



Volvo Construction Equipment

# ECR145E, ECR235E

Volvo Excavators 14.4-16.7 t 122 hp | 23.7-27.8 t 175 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 industry experts. 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.



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 Stage IV 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.



## Stage IV engine

Featuring proven advanced technology, and built on decades of experience, Volvo's robust Stage IV 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), H (heavy) and P\* (power max).



## 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.

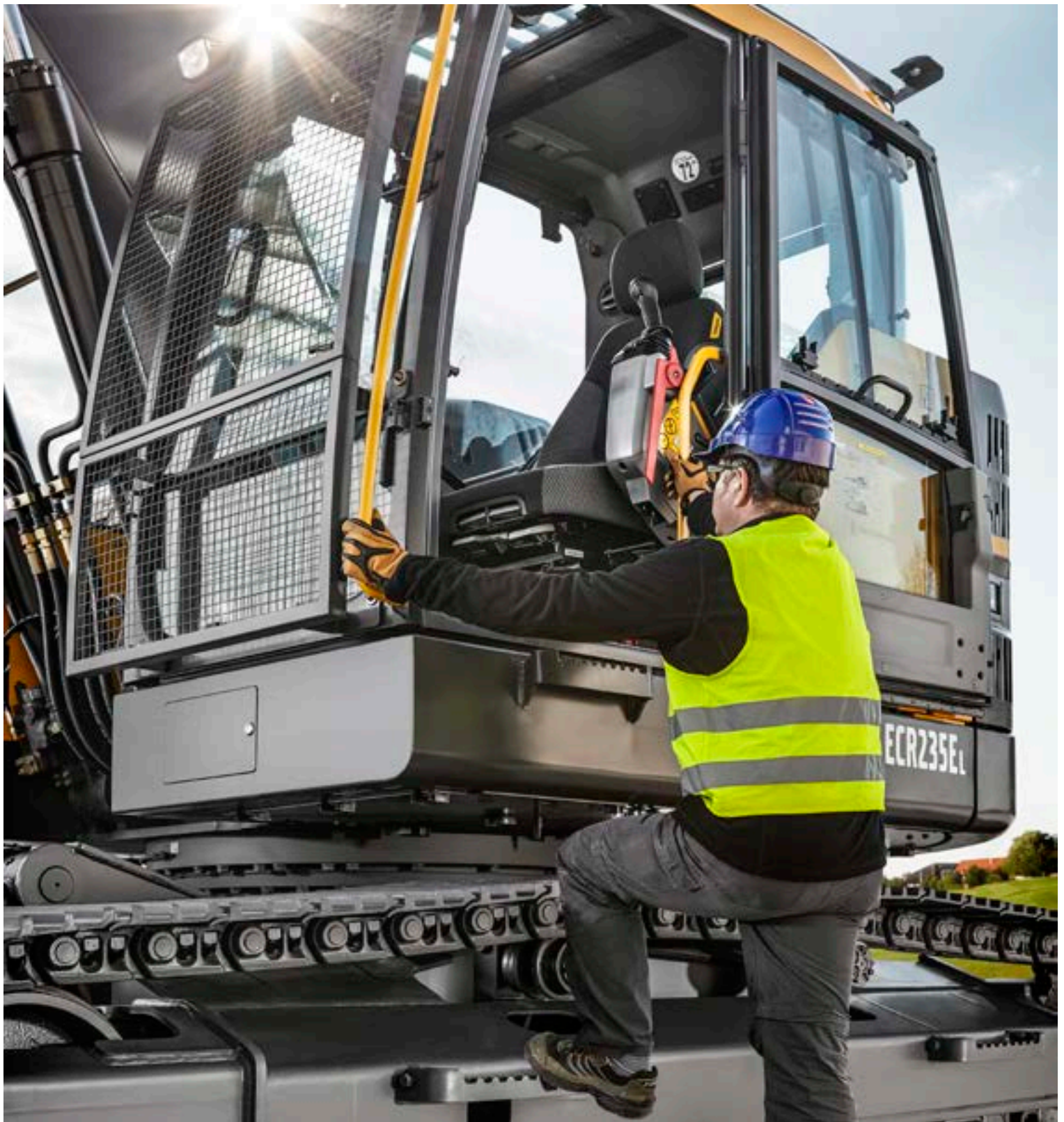




# SHORT SWING RADIUS



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.



## 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.



## 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.



## Shortcut button

The windshield wipers, camera, audio mute and power max 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.

## 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.



## 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.



## 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.



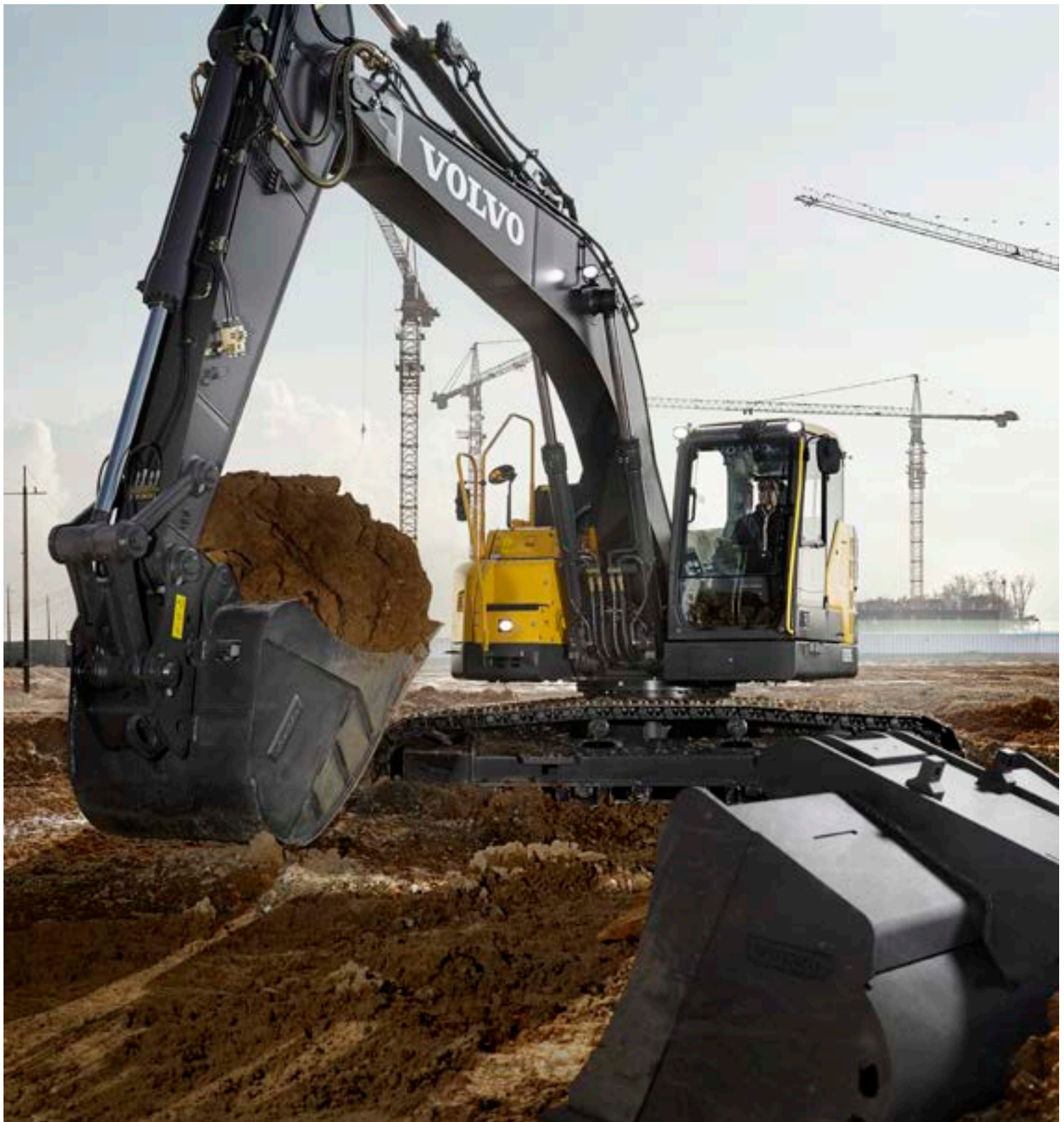




# ENHANCED HYDRAULIC SYSTEM



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



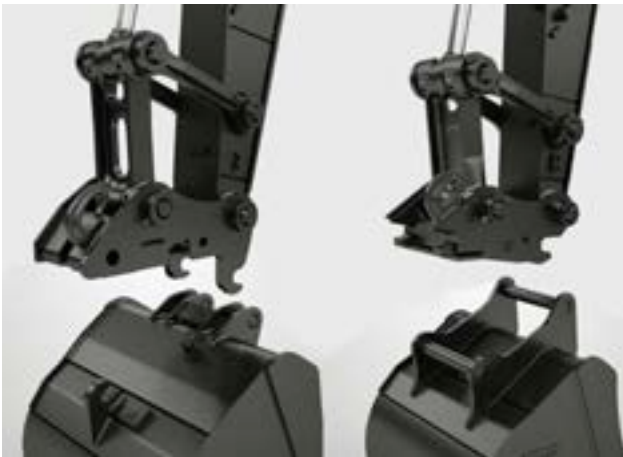
Volvo's buckets are the perfectly matched tool for digging and re-handling in all working conditions. Choose from durable General Purpose or Heavy-duty buckets, providing maximum productivity, long life and feature original Volvo wear components.

# 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.



## Tilt Rotator

Volvo's tilt rotator can be ordered factory installed with multifunctional joysticks and a color display that's fully integrated into the machine's system. The new series of Volvo Aggressive Cut excavator buckets are perfectly matched to the factory-installed tilt rotator.



## 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

### Stage IV engine (D6)

Volvo's robust Stage IV engine boasts more power while reducing fuel consumption and emissions.

### AdBlue®

Volvo offers a total AdBlue® solution that is quality assured, cost efficient and easily accessible. ® = registered trademark of the Verband der Automobilindustrie e.V. (VDA)

### 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 / Stage IV 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 / 121
Gross, ISO 14396/SAE J1995	kW / hp	90 / 122
Max torque at	Nm/ r/min	566 / 1 500
No. of cylinders		4
Displacement	l	4.0
Bore	mm	101
Stroke	mm	126

ECR235E		
Engine	Volvo	D6J
Max power at	r/s / r/min	30 / 1 800
Net, ISO 9249/SAE J1349	kW / hp	128 / 174
Gross, ISO 14396/SAE J1995	kW / hp	129 / 175
Max torque at	Nm/ r/min	850 / 1 350
No. of cylinders		6
Displacement	l	5.7
Bore	mm	98
Stroke	mm	126

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 83

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	119 208.9
Max. travel speed	km/h	3.0 / 5.5 3.0 / 5.5
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	171 190
Shoe width, triple grouser	mm	500 / 600 / 750 600 / 700 / 800 / 900
Shoe width, triple grouser, HD	mm	600 / 700 600
Shoe width, double grouser	mm	- 700
Shoe width, rubber grouser	mm	500 600
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.		
<b>Main pump,</b> Type 2 x variable displacement axial piston pumps		
Maximum flow	l/min	2 x 124 2 x 207
<b>Pilot pump,</b> Type Gear pump		
Maximum flow	l/min	1 x 20 1 x 18
<b>Relief valve setting:</b>		
Implement	MPa	32.4 / 34.3 34.3 / 36.3
Travel circuit	MPa	34.3 34.3
Slew circuit	MPa	26.5 27.9
Pilot circuit	MPa	3.9 3.9

Hydraulic motors	ECR145E	ECR235E
<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 2
Bore x Stroke	ø x mm	105 x 1 055 130 x 1 420
1st boom of 2 piece boom		2 2
Bore x Stroke	ø x mm	110 x 980 130 x 1 345
2nd boom of 2 piece boom		1 1
Bore x Stroke	ø x mm	160 x 765 160 x 1 070
Arm		1 1
Bore x Stroke	ø x mm	120 x 1 028 135 x 1 520
Bucket		1 1
Bore x Stroke	ø x mm	100 x 865 120 x 1 065
Dozer blade		2 2
Bore x Stroke	ø x mm	130 x 270 140 x 320
Service refill capacities	ECR145E	ECR235E
Fuel tank	l	200 286
Hydraulic system, total	l	200 280
Hydraulic tank	l	59 126
AdBlue tank	l	15.5 24.9
Engine oil	l	15.5 25
Engine coolant	l	26 30
Swing reduction unit	l	3.9 7
Travel reduction unit	l	2 x 2.2 2 x 5

**Cab**  
The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the side door.  
**Integrated air-conditioning and heating system:** The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents.  
**Ergonomic operator's seat:** The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety.

Sound Level	ECR145E	ECR235E
Sound level in cab according to ISO 6396		
LpA (standard)	dB(A)	71 71
LpA (tropical)	dB(A)	72 72
External sound level according to ISO 6395, EU Noise Directive (2000/14/EC)		
LwA (standard)	dB(A)	100 101
LwA (tropical)	dB(A)	101 102

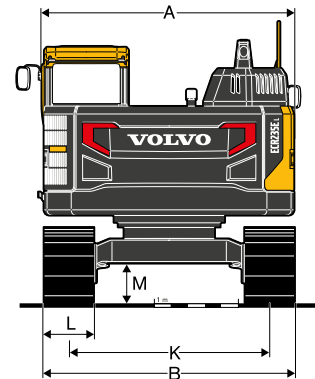
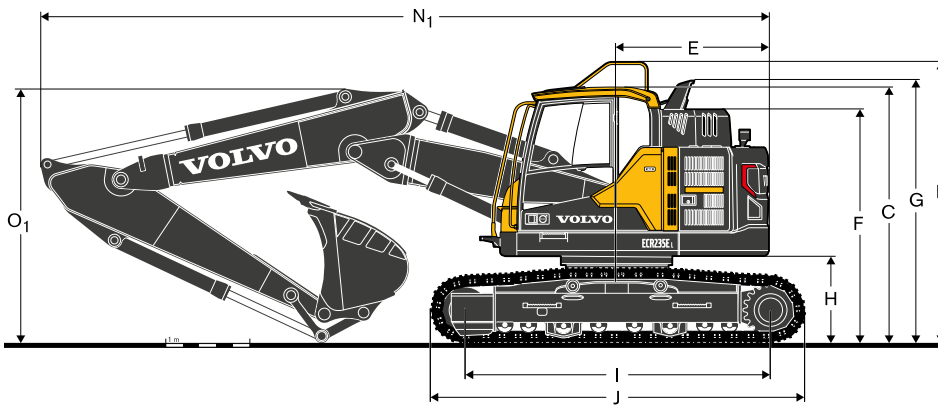
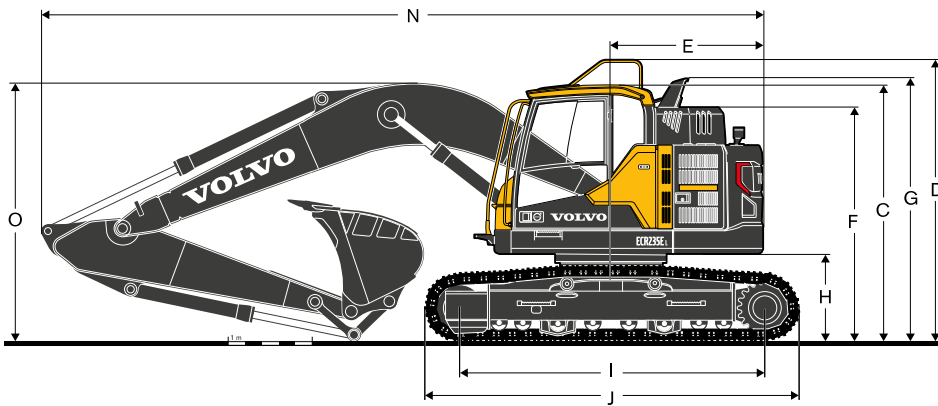


# Specifications

## MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe width	Operating weight	Ground pressure	Overall width	Operating weight	Ground pressure	Overall width
	mm	kg	kPa	mm	kg	kPa	mm
		<b>ECR145EL</b>					
		<b>4.6m boom, 2.5m arm, 443kg / 660l bucket, 3 200kg counterweight</b>			<b>4.72m 2-piece boom, 2.5m arm, 443kg / 660l bucket, 3 200kg counterweight</b>		
<b>Triple grouser</b>	500	14 920	44.1	2 490	15 310	45.1	2 490
	600	15 120	37.3	2 590	15 510	38.2	2 590
	750	15 500	30.4	2 740	15 890	31.4	2 740
<b>Triple grouser, HD</b>	600	15 185	37.3	2 590	15 570	38.2	2 590
	700	15 400	32.4	2 690	15 785	33.3	2 690
<b>Rubber grouser</b>	500	14 955	44.1	2 490	15 340	46.1	2 490
<b>Add on rubber grouser</b>	500	15 370	46.1	2 490	15 760	47.1	2 490
		<b>ECR145EL with dozer blade</b>					
		<b>4.6m boom, 2.5m arm, 443kg / 660l bucket, 3 200kg counterweight</b>			<b>4.72m 2-piece boom, 2.5m arm, 443kg / 660l bucket, 3 200kg counterweight</b>		
<b>Triple grouser</b>	500	15 790	47.1	2 490	16 180	48.0	2 490
	600	16 000	39.2	2 590	16 390	40.2	2 590
	750	16 385	32.4	2 740	16 770	33.3	2 740
<b>Triple grouser, HD</b>	600	16 070	40.2	2 590	16 455	41.2	2 590
	700	16 280	34.3	2 690	16 670	35.3	2 690
<b>Rubber grouser</b>	500	15 830	47.1	2 490	16 220	48.0	2 490
<b>Add on rubber grouser</b>	500	16 240	48.0	2 490	16 630	49.0	2 490
		<b>ECR235EL</b>					
		<b>5.7m boom, 2.9m arm, 908kg / 1 090l bucket, 6 200kg counterweight</b>			<b>5.57m 2-piece boom, 2.9m arm, 908kg / 1 090l bucket, 6 200kg counterweight</b>		
<b>Triple grouser</b>	600	24 570	51.0	2 990	25 140	52.0	2 990
	700	25 040	44.1	3 090	25 600	45.1	3 090
	800	25 315	39.2	3 190	25 880	40.2	3 190
	900	25 610	35.3	3 290	26 180	36.3	3 290
<b>Triple grouser, HD</b>	600	25 780	53.0	2 990	25 310	52.0	2 990
<b>Double grouser</b>	700	25 300	45.1	3 090	25 860	46.1	3 090
<b>Rubber grouser</b>	600	24 700	51.0	2 990	25 430	53.0	2 990
<b>Add on rubber grouser</b>	600	25 300	52.0	2 990	26 030	53.9	2 990
		<b>ECR235EL with dozer blade</b>					
		<b>5.7m boom, 2.9m arm, 908kg / 1 090l bucket, 6 200kg counterweight</b>			<b>5.57m 2-piece boom, 2.9m arm, 908kg / 1 090l bucket, 6 200kg counterweight</b>		
<b>Triple grouser</b>	600	25 955	53.9	2 990	26 520	54.9	2 990
	700	26 440	47.1	3 090	27 000	48.0	3 090
	800	26 730	41.2	3 190	27 290	42.2	3 190
	900	27 020	37.3	3 290	27 590	38.2	3 290
<b>Triple grouser, HD</b>	600	27 160	55.9	2 990	26 690	54.9	2 990
<b>Double grouser</b>	700	26 695	47.1	3 090	27 260	48.0	3 090
<b>Rubber grouser</b>	600	26 080	53.9	2 990	26 820	55.9	2 990
<b>Add on rubber grouser</b>	600	26 680	54.9	2 990	27 410	56.9	2 990

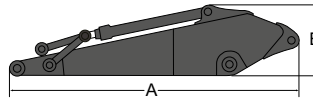
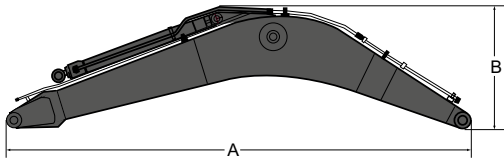
# Specifications



Description		Unit	ECR145EL			ECR235EL	
Boom		m	4.6 mono or 4.72 2-piece			5.7 mono or 5.57 2-piece	
Arm		m	2.1	2.5	3.0	2.5	2.9
A	Overall width of upper structure	mm	2 490	2 490	2 490	2 990	2 990
B	Overall width	mm	2 690	2 690	2 690	3 090	3 090
C	Overall height of cab	mm	2 895	2 895	2 895	2 965	2 965
D	Overall height of guardrail(unfolded)	mm	3 075	3 075	3 075	3 365	3 365
D'	Overall height of guardrail(folded)	mm	-	-	-	2 925	2 925
E	Tail swing radius	mm	1 494	1 494	1 494	1 810	1 810
F	Overall height of engine hood	mm	2 545	2 545	2 545	2 780	2 780
G	Overall height of diffuser	mm	2 775	2 775	2 775	3 035	3 035
H	Counterweight clearance *	mm	900	900	900	1 025	1 025
I	Tumbler length	mm	3 040	3 040	3 040	3 660	3 660
J	Track length	mm	3 750	3 750	3 750	4 460	4 460
K	Track gauge	mm	1 990	1 990	1 990	2 390	2 390
L	Shoe width	mm	700	700	700	700	700
M	Min. ground clearance *	mm	430	430	430	460	460
N	Overall length	mm	7 400	7 405	7 345	9 070	9 010
N <sub>1</sub>	Overall length	mm	7 505	7 470	7 370	9 090	9 065
O	Overall height of boom	mm	2 760	2 900	3 250	3 330	3 190
O <sub>1</sub>	Overall height of boom	mm	2 710	2 910	3 470	3 060	3 030

\* Without shoe grouser.

<sub>1</sub> 2-piece boom



### ECR145E

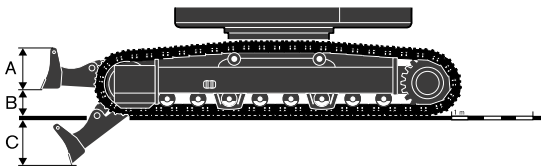
Description	Unit	mono	2-piece	Description	Unit			
<b>Boom</b>	<b>m</b>	<b>4.6</b>	<b>4.72</b>	<b>Arm</b>	<b>m</b>	<b>2.1</b>	<b>2.5</b>	<b>3.0</b>
A Length	mm	4 770	4 885	A Length	mm	2 790	3 195	3 690
B Height	mm	1 370	1 135	B Height	mm	680	675	750
Width	mm	545	545	Width	mm	275	275	275
Weight	kg	1 130	1 450	Weight	kg	560	624	684

### ECR235E

Description	Unit	mono	2-piece	Description	Unit		
<b>Boom</b>	<b>m</b>	<b>5.7</b>	<b>5.57</b>	<b>Arm</b>	<b>m</b>	<b>2.5</b>	<b>2.9</b>
A Length	mm	5 910	5 965	A Length	mm	3 525	3 910
B Height	mm	1 770	1 300	B Height	mm	860	860
Width	mm	670	670	Width	mm	440	440
Weight	kg	2 000	2 570	Weight	kg	975	1 000

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

\* Includes cylinder, linkage and pin

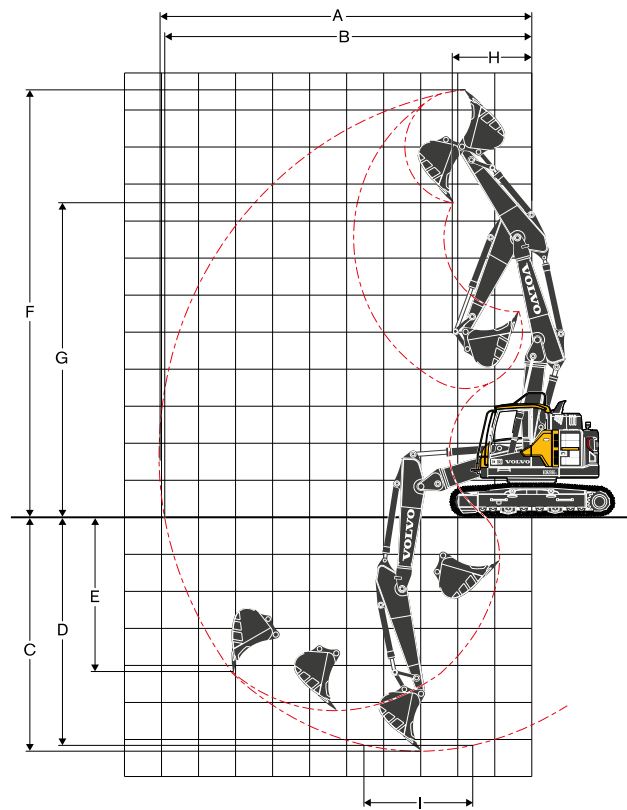
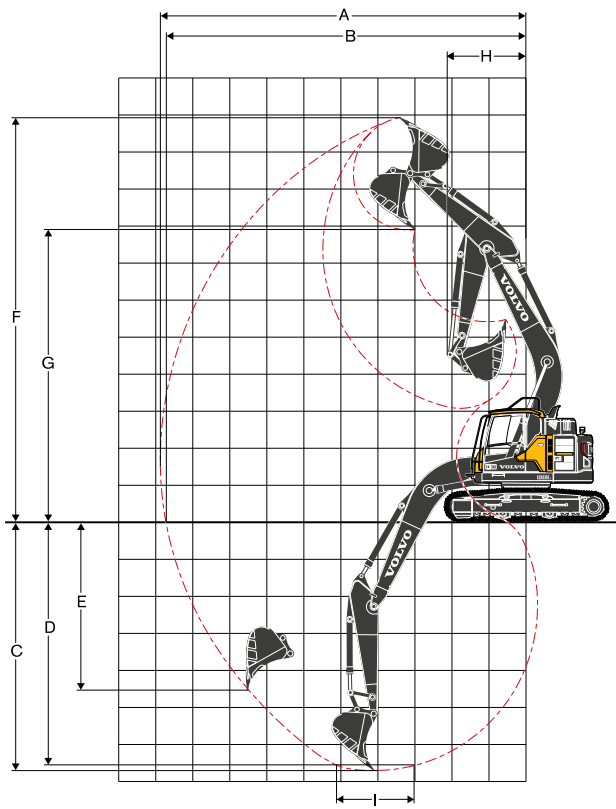


### Front dozer blade

Description	Unit	ECR145E	ECR235E
A Height	mm	585	600
Width 500mm shoe	mm	2 490	-
Width 600mm shoe	mm	2 590	2 990
Width 700mm shoe	mm	2 690	3 090
Width 800mm shoe	mm	-	3 190
Weight	kg	460	790
B Lift height	mm	478	610
C Digging depth	mm	601	480

# Specifications

## WORKING RANGES



Description		Unit	ECR145E						ECR235E			
Boom		m	4.6 mono			4.72 2-piece			5.7 mono		5.57 2-piece	
Arm		m	2.1	2.5	3.0	2.1	2.5	3.0	2.5	2.9	2.5	2.9
A	Max. digging reach	mm	7 990	8 360	8 850	8 220	8 610	9 100	9 510	9 890	9 690	10 085
B	Max. digging reach on ground	mm	7 840	8 215	8 720	8 070	8 465	8 970	9 340	9 735	9 660	9 930
C	Max. digging depth	mm	5 130	5 530	6 030	5 235	5 640	6 145	6 350	6 755	5 950	6 355
D	Max. digging depth (l = 2.44m level)	mm	4 880	5 310	5 850	5 115	5 525	6 040	6 120	6 550	5 840	6 250
E	Max. vertical wall digging depth	mm	3 954	4 325	4 855	4 155	4 523	5 015	5 220	5 685	4 910	5 325
F	Max. cutting height	mm	9 090	9 415	9 860	9 380	9 740	10 205	10 600	10 915	11 150	11 515
G	Max. dumping height	mm	6 550	6 875	7 310	6 830	7 190	7 660	7 560	7 870	8 095	8 460
H	Min. front swing radius	mm	1 929	2 130	2 505	2 330	2 590	3 010	2 395	2 170	2 235	2 160
<b>DIGGING FORCES WITH DIRECT FIT BUCKET</b>												
Bucket radius		mm	1 274	1 274	1 274	1 274	1 274	1 274	1 528	1 528	1 528	1 528
Breakout force - bucket	Normal	SAE J1179	kN	80.5	80.5	80.5	80.5	80.5	80.5	125.0	125.0	125.0
	Power boost	SAE J1179	kN	85.4	85.4	85.4	85.4	85.4	85.4	132.1	132.2	132.1
	Normal	ISO 6015	kN	91.1	91.1	91.1	91.1	91.1	91.1	141.3	141.3	141.3
	Power boost	ISO 6015	kN	96.6	96.6	96.6	96.6	96.6	96.6	149.4	149.4	149.4
Tearout force - dipper arm	Normal	SAE J1179	kN	69.5	62.1	55.3	69.5	62.1	55.3	117.2	101.3	117.2
	Power boost	SAE J1179	kN	73.8	65.8	58.6	73.8	65.8	58.6	123.9	107.1	123.9
	Normal	ISO 6015	kN	71.4	63.5	56.3	71.4	63.5	56.3	120.7	103.9	120.7
	Power boost	ISO 6015	kN	75.8	67.3	59.8	75.8	67.3	59.8	127.6	109.9	127.6
Rotation angle, bucket		°	175	175	175	175	175	175	175	175	175	175

**BUCKET SELECTION GUIDE**

Bucket type		Capacity	Cutting width	Weight	Teeth	ECR145E					
						600mm shoe, 3 200kg counterweight					
						4.6m boom			4.72m 2-piece boom		
						L	mm	kg	EA	2.1m arm	2.5m arm
Direct fit Buckets	Without Quick Coupler	250	450	293	3	C	C	C	C	C	C
		330	600	324	3	C	C	C	C	C	C
		420	750	355	3	C	C	C	C	C	C
		540	900	403	4	C	C	C	C	C	C
		660	1 050	443	4	C	C	C	C	C	C
		770	1 200	504	5	C	C	B	C	C	B
General purpose	U type quick coupler	250	450	293	3	C	C	C	C	C	C
		330	600	324	3	C	C	C	C	C	C
		420	750	355	3	C	C	C	C	C	C
		540	900	403	4	C	C	C	C	C	C
		660	1 050	443	4	C	C	B	C	C	B
		770	1 200	504	5	C	B	A	C	B	A

Bucket type		Capacity	Cutting width	Weight	Teeth	ECR145E					
						700mm shoe, 3 200kg counterweight					
						4.6m boom			4.72m 2-piece boom		
						L	mm	kg	EA	2.1m arm	2.5m arm
Direct fit Buckets	Without Quick Coupler	250	450	293	3	C	C	C	C	C	C
		330	600	324	3	C	C	C	C	C	C
		420	750	355	3	C	C	C	C	C	C
		540	900	403	4	C	C	C	C	C	C
		660	1 050	443	4	C	C	C	C	C	C
		770	1 200	504	5	C	C	B	C	C	C
General purpose	U type quick coupler	250	450	293	3	C	C	C	C	C	C
		330	600	324	3	C	C	C	C	C	C
		420	750	355	3	C	C	C	C	C	C
		540	900	403	4	C	C	C	C	C	C
		660	1 050	443	4	C	C	C	C	C	C
		770	1 200	504	5	C	C	B	C	B	A

Bucket type		Capacity	Cutting width	Weight	Teeth	ECR235E							
						600mm shoe, 6 200kg counterweight				700mm shoe, 6 200kg counterweight			
						5.7m boom		5.57m 2-piece boom		5.7m boom		5.57m 2-piece boom	
						L	mm	kg	EA	2.5m arm	2.9m arm	2.5m arm	2.9m arm
Direct fit Buckets	Without Quick Coupler	480	600	623	3	C	C	C	C	C	C	C	C
		630	800	703	4	C	C	C	C	C	C	C	C
		750	900	749	4	C	C	C	C	C	C	C	C
		920	1 050	819	4	C	C	C	C	C	C	C	C
		1 090	1 200	908	5	C	C	C	C	C	C	C	C
		1 270	1 350	995	5	C	C	C	B	C	C	C	C
		1 440	1 500	1 085	6	C	B	B	B	C	B	B	B
		1 440	1 500	1 085	6	B	A	A	A	B	A	B	A
General purpose	U type quick coupler	480	600	623	3	C	C	C	C	C	C	C	C
		630	800	703	4	C	C	C	C	C	C	C	C
		750	900	749	4	C	C	C	C	C	C	C	C
		920	1 050	819	4	C	C	C	C	C	C	C	C
		1 090	1 200	908	5	C	C	C	C	C	C	C	C
		1 270	1 350	995	5	C	B	B	B	C	B	B	B
		1 440	1 500	1 085	6	B	A	A	A	B	A	B	A

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.

**Maximum material density**

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

# 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	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		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	m
Boom : 4.6m	7.5m kg	-	-	-	-	-	-	-	-	-	-	*5 360	*5 360	2.8
Arm : 2.1m	6.0m kg	-	-	*4 360	*4 360	*4 190	3 820	-	-	-	-	*4 220	3 240	5.0
Shoe : 500mm	4.5m kg	-	-	*5 220	*5 220	*4 360	3 760	3 790	2 380	-	-	3 770	2 370	6.0
CWT : 3 200kg	3.0m kg	-	-	*7 560	6 610	*5 090	3 580	3 740	2 330	-	-	3 250	2 030	6.6
	1.5m kg	-	-	-	-	5 640	3 370	3 650	2 250	-	-	3 090	1 910	6.7
	0.0m kg	-	-	*5 520	*5 520	5 500	3 240	3 580	2 190	-	-	3 180	1 950	6.5
	-1.5m kg	*5 200	*5 200	*8 140	5 900	5 460	3 210	-	-	-	-	3 620	2 210	5.9
	-3.0m kg	-	-	*6 040	6 030	*4 140	3 290	-	-	-	-	*3 610	2 990	4.8
Boom : 4.6m	7.5m kg	-	-	*4 380	*4 380	-	-	-	-	-	-	*4 270	*4 270	3.7
Arm : 2.5m	6.0m kg	-	-	-	-	*3 750	*3 750	-	-	-	-	*3 440	2 810	5.5
Shoe : 500mm	4.5m kg	-	-	*4 420	*4 420	*4 000	3 800	*3 710	2 400	-	-	*3 220	2 140	6.4
CWT : 3 200kg	3.0m kg	-	-	*6 780	6 770	*4 770	3 610	3 750	2 330	-	-	2 980	1 850	6.9
	1.5m kg	-	-	-	-	*5 630	3 380	3 640	2 240	-	-	2 840	1 750	7.1
	0.0m kg	-	-	*6 130	5 840	5 480	3 220	3 560	2 160	-	-	2 910	1 780	6.9
	-1.5m kg	*4 770	*4 770	*8 600	5 820	5 420	3 170	3 530	2 140	-	-	3 260	1 980	6.4
	-3.0m kg	*9 220	*9 220	*6 790	5 920	*4 680	3 210	-	-	-	-	*3 560	2 550	5.3
Boom : 4.6m	7.5m kg	-	-	-	-	*3 460	*3 460	-	-	-	-	*3 360	*3 360	4.6
Arm : 3.0m	6.0m kg	-	-	-	-	*3 220	*3 220	*3 030	2 410	-	-	*2 830	2 350	6.1
Shoe : 500mm	4.5m kg	-	-	-	-	*3 510	*3 510	*3 350	2 410	-	-	*2 670	1 850	7.0
CWT : 3 200kg	3.0m kg	-	-	*5 740	*5 740	*4 300	3 630	*3 650	2 320	-	-	2 650	1 630	7.4
	1.5m kg	-	-	-	-	*5 260	3 370	3 610	2 210	2 570	1 560	2 530	1 540	7.6
	0.0m kg	-	-	*6 540	5 770	5 430	3 170	3 510	2 110	-	-	2 580	1 560	7.4
	-1.5m kg	*4 120	*4 120	*8 920	5 670	5 330	3 080	3 450	2 060	-	-	2 830	1 710	6.9
	-3.0m kg	*7 550	*7 550	*7 500	5 740	*5 090	3 090	-	-	-	-	*3 340	2 100	6.0
	-4.5m kg	-	-	*4 580	*4 580	-	-	-	-	-	-	*2 830	*2 830	4.4
Boom : 4.6m	7.5m kg	-	-	-	-	*4 360	*4 360	*4 190	*4 190	-	-	*5 360	*5 360	2.8
Arm : 2.1m	6.0m kg	-	-	*4 360	*4 360	*4 190	*4 190	-	-	-	-	*4 220	3 600	5.0
Shoe : 500mm	4.5m kg	-	-	*5 220	*5 220	*4 360	4 180	*3 980	2 650	-	-	*3 910	2 640	6.0
CWT : 3 200kg	3.0m kg	-	-	*7 560	7 420	*5 090	3 990	*4 150	2 600	-	-	*3 930	2 270	6.6
Dozer blade down	1.5m kg	-	-	-	-	*5 850	3 780	*4 410	2 520	-	-	*3 960	2 140	6.7
	0.0m kg	-	-	*5 520	*5 520	*6 120	3 650	*4 450	2 460	-	-	*3 980	2 200	6.5
	-1.5m kg	*5 200	*5 200	*8 140	6 690	*5 670	3 620	-	-	-	-	*3 930	2 490	5.9
	-3.0m kg	-	-	*6 040	*6 040	*4 140	3 690	-	-	-	-	*3 610	3 350	4.8
Boom : 4.6m	7.5m kg	-	-	*4 380	*4 380	-	-	-	-	-	-	*4 270	*4 270	3.7
Arm : 2.5m	6.0m kg	-	-	-	-	*3 750	*3 750	-	-	-	-	*3 440	3 120	5.5
Shoe : 500mm	4.5m kg	-	-	*4 420	*4 420	*4 000	*4 000	*3 710	2 680	-	-	*3 220	2 390	6.4
CWT : 3 200kg	3.0m kg	-	-	*6 780	*6 780	*4 770	4 020	*3 950	2 610	-	-	*3 240	2 080	6.9
Dozer blade down	1.5m kg	-	-	-	-	*5 630	3 790	*4 280	2 510	-	-	*3 440	1 970	7.1
	0.0m kg	-	-	*6 130	*6 130	*6 060	3 630	*4 430	2 440	-	-	*3 730	2 010	6.9
	-1.5m kg	*4 770	*4 770	*8 600	6 610	*5 820	3 570	*4 130	2 410	-	-	*3 730	2 240	6.4
	-3.0m kg	*9 220	*9 220	*6 790	6 710	*4 680	3 620	-	-	-	-	*3 560	2 870	5.3
Boom : 4.6m	7.5m kg	-	-	-	-	*3 460	*3 460	-	-	-	-	*3 360	*3 360	4.6
Arm : 3.0m	6.0m kg	-	-	-	-	*3 220	*3 220	*3 030	2 690	-	-	*2 830	2 620	6.1
Shoe : 500mm	4.5m kg	-	-	-	-	*3 510	*3 510	*3 350	2 680	-	-	*2 670	2 080	7.0
CWT : 3 200kg	3.0m kg	-	-	*5 740	*5 740	*4 300	4 050	*3 650	2 600	-	-	*2 670	1 830	7.4
Dozer blade down	1.5m kg	-	-	-	-	*5 260	3 780	*4 050	2 480	*3 120	1 770	*2 810	1 740	7.6
	0.0m kg	-	-	*6 540	*6 540	*5 880	3 580	*4 320	2 380	-	-	*3 110	1 760	7.4
	-1.5m kg	*4 120	*4 120	*8 920	6 460	*5 880	3 490	*4 220	2 330	-	-	*3 410	1 930	6.9
	-3.0m kg	*7 550	*7 550	*7 500	6 530	*5 090	3 500	-	-	-	-	*3 340	2 380	6.0
	-4.5m kg	-	-	*4 580	*4 580	-	-	-	-	-	-	*2 830	*2 830	4.4
Boom : 4.72m 2-piece	7.5m kg	-	-	*6 240	*6 240	-	-	-	-	-	-	*5 300	*5 300	3.4
Arm : 2.1m	6.0m kg	-	-	*5 290	*5 290	*5 480	3 850	-	-	-	-	*3 950	2 930	5.3
Shoe : 500mm	4.5m kg	-	-	*5 480	*5 480	*5 690	3 770	3 820	2 380	-	-	3 550	2 200	6.3
CWT : 3 200kg	3.0m kg	-	-	-	-	5 910	3 560	3 760	2 320	-	-	3 090	1 910	6.8
	1.5m kg	-	-	-	-	5 660	3 340	3 660	2 230	-	-	2 950	1 800	6.9
	0.0m kg	-	-	-	-	5 510	3 210	3 590	2 170	-	-	3 040	1 850	6.8
	-1.5m kg	-	-	*6 990	5 880	*5 410	3 190	3 590	2 170	-	-	*3 190	2 090	6.2
Boom : 4.72m 2-piece	7.5m kg	-	-	*5 310	*5 310	-	-	-	-	-	-	*4 030	*4 030	4.1
Arm : 2.5m	6.0m kg	-	-	-	-	*4 690	3 910	-	-	-	-	*3 210	2 550	5.8
Shoe : 500mm	4.5m kg	-	-	*4 100	*4 100	*4 890	3 820	3 850	2 410	-	-	*2 940	1 990	6.7
CWT : 3 200kg	3.0m kg	-	-	-	-	5 960	3 600	3 770	2 330	-	-	2 830	1 740	7.2
	1.5m kg	-	-	-	-	5 680	3 350	3 660	2 230	-	-	2 710	1 650	7.3
	0.0m kg	-	-	-	-	5 490	3 190	3 570	2 150	-	-	2 780	1 680	7.2
	-1.5m kg	-	-	*7 870	5 790	5 430	3 140	3 540	2 120	-	-	3 090	1 870	6.6
	-3.0m kg	-	-	-	-	*3 840	3 200	-	-	-	-	-	-	5.7

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		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		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	m
Boom : 4.72m 2-piece Arm : 3.0m Shoe : 500mm CWT : 3 200kg	7.5m	kg	-	-	-	-	*3 980	3 890	-	-	-	-	*3 180	*3 180	5.0
	6.0m	kg	-	-	-	-	*3 770	*3 770	*3 530	2 430	-	-	*2 640	2 150	6.4
	4.5m	kg	-	-	-	-	*3 730	*3 730	3 870	2 410	-	-	*2 440	1 720	7.2
	3.0m	kg	-	-	-	-	*5 060	3 630	3 760	2 320	2 630	1 600	*2 390	1 520	7.7
	1.5m	kg	-	-	-	-	5 680	3 350	3 630	2 190	2 580	1 550	2 410	1 450	7.8
	0.0m	kg	-	-	-	-	5 440	3 140	3 520	2 090	2 540	1 510	2 460	1 470	7.7
	-1.5m	kg	-	-	*7 460	5 630	5 340	3 050	3 460	2 040	-	-	2 700	1 610	7.2
	-3.0m	kg	-	-	*6 170	5 710	*4 530	3 070	*2 830	2 080	-	-	*2 260	1 960	6.3
Boom : 4.72m 2-piece Arm : 2.1m Shoe : 500mm CWT : 3 200kg Dozer blade down	7.5m	kg	-	-	*6 240	*6 240	-	-	-	-	-	-	*5 300	*5 300	3.4
	6.0m	kg	-	-	*5 290	*5 290	*5 480	4 270	-	-	-	-	*3 950	3 270	5.3
	4.5m	kg	-	-	*5 480	*5 480	*5 690	4 190	*4 790	2 660	-	-	*3 580	2 460	6.3
	3.0m	kg	-	-	-	-	*6 320	3 980	*4 900	2 600	-	-	*3 500	2 140	6.8
	1.5m	kg	-	-	-	-	*6 780	3 750	*4 970	2 510	-	-	*3 630	2 030	6.9
	0.0m	kg	-	-	-	-	*6 530	3 620	*4 690	2 450	-	-	*3 750	2 090	6.8
	-1.5m	kg	-	-	*6 990	6 680	*5 410	3 600	*3 600	2 440	-	-	*3 190	2 350	6.2
	-3.0m	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Boom : 4.72m 2-piece Arm : 2.5m Shoe : 500mm CWT : 3 200kg Dozer blade down	7.5m	kg	-	-	*5 310	*5 310	-	-	-	-	-	-	*4 030	*4 030	4.1
	6.0m	kg	-	-	-	-	*4 690	4 330	-	-	-	-	*3 210	2 850	5.8
	4.5m	kg	-	-	*4 100	*4 100	*4 890	4 230	*4 570	2 680	-	-	*2 940	2 230	6.7
	3.0m	kg	-	-	-	-	*6 060	4 020	*4 760	2 600	-	-	*2 880	1 960	7.2
	1.5m	kg	-	-	-	-	*6 670	3 770	*4 930	2 500	-	-	*2 980	1 860	7.3
	0.0m	kg	-	-	-	-	*6 630	3 600	*4 790	2 420	-	-	*3 250	1 900	7.2
	-1.5m	kg	-	-	*7 870	6 590	*5 760	3 550	*4 030	2 400	-	-	*3 110	2 110	6.6
	-3.0m	kg	-	-	-	-	*3 840	3 610	-	-	-	-	-	-	-
Boom : 4.72m 2-piece Arm : 3.0m Shoe : 500mm CWT : 3 200kg Dozer blade down	7.5m	kg	-	-	-	-	*3 980	*3 980	-	-	-	-	*3 180	*3 180	5.0
	6.0m	kg	-	-	-	-	*3 770	*3 770	*3 530	2 710	-	-	*2 640	2 400	6.4
	4.5m	kg	-	-	-	-	*3 730	*3 730	*3 990	2 690	-	-	*2 440	1 940	7.2
	3.0m	kg	-	-	-	-	*5 060	4 050	*4 530	2 590	*3 170	1 800	*2 390	1 720	7.7
	1.5m	kg	-	-	-	-	*6 410	3 760	*4 790	2 470	*3 760	1 760	*2 460	1 640	7.8
	0.0m	kg	-	-	-	-	*6 630	3 550	*4 800	2 370	*3 470	1 720	*2 640	1 670	7.7
	-1.5m	kg	-	-	*7 460	6 430	*6 040	3 460	*4 310	2 320	-	-	*2 910	1 830	7.2
	-3.0m	kg	-	-	*6 170	*6 170	*4 530	3 480	*2 830	2 350	-	-	*2 260	2 220	6.3
Boom : 4.6m Arm : 2.5m Shoe : 600mm CWT : 3 200kg Dozer blade down	7.5m	kg	-	-	*4 380	*4 380	-	-	-	-	-	-	*4 270	*4 270	3.7
	6.0m	kg	-	-	-	-	*3 750	*3 750	-	-	-	-	*3 440	3 230	5.5
	4.5m	kg	-	-	*4 420	*4 420	*4 000	*4 000	*3 710	2 770	-	-	*3 220	2 470	6.4
	3.0m	kg	-	-	*6 780	*6 780	*4 770	4 160	*3 950	2 700	-	-	*3 240	2 150	6.9
	1.5m	kg	-	-	-	-	*5 630	3 930	*4 280	2 600	-	-	*3 440	2 040	7.1
	0.0m	kg	-	-	*6 130	*6 130	*6 060	3 770	*4 430	2 530	-	-	*3 730	2 080	6.9
	-1.5m	kg	*4 770	*4 770	*8 600	6 880	*5 820	3 710	*4 130	2 500	-	-	*3 730	2 320	6.4
	-3.0m	kg	*9 220	*9 220	*6 790	*6 790	*4 680	3 750	-	-	-	-	*3 560	2 980	5.3
Boom : 4.6m Arm : 3.0m Shoe : 600mm CWT : 3 200kg Dozer blade down	7.5m	kg	-	-	-	-	*3 460	*3 460	-	-	-	-	*3 360	*3 360	4.6
	6.0m	kg	-	-	-	-	*3 220	*3 220	*3 030	2 780	-	-	*2 830	2 710	6.1
	4.5m	kg	-	-	-	-	*3 510	*3 510	*3 350	2 770	-	-	*2 670	2 150	7.0
	3.0m	kg	-	-	*5 740	*5 740	*4 300	4 180	*3 650	2 690	-	-	*2 670	1 900	7.4
	1.5m	kg	-	-	-	-	*5 260	3 920	*4 050	2 570	*3 120	1 830	*2 810	1 800	7.6
	0.0m	kg	-	-	*6 540	*6 540	*5 880	3 710	*4 320	2 470	-	-	*3 110	1 830	7.4
	-1.5m	kg	*4 120	*4 120	*8 920	6 730	*5 880	3 620	*4 220	2 420	-	-	*3 410	2 010	6.9
	-3.0m	kg	*7 550	*7 550	*7 500	6 800	*5 090	3 630	-	-	-	-	*3 340	2 470	6.0
-4.5m	kg	-	-	*4 580	*4 580	-	-	-	-	-	-	*2 830	*2 830	4.4	
Boom : 4.72m 2-piece Arm : 2.1m Shoe : 600mm CWT : 3 200kg	7.5m	kg	-	-	*6 240	*6 240	-	-	-	-	-	-	*5 300	*5 300	3.4
	6.0m	kg	-	-	*5 290	*5 290	*5 480	3 890	-	-	-	-	*3 950	2 970	5.3
	4.5m	kg	-	-	*5 480	*5 480	*5 690	3 820	3 880	2 410	-	-	*3 580	2 230	6.3
	3.0m	kg	-	-	-	-	5 990	3 610	3 810	2 350	-	-	3 140	1 930	6.8
	1.5m	kg	-	-	-	-	5 740	3 390	3 710	2 270	-	-	2 990	1 830	6.9
	0.0m	kg	-	-	-	-	5 590	3 260	3 640	2 200	-	-	3 080	1 880	6.8
	-1.5m	kg	-	-	*6 990	5 960	*5 410	3 240	*3 600	2 200	-	-	*3 190	2 120	6.2
	-3.0m	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Boom : 4.72m 2-piece Arm : 2.5m Shoe : 600mm CWT : 3 200kg	7.5m	kg	-	-	*5 310	*5 310	-	-	-	-	-	-	*4 030	*4 030	4.1
	6.0m	kg	-	-	-	-	*4 690	3 950	-	-	-	-	*3 210	2 590	5.8
	4.5m	kg	-	-	*4 100	*4 100	*4 890	3 860	3 910	2 440	-	-	*2 940	2 010	6.7
	3.0m	kg	-	-	-	-	6 040	3 650	3 820	2 360	-	-	*2 870	1 760	7.2
	1.5m	kg	-	-	-	-	5 760	3 400	3 710	2 260	-	-	2 750	1 670	7.3
	0.0m	kg	-	-	-	-	5 570	3 240	3 620	2 180	-	-	2 820	1 710	7.2
	-1.5m	kg	-	-	*7 870	5 870	5 510	3 190	3 590	2 150	-	-	*3 110	1 900	6.6
	-3.0m	kg	-	-	-	-	*3 840	3 240	-	-	-	-	-	-	-

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		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		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	m
Boom : 4.72m 2-piece Arm : 3.0m Shoe : 600mm CWT : 3 200kg	7.5m	kg	-	-	-	-	*3 980	3 940	-	-	-	-	*3 180	*3 180	5.0
	6.0m	kg	-	-	-	-	*3 770	*3 770	*3 530	2 460	-	-	*2 640	2 170	6.4
	4.5m	kg	-	-	-	-	*3 730	*3 730	3 920	2 440	-	-	*2 440	1 750	7.2
	3.0m	kg	-	-	-	-	*5 060	3 670	3 820	2 350	2 670	1 620	*2 390	1 550	7.7
	1.5m	kg	-	-	-	-	5 760	3 390	3 680	2 230	2 620	1 580	2 450	1 470	7.8
	0.0m	kg	-	-	-	-	5 520	3 190	3 570	2 120	2 580	1 540	2 500	1 490	7.7
	-1.5m	kg	-	-	*7 460	5 710	5 420	3 100	3 520	2 070	-	-	2 740	1 630	7.2
	-3.0m	kg	-	-	*6 170	5 800	*4 530	3 120	*2 830	2 110	-	-	*2 260	1 990	6.3
Boom : 4.72m 2-piece Arm : 2.1m Shoe : 600mm CWT : 3 200kg Dozer blade down	7.5m	kg	-	-	*6 240	*6 240	-	-	-	-	-	-	*5 300	*5 300	3.4
	6.0m	kg	-	-	*5 290	*5 290	*5 480	4 410	-	-	-	-	*3 950	3 380	5.3
	4.5m	kg	-	-	*5 480	*5 480	*5 690	4 330	*4 790	2 750	-	-	*3 580	2 550	6.3
	3.0m	kg	-	-	-	-	*6 320	4 120	*4 900	2 690	-	-	*3 500	2 220	6.8
	1.5m	kg	-	-	-	-	*6 780	3 890	*4 970	2 600	-	-	*3 630	2 110	6.9
	0.0m	kg	-	-	-	-	*6 530	3 760	*4 690	2 540	-	-	*3 750	2 160	6.8
	-1.5m	kg	-	-	*6 990	6 960	*5 410	3 740	*3 600	2 540	-	-	*3 190	2 430	6.2
	-3.0m	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Boom : 4.72m 2-piece Arm : 2.5m Shoe : 600mm CWT : 3 200kg Dozer blade down	7.5m	kg	-	-	*5 310	*5 310	-	-	-	-	-	-	*4 030	*4 030	4.1
	6.0m	kg	-	-	-	-	*4 690	4 470	-	-	-	-	*3 210	2 940	5.8
	4.5m	kg	-	-	*4 100	*4 100	*4 890	4 370	*4 570	2 770	-	-	*2 940	2 300	6.7
	3.0m	kg	-	-	-	-	*6 060	4 150	*4 760	2 700	-	-	*2 880	2 030	7.2
	1.5m	kg	-	-	-	-	*6 670	3 900	*4 930	2 590	-	-	*2 980	1 930	7.3
	0.0m	kg	-	-	-	-	*6 630	3 740	*4 790	2 510	-	-	*3 250	1 970	7.2
	-1.5m	kg	-	-	*7 870	6 860	*5 760	3 690	*4 030	2 490	-	-	*3 110	2 190	6.6
	-3.0m	kg	-	-	-	-	*3 840	3 740	-	-	-	-	-	-	5.7
Boom : 4.72m 2-piece Arm : 3.0m Shoe : 600mm CWT : 3 200kg Dozer blade down	7.5m	kg	-	-	-	-	*3 980	*3 980	-	-	-	-	*3 180	*3 180	5.0
	6.0m	kg	-	-	-	-	*3 770	*3 770	*3 530	2 800	-	-	*2 640	2 480	6.4
	4.5m	kg	-	-	-	-	*3 730	*3 730	*3 990	2 780	-	-	*2 440	2 010	7.2
	3.0m	kg	-	-	-	-	*5 060	4 190	*4 530	2 680	*3 170	1 870	*2 390	1 790	7.7
	1.5m	kg	-	-	-	-	*6 410	3 900	*4 790	2 560	*3 760	1 830	*2 460	1 710	7.8
	0.0m	kg	-	-	-	-	*6 630	3 690	*4 800	2 460	*3 470	1 790	*2 640	1 740	7.7
	-1.5m	kg	-	-	*7 460	6 700	*6 040	3 600	*4 310	2 410	-	-	*2 910	1 900	7.2
	-3.0m	kg	-	-	*6 170	*6 170	*4 530	3 620	*2 830	2 440	-	-	*2 260	*2 260	6.3
Boom : 4.6m Arm : 2.1m Shoe : 700mm CWT : 3 200kg	7.5m	kg	-	-	-	-	-	-	-	-	-	-	*5 360	*5 360	2.8
	6.0m	kg	-	-	*4 360	*4 360	*4 190	3 930	-	-	-	-	*4 220	3 340	5.0
	4.5m	kg	-	-	*5 220	*5 220	*4 360	3 870	3 920	2 450	-	-	3 900	2 440	6.0
	3.0m	kg	-	-	*7 560	6 810	*5 090	3 690	3 870	2 410	-	-	3 370	2 100	6.6
	1.5m	kg	-	-	-	-	5 840	3 480	3 780	2 330	-	-	3 200	1 980	6.7
	0.0m	kg	-	-	*5 520	*5 520	5 690	3 350	3 710	2 260	-	-	3 290	2 020	6.5
	-1.5m	kg	*5 200	*5 200	*8 140	6 100	5 650	3 320	-	-	-	-	3 750	2 290	5.9
	-3.0m	kg	-	-	*6 040	*6 040	*4 140	3 400	-	-	-	-	*3 610	3 090	4.8
Boom : 4.6m Arm : 2.5m Shoe : 700mm CWT : 3 200kg	7.5m	kg	-	-	*4 380	*4 380	-	-	-	-	-	-	*4 270	*4 270	3.7
	6.0m	kg	-	-	-	-	*3 750	*3 750	-	-	-	-	*3 440	2 890	5.5
	4.5m	kg	-	-	*4 420	*4 420	*4 000	3 900	*3 710	2 470	-	-	*3 220	2 200	6.4
	3.0m	kg	-	-	*6 780	*6 780	*4 770	3 710	3 830	2 400	-	-	3 050	1 910	6.9
	1.5m	kg	-	-	*6 310	6 270	*5 630	3 480	3 730	2 310	-	-	2 910	1 810	7.1
	0.0m	kg	-	-	*6 130	6 020	5 610	3 320	3 640	2 230	-	-	2 980	1 840	6.9
	-1.5m	kg	*4 770	*4 770	*8 600	5 990	5 550	3 270	3 620	2 210	-	-	3 340	2 050	6.4
	-3.0m	kg	*9 220	*9 220	*6 790	6 090	*4 680	3 310	-	-	-	-	*3 560	2 630	5.3
Boom : 4.6m Arm : 3.0m Shoe : 700mm CWT : 3 200kg	7.5m	kg	-	-	-	-	*3 460	*3 460	-	-	-	-	*3 360	*3 360	4.6
	6.0m	kg	-	-	-	-	*3 220	*3 220	*3 030	2 490	-	-	*2 830	2 430	6.1
	4.5m	kg	-	-	-	-	*3 510	*3 510	*3 350	2 480	-	-	*2 670	1 920	7.0
	3.0m	kg	-	-	*5 740	*5 740	*4 300	3 740	*3 650	2 400	-	-	*2 670	1 690	7.4
	1.5m	kg	-	-	-	-	*5 260	3 480	3 740	2 280	2 660	1 620	2 620	1 600	7.6
	0.0m	kg	-	-	*6 540	5 960	5 630	3 280	3 640	2 190	-	-	2 670	1 620	7.4
	-1.5m	kg	*4 120	*4 120	*8 920	5 870	5 520	3 190	3 580	2 140	-	-	2 940	1 770	6.9
	-3.0m	kg	*7 550	*7 550	*7 500	5 930	*5 090	3 200	-	-	-	-	*3 340	2 180	6.0
-4.5m	kg	-	-	*4 580	*4 580	-	-	-	-	-	-	*2 830	*2 830	4.4	
Boom : 4.6m Arm : 2.1m Shoe : 700mm CWT : 3 200kg Dozer blade down	7.5m	kg	-	-	-	-	-	-	-	-	-	-	*5 360	*5 360	2.8
	6.0m	kg	-	-	*4 360	*4 360	*4 190	3 930	-	-	-	-	*4 220	3 360	5.0
	4.5m	kg	-	-	*5 220	*5 220	*4 360	3 870	*3 980	2 840	-	-	*3 910	2 830	6.0
	3.0m	kg	-	-	*7 560	*7 560	*5 090	3 690	3 870	2 410	-	-	*3 930	2 440	6.6
	1.5m	kg	-	-	-	-	*5 850	3 470	*4 410	2 710	-	-	*3 960	2 310	6.7
	0.0m	kg	-	-	*5 520	*5 520	5 610	3 350	3 710	2 260	-	-	3 980	2 370	6.5
	-1.5m	kg	*5 200	*5 200	*8 140	7 280	*5 670	3 310	-	-	-	-	*3 930	2 680	5.9
	-3.0m	kg	-	-	*6 040	*6 040	*4 140	3 400	-	-	-	-	*3 610	3 090	4.8

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	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		m
		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	7.5m kg	-	-	*4 380	*4 380	-	-	-	-	-	-	*4 270	*4 270	3.7
Arm : 2.5m	6.0m kg	-	-	-	-	*3 750	*3 750	-	-	-	-	*3 440	3 350	5.5
Shoe : 700mm	4.5m kg	-	-	*4 420	*4 420	*4 000	*4 000	*3 710	2 870	-	-	*3 220	2 570	6.4
CWT : 3 200kg	3.0m kg	-	-	*6 780	*6 780	*4 770	4 320	*3 950	2 800	-	-	*3 240	2 240	6.9
Dozer blade down	1.5m kg	-	-	-	-	*5 630	4 080	*4 280	2 710	-	-	*3 440	2 120	7.1
	0.0m kg	-	-	*6 130	*6 130	*6 060	3 920	*4 430	2 630	-	-	*3 730	2 170	6.9
	-1.5m kg	*4 770	*4 770	*8 600	7 200	*5 820	3 870	*4 130	2 600	-	-	*3 730	2 410	6.4
	-3.0m kg	*9 220	*9 220	*6 790	*6 790	*4 680	3 910	-	-	-	-	*3 560	3 100	5.3
Boom : 4.6m	7.5m kg	-	-	-	-	*3 460	*3 460	-	-	-	-	*3 360	*3 360	4.6
Arm : 3.0m	6.0m kg	-	-	-	-	*3 220	*3 220	*3 030	2 880	-	-	*2 830	2 810	6.1
Shoe : 700mm	4.5m kg	-	-	-	-	*3 510	*3 510	*3 350	2 880	-	-	*2 670	2 240	7.0
CWT : 3 200kg	3.0m kg	-	-	*5 740	*5 740	*4 300	*4 300	*3 650	2 790	-	-	*2 670	1 980	7.4
Dozer blade down	1.5m kg	-	-	-	-	*5 260	4 080	*4 050	2 670	*3 120	1 910	*2 810	1 880	7.6
	0.0m kg	-	-	*6 540	*6 540	*5 880	3 870	*4 320	2 580	-	-	*3 110	1 910	7.4
	-1.5m kg	*4 120	*4 120	*8 920	7 050	*5 880	3 780	*4 220	2 530	-	-	*3 410	2 090	6.9
	-3.0m kg	*7 550	*7 550	*7 500	7 110	*5 090	3 790	-	-	-	-	*3 340	2 570	6.0
	-4.5m kg	-	-	*4 580	*4 580	-	-	-	-	-	-	*2 830	*2 830	4.4
Boom : 4.72m 2-piece	7.5m kg	-	-	*6 240	*6 240	-	-	-	-	-	-	*5 300	*5 300	3.4
Arm : 2.1m	6.0m kg	-	-	*5 290	*5 290	*5 480	3 960	-	-	-	-	*3 950	3 030	5.3
Shoe : 700mm	4.5m kg	-	-	*5 480	*5 480	*5 690	3 880	3 950	2 460	-	-	*3 580	2 280	6.3
CWT : 3 200kg	3.0m kg	-	-	-	-	6 110	3 670	3 890	2 400	-	-	3 200	1 970	6.8
	1.5m kg	-	-	-	-	5 850	3 450	3 790	2 310	-	-	3 050	1 870	6.9
	0.0m kg	-	-	-	-	5 700	3 320	3 720	2 250	-	-	3 150	1 920	6.8
	-1.5m kg	-	-	*6 990	6 080	*5 410	3 300	*3 600	2 250	-	-	*3 190	2 160	6.2
Boom : 4.72m 2-piece	7.5m kg	-	-	*5 310	*5 310	-	-	-	-	-	-	*4 030	*4 030	4.1
Arm : 2.5m	6.0m kg	-	-	-	-	*4 690	4 020	-	-	-	-	*3 210	2 630	5.8
Shoe : 700mm	4.5m kg	-	-	*4 100	*4 100	*4 890	3 930	3 980	2 480	-	-	*2 940	2 050	6.7
CWT : 3 200kg	3.0m kg	-	-	-	-	*6 060	3 710	3 900	2 400	-	-	*2 880	1 800	7.2
	1.5m kg	-	-	-	-	5 870	3 470	3 780	2 300	-	-	2 810	1 710	7.3
	0.0m kg	-	-	-	-	5 680	3 300	3 700	2 220	-	-	2 880	1 750	7.2
	-1.5m kg	-	-	*7 870	5 990	*5 630	3 250	3 670	2 200	-	-	*3 110	1 940	6.6
	-3.0m kg	-	-	-	-	*3 840	3 310	-	-	-	-	-	-	5.7
Boom : 4.72m 2-piece	7.5m kg	-	-	-	-	*3 980	*3 980	-	-	-	-	*3 180	*3 180	5.0
Arm : 3.0m	6.0m kg	-	-	-	-	*3 770	*3 770	*3 530	2 510	-	-	*2 640	2 220	6.4
Shoe : 700mm	4.5m kg	-	-	-	-	*3 730	*3 730	*3 990	2 490	-	-	*2 440	1 780	7.2
CWT : 3 200kg	3.0m kg	-	-	-	-	*5 060	3 740	3 890	2 390	2 720	1 650	*2 390	1 580	7.7
	1.5m kg	-	-	-	-	5 880	3 460	3 760	2 270	2 670	1 610	*2 460	1 500	7.8
	0.0m kg	-	-	-	-	5 640	3 250	3 640	2 170	2 630	1 570	2 560	1 530	7.7
	-1.5m kg	-	-	*7 460	5 830	5 530	3 160	3 590	2 120	-	-	2 800	1 670	7.2
	-3.0m kg	-	-	*6 170	5 910	*4 530	3 180	*2 830	2 150	-	-	*2 260	2 030	6.3
Boom : 4.72m 2-piece	7.5m kg	-	-	*6 240	*6 240	-	-	-	-	-	-	*5 300	*5 300	3.4
Arm : 2.1m	6.0m kg	-	-	*5 290	*5 290	*5 480	4 570	-	-	-	-	*3 950	3 500	5.3
Shoe : 700mm	4.5m kg	-	-	*5 480	*5 480	*5 690	4 490	*4 790	2 860	-	-	*3 580	2 650	6.3
CWT : 3 200kg	3.0m kg	-	-	-	-	*6 320	4 280	*4 900	2 790	-	-	*3 500	2 310	6.8
Dozer blade down	1.5m kg	-	-	-	-	*6 780	4 050	*4 970	2 700	-	-	*3 630	2 190	6.9
	0.0m kg	-	-	-	-	*6 530	3 920	*4 690	2 640	-	-	*3 750	2 250	6.8
	-1.5m kg	-	-	*6 990	*6 990	*5 410	3 890	*3 600	2 640	-	-	*3 190	2 530	6.2
Boom : 4.72m 2-piece	7.5m kg	-	-	*5 310	*5 310	-	-	-	-	-	-	*4 030	*4 030	4.1
Arm : 2.5m	6.0m kg	-	-	-	-	*4 690	4 630	-	-	-	-	*3 210	3 050	5.8
Shoe : 700mm	4.5m kg	-	-	*4 100	*4 100	*4 890	4 540	*4 570	2 880	-	-	*2 940	2 390	6.7
CWT : 3 200kg	3.0m kg	-	-	-	-	*6 060	4 310	*4 760	2 800	-	-	*2 880	2 110	7.2
Dozer blade down	1.5m kg	-	-	-	-	*6 670	4 060	*4 930	2 700	-	-	*2 980	2 010	7.3
	0.0m kg	-	-	-	-	*6 630	3 900	*4 790	2 620	-	-	*3 250	2 060	7.2
	-1.5m kg	-	-	*7 870	7 180	*5 760	3 850	*4 030	2 590	-	-	*3 110	2 280	6.6
	-3.0m kg	-	-	-	-	*3 840	*3 840	-	-	-	-	-	-	5.7
Boom : 4.72m 2-piece	7.5m kg	-	-	-	-	*3 980	*3 980	-	-	-	-	*3 180	*3 180	5.0
Arm : 3.0m	6.0m kg	-	-	-	-	*3 770	*3 770	*3 530	2 910	-	-	*2 640	2 580	6.4
Shoe : 700mm	4.5m kg	-	-	-	-	*3 730	*3 730	*3 990	2 890	-	-	*2 440	2 090	7.2
CWT : 3 200kg	3.0m kg	-	-	-	-	*5 060	4 350	*4 530	2 790	*3 170	1 950	*2 390	1 860	7.7
Dozer blade down	1.5m kg	-	-	-	-	*6 410	4 060	*4 790	2 670	*3 760	1 900	*2 460	1 780	7.8
	0.0m kg	-	-	-	-	*6 630	3 850	*4 800	2 560	*3 470	1 870	*2 640	1 810	7.7
	-1.5m kg	-	-	*7 460	7 020	*6 040	3 760	*4 310	2 510	-	-	*2 910	1 980	7.2
	-3.0m kg	-	-	*6 170	*6 170	*4 530	3 780	*2 830	2 550	-	-	*2 260	*2 260	6.3

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	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		m
		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 Arm : 2.5m Shoe : 600mm CWT : 6 200kg	9.0m kg	-	-	*8 380	*8 380	-	-	-	-	-	-	*8 380	*8 380	3.1
	7.5m kg	-	-	-	-	*6 890	*6 890	-	-	-	-	*6 680	6 240	5.5
	6.0m kg	-	-	-	-	*7 210	*7 210	*6 880	5 370	-	-	*6 230	4 430	6.7
	4.5m kg	-	-	*11 790	*11 790	*8 700	8 140	*7 430	5 210	-	-	5 800	3 660	7.5
	3.0m kg	-	-	-	-	*10 880	7 550	8 030	4 970	5 670	3 550	5 260	3 290	7.9
	1.5m kg	-	-	-	-	12 280	7 050	7 760	4 730	5 550	3 440	5 070	3 150	8.0
	0.0m kg	-	-	-	-	11 980	6 810	7 580	4 560	5 470	3 360	5 190	3 200	7.8
	-1.5m kg	-	-	*11 650	*11 650	11 920	6 760	7 510	4 500	-	-	5 700	3 490	7.3
	-3.0m kg	-	-	*15 910	13 350	*11 700	6 840	7 580	4 560	-	-	6 960	4 230	6.4
	-4.5m kg	-	-	*11 740	*11 740	*8 570	7 110	-	-	-	-	*7 760	6 380	4.9
Boom : 5.7m Arm : 2.9m Shoe : 600mm CWT : 6 200kg	9.0m kg	-	-	-	-	-	-	-	-	-	-	*5 830	*5 830	4.0
	7.5m kg	-	-	-	-	*6 150	*6 150	*4 920	*4 920	-	-	*4 830	*4 830	6.0
	6.0m kg	-	-	-	-	*6 530	*6 530	*6 380	5 430	-	-	*4 530	4 000	7.2
	4.5m kg	-	-	*10 230	*10 230	*8 010	*8 010	*7 000	5 260	5 810	3 680	*4 490	3 370	7.9
	3.0m kg	-	-	-	-	*10 230	7 670	*8 000	5 000	5 690	3 570	*4 650	3 050	8.3
	1.5m kg	-	-	-	-	*12 250	7 130	7 790	4 740	5 550	3 440	4 720	2 930	8.4
	0.0m kg	-	-	*6 180	*6 180	11 990	6 810	7 570	4 550	5 450	3 340	4 810	2 960	8.2
	-1.5m 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	7.7
	-3.0m kg	*11 760	*11 760	*17 000	13 180	11 930	6 760	7 500	4 490	-	-	6 200	3 780	6.8
	-4.5m kg	-	-	*13 310	*13 310	*9 670	6 960	-	-	-	-	*7 590	5 280	5.5
Boom : 5.7m Arm : 2.5m Shoe : 600mm CWT : 6 200kg Dozer blade down	9.0m kg	-	-	*8 380	*8 380	-	-	-	-	-	-	*8 380	*8 380	3.1
	7.5m kg	-	-	-	-	*6 890	*6 890	-	-	-	-	*6 680	*6 680	5.5
	6.0m kg	-	-	-	-	*7 210	*7 210	*6 880	5 940	-	-	*6 230	4 920	6.7
	4.5m kg	-	-	*11 790	*11 790	*8 700	*8 700	*7 430	5 790	-	-	*6 200	4 080	7.5
	3.0m kg	-	-	-	-	*10 880	8 440	*8 380	5 540	*7 220	3 980	*6 460	3 690	7.9
	1.5m kg	-	-	-	-	*12 700	7 940	*9 290	5 300	*7 610	3 860	*7 010	3 540	8.0
	0.0m kg	-	-	-	-	*13 390	7 690	*9 820	5 130	*7 790	3 780	*7 490	3 600	7.8
	-1.5m kg	-	-	*11 650	*11 650	*13 040	7 630	*9 720	5 070	-	-	*7 740	3 930	7.3
	-3.0m kg	-	-	*15 910	15 230	*11 700	7 720	*8 660	5 130	-	-	*7 950	4 750	6.4
	-4.5m kg	-	-	*11 740	*11 740	*8 570	7 990	-	-	-	-	*7 760	7 160	4.9
Boom : 5.7m Arm : 2.9m Shoe : 600mm CWT : 6 200kg Dozer blade down	9.0m kg	-	-	-	-	-	-	-	-	-	-	*5 830	*5 830	4.0
	7.5m kg	-	-	-	-	*6 150	*6 150	*4 920	*4 920	-	-	*4 830	*4 830	6.0
	6.0m kg	-	-	-	-	*6 530	*6 530	*6 380	6 010	-	-	*4 530	4 450	7.2
	4.5m kg	-	-	*10 230	*10 230	*8 010	*8 010	*7 000	5 840	*6 170	4 100	*4 490	3 770	7.9
	3.0m kg	-	-	-	-	*10 230	8 570	*8 000	5 580	*6 940	3 990	*4 650	3 420	8.3
	1.5m kg	-	-	-	-	*12 250	8 010	*9 020	5 320	*7 410	3 860	*4 990	3 290	8.4
	0.0m kg	-	-	*6 180	*6 180	*13 250	7 690	*9 680	5 120	*7 720	3 760	*5 610	3 340	8.2
	-1.5m kg	*6 750	*6 750	*10 980	*10 980	*13 190	7 590	*9 770	5 030	*7 580	3 720	*6 740	3 610	7.7
	-3.0m kg	*11 760	*11 760	*17 000	15 060	*12 150	7 640	*9 040	5 060	-	-	*7 560	4 250	6.8
	-4.5m kg	-	-	*13 310	*13 310	*9 670	7 840	-	-	-	-	*7 590	5 940	5.5
Boom : 5.57m 2-piece Arm : 2.5m Shoe : 600mm CWT : 6 200kg	9.0m kg	-	-	*9 840	*9 840	-	-	-	-	-	-	*8 670	*8 670	3.6
	7.5m kg	-	-	*8 290	*8 290	*8 730	8 620	-	-	-	-	*6 830	5 680	5.7
	6.0m kg	-	-	*7 680	*7 680	*8 800	8 480	8 460	5 290	-	-	*6 280	4 120	6.9
	4.5m kg	-	-	-	-	*11 340	8 030	8 270	5 130	5 740	3 580	5 530	3 440	7.7
	3.0m kg	-	-	-	-	*12 760	7 400	7 980	4 870	5 640	3 480	5 040	3 110	8.1
	1.5m kg	-	-	-	-	12 180	6 900	7 710	4 630	5 520	3 380	4 880	2 990	8.1
	0.0m kg	-	-	-	-	11 920	6 690	7 540	4 480	5 440	3 310	5 010	3 060	8.0
	-1.5m kg	-	-	*9 780	*9 780	*10 700	6 680	7 500	4 440	-	-	5 500	3 340	7.5
	-3.0m kg	-	-	-	-	*7 710	6 810	*5 820	4 530	-	-	-	-	6.6
	-4.5m kg	-	-	*7 890	*7 890	-	-	-	-	-	-	*5 990	*5 990	4.4
Boom : 5.57m 2-piece Arm : 2.9m Shoe : 600mm CWT : 6 200kg	9.0m kg	-	-	-	-	*7 010	*7 010	*5 930	5 360	-	-	*4 920	*4 920	6.3
	7.5m kg	-	-	*6 060	*6 060	*7 010	*7 010	*7 170	5 360	-	-	*4 550	3 730	7.4
	6.0m kg	-	-	*9 910	*9 910	*9 130	8 160	8 340	5 180	5 780	3 610	*4 440	3 160	8.1
	4.5m kg	-	-	-	-	*12 360	7 530	8 030	4 910	5 660	3 500	*4 520	2 880	8.5
	3.0m kg	-	-	-	-	12 270	6 970	7 730	4 640	5 520	3 370	4 540	2 770	8.5
	1.5m kg	-	-	-	-	11 920	6 680	7 530	4 460	5 420	3 280	4 640	2 820	8.4
	0.0m kg	-	-	-	-	11 920	6 680	7 530	4 460	5 420	3 280	4 640	2 820	8.4
	-1.5m kg	-	-	*9 410	*9 410	*11 330	6 620	7 450	4 400	5 400	3 260	5 040	3 060	7.9
	-3.0m kg	-	-	-	-	*8 660	6 720	*6 620	4 450	-	-	*4 660	3 600	7.1

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	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		m
		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 : 5.57m 2-piece	9.0m kg	-	-	*9 840	*9 840	-	-	-	-	-	-	*8 670	*8 670	3.6
Arm : 2.5m	7.5m kg	-	-	*8 290	*8 290	*8 730	*8 730	-	-	-	-	*6 830	6 310	5.7
Shoe : 600mm	6.0m kg	-	-	*7 680	*7 680	*8 800	*8 800	*8 660	5 880	-	-	*6 280	4 590	6.9
CWT : 6 200kg	4.5m kg	-	-	-	-	*11 340	8 930	*9 040	5 710	*7 290	4 000	*6 140	3 850	7.7
Dozer blade down	3.0m kg	-	-	-	-	*12 760	8 300	*9 570	5 450	*7 760	3 910	*6 280	3 500	8.1
	1.5m kg	-	-	-	-	*13 350	7 790	*9 840	5 200	*7 710	3 800	*6 680	3 370	8.1
	0.0m kg	-	-	-	-	*12 570	7 570	*9 490	5 050	*7 210	3 730	*6 450	3 450	8.0
	-1.5m kg	-	-	*9 780	*9 780	*10 700	7 560	*8 290	5 010	-	-	*5 810	3 770	7.5
	-3.0m kg	-	-	-	-	*7 710	7 700	*5 820	5 110	-	-	-	-	6.6
Boom : 5.57m 2-piece	9.0m kg	-	-	*7 890	*7 890	-	-	-	-	-	-	*5 990	*5 990	4.4
Arm : 2.9m	7.5m kg	-	-	-	-	*7 010	*7 010	*5 930	*5 930	-	-	*4 920	*4 920	6.3
Shoe : 600mm	6.0m kg	-	-	*6 060	*6 060	*7 010	*7 010	*7 170	5 950	-	-	*4 550	4 160	7.4
CWT : 6 200kg	4.5m kg	-	-	*9 910	*9 910	*9 130	9 070	*8 480	5 760	*6 780	4 040	*4 440	3 550	8.1
Dozer blade down	3.0m kg	-	-	-	-	*12 360	8 430	*9 360	5 490	*7 660	3 920	*4 520	3 240	8.5
	1.5m kg	-	-	-	-	*13 270	7 860	*9 770	5 220	*7 710	3 790	*4 760	3 130	8.5
	0.0m kg	-	-	-	-	*12 890	7 570	*9 610	5 040	*7 400	3 700	*5 240	3 190	8.4
	-1.5m kg	-	-	*9 410	*9 410	*11 330	7 500	*8 660	4 970	*6 370	3 680	*5 610	3 450	7.9
	-3.0m kg	-	-	-	-	*8 660	7 600	*6 620	5 020	-	-	*4 660	4 060	7.1
Boom : 5.7m	9.0m kg	-	-	*8 380	*8 380	-	-	-	-	-	-	*8 380	*8 380	3.1
Arm : 2.5m	7.5m kg	-	-	-	-	*6 890	*6 890	-	-	-	-	*6 680	6 350	5.5
Shoe : 700mm	6.0m kg	-	-	-	-	*7 210	*7 210	*6 880	5 460	-	-	*6 230	4 510	6.7
CWT : 6 200kg	4.5m kg	-	-	*11 790	*11 790	*8 700	8 280	*7 430	5 310	-	-	*5 920	3 730	7.5
	3.0m kg	-	-	-	-	*10 880	7 690	8 190	5 060	5 790	3 630	5 370	3 360	7.9
	1.5m kg	-	-	-	-	12 520	7 190	7 920	4 820	5 670	3 520	5 180	3 220	8.0
	0.0m kg	-	-	-	-	12 230	6 950	7 740	4 660	5 580	3 440	5 310	3 270	7.8
	-1.5m kg	-	-	*11 650	*11 650	12 170	6 900	7 670	4 600	-	-	5 820	3 570	7.3
	-3.0m kg	-	-	*15 910	13 610	*11 700	6 980	7 740	4 660	-	-	7 110	4 320	6.4
	-4.5m kg	-	-	*11 740	*11 740	*8 570	7 250	-	-	-	-	*7 760	6 510	4.9
Boom : 5.7m	9.0m kg	-	-	-	-	-	-	-	-	-	-	*5 830	*5 830	4.0
Arm : 2.9m	7.5m kg	-	-	-	-	*6 150	*6 150	*4 920	*4 920	-	-	*4 830	*4 830	6.0
Shoe : 700mm	6.0m kg	-	-	-	-	*6 530	*6 530	*6 380	5 520	-	-	*5 530	4 080	7.2
CWT : 6 200kg	4.5m kg	-	-	*10 230	*10 230	*8 010	*8 010	*7 000	5 360	5 930	3 750	*4 490	3 440	7.9
	3.0m kg	-	-	-	-	*10 230	7 810	*8 000	5 100	5 810	3 640	*4 650	3 120	8.3
	1.5m kg	-	-	-	-	*12 250	7 260	7 950	4 840	5 670	3 510	4 820	2 990	8.4
	0.0m kg	-	-	*6 180	*6 180	12 240	6 950	7 730	4 650	5 560	3 410	4 920	3 030	8.2
	-1.5m 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	7.7
	-3.0m kg	*11 760	*11 760	*17 000	13 440	*12 150	6 900	7 660	4 580	-	-	6 330	3 860	6.8
	-4.5m kg	-	-	*13 310	*13 310	*9 670	7 100	-	-	-	-	*7 590	5 390	5.5
Boom : 5.7m	9.0m kg	-	-	*8 380	*8 380	-	-	-	-	-	-	*8 380	*8 380	3.1
Arm : 2.5m	7.5m kg	-	-	-	-	*6 890	*6 890	-	-	-	-	*6 680	*6 680	5.5
Shoe : 700mm	6.0m kg	-	-	-	-	*7 210	*7 210	*6 880	6 150	-	-	*6 230	5 090	6.7
CWT : 6 200kg	4.5m kg	-	-	*11 790	*11 790	*8 700	*8 700	*7 430	5 990	-	-	*6 200	4 240	7.5
Dozer blade down	3.0m kg	-	-	-	-	*10 880	8 770	*8 380	5 750	*7 220	4 130	*6 460	3 830	7.9
	1.5m kg	-	-	-	-	*12 700	8 260	*9 290	5 500	*7 610	4 020	*7 010	3 680	8.0
	0.0m kg	-	-	-	-	*13 390	8 010	*9 820	5 340	*7 790	3 930	*7 490	3 750	7.8
	-1.5m kg	-	-	*11 650	*11 650	*13 040	7 950	*9 720	5 270	-	-	*7 740	4 090	7.3
	-3.0m kg	-	-	*15 910	*15 910	*11 700	8 040	*8 660	5 330	-	-	*7 950	4 940	6.4
	-4.5m kg	-	-	*11 740	*11 740	*8 570	8 310	-	-	-	-	*7 760	7 450	4.9
Boom : 5.7m	9.0m kg	-	-	-	-	-	-	-	-	-	-	*5 830	*5 830	4.0
Arm : 2.9m	7.5m kg	-	-	-	-	*6 150	*6 150	*4 920	*4 920	-	-	*4 830	*4 830	6.0
Shoe : 700mm	6.0m kg	-	-	-	-	*6 530	*6 530	*6 380	6 220	-	-	*4 530	*4 530	7.2
CWT : 6 200kg	4.5m kg	-	-	*10 230	*10 230	*8 010	*8 010	*7 000	6 050	*6 170	4 250	*4 490	3 910	7.9
Dozer blade down	3.0m kg	-	-	-	-	*10 230	8 890	*8 000	5 790	*6 940	4 140	*4 650	3 560	8.3
	1.5m kg	-	-	-	-	*12 250	8 330	*9 020	5 520	*7 410	4 010	*4 990	3 420	8.4
	0.0m kg	-	-	*6 180	*6 180	*13 250	8 010	*9 680	5 330	*7 720	3 910	*5 610	3 470	8.2
	-1.5m kg	*6 750	*6 750	*10 980	*10 980	*13 190	7 910	*9 770	5 240	*7 580	3 870	*6 740	3 750	7.7
	-3.0m kg	*11 760	*11 760	*17 000	15 750	*12 150	7 950	*9 040	5 260	-	-	*7 560	4 420	6.8
	-4.5m kg	-	-	*13 310	*13 310	*9 670	8 160	-	-	-	-	*7 590	6 170	5.5

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	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		m
		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 : 5.57m 2-piece Arm : 2.5m Shoe : 700mm CWT : 6 200kg	9.0m kg	-	-	*9 840	*9 840	-	-	-	-	-	-	*8 670	*8 670	3.6
	7.5m kg	-	-	*8 290	*8 290	*8 730	*8 730	-	-	-	-	*6 830	5 790	5.7
	6.0m kg	-	-	*7 680	*7 680	*8 800	8 620	8 620	5 390	-	-	*6 280	4 200	6.9
	4.5m kg	-	-	-	-	*11 340	8 170	8 430	5 220	5 860	3 650	5 640	3 510	7.7
	3.0m kg	-	-	-	-	*12 760	7 540	8 140	4 960	5 760	3 560	5 140	3 170	8.1
	1.5m kg	-	-	-	-	12 430	7 040	7 870	4 720	5 640	3 450	4 990	3 060	8.1
	0.0m kg	-	-	-	-	12 170	6 830	7 700	4 570	5 560	3 380	5 120	3 120	8.0
	-1.5m kg	-	-	*9 780	*9 780	*10 700	6 820	7 660	4 540	-	-	5 620	3 420	7.5
	-3.0m kg	-	-	-	-	*7 710	6 950	*5 820	4 630	-	-	-	-	6.6
Boom : 5.57m 2-piece Arm : 2.9m Shoe : 700mm CWT : 6 200kg	9.0m kg	-	-	*7 890	*7 890	-	-	-	-	-	-	*5 990	*5 990	4.4
	7.5m kg	-	-	-	-	*7 010	*7 010	*5 930	5 460	-	-	*4 920	*4 920	6.3
	6.0m kg	-	-	*6 060	*6 060	*7 010	*7 010	*7 170	5 460	-	-	*4 550	3 800	7.4
	4.5m kg	-	-	*9 910	*9 910	*9 130	8 300	*8 480	5 280	5 900	3 680	*4 440	3 230	8.1
	3.0m kg	-	-	-	-	*12 360	7 670	8 190	5 000	5 770	3 570	*4 520	2 940	8.5
	1.5m kg	-	-	-	-	12 520	7 110	7 890	4 740	5 640	3 440	4 640	2 830	8.5
	0.0m kg	-	-	-	-	12 170	6 820	7 690	4 560	5 530	3 350	4 740	2 890	8.4
	-1.5m kg	-	-	*9 410	*9 410	*11 330	6 760	7 610	4 490	5 510	3 330	5 150	3 120	7.9
	-3.0m kg	-	-	-	-	*8 660	6 860	*6 620	4 550	-	-	*4 660	3 680	7.1
Boom : 5.57m 2-piece Arm : 2.5m Shoe : 700mm CWT : 6 200kg Dozer blade down	9.0m kg	-	-	*9 840	*9 840	-	-	-	-	-	-	*8 670	*8 670	3.6
	7.5m kg	-	-	*8 290	*8 290	*8 730	*8 730	-	-	-	-	*6 830	6 530	5.7
	6.0m kg	-	-	*7 680	*7 680	*8 800	*8 800	*8 660	6 090	-	-	*6 280	4 760	6.9
	4.5m kg	-	-	-	-	*11 340	9 260	*9 040	5 910	*7 290	4 150	*6 140	4 000	7.7
	3.0m kg	-	-	-	-	*12 760	8 620	*9 570	5 650	*7 760	4 060	*6 280	3 630	8.1
	1.5m kg	-	-	-	-	*13 350	8 110	*9 840	5 410	*7 710	3 950	*6 680	3 510	8.1
	0.0m kg	-	-	-	-	*12 570	7 890	*9 490	5 260	*7 210	3 880	*6 450	3 590	8.0
	-1.5m kg	-	-	*9 780	*9 780	*10 700	7 880	*8 290	5 220	-	-	*5 810	3 920	7.5
	-3.0m kg	-	-	-	-	*7 710	*7 710	*5 820	5 310	-	-	-	-	6.6
Boom : 5.57m 2-piece Arm : 2.9m Shoe : 700mm CWT : 6 200kg Dozer blade down	9.0m kg	-	-	*7 890	*7 890	-	-	-	-	-	-	*5 990	*5 990	4.4
	7.5m kg	-	-	-	-	*7 010	*7 010	*5 930	5 930	-	-	*4 920	*4 920	6.3
	6.0m kg	-	-	*6 060	*6 060	*7 010	*7 010	*7 170	6 160	-	-	*4 550	4 320	7.4
	4.5m kg	-	-	*9 910	*9 910	*9 130	*9 130	*8 480	5 970	*6 780	4 190	*4 440	3 680	8.1
	3.0m kg	-	-	-	-	*12 360	8 750	*9 360	5 700	*7 660	4 070	*4 520	3 370	8.5
	1.5m kg	-	-	-	-	*13 270	8 180	*9 770	5 430	*7 710	3 950	*4 760	3 260	8.5
	0.0m kg	-	-	-	-	*12 890	7 890	*9 610	5 240	*7 400	3 850	*5 240	3 320	8.4
	-1.5m kg	-	-	*9 410	*9 410	*11 330	7 820	*8 660	5 180	*6 370	3 830	*5 610	3 590	7.9
	-3.0m kg	-	-	-	-	*8 660	7 920	*6 620	5 230	-	-	*4 660	4 230	7.1
Boom : 5.7m Arm : 2.5m Shoe : 800mm CWT : 6 200kg	9.0m kg	-	-	*8 380	*8 380	-	-	-	-	-	-	*8 380	*8 380	3.1
	7.5m kg	-	-	-	-	*6 890	*6 890	-	-	-	-	*6 680	6 410	5.5
	6.0m kg	-	-	-	-	*7 210	*7 210	*6 880	5 520	-	-	*6 230	4 560	6.7
	4.5m kg	-	-	*11 790	*11 790	*8 700	8 360	*7 430	5 360	-	-	5 990	3 780	7.5
	3.0m kg	-	-	-	-	*10 880	7 780	8 290	5 120	5 860	3 670	5 430	3 400	7.9
	1.5m kg	-	-	-	-	12 670	7 280	8 020	4 880	5 740	3 560	5 250	3 260	8.0
	0.0m kg	-	-	-	-	12 380	7 030	7 830	4 710	5 650	3 480	5 370	3 310	7.8
	-1.5m kg	-	-	*11 650	*11 650	12 310	6 980	7 760	4 650	-	-	5 900	3 610	7.3
	-3.0m kg	-	-	*15 910	13 760	*11 700	7 060	7 830	4 710	-	-	7 190	4 370	6.4
Boom : 5.7m Arm : 2.9m Shoe : 800mm CWT : 6 200kg	9.0m kg	-	-	-	-	-	-	-	-	-	-	*5 830	*5 830	4.0
	7.5m kg	-	-	-	-	*6 150	*6 150	*4 920	*4 920	-	-	*4 830	*4 830	6.0
	6.0m kg	-	-	-	-	*6 530	*6 530	*6 380	5 580	-	-	*4 530	4 130	7.2
	4.5m kg	-	-	*10 230	*10 230	*8 010	*8 010	*7 000	5 410	6 000	3 790	*4 490	3 480	7.9
	3.0m kg	-	-	-	-	*10 230	7 900	*8 000	5 160	5 880	3 680	*4 650	3 150	8.3
	1.5m kg	-	-	-	-	*12 250	7 350	8 040	4 900	5 740	3 560	4 880	3 030	8.4
	0.0m kg	-	-	*6 180	*6 180	12 390	7 040	7 830	4 710	5 630	3 460	4 980	3 070	8.2
	-1.5m kg	*6 750	*6 750	*10 980	*10 980	12 270	6 940	7 730	4 620	5 590	3 420	5 400	3 310	7.7
	-3.0m kg	*11 760	*11 760	*17 000	13 600	*12 150	6 980	7 750	4 640	-	-	6 410	3 900	6.8
-4.5m kg	-	-	*13 310	*13 310	*9 670	7 190	-	-	-	-	*7 590	5 460	5.5	

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	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		m
		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 Arm : 2.5m Shoe : 800mm CWT : 6 200kg Dozer blade down	9.0m kg	-	-	*8 380	*8 380	-	-	-	-	-	-	*8 380	*8 380	3.1
	7.5m kg	-	-	-	-	*6 890	*6 890	-	-	-	-	*6 680	*6 680	5.5
	6.0m kg	-	-	-	-	*7 210	*7 210	*6 880	6 320	-	-	*6 230	5 240	6.7
	4.5m kg	-	-	*11 790	*11 790	*8 700	*8 700	*7 430	6 160	-	-	*6 200	4 360	7.5
	3.0m kg	-	-	-	-	*10 880	9 030	*8 380	5 910	*7 220	4 250	*6 460	3 940	7.9
	1.5m kg	-	-	-	-	*12 700	8 520	*9 290	5 670	*7 610	4 140	*7 010	3 790	8.0
	0.0m kg	-	-	-	-	*13 390	8 270	*9 820	5 500	*7 790	4 060	*7 490	3 860	7.8
	-1.5m kg	-	-	*11 650	*11 650	*13 040	8 210	*9 720	5 440	-	-	*7 740	4 220	7.3
	-3.0m kg	-	-	*15 910	*15 910	*11 700	8 300	*8 660	5 500	-	-	*7 950	5 090	6.4
-4.5m kg	-	-	*11 740	*11 740	*8 570	*8 570	-	-	-	-	*7 760	7 680	4.9	
Boom : 5.7m Arm : 2.9m Shoe : 800mm CWT : 6 200kg Dozer blade down	9.0m kg	-	-	-	-	-	-	-	-	-	-	*5 830	*5 830	4.0
	7.5m kg	-	-	-	-	*6 150	*6 150	*4 920	*4 920	-	-	*4 830	*4 830	6.0
	6.0m kg	-	-	-	-	*6 530	*6 530	*6 380	*6 380	-	-	*4 530	*4 530	7.2
	4.5m kg	-	-	*10 230	*10 230	*8 010	*8 010	*7 000	6 220	*6 170	4 370	*4 490	4 020	7.9
	3.0m kg	-	-	-	-	*10 230	9 160	*8 000	5 950	*6 940	4 260	*4 650	3 660	8.3
	1.5m kg	-	-	-	-	*12 250	8 590	*9 020	5 690	*7 410	4 130	*4 990	3 530	8.4
	0.0m kg	-	-	*6 180	*6 180	*13 250	8 270	*9 680	5 490	*7 720	4 030	*5 610	3 580	8.2
	-1.5m kg	*6 750	*6 750	*10 980	*10 980	*13 190	8 170	*9 770	5 400	*7 580	3 990	*6 740	3 870	7.7
	-3.0m kg	*11 760	*11 760	*17 000	16 340	*12 150	8 220	*9 040	5 430	-	-	*7 560	4 560	6.8
-4.5m kg	-	-	*13 310	*13 310	*9 670	8 430	-	-	-	-	*7 590	6 360	5.5	
Boom : 5.57m 2-piece Arm : 2.5m Shoe : 800mm CWT : 6 200kg	9.0m kg	-	-	*9 840	*9 840	-	-	-	-	-	-	*8 670	*8 670	3.6
	7.5m kg	-	-	*8 290	*8 290	*8 730	*8 730	-	-	-	-	*6 830	5 840	5.7
	6.0m kg	-	-	*7 680	*7 680	*8 800	8 700	*8 660	5 450	-	-	*6 280	4 250	6.9
	4.5m kg	-	-	-	-	*11 340	8 250	8 520	5 280	5 930	3 690	5 710	3 550	7.7
	3.0m kg	-	-	-	-	*12 760	7 620	8 230	5 020	5 830	3 600	5 210	3 210	8.1
	1.5m kg	-	-	-	-	12 580	7 120	7 960	4 780	5 710	3 490	5 050	3 100	8.1
	0.0m kg	-	-	-	-	12 320	6 910	7 790	4 630	5 630	3 420	5 180	3 160	8.0
	-1.5m kg	-	-	*9 780	*9 780	*10 700	6 900	7 750	4 590	-	-	5 690	3 460	7.5
	-3.0m kg	-	-	-	-	*7 710	7 030	*5 820	4 690	-	-	-	-	6.6
Boom : 5.57m 2-piece Arm : 2.9m Shoe : 800mm CWT : 6 200kg	9.0m kg	-	-	*7 890	*7 890	-	-	-	-	-	-	*5 990	*5 990	4.4
	7.5m kg	-	-	-	-	*7 010	*7 010	*5 930	5 520	-	-	*4 920	*4 920	6.3
	6.0m kg	-	-	*6 060	*6 060	*7 010	*7 010	*7 170	5 520	-	-	*4 550	3 840	7.4
	4.5m kg	-	-	*9 910	*9 910	*9 130	8 390	*8 480	5 330	5 970	3 730	*4 440	3 270	8.1
	3.0m kg	-	-	-	-	*12 360	7 750	8 290	5 060	5 840	3 610	*4 520	2 980	8.5
	1.5m kg	-	-	-	-	12 670	7 190	7 990	4 800	5 700	3 490	4 690	2 870	8.5
	0.0m kg	-	-	-	-	12 320	6 910	7 780	4 620	5 600	3 390	4 800	2 920	8.4
	-1.5m kg	-	-	*9 410	*9 410	*11 330	6 840	7 710	4 550	5 580	3 370	5 210	3 160	7.9
	-3.0m kg	-	-	-	-	*8 660	6 940	*6 620	4 600	-	-	*4 660	3 730	7.1
Boom : 5.57m 2-piece Arm : 2.5m Shoe : 800mm CWT : 6 200kg Dozer blade down	9.0m kg	-	-	*9 840	*9 840	-	-	-	-	-	-	*8 670	*8 670	3.6
	7.5m kg	-	-	*8 290	*8 290	*8 730	*8 730	-	-	-	-	*6 830	6 710	5.7
	6.0m kg	-	-	*7 680	*7 680	*8 800	*8 800	*8 660	6 260	-	-	*6 280	4 900	6.9
	4.5m kg	-	-	-	-	*11 340	9 530	*9 040	6 080	*7 290	4 280	*6 140	4 120	7.7
	3.0m kg	-	-	-	-	*12 760	8 890	*9 570	5 820	*7 760	4 180	*6 280	3 740	8.1
	1.5m kg	-	-	-	-	*13 350	8 370	*9 840	5 580	*7 710	4 070	*6 680	3 620	8.1
	0.0m kg	-	-	-	-	*12 570	8 160	*9 490	5 420	*7 210	4 000	*6 450	3 700	8.0
	-1.5m kg	-	-	*9 780	*9 780	*10 700	8 150	*8 290	5 390	-	-	*5 810	4 040	7.5
	-3.0m kg	-	-	-	-	*7 710	*7 710	*5 820	5 480	-	-	-	-	6.6
Boom : 5.57m 2-piece Arm : 2.9m Shoe : 800mm CWT : 6 200kg Dozer blade down	9.0m kg	-	-	*7 890	*7 890	-	-	-	-	-	-	*5 990	*5 990	4.4
	7.5m kg	-	-	-	-	*7 010	*7 010	*5 930	*5 930	-	-	*4 920	*4 920	6.3
	6.0m kg	-	-	*6 060	*6 060	*7 010	*7 010	*7 170	6 330	-	-	*4 550	4 440	7.4
	4.5m kg	-	-	*9 910	*9 910	*9 130	*9 130	*8 480	6 140	*6 780	4 310	*4 440	3 800	8.1
	3.0m kg	-	-	-	-	*12 360	9 020	*9 360	5 870	*7 660	4 200	*4 520	3 480	8.5
	1.5m kg	-	-	-	-	*13 270	8 450	*9 770	5 600	*7 710	4 070	*4 760	3 360	8.5
	0.0m kg	-	-	-	-	*12 890	8 150	*9 610	5 410	*7 400	3 980	*5 240	3 430	8.4
	-1.5m kg	-	-	*9 410	*9 410	*11 330	8 090	*8 660	5 340	*6 370	3 960	*5 610	3 710	7.9
	-3.0m kg	-	-	-	-	*8 660	8 180	*6 620	5 400	-	-	*4 660	4 360	7.1

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 EU (Stage IV) requirements	•	•
Air filter with indicator	•	•
Air intake heater	•	•
Electric engine shut-off	•	•
Fuel filter and water separator	•	•
Standard cooling system	•	•
Fuel filler pump: 30 l/min with auto stop	•	•
Alternator, 110 A	•	•
<b>Electric/Electronic control system</b>		
<b>Contronics</b>		
Advanced mode control system	•	•
Self-diagnostic system	•	•
Machine status indication	•	•
GSM/GPS 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	•	•
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>		
Boom hose rupture valve with overload warning device	•	•
Arm hose rupture valve	•	•
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 counterweight	•	•
6 200kg 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	•	•
Master key	•	•
<b>Undercarriage</b>		
Under cover	•	•
Hydraulic track adjusters	•	•
Greased and sealed track link	•	•
Track Guard	•	•
<b>Digging equipment</b>		
4.6m mono boom	•	•
5.7m mono boom		•
2.5m arm	•	•
2.9m 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	•	•
Travel alarm	•	•
Anti-theft system	•	•
Rotating warning beacon	•	•

## OPTIONAL EQUIPMENT

	ECR145E	ECR235E
<b>Hydraulic system</b>		
Boom float function with HRV	•	•
Boom float function without HRV	•	•
Pilot control pattern change	•	•
Hydraulic piping:		
Work tool management system (up to 20 programmable memories)	•	•
Breaker & shear, 1 or 2 pump flow	•	•
Slope & rotator (40lpm or 60lpm)	•	•
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	•	•

	ECR145E	ECR235E
<b>Cab and interior</b>		
Control joysticks with 3 switch & 1 proportional	•	•
Straight travel pedal	•	•
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	•	•
500/600/600 HD/700 HD/750mm shoe with triple grousers	•	
500mm shoe with rubber grousers	•	
600/600 HD/700/800/900mm shoe with triple grousers		•
700mm shoe with double grousers		•
600mm shoe with rubber grousers		•
Full track guard		•
<b>Digging equipment</b>		
4.72 m 2-piece boom	•	
5.57 m 2-piece boom		•
2.1 m, 3.0 m arm	•	
2.5 m 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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