



# EC75D

Volvo Excavators 7.4-7.8 t 58 hp



# A passion for performance

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

## Helping you to do more

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

## Designed to fit your needs

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



## You learn a lot in 180 years

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

## We're on your side

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

## We have a passion for performance.



Volvo Trucks



Renault Trucks





Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction  
Equipment



Volvo Penta



Volvo Financial Services

# Built bigger, designed stronger

Introducing the Volvo EC75D – the biggest excavator in its class. If you're looking for a strong, stable and durable platform, look no further than the EC75D which boasts new levels of strength and durability. Capitalize on greater machine size and weight and reap the benefits of maximum productivity with Volvo.

## Working range

The configuration of the boom and arm provide optimal working range – allowing the machine to reach further and dig deeper for increased productivity.



## Bucket size

Thanks to its large size, the EC75D can be used with a bigger bucket than similar machines in the same class – increasing productivity. The Volvo designed bucket is specifically matched to the machine's size for maximum performance.



## Boom and arm

The boom and arm are made from high strength tensile steel for maximum durability and uptime. The boom is fixed to the superstructure at the side of the cab for improved stability and visibility of the job site.







# MACHINE SIZE

The EC75D has been built larger and heavier than competitor products in the same class to ensure superior productivity and profitability. The wider and longer undercarriage provides excellent stability and lifting capacity together with fantastic ground clearance and working range.





# DIGGING POWER

High digging force is delivered through optimum engine power and hydraulic pressure while excellent pump flow and swing torque enable faster cycle times – particularly when working with hard materials and a larger bucket.

# More performance, less fuel

Volvo prides itself on producing machines that give you more power while using less fuel. The EC75D's enhanced hydraulic system is perfectly matched to the engine – delivering high performance and reduced fuel consumption. Features including industry-leading lift capacity and high digging power give you the most efficient operation possible – saving you time and money. The EC75D is in a league of its own.

## Volvo engine

The powerful Volvo D3 diesel engine delivers 44.4kW and low fuel consumption. The automatic idling system reduces engine speed to idle when the controls are inactive for five seconds or the left-hand console is raised. The engine returns to the pre-selected speed when a control is touched or automatic idling is turned off.



## Tractive force

Superior tractive force enables the machine to climb gradients with ease and travel over rough terrain. If an optional dozer blade is selected, tractive force will also aid backfilling and landscaping.



## Swing performance

The balance between the torque and swing speed permits fast and precise placement of the attachment – even when working on a slope



## Lifting capacity

The EC75D features industry-leading lifting capacity which, combined with strong hydraulic performance and stability, delivers exceptional lift and handling capabilities.





# Optimize productivity

At Volvo we understand that when operators are comfortable they experience less fatigue and work more productively. That's why we've built an industry-leading, spacious operator environment with excellent allaround visibility. Operators will feel in control and perform efficiently all day long in this superior working environment. Witness the benefits for yourself and experience new levels of profitability.

## I-ECU monitor

The large monitor clearly presents machine information and puts the operator in control, enabling high performance and efficiency. The operator and service technician can make quick visual and diagnostic checks, increasing uptime and productivity.



## RPM control

An electrical rpm control system allows the operator to precisely adjust and optimize engine rpm in any application. By using the rpm settings, fuel efficiency and machine performance are maximized. There are nine rpm settings as well as the P (Power) max mode.

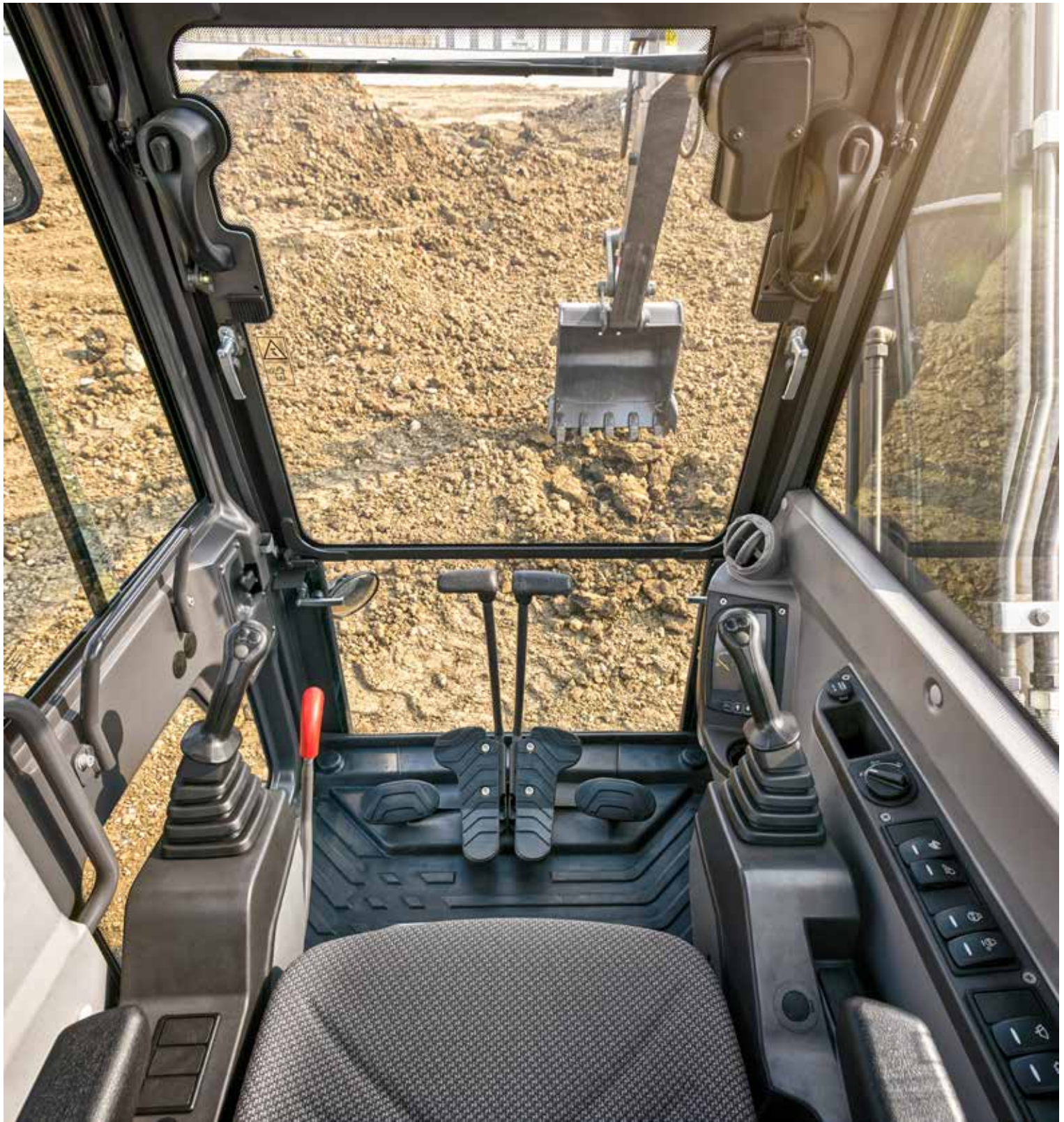


## Dozer blade control lever

The dozer blade control level manages the lift and fall of dozer blade. EC75D applies the advanced pilot control to make the control easier.







# VOLVO CAB

See and do more in the Volvo cab, designed with the large expanses of glass that surround the adjustable operator seat, which features a headrest and orange seatbelt as standard. The spacious environment offers ergonomic controls, efficient HVAC system, and vibration and noise isolation, so you'll always be in control – and comfortable.

# Designed to meet your needs

## Boom and arm

The boom and arm are made from high strength tensile steel for maximum durability and uptime.

## Lifting capacity

Industry-leading lift capacity delivers exceptional lifting and handling capabilities.

## Bucket size

Due to its larger size, the EC75D can be used with a bigger bucket than similar machines in the same class – increasing productivity.

## VCADS Pro

This analysis and programming tool makes it easy to control the machine for increased performance.



## DIGGING POWER

The enhanced hydraulic system is perfectly matched to the engine to deliver high digging force.



## MACHINE SIZE

The EC75D is bigger and heavier than competitor products in the same class to ensure more productivity and profitability.

## VOLVO CAB

The industry-leading cab offers a spacious and comfortable environment with enhanced visibility for reduced fatigue and increased productivity.

### Volvo engine

Powerful engine delivers 44.4kW. Volvo engine and automatic idling system provide low fuel consumption.

### Swing performance

The swing motor design features a robust axial piston providing excellent performance.

## SERVICEABILITY

Grouped service points and ground level access allow regular checks to be done faster for maximum machine uptime.





# SERVICEABILITY

Grouped service points and excellent access to the engine compartment via the engine hood – which can be fully opened – allows regular checks to be done faster for maximum machine uptime.



# Smart serviceability

Taking care of your excavator shouldn't be complicated. That's why the EC75D is packed with maintenance saving features to help you work for longer and sustain productivity day in and day out. Benefit from the Volvo experience and enjoy intuitive maintenance with the EC75D.

## Customer Support Agreements

Customer Support Agreements offer service and maintenance with controlled costs and maximum uptime. The flexible system caters for a range of needs from total repair and maintenance to an inspection program covering vital parts and functions.



## Support center

Volvo customers have direct access to the unique dealer support network. Customers can telephone a support number 24 hours a day, seven days a week, which identifies the call and transfers it to the local dealer where a dedicated team will take care of your needs – maximizing machine uptime.



## VCADS Pro

The VCADS Pro (Volvo Computer Aided Diagnostic System Professional) analysis and programming tool makes it easy to control the machine for increased performance.



# Get the most from your excavator

For increased versatility and profitability, the EC75D has been built attachment ready. Get the most out of your machine with Volvo attachments which have been designed to perfectly match and work in harmony with your excavator. The EC75D is a versatile machine that can effectively perform a variety of tasks. Get the job done with reduced cycle times and reduced fuel consumption with Volvo.

## Interfaces



### Direct fit

Direct fit attachments will always deliver a high performance however with the need for excavators to handle more tasks than ever before, Volvo offer Quick Couplers providing various levels of versatility and performance to meet every need.



### Hydraulic quick coupler

The Volvo Hydraulic Quick Coupler allows pin on interface attachments that can be connected and disconnected in standard digging position or face shovel mode. It's also the perfect match for Volvo breakers.

## Buckets



### General purpose buckets

Designed to be used in a large variety of conditions for all trenching and handling jobs. The durable buckets can work in material like loose gravel, crushed rock, dirt and soil. Available in different widths: 770-890 mm.

## Hydraulic breaker

Designed for optimum compatibility with Volvo machines, the Volvo hydraulic breaker range combines excellent operating performance with low vibration: Increase performance and productivity / Reliable and simple to maintain / Designed for a perfect fit



## Wear parts

An all-round system that combines strength and durability with quick and easy change.



### Tooth

Engineered for combined durability and penetration. Manufactured with optimal material composition and heat treatment process.



### Adapter

Designed for optimal fitting with the tooth, better retention and better cutting edge protection.



### Breaker tools

We offer an extensive range of high quality tools using high tensile steel to suit every application.





# THE PERFECT MATCH

Select from a range of original Volvo buckets made to work in harmony with your Volvo excavator. Buckets are available as direct fit or with Volvo quick coupler interfaces.

# Volvo EC75D in detail

Engine		
Volvo engine Tier 3 (Stage 3) emissions compliant diesel engine. The engine uses precise, highpressure fuel injectors, Air Filter: 2 stage. Low cab noise levels.		
Model	Volvo	D2.6D
Max. power at	r/min	2 000
Net (ISO 9249/SAEJ1349)	kW	40.9
	hp	56
Gross (SAE J1995)	kW	43
	hp	58
Max. torque	Nm	225.8
at engine speed	r/min	1 600
No. of cylinders		4
Displacement	l	2.62
Bore	mm	87
Stroke	mm	110
Electrical system		
Voltage	V	12
Batteries	V	1 x 12
Battery capacity	Ah	100
Alternator	V/Ah	12/60
Starter motor output	V - kW	12 - 2.5
Swing system		
Swing provided by radial piston motor and reduction gear with remote lubrication.		
Max. swing speed	r/min	10.5
Max. swing torque	kNm	22.9
Travel System		
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.		
Travel speed low	km/h	2.86
Travel speed high	km/h	5
Max. drawbar pull	kN	56
Gradeability	°	35

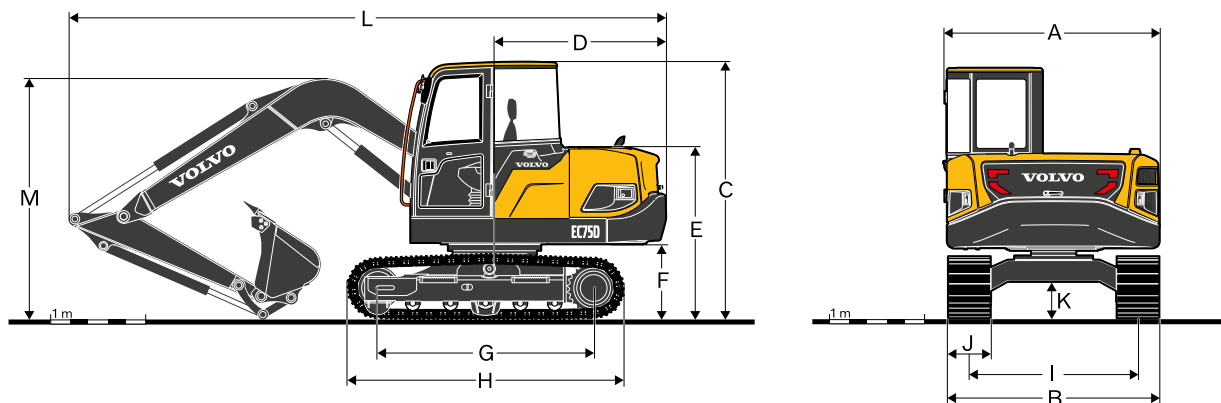
Undercarriage		
The undercarriage has a robust X-shaped frame. Greased and sealed track chains are standard.		
Track shoes		2 x 40
Link pitch	mm	154
Shoe width	mm	450
Bottom rollers		2 x 5
Top rollers		2 x 1
Hydraulic system		
Closed-center, load-sensing hydraulic system (CCLS) providing fuel savings and independent control of functions.		
Main pump: Variable-displacement, load-sensing pump for all equipmen		
Maximum flow	l/min	1 x 160
Relief valve setting pressure		
Implement	MPa	26
Travel circuit	MPa	26
Swing circuit	MPa	23.5
Sound Level		
Sound level in cab according to ISO 6396		
LpA	dB(A)	80
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
LwA	dB(A)	99
Service Refill		
Fuel tank	l	145
Hydraulic system, total	l	140
Hydraulic tank	l	80
Engine oil	l	10
Engine coolant	l	13.6

BUCKETS		
Width	Weight	Capacity
mm	kg	l
770	262	340

MACHINE WEIGHT AND GROUND PRESSURE			
	Shoe width	Operating weight	Ground pressure
	mm	kg	kPa
Boom 3.71 m, Arm 1.65 m, Bucket 262 kg (340 l), Counterweight 650 kg			
Steel track	450	7 400	30.4
Rubber shoe	450	7 400	30.4
Rubber shoe pad + Link	450	7 800	32.0



# Specifications

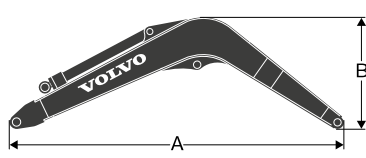
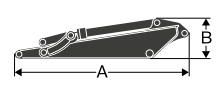


## MACHINE DIMENSIONS

		Unit	EC75D
A	Overall width of upper structure	mm	2 280
B	Overall width	mm	2 230
C	Overall height of cab	mm	2 713
D	Tail swing radius	mm	1 868
E	Overall height of engine hood	mm	1 798
F	Counterweight clearance *	mm	813
G	Tumbler length	mm	2 220
H	Track length	mm	2 900
I	Track gauge	mm	1 780
J	Shoe width	mm	450
K	Min. ground clearance *	mm	408.5
L	Overall length	mm	6 290
M	Overall height of boom	mm	2 470

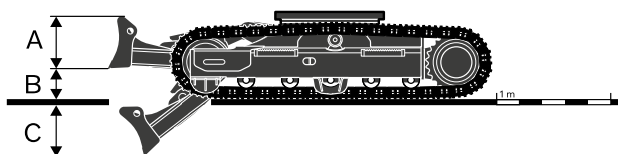
\* Without shoe grouser

## BOOM AND ARM DIMENSIONS

					
		unit	Boom	Arm	
		m	3.71	1.65	
A	Length	mm	3 850	2 195	
B	Height	mm	1 330	495	
	Width	mm	457	245	
	Weight	kg	540	285	

Boom: Includes cylinder, piping and pin, excludes boom cyl. Pin

Arm: Includes cylinder, linkage and pin



## DOZER BLADE DIMENSIONS

		Unit	
A	Height	mm	440
	Width	mm	2 240
B	Lifting height	mm	400
C	Digging depth	mm	330

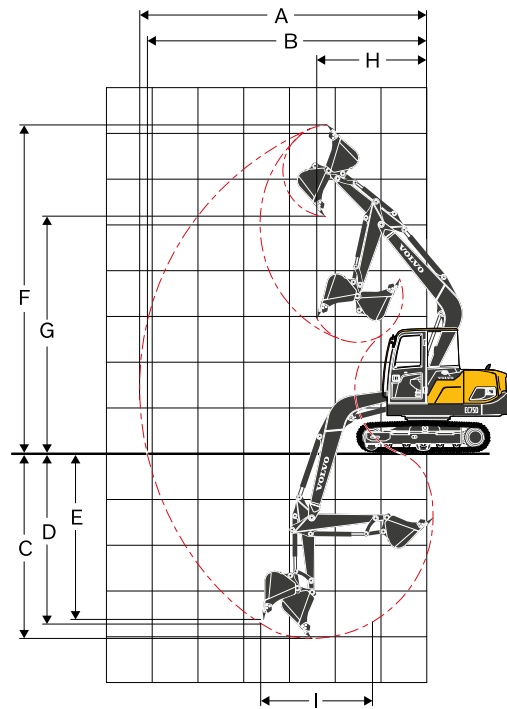
# Specifications

## WORKING RANGES

A	Max. digging reach	mm	6 340
B	Max. digging reach on ground	mm	6 190
C	Max. digging depth	mm	4 150
D	Max. digging depth (l=2.44m level)	mm	3 800
E	Max. vertical wall digging depth	mm	3 750
F	Max. cutting height	mm	7 200
G	Max. dumping height	mm	5 070
H	Min. front swing radius	mm	1 760

## DIGGING FORCES

Breakout force (bucket)	ISO	kN	56
Tearout force (arm)	ISO	kN	38
Rotation angle, bucket		°	173



## LIFTING CAPACITY EC75DV

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	2.0 m		3.0 m		4.0 m		5.0 m		Max. Reach		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Max.
Boom: 3.71 m Arm: 1.6 m Shoe: 450 mm CWT: 650 kg No dozer blade	6.0 m kg									*1 785	*1 785	2.5
	5.0 m kg			*1 475	*1 475					*1 560	*1 560	3.9
	4.0 m kg			*1 595	*1 595	*1 500	*1 500			*1 520	1 410	4.7
	3.0 m kg	*2 880	*2 880	*1 995	*1 995	*1 670	*1 670	1 480	1 240	1 400	1 180	5.1
	2.0 m kg			*2 550	*2 550	*1 900	1 710	1 440	1 210	1 280	1 070	5.4
	1.0 m kg			*2 965	2 470	1 950	1 620	1 400	1 170	1 240	1 040	5.4
	0 m kg			2 950	2 390	1 890	1 570	1 370	1 140	1 280	1 070	5.2
	-1.0 m kg	*4 210	*4 210	2 940	2 380	1 880	1 550			1 430	1 190	4.9
	-2.0 m kg	*3 610	*3 610	*2 600	2 420	*1 850	1 580			*1 710	1 480	4.2
	-3.0 m kg	*2 455	*2 455	*1 670	*1 670					*1 605	*1 605	3.1
Boom: 3.71 m Arm: 1.6 m Shoe: 450 mm CWT: 650 kg Dozer blade: Down	6.0 m kg									*1 785	*1 785	2.5
	5.0 m kg			*1 475	*1 475					*1 560	*1 560	3.9
	4.0 m kg			*1 595	*1 595	*1 500	*1 500			*1 520	1 510	4.7
	3.0 m kg	*2 880	*2 880	*1 995	*1 995	*1 670	*1 670	*1 520	1 340	*1 520	1 270	5.1
	2.0 m kg			*2 550	*2 550	*1 900	1 840	*1 605	1 310	*1 550	1 160	5.4
	1.0 m kg			*2 965	2 670	*2 110	1 750	*1 700	1 260	*1 580	1 130	5.4
	0 m kg			*3 080	*2 600	*2 220	*1 700	*1 730	1 240	*1 630	1 160	5.2
	-1.0 m kg	*4 210	*4 210	*2 965	2 580	*2 170	1 680			*1 680	1 290	4.9
	-2.0 m kg	*3 610	*3 610	*2 600	*2 600	*1 850	1 710			*1 710	1 610	4.2
	-3.0 m kg	*2 455	*2 455	*1 670	*1 670					*1 605	*1 605	3.1
Boom: 3.71 m Arm: 1.6 m Shoe: 450 mm CWT: 650 kg Dozer blade: Up	6.0 m kg									*1 785	*1 785	2.5
	5.0 m kg			*1 475	*1 475					*1 560	*1 560	3.9
	4.0 m kg			*1 595	*1 595	*1 500	*1 500			*1 520	1 510	4.7
	3.0 m kg	*2 880	*2 880	*1 995	*1 995	*1 670	*1 670	*1 520	1 340	*1 520	1 270	5.1
	2.0 m kg			*2 550	*2 550	*1 900	1 840	*1 605	1 310	*1 475	1 160	5.4
	1.0 m kg			*2 965	2 670	*2 110	1 750	*1 605	1 260	1 430	1 130	5.4
	0 m kg			*3 080	*2 600	2 170	*1 700	1 580	1 240	1 480	1 160	5.2
	-1.0 m kg	*4 210	*4 210	*2 965	2 580	2 150	1 680			1 640	1 290	4.9
	-2.0 m kg	*3 610	*3 610	*2 600	*2 600	*1 850	1 710			*1 710	1 610	4.2
	-3.0 m kg	*2 455	*2 455	*1 670	*1 670					*1 605	*1 605	3.1

Notes: 1. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.

2. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 3. Rated loads marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load. 4. No bucket.



# Equipment

## STANDARD EQUIPMENT

### Engine

Engine Tier 3  
Auto deceleration

### Electrical system

Extra work light, Cab front  
Non Travel alarm  
Non Cleaning air gun

### Undercarriage

450mm steel track  
Lower frame-w/o dozer blade

### Hydraulics

Without X1 Piping  
w/o X1 piping on 3.70m bm  
Hydraulic fluid mineral 46

### Cab

CAB\_Sld window,CN GPS  
Fabric seat, Suspension  
Head rest for Fabric seat  
LH/RH one button in Single X1  
Heater & air conditioner  
Universal key  
Radio with USB  
2 inch retractible

### Digging equipment

GP Boom, 3.70 m  
GP Arm, 1.65 m  
Linkage  
Boom cylinder  
Arm cylinder  
Bucket cylinder

## STANDARD EQUIPMENT

### Service

Tool kit-daily maintenance  
Spare parts  
Manual Chinese  
Part Catalog with DVD

### Other equipment

Counterweight  
Pump for standard

### Attachments / Buckets

BUCKET-0.34 m3(SAE)-with hook

## OPTIONAL EQUIPMENT

### Engine

Fuel filler pump 35l

### Undercarriage

Less lower structure  
Lower frame-w/dozer blade  
Dozer blade

### Hydraulics

X1 control  
X1 pipe on 3.70m bm  
X1 pipe on 1.65m arm  
Quick coupler and piping

### Protective equipment

Safty net, front window

### Attachments / Buckets

Hydraulic breaker

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

Dozer blade



Quick coupler and piping



Hydraulic breaker



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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