,200	21.5 ft
	1.5 m kg	-	-	-	-	*5 850	3 910	*4 410	2 610	-	-	*3 960	2 220	6.7m
	5 ft lb	-	-	-	-	*12,670	8,450	*9,570	5,630	-	-	*8,740	4,900	22.0 ft
	0 m kg	-	-	*5 520	*5 520	*6 120	3 780	*4 450	2 550	-	-	*3 980	2 280	6.5m
	0 ft lb	-	-	*12,930	*12,930	*13,260	8,160	*9,620	5,510	-	-	*8,770	5,030	21.4 ft
	-1.5 m kg	*5 200	*5 200	*8 140	6 970	*5 670	3 750	-	-	-	-	*3 930	2 580	5.9m
	-5 ft lb	*11,730	*11,730	*17,690	14,960	*12,280	8,100	-	-	-	-	*8,660	5,700	19.5 ft
	-3.0 m kg	-	-	*6 040	*6 040	*4 140	3 830	-	-	-	-	*3 610	3 470	4.8m
	-10 ft lb	-	-	*12,980	*12,980	*8,710	8,280	-	-	-	-	*7,930	7,780	15.7 ft

Notes: 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

LIFTING CAPACITY ECR145EL

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 coupler from the following values.

	Lifting hook related to ground level		1.5m, 5 ft		3.0m, 10 ft		4.5m, 15 ft		6.0m, 20 ft		7.5m, 25 ft		Max. Reach	
			Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC
Boom : 4.6m, 15'1" Arm : 2.5m, 8'2" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb Dozer blade down	7.5 m	kg	-	-	*4 380	*4 380	-	-	-	-	-	-	*4 270	*4 270
	25 ft	lb	-	-	*9,980	*9,980	-	-	-	-	-	-	*9,730	*9,730
	6 m	kg	-	-	-	-	*3 750	*3 750	-	-	-	-	*3 440	3 230
	20 ft	lb	-	-	-	-	*8,310	*8,310	-	-	-	-	*7,650	7,290
	4.5 m	kg	-	-	*4 420	*4 420	*4 000	*4 000	*3 710	2 770	-	-	*3 220	2 470
	15 ft	lb	-	-	*9,730	*9,730	*8,730	*8,730	*8,170	5,950	-	-	*7,120	5,500
	3 m	kg	-	-	*6 780	*6 780	*4 770	4 160	*3 950	2 700	-	-	*3 240	2 150
	10 ft	lb	-	-	*14,530	*14,530	*10,340	8,970	*8,620	5,820	-	-	*7,130	4,770
	1.5 m	kg	-	-	-	-	*5 630	3 930	*4 280	2 600	-	-	*3 440	2 040
	5 ft	lb	-	-	-	-	*12,200	8,470	*9,290	5,620	-	-	*7,570	4,510
	0 m	kg	-	-	*6 130	*6 130	*6 060	3 770	*4 430	2 530	-	-	*3 730	2 080
	0 ft	lb	-	-	*14,260	*14,260	*13,140	8,120	*9,600	5,450	-	-	*8,230	4,600
	-1.5 m	kg	*4 770	*4 770	*8 600	6 880	*5 820	3 710	*4 130	2 500	-	-	*3 730	2 320
	-5 ft	lb	*10,730	*10,730	*18,660	14,790	*12,600	8,000	*8,860	5,400	-	-	*8,220	5,130
	-3.0 m	kg	*9 220	*9 220	*6 790	*6 790	*4 680	3 750	-	-	-	-	*3 560	2 980
	-10 ft	lb	*20,870	*20,870	*14,620	*14,620	*10,000	8,100	-	-	-	-	*7,840	6,640
Boom : 4.6m, 15'1" Arm : 3.0m, 9'10" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb Dozer blade down	7.5 m	kg	-	-	-	-	*3 460	*3 460	-	-	-	-	*3 360	*3 360
	25 ft	lb	-	-	-	-	-	-	-	-	-	-	*7,580	*7,580
	6 m	kg	-	-	-	-	*3 220	*3 220	*3 030	2 780	-	-	*2 830	2 710
	20 ft	lb	-	-	-	-	*7,130	*7,130	-	-	-	-	*6,290	6,100
	4.5 m	kg	-	-	-	-	*3 510	*3 510	*3 350	2 770	-	-	*2 670	2 150
	15 ft	lb	-	-	-	-	*7,660	*7,660	*7,360	5,970	-	-	*5,900	4,790
	3 m	kg	-	-	*5 740	*5 740	*4 300	4 180	*3 650	2 690	-	-	*2 670	1 900
	10 ft	lb	-	-	*12,100	*12,100	*9,340	9,030	*7,960	5,790	-	-	*5,890	4,210
	1.5 m	kg	-	-	-	-	*5 260	3 920	*4 050	2 570	*3 120	1 830	*2 810	1 800
	5 ft	lb	-	-	-	-	*11,400	8,460	*8,800	5,540	-	-	*6,180	3,990
	0 m	kg	-	-	*6 540	*6 540	*5 880	3 710	*4 320	2 470	-	-	*3 110	1 830
	0 ft	lb	-	-	*15,210	14,680	*12,750	8,010	*9,360	5,330	-	-	*6,860	4,040
	-1.5 m	kg	*4 120	*4 120	*8 920	6 730	*5 880	3 620	*4 220	2 420	-	-	*3 410	2 010
	-5 ft	lb	*9,260	*9,260	*19,370	14,460	*12,730	7,810	*9,120	5,230	-	-	*7,530	4,440
	-3.0 m	kg	*7 550	*7 550	*7 500	6 800	*5 090	3 630	-	-	-	-	*3 340	2 470
	-10 ft	lb	*17,050	*17,050	*16,170	14,610	*10,950	7,840	-	-	-	-	*7,350	5,490
	-4.5 m	kg	-	-	*4 580	*4 580	-	-	-	-	-	-	*2 830	*2 830
	-15 ft	lb	-	-	*9,520	*9,520	-	-	-	-	-	-	*6,130	*6,130
Boom : 4.72m, 15'6" 2-piece Arm : 2.1m, 6'11" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb	7.5 m	kg	-	-	*6 240	*6 240	-	-	-	-	-	-	*5 300	*5 300
	25 ft	lb	-	-	*12,970	*12,970	-	-	-	-	-	-	*12,260	*12,260
	6 m	kg	-	-	*5 290	*5 290	*5 480	3 890	-	-	-	-	*3 950	2 970
	20 ft	lb	-	-	*11,850	*11,850	*12,040	8,370	-	-	-	-	*8,810	6,730
	4.5 m	kg	-	-	*5 480	*5 480	*5 690	3 820	3 880	2 410	-	-	*3 580	2 230
	15 ft	lb	-	-	*11,950	*11,950	*12,370	8,230	8,330	5,180	-	-	*7,910	4,980
	3 m	kg	-	-	-	-	5 990	3 610	3 810	2 350	-	-	3 140	1 930
	10 ft	lb	-	-	-	-	12,900	7,800	8,210	5,080	-	-	6,940	4,280
	1.5 m	kg	-	-	-	-	5 740	3 390	3 710	2 270	-	-	2 990	1 830
	5 ft	lb	-	-	-	-	12,350	7,320	8,010	4,890	-	-	6,600	4,040
	0 m	kg	-	-	-	-	5 590	3 260	3 640	2 200	-	-	3 080	1 880
	0 ft	lb	-	-	-	-	12,030	7,040	7,860	4,760	-	-	6,800	4,140
	-1.5 m	kg	-	-	*6 990	5 960	*5 410	3 240	*3 600	2 200	-	-	*3 190	2 120
	-5 ft	lb	-	-	*15,260	12,820	*11,710	6,980	*7,490	4,770	-	-	*7,010	4,680
Boom : 4.72m, 15'6" 2-piece Arm : 2.5m, 8'2" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb	7.5 m	kg	-	-	*5 310	*5 310	-	-	-	-	-	-	*4 030	*4 030
	25 ft	lb	-	-	*11,820	*11,820	-	-	-	-	-	-	*9,180	*9,180
	6 m	kg	-	-	-	-	*4 690	3 950	-	-	-	-	*3 210	2 590
	20 ft	lb	-	-	-	-	*10,350	8,500	-	-	-	-	*7,140	5,840
	4.5 m	kg	-	-	*4 100	*4 100	*4 890	3 860	3 910	2 440	-	-	*2 940	2 010
	15 ft	lb	-	-	*9,040	*9,040	*10,740	8,320	8,400	5,240	-	-	*6,500	4,480
	3 m	kg	-	-	-	-	6 040	3 650	3 820	2 360	-	-	2 870	1 760
	10 ft	lb	-	-	-	-	13,000	7,870	8,230	5,090	-	-	*6,350	3,910
	1.5 m	kg	-	-	-	-	5 760	3 400	3 710	2 260	-	-	2 750	1 670
	5 ft	lb	-	-	-	-	12,390	7,340	7,990	4,870	-	-	6,070	3,700
	0 m	kg	-	-	-	-	5 570	3 240	3 620	2 180	-	-	2 820	1 710
	0 ft	lb	-	-	-	-	11,990	6,990	7,810	4,700	-	-	6,220	3,770
	-1.5 m	kg	-	-	*7 870	5 870	5 510	3 190	3 590	2 150	-	-	*3 110	1 900
	-5 ft	lb	-	-	*17,120	12,620	11,860	6,880	7,760	4,660	-	-	*6,840	4,200
	-3.0 m	kg	-	-	-	-	*3 840	3 240	-	-	-	-	-	-
	-10 ft	lb	-	-	-	-	*8,120	7,000	-	-	-	-	-	-

Notes: 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

Specifications

LIFTING CAPACITY ECR145EL

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 coupler from the following values.

	Lifting hook related to ground level		1.5m, 5 ft		3.0m, 10 ft		4.5m, 15 ft		6.0m, 20 ft		7.5m, 25 ft		Max. Reach	
			Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC
Boom : 4.72m, 15'6" 2-piece Arm : 3.0m, 9'10" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb	7.5 m	kg	-	-	-	-	*3 980	3 940	-	-	-	-	*3 180	*3 180
	25 ft	lb	-	-	-	-	*8,390	*8,390	-	-	-	-	*7,180	*7,180
	6 m	kg	-	-	-	-	*3 770	*3 770	*3 530	2 460	-	-	*2 640	2 170
	20 ft	lb	-	-	-	-	*8,400	*8,400	*7,300	5,260	-	-	*5,870	4,890
	4.5 m	kg	-	-	-	-	*3 730	*3 730	3 920	2 440	-	-	*2 440	1 750
	15 ft	lb	-	-	-	-	*8,260	*8,260	8,440	5,260	-	-	*5,390	3,890
	3 m	kg	-	-	-	-	*5 060	3 670	3 820	2 350	2 670	1 620	*2 390	1 550
	10 ft	lb	-	-	-	-	*10,950	7,930	8,220	5,060	5,730	3,470	*5,270	3,420
	1.5 m	kg	-	-	-	-	5 760	3 390	3 680	2 230	2 620	1 580	2 450	1 470
	5 ft	lb	-	-	-	-	12,400	7,330	7,930	4,800	5,640	3,390	5,410	3,250
	0 m	kg	-	-	-	-	5 520	3 190	3 570	2 120	2 580	1 540	2 500	1 490
	0 ft	lb	-	-	-	-	11,880	6,870	7,690	4,580	5,560	3,320	5,520	3,300
	-1.5 m	kg	-	-	*7 460	5 710	5 420	3 100	3 520	2 070	-	-	2 740	1 630
	-5 ft	lb	-	-	*17,150	12,270	11,660	6,680	7,580	4,480	-	-	6,060	3,620
	-3.0 m	kg	-	-	*6 170	5 800	*4 530	3 120	*2 830	2 110	-	-	*2 260	1 990
	-10 ft	lb	-	-	*13,260	12,460	*9,670	6,730	*5,710	4,570	-	-	*4,920	4,430
Boom : 4.72m, 15'6" 2-piece Arm : 2.1m, 6'11" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb Dozer blade down	7.5 m	kg	-	-	*6 240	*6 240	-	-	-	-	-	-	*5 300	*5 300
	25 ft	lb	-	-	*12,970	*12,970	-	-	-	-	-	-	*12,260	*12,260
	6 m	kg	-	-	*5 290	*5 290	*5 480	4 410	-	-	-	-	*3 950	3 380
	20 ft	lb	-	-	*11,850	*11,850	*12,040	9,470	-	-	-	-	*8,810	7,640
	4.5 m	kg	-	-	*5 480	*5 480	*5 690	4 330	*4 790	2 750	-	-	*3 580	2 550
	15 ft	lb	-	-	*11,950	*11,950	*12,370	9,330	*9,840	5,910	-	-	*7,910	5,680
	3 m	kg	-	-	-	-	*6 320	4 120	*4 900	2 690	-	-	*3 500	2 220
	10 ft	lb	-	-	-	-	*13,700	8,890	*10,640	5,800	-	-	*7,710	4,910
	1.5 m	kg	-	-	-	-	*6 780	3 890	*4 970	2 600	-	-	*3 630	2 110
	5 ft	lb	-	-	-	-	*14,700	8,400	*10,780	5,610	-	-	*7,980	4,650
	0 m	kg	-	-	-	-	*6 530	3 760	*4 690	2 540	-	-	*3 750	2 160
	0 ft	lb	-	-	-	-	*14,170	8,110	*10,110	5,480	-	-	*8,260	4,770
	-1.5 m	kg	-	-	*6 990	6 960	*5 410	3 740	*3 600	2 540	-	-	*3 190	2 430
	-5 ft	lb	-	-	*15,260	14,940	*11,710	8,060	*7,490	5,490	-	-	*7,010	5,390
Boom : 4.72m, 15'6" 2-piece Arm : 2.5m, 8'2" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb Dozer blade down	7.5 m	kg	-	-	*5 310	*5 310	-	-	-	-	-	-	*4 030	*4 030
	25 ft	lb	-	-	*11,820	*11,820	-	-	-	-	-	-	*9,180	*9,180
	6 m	kg	-	-	-	-	*4 690	4 470	-	-	-	-	*3 210	2 940
	20 ft	lb	-	-	-	-	*10,350	9,600	-	-	-	-	*7,140	6,630
	4.5 m	kg	-	-	*4 100	*4 100	*4 890	4 370	*4 570	2 770	-	-	*2 940	2 300
	15 ft	lb	-	-	*9,040	*9,040	*10,740	9,430	*9,950	5,970	-	-	*6,500	5,130
	3 m	kg	-	-	-	-	*6 060	4 150	*4 760	2 700	-	-	*2 880	2 030
	10 ft	lb	-	-	-	-	*13,140	8,960	*10,350	5,810	-	-	*6,350	4,490
	1.5 m	kg	-	-	-	-	*6 670	3 900	*4 930	2 590	-	-	*2 980	1 930
	5 ft	lb	-	-	-	-	*14,440	8,430	*10,690	5,590	-	-	*6,560	4,260
	0 m	kg	-	-	-	-	*6 630	3 740	*4 790	2 510	-	-	*3 250	1 970
	0 ft	lb	-	-	-	-	*14,380	8,070	*10,350	5,420	-	-	*7,150	4,360
	-1.5 m	kg	-	-	*7 870	6 860	*5 760	3 690	*4 030	2 490	-	-	*3 110	2 190
	-5 ft	lb	-	-	*17,120	14,740	*12,460	7,960	*8,600	5,370	-	-	*6,840	4,840
	-3.0 m	kg	-	-	-	-	*3 840	3 740	-	-	-	-	-	-
	-10 ft	lb	-	-	-	-	*8,120	8,080	-	-	-	-	-	-
Boom : 4.72m, 15'6" 2-piece Arm : 3.0m, 9'10" Shoe : 600mm, 24" CWT : 3 200kg, 7,060lb Dozer blade down	7.5 m	kg	-	-	-	-	*3 980	*3 980	-	-	-	-	*3 180	*3 180
	25 ft	lb	-	-	-	-	*8,390	*8,390	-	-	-	-	*7,180	*7,180
	6 m	kg	-	-	-	-	*3 770	*3 770	*3 530	2 800	-	-	*2 640	2 480
	20 ft	lb	-	-	-	-	*8,400	*8,400	*7,300	5,990	-	-	*5,870	5,580
	4.5 m	kg	-	-	-	-	*3 730	*3 730	*3 990	2 780	-	-	*2 440	2 010
	15 ft	lb	-	-	-	-	*8,260	*8,260	*8,730	5,990	-	-	*5,390	4,470
	3 m	kg	-	-	-	-	*5 060	4 190	*4 530	2 680	*3 170	1 870	*2 390	1 790
	10 ft	lb	-	-	-	-	*10,950	9,030	*9,850	5,790	*5,950	4,010	*5,270	3,960
	1.5 m	kg	-	-	-	-	*6 410	3 900	*4 790	2 560	*3 760	1 830	*2 460	1 710
	5 ft	lb	-	-	-	-	*13,890	8,410	*10,390	5,520	*7,560	3,930	*5,410	3,770
	0 m	kg	-	-	-	-	*6 630	3 690	*4 800	2 460	*3 470	1 790	*2 640	1 740
	0 ft	lb	-	-	-	-	*14,360	7,950	*10,390	5,300	*6,500	3,860	*5,820	3,830
	-1.5 m	kg	-	-	*7 460	6 700	*6 040	3 600	*4 310	2 410	-	-	*2 910	1 900
	-5 ft	lb	-	-	*17,150	14,390	*13,070	7,760	*9,260	5,200	-	-	*6,410	4,200
	-3.0 m	kg	-	-	*6 170	*6 170	*4 530	3 620	*2 830	2 440	-	-	*2 260	*2 260
	-10 ft	lb	-	-	*13,260	*13,260	*9,670	7,810	*5,710	5,290	-	-	*4,920	*4,920

Notes: 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.