

VOLVO EXCAVATORS

# EC380D, EC480D

38-56 t 288-355 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.



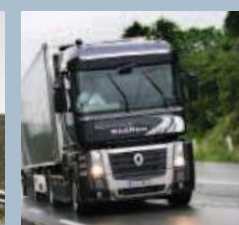
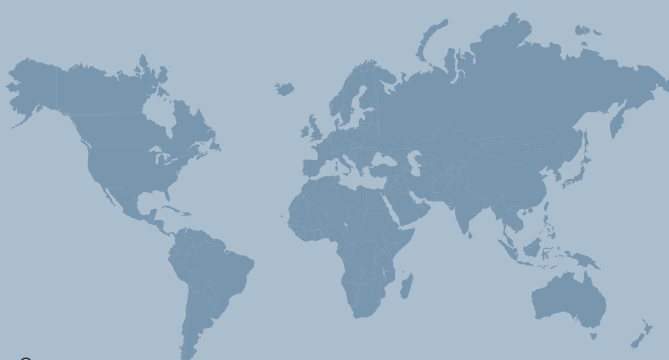
## You learn a lot in 175 years

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.

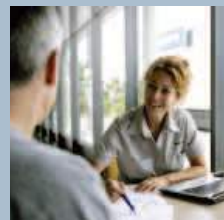
## We have a passion for performance.



Volvo Trucks

Renault Trucks

Mack Trucks



UD Trucks

Volvo Buses

Volvo Construction Equipment

Volvo Penta

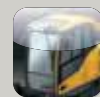
Volvo Aero

Volvo Financial Services

# SEE IT ALL. DO IT ALL.



When you are working comfortably, long work shifts go by quickly. You see everything clearly. Everything seems easier and you get more accomplished. That is the goal every day. Do it with Volvo.



#### **Volvo care cab**

All-day cab comfort is yours with Volvo. Expect an excellent operator environment and take command in all-around quality and ergonomic comfort. A comfortable seat, ideally-placed controls, excellent visibility and plenty of cab room. It all adds up to greater productivity, day after day.



### Color I-ECU monitor

Operators always know exactly where their machine stands from a diagnostic point of view with the color I-ECU monitor. It's clear and easy to read, in all light conditions, for visual status checks. Its position from left to right is adjustable. A service mode allows engineers to perform quick diagnostic checks, helping to increase uptime and productivity. The monitor also permits rear view camera images to be displayed.

### Console & switches

Everything you need is all in reach and view in the Volvo cab. The consoles and switches are conveniently located right where you want them, with your ergonomic comfort in mind. The consoles and switches are also built with quality for durability and long life.



### Noise reduction

Excellent noise insulation and vibration dampening reduces fatigue and ensures high operator productivity all day long.

### Viscous silicon rubber

The Volvo Care Cab is mounted on viscous, silicon rubber mounts. This system absorbs shocks, providing excellent comfort and greatly reducing whole body vibration. Also produces less noise, resulting in less fatigue and more comfort that leads to more all-day productivity.

### ROPS

The cab features Roll Over Protective Structure (ROPS) safety certification. Provides more operator safety and peace-of-mind when operating in tough environments or in the event of the machine rolling over.

# VOLVO STRENGTH IS BEHIND YOU.

## Volvo engine

The new Volvo Stage IIIB emissions compliant engine fully meets today's environmental requirements. Engine noise is also reduced.



## Digging power

Excellent digging power performance allows for quick cycle times and efficient extraction of hard or compacted material.



## Tractive force

Improved tractive force for excellent speed and traveling on inclines or difficult terrain.



## Mechanical variable width (EC480D only)

Better stability and protection from an additional 150mm width and 196mm of ground clearance, whilst bucket capacity can also be increased.

## Digging speed

Up to 15% increased boom down speed and 2-pump flow for bucket in, results in faster cycle times and higher productivity.



## Boom float

With the float position it is possible to get the boom "floating" over the ground without any pressure in the boom cylinders. This feature is useful for grading/finishing operation and for grab working.



You think it and you act. The reaction time is instantaneous. From your mind to your hand, there is no hesitation. It's intuitive and it's the same in your Volvo Excavator. Move swiftly and dig in with powerful productivity.

# TECHNOLOGY AT WORK FOR YOU.



Your excavator does much more than one task, and Volvo uses advanced technology to help you get the most out of each job. Pick the right work mode, settings and attachments. Multi-task, go for speed or handle heavy loads. It's your choice and you can do each with maximum efficiency.





### Selection work mode



Five working modes allow the operator to select the most appropriate mode for the application at hand. Assures the right amount of performance, along with an efficient use of fuel to suit the task.

I (Idle) stages 1 and 2 (2 being the lowest) – reduces rpm during inactive periods. Can be deselected at the press of a switch.

F (Fine) stages 1, 2 and 3 – increased hydraulic pressure via continuous Power Boost for lifting.

G (General) stages 1, 2 and 3 (1 being the highest) – G1 = good productivity and fuel consumption.

H (Heavy) – high productivity for intensive bulk earthmoving (more fuel efficient than P).

P (Power- Max) – provides additional 100rpm for absolute maximum performance.



### Attachment management system

Permits storage of up to 18 different attachment presets. Enables hydraulic flow (standard) and pressure (optional) adjustments according to requirements. Operator can choose hydraulic settings that are 1-way, 2-way, push button, toggle or proportional (optional). Allows operators to quickly change attachments without the need for manual setup. This saves downtime and increases productivity. The system can be password protected to prevent possible misuse by operators or rental users with insufficient knowledge of using hydraulic attachments.

# BUILT TO OUTLAST.

## Durability

Durability is built in, top to bottom, arm to counterweight. With Volvo, unforgiving conditions are no match.

## Undercarriage

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

## Superstructure underside

Standard HD plates are hinged to provide not only excellent underside protection, but also safety for service personnel. All models benefit from bolt-head protection in the event of the underside being scraped.

## Gear box

Employs a 3-stage, planetary reduction gear. Automatic 2-speed track motors utilize durable covers with recessed bolts.

## Top rollers

Forged steel and deep-hardened to ensure long-term durability.

## Sprocket

Designed with high quality, heat-treated material for hardness and durability.

## Track guards

Protects against track derailment. Two guards per track frame (standard) or full length track guards (optional).

## Track shoes

Strong, durable and available in various widths to suit the application at hand.

## Bottom rollers

Volvo forged steel bottom rollers are oil-lubricated with EP (Extreme Pressure) oil, ensuring high and consistent viscosity even under heavy loads and high shocks, and a reduced internal temperature. In addition, an M-type seal keeps grease inside the pin and bushing, whilst preventing the ingress of dirt/abrasive materials.

## Idler wear strip protection

Located on the inside and outside of the idler bracket, providing protection and long-term durability.



### HD boom

Standard HD booms are heavily reinforced in order to withstand high-impact materials such as blasted rock.

### HD arm

High tensile steel arms feature strong welds, castings and forged bearings for severe-use durability.

### Arm wear stripes

Long wear strips are welded to the inside of the arm, providing protection and durability.

### Linkage yoke reinforcement

Incorporates a support bar for additional strength and durability. Extra assurance for severe applications.

### Track chains

Volvo track links are deep-hardened, heat-treated, induction-hardened, heat-treated again and finally machined. Track link pins and bushings are grease lubricated with lithium based grease (fortified with molybdenum) and sealed for life, thereby reducing maintenance and downtime.

### Idlers

Durable, hardened, large-radius fabricated idlers.



# MORE UPTIME, IN REACH.

Volvo makes it easier for you to keep working. It starts with ease of serviceability. Compartments open easily, revealing grouped service points. It's in reach without having to climb all over the machine. It's designed to help you reach greater profits.



## Grouped filters

A wide range of filter types are grouped together and accessible from ground level. This level of access makes daily checks and change outs quicker and easier, leading to more productivity. Easier access during service is also safer because the service engineer does not need to climb onto the superstructure.



#### Access



Large opening service compartment doors provide faster, safer service access. Service points are grouped and as close to ground level as possible. This helps avoid climbing to heights or working from the superstructure. Reducing service time helps to increase uptime.

# THE LOOK OF PRODUCTIVITY.

## Working Modes

Five working modes to select the right mode and efficiency for the application at hand.

## Attachment Management

Store up to 18 different password-protected attachment presets.

## Boom Float

Lowers using only gravity, for more hydraulic flow availability and faster dig speed.

## Tractive force

Travel on inclines or difficult terrain with excellent speed and tractive force.



## Durability

Built to outlast. Built for your work, through and through.





#### Care cab

The roomy Volvo cab has it all: clear visibility, ergonomic comfort and perfectly-placed controls.

#### ROPS Safety

More operator safety and peace-of-mind when operating.



#### Technology

Designed with intelligence to help you do a variety of tasks, from heavy to fine, with a wide range of tools.



#### Volvo Power

Dependable power with high torque at low RPM, along with low fuel consumption, emissions and noise.



#### Serviceability

Fast, easy service from grouped, ground-level access.



# TOP PERFORMANCE DESERVES SUPPORT.

The day you receive your new Volvo 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.

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.





#### CareTrack\*

Each Volvo Excavator comes standard equipped with CareTrack, the Volvo telematics system. CareTrack provides information for better planning and smarter working; including fuel consumption reports, location reports and service reminders. Save fuel. Reduce costs. Maximise profitability. You can with CareTrack.

\* In markets where CareTrack is available

# VOLVO EC380D, EC480D IN DETAIL.

## Engine

The latest generation, Volvo engine Tier 4i (Stage IIIB) 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, highpressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance.

Air Filter: 3-stage and 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.

### EC380D

Engine Tier 4i (Stage IIIB)	Volvo	D13H-D
Max power at	r/s / r/min	28 / 1700
Net, ISO 9249/SAE J1349	kW / hp	208 / 283
Gross, ISO 14396/SAE J1995	kW / hp	215 / 293
Max torque at	Nm / r/min	1580 / 1300
No. of cylinders		6
Displacement	l	12,8
Bore	mm	131
Stroke	mm	158

### EC480D

Engine Tier 4i (Stage IIIB)	Volvo	D13H-D
Max power at	r/s / r/min	30 / 1800
Net, ISO 9249/SAE J1349	kW / hp	256 / 348
Gross, ISO 14396/SAE J1995	kW / hp	265 / 360
Max torque at	Nm / r/min	1800 / 1400
No. of cylinders		6
Displacement	l	12,8
Bore	mm	131
Stroke	mm	158

## 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.

		EC380D	EC480D
Voltage	V	24	24
Batteries	V	2 x 12	2 x 12
Battery capacity	Ah	200	200
Alternator	V / Ah	28 / 80	28 / 80

## 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.

Max. slew speed	r/min	10,2	8,8
Max. slew torque	kNm	130,5	166,3

## 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	276,5	333
Max. travel speed	km/h	3,4/5,53	3,1/5,2
Gradeability	°	35	35

## Undercarriage

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

Track pads		2 x 50	2 x 52
Link pitch	mm	215,9	215,9
Shoe width, triple grouser	mm	600/700/ 800/900	600/700/ 800/900
Shoe width, double grouser	mm	600	600
Bottom rollers		2 x 9	2 x 9
Top rollers		2 x 2	2 x 2

### 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 and arm regeneration provides optimum performance. The following important functions are included in the system:

**Summation system:** Combines the flow of both hydraulic pumps to a single function 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.

		EC380D	EC480D
Main pump, Type	2 x variable displacement axial piston pumps		
Maximum flow	l/min	2 x 300	2 x 358
Pilot pump, Type	Gear pump		
Maximum flow	l/min	25,5	32

### Hydraulic motors

		EC380D	EC480D
Travel:	Variable displacement axial piston motor with mechanical brake		
Slew:	Fixed displacement axial piston motor with mechanical brake		
Relief valve setting			
Implement	MPa	32,4/35,3	32,4/35,3
Travel circuit	MPa	35,3	32,4
Slew circuit	MPa	27,9	25,8
Pilot circuit	MPa	3,9	3,9

### Hydraulic cylinders

		EC380D	EC480D
Mono boom		2	2
Bore x Stroke	ø x mm	160 x 1530	165 x 1590
Arm		1	1
Bore x Stroke	ø x mm	175 x 1750	190 x 1850
Bucket		1	1
Bore x Stroke	ø x mm	145 x 1285	165 x 1330
ME Bucket		1	1
Bore x Stroke	ø x mm	160 x 1250	175 x 1335

### Service refill capacities

		EC380D	EC480D
Fuel tank	l	620	685
Hydraulic system, total	l	500	525
Hydraulic tank	l	220	270
Engine oil	l	42	42
Engine coolant	l	60	60
Slew reduction unit	l	6,5	2 x 6
Travel reduction unit	l	2 x 6,8	2 x 8

### Cab

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

		EC380D	EC480D
Sound level in cab according to ISO 6396			
LpA	dB(A)	71	71
External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:2009			
LwA	dB(A)	105	106

# SPECIFICATIONS.

## VOLVO BUCKETS

Loose soil, re-handling material or abrasive rock; excavators and attachments work hand in hand to move almost any type of material. Volvo's experience together with excavator and attachment technology ensures a reduction in cycle times, increased productivity and lower fuel costs through higher breakout forces and quicker bucket fill times.

The efficiency of any type of excavation depends upon the selection of the right bucket therefore a broad bucket offering available from the same retailer as your excavator means the machine can be easily adjusted to operate in any conditions.

As the technology and experience in design for both Volvo's attachments and excavators stems from the same origin, availing from another service like Volvo's aftermarket support ensures the machine is running harder for longer.



### (GP) General purpose bucket

Designed for digging and re-handling soft to medium materials e.g. soils with low wear characteristics. the GP bucket has anti-abrasive side cutters, a hardened lip plate and self-sharpening bucket teeth.

### (HD) Heavy-duty bucket

Intended for digging in dense materials such as hard packed clay and gravel. The HD bucket has heavier overall fabrication with a thicker side cutting edge and hardened plating on all critical ground-engaging areas.

### (RK) Rock bucket

Together with harder and thicker plating on all critical leading edges the rock bucket provides digging performance in soils with a high degree of rock content and well blasted rock. On the EC700B the option of a D-edge is available, for ease of penetration when rock handling.

### (ES) Extreme service bucket

Available for the EC700 and provides additional wear protection for use in high impact or wearing applications. Inner protection and D edge as standard.

### (FD) Fixed ditching bucket

A wide face, round profile and drain holes make the FD bucket ideal for ditch cleaning or removal of other soft material. An inner stiffener and optional bolt-on cutting edge bolster performance.

## VOLVO TOOTH SYSTEM



### Self-Sharpening Tooth System Cuts Through the Toughest Jobs

Volvo perfects the excavator bucket's point of attack with a robust tooth system that delivers performance and long life. Cast and tempered from a high-strength alloy, Volvo teeth resist stress and deliver optimum penetration in hard or abrasive material. An innovative design lessens internal wear between tooth and adapter — and makes it easy to change teeth.

#### LOCKING DEVICE

Patented vertical locking device. The steel pin with flexible lock retainer tightly secures the tooth to the adapter. Smart design transfers working stresses away from the locking device, saving wear on the steel pin and extending pin life. Self-sharpening Volvo teeth are designed for a small penetration area, which reduces stress and wear at the point of contact.

#### GPE

Self-sharpening general-purpose tooth with good penetration and long service life.

#### AMRE

Self-sharpening tooth resists wear in rock and other abrasive materials.

#### PPE

Pick-point excavator tooth delivers maximum penetration in hard clay or frozen ground.

#### SNE

Spade nose tooth is designed for finishing work such as leveling, grading, cleaning & backfilling.

#### TPE

Twin pick point with sharp, dual-point profile is ideal for compact or frozen ground.

#### Wear Cap & BL Adapter

The wear cap protects the adapter from unnecessary wear.

BL: 1 1/2 bottom leg adapter for welding to both sides of the cutting edge

## MAXIMUM PERMITTED BUCKETS

		EC380DL with 7550kg counterweight				EC380DNL with 7550kg counterweight				
Boom	m	6,2 ME		6,45 HD		6,2 ME		6,45 HD		
Arm	m	2,6	2,6	3,2 HD	3,9	2,6	2,6	3,2 HD	3,9	
Max. bucket		liter	liter	liter	liter	liter	liter	liter	liter	
GP bucket 1,5 t/m <sup>3</sup>		2775	2775	2550	2300	2450	2325	2125	1925	
GP bucket 1,8 t/m <sup>3</sup>		2450	2450	2250	2050	2175	2075	1900	1700	
HD bucket 1,8 t/m <sup>3</sup>		2325	2325	2125	1925	2050	1950	1800	1625	
HD bucket 2,0 t/m <sup>3</sup>		2175	2175	2000	1800	1925	1825	1675	1500	
		• EC380DL with direct fit bucket				• EC380DNL with direct fit bucket				
GP bucket 1,5 t/m <sup>3</sup>		2600	2600	2350	2125	2325	2200	2025	1800	
GP bucket 1,8 t/m <sup>3</sup>		2300	2300	2100	1875	2075	1950	1800	1600	
HD bucket 1,8 t/m <sup>3</sup>		2175	2175	1975	1775	1950	1850	1700	1525	
HD bucket 2,0 t/m <sup>3</sup>		2025	2025	1850	1675	1825	1725	1575	1400	
		• EC380DL with quick coupler bucket				• EC380DNL with quick coupler bucket				
		EC480DL fixed undercarriage with 9750kg counterweight								
Boom	m	7,0 GP/HD					6,5 ME			
Arm	m	G3,9		G4,8		H2,55		H3,35		M2,55
Max. bucket		liter		liter		liter		liter		liter
GP bucket 1,5 t/m <sup>3</sup>		2750		2450		3300		2950		3500
GP bucket 1,8 t/m <sup>3</sup>		2450		2175		2925		2600		3100
HD bucket 1,8 t/m <sup>3</sup>		2300		2050		2775		2475		2925
HD bucket 2,0 t/m <sup>3</sup>		2150		1925		2600		2300		2750
		• EC480DL with direct								
GP bucket 1,5 t/m <sup>3</sup>		2575		2275		3125		2750		3325
GP bucket 1,8 t/m <sup>3</sup>		2275		2025		2775		2450		2950
HD bucket 1,8 t/m <sup>3</sup>		2150		1900		2625		2325		2775
HD bucket 2,0 t/m <sup>3</sup>		2000		1775		2450		2150		2600
		• EC480DL with S3								
GP bucket 1,5 t/m <sup>3</sup>		2400		2100		2950		2600		3150
GP bucket 1,8 t/m <sup>3</sup>		2125		1875		2625		2300		2800
HD bucket 1,8 t/m <sup>3</sup>		2025		1775		2475		2175		2650
HD bucket 2,0 t/m <sup>3</sup>		1875		1650		2300		2025		2450
		• EC480DL with U quick coupler bucket								
		EC480D retractable undercarriage with 9750kg counterweight								
Boom	m	7,0 GP/HD					6,5 ME			
Arm	m	G3,9		G4,8		H2,55		H3,35		M2,55
Max. bucket		liter		liter		liter		liter		liter
GP bucket 1,5 t/m <sup>3</sup>		2975		2625		3525		3150		3800
GP bucket 1,8 t/m <sup>3</sup>		2625		2325		3125		2800		3375
HD bucket 1,8 t/m <sup>3</sup>		2500		2200		2950		2650		3175
HD bucket 2,0 t/m <sup>3</sup>		2325		2050		2750		2475		2975
		• EC480D MVW with direct fit bucket								
GP bucket 1,5 t/m <sup>3</sup>		2775		2450		3325		2975		3625
GP bucket 1,8 t/m <sup>3</sup>		2475		2175		2950		2625		3200
HD bucket 1,8 t/m <sup>3</sup>		2325		2050		2800		2500		3025
HD bucket 2,0 t/m <sup>3</sup>		2175		1900		2600		2325		2825
		• EC480D MVW with S3 quick coupler bucket								
GP bucket 1,5 t/m <sup>3</sup>		2625		2275		3175		2800		3450
GP bucket 1,8 t/m <sup>3</sup>		2325		2025		2800		2475		3050
HD bucket 1,8 t/m <sup>3</sup>		2200		1900		2650		2350		2900
HD bucket 2,0 t/m <sup>3</sup>		2050		1775		2475		2200		2700
		• EC480D MVW with U quick coupler bucket								

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.

# SPECIFICATIONS.

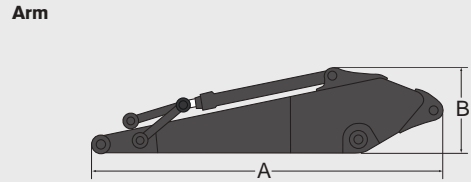
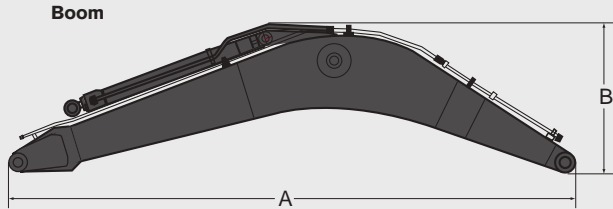
## MACHINE WEIGHTS AND GROUND PRESSURE

EC380D							
Description	Shoe width	Operating weight	Ground pressure	Operating weight		Ground pressure	
Triple grouser	600 mm	38300 kg	68,6 kPa	38040 kg		68,1 kPa	
	700 mm	38790 kg	59,8 kPa	38530 kg		59,8 kPa	
	800 mm	39220 kg	53,0 kPa	38960 kg		53,0 kPa	
	900 mm	39660 kg	48,1 kPa	39400 kg		47,1 kPa	
Double grouser	600 mm	38460 kg	69,6 kPa	38200 kg		68,6 kPa	
EC380D with LC undercarriage, 6,45 m boom, 3,2 m arm, 1460 kg bucket, 7050 kg counterweight				EC380D with NLC undercarriage, 6,45 m boom, 3,2 m arm, 1460 kg bucket, 7050 kg counterweight			

EC480D with FIXED undercarriage				EC480D with RETRACTABLE undercarriage			
Triple grouser	600 mm	48600 kg	84,6 kPa	49700 kg		86,5 kPa	
	700 mm	49100 kg	73,7 kPa	50200 kg		74,5 kPa	
	800 mm	49600 kg	64,6 kPa	50700 kg		66,6 kPa	
	900 mm	50200 kg	58,7 kPa	51200 kg		59,6 kPa	
Double grouser	600 mm	48700 kg	84,6 kPa	49800 kg		86,5 kPa	
EC480DLC with FIXED undercarriage, 7,0 m boom, 3,35 m arm, 2020 kg bucket, 9750 kg counterweight				EC480DLC with RETRACTABLE undercarriage, 7 m boom, 3,35 m arm, 2020 kg bucket, 9750 kg counterweight			

		EC380DL		EC380DNL		EC480DL		EC480DL*	
Description		Operating weight, kg							
Boom	m	6,2 ME		6,45 HD		6,5 ME		7,0 HD	
Weight	kg	3353		3346		4127		4176	
Arm	m	2,6	3,2 HD	3,9	2,55	3,35 HD	3,90	4,80	
Weight	kg	2049	2180	2300	2331	2579	2582	2726	

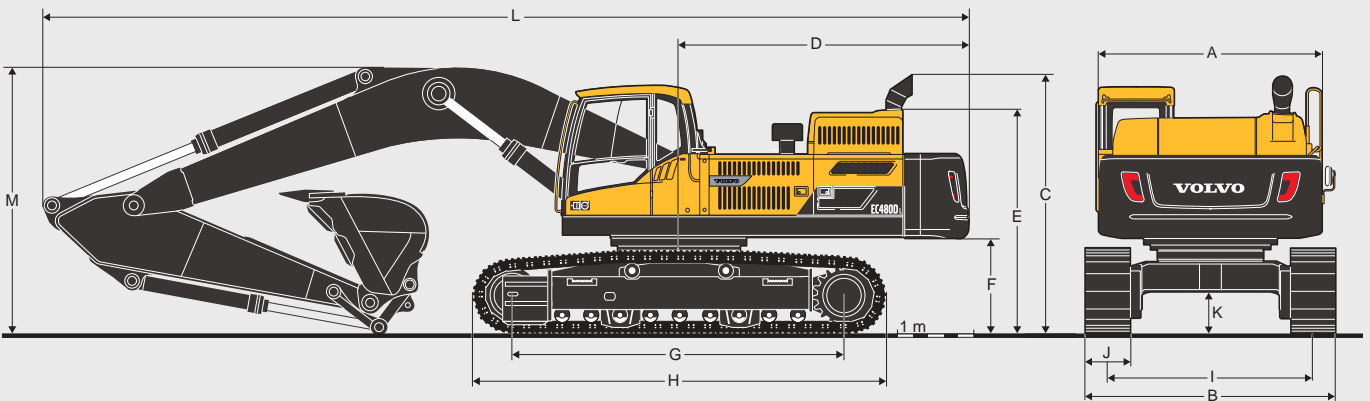
## DIMENSIONS



Boom	EC380D					EC480D		Arm	EC380D				EC480D	
	Unit	mono	mono	mono	mono	Description	Unit		EC380D	EC380D	EC380D	EC380D	EC480D	EC480D
Boom	m	6,2 ME	6,45 HD	6,5 ME	7,0 HD	Arm	m	2,6	3,2 HD	3,9	2,55	3,35 HD	3,90	4,80
A	mm	6460	6700	6750	7250	A	mm	3780	4360	5080	3770	4590	5140	6100
B	mm	1740	1800	2000	1840	B	mm	1145	1146	1140	1235	1235	1240	1250
Width	mm	820	820	960	960	Width	mm	560	560	560	600	600	600	600

\* Includes arm cylinder, piping and pin

\* Includes bucket cylinder, linkage and pin



Description	Unit	EC380DL				EC380DNL			
		6,2	6,45	6,2	6,45				
Boom	m	6,2	6,45	6,2	6,45				
Arm	m	2,6	2,6	3,2	3,9				
A. Overall width of upper structure	mm	2990	2990	2990	2990				
B. Overall width	mm	3340	3340	3340	3340				
C. Overall height of cab	mm	3197	3197	3197	3197				
D. Tail swing radius	mm	3560	3560	3560	3560				
E. Overall height of engine hood	mm	2860	2860	2860	2860				
F. Counterweight clearance *	mm	1210	1210	1210	1210				
G. Tumbler length	mm	4240	4240	4240	4240				
H. Track length	mm	5180	5180	5180	5180				
I. Track gauge	mm	2740	2740	2740	2390				
J. Shoe width	mm	600	600	600	600				
K. Min. ground clearance *	mm	500	500	500	500				
L. Overall length	mm	11080	11330	11240	11290				
M. Overall height of boom	mm	3700	3580	3350	3590				

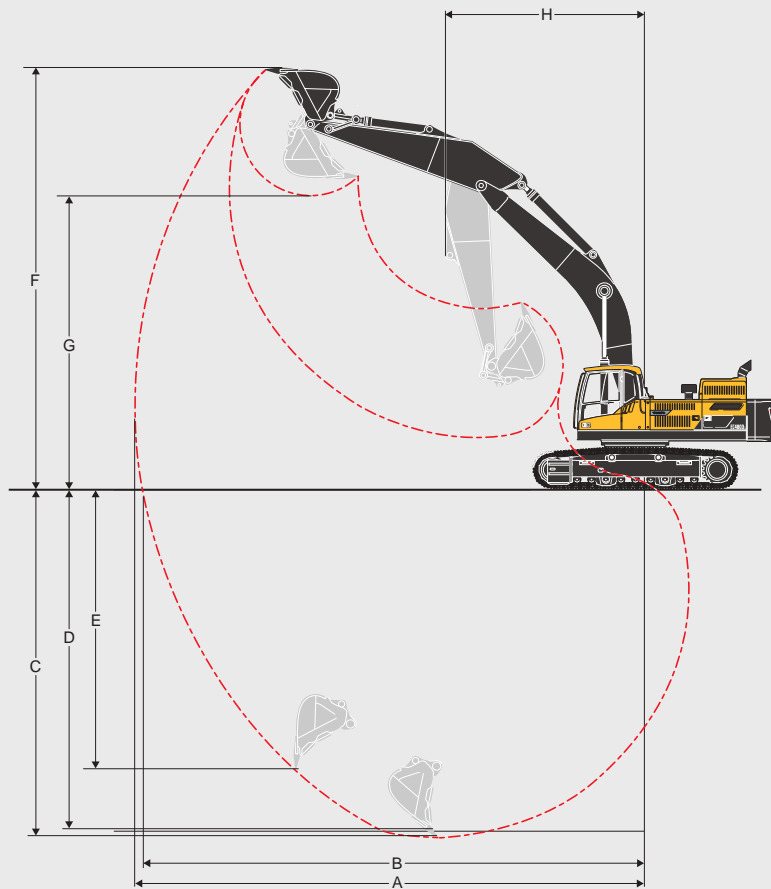
  

Description	Unit	EC480DL				EC480D mechanically retractable width					
		6,5	7,0	7,0	7,0	6,5	7,0	7,0	7,0		
Boom	m	6,5	7,0	7,0	7,0	6,5	7,0	7,0	7,0		
Arm	m	2,55	2,55	3,35	3,9	4,8	2,55	2,55	3,35	3,9	4,8
A. Overall width of upper structure	mm	2990	2990	2990	2990	2990	2990	2990	2990	2990	2990
B. Overall width (extended)	mm	3440	3440	3440	3440	3440	3590	3590	3590	3590	3590
Overall width (retracted)	mm	-	-	-	-	-	3367	3367	3367	3367	3367
C. Overall height of cab	mm	3257	3257	3257	3257	3257	3090	3090	3090	3090	3090
D. Tail swing radius	mm	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800
E. Overall height of engine hood	mm	2910	2910	2910	2910	2910	3020	3020	3020	3020	3020
F. Counterweight clearance *	mm	1275	1275	1275	1275	1275	1385	1385	1385	1385	1385
G. Tumbler length	mm	4370	4370	4370	4370	4370	4370	4370	4370	4370	4370
H. Track length	mm	5370	5370	5370	5370	5370	5370	5370	5370	5370	5370
I. Track gauge (retracted)	mm	2740	2740	2740	2740	2740	2390	2390	2390	2390	2390
Track gauge (extended)	mm	-	-	-	-	-	2890	2890	2890	2890	2890
J. Shoe width	mm	700	700	700	700	700	700	700	700	700	700
K. Min. ground clearance *	mm	550	550	550	550	550	746	746	746	746	746
L. Overall length	mm	11630	12130	12140	12140	12010	11630	12130	12140	12140	12010
M. Overall height of boom	mm	3770	3630	3650	3690	4650	3800	3770	3790	3830	4790

\* Without shoe grouser

# SPECIFICATIONS.

## WORKING RANGES



Description	Unit	EC380D				
Boom	m	6,2		6,45		
Arm	m	2,6	2,6	3,2	3,9	
A. Max. digging reach	mm	10440	10550	11070	11710	
B. Max. digging reach on ground	mm	10210	10330	10860	11520	
C. Max. digging depth	mm	6740	6850	7450	8150	
D. Max. digging depth (2,44 m level)	mm	6560	6650	7270	8000	
E. Max. vertical wall digging depth	mm	5260	5430	5870	6500	
F. Max. cutting height	mm	10070	10170	10340	10610	
G. Max. dumping height	mm	6810	7090	7280	7560	
H. Min. front slew radius	mm	4120	4320	4280	4300	
<b>Digging forces with direct fit bucket</b>						
Bucket radius	mm	1810	1623	1623	1623	
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN	214,5	198	198	198
	SAE J1179	kN	234,5	215,0	215,0	215,0
	ISO 6015	kN	243,4	221,7	221,7	221,7
	ISO 6015	kN	265,4	242,7	242,7	242,7
Tearout force - dipper arm (Normal/Power boost)	SAE J1179	kN	187,7	195,9	161,9	141,3
	SAE J1179	kN	205,7	212,9	176,9	154,3
	ISO 6015	kN	193,9	201,1	166,0	144,4
ISO 6015	kN	211,9	219,1	181,0	157,4	
Rotation angle, bucket	°	164	177	177	177	



## WORKING RANGES

Description	Unit	EC480D *					EC480D, mechanically retractable width **				
		6,5ME		7,0			6,5ME		7,0		
Boom	m										
Arm	m	2,55	2,55	3,35	3,9	4,8	2,55	2,55	3,35	3,9	4,8
A. Max. digging reach	mm	10930	11340	12040	12530	13260	10930	11340	12040	12530	13260
B. Max. digging reach on ground	mm	10680	11110	11810	12320	13060	10660	11090	11790	12300	13040
C. Max. digging depth	mm	6580	6920	7720	8270	9170	6470	6810	7610	8160	9060
D. Max. digging depth (2,44 m level)	mm	6410	6750	7570	8140	9050	6300	6640	7460	8030	8940
E. Max. vertical wall digging depth	mm	6100	6270	7110	7570	8020	5880	6160	7000	7460	7910
F. Max. cutting height	mm	10600	10860	11010	11190	11130	10710	10970	11130	11300	11240
G. Max. dumping height	mm	6970	7420	7640	7820	7850	7080	7530	7750	7930	7960
H. Min. front slew radius	mm	4780	5170	5090	5050	5100	4780	5170	5090	5050	5100

### Digging forces with direct fit bucket

Bucket radius	mm	1923	1810	1810	1810	1810	1923	1810	1810	1810	1810
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN	252,9	229,6	229,6	229,6	229,6	253	230	230	230
	SAE J1179	kN	285,1	260,9	260,9	260,9	260,9	285	261	261	261
	ISO 6015	kN	275,3	251,2	251,2	251,2	251,2	275	251	251	251
	ISO 6015	kN	310,6	284,4	284,4	284,4	284,4	311	284	284	284
Tearout force - bucket (Normal/Power boost)	SAE J1179	kN	224,5	231,6	196,1	175,9	159,7	225	232	196	176
	SAE J1179	kN	231,6	238,6	201,2	179,0	162,8	232	239	201	179
	ISO 6015	kN	244,1	252,2	214,9	191,6	174,4	244	252	215	192
	ISO 6015	kN	253,1	260,2	219,9	195,6	177,5	253	260	220	196
Rotation angle, bucket	°	169	183	183	183	183	169	183	183	183	183

\* FIXED UNDERCARRIAGE, Machine with pin-on bucket

\*\* RETRACTABLE UNDERCARRIAGE, Machine with pin-on bucket

Bucket spec. for Working Range

- For ME Boom : VGP60 2600L VTS (Bucket tip radius : 1948,40mm)

- For STD Boom : KGP46 2060L KTS (Bucket tip radius : 1847,01mm)

## EXPLANATION OF LIFTING CAPACITY TABLES

### Example: • EC380DNLC

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	Along		Across		Along		Across		Along		Across		Max. mm
		undercarriage 3,0 m	undercarriage 4,5 m	undercarriage 6,0 m	undercarriage 7,5 m	undercarriage 9,0 m	undercarriage Max. reach							
Boom: 6,2 m + Arm: 2,6 m + Shoe: 600 mm + CWT: 7050 kg	7,5 m kg	-	-	-	-	*10730	9890	-	-	-	-	*10940	8140	6717
	6,0 m kg	-	-	-	-	*11270	9690	*10800	6730	-	-	10530	6430	7694
	4,5 m kg	-	-	*15950	14330	*12740	9270	10850	6580	-	-	9200	5580	8288
	3,0 m kg	-	-	*19950	13190	*14580	8780	10590	6340	-	-	8570	5160	8579
	1,5 m kg	-	-	*22520	12470	14570	8370	10340	6130	-	-	8420	5030	8600
	0 m kg	-	-	*23070	12230	14290	8130	10180	5990	-	-	8720	5170	8351
	-1,5 m kg	*17930	*17930	*22250	12240	14220	8080	10170	5970	-	-	9610	5680	7807
	-3,0 m kg	*26840	24630	*20070	12440	14370	8200	-	-	-	-	11660	6830	6898
-4,5 m kg	-	-	*15500	12900	-	-	-	-	-	-	*12300	9850	5439	

- 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 EC480DL

		1,5 m		3,0 m		4,5 m		6,0 m		7,5 m		9,0 m		Max. reach		Max. mm				
		Along UC	Across UC	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 : 6,5m	Arm : 2,55m	Shoe : 600mm	CWT : 9750kg	7,5 m	kg	-	-	-	-	-	-	-	-	-	-	*12430	11410	7249		
				6,0 m	kg	-	-	-	-	-	-	*13390	*13390	*12350	10750	-	-	*12280	9400	8143
				4,5 m	kg	-	-	-	-	*19980	*19980	*15270	14580	*13110	10490	-	-	*12340	8380	8686
				3,0 m	kg	-	-	-	-	*24400	20930	*17390	13930	*14160	10170	-	-	12210	7880	8944
				1,5 m	kg	-	-	-	-	*17490	*17490	*19000	13450	*15060	9900	-	-	12090	7770	8942
				0 m	kg	-	-	-	-	*25680	20090	*19670	13200	15490	9740	-	-	12550	8030	8680
				-1,5 m	kg	-	-	*18840	*18840	*25280	20170	*19250	13160	*15070	9720	-	-	*13470	8770	8132
				-3,0 m	kg	-	-	*29180	*29180	*22630	20440	*17440	13320	-	-	-	-	*13600	10410	7231
-4,5 m	kg	-	-	-	-	*17530	*17530	-	-	-	-	-	-	*12950	*12950	5813				
Boom : 7,0m	Arm : 2,55m	Shoe : 600mm	CWT : 9750kg	7,5 m	kg	-	-	-	-	-	-	*11320	10850	-	-	*11440	9960	7886		
				6,0 m	kg	-	-	-	-	-	-	*13060	*13060	*11700	10690	-	-	*11360	8410	8714
				4,5 m	kg	-	-	-	-	-	-	*15150	14310	*12670	10360	*11500	7890	*11450	7580	9223
				3,0 m	kg	-	-	-	-	-	-	*17330	13620	*13820	10010	*11980	7730	11130	7170	9466
				1,5 m	kg	-	-	-	-	-	-	*18870	13150	*14770	9720	11850	7580	11020	7070	9464
				0 m	kg	-	-	-	-	-	-	*19450	12940	*15270	9550	11760	7500	11380	7280	9217
				-1,5 m	kg	-	-	-	-	*24720	19920	*19090	12930	*15100	9520	-	-	12370	7870	8703
				-3,0 m	kg	-	-	*27580	*27580	*22570	20160	*17700	13070	*13770	9670	-	-	*12720	9120	7870
-4,5 m	kg	-	-	-	-	*18710	*18710	*14430	13460	-	-	-	-	*12460	11890	6594				
Boom : 7,0m	Arm : 3,35m	Shoe : 600mm	CWT : 9750kg	7,5 m	kg	-	-	-	-	-	-	*10010	*10010	-	-	*9800	8680	8709		
				6,0 m	kg	-	-	-	-	-	-	-	*10630	*10630	*10190	8180	*9600	7510	9463	
				4,5 m	kg	-	-	-	-	*17950	*17950	*13760	*13760	*11740	10550	*10670	8020	*9680	6850	9933
				3,0 m	kg	-	-	-	-	*22870	20940	*16130	13910	*13040	10150	*11350	7810	*10010	6510	10159
				1,5 m	kg	-	-	-	-	*15840	*15840	*18080	13320	*14210	9810	11890	7610	9960	6410	10158
				0 m	kg	-	-	-	-	*19420	*19420	*19170	12980	*15010	9570	11730	7470	10220	6550	9928
				-1,5 m	kg	-	-	*14040	*14040	*25880	19700	*19340	12860	15190	9460	11680	7430	10930	6980	9454
				-3,0 m	kg	-	-	*23900	*23900	*24290	19880	*18570	12910	*14630	9500	-	-	*11980	7860	8694
-4,5 m	kg	-	-	*28410	*28410	*21330	20240	*16470	13150	*12380	9750	-	-	*12190	9660	7562				
Boom : 7,0m	Arm : 3,9m	Shoe : 600mm	CWT : 9750kg	7,5 m	kg	-	-	-	-	-	-	-	-	*9250	8300	*7930	7850	9288		
				6,0 m	kg	-	-	-	-	-	-	-	*9780	*9780	*9410	8220	*7770	6870	9999	
				4,5 m	kg	-	-	-	-	-	-	*12610	*12610	*10930	10600	*9990	8020	*7840	6300	10444
				3,0 m	kg	-	-	-	-	*20840	*20840	*15060	14000	*12300	10160	*10760	7770	*8090	5990	10659
				1,5 m	kg	-	-	-	-	*21560	20030	*17210	13300	*13600	9750	*11530	7540	*8570	5890	10657
				0 m	kg	-	-	-	-	*21410	19490	*18610	12860	*14560	9460	11630	7360	*9320	6000	10439
				-1,5 m	kg	*9890	*9890	*14060	*14060	*25990	19360	*19130	12660	*15010	9300	11530	7270	9980	6340	9989
				-3,0 m	kg	*16520	*16520	*21670	*21670	*24880	19470	*18740	12650	*14760	9280	11570	7310	11110	7040	9275
-4,5 m	kg	-	-	*31060	*31060	*22520	19780	*17220	12830	*13380	9440	-	-	*11590	8410	8224				
-6,0 m	kg	-	-	-	-	*18130	*18130	*13640	13270	-	-	-	-	*11580	11500	6678				
Boom : 7,0m	Arm : 4,8m	Shoe : 600mm	CWT : 9750kg	7,5 m	kg	-	-	-	-	-	-	-	-	*7860	*7860	*7290	6870	10111		
				6,0 m	kg	-	-	-	-	-	-	-	-	-	-	*8220	*8220	*7220	6090	10766
				4,5 m	kg	-	-	-	-	-	-	-	-	*9570	*9570	*8910	8070	*7320	5610	11181
				3,0 m	kg	-	-	-	-	*17570	*17570	*13220	*13220	*11040	10240	*9780	7780	*7570	5330	11382
				1,5 m	kg	-	-	-	-	*21990	20380	*15670	13410	*12510	9760	*10680	7480	*8020	5230	11380
				0 m	kg	-	-	-	-	*24650	19410	*17530	12790	*13720	9370	*11460	7240	8380	5290	11176
				-1,5 m	kg	*9580	*9580	*14230	*14230	*25660	19010	*18570	12440	*14500	9110	11340	7080	8800	5530	10758
				-3,0 m	kg	*14660	*14660	*19870	*19870	*25380	18950	*18750	12320	*14700	9010	11280	7030	9620	6040	10098
-4,5 m	kg	*20520	*20520	*27230	*27230	*23910	19140	*17970	12390	*14090	9060	*11110	7120	*10820	6980	9145				
-6,0 m	kg	-	-	*29270	*29270	*20870	19580	*15820	12670	*12010	9320	-	-	*11290	8890	7787				

**LIFTING CAPACITY EC480DL**

		1,5 m		3,0 m		4,5 m		6,0 m		7,5 m		9,0 m		Max. reach		Max. mm				
		Along UC	Across UC	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 :	6,5m	7,5 m	kg	-	-	-	-	-	-	-	-	-	-	-	*12430	11500	7249			
		6,0 m	kg	-	-	-	-	-	*13390	*13390	*12350	10840	-	-	*12280	9480	8143			
		4,5 m	kg	-	-	-	-	*19980	*19980	*15270	14700	*13110	10580	-	-	*12340	8450	8686		
		Arm :	2,55m	3,0 m	kg	-	-	-	-	*24400	21120	*17390	14060	*14160	10270	-	-	12330	7960	8944
				1,5 m	kg	-	-	-	-	*17490	*17490	*19000	13570	*15060	9990	-	-	12210	7840	8942
		Shoe :	700mm	0 m	kg	-	-	-	-	*25680	20270	*19670	13320	*15490	9830	-	-	12680	8100	8680
				CWT :	9750kg	-1,5 m	kg	-	-	*18840	*18840	*25280	20350	*19250	13280	*15070	9810	-	-	*13470
						-3,0 m	kg	-	-	*29180	*29180	*22630	20620	*17440	13450	-	-	-	-	*13600
		-4,5 m	kg	-	-	-	-	*17530	*17530	-	-	-	-	-	-	*12950	*12950	5813		
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	*11320	10940	-	-	*11440	10050	7886				
		6,0 m	kg	-	-	-	-	-	*13060	*13060	*11700	10780	-	-	*11360	8490	8714			
		4,5 m	kg	-	-	-	-	-	*15150	14430	*12670	10450	*11500	7960	*11450	7650	9223			
		Arm :	2,55m	3,0 m	kg	-	-	-	-	*17330	13740	*13820	10100	*11980	7800	11240	7240	9466		
				1,5 m	kg	-	-	-	-	*18870	13280	*14770	9810	11970	7660	11130	7140	9464		
		Shoe :	700mm	0 m	kg	-	-	-	-	*19450	13070	*15270	9650	11880	7580	11500	7350	9217		
				CWT :	9750kg	-1,5 m	kg	-	-	-	*24720	20100	*19090	13050	*15100	9620	-	-	12490	7950
						-3,0 m	kg	-	-	*27580	*27580	*22570	20340	*17700	13200	*13770	9760	-	-	*12720
		-4,5 m	kg	-	-	-	-	*18710	*18710	*14430	13580	-	-	-	-	*12460	12000	6594		
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	*10010	*10010	-	-	*9800	8760	8709				
		6,0 m	kg	-	-	-	-	-	-	*10630	*10630	*10190	8250	*9600	7580	9463				
		4,5 m	kg	-	-	-	-	*17950	*17950	*13760	*13760	*11740	10640	*10670	8090	*9680	6920	9933		
		Arm :	3,35m	3,0 m	kg	-	-	-	-	*22870	21120	*16130	14030	*13040	10240	*11350	7880	*10010	6570	10159
				1,5 m	kg	-	-	-	-	*15840	*15840	*18080	13440	*14210	9900	12010	7690	10060	6470	10158
		Shoe :	700mm	0 m	kg	-	-	-	-	*19420	*19420	*19170	13100	*15010	9660	11860	7550	10320	6620	9928
				CWT :	9750kg	-1,5 m	kg	-	-	*14040	*14040	*25880	19890	*19340	12980	*15220	9550	11810	7500	11040
						-3,0 m	kg	-	-	*23900	*23900	*24290	20060	*18570	13040	*14630	9590	-	-	*11980
		-4,5 m	kg	-	-	*28410	*28410	*21330	20420	*16470	13270	*12380	9840	-	-	*12190	9750	7562		
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	-	-	-	*9250	8380	*7930	7920	9288			
		6,0 m	kg	-	-	-	-	-	-	*9780	*9780	*9410	8290	*7770	6930	9999				
		4,5 m	kg	-	-	-	-	-	-	*12610	*12610	*10930	10690	*9990	8090	*7840	6360	10444		
		Arm :	3,9m	3,0 m	kg	-	-	-	-	*20840	*20840	*15060	14120	*12300	10250	*10760	7850	*8090	6050	10659
				1,5 m	kg	-	-	-	-	*21560	20220	*17210	13430	*13600	9850	*11530	7610	*8570	5950	10657
		Shoe :	700mm	0 m	kg	-	-	-	-	*21410	19680	*18610	12980	*14560	9550	11750	7440	*9320	6060	10439
				CWT :	9750kg	-1,5 m	kg	*9890	*9890	*14060	*14060	*25990	19550	*19130	12780	*15010	9390	11650	7340	10080
						-3,0 m	kg	*16520	*16520	*21670	*21670	*24880	19650	*18740	12770	*14760	9380	11690	7380	11230
		-4,5 m	kg	-	-	*31060	*31060	*22520	19960	*17220	12950	*13380	9530	-	-	*11590	8490	8224		
		-6,0 m	kg	-	-	-	-	*18130	*18130	*13640	13390	-	-	-	-	*11580	*11580	6678		
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	-	-	-	*7860	*7860	*7290	6930	10111			
		6,0 m	kg	-	-	-	-	-	-	-	-	-	-	*8220	*8220	*7220	6150	10766		
		4,5 m	kg	-	-	-	-	-	-	-	*9570	*9570	*8910	8140	*7320	5660	11181			
		Arm :	4,8m	3,0 m	kg	-	-	-	-	*17570	*17570	*13220	*13220	*11040	10330	*9780	7850	*7570	5390	11382
				1,5 m	kg	-	-	-	-	*21990	20560	*15670	13540	*12510	9850	*10680	7560	*8020	5290	11380
		Shoe :	700mm	0 m	kg	-	-	-	-	*24650	19600	*17530	12920	*13720	9460	*11460	7310	8470	5350	11176
				CWT :	9750kg	-1,5 m	kg	*9580	*9580	*14230	*14230	*25660	19190	*18570	12560	*14500	9200	11470	7150	8890
						-3,0 m	kg	*14660	*14660	*19870	*19870	*25380	19130	*18750	12440	*14700	9100	11400	7100	9720
		-4,5 m	kg	*20520	*20520	*27230	*27230	*23910	19320	*17970	12510	*14090	9150	*11110	7190	*10820	7050	9145		
		-6,0 m	kg	-	-	*29270	*29270	*20870	19760	*15820	12790	*12010	9420	-	-	*11290	8980	7787		

# SPECIFICATIONS.

## LIFTING CAPACITY EC480D mechanically retractable width

		1,5 m		3,0 m		4,5 m		6,0 m		7,5 m		9,0 m		Max. reach		Max.				
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	mm				
Boom :	6,5m	7,5 m	kg	-	-	-	-	-	-	-	-	-	-	-	*12430	12130	7249			
		6,0 m	kg	-	-	-	-	-	-	*13390	*13390	*12350	11440	-	-	*12280	10000	8143		
	Arm :	2,55m	4,5 m	kg	-	-	-	-	*19980	*19980	*15270	*15270	*13110	11180	-	-	*12340	8920	8686	
	Shoe :	600mm	3,0 m	kg	-	-	-	-	*24400	22580	*17390	14910	*14160	10850	-	-	12380	8410	8944	
CWT :	9750kg	1,5 m	kg	-	-	-	-	*17490	*17490	*19000	14410	*15060	10580	-	-	12260	8290	8942		
UC: mechanically retractable width		0 m	kg	-	-	-	-	*25680	21720	*19670	14160	*15490	10410	-	-	12730	8570	8680		
		-1,5 m	kg	-	-	*18840	*18840	*25280	21800	*19250	14120	*15070	10400	-	-	*13470	9370	8132		
		-3,0 m	kg	-	-	*29180	*29180	*22630	22080	*17440	14290	-	-	-	-	*13600	11120	7231		
		-4,5 m	kg	-	-	-	-	*17530	*17530	-	-	-	-	-	-	*12950	*12950	5813		
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	*11320	*11320	-	-	-	*11440	10600	7886			
		6,0 m	kg	-	-	-	-	-	-	*13060	*13060	*11700	11370	-	-	*11360	8960	8714		
	Arm :	2,55m	4,5 m	kg	-	-	-	-	-	*15150	*15150	*12670	11050	*11500	8410	*11450	8090	9223		
	Shoe :	600mm	3,0 m	kg	-	-	-	-	-	*17330	14590	*13820	10690	*11980	8250	11290	7660	9466		
CWT :	9750kg	1,5 m	kg	-	-	-	-	-	*18870	14120	*14770	10400	12020	8100	11180	7560	9464			
UC: mechanically retractable width		0 m	kg	-	-	-	-	-	-	*19450	13900	*15270	10230	11930	8020	11550	7780	9217		
		-1,5 m	kg	-	-	-	-	*24720	21540	*19090	13880	*15100	10200	-	-	*12530	8420	8703		
		-3,0 m	kg	-	-	*27580	*27580	*22570	21790	*17700	14040	*13770	10340	-	-	*12720	9750	7870		
		-4,5 m	kg	-	-	-	-	*18710	*18710	*14430	14430	-	-	-	-	*12460	*12460	6594		
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	*10010	*10010	-	-	-	*9800	9230	8709			
		6,0 m	kg	-	-	-	-	-	-	*10630	*10630	*10190	8700	*9600	8000	9463				
	Arm :	3,35m	4,5 m	kg	-	-	-	-	-	*17950	*17950	*13760	*13760	*11740	11230	*10670	8540	*9680	7310	9933
	Shoe :	600mm	3,0 m	kg	-	-	-	-	-	*22870	22590	*16130	14880	*13040	10830	*11350	8330	*10010	6950	10159
CWT :	9750kg	1,5 m	kg	-	-	-	-	-	*15840	*15840	*18080	14290	*14210	10480	*12010	8130	10100	6850	10158	
UC: mechanically retractable width		0 m	kg	-	-	-	-	*19420	*19420	*19170	13940	*15010	10240	11900	7990	10370	7000	9928		
		-1,5 m	kg	-	-	*14040	*14040	*25880	21320	*19340	13820	*15220	10130	11860	7950	11090	7460	9454		
		-3,0 m	kg	-	-	*23900	*23900	*24290	21500	*18570	13870	*14630	10170	-	-	*11980	8410	8694		
		-4,5 m	kg	-	-	*28410	*28410	*21330	*21330	*16470	14120	*12380	10430	-	-	*12190	10320	7562		
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	-	-	-	*9250	8830	*7930	*7930	9288			
		6,0 m	kg	-	-	-	-	-	-	*9780	*9780	*9410	8740	*7770	7320	9999				
	Arm :	3,9m	4,5 m	kg	-	-	-	-	-	*12610	*12610	*10930	*10930	*9990	8540	*7840	6720	10444		
	Shoe :	600mm	3,0 m	kg	-	-	-	-	-	*20840	*20840	*15060	14980	*12300	10840	*10760	8300	*8090	6400	10659
CWT :	9750kg	1,5 m	kg	-	-	-	-	*21560	*21560	*17210	14270	*13600	10430	*11530	8060	*8570	6310	10657		
UC: mechanically retractable width		0 m	kg	-	-	-	-	*21410	21110	*18610	13820	*14560	10130	11800	7880	*9320	6420	10439		
		-1,5 m	kg	*9890	*9890	*14060	*14060	*25990	20980	*19130	13610	*15010	9970	11700	7790	10130	6790	9989		
		-3,0 m	kg	*16520	*16520	*21670	*21670	*24880	21090	*18740	13610	*14760	9960	11740	7820	*11250	7540	9275		
		-4,5 m	kg	-	-	*31060	*31060	*22520	21410	*17220	13790	*13380	10120	-	-	*11590	9000	8224		
	-6,0 m	kg	-	-	-	-	*18130	*18130	*13640	*13640	-	-	-	-	*11580	*11580	6678			
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	-	-	-	*7860	*7860	*7290	*7290	10111			
		6,0 m	kg	-	-	-	-	-	-	-	-	-	*8220	*8220	*7220	6500	10766			
	Arm :	4,8m	4,5 m	kg	-	-	-	-	-	-	*9570	*9570	*8910	8600	*7320	6000	11181			
	Shoe :	600mm	3,0 m	kg	-	-	-	-	*17570	*17570	*13220	*13220	*11040	10930	*9780	8300	*7570	5710	11382	
CWT :	9750kg	1,5 m	kg	-	-	-	-	*21990	*21990	*15670	14390	*12510	10440	*10680	8010	*8020	5610	11380		
UC: mechanically retractable width		0 m	kg	-	-	-	-	*24650	21040	*17530	13760	*13720	10040	*11460	7760	8510	5680	11176		
		-1,5 m	kg	*9580	*9580	*14230	*14230	*25660	20620	*18570	13400	*14500	9790	11510	7600	8930	5940	10758		
		-3,0 m	kg	*14660	*14660	*19870	*19870	*25380	20560	*18750	13270	*14700	9680	11450	7540	9770	6480	10098		
		-4,5 m	kg	*20520	*20520	*27230	*27230	*23910	20760	*17970	13350	*14090	9730	*11110	7640	*10820	7490	9145		
	-6,0 m	kg	-	-	*29270	*29270	*20870	*20870	*15820	13630	*12010	10000	-	-	*11290	9530	7787			

**LIFTING CAPACITY EC480D mechanically retractable width**

		1,5 m		3,0 m		4,5 m		6,0 m		7,5 m		9,0 m		Max. reach		Max.		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	mm		
Boom :	6,5m	7,5 m	kg	-	-	-	-	-	-	-	-	-	-	-	*12430	12280	7249	
		6,0 m	kg	-	-	-	-	-	*13390	*13390	*12350	11570	-	-	*12280	10130	8143	
Arm :	2,55m	4,5 m	kg	-	-	-	-	*19980	*19980	*15270	*15270	*13110	11310	-	-	*12340	9040	8686
Shoe :	700mm	3,0 m	kg	-	-	-	-	*24400	22860	*17390	15090	*14160	10990	-	-	*12540	8520	8944
		1,5 m	kg	-	-	-	-	*17490	*17490	*19000	14600	*15060	10710	-	-	12430	8400	8942
CWT :	9750kg	0 m	kg	-	-	-	-	*25680	21990	*19670	14340	*15490	10550	-	-	12910	8690	8680
UC: mechanically retractable width		-1,5 m	kg	-	-	*18840	*18840	*25280	22080	*19250	14300	*15070	10530	-	-	*13470	9500	8132
		-3,0 m	kg	-	-	*29180	*29180	*22630	22350	*17440	14470	-	-	-	-	*13600	11270	7231
		-4,5 m	kg	-	-	-	-	*17530	*17530	-	-	-	-	-	-	*12950	*12950	5813
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	*11320	*11320	-	-	-	*11440	10730	7886	
		6,0 m	kg	-	-	-	-	-	*13060	*13060	*11700	11510	-	-	*11360	9070	8714	
Arm :	2,55m	4,5 m	kg	-	-	-	-	-	*15150	*15150	*12670	11180	*11500	8520	*11450	8190	9223	
Shoe :	700mm	3,0 m	kg	-	-	-	-	-	*17330	14780	*13820	10830	*11980	8360	11450	7760	9466	
		1,5 m	kg	-	-	-	-	-	*18870	14300	*14770	10540	12190	8210	11340	7660	9464	
CWT :	9750kg	0 m	kg	-	-	-	-	-	*19450	14090	*15270	10370	12100	8130	11720	7890	9217	
UC: mechanically retractable width		-1,5 m	kg	-	-	-	-	*24720	21820	*19090	14070	*15100	10330	-	-	*12530	8530	8703
		-3,0 m	kg	-	-	*27580	*27580	*22570	22070	*17700	14220	*13770	10480	-	-	*12720	9880	7870
		-4,5 m	kg	-	-	-	-	*18710	*18710	*14430	*14430	-	-	-	-	*12460	*12460	6594
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	*10010	*10010	-	-	-	*9800	9340	8709	
		6,0 m	kg	-	-	-	-	-	-	*10630	*10630	*10190	8810	*9600	8100	9463		
Arm :	3,35m	4,5 m	kg	-	-	-	-	*17950	*17950	*13760	*13760	*11740	11370	*10670	8650	*9680	7400	9933
Shoe :	700mm	3,0 m	kg	-	-	-	-	*22870	22870	*16130	15070	*13040	10970	*11350	8440	*10010	7040	10159
		1,5 m	kg	-	-	-	-	*15840	*15840	*18080	14470	*14210	10620	*12010	8240	10250	6940	10158
CWT :	9750kg	0 m	kg	-	-	-	-	*19420	*19420	*19170	14120	*15010	10380	12080	8100	10520	7100	9928
UC: mechanically retractable width		-1,5 m	kg	-	-	*14040	*14040	*25880	21600	*19340	14000	*15220	10270	12030	8060	11250	7570	9454
		-3,0 m	kg	-	-	*23900	*23900	*24290	21780	*18570	14060	*14630	10310	-	-	*11980	8520	8694
		-4,5 m	kg	-	-	*28410	*28410	*21330	*21330	*16470	14300	*12380	10570	-	-	*12190	10460	7562
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	-	-	-	*9250	8940	*7930	*7930	9288	
		6,0 m	kg	-	-	-	-	-	-	*9780	*9780	*9410	8850	*7770	7420	9999		
Arm :	3,9m	4,5 m	kg	-	-	-	-	-	*12610	*12610	*10930	*10930	*9990	8650	*7840	6820	10444	
Shoe :	700mm	3,0 m	kg	-	-	-	-	*20840	*20840	*15060	*15060	*12300	10980	*10760	8410	*8090	6490	10659
		1,5 m	kg	-	-	-	-	*21560	*21560	*17210	14460	*13600	10570	*11530	8170	*8570	6390	10657
CWT :	9750kg	0 m	kg	-	-	-	-	*21410	21390	*18610	14000	*14560	10270	11970	7990	*9320	6510	10439
UC: mechanically retractable width		-1,5 m	kg	*9890	*9890	*14060	*14060	*25990	21260	*19130	13800	*15010	10110	11870	7900	10280	6890	9989
		-3,0 m	kg	*16520	*16520	*21670	*21670	*24880	21370	*18740	13790	*14760	10090	*11800	7930	*11250	7650	9275
		-4,5 m	kg	-	-	*31060	*31060	*22520	21680	*17220	13970	*13380	10250	-	-	*11590	9120	8224
	-6,0 m	kg	-	-	-	-	*18130	*18130	*13640	*13640	-	-	-	-	*11580	*11580	6678	
Boom :	7,0m	7,5 m	kg	-	-	-	-	-	-	-	-	-	*7860	*7860	*7290	*7290	10111	
		6,0 m	kg	-	-	-	-	-	-	-	-	-	-	*8220	*8220	*7220	6590	10766
Arm :	4,8m	4,5 m	kg	-	-	-	-	-	-	*9570	*9570	*8910	8710	*7320	6080	11181		
Shoe :	700mm	3,0 m	kg	-	-	-	-	*17570	*17570	*13220	*13220	*11040	*11040	*9780	8410	*7570	5800	11382
		1,5 m	kg	-	-	-	-	*21990	*21990	*15670	14570	*12510	10580	*10680	8120	*8020	5690	11380
CWT :	9750kg	0 m	kg	-	-	-	-	*24650	21310	*17530	13940	*13720	10180	*11460	7870	8640	5760	11176
UC: mechanically retractable width		-1,5 m	kg	*9580	*9580	*14230	*14230	*25660	20900	*18570	13580	*14500	9920	11680	7710	9070	6030	10758
		-3,0 m	kg	*14660	*14660	*19870	*19870	*25380	20840	*18750	13460	*14700	9820	11620	7650	9910	6580	10098
		-4,5 m	kg	*20520	*20520	*27230	*27230	*23910	21030	*17970	13530	*14090	9870	*11110	7750	*10820	7600	9145
	-6,0 m	kg	-	-	*29270	*29270	*20870	*20870	*15820	13820	*12010	10140	-	-	*11290	9660	7787	

# EQUIPMENT.

## STANDARD EQUIPMENT

	EC380D	EC480D
<b>Engine</b>		
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Tier 4i EU (Stage IIIB) requirements	•	•
Air filter with indicator	•	•
Air intake heater	•	•
Cyclone pre-cleaner	•	•
Electric engine shut-off	•	•
Fuel filter and water separator	•	•
Fuel filler pump: 50 l/min, with automatic shut-off	•	•
Alternator, 80 A	•	•
<b>Electric/Electronic control system</b>		
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 / 200 Ah	•	•
Start motor, 24 V / 7 kW	•	•
<b>Hydraulic system</b>		
Hose rupture valve: boom	•	•
Overload warning device	•	•
Automatic sensing hydraulic system	•	•
- 2-pump flow bucket circuit	•	•
- Summation system	•	•
- Boom priority	•	•
- Arm priority	•	•
- Swing priority	•	•
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, ISO VG 46	•	•
<b>Frame</b>		
Access way with handrail	•	•
Tool storage area	•	•
Punched metal anti-slip plates	•	•
Undercover (heavy-duty)	•	•
<b>Cab and interior</b>		
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	•	•

	EC380D	EC480D
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	•	•
Rear view camera	•	•
Master key	•	•
<b>Undercarriage</b>		
Undercover (heavy-duty)	•	•
Hydraulic track adjusters	•	•
Greased and sealed track link	•	•
Track Guard	•	•
<b>Track shoes</b>		
600 mm with triple grousers	•	
700 mm with triple grousers		•
<b>Digging equipment</b>		
Boom: 6,45 m HD	•	
Boom: 7,0 m HD		•
Arm: 3,2 m HD	•	
Arm: 3,35 m HD		•
Manual centralized lubrication	•	•

## OPTIONAL EQUIPMENT

	EC380D	EC480D
<b>Engine</b>		
Block heater: 120 V, 240 V	•	•
Oil bath pre-cleaner	•	•
Diesel coolant heater, 10 kW	•	•
Water separator with heater	•	•
Auto engine shutdown	•	•
<b>Electric</b>		
Extra lights:	•	•
- Cab-mounted 3	•	•
- Boom-mounted 2	•	•
- Counterweight-mounted 1	•	•
Travel alarm	•	•
Anti-theft system	•	•
Rotating warning beacon	•	•
<b>Hydraulic system</b>		
Hose rupture valve: arm	•	•
Boom float function	•	•
Hydraulic piping:	•	•
- Work tool management system (up to 20 programmable memories)	•	•
- Hammer & shear, 1 and 2 pump flow	•	•
- Hammer & shear: variable flow and pressure pre-setting	•	•



## OPTIONAL EQUIPMENT

	EC380D	EC480D
- Additional return filter	•	•
- Slope & rotator	•	•
- Grapple	•	•
- Oil leak (drain) line	•	•
- Quick coupler piping	•	•
Volvo hydraulic quick coupler S3	•	•
Volvo hydraulic quick coupler U36	•	•
Volvo hydraulic quick coupler U46	•	•
Hydraulic oil, ISO VG 32	•	•
Hydraulic oil, ISO VG 46	•	•
Hydraulic oil, ISO VG 68	•	•
Hydraulic oil, biodegradable 46	•	•
Hydraulic oil, longlife oil 32	•	•
Hydraulic oil, longlife oil 46	•	•
Hydraulic oil, longlife oil 68	•	•
<b>Frame</b>		
Hydraulic removable counterweight		•
Full height counterweight: 6500 kg, 7550 kg,	•	
Full height counterweight: 8450 kg, 9050 kg		•
<b>Cab and interior</b>		
Fabric seat with heater	•	•
Fabric seat with heater and air suspension	•	•
Pilot control pattern change	•	•
Opening top hatch	•	•
Falling object guard (FOG)	•	•
- Frame-mounted	•	•
- Cab-mounted	•	•
Cab-mounted falling object protective structure (FOPS)	•	•
Smoker kit (ashtray and lighter)	•	•
Screen guard for front window	•	•
Lower wiper with intermittent control	•	•
Anti-vandalism kit	•	•
Specific key	•	•
<b>Undercarriage</b>		
Full track guard	•	•
Mechanically retractable width track gauge		•
<b>Track shoes</b>		
Track shoes 600/700/800/900 mm with triple grousers	•	•
Track shoes 600 mm with double grousers	•	•
<b>Digging equipment</b>		
Boom: 6,2 m ME	•	
Boom: 6,5 m ME		•
Arm: 2,6 m, 3,9 m	•	
Arm: 2,55 m, 3,9 m, 4,8 m		•
Linkage with lifting eye	•	•
Extended greasing bushing	•	•
<b>Service</b>		
Tool kit, daily maintenance	•	•
Tool kit, full scale	•	•
Automatic lubrication system	•	•

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

Hose rupture valve, arm



Hammer & shear:  
variable flow and pressure  
pre-setting



FOG



Auto Engine Shutdown



Auto Lubrication System



Anti theft







# 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. And we're proud of what makes Volvo different.

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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