

VOLVO EXCAVATORS

# EC380DHR, EC480DHR, EC700CHR

44.0-88.9 t (97,003-195,991 lb) 21-32 m (69-105 ft)



# 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.

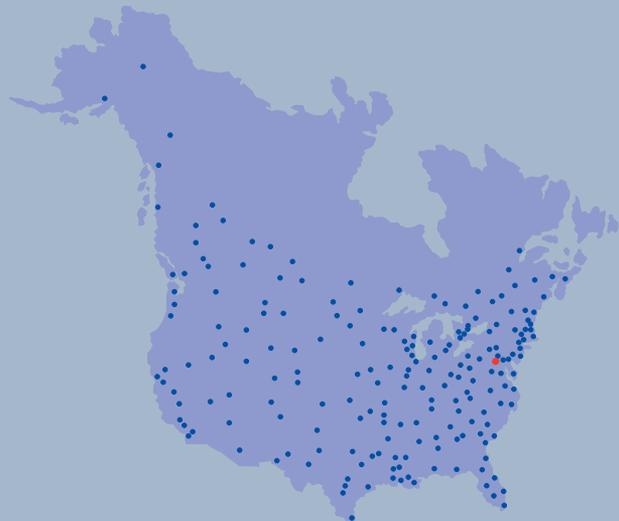
### A strong, dedicated, capable dealer network.

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 Financial Services

**YOUR TRUSTED PARTNER FOR DEMOLITION SOLUTIONS.**





Demolition. It is a key ingredient in progress. The deconstruction of buildings, bridges and other structures is tough, gritty work. Winning at demolition demands extreme-duty equipment, performance attachments — and a partner to back it all up, shift after shift. Volvo delivers, with purpose-built demolition excavators, wheel loaders, haulers and more. Trusted solutions for every stage of demolition.

#### **Power and quick cycles for demolition**

Volvo equipment is engineered for performance on all types of demolition. Demolishing structures. Sorting and processing steel beams, rebar, concrete, wood, tile and more. Loading and transportation. Site remediation and finishing. Volvo takes you from first stroke to final grade with power, reliability and low cost of operation. Count on it.



#### **Demolition attachment performance**

For primary and secondary demolition jobs, Volvo has standard demolition option packages for the EC220D, EC250D, EC300D, EC380D and EC480D. All models feature heavy-duty fabrication, demolition guarding, excellent visibility and the industry-leading Volvo Care Cab.

#### **Demolition excavators, wheel loaders — and more**

Whether you're working Volvo demolition excavators, wheel loaders, mini-excavators or compact loaders, rely on clean lines of sight to the job, operator comfort and protection, and a fuel-efficient Volvo powertrain that perfectly matches engine speed with hydraulic flow to best any demolition task.

# POWER AND PERFORMANCE WITH ALTITUDE.

Primary demolition is all about reach, power and control. Volvo's line of three Ultra High Reach (HR) excavators have booms from 21-32 meters (69 - 105 ft), high-visibility cabs and smooth, confident hydraulics. Equipped with tools from 2.5 to 3.5 tons, they cut demolition challenges down to size. Volvo's six Standard Demolition Excavators bring strength, quick cycles, fuel efficiency and superior protection to bear on all your other demolition tasks.

### 30-minute quick change from demo to backhoe

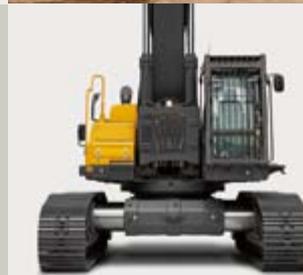
Total utilization. A innovative design makes it easy to change from the Ultra High Reach boom and arm to a standard backhoe configuration or a straight boom. So your excavator will stay busy even when you don't have high-reach projects. The Volvo hydraulic modular joint makes this quick change possible. The machine boom engages two full-length pins on the desired equipment — backhoe, straight boom or demolition boom.

A hydraulic joint secures the locking pins, and safety caps are fitted to the ends of each pin to make it ready for operation. Volvo high-reach excavators come with both the high-reach demolition boom set and a digging boom set for maximum versatility and uptime. A transportation cradle for both boom sets is also standard.



High Reach Demolition Machines		EC380DHR*	EC480DHR*	EC700CHR**
Operating weight	kg	48 895	61 260	88 990
	lb	107,795	135,055	196,189
Operating weight (digging equipment including cradle, w/o add. counterweight)	kg	43 990	55 270	82 255
	lb	96,981	121,849	181,341
Max. pin height	mm	21 070	27 355	32 020
	ft-in	69' 2"	89' 9"	105' 1"
Max. pin reach	mm	13 500	15 840	19 570
	ft-in	44' 3"	52' 0"	64' 2"
Max. tool weight	kg	3 000	3 000	2 500
	lb	6,614	6,614	5,512
Operating angle	°	20	15	15
Max cab tilting angle	°	30	30	30

\* Figures based on high reach demolition machine with 3-piece boom/digging boom (including cradle), hydraulically retractable undercarriage, 600 mm (20") shoe, additional counterweight  
 \*\* With boom extension and 650 mm (26") shoe



### Stability for all around works

Optional hydraulically variable undercarriage width for easier transport and for optimal stability.

### Operator comfort

The standard hydraulically tilting cabin tilts up to 30 degrees to enhance visibility and reduce operator fatigue and neck strain on high-reach jobs.



#### **High Reach (HR) excavators**

Volvo combines power and performance with altitude in its new series of Ultra High Reach (HR) excavators. With available boom heights from 21 meters (**69 ft**) to 32 meters (**105 ft**), Ultra High-Reach models include the EC380DHR, EC480DHR and EC700CHR with robust hydraulics, guarding packages and ability to work various attachments from 2.5 to 3.5 tons.

#### **Stability and safety**

Excellent stability and safety throughout the working envelope, thanks to a long undercarriage, extra modular counterweight, boom and arm holding valves, optional slew-reduction control, and a Total Moment Indicator that warns the operator if the machine approaches the maximum safe working load. Productivity-enhancing features and options include viscous-mounted and sound-dampened cab, forward and rear-view cameras, and a reversible fan (option) to purge the coolers of dust and debris.

# SECONDARY DEMOLITION, PRIME PRODUCTION.



## Volvo has complete demolition equipment solutions

Robust demolition guarding features include a frame-mounted falling object guard (FOG), bolted side impact protection system, heavy-duty, double-thickness side doors, bucket and boom cylinder guards that shield the cylinders and piping.



## Stability for compacting and digging debris

Undercarriage protection includes full-length track-chain guards, thick 10 mm (0.39 in) under plating with bolt-head protection, an 8 mm (0.32 in) swing-ring guard, and hinged service panels with recessed hinges that won't snag on debris.

Volvo excavators that have demolition packages available*		EC220D	EC250D	EC300D	EC380D	EC480D	EC700C
Operating weight**	kg	23 100	26 455	31 542	39 655	50 025	71 100
	lb	50,927	58,323	69,538	87,424	110,286	156,749
Engine		Volvo D6H	Volvo D8H	Volvo D8H	Volvo D13H	Volvo D13H	Volvo D16E
ISO 9249/SAE J1349 net @ Rated rpm	kW / rpm	128 / 1,800	151 / 1,800	169 / 1,800	208 / 1,700	256 / 1,800	316 / 1,800
	Hp / rpm	172 / 1,800	202 / 1,800	227 / 1,800	279 / 1,700	343 / 1,800	424 / 1,800
Max. torque	Nm @ rpm	849 @ 1,350	1 012 @ 1,350	1 139 @ 1,350	1 580 @ 1,300	1 800 @ 1,400	2 250 @ 1,350
	lb-ft @rpm	626 @ 1,350	746 @ 1,350	840 @ 1,350	1,165 @ 1,300	1,327 @ 1,400	1,659 @ 1,350
Pump type		2x variable displacement axial piston pumps					
System pressure	MPa / psi	34.3 / 4,975	33.3 / 4,830	33.3 / 4,831	32.4 / 4,699	32.4 / 4,699	31.4 / 4,554
w. Power Boost	MPa / psi	36.3 / 5,265	36.3 / 5,265	36.3 / 5,265	35.3 / 5,120	35.3 / 5,120	34.3 / 4,975
Max. flow rate	l/min	414	480	526	600	716	872
	gpm	109	127	139	159	189	230
Track length	mm	4 460	4 650	4 870	5 180	5 370	5 990
	ft-in	14' 6"	15' 3"	15' 12"	17' 0"	17' 6"	19' 7"
Track gauge	mm	2 390	2 590	2 590	2 740	2 740	3 350
	ft-in	7' 8"	8' 5"	8' 5"	9' 0"	9' 0"	11' 0"
Front lifting capacity at 6.0 m (19' 7"), 1.5 m (4' 9")	kg	7 580	9 630	11 310	15 430	18 080	25 290
	lb	16,711	21,231	24,934	34,017	39,860	55,755
Side lifting capacity at 6 m (19' 7"), 1.5 m (4' 9")	kg	4 530	6 450	6 710	10 280	13 160	22 020
	lb	9,987	14,220	14,793	22,664	29,013	48,546
Max. Breakout force (Normal / Power Boost)	kN	145 / 153	171 / 186	188 / 205	222 / 243	261 / 284	326 / 356
	lbf	32,597 / 34,396	38,442 / 41,814	42,264 / 46,086	49,908 / 54,629	58,675 / 63,846	73,288 / 80,032

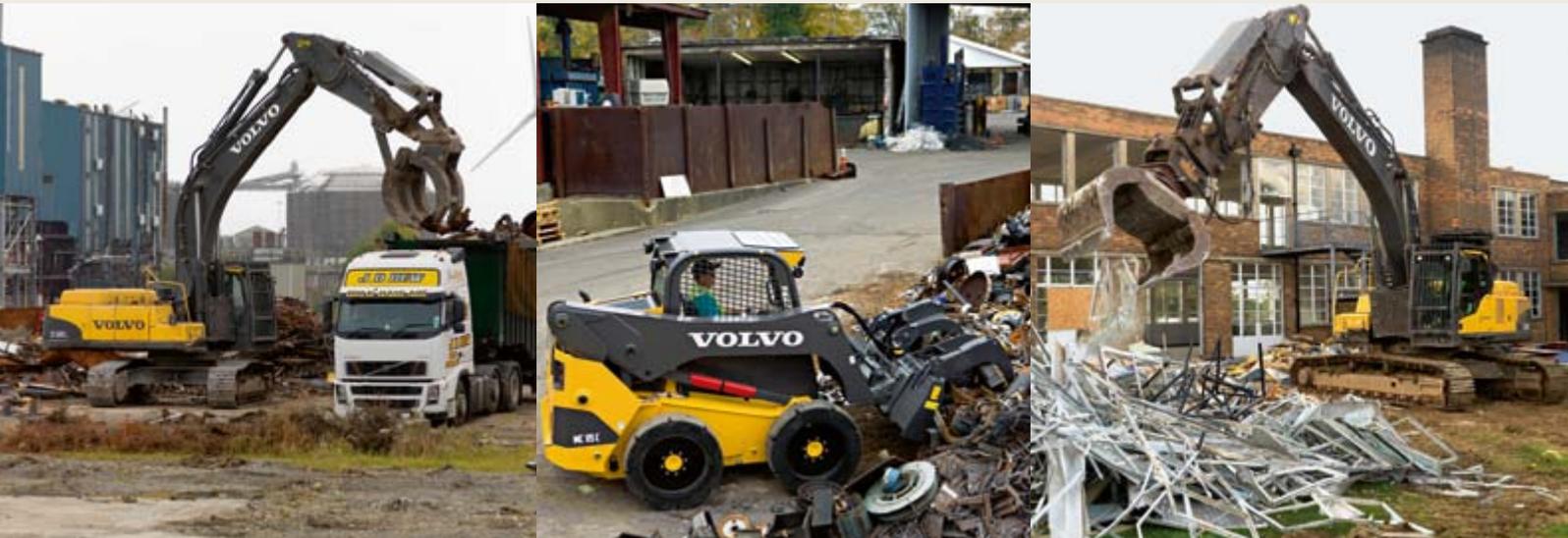
\* Figures are with the standard boom/arm combination. Alternate long-arm and ME geometries available.

\*\* Operating weight may vary by market based on the option and attachment configuration.

Extreme conditions. Sharp, jagged, heavy and gritty. Few things in construction put more strain on equipment than moving, sorting, loading and processing demolition debris. Volvo Standard Demolition Excavators have the muscle and the armor to excel at all stages of demolition. You want your jobs done right, done safely and profitably. Volvo gets you there.

**Harmonized hydraulics for lifting and swinging**

A world-class engine and hydraulic system that perfectly matches hydraulic flow to engine speed. The system ensures hydraulic power when and where it's needed, especially on combined operations such as lifting and swinging.



**Volvo delivers reach and attachment power**

Choices. You want the right size machine to handle high-reach demolition. Volvo has your needs covered with its line of Ultra High Reach (HR) excavators:

- EC380DHR: 21 m (69 ft) boom
- EC480DHR: 27 m (89 ft) boom
- EC700CHR: 32 m (105 ft) boom



**Strong tear-out forces**

Hydraulic capacity and flow to power high-reach attachments such as pulverizers, severe-duty grapples, crushers, hammers and shears. Maximum attachment weight ranges from 2.5 tons on the EC380DHR and EC480DHR, to 3.5 tons on the EC700CHR.



**Frame-mounted FOG protects the operator**

FOPS and cab or frame mounted FOG are available according to application requirements. Ensure safety when working in applications that offer a greater risk of the cab being struck by flying or falling objects. Easy to clean due to wide openable front guard.



**Micro mesh screens keep particles from coolers**

To lessen the effects of dust and airborne debris, Volvo excavators have micro-mesh screens on the side doors and the engine cowl. An optional reversible fan purges the coolers of debris, enhancing uptime by reducing need to stop the machine for cleaning.

# VOLVO DEMOLITION EXCAVATORS: POWER, PRODUCTION



**Hydraulic Removable Counter weight option** Removable counterweights are easier to remove and install using Volvo's hydraulic cylinder and linkage system.



**Standard boom-mounted camera** boosts productivity on high-reach operations.



**Tilting cab pivots up to 30 degrees** for enhanced visibility and reduced fatigue on high-reach jobs. Standard on Ultra High Reach (HR) models and optional on Standard Demolition Excavator models.



Innovative **hydraulic modular joint** uses a **hydraulic lock** mechanism to release digging equipment and **change from high reach** demolition boom to a standard backhoe configuration in **less than 30 minutes**. The feature greatly enhances versatility.



**Bucket and boom cylinder guards** protect rods, cylinders, HRVs and piping from falling objects. These steel jackets reduce the chance of machine damage and improve uptime on all types of demolition jobs.



Boom-mounted **Total Moment Indicator** provides warning if the HR excavator is approaching maximum safe load.



Volvo hydraulics are ready to function a range of demolition **attachments** including **grapples, hammers, shears** and **pulverizers**.



**Demolition boom** on HR models provides maximum boom pin heights from 21-32 meters (69 - 105 ft).

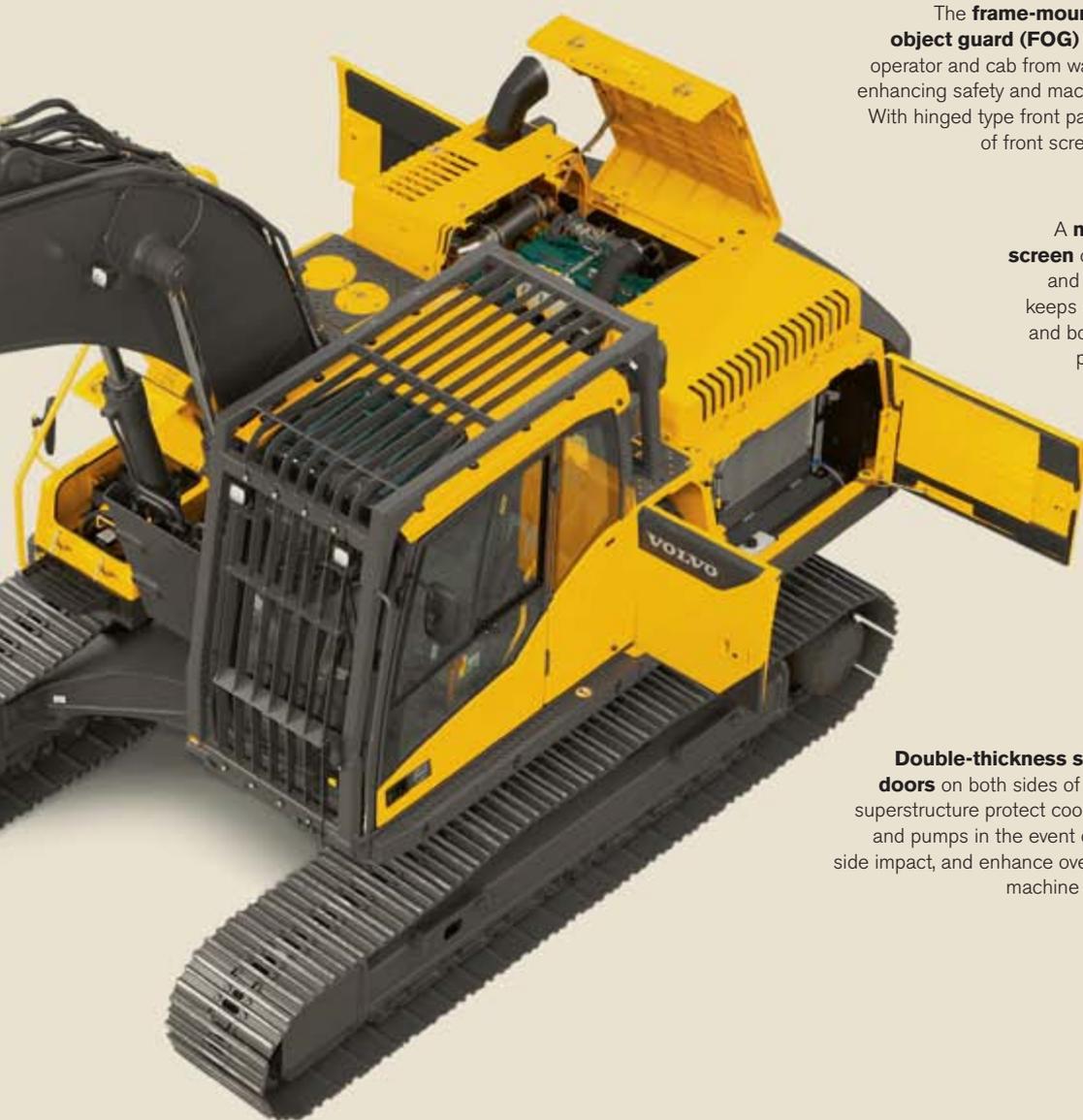


**Swing-ring protection guard** jackets the swing ring bearing seal and grease piping from damage by rebar, timber, concrete rubble or other debris.



**Boom Cylinder Protection System** visible through the plate from the cabin for visibility to the right track.

# & SAFETY.



The **frame-mounted falling object guard (FOG)** protects the operator and cab from wayward debris, enhancing safety and machine uptime. With hinged type front panel for ease of front screen cleaning.



A **micro-mesh screen** on the doors and engine cowl keeps out particles and boosts engine performance.



**Double-thickness side doors** on both sides of the superstructure protect coolers and pumps in the event of a side impact, and enhance overall machine life.



Enhanced 8 mm (0.32 in) **under-guarding of the superstructure** and 10 mm (0.39 in) **guarding under the slewing ring**, with bolt-head protection.



The bolt-on **side impact protection system** protects the superstructure from damage.



**Punched plate** is welded to the top of the rail along the cab entrance to provide sure grip for the operator.

**Full-length track-chain guards** keeps out demolition debris and prevents rebar or other sharp objects from lodging in the tracks. **Extendable undercarriage** expands by 1 m (3' 3") for increased stability.

# 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 180 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**

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[www.volvoce.com/na](http://www.volvoce.com/na)

Ref. No. D1003385  
Printed in USA 09/12 - 0,0  
Volvo, Asheville  
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