VOLVO EXCAVATORS

ECR145D, ECR235D

14.4-27.7 t / 31,640-60,980 lb, 114-173 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 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 175 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.

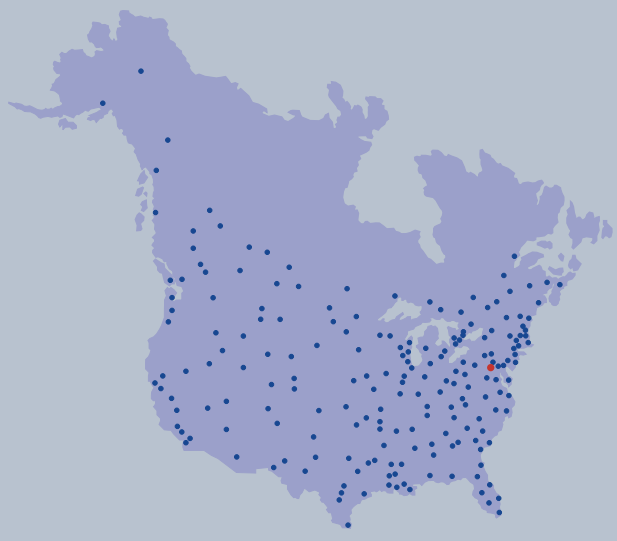
A strong, dedicated, capable dealer network.

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 and product support training at our state-of-the-art Technical Training Center in Asheville and through hands-on training. At our nearby 80-acre Product Demonstration Center, visitors operate equipment from our entire product line under a variety of simulated working conditions. Both facilities are in year-round use by our dealers and customers – more than 2,000 visit each year. **Building the best starts right here.**

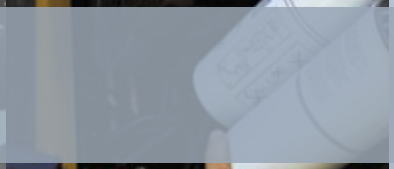
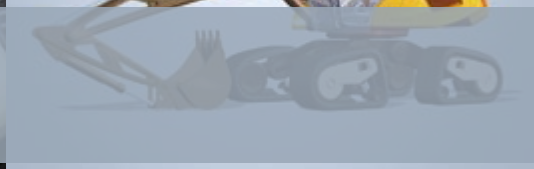
The products designed and manufactured by Volvo Construction Equipment have their beginnings at the most advanced Research & Design centers in the industry. Volvo CE machines are designed in 11 R&D centers and produced in 15 manufacturing facilities across the world.

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.











Mack Trucks


Volvo Construction Equipment


Volvo Penta


Volvo Trucks


Renault Trucks

UD Trucks


Volvo Buses


Volvo Aero


Volvo Financial Services

ENGINEERED FOR EFFICIENCY.

Fuel efficiency is at the heart of Volvo's ECR145D and ECR235D. Featuring the Tier 4 Interim engine, ECO mode and improved hydraulics, these machines deliver reduced fuel consumption and cycle times, as well as increased digging performance. Save time and money with Volvo.

Efficient engine

Volvo's fuel efficient Tier 4 Interim diesel engine gives you more power, while consuming less fuel. Benefit from reduced operating costs as well as low emission levels for ultimate efficiency and environmental care.

Regeneration

Soot collected by the Diesel Particulate Filter is oxidized every eight hours, depending on application. Volvo's unique, operator controlled, 25 minute system does not interrupt operation, performance or productivity. For increased safety, regeneration can be postponed.

ECO mode

Volvo's unique ECO mode features sophisticated electronic pump control technology for increased fuel efficiency. It can be used in-conjunction with any working mode. There is no loss of performance in the majority of operating conditions.

Auto idling system

Reduces rpm to idle when the controls are inactive for a specified time – between 3-20 seconds. The length of time is set up via the I-ECU monitor. This system delivers reduced fuel consumption and running costs.

Work modes

For added versatility operators can select the best work mode for the task at hand to ensure optimum performance and fuel efficiency. Easily choose the correct mode, within the throttle control, according to your working conditions.

GET THE JOB DONE.

Get productive with these short swing radius machines – perfect for maneuvering in and out of confined areas with ease. Featuring class-leading digging depth with a 2,4 m **(8 ft)** flat level and superior stability, you can achieve more with Volvo.

Compact swing radius

Short front and rear radius ensures safe and easy operation within a confined space – reducing the risk of damage to the rear compartments in urban construction.

Narrow design

These machines feature a narrow design compared to the classic crawler excavators but still maintain the stability, balance and performance that you would expect from a conventional model. The boom is positioned in the center of the machine.

MORE POWER. MORE SPEED.

Volvo understands that machines need to perform day in, day out. With strong digging power and various work modes the ECR145D and ECR235D are ideally suited to extracting hard and compact materials. Additional pump flow provides faster cycle times. Trust Volvo to increase your productivity.

Idle (I) Mode

For reduced fuel consumption and more environmental care, the higher I-stage of the Idle Mode is used for auto idling – which is highly recommended when truck loading. The second stage (lower I-stage) is typically used for warm up and cool down.

Heavy (H) Mode

H Mode is used for high productivity in intensive and bulk earthmoving applications. It is used for hard digging, trenching and truck loading from deep trenches.

Fine (F) Mode

The Fine control mode provides high hydraulic pressure setting same as power boost function for maximum lifting capability. It is also used for precise grading operation.

General (G) Mode

The General Mode features three different stages of speed. The highest G setting is recommended for maximum fuel saving and good productivity in digging and truck loading. The middle and low G settings can be used for ditching, levelling, slope finishing and spreading where moderate speed is needed.

WORK IN COMFORT.

Space matters – especially in the cab. That's why Volvo has designed a premier operator environment with built in safety, comfort and all-round visibility. Featuring ample leg room and easy to access controls for increased productivity. See everything from all angles in the Volvo's spacious cab.

Industry-leading cab

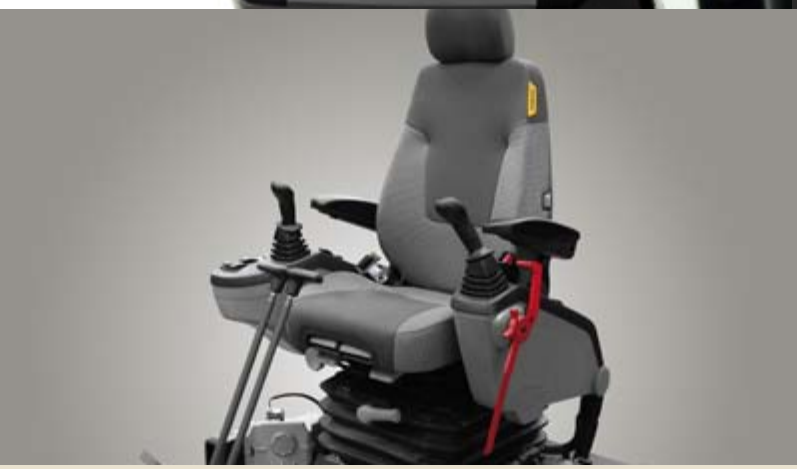
Volvo's spacious convex cab design is Roll Over Protective Structure (ROPS) certified for increased peace of mind in the unlikely event of machine roll over. The cab features a sliding door and a tilting type left-hand console for easy entry and exit to the machine.

I-ECU monitor

Large color monitor provides excellent clarity in all lighting conditions. Using a control panel, the operator and service technician can make quick visual and diagnostic checks, increasing uptime and productivity. The monitor also displays camera images – up to four at a time.

Visibility

Slim cab pillars and large expanses of glass ensure excellent all-round visibility. Enhanced vision delivers improved safety and also allows operators to increase their productivity.



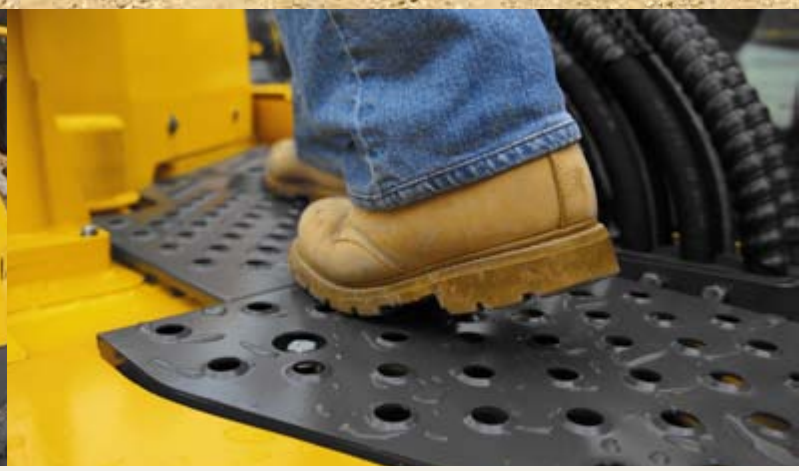
Seat

Featuring nine different adjustments for superb operator comfort and reduced vibration, Volvo's superior seat provides comfort to all operators – resulting in more productivity.

Control panel

Optimally positioned control panel ensures there is no need for operators to move or lean forward to change settings or navigate through the I-ECU monitor. This increases operator comfort and safety.

MORE UPTIME.



Service points

Large, wide compartment doors provide ground level access (wherever possible) to grouped filters and greasing points, reducing maintenance downtime. Excellent centralized access for quick servicing and increased uptime.

Anti-slip plates

Added operator and service mechanic safety from punched anti-slip plate on the superstructure. This provides superb grip, especially in wet or icy conditions.

Service access

Conveniently located boom and arm greasing points are grouped for simplicity and ease of access. In general applications greasing is needed at 50 hour intervals but this can be extended to 500 hours with long life bushings. Slew ring greasing is at 250 hours.

Air filters

Conveniently located air filter elements offer easy access for more machine uptime. The primary air filter removes all major particles and may be cleaned up to five times or used for one year. A secondary protective filter is in place in case of malfunction.

Main control valve

Access to the main control valve is available at ground level, minimizing the amount of service downtime.

PROFILING YOUR NEW EXCAVATOR.

Boom and arm

Available with a mono or two piece boom, and with different arm configurations, for increased flexibility and versatility.

CareTrack

Volvo's telematics system guides machine owners towards optimized productivity and their next service – remotely.

Power and speed

Perform at a higher level with increased digging power and faster cycle times for greater productivity.

Swing radius

Short front and rear radius ensures safe and easy operation within a confined space.

ECO mode

Volvo's unique ECO mode improves fuel efficiency without sacrificing performance.

Undercarriage

Three-piece, high tensile steel undercarriage is designed and built to withstand the toughest conditions.

Volvo cab

Spacious, convex cab design with excellent all-round visibility and easy to access controls. ROPS certified.

MATRIS

Machine Tracking Information System (MATRIS) displays machine performance data on an easy to understand graph.

Efficient engine

Volvo's fuel efficient Tier 4 Interim diesel engine gives you more power while consuming less fuel.

Service access

Premium service access from large opening doors and grouped service points.

Auxiliary hydraulics

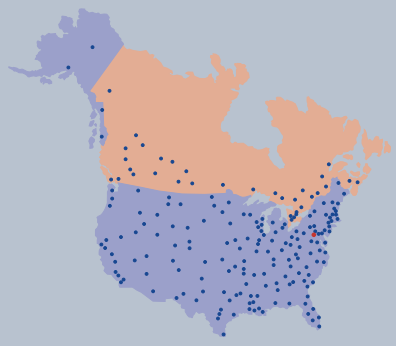
Optional, additional auxiliary hydraulic piping kits allow other hydraulic attachments like hydraulic breakers and rotating grabs to be operated.

Reinforced frames

Reinforced undercarriage and superstructure for improved durability and reliability.

STRENGTH TO SUPPORT YOU AND YOUR BUSINESS.

The day you receive your new Volvo short swing radius crawler excavator is just the start of your working relationship with Volvo. From service and maintenance to our CareTrack telematics system – Volvo has a comprehensive and sophisticated aftermarket portfolio to continuously add value to your business.



CareTrack - Volvo's telematics system works with our exclusive machine tracking info system, MATRIS, using guided diagnostics to track and analyze machines remotely - minimizing costs and maximizing uptime.

Customer Support Agreements - Gives you peace of mind by reducing total ownership costs, maximizing uptime, and distributing maintenance and major repair costs.

Attachments - Providing customers with a wide variety of attachments keep your machine working and open up new job opportunities.

Volvo designed and built your machines, so no-one knows how to keep them working in top condition more than us. When it comes to your machine, our Volvo trained technicians are the experts.

Our technicians work with industry leading diagnostic tools and techniques, using only Genuine Volvo Parts to deliver the highest levels of quality and service. Talk to your Volvo dealer about how genuine Volvo services can best provide the service and maintenance plan that is the right fit for you and your business.

State-of-the-art machines require state-of-the-art support and your Volvo dealer can provide a catalogue of services designed to get the most out of your machine, helping you maximise uptime, productivity and residual value. Your Volvo dealer can provide a number of sophisticated support offers, including:

Service plans ranging from routine wear inspections, through to comprehensive maintenance and repair agreements.

Analysis and diagnostics to help you understand how your machine is running, highlight potential maintenance issues and identify where performance can be improved.

Eco Operator training courses can help your operators work towards a safer, more productive and fuel efficient performance.

VOLVO ECR145D, ECR235D IN DETAIL.

Engine

The latest generation, Volvo engine Tier 4 Interim emissions compliant diesel engine fully meets the demands of the latest, emissions regulations. 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: 2-stage air cleaner. 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.

ECR145D		
Engine Tier 4 Interim	Volvo	D4H
Max power at	r/s / **r/min**	33 / **2,000**
Net, ISO 9249/SAE J1349	kW / **hp**	84 / **113**
Gross, ISO 14396/SAE J1995	kW / **hp**	85 / **114**
Max torque at	Nm / **r/min**	535 / **1,500**
	lb. ft	**395**
No. of cylinders		4
Displacement	l	4.0
	cu. in	**246**
Bore	mm	101
	cu. in	**3.98**
Stroke	mm	126
	cu. in	**4.96**

ECR235D		
Engine Tier 4 Interim	Volvo	D6H
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 at	Nm / **r/min**	849 / **1,350**
	lb. ft	**626**
No. of cylinders		6
Displacement	l	5.7
	cu. in	**348**
Bore	mm	98
	cu. in	**3.86**
Stroke	mm	126
	cu. in	**4.96**

Electrical system

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard. Contronics provides advanced monitoring of machine functions and important diagnostic information on the I-ECU.

		ECR145D	ECR235D
Voltage	V	24	24
Batteries	V	2 x 12	2 x 12
Battery capacity	Ah	100	150
Alternator	V / Ah	28 / 110	28 / 110

Swing system

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

		ECR145D	ECR235D
Max. slew speed	r/min	12.2	11.2
Max. slew torque	kN m	41.9	82.5
	lbf. ft	**30,912**	**60,866**

Drive

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	200
	lb	**26,756**	**44,969**
Max. travel speed	km/h	3.2/5.5	3.1/5.5
	mph	**2.0/3.4**	**1.9 3.4**
Gradeability	°	35	35

Undercarriage

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

Track pads		2 x 46	2 x 49
Link pitch	mm	171.5	190
	in	**6.8**	**7.5**
Shoe width, triple grouser	mm	500/600/750	600/700/ 800/900
	in	**20/24/30**	**24/28/32/36**
Shoe width, triple grouser (HD)	mm	600/700	600
	in	**24/28**	**24**
Shoe width, rubber grouser	mm	500	600
	in	**20**	**24**
Shoe width, double grouser	mm	–	700
	in	–	**28**
Bottom rollers		2 x 7	2 x 8
Top rollers		2 x 1	2 x 2

VOLVO ECR145D, ECR235D IN DETAIL.

Hydraulic system

The hydraulic system, also known as the "Automatic Sensing Work Mode," is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, boom, arm and swing priority along with boom, arm and bucket regeneration provides optimum performance.
The following important functions are included in the system :
Summation system: Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity.
Boom priority: Gives priority to the boom operation for faster raising when loading or performing deep excavations.
Arm priority: Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.
Swing priority: Gives priority to swing functions for faster simultaneous operations.
Regeneration system: Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity.
Power boost: All digging and lifting forces are increased.
Holding valves: Boom and arm holding valves prevent the digging equipment from creeping.

		ECR145D	ECR235D
Main pump, Type 2 x variable displacement axial piston pumps			
Maximum flow	l/min	2 x 124	2 x 207
	gpm	**2 x 33**	**2 x 55**
Pilot pump, Type Gear pump Maximum flow	l/min / **gpm**	20 / **5.3**	18 / **4.8**

Hydraulic motors

Travel: Variable displacement axial piston motor with mechanical brake.
Slew: Fixed displacement axial piston motor with mechanical brake

Relief valve setting			
Implement	MPa	32.3/34.3	34.3/36.3
	psi	**4,690/4,980**	**4,980/5,260**
	kg/cm²	330/350	350/370
Travel circuit	MPa	34.3	34.3
	psi	**4,980**	**4,980**
	kg/cm²	350	350
Slew circuit	MPa	26.5	27.9
	psi	**3,840**	**4,050**
	kg/cm²	270	285
Pilot circuit	MPa	3.9	3.9
	psi	**570**	**570**
	kg/cm²	40	40

Hydraulic cylinders

		ECR145D	ECR235D
Mono boom		2	2
Bore x Stroke	ø x mm	105 x 1 055	130 x 1 420
	ø x in	**4.1 x 41.5**	**5.1 x 55.9**
1st boom of 2 piece boom		2	2
Bore x Stroke	ø x mm	110 x 980	130 x 1 345
	ø x in	**4.3 x 38.6**	**5.1 x 53.0**
2nd boom of 2 piece boom		1	1
Bore x Stroke	ø x mm	160 x 765	160 x 1 070
	ø x in	**6.3 x 30.1**	**6.3 x 42.1**
Arm		1	1
Bore x Stroke	ø x mm	120 x 1 045	135 x 1 540
	ø x in	**4.7 x 41.1**	**5.3 x 60.6**
Bucket		1	1
Bore x Stroke	ø x mm	100 x 865	120 x 1 065
	ø x in	**3.9 x 34.1**	**4.7 x 41.9**
Dozer blade		2	2
Bore x Stroke	ø x mm	130 x 270	140 x 320
	ø x in	**5.1 x 10.6**	**5.5 x 12.6**

Service refill capacities

Fuel tank	l / **gal**	210 / **55**	321 / **85**
Hydraulic system, total	l / **gal**	200 / **53**	280 / **74**
Hydraulic tank	l / **gal**	59 / **16**	113 / **30**
Engine oil	l / **gal**	15.5 / **4.1**	25 / **6.6**
Engine coolant	l / **gal**	26.0 / **6.9**	30.0 / **7.9**
Swing reduction unit	l / **gal**	3.9 / **1.0**	7 / **1.8**
Travel reduction unit	l / **gal**	2 x 2.2 / **2 x 0.6**	2 x 5 / **2 x 1.3**

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

Sound level in cab according to ISO 6396			
LpA (standard)	dB(A)	71	71
LpA (high capacity)	dB(A)	72	72
External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:2009			
LwA (standard)	dB(A)	100	101
LwA (high capacity)	dB(A)	101	102

SPECIFICATIONS.

MAXIMUM PERMITTED BUCKETS

ECR145DL with 600 mm (24") shoe

Boom, Direct Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	0,88	**1.14**	750	**0.98**	0,73	**0.95**	600	**0.78**	0,63	**0.82**	500	**0.65**	0,85	**1.11**	700	**0.92**	0,73	**0.95**	600	**0.78**	0,63	**0.82**	500	**0.65**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,78	**1.01**	650	**0.85**	0,65	**0.85**	550	**0.72**	0,55	**0.72**	450	**0.59**	0,75	**0.98**	650	**0.85**	0,65	**0.85**	550	**0.72**	0,55	**0.72**	450	**0.59**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,75	**0.98**	750	**0.98**	0,63	**0.82**	600	**0.78**	0,53	**0.69**	500	**0.65**	0,73	**0.95**	700	**0.92**	0,63	**0.82**	600	**0.78**	0,53	**0.69**	500	**0.65**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	0,7	**0.92**	700	**0.92**	0,58	**0.75**	550	**0.72**	0,5	**0.65**	500	**0.65**	0,68	**0.88**	650	**0.85**	0,58	**0.75**	550	**0.72**	0,5	**0.65**	500	**0.65**

ECR145DL with 600 mm (24") shoe

Boom, S6 Quick Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	0,83	**1.08**	700	**0.92**	0,68	**0.88**	550	**0.72**	0,58	**0.75**	500	**0.65**	0,83	**1.08**	700	**0.92**	0,68	**0.88**	550	**0.72**	0,58	**0.75**	500	**0.65**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,75	**0.98**	600	**0.78**	0,6	**0.78**	500	**0.65**	0,5	**0.65**	400	**0.52**	0,73	**0.95**	600	**0.78**	0,6	**0.78**	500	**0.65**	0,5	**0.65**	400	**0.52**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,7	**0.92**	700	**0.92**	0,58	**0.75**	550	**0.72**	0,48	**0.62**	450	**0.59**	0,68	**0.88**	650	**0.85**	0,58	**0.75**	550	**0.72**	0,48	**0.62**	450	**0.59**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	0,65	**0.85**	650	**0.85**	0,53	**0.69**	500	**0.65**	0,45	**0.59**	450	**0.59**	0,63	**0.82**	600	**0.78**	0,53	**0.69**	500	**0.65**	0,45	**0.59**	450	**0.59**

ECR145DL with 600 mm (24") shoe

Boom, U Quick Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	0,8	**1.05**	650	**0.85**	0,65	**0.85**	550	**0.72**	0,55	**0.72**	450	**0.59**	0,78	**1.01**	650	**0.85**	0,65	**0.85**	550	**0.72**	0,55	**0.72**	450	**0.59**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,7	**0.92**	600	**0.78**	0,58	**0.75**	500	**0.65**	0,48	**0.62**	400	**0.52**	0,7	**0.92**	550	**0.72**	0,58	**0.75**	500	**0.65**	0,48	**0.62**	400	**0.52**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,68	**0.88**	650	**0.85**	0,55	**0.72**	550	**0.72**	0,45	**0.59**	450	**0.59**	0,65	**0.85**	650	**0.85**	0,55	**0.72**	550	**0.72**	0,45	**0.59**	450	**0.59**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	0,63	**0.82**	600	**0.78**	0,5	**0.65**	500	**0.65**	0,43	**0.56**	400	**0.52**	0,6	**0.78**	600	**0.78**	0,5	**0.65**	500	**0.65**	0,43	**0.56**	400	**0.52**

ECR145DL with 700 mm (28") shoe

Boom, Direct Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	0,88	**1.14**	750	**0.98**	0,73	**0.95**	600	**0.78**	0,63	**0.82**	500	**0.65**	0,88	**1.14**	750	**0.98**	0,73	**0.95**	600	**0.78**	0,63	**0.82**	500	**0.65**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,78	**1.01**	650	**0.85**	0,65	**0.85**	550	**0.72**	0,55	**0.72**	450	**0.59**	0,78	**1.01**	650	**0.85**	0,65	**0.85**	550	**0.72**	0,55	**0.72**	450	**0.59**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,75	**0.98**	750	**0.98**	0,63	**0.82**	600	**0.78**	0,53	**0.69**	500	**0.65**	0,75	**0.98**	750	**0.98**	0,63	**0.82**	600	**0.78**	0,53	**0.69**	500	**0.65**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	0,7	**0.92**	700	**0.92**	0,58	**0.75**	550	**0.72**	0,5	**0.65**	500	**0.65**	0,7	**0.92**	700	**0.92**	0,58	**0.75**	550	**0.72**	0,5	**0.65**	500	**0.65**

ECR145DL with 700 mm (28") shoe

Boom, S6 Quick Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	0,83	**1.08**	700	**0.92**	0,68	**0.88**	550	**0.72**	0,58	**0.75**	500	**0.65**	0,83	**1.08**	700	**0.92**	0,68	**0.88**	550	**0.72**	0,58	**0.75**	500	**0.65**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,75	**0.98**	600	**0.78**	0,6	**0.78**	500	**0.65**	0,5	**0.65**	400	**0.52**	0,75	**0.98**	600	**0.78**	0,6	**0.78**	500	**0.65**	0,5	**0.65**	400	**0.52**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,7	**0.92**	700	**0.92**	0,58	**0.75**	550	**0.72**	0,48	**0.62**	450	**0.59**	0,7	**0.92**	700	**0.92**	0,58	**0.75**	550	**0.72**	0,48	**0.62**	450	**0.59**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	0,65	**0.85**	650	**0.85**	0,53	**0.69**	500	**0.65**	0,45	**0.59**	450	**0.59**	0,65	**0.85**	650	**0.85**	0,53	**0.69**	500	**0.65**	0,45	**0.59**	450	**0.59**

ECR145DL with 700 mm (28") shoe

Boom, U Quick Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb	m^3	yd^3	kg	lb
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	0,8	**1.05**	650	**0.85**	0,65	**0.85**	550	**0.72**	0,55	**0.72**	450	**0.59**	0,8	**1.05**	650	**0.85**	0,65	**0.8**	550	**0.72**	0,55	**0.72**	450	**0.59**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,7	**0.92**	600	**0.78**	0,58	**0.75**	500	**0.65**	0,48	**0.62**	400	**0.52**	0,7	**0.92**	600	**0.78**	0,58	**0.75**	500	**0.65**	0,48	**0.62**	400	**0.52**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	0,68	**0.88**	650	**0.85**	0,55	**0.72**	550	**0.72**	0,45	**0.59**	450	**0.59**	0,68	**0.88**	650	**0.85**	0,55	**0.72**	550	**0.72**	0,45	**0.59**	450	**0.59**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	0,63	**0.82**	600	**0.78**	0,5	**0.65**	500	**0.65**	0,43	**0.56**	400	**0.52**	0,63	**0.82**	600	**0.78**	0,5	**0.65**	500	**0.65**	0,43	**0.56**	400	**0.52**

Note: 1. Bucket size based on ISO 7451, heaped material with a 1:1 angle of repose.
2. "Max permitted sizes" are for reference only and are not necessarily available from the factory.
3. Bucket widths are less than bucket's tip radius.

SPECIFICATIONS.

MAXIMUM PERMITTED BUCKETS

ECR235DL with 600 mm (24") shoe																
Boom, Direct Fit	5,7 m **(18' 8") Mono-Boom**								5,76 m **(18' 10") 2-piece Boom**							
Arm	2,5 m **(8' 2")**				2,9 m **(9' 6")**				2,5 m **(8' 2")**				2,9 m **(9' 6")**			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	1,48	**1.93**	1 250	**1.64**	1,33	**1.73**	1 100	**1.44**	1,4	**1.83**	1 150	**1.50**	1,28	**1.67**	1 100	**1.44**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,3	**1.70**	1 100	**1.44**	1,18	**1.54**	1 000	**1.31**	1,23	**1.60**	1 050	**1.37**	1,15	**1.50**	950	**1.24**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,25	**1.64**	1 250	**1.64**	1,13	**1.47**	1 100	**1.44**	1,18	**1.54**	1 150	**1.50**	1,08	**1.41**	1 050	**1.37**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	1,15	**1.50**	1 150	**1.50**	1,05	**1.37**	1 050	**1.37**	1,1	**1.44**	1 100	**1.44**	1,0	**1.31**	1 000	**1.31**

ECR235DL with 600 mm (24") shoe																
Boom, U Quick Fit	5,7 m **(18' 8") Mono-Boom**								5,76 m **(18' 10") 2-piece Boom**							
Arm	2,5 m **(8' 2")**				2,9 m **(9' 6")**				2,5 m **(8' 2")**				2,9 m **(9' 6")**			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	1,35	**1.77**	1 150	**1.50**	1,2	**1.57**	1 000	**1.31**	1,25	**1.64**	1 050	**1.37**	1,15	**1.50**	950	**1.24**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,2	**1.57**	1 000	**1.31**	1,05	**1.37**	900	**1.18**	1,1	**1.24**	950	**1.24**	1,03	**1.34**	850	**1.11**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,13	**1.47**	1 100	**1.44**	1,0	**1.31**	1 000	**1.31**	1,05	**1.37**	1 050	**1.37**	0,98	**1.28**	950	**1.24**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	1,05	**1.37**	1 050	**1.37**	0,93	**1.21**	900	**1.18**	0,98	**1.28**	950	**1.24**	0,90	**1.18**	900	**1.18**

ECR235DL with 600 mm (24") shoe																
Boom, S1 Quick Fit	5,7 m **(18' 8") Mono-Boom**								5,76 m **(18' 10") 2-piece Boom**							
Arm	2,5 m **(8' 2")**				2,9 m **(9' 6")**				2,5 m **(8' 2")**				2,9 m **(9' 6")**			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	1,4	**1.83**	1 150	**1.50**	1,25	**1.64**	1 050	**1.37**	1,3	**1.70**	1 100	**1.44**	1,2	**1.57**	1 000	**1.31**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,23	**1.60**	1 050	**1.37**	1,1	**1.44**	900	**1.18**	1,15	**1.50**	950	**1.24**	1,05	**1.37**	900	**1.18**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,18	**1.54**	1 150	**1.50**	1,05	**1.37**	1 050	**1.37**	1,1	**1.44**	1 100	**1.44**	1,0	**1.31**	1 000	**1.31**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	1,08	**1.41**	1 050	**1.37**	0,98	**1.28**	950	**1.24**	1,03	**1.34**	1 000	**1.31**	0,93	**1.21**	900	**1.18**

ECR235DL with 700 mm (28") shoe																
Boom, Direct Fit	5,7 m **(18' 8") Mono-Boom**								5,76 m **(18' 10") 2-piece Boom**							
Arm	2,5 m **(8' 2")**				2,9 m **(9' 6")**				2,5 m **(8' 2")**				2,9 m **(9' 6")**			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	1,5	**1.96**	1 250	**1.64**	1,33	**1.73**	1 100	**1.44**	1,43	**1.86**	1 200	**1.57**	1,3	**1.70**	1 100	**1.44**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,33	**1.73**	1 100	**1.44**	1,18	**1.54**	1 000	**1.31**	1,25	**1.64**	1 050	**1.37**	1,15	**1.50**	950	**1.24**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,25	**1.64**	1 250	**1.64**	1,13	**1.47**	1 100	**1.44**	1,18	**1.54**	1 150	**1.50**	1,1	**1.44**	1 100	**1.44**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	1,18	**1.54**	1 150	**1.50**	1,05	**1.37**	1 050	**1.37**	1,1	**1.44**	1 100	**1.44**	1,03	**1.34**	1 000	**1.31**

ECR235DL with 700 mm (28") shoe																
Boom, U Quick Fit	5,7 m **(18' 8") Mono-Boom**								5,76 m **(18' 10") 2-piece Boom**							
Arm	2,5 m **(8' 2")**				2,9 m **(9' 6")**				2,5 m **(8' 2")**				2,9 m **(9' 6")**			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	1,35	**1.77**	1 150	**1.50**	1,2	**1.57**	1 000	**1.31**	1,28	**1.67**	1 050	**1.37**	1,18	**1.54**	1 000	**1.31**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,2	**1.57**	1 000	**1.31**	1,05	**1.37**	900	**1.18**	1,13	**1.47**	950	**1.24**	1,03	**1.34**	850	**1.11**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,15	**1.50**	1 150	**1.50**	1,0	**1.31**	1 000	**1.31**	1,08	**1.41**	1 050	**1.37**	0,98	**1.28**	950	**1.24**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	1,08	**1.41**	1 050	**1.37**	0,93	**1.21**	900	**1.18**	1,0	**1.31**	1 000	**1.31**	0,93	**1.21**	900	**1.18**

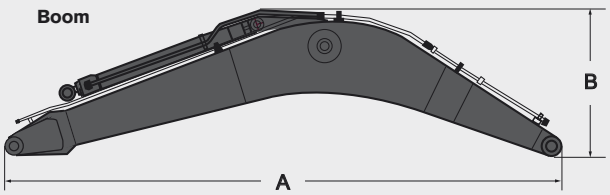
ECR235DL with 700 mm (28") shoe																
Boom, S1 Quick Fit	5,7 m **(18' 8") Mono-Boom**								5,76 m **(18' 10") 2-piece Boom**							
Arm	2,5 m **(8' 2")**				2,9 m **(9' 6")**				2,5 m **(8' 2")**				2,9 m **(9' 6")**			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**	m^3	**yd^3**	kg	**lb**
GP bucket 1,5 t/m^3 **(2,530 lb/yd^3)**	1,4	**1.83**	1 200	**1.57**	1,25	**1.64**	1 050	**1.37**	1,33	**1.73**	1 100	**1.44**	1,23	**1.60**	1 000	**1.31**
GP bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,25	**1.64**	1 050	**1.37**	1,1	**1.44**	900	**1.18**	1,18	**1.54**	1 000	**1.31**	1,08	**1.41**	900	**1.18**
HD bucket 1,8 t/m^3 **(3,030 lb/yd^3)**	1,18	**1.54**	1 150	**1.50**	1,05	**1.37**	1 050	**1.37**	1,1	**1.44**	1 100	**1.44**	1,03	**1.34**	1 000	**1.31**
HD bucket 2,0 t/m^3 **(3,370 lb/yd^3)**	1,1	**1.44**	1 100	**1.44**	0,98	**1.28**	950	**1.24**	1,03	**1.34**	1 000	**1.31**	0,95	**1.24**	950	**1.24**

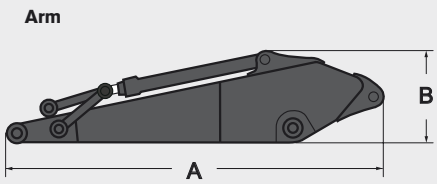
Note: 1. Bucket size based on ISO 7451, heaped material with a 1:1 angle of repose.
2. "Max permitted sizes" are for reference only and are not necessarily available from the factory.
3. Bucket widths are less than bucket's tip radius.

MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe width		Operating weight		Ground pressure		Overall width		Operating weight		Ground pressure		Overall width	
Units	mm	in	kg	lb	kPa	psi	mm	in	kg	lb	kPa	psi	mm	in
ECR145DL			4,6 m **(15' 1")** boom, 2,5 m **(8' 2")** arm, 419 kg **(912 lb)** bucket, 3 200 kg **(7,060 lb)** counterweight						4,72 m **(15' 6")** 2 piece boom, 2,5 m **(8' 2")** arm, 419 kg **(912 lb)** bucket, 3 200 kg **(7,060 lb)** counterweight					
Triple grouser	500	**20**	14 960	**32,990**	44.5	**6.5**	2 490	**8' 2"**	15 360	**33,870**	45.7	**6.6**	2 490	**8' 2"**
	600	**24**	15 160	**33,430**	37.6	**5.5**	2 590	**8' 6"**	15 560	**34,310**	38.6	**5.6**	2 590	**8' 6"**
	750	**30**	15 540	**34,270**	30.8	**4.5**	2 740	**9' 0"**	15 940	**35,150**	31.6	**4.6**	2 740	**9' 0"**
Triple grouser HD	600	**24**	15 230	**33,580**	37.8	**5.5**	2 590	**8' 6"**	15 630	**34,460**	38.8	**5.6**	2 590	**8' 6"**
	700	**28**	15 430	**34,020**	32.8	**4.8**	2 690	**8' 10"**	15 830	**34,910**	33.7	**4.9**	2690	**8' 10"**
Rubber grouser	500	**20**	15 000	**33,080**	44.7	**6.5**	2 490	**8' 2"**	15 400	**33,960**	45.8	**6.6**	2 490	**8' 2"**
ECR145DL with Dozer Blade			4,6 m **(15' 1")** boom, 2,5 m **(8' 2")** arm, 419 kg **(912 lb)** bucket, 3 200 kg **(7,060 lb)** counterweight						4,72 m **(15' 6")** 2 piece boom, 2,5 m **(8' 2")** arm, 419 kg **(912 lb)** bucket, 3 200 kg **(7,060 lb)** counterweight					
Triple grouser	500	**20**	15 830	**34,910**	47.1	**6.8**	2 490	**8' 2"**	16 230	**35,790**	48.3	**7.0**	2 490	**8' 2"**
	600	**24**	16 040	**35,370**	39.8	**5.8**	2 590	**8' 6"**	16 440	**36,250**	40.8	**5.9**	2 590	**8' 6"**
	750	**30**	16420	**36,210**	32.6	**4.7**	2 740	**9' 0"**	16 820	**37,090**	33.4	**4.8**	2 740	**9' 0"**
Triple grouser HD	600	**24**	16 110	**35,520**	40.0	**5.8**	2 590	**8' 6"**	16 510	**36,400**	41.0	**5.9**	2 590	**8' 6"**
	700	**28**	16 310	**35,960**	34.7	**5.0**	2 690	**8' 10"**	16 710	**36,850**	35.5	**5.2**	2 690	**8' 10"**
Rubber grouser	500	**20**	15 870	**34,990**	47.2	**6.9**	2 490	**8' 2"**	16 270	**35,880**	48.4	**7.0**	2 490	**8' 2"**
ECR235DL			5,7 m **(18' 8")** boom, 2,9 m **(18' 8")** arm, 693 kg **(1,530 lb)** bucket, 6 400 kg **(14,110 lb)** counterweight						5,76 m **(18' 11")** 2-piece boom 2,9 m **(18' 8")** arm, 693 kg **(1,530 lb)** bucket, 6 400 kg **(14,110 lb)** counterweight					
Triple grouser	600	**24**	24 650	**54,350**	51.1	**7.4**	2 990	**9' 10"**	25 230	**55,630**	52.3	**7.6**	2 990	**9' 10"**
	700	**28**	25 100	**55,350**	44.6	**6.5**	3 090	**10' 2"**	25 680	**56,620**	45.6	**6.6**	3 090	**10' 2"**
	800	**32**	25 380	**55,960**	39.4	**5.7**	3 190	**10' 6"**	25 960	**57,240**	40.4	**5.9**	3190	**10' 6"**
	900	**36**	25 670	**56,600**	35.5	**5.1**	3 290	**10' 10"**	26 250	**57,880**	36.3	**5.3**	3 290	**10' 10"**
Triple grouser HD	600	**24**	24 820	**54,730**	51.4	**7.5**	2 990	**9' 10"**	25 400	**56,010**	52.6	**7.6**	2 990	**9' 10"**
Double grouser	700	**28**	25 380	**55,960**	45.1	**6.5**	3 090	**10' 2"**	25 960	**57,240**	46.1	**6.7**	3 090	**10' 2"**
Rubber grouser	600	**24**	24 940	**54,990**	51.7	**7.5**	2 990	**9' 10"**	25 520	**56,270**	52.9	**7.7**	2 990	**9' 10"**
ECR235DL with Dozer Blade			5,7 m **(18' 8")** boom, 2,9 m **(18' 8")** arm, 693 kg **(1,530 lb)** bucket, 6 400 kg **(14,110 lb)** counterweight						5,76 m **(18' 11")** 2-piece boom 2,9 m **(18' 8")** arm, 693 kg **(1,530 lb)** bucket, 6 400 kg **(14,110 lb)** counterweight					
Triple grouser	600	**24**	26 030	**57,400**	53.9	**7.8**	2 990	**9' 10"**	26 610	**58,680**	55.1	**8.0**	2 990	**9' 10"**
	700	**28**	26 500	**58,430**	47.1	**6.8**	3 090	**10' 2"**	27 080	**59,710**	48.1	**7.0**	3 090	**10' 2"**
	800	**32**	26 790	**59,070**	41.6	**6.0**	3 190	**10' 6"**	27 370	**60,350**	42.5	**6.2**	3 190	**10' 6"**
	900	**36**	27 080	**59,710**	37.4	**5.4**	3 290	**10' 10"**	27 660	**60,990**	38.2	**5.5**	3 290	**10' 10"**
Triple grouser HD	600	**24**	26 200	**57,770**	54.3	**7.9**	2 990	**9' 10"**	26 780	**59,050**	55.5	**8.0**	2 990	**9' 10"**
Double grouser	700	**28**	26 780	**59,050**	47.6	**6.9**	3 090	**10' 2"**	27 360	**60,330**	48.6	**7.0**	3 090	**10' 2"**
Rubber grouser	600	**24**	26 320	**58,040**	54.5	**7.9**	2 990	**9' 10"**	26 900	**59,310**	55.7	**8.1**	2 990	**9' 10"**

DIMENSIONS



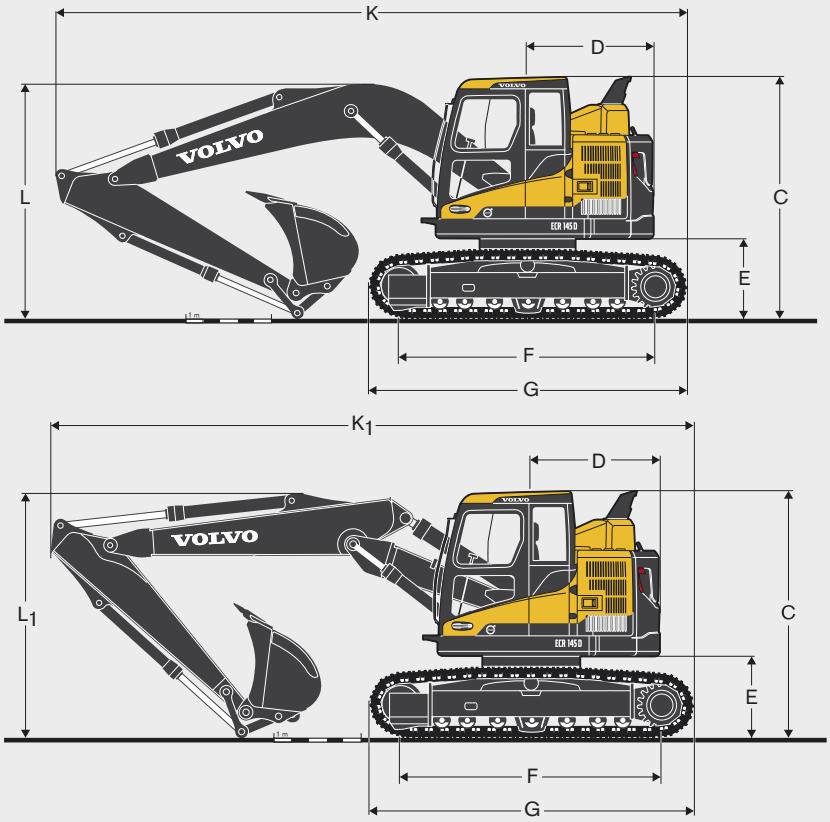


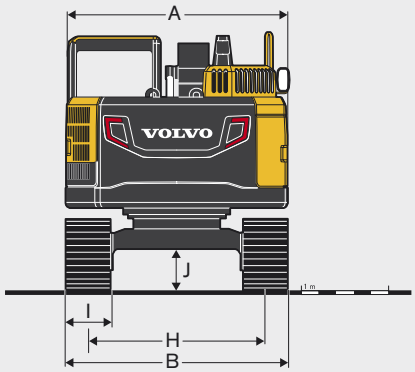
		ECR145D		ECR235D	
Description	Unit	mono	2-piece	mono	2-piece
Boom	m **(in)**	4,6 **(15' 1")**	4,72 **(15' 6")**	5,7 **(18' 8")**	5,76 **(18' 11")**
Length (A)	mm **(in)**	4 770 **(15' 8")**	4 885 **(16' 0")**	5 910 **(19' 5")**	5 965 **(19' 7")**
Height (B)	mm **(in)**	1 370 **(4' 6")**	1 135 **(3' 9")**	1 770 **(5' 10")**	1 300 **(4' 3")**
Width	mm **(in)**	545 **(1' 9")**	545 **(1' 9")**	670 **(2' 2")**	670 **(2' 2")**
Weight	kg **(lb)**	1 130 **(2,490)**	1 450 **(3,200)**	2 000 **(4,410)**	2 570 **(5,670)**

		ECR145D			ECR235D	
Description	Unit					
Arm	m **(in)**	2,1 **(6' 11")**	2,5 **(8' 2")**	3,0 **(9' 10")**	2,5 **(8' 2")**	2,9 **(9' 6")**
Length (A)	mm **(in)**	2 790 **(9' 2")**	3 195 **(10' 6")**	3 690 **(12' 1")**	3 525 **(11' 7")**	3 910 **(12' 10")**
Height (B)	mm **(in)**	680 **(2' 3")**	675 **(2' 3")**	750 **(2' 6")**	860 **(2' 10")**	860 **(2' 10")**
Width	mm **(in)**	275 **(0' 11")**	275 **(0' 11")**	275 **(0' 11")**	440 **(1' 5")**	440 **(1' 5")**
Weight	kg **(lb)**	560 **(1,230)**	624 **(1,380)**	684 **(1,510)**	975 **(2,150)**	1 000 **(2,200)**

SPECIFICATIONS.

DIMENSIONS ECR145DL

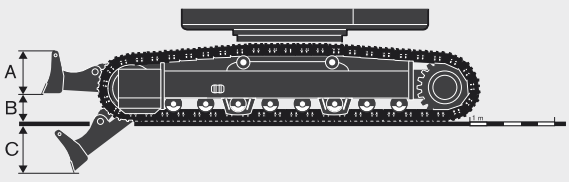




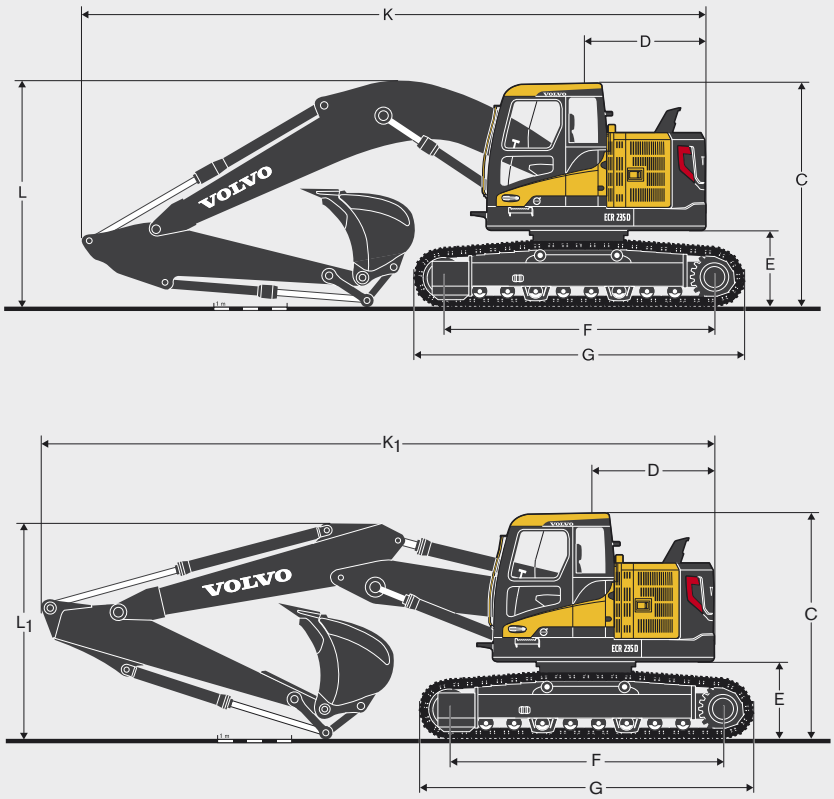
Description	Unit	ECR145DL					
Boom	m, **ft-in**	4,6 **(15' 1")** mono or 4,72 **(15' 6")** 2-piece					
Arm	m, **ft-in**	2,1	**6' 11"**	2,5	**8' 2"**	3,0	**9' 10"**
A. Overall width of upper structure	mm, **ft-in**	2 490	**8' 2"**	2 490	**8' 2"**	2 490	**8' 2"**
B. Overall width	mm, **ft-in**	2 690	**8' 10"**	2 690	**8' 10"**	2 690	**8' 10"**
C. Overall height of cab	mm, **ft-in**	2 855	**9' 4"**	2 855	**9' 4"**	2 855	**9' 4"**
D. Tail slew radius	mm, **ft-in**	1 494	**4' 11"**	1 494	**4' 11"**	1 494	**4' 11"**
E. Counterweight clearance *	mm, **ft-in**	900	**2' 11"**	900	**2' 11"**	900	**2' 11"**
F. Tumbler length	mm, **ft-in**	3 040	**10' 0"**	3 040	**10' 0"**	3 040	**10' 0"**
G. Track length	mm, **ft-in**	3 750	**12' 4"**	3 750	**12' 4"**	3 750	**12' 4"**
H. Track gauge	mm, **ft-in**	1 990	**6' 6"**	1 990	**6' 6"**	1 990	**6' 6"**
I. Shoe width	mm, **ft-in**	700	**2' 4"**	700	**2' 4"**	700	**2' 4"**
J. Min. ground clearance *	mm, **ft-in**	430	**1' 5"**	430	**1' 5"**	430	**1' 5"**
K. Overall length	mm, **ft-in**	7 400	**24' 3"**	7 405	**24' 4"**	7 345	**24' 1"**
K¹ . Overall length	mm, **ft-in**	7 505	**24' 7"**	7 470	**24' 6"**	7 370	**24' 2"**
L. Overall height of boom	mm, **ft-in**	2 745	**9' 0"**	2 865	**9' 5"**	3 270	**10' 9"**
L¹ . Overall height of boom	mm, **ft-in**	2 665	**8' 9"**	2 860	**9' 5"**	3 350	**11' 0"**

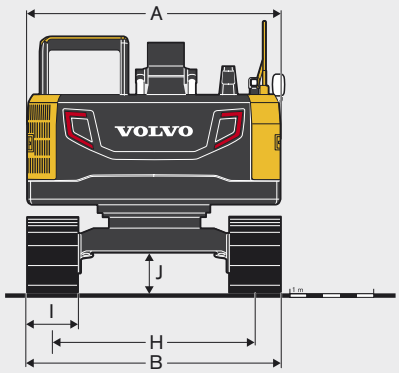
* Without shoe grouser

Front dozer blade	Unit	ECR145D
A. Height	m, **(ft-in)**	580 **(1' 11")**
Width	mm, **(ft-in)**	2 690 **(8' 10")**
B. Lift height	mm, **(ft-in)**	590 **(1' 11")**
C. Digging depth	mm, **(ft-in)**	570 **(1' 10")**



DIMENSIONS ECR235DL

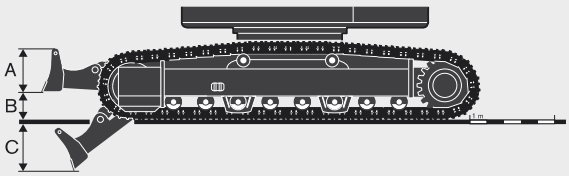




Description	Unit	ECR235DL			
Boom	m, ft-in	5,7 **(18' 8")** mono or 5,76 **(18' 11")** 2-piece			
Arm	m, ft-in	2,5	**8' 2"**	2,9	**9' 6"**
A. Overall width of upper structure	mm, ft-in	2 990	**9' 10"**	2 990	**9' 10"**
B. Overall width	mm, ft-in	3 090	**10' 2"**	3 090	**10' 2"**
C. Overall height of cab	mm, ft-in	3 040	**10' 0"**	3 040	**10' 0"**
D. Tail slew radius	mm, ft-in	1 720	**5' 8"**	1 720	**5' 8"**
E. Counterweight clearance *	mm, ft-in	1 025	**3' 4"**	1 025	**3' 4"**
F. Tumbler length	mm, ft-in	3 660	**12' 0"**	3 660	**12' 0"**
G. Track length	mm, ft-in	4 460	**14' 8"**	4 460	**14' 8"**
H. Track gauge	mm, ft-in	2 390	**7' 10"**	2 390	**7' 10"**
I. Shoe width	mm, ft-in	700	**2' 4"**	700	**2' 4"**
J. Min. ground clearance *	mm, ft-in	460	**1' 6"**	460	**1' 6"**
K. Overall length	mm, ft-in	9 080	**29' 9"**	8 985	**29' 6"**
K¹ . Overall length	mm, ft-in	9 120	**29' 11"**	9 100	**29' 10"**
L. Overall height of boom	mm, ft-in	3 235	**10' 7"**	3 080	**10' 1"**
L¹ . Overall height of boom	mm, ft-in	3 005	**9' 10"**	2 905	**9' 6"**

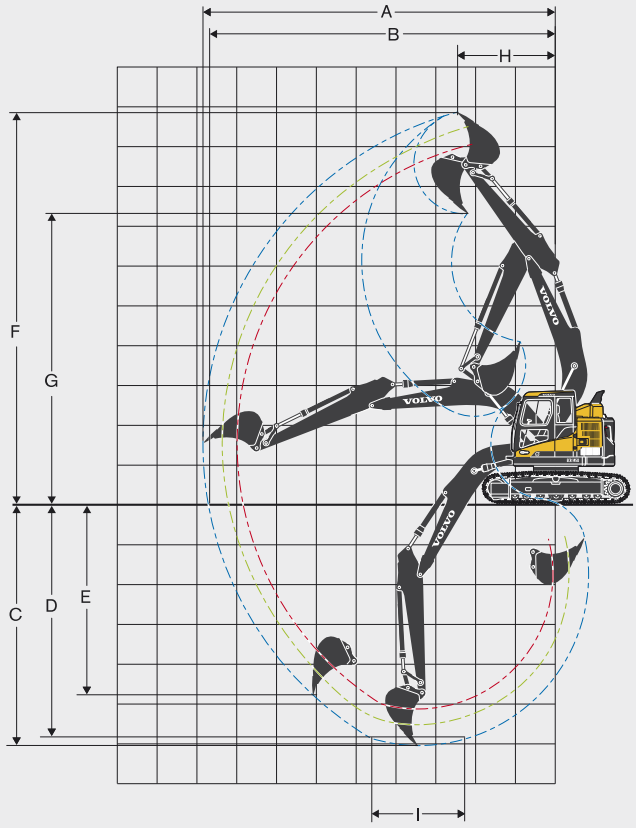
* Without shoe grouser

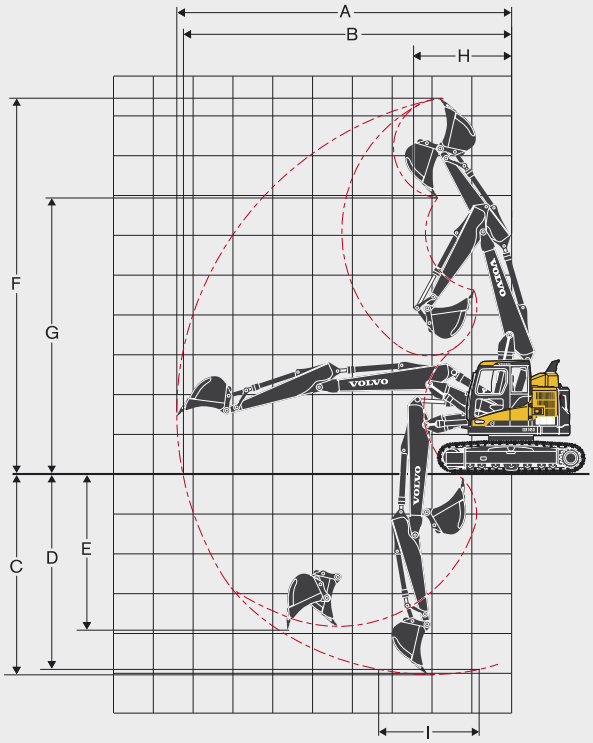
Front dozer blade	Unit	ECR235D
A. Height	m, (ft-in)	600 **(1' 12")**
Width	mm, (ft-in)	3 090 **(10' 2")**
B. Lift height	mm, (ft-in)	610 **(2' 0")**
C. Digging depth	mm, (ft-in)	480 **(1' 7")**



SPECIFICATIONS.

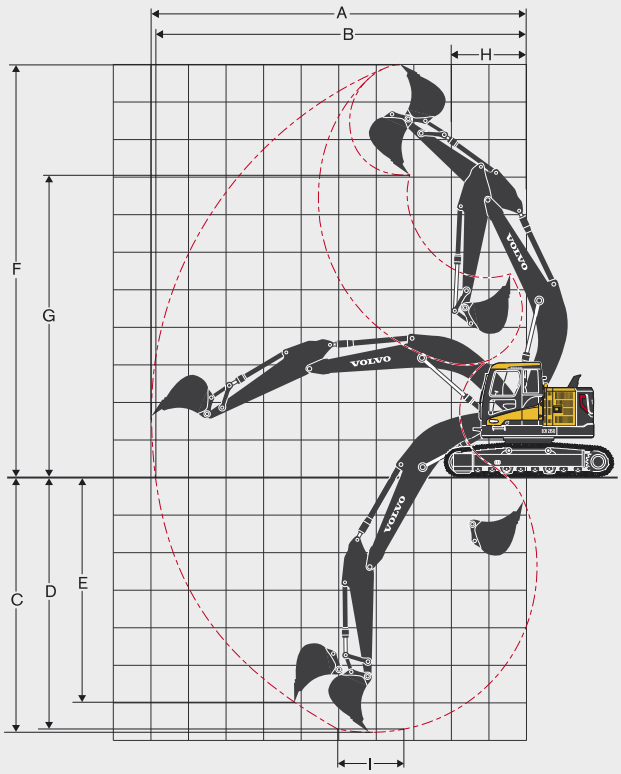
WORKING RANGES ECR145D

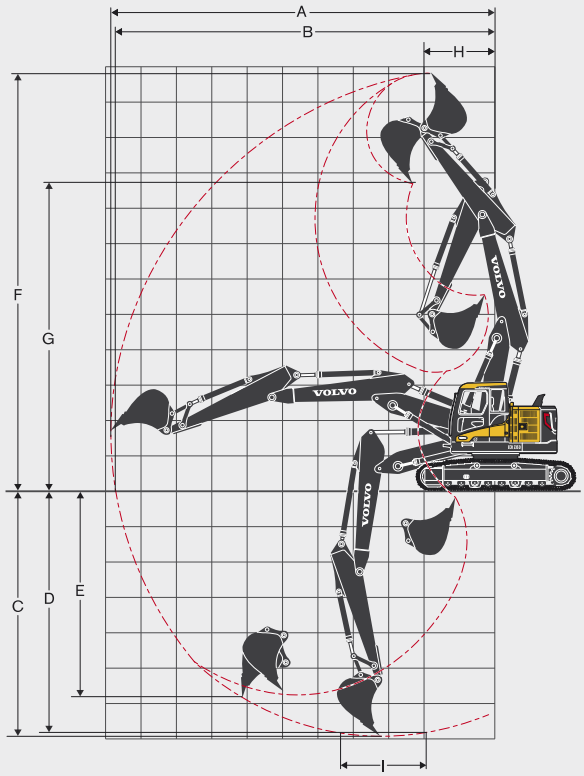




Description			Unit	ECR145DL											
Boom			m, ft-in	4,6 (15' 1") mono						4,72 (15' 6") 2-piece					
Arm			m, ft-in	2,1	6' 11"	2,5	8' 2"	3,0	9' 10"	2,1	6' 11"	2,5	8' 2"	3,0	9' 10"
A. Max. digging reach			mm, ft-in	7 980	26' 2"	8 350	27' 5"	8 840	29' 0"	8 210	26' 11"	8 600	28' 3"	9090	29' 10"
B. Max. digging reach on ground			mm, ft-in	7 830	25' 8"	8 210	26' 11"	8 700	28' 7"	8 060	26' 5"	8 450	27' 9"	8 960	29' 5"
C. Max. digging depth			mm, ft-in	5 110	16' 9"	5 510	18' 1"	6 010	19' 9"	5 220	17' 2"	5 620	18' 5"	6 120	20' 1"
D. Max. digging depth (l = 2,440 m, (8') level)			mm, ft-in	4 860	15' 11"	5 290	17' 4"	5 830	19' 2"	5 100	16' 9"	5 510	18' 1"	6 020	19' 9"
E. Max. vertical wall digging depth			mm, ft-in	3 920	12' 10"	4 290	14' 1"	4 810	15' 9"	4 120	13' 6"	4 480	14' 8"	4 970	16' 4"
F. Max. cutting height			mm, ft-in	9 100	29' 10"	9 420	30' 11"	9 860	32' 4"	9 390	30' 10"	9 740	31' 11"	10 210	33' 6"
G. Max. dumping height			mm, ft-in	6 570	21' 7"	6 900	22' 8"	7 330	24' 1"	6 850	22' 6"	7 210	23' 8"	7 680	25' 2"
H. Min. front swing radius			mm, ft-in	1 800	5' 11"	1 980	6' 6"	2 340	7' 8"	2 230	7' 4"	2 470	8' 1"	2 890	9' 6"
Digging forces with direct fit bucket															
Bucket radius			mm, ft-in	1 270	4' 8"	1 270	4' 8"	1 270	4' 8"	1 270	4' 8"	1 270	4' 8"	1 270	4' 8"
Breakout force - bucket	Normal	SAE	kN, lb	80.8	18,150	80.8	18,150	80.8	18150	80.8	18,150	80.8	18,150	80.8	18,150
	Power boost		kN, lb	85.7	19,250	85.7	19,250	85.7	19,250	85.7	19,250	85.7	19,250	85.7	19,250
	Normal	ISO	kN, lb	91.0	20,470	91.0	20,470	91.0	20,470	91.0	20,470	91.0	20,470	91.0	20,470
	Power boost		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	kN, lb	69.6	15,640	62.2	13,980	55.4	12,450	69.6	15,640	62.2	13,980	55.4	12,450
	Power boost		kN, lb	73.8	16,590	66.1	14,860	55.8	12,540	73.8	16,590	66.1	14,860	55.8	12,540
	Normal	ISO	kN, lb	71.3	16,040	63.6	14,300	56.4	12,680	71.3	16,040	63.6	14,300	56.4	12,680
	Power boost		kN, lb	75.8	17,030	67.4	15,150	59.8	13,440	75.8	17,030	67.4	15,150	59.8	13,440
Rotation angle, bucket			°	178		178		178		178		178		178	

WORKING RANGES ECR235D





Description			Unit	ECR235DL							
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	9 500	31' 2"	9 880	32' 5"	9 680	31' 9"	10 070	33' 0"
B. Max. digging reach on ground			mm, ft-in	9 330	30' 7"	9 720	31' 11"	9 510	31' 2"	9 910	32' 6"
C. Max. digging depth			mm, ft-in	6 310	20' 8"	6 710	22' 0"	5 910	19' 5"	6 310	20' 8"
D. Max. digging depth (I = 2,440 m, (8') level)			mm, ft-in	6 080	19' 11"	6 510	21' 4"	5 800	19' 0"	6 210	20' 4"
E. Max. vertical wall digging depth			mm, ft-in	5 180	17' 0"	5 650	18' 6"	4 850	15' 11"	5 270	17' 3"
F. Max. cutting height			mm, ft-in	10 620	34' 10"	10 940	35' 11"	11 170	36' 8"	11 530	37' 10"
G. Max. dumping height			mm, ft-in	7 600	24' 11"	7 910	25' 11"	8 130	26' 8"	8 510	27' 11"
H. Min. front swing radius			mm, ft-in	2 280	7' 6"	2 000	6' 7"	2 150	7' 1"	2 010	6' 7"
Digging forces with direct fit bucket											
Bucket radius			mm, ft-in	1 525	5' 3"	1 525	5' 3"	1 525	5' 3"	1 525	5' 3"
Breakout force - bucket	Normal	SAE	kN, lb	126.3	28,400	126.3	28,400	126.3	28,400	126.3	28,400
	Power boost		kN, lb	133.5	30,020	133.5	30,020	133.5	30,020	133.5	30,020
	Normal	ISO	kN, lb	142.1	31,930	142.1	31,930	142.1	31,930	142.1	31,930
	Power boost		kN, lb	150.2	33,760	150.2	33,760	150.2	33,760	150.2	33,760
Tearout force - dipper arm	Normal	SAE	kN, lb	117.1	26,330	101.2	22,760	117.1	26,330	101.2	22,760
	Power boost		kN, lb	123.8	27,830	107.0	24,060	123.8	27,830	107.0	24,060
	Normal	ISO	kN, lb	120.4	27,060	103.7	23,320	120.4	27,060	103.7	23,320
	Power boost		kN, lb	127.3	28,610	109.7	24,650	127.3	28,610	109.7	24,650
Rotation angle, bucket			°	175		175		175		175	

EQUIPMENT.

STANDARD EQUIPMENT

	ECR145D	ECR235D
Engine		
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Stage IIIB/ Tier 4 Interim requirements	•	•
Air filter with indicator	•	•
Air intake heater	•	•
Electric engine shut-off	•	•
Fuel filter and water separator	•	•
Fuel filler pump: 35 l/min **(9 gpm)**, with automatic shut-off	•	•
Alternator, 80 A	•	•
Electric/Electronic control system		
Contronics	•	•
– Advanced mode control system	•	•
– Self-diagnostic system	•	•
Machine status indication	•	•
Engine speed sensing power control	•	•
Automatic idling system	•	•
One-touch power boost	•	•
Safety stop/start function	•	•
Adjustable LCD color monitor	•	•
Master electrical disconnect switch	•	•
Engine restart prevention circuit	•	•
High-capacity halogen lights:	•	•
– Frame-mounted 2	•	•
– Boom-mounted 2	•	•
Batteries,		
2 x 12 V / 100 Ah (ECR145D)	•	
2 x 12 V / 150 Ah (ECR235D)		•
Start motor, 24 V / 5.5 kW	•	•
Travel alarm	•	•
Hydraulic system		
Overload warning device	•	•
Automatic sensing hydraulic system	•	•
– Summation system	•	•
– Boom priority	•	•
– Arm priority	•	•
– Swing 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	•	•
Cylinder cushioning	•	•
Cylinder contamination seals	•	•
Auxiliary hydraulic valve	•	•
Automatic two-speed travel motors	•	•
Hydraulic oil, long life oil, ISO VG 46	•	•
Frame		
Access way with handrail	•	•
Tool storage area	•	•
Punched metal anti-slip plates	•	•
Undercover (heavy-duty)	•	•
Full height counterweight:		
3 200 kg **(7,060 lb)**	•	
6 400 kg **(14,110 lb)**		•
Cab and interior		
ROPS (ISO12117-2) certified cab	•	•
Silicon oil and rubber mounts with spring	•	•
Travel pedals and hand levers	•	•
Adjustable operator seat and joystick control console	•	•
Control joysticks with 4 switches each	•	•
Heater & air-conditioner, automatic	•	•
Flexible antenna	•	•
AM/FM stereo with CD player and MP3 input	•	•
Hydraulic safety lock lever	•	•
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	•	•
– Rain shield	•	•
– Windshield wiper with intermittent feature	•	•
Opening roof hatch	•	•
Rear view camera	•	•
Master key	•	•
Undercarriage		
Undercover (heavy-duty)	•	•
Hydraulic track adjusters	•	•
Greased and sealed track link	•	•
Track Guard	•	•
Track shoes		
600 mm with triple grousers	•	•
Digging equipment		
Boom: 4,6 m **(15' 1")** monoblock	•	
Arm: 2,5 m **(8' 2")**	•	
Boom: 5,7 m **(18' 8")** monoblock		•
Arm: 2,9 m **(9' 6")**		•
Manual centralized lubrication	•	•

OPTIONAL EQUIPMENT

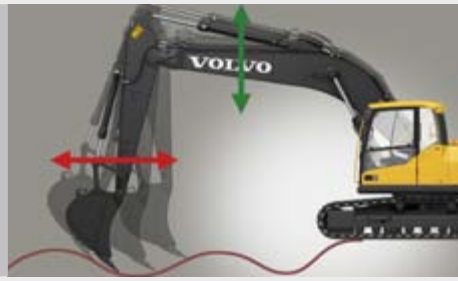
	ECR145D	ECR235D
Engine		
Block heater: 120 V, 240 V	•	•
Diesel coolant heater, 5 kW	•	•
Water separator with heater	•	•
Auto engine shutdown	•	•
Electric		
Extra lights:	•	•
– Cab-mounted 2	•	•
– Boom-mounted 2	•	•
– Counterweight-mounted 1	•	•
Anti-theft system	•	•
Rotating warning beacon	•	•
Hydraulic system		
Hose rupture valve: boom	•	•
Hose rupture valve: arm	•	•
Boom float function with HRV	•	•
Boom float function without HRV	•	•
Hydraulic piping:		
– Attachment management system (up to 18 programmable memories)	•	•

OPTIONAL EQUIPMENT

	ECR145D	ECR235D
– Hammer & shear, 1 and 2 pump flow	•	•
– Hammer & shear: variable flow and pressure pre-setting	•	•
– Slope & rotator	•	•
– Grapple	•	•
– Oil leak (drain) line	•	•
– Quick coupler piping	•	•
Volvo hydraulic quick coupler S6	•	
Volvo hydraulic quick coupler S1		•
Volvo hydraulic quick coupler U14	•	
Volvo hydraulic quick coupler U21		•
Hydraulic oil, biodegradable 46	•	•
Hydraulic oil, longlife oil 32	•	•
Hydraulic oil, longlife oil 46	•	•
Hydraulic oil, longlife oil 68	•	•
Cab and interior		
Fabric seat with heater	•	•
Fabric seat with heater and air suspension	•	•
Pilot control pattern change	•	•
Falling object guard (FOG)	•	•
– Cab-mounted	•	•
Cab-mounted falling object protective structure (FOPS)	•	•
Smoker kit (ashtray and lighter)	•	•
Safety net for front window	•	•
Anti-vandalism kit	•	•
Specific key	•	•
Undercarriage		
Full track guard		•
Track shoes		
500 mm **(20")** / 750 mm **(30")** with triple grousers	•	
600 mm **(24")** / 700 mm **(28")** with HD triple grousers.	•	
500 mm **(20")** with rubber shoe	•	
700 mm **(28")** / 800 mm **(32")** / 900 mm **(36")** with triple grousers		•
700 mm **(28")** with HD triple grousers.		•
700 mm **(28")** with double grousers		•
600 mm **(24")** with rubber shoe		•
Digging equipment		
Boom: 4,72 m **(15' 6")** 2 piece boom	•	
Boom: 5,76 m **(18' 11")** 2 piece boom		•
Arm: 2,1 m **(6' 11")**, 3,0 m **(9' 10")**	•	
Arm: 2,5 m **(8' 2")** HD		•
Linkage with lifting eye	•	•
Extended greasing bushing	•	•
Service		
Tool kit, daily maintenance	•	•
Tool kit, Compact	•	•

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Boom float



Falling object guard

Proportional joystick

Dozer blade

Two piece boom

UQF/SQF quick couplers

VOLVO CONSTRUCTION EQUIPMENT

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

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
www.volvoce.com/na

Ref. No. VOE2210009255
Printed in USA 04/12 – 0,0
Volvo, Asheville
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USA