

Volvo Construction Equipment  
Building Tomorrow



# ECR145E, ECR235E

Volvo Excavators 14.4-16.7 t / 31,770-36,790 lb 121 hp | 23.7-27.9 t / 52,250-61,440 lb 173 hp



# A passion for performance

At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for customers around the globe. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.

## Helping you to do more

Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

## Designed to fit your needs

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.



## You learn a lot in 180 years

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

## We're on your side

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

## We have a passion for performance.

## A strong, dedicated, capable dealer network

Our dealers are strategically located throughout North America to provide the equipment you need and the parts and service support you demand for a productive and profitable operation.

The strength of our dealer network is enhanced with extensive individualized product support training at our best-in-class Customer Center in Shippensburg and through hands-on training. Using a great Product Demonstration Center featuring a dedicated area for most common applications, visitors operate equipment from our entire product line under a variety of simulated working conditions. This facility is in year-round use by our dealers and customers.

## Building the best starts right here.

The products designed and manufactured by Volvo Construction Equipment have their beginnings at the most advanced Research & Design centers in the industry. Volvo CE machines are designed in 11 R&D centers and produced in 15 manufacturing facilities across the world.

The major R&D center and manufacturing plant in the Americas is located in Shippensburg, Pennsylvania. This facility has been in operation for over 30 years and – with its recently added 200,000 sq. ft. expansion – now covers 570,000 sq. ft. on an 80 acre campus. Dedicated work teams and highly advanced technologies and techniques using the Volvo Production System ensure continuous quality improvements, labor savings and cost control to reach the high quality that our customers have come to expect from Volvo.





Volvo Trucks



Renault Trucks



Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction Equipment



Volvo Penta



Volvo Financial Services

# Confined space, big potential

The optimized compact design of the ECR145E/ECR235E offers a short swing radius for operating in confined spaces without compromising on performance. The machine's Tier 4 Final engine and enhanced hydraulics system results in smoother operation and increased productivity.

## Tractive force

For more power and better productivity, the machine's system design – specific to the ECR145E/ECR235E – and durable under carriage ensure impressive tractive force when climbing gradients and traveling over rough or soft terrain.



## Tier 4 Final engine

Featuring proven advanced technology, and built on decades of experience, Volvo's robust Tier 4 Final engine boasts more power - while reducing both fuel consumption and emissions to deliver superior quality, reliability and durability.



## Working mode

Volvo's integrated working mode system, which now includes the G4 mode, optimizes fuel efficiency, reduces running costs, increases productivity and performance. Choose the best work mode for the task at hand – select from I (idle), F (fine), G (general) and H (heavy).



## Faster cycle time

Do more in less time as the enhanced hydraulics system increases pump power for faster and smoother operation, resulting in quicker cycle times and higher productivity.





# SHORT SWING RADIUS



An optimized compact design offers a short swing radius which allows safe operation in confined spaces. Perfect for maneuvering in and out of narrow areas with ease while increasing your uptime and productivity.



# NEW COMFORT CAB



The newly designed ROPS-certified cab features a vast glass area improving front and side visibility for easier machine operation. The comfort cab also offers a wider entrance, more legroom, spacious interior and new ergonomic controls.

# Sight, space and sound

Operate in a comfortable, low noise environment to increase efficiency and reduce operator fatigue. The larger ROPS certified cab has a wider entrance for easier access, more legroom and a more spacious interior, while the responsive climate control system provides a comfortable working environment.

## Climate control system

For easier controllability and operator comfort the machine features an improved climate control system displayed on the 8" LCD monitor. The industry-leading air circulation and defrosting system speeds up the heating and cooling of the cab for a more comfortable environment.



## Better visibility

For a clear view of your job site, the cab's slim pillars and large expanses of glass result in excellent all-round visibility. Well positioned and a longer vertical windshield wiper provides the best possible coverage of the front window for comfortable and accurate operating.



## Keypad

The keypad allows the operator to navigate through different settings on the 8" LCD monitor and activate machine functions in a safe and comfortable way. The functionality of the camera, air conditioning and lights can be customized through the keypad and configurations can be saved for added convenience. Bluetooth and a hands-free function have also been added so the operator can connect to wireless functions.



## Shortcut button

The windshield wipers, camera, and audio mute function can be assigned to a shortcut button located on the joystick, so the operator can control the selected function by simply pressing a button.



# Own it all

Secure more profit and reduce your Total Cost of Ownership by lowering fuel consumption and increasing uptime with the ECR145E/ECR235E short swing radius excavator. The winning combination of an enhanced hydraulics system with fully electronic control system, improved ECO mode, convenient service access and easy maintenance, all contribute to lower costs and higher productivity.

## Auto idle and engine shutdown

Engine speed is reduced to idle when the controls are inactive for a pre-set amount of time between 3-20 seconds – reducing fuel consumption and noise. If the machine is left idle for longer, the optional auto engine shutdown feature will automatically turn off the machine.



## ECO mode

For better fuel efficiency without sacrificing performance and power in most operating conditions, Volvo's unique and intelligent ECO mode optimizes the hydraulic system to reduce flow and pressure losses in order to reduce fuel consumption. ECO mode is automatically selected but can be switched off via the keypad.



## Safer access

The machine features well-positioned punched anti-slip plates, handrails and foldable guardrails\* for superior grip and added safety. The design facilitates easy inspection and maintenance to promote safety. \*ECR235E only



## Easy service access

To increase the longevity of your machine, it's important to carry out regular service checks. Volvo has grouped filters and centralized greasing points, which are accessible from the ground for easy access. Maximize machine uptime and avoid any unwanted costs.







# ENHANCED HYDRAULIC SYSTEM



The optimized hydraulics system combined with the fully electronic control system and advanced ECO mode, matches engine power, improves controllability and response time. This results in better fuel efficiency and productivity.



# BUCKETS GP/HD



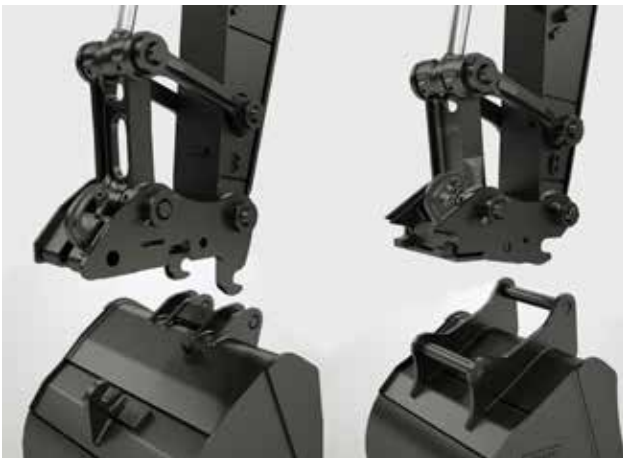
Volvo's buckets are the perfectly matched tool for digging and re-handling in all working conditions. Choose from durable General Purpose or Heavy-duty buckets, providing maximum productivity, long life and feature original Volvo wear components.

# Mix and match versatility

Maximize your productivity and profitability with Volvo's ECR145E/ECR235E excavators and a range of durable attachments. Increase your versatility, access more applications and perform a variety of tasks on one job – all while experiencing faster cycle times and excellent control.

## Quick Coupler range

Volvo offers a full range of quick couplers, including its dedicated S-type and symmetrical couplers that reduce a loss of break-out force and perfectly match Volvo attachments. In addition, the Volvo universal quick coupler picks up a variety of attachments from various manufacturers – all without leaving the comfort of your cab.



## Hydraulic Breakers

The HB-Series of hydraulic breakers are optimized to the specific weights of Volvo machines and tailored to Volvo quick couplers for swift, safe and simple attachment changes. They are available with a full assortment of tools.



## Auxiliary piping

To achieve the correct flow and superior pressure for hydraulic attachments such as mowers, grinders, shears, crushers and tilt rotators, the machine can be factory fitted with a wide variety of hydraulic lines, using breaker and shear piping as well as rotator piping.



## Attachment management system

The password protected attachment management system allows storage for up to 20 different attachments. The system allows the operator to pre-set hydraulic flow and pressure inside the cab through the monitor, which ensures the use of various attachments for increased versatility.



# Dig, swing, load, move

## SHORT SWING RADIUS



The short swing radius design allows safe and concise operation in confined spaces.

### Tractive force

Specific to the ECR145E/ECR235E, the durable undercarriage ensures impressive tractive force.

### Working mode

Volvo's integrated working mode system, now includes the G4 mode, optimizing fuel efficiency, productivity and performance.

### Quick coupler

A full range of quick couplers reduce a loss of break-out force and perfectly match Volvo attachments.

## BUCKETS



Volvo's buckets are the perfectly matched tool for digging and re-handling in all working conditions.



## CUSTOMER SUPPORT AGREEMENTS



Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services.

### Better visibility

For a clear view of your job site, the cab's slim pillars and large expanses of glass result in excellent all-round visibility.

### Short cut button

The windshield wipers, camera and audio mute function can be assigned to a shortcut button located on the joystick.

### COMFORT CAB



The newly designed ROPS-certified cab has improved all-round visibility, more space and ergonomic controls.

### Climate control system

The industry-leading air circulation and defrosting system speeds up the heating and cooling of the cab.

### Safer access

Punched anti-slip plates, handrails and foldable guardrails\* provide superior grip and added safety.

\*ECR235E only

### Tier 4 Final engine (D6)

Volvo's robust Tier 4 Final engine boasts more power while reducing fuel consumption and emissions.

### Diesel Exhaust Fluid (DEF)

Volvo offers a total DEF solution that is quality assured, cost efficient and easily accessible.

### ENHANCED HYDRAULICS



The hydraulics system, fully electronic control system and advanced ECO mode, result in better fuel efficiency and productivity.



# Adding value to your business

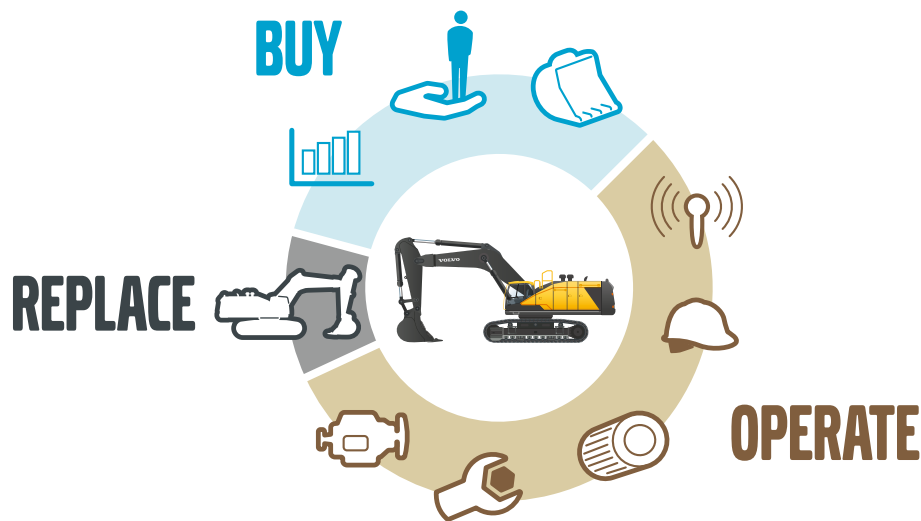
Being a Volvo customer means having a complete set of services at your fingertips. Volvo can offer you a long-term partnership, protect your revenue and provide a full range of customer solutions using high quality parts, delivered by passionate people. Volvo is committed to increasing the positive return on your investment and maximising uptime.



## Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle

of your machine? By listening to your requirements, we can reduce your total cost of ownership and increase your revenue.



## Genuine Volvo Parts

Our attention to detail is what makes us stand out. This proven concept acts as a solid investment in your machine's future. Parts are extensively tested and approved because every part is vital for uptime and performance. Only by using Genuine Volvo Parts, can you be sure that your machine retains the renowned Volvo quality.



## Service Network

In order to respond to your needs faster, a Volvo expert is on their way to your job site from one of our Volvo facilities. With our extensive infrastructure of technicians, workshops and dealers, Volvo has a comprehensive network to fully support you using local knowledge and global experience.





# CUSTOMER SUPPORT AGREEMENT



The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.

# 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 <sup>3</sup>	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 <sup>3</sup>	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	41.9	30,910
	lbf ft	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.		
<b>The following important functions are included in the system:</b>		
<b>Summation system:</b> Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity.		
<b>Arm priority:</b> Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.		
<b>Swing priority:</b> Gives priority to swing functions for faster simultaneous operations.		
<b>Regeneration system:</b> Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity.		
<b>Power boost:</b> All digging and lifting forces are increased.		
<b>Holding valves:</b> 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
Pilot pump, Type Gear pump						
Maximum flow	l/min	gpm	1 x 20	1 x 5	1 x 18	1 x 5
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						
<b>Travel:</b> Variable displacement axial piston motor with mechanical brake						
<b>Slew:</b> Fixed displacement axial piston motor with mechanical brake						

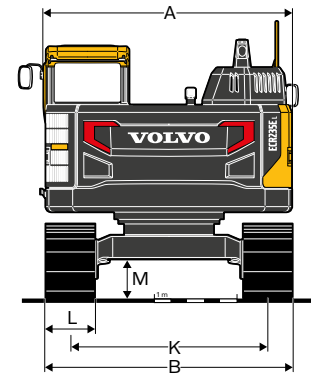
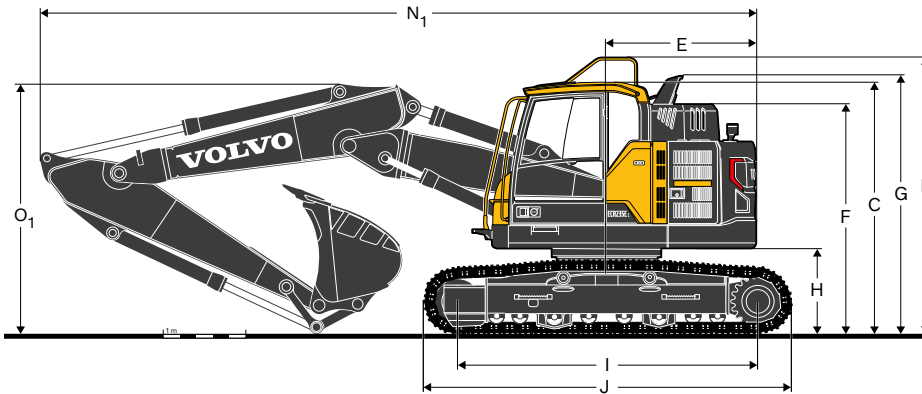
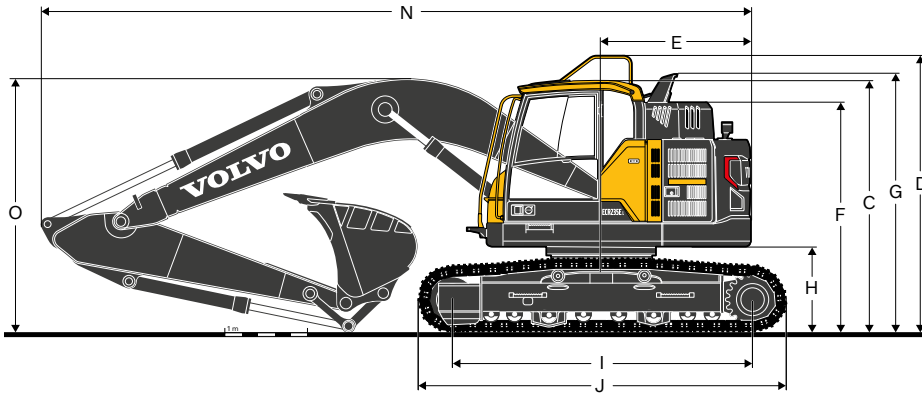
Hydraulic cylinders	ECR145E	ECR235E
Mono boom	2	
Bore x Stroke	∅ x ∅ x mm in	105 x 4.1 x 1 055 41.5
1st boom of 2 piece boom	2	
Bore x Stroke	∅ x ∅ x mm in	110 x 4.3 x 980 38.6
2nd boom of 2 piece boom	1	
Bore x Stroke	∅ x ∅ x mm in	160 x 6.3 x 765 30.1
Arm	1	
Bore x Stroke	∅ x ∅ x mm in	120 x 4.7 x 1 028 40.5
Bucket	1	
Bore x Stroke	∅ x ∅ x mm in	100 x 3.9 x 865 34.1
Dozer blade	2	
Bore x Stroke	∅ x ∅ x mm in	130 x 5.1 x 270 10.6

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.		
<b>Integrated air-conditioning and heating system:</b> The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents.		
<b>Ergonomic operator's seat:</b> 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 <sub>pA</sub> (standard)	dB	71 71
L <sub>pA</sub> (tropical)	dB	72 72
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
L <sub>WA</sub> (standard)	dB	97 101
L <sub>WA</sub> (tropical)	dB	98 102

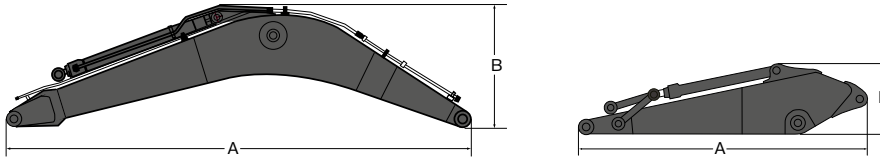
# Specifications



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 <sub>1</sub>	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 <sub>1</sub>	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

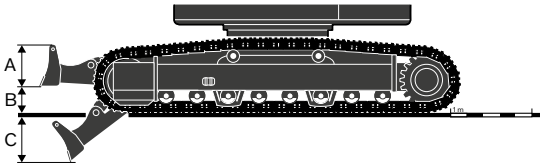
Description	Unit		mono		2-piece		Description	Unit							
Boom	m	ft in	4.6	15'1"	4.72	15'6"	Arm	m	ft in	2.1	6'11"	2.5	8'2"	3.0	9'10"
A Length	mm	ft in	4 770	15'8"	4 885	16'0"	A Length	mm	ft in	2 790	9'2"	3 195	10'6"	3 690	12'1"
B Height	mm	ft in	1 370	4'6"	1 135	3'9"	B Height	mm	ft in	680	2'3"	675	2'3"	750	2'6"
Width	mm	ft in	545	1'9"	545	1'9"	Width	mm	ft in	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

### 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"
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"
B Height	mm	ft in	1 770	5'10"	1 300	4'3"	B Height	mm	ft in	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"
Weight	kg	lb	2 000	4,410	2 570	5,670	Weight	kg	lb	975	2,150	1 000	2,200

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

\* Includes cylinder, linkage and pin

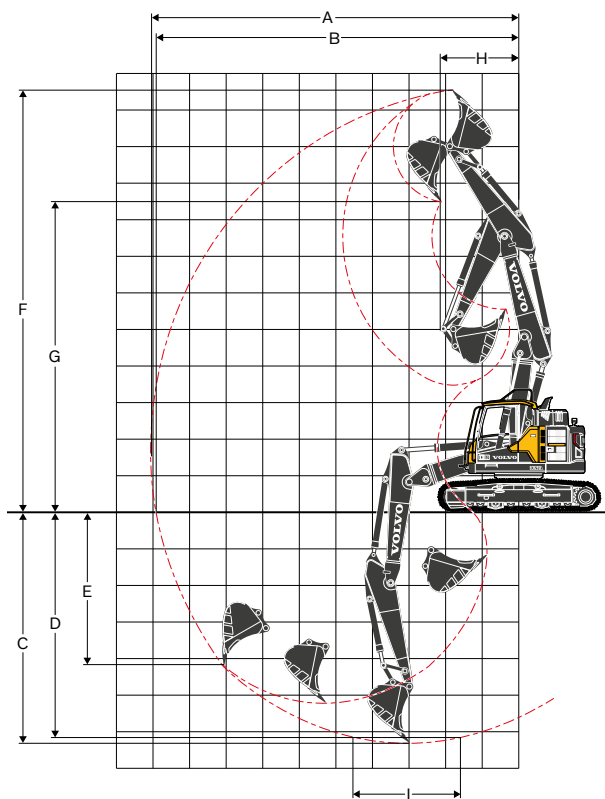
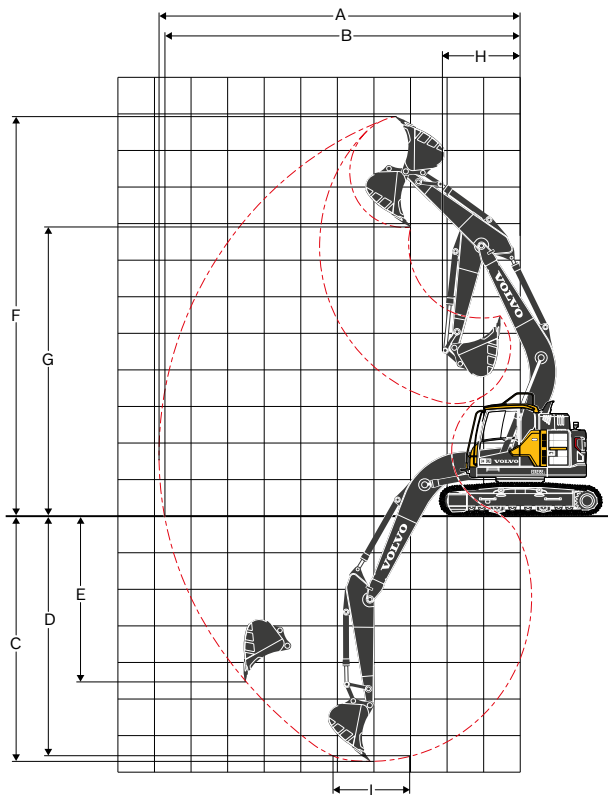


### Front dozer blade

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
	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
	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
	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
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
	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
	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
	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
Rotation angle, bucket		°		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	28,090	125.0	28,100
	Power boost	SAE J1179	kN lb	132.1	29,700	132.2	29,710	132.1	29,700	132.2	29,710
	Normal	ISO 6015	kN lb	141.3	31,760	141.3	31,770	141.3	31,760	141.3	31,770
	Power boost	ISO 6015	kN lb	149.4	33,580	149.4	33,590	149.4	33,580	149.4	33,590
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
	Power boost	SAE J1179	kN lb	123.9	27,860	107.1	24,080	123.9	27,860	107.1	24,080
	Normal	ISO 6015	kN lb	120.7	27,130	103.9	23,360	120.7	27,130	103.9	23,360
	Power boost	ISO 6015	kN lb	127.6	28,680	109.9	24,700	127.6	28,680	109.9	24,700
Rotation angle, bucket		°		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
	<b>ECR145EL</b>													
	<b>4.6m / 15'1" boom, 2.5m / 8'2" arm, 480kg, 660l / 1,060lb bucket, 3 200kg / 7,060 counterweight</b>						<b>4.72m / 15'6" 2-piece boom, 2.5m / 8'2" arm, 480kg, 660l / 1,060lb bucket, 3 200kg / 7,060lb counterweight</b>							
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"
	<b>ECR145EL with dozer blade</b>													
	<b>4.6m / 15'1" boom, 2.5m / 8'2" arm, 480kg, 660l / 1,060lb bucket, 3 200kg / 7,060 counterweight</b>						<b>4.72m / 15'6" 2-piece boom, 2.5m / 8'2" arm, 480kg, 660l / 1,060lb bucket, 3 200kg / 7,060lb counterweight</b>							
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"
	<b>ECR235EL</b>													
	<b>5.7m / 18'8" boom, 2.9m / 9'6" arm, 950kg, 1 090l / 2,090lb bucket, 6 200kg / 13,670lb counterweight</b>						<b>5.76m / 18'11" 2-piece boom, 2.9m / 9'6" arm, 950kg, 1 090l / 2,090lb bucket, 6 200kg / 13,670lb counterweight</b>							
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"
	<b>ECR235EL with dozer blade</b>													
	<b>5.7m / 18'8" boom, 2.9m / 9'6" arm, 950kg, 1 090l / 2,090lb bucket, 6 200kg / 13,670lb counterweight</b>						<b>5.76m / 18'11" 2-piece boom, 2.9m / 9'6" arm, 950kg, 1 090l / 2,090lb bucket, 6 200kg / 13,670lb counterweight</b>							
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		
		m <sup>3</sup>	yd <sup>3</sup>	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
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		
		m <sup>3</sup>	yd <sup>3</sup>	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
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			
		m <sup>3</sup>	yd <sup>3</sup>	mm	in	kg	lb	EA	5.7m / 18'8" boom		5.76m / 18'11" 2-piece boom		5.7m / 18'8" boom		5.76m / 18'11" 2-piece boom	
									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	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	C
		0.59	0.77	750	29.53	711	1,568	3	C	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	C
		0.92	1.20	1050	41.34	862	1,900	4	C	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	C
	Heavy duty	1.27	1.66	1350	53.15	1038	2,289	5	C	C	C	B	C	C	C	C
		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 <sup>3</sup>	lb/yd <sup>3</sup>	
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.





## 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	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	*3 230	5.5m
	20 ft	lb	-	-	-	-	*8,310	*8,310	-	-	-	-	*7,650	7,290	17.6 ft
	4.5 m	kg	-	-	*4 420	*4 420	*4 000	*4 000	*3 710	2 770	-	-	*3 220	2 470	6.4m
	15 ft	lb	-	-	*9,730	*9,730	*8,730	*8,730	*8,170	5,950	-	-	*7,120	5,500	21.0 ft
	3 m	kg	-	-	*6 780	*6 780	*4 770	4 160	*3 950	2 700	-	-	*3 240	2 150	6.9m
	10 ft	lb	-	-	*14,530	*14,530	*10,340	8,970	*8,620	5,820	-	-	*7,130	4,770	22.7 ft
	1.5 m	kg	-	-	-	-	*5 630	3 930	*4 280	2 600	-	-	*3 440	2 040	7.1m
	5 ft	lb	-	-	-	-	*12,200	8,470	*9,290	5,620	-	-	*7,570	4,510	23.2 ft
	0 m	kg	-	-	*6 130	*6 130	*6 060	3 770	*4 430	2 530	-	-	*3 730	2 080	6.9m
	0 ft	lb	-	-	*14,260	*14,260	*13,140	8,120	*9,600	5,450	-	-	*8,230	4,600	22.6 ft
	-1.5 m	kg	*4 770	*4 770	*8 600	6 880	*5 820	3 710	*4 130	2 500	-	-	*3 730	2 320	6.4m
	-5 ft	lb	*10,730	*10,730	*18,660	14,790	*12,600	8,000	*8,860	5,400	-	-	*8,220	5,130	20.8 ft
	-3.0 m	kg	*9 220	*9 220	*6 790	*6 790	*4 680	3 750	-	-	-	-	*3 560	2 980	5.3m
-10 ft	lb	*20,870	*20,870	*14,620	*14,620	*10,000	8,100	-	-	-	-	*7,840	6,640	17.4 ft	
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	4.6m
	25 ft	lb	-	-	-	-	-	-	-	-	-	-	*7,580	*7,580	14.4 ft
	6 m	kg	-	-	-	-	*3 220	*3 220	*3 030	2 780	-	-	*2 830	2 710	6.1m
	20 ft	lb	-	-	-	-	*7,130	*7,130	-	-	-	-	*6,290	6,100	19.7 ft
	4.5 m	kg	-	-	-	-	*3 510	*3 510	*3 350	2 770	-	-	*2 670	2 150	7.0m
	15 ft	lb	-	-	-	-	*7,660	*7,660	*7,360	5,970	-	-	*5,900	4,790	22.7 ft
	3 m	kg	-	-	*5 740	*5 740	*4 300	4 180	*3 650	2 690	-	-	*2 670	1 900	7.4m
	10 ft	lb	-	-	*12,100	*12,100	*9,340	9,030	*7,960	5,790	-	-	*5,890	4,210	24.3 ft
	1.5 m	kg	-	-	-	-	*5 260	3 920	*4 050	2 570	*3 120	1 830	*2 810	1 800	7.6m
	5 ft	lb	-	-	-	-	*11,400	8,460	*8,800	5,540	-	-	*6,180	3,990	24.8 ft
	0 m	kg	-	-	*6 540	*6 540	*5 880	3 710	*4 320	2 470	-	-	*3 110	1 830	7.4m
	0 ft	lb	-	-	*15,210	14,680	*12,750	8,010	*9,360	5,330	-	-	*6,860	4,040	24.3 ft
	-1.5 m	kg	*4 120	*4 120	*8 920	6 730	*5 880	3 620	*4 220	2 420	-	-	*3 410	2 010	6.9m
	-5 ft	lb	*9,260	*9,260	*19,370	14,460	*12,730	7,810	*9,120	5,230	-	-	*7,530	4,440	22.6 ft
	-3.0 m	kg	*7 550	*7 550	*7 500	6 800	*5 090	3 630	-	-	-	-	*3 340	2 470	6.0m
-10 ft	lb	*17,050	*17,050	*16,170	14,610	*10,950	7,840	-	-	-	-	*7,350	5,490	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 : 4.72m, 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	3.4m
	25 ft	lb	-	-	*12,970	*12,970	-	-	-	-	-	-	*12,260	*12,260	10.3 ft
	6 m	kg	-	-	*5 290	*5 290	*5 480	3 890	-	-	-	-	*3 950	2 970	5.3m
	20 ft	lb	-	-	*11,850	*11,850	*12,040	8,370	-	-	-	-	*8,810	6,730	17.0 ft
	4.5 m	kg	-	-	*5 480	*5 480	*5 690	3 820	3 880	2 410	-	-	*3 580	2 230	6.3m
	15 ft	lb	-	-	*11,950	*11,950	*12,370	8,230	8,330	5,180	-	-	*7,910	4,980	20.5 ft
	3 m	kg	-	-	-	-	5 990	3 610	3 810	2 350	-	-	3 140	1 930	6.8m
	10 ft	lb	-	-	-	-	12,900	7,800	8,210	5,080	-	-	6,940	4,280	22.2 ft
	1.5 m	kg	-	-	-	-	5 740	3 390	3 710	2 270	-	-	2 990	1 830	6.9m
	5 ft	lb	-	-	-	-	12,350	7,320	8,010	4,890	-	-	6,600	4,040	22.8 ft
	0 m	kg	-	-	-	-	5 590	3 260	3 640	2 200	-	-	3 080	1 880	6.8m
	0 ft	lb	-	-	-	-	12,030	7,040	7,860	4,760	-	-	6,800	4,140	22.2 ft
	-1.5 m	kg	-	-	*6 990	5 960	*5 410	3 240	*3 600	2 200	-	-	*3 190	2 120	6.2m
	-5 ft	lb	-	-	*15,260	12,820	*11,710	6,980	*7,490	4,770	-	-	*7,010	4,680	20.3 ft
	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	12.9 ft
6 m		kg	-	-	-	-	*4 690	3 950	-	-	-	-	*3 210	2 590	5.8m
20 ft		lb	-	-	-	-	*10,350	8,500	-	-	-	-	*7,140	5,840	18.7 ft
4.5 m		kg	-	-	*4 100	*4 100	*4 890	3 860	3 910	2 440	-	-	*2 940	2 010	6.7m
15 ft		lb	-	-	*9,040	*9,040	*10,740	8,320	8,400	5,240	-	-	*6,500	4,480	21.8 ft
3 m		kg	-	-	-	-	6 040	3 650	3 820	2 360	-	-	2 870	1 760	7.2m
10 ft		lb	-	-	-	-	13,000	7,870	8,230	5,090	-	-	*6,350	3,910	23.5 ft
1.5 m		kg	-	-	-	-	5 760	3 400	3 710	2 260	-	-	2 750	1 670	7.3m
5 ft		lb	-	-	-	-	12,390	7,340	7,990	4,870	-	-	6,070	3,700	24.0 ft
0 m		kg	-	-	-	-	5 570	3 240	3 620	2 180	-	-	2 820	1 710	7.2m
0 ft		lb	-	-	-	-	11,990	6,990	7,810	4,700	-	-	6,220	3,770	23.5 ft
-1.5 m		kg	-	-	*7 870	5 870	5 510	3 190	3 590	2 150	-	-	*3 110	1 900	6.6m
-5 ft		lb	-	-	*17,120	12,620	11,860	6,880	7,760	4,660	-	-	*6,840	4,200	21.7 ft
-3.0 m		kg	-	-	-	-	*3 840	3 240	-	-	-	-	-	-	5.7m
-10 ft	lb	-	-	-	-	*8,120	7,000	-	-	-	-	-	-	18.5 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.

# 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	5.0m	
	25 ft	lb	-	-	-	-	*8,390	*8,390	-	-	-	-	*7,180	*7,180	15.8 ft	
	6 m	kg	-	-	-	-	*3 770	*3 770	*3 530	2 460	-	-	*2 640	2 170	6.4m	
	20 ft	lb	-	-	-	-	*8,400	*8,400	*7,300	5,260	-	-	*5,870	4,890	20.8 ft	
	4.5 m	kg	-	-	-	-	*3 730	*3 730	3 920	2 440	-	-	*2 440	1 750	7.2m	
	15 ft	lb	-	-	-	-	*8,260	*8,260	8,440	5,260	-	-	*5,390	3,890	23.6 ft	
	3 m	kg	-	-	-	-	*5 060	3 670	3 820	2 350	2 670	1 620	*2 390	1 550	7.7m	
	10 ft	lb	-	-	-	-	*10,950	7,930	8,220	5,060	5,730	3,470	*5,270	3,420	25.2 ft	
	1.5 m	kg	-	-	-	-	5 760	3 390	3 680	2 230	2 620	1 580	2 450	1 470	7.8m	
	5 ft	lb	-	-	-	-	12,400	7,330	7,930	4,800	5,640	3,390	5,410	3,250	25.7 ft	
	0 m	kg	-	-	-	-	5 520	3 190	3 570	2 120	2 580	1 540	2 500	1 490	7.7m	
	0 ft	lb	-	-	-	-	11,880	6,870	7,690	4,580	5,560	3,320	5,520	3,300	25.1 ft	
	-1.5 m	kg	-	-	*7 460	5 710	5 420	3 100	3 520	2 070	-	-	2 740	1 630	7.2m	
	-5 ft	lb	-	-	*17,150	12,270	11,660	6,680	7,580	4,480	-	-	6,060	3,620	23.5 ft	
	-3.0 m	kg	-	-	*6 170	5 800	*4 530	3 120	*2 830	2 110	-	-	*2 260	1 990	6.3m	
	-10 ft	lb	-	-	*13,260	12,460	*9,670	6,730	*5,710	4,570	-	-	*4,920	4,430	20.6 ft	
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	3.4m	
	25 ft	lb	-	-	*12,970	*12,970	-	-	-	-	-	-	*12,260	*12,260	10.3 ft	
	6 m	kg	-	-	*5 290	*5 290	*5 480	4 410	-	-	-	-	*3 950	3 380	5.3m	
	20 ft	lb	-	-	*11,850	*11,850	*12,040	9,470	-	-	-	-	*8,810	7,640	17.0 ft	
	4.5 m	kg	-	-	*5 480	*5 480	*5 690	4 330	*4 790	2 750	-	-	*3 580	2 550	6.3m	
	15 ft	lb	-	-	*11,950	*11,950	*12,370	9,330	*9,840	5,910	-	-	*7,910	5,680	20.5 ft	
	3 m	kg	-	-	-	-	*6 320	4 120	*4 900	2 690	-	-	*3 500	2 220	6.8m	
	10 ft	lb	-	-	-	-	*13,700	8,890	*10,640	5,800	-	-	*7,710	4,910	22.2 ft	
	1.5 m	kg	-	-	-	-	*6 780	3 890	*4 970	2 600	-	-	*3 630	2 110	6.9m	
	5 ft	lb	-	-	-	-	*14,700	8,400	*10,780	5,610	-	-	*7,980	4,650	22.8 ft	
	0 m	kg	-	-	-	-	*6 530	3 760	*4 690	2 540	-	-	*3 750	2 160	6.8m	
	0 ft	lb	-	-	-	-	*14,170	8,110	*10,110	5,480	-	-	*8,260	4,770	22.2 ft	
	-1.5 m	kg	-	-	*6 990	6 960	*5 410	3 740	*3 600	2 540	-	-	*3 190	2 430	6.2m	
	-5 ft	lb	-	-	*15,260	14,940	*11,710	8,060	*7,490	5,490	-	-	*7,010	5,390	20.3 ft	
	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	4.1m
		25 ft	lb	-	-	*11,820	*11,820	-	-	-	-	-	-	*9,180	*9,180	12.9 ft
6 m		kg	-	-	-	-	*4 690	4 470	-	-	-	-	*3 210	2 940	5.8m	
20 ft		lb	-	-	-	-	*10,350	9,600	-	-	-	-	*7,140	6,630	18.7 ft	
4.5 m		kg	-	-	*4 100	*4 100	*4 890	4 370	*4 570	2 770	-	-	*2 940	2 300	6.7m	
15 ft		lb	-	-	*9,040	*9,040	*10,740	9,430	*9,950	5,970	-	-	*6,500	5,130	21.8 ft	
3 m		kg	-	-	-	-	*6 060	4 150	*4 760	2 700	-	-	*2 880	2 030	7.2m	
10 ft		lb	-	-	-	-	*13,140	8,960	*10,350	5,810	-	-	*6,350	4,490	23.5 ft	
1.5 m		kg	-	-	-	-	*6 670	3 900	*4 930	2 590	-	-	*2 980	1 930	7.3m	
5 ft		lb	-	-	-	-	*14,440	8,430	*10,690	5,590	-	-	*6,560	4,260	24.0 ft	
0 m		kg	-	-	-	-	*6 630	3 740	*4 790	2 510	-	-	*3 250	1 970	7.2m	
0 ft		lb	-	-	-	-	*14,380	8,070	*10,350	5,420	-	-	*7,150	4,360	23.5 ft	
-1.5 m		kg	-	-	*7 870	6 860	*5 760	3 690	*4 030	2 490	-	-	*3 110	2 190	6.6m	
-5 ft		lb	-	-	*17,120	14,740	*12,460	7,960	*8,600	5,370	-	-	*6,840	4,840	21.7 ft	
-3.0 m		kg	-	-	-	-	*3 840	3 740	-	-	-	-	-	-	5.7m	
-10 ft		lb	-	-	-	-	*8,120	8,080	-	-	-	-	-	-	18.5 ft	
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	5.0m	
	25 ft	lb	-	-	-	-	*8,390	*8,390	-	-	-	-	*7,180	*7,180	15.8 ft	
	6 m	kg	-	-	-	-	*3 770	*3 770	*3 530	2 800	-	-	*2 640	2 480	6.4m	
	20 ft	lb	-	-	-	-	*8,400	*8,400	*7,300	5,990	-	-	*5,870	5,580	20.8 ft	
	4.5 m	kg	-	-	-	-	*3 730	*3 730	*3 990	2 780	-	-	*2 440	2 010	7.2m	
	15 ft	lb	-	-	-	-	*8,260	*8,260	*8,730	5,990	-	-	*5,390	4,470	23.6 ft	
	3 m	kg	-	-	-	-	*5 060	4 190	*4 530	2 680	*3 170	1 870	*2 390	1 790	7.7m	
	10 ft	lb	-	-	-	-	*10,950	9,030	*9,850	5,790	*5,950	4,010	*5,270	3,960	25.2 ft	
	1.5 m	kg	-	-	-	-	*6 410	3 900	*4 790	2 560	*3 760	1 830	*2 460	1 710	7.8m	
	5 ft	lb	-	-	-	-	*13,890	8,410	*10,390	5,520	*7,560	3,930	*5,410	3,770	25.7 ft	
	0 m	kg	-	-	-	-	*6 630	3 690	*4 800	2 460	*3 470	1 790	*2 640	1 740	7.7m	
	0 ft	lb	-	-	-	-	*14,360	7,950	*10,390	5,300	*6,500	3,860	*5,820	3,830	25.1 ft	
	-1.5 m	kg	-	-	*7 460	6 700	*6 040	3 600	*4 310	2 410	-	-	*2 910	1 900	7.2m	
	-5 ft	lb	-	-	*17,150	14,390	*13,070	7,760	*9,260	5,200	-	-	*6,410	4,200	23.5 ft	
	-3.0 m	kg	-	-	*6 170	*6 170	*4 530	3 620	*2 830	2 440	-	-	*2 260	*2 260	6.3m	
	-10 ft	lb	-	-	*13,260	*13,260	*9,670	7,810	*5,710	5,290	-	-	*4,920	*4,920	20.6 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.



# 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 : 2.5m, 8'2" Shoe : 700mm, 28" CWT : 3 200kg, 7,060lb Dozer blade down	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	11.3ft	
	6 m	kg	-	-	-	-	*3 750	*3 750	-	-	-	-	*3 440	3 350	5.5m	
	20 ft	lb	-	-	-	-	*8,310	*8,310	-	-	-	-	*7,650	7,560	17.6ft	
	4.5 m	kg	-	-	*4 420	*4 420	*4 000	*4 000	*3 710	2 870	-	-	*3 220	2 570	6.4m	
	15 ft	lb	-	-	*9,730	*9,730	*8,730	*8,730	*8,170	6,180	-	-	*7,120	5,710	21.0ft	
	3 m	kg	-	-	*6 780	*6 780	*4 770	4 320	*3 950	2 800	-	-	*3 240	2 240	6.9m	
	10 ft	lb	-	-	*14,530	*14,530	*10,340	9,310	*8,620	6,040	-	-	*7,130	4,960	22.7ft	
	1.5 m	kg	-	-	-	-	*5 630	4 080	*4 280	2 710	-	-	*3 440	2 120	7.1m	
	5 ft	lb	-	-	-	-	*12,200	8,810	*9,290	5,840	-	-	*7,570	4,690	23.2ft	
	0 m	kg	-	-	*6 130	*6 130	*6 060	3 920	*4 430	2 630	-	-	*3 730	2 170	6.9m	
	0 ft	lb	-	-	*14,260	*14,260	*13,140	8,460	*9,600	5,680	-	-	*8,230	4,790	22.6ft	
	-1.5 m	kg	*4 770	*4 770	*8 600	7 200	*5 820	3 870	*4 130	2 600	-	-	*3 730	2 410	6.4m	
	-5 ft	lb	*10,730	*10,730	*18,660	15,460	*12,600	8,340	*8,860	5,630	-	-	*8,220	5,340	20.8ft	
	-3.0 m	kg	*9 220	*9 220	*6 790	*6 790	*4 680	3 910	-	-	-	-	*3 560	3 100	5.3m	
	-10 ft	lb	*20,870	*20,870	*14,620	*14,620	*10,000	8,440	-	-	-	-	*7,840	6,910	17.4ft	
	Boom : 4.6m, 15'1" Arm : 3.0m, 9'10" Shoe : 700mm, 28" CWT : 3 200kg, 7,060lb Dozer blade down	7.5 m	kg	-	-	-	-	*3 460	*3 460	-	-	-	-	*3 360	*3 360	4.6m
		25 ft	lb	-	-	-	-	-	-	-	-	-	-	*7,580	*7,580	14.4ft
		6 m	kg	-	-	-	-	*3 220	*3 220	*3 030	2 880	-	-	*2 830	2 810	6.1m
20 ft		lb	-	-	-	-	*7,130	*7,130	-	-	-	-	*6,290	*6,290	19.7ft	
4.5 m		kg	-	-	-	-	*3 510	*3 510	*3 350	2 880	-	-	*2 670	2 240	7.0m	
15 ft		lb	-	-	-	-	*7,660	*7,660	*7,360	6,190	-	-	*5,900	4,980	22.7ft	
3 m		kg	-	-	*5 740	*5 740	*4 300	*4 300	*3 650	2 790	-	-	*2 670	1 980	7.4m	
10 ft		lb	-	-	*12,100	*12,100	*9,340	*9,340	*7,960	6,010	-	-	*5,890	4,380	24.3ft	
1.5 m		kg	-	-	-	-	*5 260	4 080	*4 050	2 670	*3 120	1 910	*2 810	1 880	7.6m	
5 ft		lb	-	-	-	-	*11,400	8,800	*8,800	5,770	-	-	*6,180	4,150	24.8ft	
0 m		kg	-	-	*6 540	*6 540	*5 880	3 870	*4 320	2 580	-	-	*3 110	1 910	7.4m	
0 ft		lb	-	-	*15,210	*15,210	*12,750	8,350	*9,360	5,560	-	-	*6,860	4,220	24.3ft	
-1.5 m		kg	*4 120	*4 120	*8 920	7 050	*5 880	3 780	*4 220	2 530	-	-	*3 410	2 090	6.9m	
-5 ft		lb	*9,260	*9,260	*19,370	15,130	*12,730	8,140	*9,120	5,450	-	-	*7,530	4,630	22.6ft	
-3.0 m		kg	*7 550	*7 550	*7 500	7 110	*5 090	3 790	-	-	-	-	*3 340	2 570	6.0m	
-10 ft		lb	*17,050	*17,050	*16,170	15,280	*10,950	8,180	-	-	-	-	*7,350	5,720	19.5ft	
-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	14.0ft	
Boom : 4.72m, 15'6" 2-piece Arm : 2.1m, 6'11" Shoe : 700mm, 28" CWT : 3 200kg, 7,060lb		7.5 m	kg	-	-	*6 240	*6 240	-	-	-	-	-	-	*5 300	*5 300	3.4m
	25 ft	lb	-	-	*12,970	*12,970	-	-	-	-	-	-	*12,260	*12,260	10.3ft	
	6 m	kg	-	-	*5 290	*5 290	*5 480	3 960	-	-	-	-	*3 950	3 030	5.3m	
	20 ft	lb	-	-	*11,850	*11,850	*12,040	8,510	-	-	-	-	*8,810	6,850	17.0ft	
	4.5 m	kg	-	-	*5 480	*5 480	*5 690	3 880	3 950	2 460	-	-	*3 580	2 280	6.3m	
	15 ft	lb	-	-	*11,950	*11,950	*12,370	8,370	8,490	5,280	-	-	*7,910	5,070	20.5ft	
	3 m	kg	-	-	-	-	6 110	3 670	3 890	2 400	-	-	3 200	1 970	6.8m	
	10 ft	lb	-	-	-	-	13,140	7,940	8,370	5,170	-	-	7,080	4,370	22.2ft	
	1.5 m	kg	-	-	-	-	5 850	3 450	3 790	2 310	-	-	3 050	1 870	6.9m	
	5 ft	lb	-	-	-	-	12,590	7,460	8,170	4,990	-	-	6,740	4,130	22.8ft	
	0 m	kg	-	-	-	-	5 700	3 320	3 720	2 250	-	-	3 150	1 920	6.8m	
	0 ft	lb	-	-	-	-	12,270	7,180	8,020	4,860	-	-	6,940	4,230	22.2ft	
	-1.5 m	kg	-	-	*6 990	6 080	*5 410	3 300	*3 600	2 250	-	-	*3 190	2 160	6.2m	
	-5 ft	lb	-	-	*15,260	13,060	*11,710	7,120	*7,490	4,870	-	-	*7,010	4,780	20.3ft	
	Boom : 4.72m, 15'6" 2-piece Arm : 2.5m, 8'2" Shoe : 700mm, 28" CWT : 3 200kg, 7,060lb	7.5 m	kg	-	-	*5 310	*5 310	-	-	-	-	-	-	*4 030	*4 030	4.1m
		25 ft	lb	-	-	*11,820	*11,820	-	-	-	-	-	-	*9,180	*9,180	12.9ft
		6 m	kg	-	-	-	-	*4 690	4 020	-	-	-	-	*3 210	2 630	5.8m
		20 ft	lb	-	-	-	-	*10,350	8,640	-	-	-	-	*7,140	5,940	18.7ft
		4.5 m	kg	-	-	*4 100	*4 100	*4 890	3 930	3 980	2 480	-	-	*2 940	2 050	6.7m
15 ft		lb	-	-	*9,040	*9,040	*10,740	8,460	8,570	5,340	-	-	*6,500	4,570	21.8ft	
3 m		kg	-	-	-	-	*6 060	3 710	3 900	2 400	-	-	*2 880	1 800	7.2m	
10 ft		lb	-	-	-	-	*13,140	8,010	8,390	5,190	-	-	*6,350	3,990	23.5ft	
1.5 m		kg	-	-	-	-	5 870	3 470	3 780	2 300	-	-	2 810	1 710	7.3m	
5 ft		lb	-	-	-	-	12,640	7,480	8,160	4,970	-	-	6,190	3,780	24.0ft	
0 m		kg	-	-	-	-	5 680	3 300	3 700	2 220	-	-	2 880	1 750	7.2m	
0 ft		lb	-	-	-	-	12,230	7,130	7,970	4,800	-	-	6,350	3,850	23.5ft	
-1.5 m		kg	-	-	*7 870	5 990	5 630	3 250	3 670	2 200	-	-	*3 110	1 940	6.6m	
-5 ft		lb	-	-	*17,120	12,870	12,110	7,020	7,920	4,750	-	-	*6,840	4,290	21.7ft	
-3.0 m		kg	-	-	-	-	*3 840	3 310	-	-	-	-	-	-	5.7m	
-10 ft		lb	-	-	-	-	*8,120	7,140	-	-	-	-	-	-	18.5ft	

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		
			kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
Boom : 4.6m, 15'1" Arm : 2.5m, 8'2" Shoe : 750mm, 30" CWT : 3 200kg, 7,060lb Dozer blade down	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	11.3ft	
	6 m	kg	-	-	-	-	*3 750	*3 750	-	-	-	-	*3 440	*3 370	5.5m	
	20 ft	lb	-	-	-	-	*8,310	*8,310	-	-	-	-	*7,650	7,610	17.6ft	
	4.5 m	kg	-	-	*4 420	*4 420	*4 000	*4 000	*3 710	2 890	-	-	*3 220	2 580	6.4m	
	15 ft	lb	-	-	*9,730	*9,730	*8,730	*8,730	*8,170	6,220	-	-	*7,120	5,750	21.0ft	
	3 m	kg	-	-	*6 780	*6 780	*4 770	4 340	*3 950	2 820	-	-	*3 240	2 260	6.9m	
	10 ft	lb	-	-	*14,530	*14,530	*10,340	9,370	*8,620	6,080	-	-	*7,130	4,990	22.7ft	
	1.5 m	kg	-	-	-	-	*5 630	4 110	*4 280	2 720	-	-	*3 440	2 140	7.1m	
	5 ft	lb	-	-	-	-	*12,200	8,870	*9,290	5,880	-	-	*7,570	4,720	23.2ft	
	0 m	kg	-	-	*6 130	*6 130	*6 060	3 950	*4 430	2 650	-	-	*3 730	2 180	6.9m	
	0 ft	lb	-	-	*14,260	*14,260	*13,140	8,520	*9,600	5,720	-	-	*8,230	4,820	22.6ft	
	-1.5 m	kg	*4 770	*4 770	*8 600	7 250	*5 820	3 890	*4 130	2 620	-	-	*3 730	2 430	6.4m	
	-5 ft	lb	*10,730	*10,730	*18,660	15,560	*12,600	8,390	*8,860	5,670	-	-	*8,220	5,380	20.8ft	
	-3.0 m	kg	*9 220	*9 220	*6 790	*6 790	*4 680	3 940	-	-	-	-	*3 560	3 120	5.3m	
	-10 ft	lb	*20,870	*20,870	*14,620	*14,620	*10,000	8,500	-	-	-	-	*7,840	6,960	17.4ft	
	Boom : 4.6m, 15'1" Arm : 3.0m, 9'10" Shoe : 750mm, 30" CWT : 3 200kg, 7,060lb Dozer blade down	7.5 m	kg	-	-	-	-	*3 460	*3 460	-	-	-	-	*3 360	*3 360	4.6m
		25 ft	lb	-	-	-	-	-	-	-	-	-	-	*7,580	*7,580	14.4ft
6 m		kg	-	-	-	-	*3 220	*3 220	*3 030	2 900	-	-	*2 830	2 830	6.1m	
20 ft		lb	-	-	-	-	*7,130	*7,130	-	-	-	-	*6,290	*6,290	19.7ft	
4.5 m		kg	-	-	-	-	*3 510	*3 510	*3 350	2 900	-	-	*2 670	2 260	7.0m	
15 ft		lb	-	-	-	-	*7,660	*7,660	*7,360	6,230	-	-	*5,900	5,020	22.7ft	
3 m		kg	-	-	*5 740	*5 740	*4 300	*4 300	*3 650	2 810	-	-	*2 670	1 990	7.4m	
10 ft		lb	-	-	*12,100	*12,100	*9,340	*9,340	*7,960	6,050	-	-	*5,890	4,410	24.3ft	
1.5 m		kg	-	-	-	-	*5 260	4 100	*4 050	2 690	*3 120	1 920	*2 810	1 900	7.6m	
5 ft		lb	-	-	-	-	*11,400	8,850	*8,800	5,810	-	-	*6,180	4,190	24.8ft	
0 m		kg	-	-	*6 540	*6 540	*5 880	3 900	*4 320	2 590	-	-	*3 110	1 920	7.4m	
0 ft		lb	-	-	*15,210	*15,210	*12,750	8,410	*9,360	5,600	-	-	*6,860	4,250	24.3ft	
-1.5 m		kg	*4 120	*4 120	*8 920	7 100	*5 880	3 800	*4 220	2 540	-	-	*3 410	2 110	6.9m	
-5 ft		lb	*9,260	*9,260	*19,370	15,240	*12,730	8,200	*9,120	5,490	-	-	*7,530	4,660	22.6ft	
-3.0 m		kg	*7 550	*7 550	*7 500	7 160	*5 090	3 820	-	-	-	-	*3 340	2 590	6.0m	
-10 ft		lb	*17,050	*17,050	*16,170	15,390	*10,950	8,230	-	-	-	-	*7,350	5,760	19.5ft	
-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	14.0ft	
Boom : 4.72m, 15'6" 2-piece Arm : 2.1m, 6'11" Shoe : 750mm, 30" CWT : 3 200kg, 7,060lb	7.5 m	kg	-	-	*6 240	*6 240	-	-	-	-	-	-	*5 300	*5 300	3.4m	
	25 ft	lb	-	-	*12,970	*12,970	-	-	-	-	-	-	*12,260	*12,260	10.3ft	
	6 m	kg	-	-	*5 290	*5 290	*5 480	3 980	-	-	-	-	*3 950	3 040	5.3m	
	20 ft	lb	-	-	*11,850	*11,850	*12,040	8,560	-	-	-	-	*8,810	6,900	17.0ft	
	4.5 m	kg	-	-	*5 480	*5 480	*5 690	3 910	3 980	2 480	-	-	*3 580	2 290	6.3m	
	15 ft	lb	-	-	*11,950	*11,950	*12,370	8,420	8,550	5,320	-	-	*7,910	5,110	20.5ft	
	3 m	kg	-	-	-	-	6 150	3 700	3 910	2 420	-	-	3 220	1 990	6.8m	
	10 ft	lb	-	-	-	-	13,230	7,990	8,430	5,210	-	-	7,130	4,400	22.2ft	
	1.5 m	kg	-	-	-	-	5 890	3 480	3 820	2 330	-	-	3 080	1 880	6.9m	
	5 ft	lb	-	-	-	-	12,690	7,510	8,230	5,020	-	-	6,790	4,160	22.8ft	
	0 m	kg	-	-	-	-	5 740	3 350	3 750	2 260	-	-	3 170	1 930	6.8m	
	0 ft	lb	-	-	-	-	12,360	7,230	8,080	4,890	-	-	7,000	4,260	22.2ft	
	-1.5 m	kg	-	-	*6 990	6 120	*5 410	3 330	*3 600	2 260	-	-	*3 190	2 180	6.2m	
	-5 ft	lb	-	-	*15,260	13,160	*11,710	7,180	*7,490	4,900	-	-	*7,010	4,820	20.3ft	
	Boom : 4.72m, 15'6" 2-piece Arm : 2.5m, 8'2" Shoe : 750mm, 30" CWT : 3 200kg, 7,060lb	7.5 m	kg	-	-	*5 310	*5 310	-	-	-	-	-	-	*4 030	*4 030	4.1m
		25 ft	lb	-	-	*11,820	*11,820	-	-	-	-	-	-	*9,180	*9,180	12.9ft
		6 m	kg	-	-	-	-	*4 690	4 040	-	-	-	-	*3 210	2 650	5.8m
		20 ft	lb	-	-	-	-	*10,350	8,690	-	-	-	-	*7,140	5,980	18.7ft
4.5 m		kg	-	-	*4 100	*4 100	*4 890	3 950	4 010	2 500	-	-	*2 940	2 070	6.7m	
15 ft		lb	-	-	*9,040	*9,040	*10,740	8,520	8,630	5,380	-	-	*6,500	4,610	21.8ft	
3 m		kg	-	-	-	-	*6 060	3 730	3 930	2 420	-	-	*2 880	1 810	7.2m	
10 ft		lb	-	-	-	-	*13,140	8,060	8,450	5,220	-	-	*6,350	4,020	23.5ft	
1.5 m		kg	-	-	-	-	5 910	3 490	3 810	2 320	-	-	2 830	1 720	7.3m	
5 ft		lb	-	-	-	-	12,730	7,540	8,220	5,010	-	-	6,240	3,810	24.0ft	
0 m		kg	-	-	-	-	5 730	3 330	3 720	2 240	-	-	2 900	1 760	7.2m	
0 ft		lb	-	-	-	-	12,320	7,180	8,030	4,840	-	-	6,400	3,880	23.5ft	
-1.5 m		kg	-	-	*7 870	6 030	5 670	3 280	3 700	2 220	-	-	*3 110	1 950	6.6m	
-5 ft		lb	-	-	*17,120	12,960	12,200	7,070	7,980	4,790	-	-	*6,840	4,320	21.7ft	
-3.0 m		kg	-	-	-	-	*3 840	3 330	-	-	-	-	-	-	5.7m	
-10 ft		lb	-	-	-	-	*8,120	7,200	-	-	-	-	-	-	18.5ft	

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 : 750mm, 30" CWT : 3 200kg, 7,060lb	7.5 m	kg	-	-	-	-	*3 980	*3 980	-	-	-	-	*3 180	*3 180	5.0m	
	25 ft	lb	-	-	-	-	*8,390	*8,390	-	-	-	-	*7,180	*7,180	15.8ft	
	6 m	kg	-	-	-	-	*3 770	*3 770	*3 530	2 520	-	-	*2 640	2 230	6.4m	
	20 ft	lb	-	-	-	-	*8,400	*8,400	*7,300	5,400	-	-	*5,870	5,020	20.8ft	
	4.5 m	kg	-	-	-	-	*3 730	*3 730	*3 990	2 510	-	-	*2 440	1 800	7.2m	
	15 ft	lb	-	-	-	-	*8,260	*8,260	8,660	5,390	-	-	*5,390	4,000	23.6ft	
	3 m	kg	-	-	-	-	*5 060	3 760	3 920	2 410	2 740	1 670	*2 390	1 590	7.7m	
	10 ft	lb	-	-	-	-	*10,950	8,120	8,440	5,190	5,890	3,580	*5,270	3,530	25.2ft	
	1.5 m	kg	-	-	-	-	5 920	3 480	3 790	2 290	2 700	1 620	*2 460	1 520	7.8m	
	5 ft	lb	-	-	-	-	12,730	7,520	8,160	4,930	5,810	3,500	*5,410	3,350	25.7ft	
	0 m	kg	-	-	-	-	5 680	3 270	3 670	2 180	2 660	1 590	2 580	1 540	7.7m	
	0 ft	lb	-	-	-	-	12,210	7,070	7,920	4,710	5,730	3,420	5,690	3,400	25.1ft	
	-1.5 m	kg	-	-	*7 460	5 870	5 580	3 190	3 620	2 140	-	-	2 820	1 680	7.2m	
	-5 ft	lb	-	-	*17,150	12,620	11,990	6,870	7,800	4,610	-	-	6,240	3,730	23.5ft	
	-3.0 m	kg	-	-	*6 170	5 950	*4 530	3 210	*2 830	2 170	-	-	*2 260	2 050	6.3m	
	-10 ft	lb	-	-	*13,260	12,800	*9,670	6,920	*5,710	4,710	-	-	*4,920	4,560	20.6ft	
Boom : 4.72m, 15'6" 2-piece Arm : 2.1m, 6'11" Shoe : 750mm, 30" CWT : 3 200kg, 7,060lb Dozer blade down	7.5 m	kg	-	-	*6 240	*6 240	-	-	-	-	-	-	*5 300	*5 300	3.4m	
	25 ft	lb	-	-	*12,970	*12,970	-	-	-	-	-	-	*12,260	*12,260	10.3ft	
	6 m	kg	-	-	*5 290	*5 290	*5 480	4 600	-	-	-	-	*3 950	3 260	5.3m	
	20 ft	lb	-	-	*11,850	*11,850	*12,040	9,870	-	-	-	-	*8,810	7,980	17.0ft	
	4.5 m	kg	-	-	*5 480	*5 480	*5 690	4 520	*4 790	2 870	-	-	*3 580	2 670	6.3m	
	15 ft	lb	-	-	*11,950	*11,950	*12,370	9,730	*9,840	6,180	-	-	*7,910	5,940	20.5ft	
	3 m	kg	-	-	-	-	*6 320	4 300	*4 900	2 810	-	-	*3 500	2 320	6.8m	
	10 ft	lb	-	-	-	-	*13,700	9,290	*10,640	6,070	-	-	*7,710	5,140	22.2ft	
	1.5 m	kg	-	-	-	-	*6 780	4 080	*4 970	2 720	-	-	*3 630	2 210	6.9m	
	5 ft	lb	-	-	-	-	*14,700	8,800	*10,780	5,880	-	-	*7,980	4,870	22.8ft	
	0 m	kg	-	-	-	-	*6 530	3 940	*4 690	2 660	-	-	*3 750	2 270	6.8m	
	0 ft	lb	-	-	-	-	*14,170	8,510	*10,110	5,740	-	-	*8,260	5,000	22.2ft	
	-1.5 m	kg	-	-	*6 990	*6 990	*5 410	3 920	*3 600	2 660	-	-	*3 190	2 550	6.2m	
	-5 ft	lb	-	-	*15,260	*15,260	*11,710	8,460	*7,490	5,750	-	-	*7,010	5,650	20.3ft	
	Boom : 4.72m, 15'6" 2-piece Arm : 2.5m, 8'2" Shoe : 750mm, 30" CWT : 3 200kg, 7,060lb Dozer blade down	7.5 m	kg	-	-	*5 310	*5 310	-	-	-	-	-	-	*4 030	*4 030	4.1m
		25 ft	lb	-	-	*11,820	*11,820	-	-	-	-	-	-	*9,180	*9,180	12.9ft
6 m		kg	-	-	-	-	*4 690	4 660	-	-	-	-	*3 210	3 070	5.8m	
20 ft		lb	-	-	-	-	*10,350	10,010	-	-	-	-	*7,140	6,930	18.7ft	
4.5 m		kg	-	-	*4 100	*4 100	*4 890	4 560	*4 570	2 900	-	-	*2 940	2 410	6.7m	
15 ft		lb	-	-	*9,040	*9,040	*10,740	9,830	*9,950	6,240	-	-	*6,500	5,370	21.8ft	
3 m		kg	-	-	-	-	*6 060	4 340	*4 760	2 820	-	-	*2 880	2 130	7.2m	
10 ft		lb	-	-	-	-	*13,140	9,370	*10,350	6,080	-	-	*6,350	4,710	23.5ft	
1.5 m		kg	-	-	-	-	*6 670	4 090	*4 930	2 710	-	-	*2 980	2 030	7.3m	
5 ft		lb	-	-	-	-	*14,440	8,830	*10,690	5,860	-	-	*6,560	4,470	24.0ft	
0 m		kg	-	-	-	-	*6 630	3 930	*4 790	2 630	-	-	*3 250	2 070	7.2m	
0 ft		lb	-	-	-	-	*14,380	8,470	*10,350	5,690	-	-	*7,150	4,570	23.5ft	
-1.5 m		kg	-	-	*7 870	7 230	*5 760	3 870	*4 030	2 610	-	-	*3 110	2 300	6.6m	
-5 ft		lb	-	-	*17,120	15,520	*12,460	8,360	*8,600	5,640	-	-	*6,840	5,080	21.7ft	
-3.0 m		kg	-	-	-	-	*3 840	*3 840	-	-	-	-	-	-	5.7m	
-10 ft		lb	-	-	-	-	*8,120	*8,120	-	-	-	-	-	-	18.5ft	
Boom : 4.72m, 15'6" 2-piece Arm : 3.0m, 9'10" Shoe : 750mm, 30" CWT : 3 200kg, 7,060lb Dozer blade down	7.5 m	kg	-	-	-	-	*3 980	*3 980	-	-	-	-	*3 180	*3 180	5.0m	
	25 ft	lb	-	-	-	-	*8,390	*8,390	-	-	-	-	*7,180	*7,180	15.8ft	
	6 m	kg	-	-	-	-	*3 770	*3 770	*3 530	2 920	-	-	*2 640	2 600	6.4m	
	20 ft	lb	-	-	-	-	*8,400	*8,400	*7,300	6,260	-	-	*5,870	5,840	20.8ft	
	4.5 m	kg	-	-	-	-	*3 730	*3 730	*3 990	2 910	-	-	*2 440	2 110	7.2m	
	15 ft	lb	-	-	-	-	*8,260	*8,260	*8,730	6,260	-	-	*5,390	4,680	23.6ft	
	3 m	kg	-	-	-	-	*5 060	4 370	*4 530	2 810	*3 170	1 960	*2 390	1 880	7.7m	
	10 ft	lb	-	-	-	-	*10,950	9,430	*9,850	6,050	*5,950	4,210	*5,270	4,160	25.2ft	
	1.5 m	kg	-	-	-	-	*6 410	4 090	*4 790	2 680	*3 760	1 920	*2 460	1 790	7.8m	
	5 ft	lb	-	-	-	-	*13,890	8,820	*10,390	5,790	*7,560	4,130	*5,410	3,960	25.7ft	
	0 m	kg	-	-	-	-	*6 630	3 870	*4 800	2 580	*3 470	1 880	*2 640	1 830	7.7m	
	0 ft	lb	-	-	-	-	*14,360	8,350	*10,390	5,570	*6,500	4,060	*5,820	4,030	25.1ft	
	-1.5 m	kg	-	-	*7 460	7 060	*6 040	3 780	*4 310	2 530	-	-	*2 910	2 000	7.2m	
	-5 ft	lb	-	-	*17,150	15,170	*13,070	8,150	*9,260	5,460	-	-	*6,410	4,410	23.5ft	
	-3.0 m	kg	-	-	*6 170	*6 170	*4 530	3 800	*2 830	2 570	-	-	*2 260	*2 260	6.3m	
	-10 ft	lb	-	-	*13,260	*13,260	*9,670	8,210	*5,710	5,560	-	-	*4,920	*4,920	20.6ft	

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 ECR235EL

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 : 5.7m, 18'8" Arm : 2.5m, 8'2" Shoe : 600mm, 24" CWT : 6 200kg, 13,669lb	9 m	kg	-	-	*8 380	*8 380	-	-	-	-	-	-	*8 380	*8 380	3.1m
	30 ft	lb	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.5 m	kg	-	-	-	-	*6 890	*6 890	-	-	-	-	*6 680	*6 240	5.5m
	25 ft	lb	-	-	-	-	*15,310	*15,310	-	-	-	-	*14,870	*14,320	17.5ft
	6 m	kg	-	-	-	-	*7 210	*7 210	*6 880	5 370	-	-	*6 230	*4 430	6.7m
	20 ft	lb	-	-	-	-	*15,730	*15,730	*15,140	11,540	-	-	*13,780	*9,920	21.9ft
	4.5 m	kg	-	-	*11 790	*11 790	*8 700	8 140	*7 430	5 210	-	-	5 800	3 660	7.5m
	15 ft	lb	-	-	*25,070	*25,070	*18,800	17,560	*16,200	11,230	-	-	12,880	8,130	24.4ft
	3 m	kg	-	-	-	-	*10 880	7 550	8 030	4 970	5 670	3 550	5 260	3 290	7.9m
	10 ft	lb	-	-	-	-	*23,450	16,320	17,300	10,720	12,220	7,660	11,620	7,280	25.8ft
	1.5 m	kg	-	-	-	-	12 280	7 050	7 760	4 730	5 550	3 440	5 070	3 150	8.0m
	5 ft	lb	-	-	-	-	26,370	15,230	16,720	10,200	11,970	7,430	11,190	6,950	26.1ft
	0 m	kg	-	-	-	-	11 980	6 810	7 580	4 560	5 470	3 360	5 190	3 200	7.8m
	0 ft	lb	-	-	-	-	25,720	14,680	16,320	9,850	11,790	7,260	11,460	7,070	25.5ft
	-1.5 m	kg	-	-	*11 650	*11 650	11 920	6 760	7 510	4 500	-	-	5 700	3 490	7.3m
	-5 ft	lb	-	-	*26,580	*26,580	25,570	14,560	16,170	9,720	-	-	12,600	7,720	23.8ft
	-3.0 m	kg	-	-	*15 910	13 350	*11 700	6 840	7 580	4 560	-	-	6 960	4 230	6.4m
-10 ft	lb	-	-	*34,520	28,600	*25,290	14,750	16,340	9,860	-	-	15,490	9,410	20.8ft	
-4.5 m	kg	-	-	*11 740	*11 740	*8 570	7 110	-	-	-	-	*7 760	6 380	4.9m	
-15 ft	lb	-	-	*25,040	*25,040	*18,000	15,370	-	-	-	-	*17,040	14,530	15.6ft	
Boom : 5.7m, 18'8" Arm : 2.9m, 9'6" Shoe : 600mm, 24" CWT : 6 200kg, 13,669lb	9 m	kg	-	-	-	-	-	-	-	-	-	-	*5 830	*5 830	4.0m
	30 ft	lb	-	-	-	-	-	-	-	-	-	-	*13,290	*13,290	12.3ft
	7.5 m	kg	-	-	-	-	*6 150	*6 150	*4 920	*4 920	-	-	*4 830	*4 830	6.0m
	25 ft	lb	-	-	-	-	*13,650	*13,650	-	-	-	-	*10,750	*10,750	19.4ft
	6 m	kg	-	-	-	-	*6 530	*6 530	*6 380	5 430	-	-	*4 530	4 000	7.2m
	20 ft	lb	-	-	-	-	*14,270	*14,270	*14,020	11,680	-	-	*10,010	8,960	23.4ft
	4.5 m	kg	-	-	*10 230	*10 230	*8 010	*8 010	*7 000	5 260	5 810	3 680	*4 490	3 370	7.9m
	15 ft	lb	-	-	*21,800	*21,800	*17,330	*17,330	*15,250	11,340	*12,460	7,900	*9,900	7,480	25.8ft
	3 m	kg	-	-	-	-	*10 230	7 670	*8 000	5 000	5 690	3 570	*4 650	3 050	8.3m
	10 ft	lb	-	-	-	-	*22,050	16,570	*17,370	10,800	12,260	7,690	*10,220	6,750	27.1ft
	1.5 m	kg	-	-	-	-	*12 250	7 130	7 790	4 740	5 550	3 440	4 720	2 930	8.4m
	5 ft	lb	-	-	-	-	*26,460	15,380	16,770	10,240	11,970	7,420	10,410	6,460	27.4ft
	0 m	kg	-	-	*6 180	*6 180	11 990	6 810	7 570	4 550	5 450	3 340	4 810	2 960	8.2m
	0 ft	lb	-	-	*14,270	*14,270	25,740	14,690	16,310	9,830	11,740	7,210	10,620	6,540	26.8ft
	-1.5 m	kg	*6 750	*6 750	*10 980	*10 980	11 870	6 710	7 470	4 470	5 400	3 300	5 220	3 200	7.7m
	-5 ft	lb	*15,120	*15,120	*24,960	*24,960	25,470	14,460	16,090	9,640	11,660	7,140	11,540	7,070	25.2ft
	-3.0 m	kg	*11 760	*11 760	*17 000	13 180	11 930	6 760	7 500	4 490	-	-	6 200	3 780	6.8m
-10 ft	lb	*26,420	*26,420	*36,850	28,250	25,600	14,570	16,160	9,690	-	-	13,780	8,390	22.3ft	
-4.5 m	kg	-	-	*13 310	*13 310	*9 670	6 960	-	-	-	-	*7 590	5 280	5.5m	
-15 ft	lb	-	-	*28,510	*28,510	*20,590	15,040	-	-	-	-	*16,710	11,940	17.7ft	
Boom : 5.7m, 18'8" Arm : 2.5m, 8'2" Shoe : 600mm, 24" CWT : 6 200kg, 13,669lb Dozer blade down	9 m	kg	-	-	*8 380	*8 380	-	-	-	-	-	-	*8 380	*8 380	3.1m
	30 ft	lb	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.5 m	kg	-	-	-	-	*6 890	*6 890	-	-	-	-	*6 680	*6 680	5.5m
	25 ft	lb	-	-	-	-	*15,310	*15,310	-	-	-	-	*14,870	*14,870	17.5ft
	6 m	kg	-	-	-	-	*7 210	*7 210	*6 880	5 940	-	-	*6 230	*4 920	6.7m
	20 ft	lb	-	-	-	-	*15,730	*15,730	*15,140	12,780	-	-	*13,780	11,020	21.9ft
	4.5 m	kg	-	-	*11 790	*11 790	*8 700	*8 700	*7 430	5 790	-	-	*6 200	4 080	7.5m
	15 ft	lb	-	-	*25,070	*25,070	*18,800	*18,800	*16,200	12,480	-	-	*13,670	9,070	24.4ft
	3 m	kg	-	-	-	-	*10 880	8 440	*8 380	5 540	*7 220	3 980	*6 460	3 690	7.9m
	10 ft	lb	-	-	-	-	*23,450	18,230	*18,180	11,960	*15,770	8,570	*14,200	8,150	25.8ft
	1.5 m	kg	-	-	-	-	*12 700	7 940	*9 290	5 300	*7 610	3 860	*7 010	3 540	8.0m
	5 ft	lb	-	-	-	-	*27,450	17,130	*20,150	11,430	*16,550	8,340	*15,420	7,810	26.1ft
	0 m	kg	-	-	-	-	*13 390	7 690	*9 820	5 130	*7 790	3 780	*7 490	3 600	7.8m
	0 ft	lb	-	-	-	-	*29,020	16,570	*21,300	11,080	*16,890	8,170	*16,510	7,950	25.5ft
	-1.5 m	kg	-	-	*11 650	*11 650	*13 040	7 630	*9 720	5 070	-	-	*7 740	3 930	7.3m
	-5 ft	lb	-	-	*26,580	*26,580	*28,290	16,450	*21,060	10,940	-	-	*17,090	8,690	23.8ft
	-3.0 m	kg	-	-	*15 910	15 230	*11 700	7 720	*8 660	5 130	-	-	*7 950	4 750	6.4m
-10 ft	lb	-	-	*34,520	32,620	*25,290	16,630	*18,550	11,090	-	-	*17,530	10,570	20.8ft	
-4.5 m	kg	-	-	*11 740	*11 740	*8 570	7 990	-	-	-	-	*7 760	7 160	4.9m	
-15 ft	lb	-	-	*25,040	*25,040	*18,000	17,260	-	-	-	-	*17,040	16,310	15.6ft	

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 ECR235EL

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	
			kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	
Boom : 5.76m, 18'11" 2-piece Arm : 2.9m, 9'6" Shoe : 600mm, 24" CWT : 6 200kg, 13,669lb Dozer blade down	9 m	kg	-	-	*7 890	*7 890	-	-	-	-	-	-	*5 990	*5 990	4.4m
	30 ft	lb	-	-	*17,480	*17,480	-	-	-	-	-	-	*13,660	*13,660	13.7ft
	7.5 m	kg	-	-	-	-	*7 010	*7 010	*5 930	*5 930	-	-	*4 920	*4 920	6.3m
	25 ft	lb	-	-	-	-	*15,500	*15,500	*11,710	*11,710	-	-	*10,960	*10,960	20.2ft
	6 m	kg	-	-	*6 060	*6 060	*7 010	*7 010	*7 170	5 950	-	-	*4 550	4 160	7.4m
	20 ft	lb	-	-	*13,420	*13,420	*15,460	*15,460	*15,600	12,800	-	-	*10,060	9,300	24.1ft
	4.5 m	kg	-	-	*9 910	*9 910	*9 130	9 070	*8 480	5 760	*6 780	4 040	*4 440	3 550	8.1m
	15 ft	lb	-	-	*20,360	*20,360	*19,600	19,560	*18,370	12,420	*14,110	8,680	*9,800	7,870	26.5ft
	3 m	kg	-	-	-	-	*12 360	8 430	*9 360	5 490	*7 660	3 920	*4 520	3 240	8.5m
	10 ft	lb	-	-	-	-	*26,720	18,190	*20,310	11,840	*16,630	8,450	*9,950	7,160	27.7ft
	1.5 m	kg	-	-	-	-	*13 270	7 860	*9 770	5 220	*7 710	3 790	*4 760	3 130	8.5m
	5 ft	lb	-	-	-	-	*28,760	16,960	*21,180	11,270	*16,710	8,180	*10,490	6,910	28.0ft
	0 m	kg	-	-	-	-	*12 890	7 570	*9 610	5 040	*7 400	3 700	*5 240	3 190	8.4m
	0 ft	lb	-	-	-	-	*28,000	16,310	*20,840	10,870	*15,970	7,990	*11,530	7,040	27.4ft
	-1.5 m	kg	-	-	*9 410	*9 410	*11 330	7 500	*8 660	4 970	*6 370	3 680	*5 610	3 450	7.9m
	-5 ft	lb	-	-	*21,470	*21,470	*24,610	16,160	*18,720	10,720	*13,530	7,960	*12,350	7,630	25.9ft
	-3.0 m	kg	-	-	-	-	*8 660	7 600	*6 620	5 020	-	-	*4 660	4 060	7.1m
	-10 ft	lb	-	-	-	-	*18,670	16,370	*14,080	10,860	-	-	*10,180	9,020	23.1ft
Boom : 5.7m, 18'8" Arm : 2.5m, 8'2" Shoe : 700mm, 28" CWT : 6 200kg, 13,669lb	9 m	kg	-	-	*8 380	*8 380	-	-	-	-	-	-	*8 380	*8 380	3.1m
	30 ft	lb	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.5 m	kg	-	-	-	-	*6 890	*6 890	-	-	-	-	*6 680	6 350	5.5m
	25 ft	lb	-	-	-	-	*15,310	*15,310	-	-	-	-	*14,870	14,560	17.5ft
	6 m	kg	-	-	-	-	*7 210	*7 210	*6 880	5 460	-	-	*6 230	4 510	6.7m
	20 ft	lb	-	-	-	-	*15,730	*15,730	*15,140	11,740	-	-	*13,780	10,110	21.9ft
	4.5 m	kg	-	-	*11 790	*11 790	*8 700	8 280	*7 430	5 310	-	-	5 920	3 730	7.5m
	15 ft	lb	-	-	*25,070	*25,070	*18,800	17,860	*16,200	11,440	-	-	13,140	8,290	24.4ft
	3 m	kg	-	-	-	-	*10 880	7 690	8 190	5 060	5 790	3 630	5 370	3 360	7.9m
	10 ft	lb	-	-	-	-	*23,450	16,620	17,640	10,920	12,470	7,810	11,860	7,430	25.8ft
	1.5 m	kg	-	-	-	-	12 520	7 190	7 920	4 820	5 670	3 520	5 180	3 220	8.0m
	5 ft	lb	-	-	-	-	26,910	15,530	17,060	10,410	12,220	7,580	11,430	7,100	26.1ft
	0 m	kg	-	-	-	-	12 230	6 950	7 740	4 660	5 580	3 440	5 310	3 270	7.8m
	0 ft	lb	-	-	-	-	26,250	14,980	16,660	10,050	12,040	7,420	11,700	7,220	25.5ft
	-1.5 m	kg	-	-	*11 650	*11 650	12 170	6 900	7 670	4 600	-	-	5 820	3 570	7.3m
	-5 ft	lb	-	-	*26,580	*26,580	26,100	14,860	16,520	9,920	-	-	12,870	7,890	23.8ft
	-3.0 m	kg	-	-	*15 910	13 610	*11 700	6 980	7 740	4 660	-	-	7 110	4 320	6.4m
	-10 ft	lb	-	-	*34,520	29,160	*25,290	15,050	16,680	10,070	-	-	15,820	9,600	20.8ft
-4.5 m	kg	-	-	*11 740	*11 740	*8 570	7 250	-	-	-	-	*7 760	6 510	4.9m	
-15 ft	lb	-	-	*25,040	*25,040	*18,000	15,670	-	-	-	-	*17,040	14,810	15.6ft	
Boom : 5.7m, 18'8" Arm : 2.9m, 9'6" Shoe : 700mm, 28" CWT : 6 200kg, 13,669lb	9 m	kg	-	-	-	-	-	-	-	-	-	-	*5 830	*5 830	4.0m
	30 ft	lb	-	-	-	-	-	-	-	-	-	-	*13,290	*13,290	12.3ft
	7.5 m	kg	-	-	-	-	*6 150	*6 150	*4 920	*4 920	-	-	*4 830	*4 830	6.0m
	25 ft	lb	-	-	-	-	*13,650	*13,650	-	-	-	-	*10,750	*10,750	19.4ft
	6 m	kg	-	-	-	-	*6 530	*6 530	*6 380	5 520	-	-	*4 530	4 080	7.2m
	20 ft	lb	-	-	-	-	*14,270	*14,270	*14,020	11,890	-	-	*10,010	9,130	23.4ft
	4.5 m	kg	-	-	*10 230	*10 230	*8 010	*8 010	*7 000	5 360	5 930	3 750	*4 490	3 440	7.9m
	15 ft	lb	-	-	*21,800	*21,800	*17,330	*17,330	*15,250	11,550	*12,460	8,060	*9,900	7,630	25.8ft
	3 m	kg	-	-	-	-	*10 230	7 810	*8 000	5 100	5 810	3 640	*4 650	3 120	8.3m
	10 ft	lb	-	-	-	-	*22,050	16,870	*17,370	11,010	12,510	7,840	*10,220	6,890	27.1ft
	1.5 m	kg	-	-	-	-	*12 250	7 260	7 950	4 840	5 670	3 510	4 820	2 990	8.4m
	5 ft	lb	-	-	-	-	*26,460	15,680	17,120	10,450	12,220	7,580	10,630	6,600	27.4ft
	0 m	kg	-	-	*6 180	*6 180	12 240	6 950	7 730	4 650	5 560	3 410	4 920	3 030	8.2m
	0 ft	lb	-	-	*14,270	*14,270	26,280	14,990	16,650	10,030	11,990	7,370	10,850	6,680	26.8ft
	-1.5 m	kg	*6 750	*6 750	*10 980	*10 980	12 120	6 850	7 630	4 560	5 520	3 380	5 340	3 270	7.7m
	-5 ft	lb	*15,120	*15,120	*24,960	*24,960	26,010	14,760	16,440	9,840	11,910	7,300	11,790	7,230	25.2ft
	-3.0 m	kg	*11 760	*11 760	*17 000	13 440	*12 150	6 900	7 660	4 580	-	-	6 330	3 860	6.8m
	-10 ft	lb	*26,420	*26,420	*36,850	28,810	26,130	14,870	16,500	9,900	-	-	14,080	8,570	22.3ft
-4.5 m	kg	-	-	*13 310	*13 310	*9 670	7 100	-	-	-	-	*7 590	5 390	5.5m	
-15 ft	lb	-	-	*28,510	*28,510	*20,590	15,340	-	-	-	-	*16,710	12,180	17.7ft	

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 ECR235EL**

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 : 5.76m, 18'11" 2-piece Arm : 2.5m, 8'2" Shoe : 800mm, 32" CWT : 6 200kg, 13,669lb Dozer blade down	9 m	kg	-	-	*9 840	*9 840	-	-	-	-	-	-	*8 670	*8 670	3.6m
	30 ft	lb	-	-	*21,210	*21,210	-	-	-	-	-	-	*20,010	*20,010	10.7ft
	7.5 m	kg	-	-	*8 290	*8 290	*8 730	*8 730	-	-	-	-	*6 830	6 710	5.7m
	25 ft	lb	-	-	*18,600	*18,600	*19,240	*19,240	-	-	-	-	*15,220	*15,220	18.4ft
	6 m	kg	-	-	*7 680	*7 680	*8 800	*8 800	*8 660	6 260	-	-	*6 280	4 900	6.9m
	20 ft	lb	-	-	*16,960	*16,960	*19,360	*19,360	*18,910	13,460	-	-	*13,880	10,970	22.6ft
	4.5 m	kg	-	-	-	-	*11 340	9 530	*9 040	6 080	*7 290	4 280	*6 140	4 120	7.7m
	15 ft	lb	-	-	-	-	*24,540	20,550	*19,650	13,120	*13,970	9,190	*13,550	9,140	25.1ft
	3 m	kg	-	-	-	-	*12 760	8 890	*9 570	5 820	*7 760	4 180	*6 280	3 740	8.1m
	10 ft	lb	-	-	-	-	*27,590	19,190	*20,770	12,570	*16,850	9,020	*13,830	8,280	26.4ft
	1.5 m	kg	-	-	-	-	*13 350	8 370	*9 840	5 580	*7 710	4 070	*6 680	3 620	8.1m
	5 ft	lb	-	-	-	-	*28,950	18,060	*21,340	12,040	*16,680	8,790	*14,690	7,980	26.7ft
	0 m	kg	-	-	-	-	*12 570	8 160	*9 490	5 420	*7 210	4 000	*6 450	3 700	8.0m
	0 ft	lb	-	-	-	-	*27,350	17,570	*20,580	11,700	*15,500	8,650	*14,220	8,160	26.1ft
	-1.5 m	kg	-	-	*9 780	*9 780	*10 700	8 150	*8 290	5 390	-	-	*5 810	4 040	7.5m
	-5 ft	lb	-	-	*22,430	*22,430	*23,260	17,540	*17,900	11,630	-	-	*12,780	8,940	24.4ft
	-3.0 m	kg	-	-	-	-	*7 710	*7 710	*5 820	5 480	-	-	-	-	6.6m
	-10 ft	lb	-	-	-	-	*16,590	*16,590	*12,220	11,850	-	-	-	-	21.5ft
Boom : 5.76m, 18'11" 2-piece Arm : 2.9m, 9'6" Shoe : 800mm, 32" CWT : 6 200kg, 13,669lb Dozer blade down	9 m	kg	-	-	*7 890	*7 890	-	-	-	-	-	-	*5 990	*5 990	4.4m
	30 ft	lb	-	-	*17,480	*17,480	-	-	-	-	-	-	*13,660	*13,660	13.7ft
	7.5 m	kg	-	-	-	-	*7 010	*7 010	*5 930	*5 930	-	-	*4 920	*4 920	6.3m
	25 ft	lb	-	-	-	-	*15,500	*15,500	*11,710	*11,710	-	-	*10,960	*10,960	20.2ft
	6 m	kg	-	-	*6 060	*6 060	*7 010	*7 010	*7 170	6 330	-	-	*4 550	4 440	7.4m
	20 ft	lb	-	-	*13,420	*13,420	*15,460	*15,460	*15,600	13,620	-	-	*10,060	9,930	24.1ft
	4.5 m	kg	-	-	*9 910	*9 910	*9 130	*9 130	*8 480	6 140	*6 780	4 310	*4 440	3 800	8.1m
	15 ft	lb	-	-	*20,360	*20,360	*19,600	*19,600	*18,370	13,240	*14,110	9,280	*9,800	8,420	26.5ft
	3 m	kg	-	-	-	-	*12 360	9 020	*9 360	5 870	*7 660	4 200	*4 520	3 480	8.5m
	10 ft	lb	-	-	-	-	*26,720	19,470	*20,310	12,650	*16,630	9,050	*9,950	7,680	27.7ft
	1.5 m	kg	-	-	-	-	*13 270	8 450	*9 770	5 600	*7 710	4 070	*4 760	3 360	8.5m
	5 ft	lb	-	-	-	-	*28,760	18,220	*21,180	12,070	*16,710	8,780	*10,490	7,420	28.0ft
	0 m	kg	-	-	-	-	*12 890	8 150	*9 610	5 410	*7 400	3 980	*5 240	3 430	8.4m
	0 ft	lb	-	-	-	-	*28,000	17,560	*20,840	11,670	*15,970	8,580	*11,530	7,560	27.4ft
	-1.5 m	kg	-	-	*9 410	*9 410	*11 330	8 090	*8 660	5 340	*6 370	3 960	*5 610	3 710	7.9m
	-5 ft	lb	-	-	*21,470	*21,470	*24,610	17,410	*18,720	11,530	*13,530	8,550	*12,350	8,200	25.9ft
	-3.0 m	kg	-	-	-	-	*8 660	8 180	*6 620	5 400	-	-	*4 660	4 360	7.1m
	-10 ft	lb	-	-	-	-	*18,670	17,630	*14,080	11,660	-	-	*10,180	9,680	23.1ft
Boom : 5.7m, 18'8" Arm : 2.5m, 8'2" Shoe : 900mm, 35" CWT : 6 200kg, 13,669lb	9 m	kg	-	-	*8 380	*8 380	-	-	-	-	-	-	*8 380	*8 380	3.1m
	30 ft	lb	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.5 m	kg	-	-	-	-	*6 890	*6 890	-	-	-	-	*6 680	6 480	5.5m
	25 ft	lb	-	-	-	-	*15,310	*15,310	-	-	-	-	*14,870	14,860	17.5ft
	6 m	kg	-	-	-	-	*7 210	*7 210	*6 880	5 580	-	-	*6 230	4 610	6.7m
	20 ft	lb	-	-	-	-	*15,730	*15,730	*15,140	12,000	-	-	*13,780	10,330	21.9ft
	4.5 m	kg	-	-	*11 790	*11 790	*8 700	8 450	*7 430	5 420	-	-	6 060	3 820	7.5m
	15 ft	lb	-	-	*25,070	*25,070	*18,800	18,230	*16,200	11,690	-	-	13,460	8,490	24.4ft
	3 m	kg	-	-	-	-	*10 880	7 860	*8 380	5 180	5 940	3 710	5 500	3 440	7.9m
	10 ft	lb	-	-	-	-	*23,450	16,990	18,060	11,180	12,780	8,000	12,160	7,610	25.8ft
	1.5 m	kg	-	-	-	-	*12 700	7 360	8 120	4 940	5 810	3 600	5 310	3 300	8.0m
	5 ft	lb	-	-	-	-	*27,450	15,900	17,480	10,660	12,530	7,780	11,720	7,280	26.1ft
	0 m	kg	-	-	-	-	12 530	7 120	7 930	4 770	5 730	3 520	5 440	3 360	7.8m
	0 ft	lb	-	-	-	-	26,900	15,350	17,080	10,310	12,350	7,610	12,000	7,410	25.5ft
	-1.5 m	kg	-	-	*11 650	*11 650	12 470	7 070	7 860	4 710	-	-	5 970	3 610	7.3m
	-5 ft	lb	-	-	*26,580	*26,580	26,760	15,230	16,940	10,180	-	-	13,200	8,090	23.8ft
	-3.0 m	kg	-	-	*15 910	13 930	*11 700	7 150	7 930	4 770	-	-	7 290	4 420	6.4m
	-10 ft	lb	-	-	*34,520	29,850	*25,290	15,420	17,100	10,320	-	-	16,210	9,840	20.8ft
-4.5 m	kg	-	-	*11 740	*11 740	*8 570	7 420	-	-	-	-	*7 760	6 660	4.9m	
-15 ft	lb	-	-	*25,040	*25,040	*18,000	16,040	-	-	-	-	*17,040	15,160	15.6ft	

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 ECR235EL

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 : 5.7m, 18'8" Arm : 2.9m, 9'6" Shoe : 900mm, 35" CWT : 6 200kg, 13,669lb	9 m	kg	-	-	-	-	-	-	-	-	-	-	*5 830	*5 830	4.0m	
	30 ft	lb	-	-	-	-	-	-	-	-	-	-	*13,290	*13,290	12.3ft	
	7.5 m	kg	-	-	-	-	*6 150	*6 150	*4 920	*4 920	-	-	*4 830	*4 830	6.0m	
	25 ft	lb	-	-	-	-	*13,650	*13,650	-	-	-	-	*10,750	*10,750	19.4ft	
	6 m	kg	-	-	-	-	*6 530	*6 530	*6 380	*6 380	5 640	-	-	*4 530	4 170	7.2m
	20 ft	lb	-	-	-	-	*14,270	*14,270	*14,020	12,140	-	-	-	*10,010	9,340	23.4ft
	4.5 m	kg	-	-	*10 230	*10 230	*8 010	*8 010	*7 000	5 470	6 070	3 840	-	*4 490	3 520	7.9m
	15 ft	lb	-	-	*21,800	*21,800	*17,330	*17,330	*15,250	11,800	*12,460	8,250	-	*9,900	7,820	25.8ft
	3 m	kg	-	-	-	-	*10 230	7 980	*8 000	5 220	5 950	3 730	-	*4 650	3 190	8.3m
	10 ft	lb	-	-	-	-	*22,050	17,240	*17,370	11,260	12,820	8,030	-	*10,220	7,060	27.1ft
	1.5 m	kg	-	-	-	-	*12 250	7 440	8 140	4 960	5 810	3 600	-	4 940	3 070	8.4m
	5 ft	lb	-	-	-	-	*26,460	16,050	17,540	10,700	12,530	7,770	-	10,910	6,770	27.4ft
	0 m	kg	-	-	*6 180	*6 180	12 550	7 120	7 930	4 770	5 710	3 500	-	5 050	3 110	8.2m
	0 ft	lb	-	-	*14,270	*14,270	26,930	15,360	17,070	10,290	12,300	7,560	-	11,130	6,860	26.8ft
	-1.5 m	kg	*6 750	*6 750	*10 980	*10 980	12 430	7 020	7 830	4 680	5 660	3 460	-	5 470	3 360	7.7m
	-5 ft	lb	*15,120	*15,120	*24,960	*24,960	26,660	15,130	16,860	10,090	12,220	7,490	-	12,100	7,410	25.2ft
	-3.0 m	kg	*11 760	*11 760	*17 000	13 760	*12 150	7 070	7 850	4 700	-	-	-	6 500	3 960	6.8m
	-10 ft	lb	*26,420	*26,420	*36,850	29,490	*26,290	15,240	16,920	10,150	-	-	-	14,440	8,790	22.3ft
-4.5 m	kg	-	-	*13 310	*13 310	*9 670	7 270	-	-	-	-	-	*7 590	5 520	5.5m	
-15 ft	lb	-	-	*28,510	*28,510	*20,590	15,710	-	-	-	-	-	*16,710	12,480	17.7ft	
9 m	kg	-	-	*8 380	*8 380	-	-	-	-	-	-	-	*8 380	*8 380	3.1m	
30 ft	lb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7.5 m	kg	-	-	-	-	*6 890	*6 890	-	-	-	-	-	*6 680	*6 680	5.5m	
25 ft	lb	-	-	-	-	*15,310	*15,310	-	-	-	-	-	*14,870	*14,870	17.5ft	
6 m	kg	-	-	-	-	*7 210	*7 210	*6 880	6 390	-	-	-	*6 230	5 290	6.7m	
20 ft	lb	-	-	-	-	*15,730	*15,730	*15,140	13,740	-	-	-	*13,780	11,860	21.9ft	
4.5 m	kg	-	-	*11 790	*11 790	*8 700	*8 700	*7 430	6 230	-	-	-	*6 200	4 410	7.5m	
15 ft	lb	-	-	*25,070	*25,070	*18,800	*18,800	*16,200	13,430	-	-	-	*13,670	9,790	24.4ft	
3 m	kg	-	-	-	-	*10 880	9 130	*8 380	5 980	*7 220	4 300	-	*6 460	3 990	7.9m	
10 ft	lb	-	-	-	-	*23,450	19,700	*18,180	12,900	*15,770	9,260	-	*14,200	8,820	25.8ft	
1.5 m	kg	-	-	-	-	*12 700	8 620	*9 290	5 730	*7 610	4 190	-	*7 010	3 840	8.0m	
5 ft	lb	-	-	-	-	*27,450	18,580	*20,150	12,380	*16,550	9,030	-	*15,420	8,460	26.1ft	
0 m	kg	-	-	-	-	*13 390	8 360	*9 820	5 570	*7 790	4 100	-	*7 490	3 910	7.8m	
0 ft	lb	-	-	-	-	*29,020	18,020	*21,300	12,020	*16,890	8,860	-	*16,510	8,630	25.5ft	
-1.5 m	kg	-	-	*11 650	*11 650	*13 040	8 310	*9 720	5 510	-	-	-	*7 740	4 270	7.3m	
-5 ft	lb	-	-	*26,580	*26,580	*28,290	17,900	*21,060	11,880	-	-	-	*17,090	9,430	23.8ft	
-3.0 m	kg	-	-	*15 910	*15 910	*11 700	8 400	*8 660	5 570	-	-	-	*7 950	5 150	6.4m	
-10 ft	lb	-	-	*34,520	*34,520	*25,290	18,090	*18,550	12,030	-	-	-	*17,530	11,460	20.8ft	
-4.5 m	kg	-	-	*11 740	*11 740	*8 570	*8 570	-	-	-	-	-	*7 760	*7 760	4.9m	
-15 ft	lb	-	-	*25,040	*25,040	*18,000	*18,000	-	-	-	-	-	*17,040	*17,040	15.6ft	
9 m	kg	-	-	-	-	-	-	-	-	-	-	-	*5 830	*5 830	4.0m	
30 ft	lb	-	-	-	-	-	-	-	-	-	-	-	*13,290	*13,290	12.3ft	
7.5 m	kg	-	-	-	-	*6 150	*6 150	*4 920	*4 920	-	-	-	*4 830	*4 830	6.0m	
25 ft	lb	-	-	-	-	*13,650	*13,650	-	-	-	-	-	*10,750	*10,750	19.4ft	
6 m	kg	-	-	-	-	*6 530	*6 530	*6 380	*6 380	5 640	-	-	*4 530	*4 530	7.2m	
20 ft	lb	-	-	-	-	*14,270	*14,270	*14,020	13,890	-	-	-	*10,010	*10,010	23.4ft	
4.5 m	kg	-	-	*10 230	*10 230	*8 010	*8 010	*7 000	6 280	*6 170	4 420	-	*4 490	4 070	7.9m	
15 ft	lb	-	-	*21,800	*21,800	*17,330	*17,330	*15,250	13,540	*12,460	9,520	-	*9,900	9,030	25.8ft	
3 m	kg	-	-	-	-	*10 230	9 250	*8 000	6 020	*6 940	4 310	-	*4 650	3 710	8.3m	
10 ft	lb	-	-	-	-	*22,050	19,960	*17,370	12,990	*15,140	9,290	-	*10,220	8,190	27.1ft	
1.5 m	kg	-	-	-	-	*12 250	8 690	*9 020	5 750	*7 410	4 180	-	*4 990	3 570	8.4m	
5 ft	lb	-	-	-	-	*26,460	18,740	*19,550	12,420	*16,130	9,020	-	*10,990	7,880	27.4ft	
0 m	kg	-	-	*6 180	*6 180	*13 250	8 370	*9 680	5 560	*7 720	4 080	-	*5 610	3 630	8.2m	
0 ft	lb	-	-	*14,270	*14,270	*28,700	18,030	*21,000	12,000	*16,750	8,810	-	*12,380	8,000	26.8ft	
-1.5 m	kg	*6 750	*6 750	*10 980	*10 980	*13 190	8 270	*9 770	5 470	*7 580	4 040	-	*6 740	3 920	7.7m	
-5 ft	lb	*15,120	*15,120	*24,960	*24,960	*28,610	17,800	*21,180	11,800	*16,330	8,740	-	*14,900	8,660	25.2ft	
-3.0 m	kg	*11 760	*11 760	*17 000	16 530	*12 150	8 310	*9 040	5 490	-	-	-	*7 560	4 610	6.8m	
-10 ft	lb	*26,420	*26,420	*36,850	35,370	*26,290	17,910	*19,470	11,860	-	-	-	*16,680	10,250	22.3ft	
-4.5 m	kg	-	-	*13 310	*13 310	*9 670	8 520	-	-	-	-	-	*7 590	6 440	5.5m	
-15 ft	lb	-	-	*28,510	*28,510	*20,590	18,390	-	-	-	-	-	*16,710	14,540	17.7ft	

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.





# Equipment

STANDARD EQUIPMENT		
	ECR145E	ECR235E
<b>Engine</b>		
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Tier 4f requirements	•	•
Air filter with indicator	•	•
Air intake heater	•	•
Electric engine shut-off	•	•
Fuel filter and water separator	•	•
Standard cooling system	•	•
Fuel filler pump: 30l/min / 7.9gpm with auto stop	•	•
Alternator, 110 A	•	•
<b>Electric/Electronic control system</b>		
Contronics		
Advanced mode control system	•	•
Self-diagnostic system	•	•
Machine status indication	•	•
Satellite Caretrack and 3yr-Caretrack subscription	•	•
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	•	•
Travel alarm	•	•
High-capacity halogen or LED lights:		
Halogen		
Frame-mounted: 1, Boom-mounted: 2	•	•
LED		
Frame-mounted: 1, Boom-mounted: 2	•	•
Batteries, 2 x 12 V / 100 Ah	•	•
Batteries, 2 x 12 V / 150 Ah	•	•
Start motor, 24 V / 5.5 kW	•	•
<b>Hydraulic system</b>		
Automatic sensing hydraulic system		
Summation system	•	•
Boom priority	•	•
Arm priority	•	•
ECO mode fuel saving technology	•	•
Boom, arm and bucket 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, longlife oil 46	•	•
<b>Frame</b>		
Access way with handrail	•	•
Tool storage area	•	•
Punched metal anti-slip plates	•	•
Under cover (heavy duty)	•	•
3 200kg / 7,060lb counterweight	•	•
6 200kg / 13,670lb counterweight		•

	ECR145E	ECR235E
<b>Cab and interior</b>		
ROPS (ISO12117-2) certified cab with openable roof hatch	•	•
Silicon oil and rubber mounts with spring	•	•
Control lock out lever	•	•
Travel pedals and hand levers	•	•
Adjustable operator seat with heater and joystick control console	•	•
Control joysticks with 4 switches each	•	•
Heater & air-conditioner, automatic	•	•
Flexible antenna	•	•
Radio with AUX, USB Jack and Bluetooth	•	•
Cab, all-weather sound suppressed, includes:		
Cup holders	•	•
Door locks	•	•
Tinted glass	•	•
Floor mat	•	•
Horn	•	•
Large storage area	•	•
Pull-up type front window	•	•
Removable lower windshield	•	•
Seat belt	•	•
Safety glass	•	•
Sun screens, front, roof, rear	•	•
Windshield wiper with intermittent feature	•	•
Rear view camera	•	•
Straight travel pedal	•	•
Master key	•	•
<b>Undercarriage</b>		
Under cover	•	•
Hydraulic track adjusters	•	•
Greased and sealed track link	•	•
Track Guard	•	•
<b>Digging equipment</b>		
4.6m / 15'1" mono boom	•	•
5.7m / 18'8" mono boom		•
2.5m / 8'2" arm	•	•
2.9m / 9'6" arm		•
Linkage	•	•
Manual centralized lubrication	•	•
<b>Service</b>		
Tool kit, daily maintenance	•	•

OPTIONAL EQUIPMENT		
	ECR145E	ECR235E
<b>Engine</b>		
Block heater: 120 V or 240 V	•	•
Diesel coolant heater, 5 kW	•	•
Water separator with heater	•	•
Auto engine shutdown	•	•
Tropical cooling system	•	•
Reversible cooling fan	•	•
<b>Electric</b>		
Extra work lights (Halogen or LED):		
Cab-mounted 2 (front 1, rear 1)	•	•
Counterweight-mounted 1	•	•
Anti-theft system	•	•
Rotating warning beacon	•	•
<b>Hydraulic system</b>		
Boom hose rupture valve with overload warning device	•	•
Arm hose rupture valve	•	•
Boom float function with HRV	•	•
Boom float function without HRV	•	•
Pilot control pattern change	•	•

## OPTIONAL EQUIPMENT

	ECR145E	ECR235E
<b>Hydraulic system</b>		
Hydraulic piping:		
Work tool management system (up to 20 programmable memories)	•	•
Breaker & shear, 1 or 2 pump flow	•	•
Slope & rotator (40lpm / 11gpm or 60lpm / 16gpm)	•	•
Extra for slope & rotator	•	•
Grapple	•	•
Oil leak (drain) line	•	•
Quick coupler	•	•
Breaker & shear pressure pre-setting	•	•
Volvo hydraulic quick coupler S1 with hook / S1 without hook		•
Volvo hydraulic quick coupler S6 with hook / S6 without hook	•	
Volvo hydraulic quick coupler Universal U22		•
Volvo hydraulic quick coupler Universal U14	•	
Hydraulic oil, biodegradable 46	•	•
Hydraulic oil, ISO VG 46, 68	•	•
Hydraulic oil, longlife oil 32, 68	•	•
<b>Cab and interior</b>		
ROPS (ISO12117-2) certified cab with fixed hatch	•	•
Fabric seat without heater	•	•
Fabric seat with heater and air suspension	•	•
Control joysticks with semi-long	•	•
Control joysticks with 3 switch & 1 propotional	•	•

	ECR145E	ECR235E
<b>Cab and interior</b>		
Cab-mounted falling object guard (FOG)	•	•
Cab-mounted falling object protective structure (FOPS)	•	•
Anti-vandalism kit	•	•
Safety net for front window	•	•
Side view camera	•	•
Smoker kit (ashtray and lighter)	•	•
Sunlight protection, roof (steel)	•	•
Rain shield	•	•
Specific key	•	•
<b>Undercarriage</b>		
Dozer blade	•	•
500mm / 20", 600mm / 24", 600mm HD / 24" HD, 700mm HD / 28" HD, 750mm / 30" shoe with triple grousers	•	
500mm / 20" shoe with rubber grousers	•	
600mm / 24", 600mm HD / 24" HD, 700mm / 28", 800mm / 32", 900mm / 36" shoe with triple grousers		•
700mm / 28" shoe with double grousers		•
600mm / 24" shoe with rubber grousers		•
Full track guard		•
<b>Digging equipment</b>		
4.72m / 15'6" 2-piece boom	•	
5.76m / 18'11" 2-piece boom		•
2.1m / 6'11", 3.0 m / 9'10" arm	•	
2.5 m / 8'2" arm		•
Linkage with lifting eye	•	•
<b>Service</b>		
Tool kit, compact	•	•

## Selection of Volvo optional equipment

Side view camera



Anti-vandal kit



Safety net



LED lights



Dozer blade



Two piece boom



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

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