

VOLVO WHEELED EXCAVATOR



VOLVO

Volvo wheeled excavators – the new generation: the formula for productivity



Engineering that inspires. Power that moves. Volvo's new range of wheeled excavators sets the standard for performance, safety and comfort. The efficiency and power of perfected engines are shown by the interaction of the operating mode selector and Power Boost.

With two models approved for on-road use, the 14-tonne EW140 and the 16-tonne EW160, four types of boom and a selection of dipper arms, buckets and attachments, Volvo have everything you could ever need for any application. Sounds good? Better still – test any Volvo of your choice!



In action

Start the engine, get going and be amazed by the breakaway power of the wheeled excavator's hydraulic system. This is due to the very heart of the Volvo – a 4-cylinder diesel engine, which combines excellent power with economy. The many technical refinements, which are standard on a Volvo, such as variable engine speed, load sensing hydraulic system and torque control, clearly show that the excavator is also a precision tool capable of adapting to any conditions.

It runs and runs and runs

There are more worthwhile jobs than searching for spares. That's why we use standard components and functions, which can be replaced very quickly. And we also do something to help with servicing by providing a display, which indicates when it is time to clean the three-stage air filter system. This information pays off as it reduces the excavator's downtime and increases its service life.

Power that moves

Regulated power

Even extreme conditions can be overcome with a Volvo excavator. However, not all conditions require the machine's maximum power. Using the operating mode selector you can determine the exact quantity of hydraulic oil to be supplied, and the engine speed for the job. Two harmonised operating modes and an individually programmable operating mode give you the leeway you need on site. And with Power Boost, which increases the digging power for ten seconds (irrespective of the operating mode), you have enough power in reserve to tackle even the most demanding conditions.



Excellent sensitivity

Volvo boasts an extremely sensitive hydraulic system. An axial piston pump supplies exactly the quantity of oil and pressure required to drive and swivel, to lift and dig. The flow is controlled variably by the load sensing system (which senses the load at any given time). This means that the bucket can grab objects smoothly and with absolute precision even at low engine speeds. In addition, the torque control ensures that the superstructure always swivels smoothly – and permanently thanks to the maintenance-free design of the slewing mechanism. The hydraulic filter only needs to be changed every thousand hours as well, which is good for your finances and good for the environment.



Stay on the ground!

We don't leave anyone dangling. A multitude of ergonomic details plus the fact that the engine is mounted longitudinally mean that servicing and routine jobs such as checking oil levels or changing filters can be easily carried out on the ground. And where work at a higher level is unavoidable, slip-proof service platforms provide access to the components.



Powerful but economical

Low fuel consumption at maximum power. Low emission, direct fuel injection and charge cooling (only on the EW160 model) ensure that our four-cylinder turbo diesel engines consume fuel more cleanly and more efficiently, thereby protecting the environment, increasing performance and reducing energy costs. But that's not all. Simply by adjusting the engine speed to suit the conditions using the operating mode selector you can maximise your savings.





First choice: steel

Tremendous forces act on the superstructure. To prevent unnecessary concentrated loads acting on the slew ring, the superstructure is designed in such a way to absorb and even out these forces and to transmit them to the undercarriage. Simple but sturdy and effective.

Welded, enclosed, armed

With a Volvo excavator the nature of the substrate is no longer a major concern. With its four-wheel drive, power shift travel gearbox and oscillating front axle the excavator is at home on any terrain. Even water and sand do not bother it thanks to the enclosed wet multiple disc brakes in a two-circuit braking system. And its continuous welded undercarriage can be equipped with outriggers and/or support blade at the front and/or rear. In short, the Volvo excavator is armed against any adversity.



Maths for professionals

It's all a question of angles. The monobloc boom's elaborate excavation geometry makes it a productivity tool. In addition, the generously sized double boom cylinders increase the lifting power. Even confined locations are no problem for the adjustable boom thanks to its large range and short front turning radius. And even precise squaring of trenches alongside buildings becomes a routine operation by virtue of the equipment's ability to swing out laterally (offset), making it possible to articulate the boom by up to 42 degrees without rotating the superstructure.



Buckets away!

We have made replacing equipment child's play. The Volvo quickfit with its welded on lifting hook is our answer to changing operating conditions. There is no need to leave the cab to remove the GP bucket, for example to lift heavier loads. All you have to do to quickly replace attachments is to activate two switches simultaneously (this serves as a safeguard against removing the attachments accidentally). After all, flexibility produces productivity.

Engineering that inspires

The right working environment

Motivation is governed by environment. It is only possible to achieve top-class performances if you feel comfortable in your workplace. That's why we have designed the cab in such a way that even entering is a pleasure. Cleverly positioned steps and handles provide access to a cab with plenty of storage space and a comfortable working climate thanks in part to the effective heating and cooling system (air conditioning also available on request). The adjustable seat, armrests and ergonomically positioned operating levers effectively prevent operator fatigue and the cab, which is provided with rubber shock absorbers, absorbs every vibration. The glazed sky light guarantees perfect all-round vision, even to the tip of the boom when it is lifted vertically. On hot summer days the top pane of the front window can be easily pushed up under the roof. The sliding window in the cab door, on the other hand, means that you can still talk to your colleagues even when the door is closed. Admittedly, this is just another detail, but it is these little things that make up the whole.



Having order is half the work done

The driver has to operate the controls, so it is essential that they are clearly laid out and within easy reach. This includes the lights, which confirm which function has been selected, and a display which provides information about the fuel supply or engine speed at the touch of a button. An additional safety measure is a warning buzzer, which indicates when a problem has been detected by the on board monitoring system.



Good night

Volvo excavators can be used at nights without disturbing the neighbours' sleep. The cab and engine compartment's special lining absorbs a great deal of noise and the noise level can be reduced still further by throttling the speed manually. This makes every night a silent night.



			
Engine		EW140 Monobloc Boom	EW160 Monobloc Boom
Rated output	rps (rpm)	Volvo TD40 GHE	Volvo TD40 KGE
ISO 9249/DIN 6271 (net)	kW (hp)	36.7 (2200)	36.7 (2200)
Bucket capacity	m ³	75.5 (103)	88 (120)
Lifting capacity		0.20-0.75	0.20-0.80
along undercarriage (max.)	t	4.4	5.1
at reach/lifting hook height	m	6.0 / 1.5	6.0 / 1.5
Reach (max.)	m	9.0	9.6
Digging depth (max.)	m	5.6	6.2
Breakout force (max.)	kN	88	109
Operating weight	t	12.8-15.2	13.8-16.4

			
Engine		EW140 2-Piece Boom	EW160 2-Piece Boom
Rated output	rps (rpm)	Volvo TD40 GHE	Volvo TD40 KGE
ISO 9249/DIN 6271 (net)	kW (hp)	36.7 (2200)	36.7 (2200)
Bucket capacity	m ³	75.5 (103)	88 (120)
Lifting capacity		0.20-0.75	0.20-0.80
along undercarriage (max.)	t	4.5	5.0
at reach/lifting hook height	m	6.0 / 1.5	6.0 / 1.5
Reach (max.)	m	9.3	9.9
Digging depth (max.)	m	5.7	6.3
Breakout force (max.)	kN	88	109
Operating weight	t	12.9-15.3	14.1-16.7

			
Engine		EW140 Monobloc-Offset	EW160 Monobloc-Offset
Rated output	rps (rpm)	Volvo TD40 GHE	Volvo TD40 KGE
ISO 9249/DIN 6271 (net)	kW (hp)	36.7 (2200)	36.7 (2200)
Bucket capacity	m ³	75.5 (103)	88 (120)
Lifting capacity		0.20-0.75	0.20-0.80
along undercarriage (max.)	t	4.1	4.9
at reach/lifting hook height	m	6.0 / 1.5	6.0 / 1.5
Reach (max.)	m	9.2	9.2
Digging depth (max.)	m	5.9	5.9
Breakout force (max.)	kN	88	88
Operating weight	t	13.3-15.7	14.2-16.8

			
Engine		EW140 2-Piece-Offset	EW160 2-Piece-Offset
Rated output	rps (rpm)	Volvo TD40 GHE	Volvo TD40 KGE
ISO 9249/DIN 6271 (net)	kW (hp)	36.7 (2200)	36.7 (2200)
Bucket capacity	m ³	75.5 (103)	88 (120)
Lifting capacity		0.20-0.75	0.20-0.80
along undercarriage (max.)	t		4.8
at reach/lifting hook height	m		6.0/1.5
Reach (max.)	m	Data on request	10.0
Digging depth (max.)	m		5.3
Breakout force (max.)	kN		88
Operating weight	t		14.5-17.1



Technology on Human Terms

Volvo Construction Equipment is one of the world's leading manufacturers of construction machines, with a product range encompassing wheel loaders, excavators, articulated haulers, motor graders and more.

The tasks they face vary considerably, but they all share one vital feature: technology which helps man to perform better: safely, efficiently and with care of the environment. We refer to it as Technology on Human Terms.

The sheer width of the product range means it is always possible to choose exactly the right machine and attachment for the job. Each machine also comes with the quality, continuity and security which is represented by

the Volvo name. The strength of the service and parts organizations; the security of always having immediate access to leading-edge research and technical development are part of the Volvo name. A machine from Volvo meets the very highest demands in all kinds of jobs, under all conditions, the world over.

Volvo Construction Equipment develops, manufactures and markets construction equipment. We are a Volvo company with production facilities on four continents and a market presence in over 100 countries.

For more information please visit our web site: www.volvo.com

All products are not available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and designs without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

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