

VOLVO SOIL COMPACTORS

# SD SERIES



MORE CARE. BUILT IN.



# VOLVO – A PARTNER TO TRUST

Our SD-Series soil compactors are genuine Volvo Construction Equipment all the way through – built to deliver maximum performance even under extreme conditions. Like all other Volvos, they have more uptime, more value, more safety and, of course, more care built right in.

## Complete range

The SD-Series is a complete range of soil compactors that comprises 18 models with operating weights from 2.5 to 20 tons. You will find Volvo compactors in operation on the toughest and most rugged compaction projects around the globe. We cover everything from efficient compaction of pipeline trenches and cycle tracks to compaction of large areas in highway construction and dam building projects.

## Technology that boosts your business

All our soil compactors are designed to do what we believe we do best: Safeguard your operators, the environment and your investment, while advancing the health and the prosperity of your business.

Volvo compactors not only stand out due to their excellent gradeability which makes them first choice for slope compaction. They also deliver class leading compaction forces and achieve the specified degree of compaction with a minimum number of passes, saving the customer time and money.

With the bolt-on padfoot segments, customers can convert a smooth drum into a padfoot compactor, thereby gaining extra versatility. The segments are quickly and easily installed on the smooth drum for compacting cohesive soils and rock-fill materials.

Volvo's new CompAnalyzer provides contractors with a full documentation of the compaction process and allows operators to organise their work most efficiently.

## A partner to rely on

The SD-Series is backed by the full strength of Volvo Construction Equipment, which has been an industry force since we started out 175 years ago. We have years of experience partnering with customers to provide tailored full-service maintenance and repairs.

So sit back. Rely on a company with more experience, more skill and more dedication to your results than anyone else in the industry. And see what the Volvo SD-Series can do for your business.



# TRUST

**TRUST** noun:

- complete confidence in a person, organization, plan, etc.
- to rely on.



# THE SD-SERIES

## - AGILE FORCES WITH BRAINS

Power and force means nothing without brains – so we decided to pack the SD-Series compactors with it all. Depending on the model – from the SD25 to the SD200 – you can draw benefit from our different solutions to make your business more successful.



### Bolt-on padfoot system

- The bolt-on padfoot system allows easy switching from compacting granular soils to compacting more cohesive soils and rock filling.
- Most models are available as an F-Version that come with a padfoot drum.

### High power to weight ratio

- The SD-Series compactors all pack plenty of efficient power which means safe operations in extreme conditions with forces to spare.

### Vibration isolated operator environment

- The premium shock mounted operator platform or cab vouch for safe and productive operating hours with excellent comfort.

### Low centre of gravity

- All SD-Series compactors have a low positioned centre of gravity which means stable performance even in steep slopes.



### Variable frequency setting

- By using the variable frequency setting, the operator can adapt the vibration to the material.
- The variable centrifugal force allows compaction down to one metre.

# STRENGTH

#### STRENGTH noun:

- the quality or state of being strong.
- ability to do or to bear.
- capacity for exertion or endurance.
- power to resist force.

## **Easy Serviceability**

- Excellent accessibility makes daily routine maintenance easy.
- One piece engine cover for complete engine compartment access.
- Rear mounted cooling system for easy access for cleaning.
- Tilting operator platform for access to hydraulic components.
- Remote mounted hydraulic test ports and hydraulic filters.
- Pre-wired for numerous field installed optional features.
- Eccentric oil sight gauge.



## **Dozerblade**

- As an option, Volvo offers a height adjustable and centrally tilting dozer blade.
- With this option, the operator can fill in trenches or strike off the fill material to obtain ideal conditions for compaction work.



## **Ultra Grade traction system**

- The hydrostatic Ultra Grade traction system with wheel and drum drive allows steep climbing without interruption in traction power. The No-Spin differential provides application flexibility.

## **Gradeability**

- Excellent traction and low centre of gravity strongly contributes to the SD-compactors' business leading gradeability which allows compaction of up to 75% gradient (SD122DX).

## **Optimum Compaction Performance**

- Excellent gradeability makes Volvo compactors first choice for slope compaction.
- High or highest compaction forces in their classes.
- Minimum number of passes required – high yardage.
- Maximum productivity with CompAnalyzer and CompGauge.

# DO IT WITH EASE – WELL PROTECTED

Volvo has a proud tradition of ergonomics and safety for one single reason: your operations are carried out by humans. Every part of the operator's job should be safe and easy – that way you will get more out of his work. Minimizing fatigue, facilitate service and preventive maintenance and most important – eliminating risks – will give you more uptime and more satisfied operators in the meantime.



## Smart solutions that make your everyday life easier.

- Large, sound-insulated and premium shock mounted cabin (option).
- Right side console contains directional control, vibration on-off control, power outlet, emergency stop, cup holder, storage compartment.
- Premium suspension mounted seats; fully adjustable, swivelling seat base.
- Gauges and control switches are conveniently located on the steering column in front of the operator.
- Climate control (option).
- Audible and visual warning lights for engine, oil pressure, coolant temperature, hydraulic oil temperature, and air cleaner restriction.
- Tilting steering column.
- Two front, two rear working lights.

The smaller SD25 and SD45 compactors have well isolated operator platforms with excellent visibility to carry out demanding jobs in cramped locations. The range from SD70 to SD200 can all be equipped with a safe and comfortable cab with controlled climate to keep the operator fresh through the workshift.

All SD-compactors feature comprehensive operator panels with gauges for oil, fuel, cooling temperature. And of

course they can be fitted with the intelligent CompAnalyzer with full control over the compaction process.

The operator platform or cab is easily tilttable for maximum access to maintain and service the compactor's hydraulic components. The one-piece rear-hinged engine cover gives complete access to the engine's service points. Not only does this facilitate the service job – it also boosts your machine's availability.



#### Air Condition

For the operator's comfort Volvo offers an air conditioning system.



#### Maximum Safety

"One meter by one meter" visibility. Operator's deck is made of skid resistant material. Spring-applied, hydraulically released brakes. ROPS/FOPS with seat belts. Back-up alarm.



#### F-Version

Most models are available as an F-Version that come with a padfoot drum.



#### CompAnalyzer

Volvo's CompAnalyzer provides contractors with a full data documentation of the compaction process, and allows the operator to organise their work most efficiently.



#### CompGauge

The smaller compaction meter is for customers who require a display of current compaction values, but do not require data documentation.



#### Adjustable Frequency

By using the variable frequency setting, the operator can adapt the vibration to the particular material that is being compacted. On the larger models, the variable centrifugal force enables a depth compaction of down to one metre.

# INTELLIGENCE

#### INTELLIGENCE noun:

- the ability to comprehend.
- to understand and profit from experience.
- having the power to bring into being.

# COMPANALYZER - FOR CONSISTENT COMPACTION CONTROL



## Little brother - CompGauge

As well as the top-of-the-range CompAnalyzer system, Volvo also offers a smaller compaction meter for customers who don't need a data documentation. This easy to read system gives the operator a constant overview of the relative ground compaction, current vibrator frequency and the bounce mode.



## Full documentation

Compaction meters are an increasing requirement in large-scale construction and road projects.

Volvo's CompAnalyzer provides contractors with a full data documentation of the compaction process. The system displays the equivalent of up to 350 km of compaction runs. With a 2.13 m wide drum it covers an area of 747.000 square meters.

## Saves time and money

The CompAnalyzer allows the operator to organise their work most efficiently. The display gives a continuous readout of the progress of compaction work. As soon as the maximum compaction level has been achieved, the driver can move on to the next section. Using the CompAnalyzer means avoiding unnecessary work, saving time and money.

## Increased compaction quality

Volvo's CompAnalyzer helps customers to safely detect any weak points on previously compacted surfaces, enabling them to be recompacted and stabilised.

The user can print out compaction data inside the driver's cab. A small thermal printer is available for this purpose, which is linked with the CompAnalyzer through an RS232 interface.

# SPECIFICATIONS

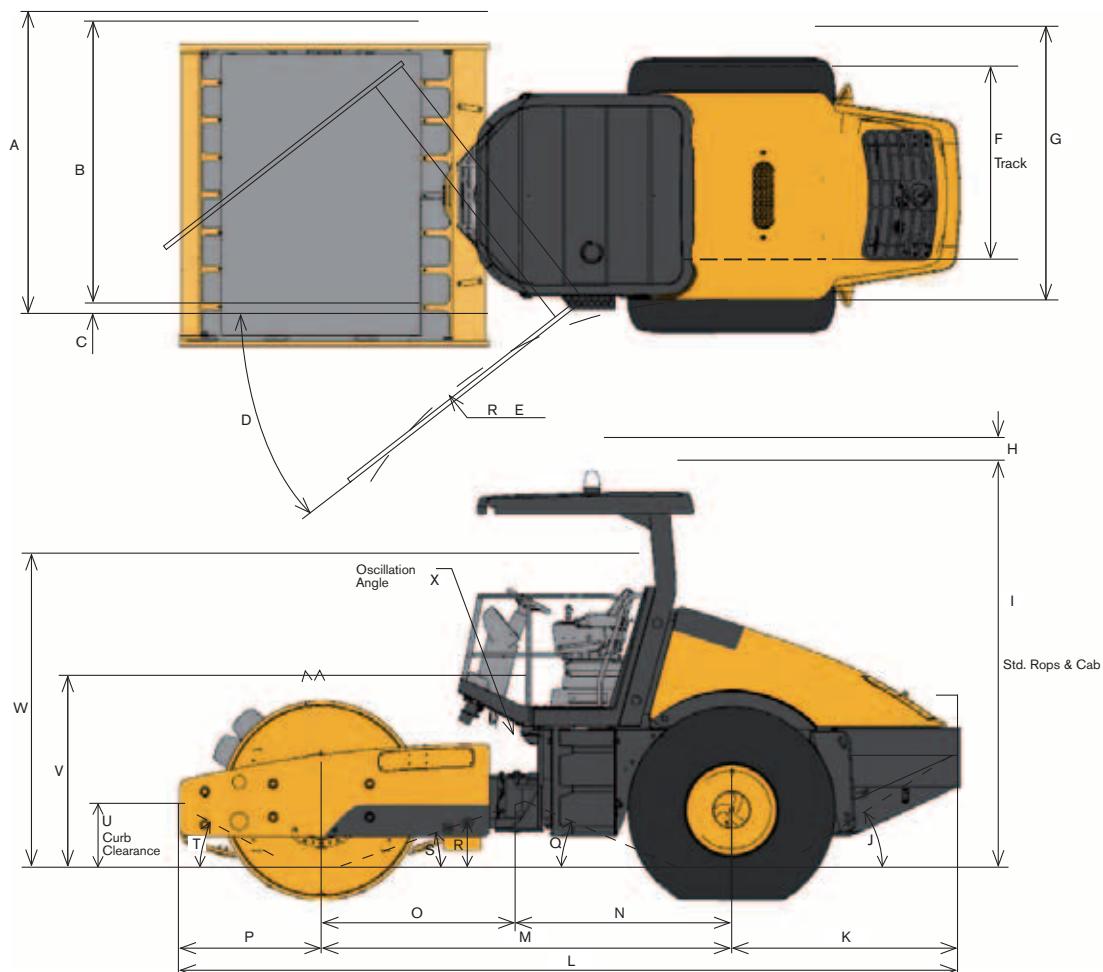
Model	Operating Weight* (CECE)	Static Weight at Drum	Shipping Weight	Vibration frequency	Centrifugal force	Nominal Amplitude	Engine Model	Engine Power	Travel Speed
SD25D	2 562 kg	1 292 kg	2 478 kg	36,7 Hz	62 kN	1,55 mm	Kubota V2203-M	32,8 kW @ 2 450 min <sup>1</sup>	0 - 9,0 km/h
SD25F	2 685 kg	1 415 kg	2 600 kg	36,7 Hz	56 kN	1,40 mm	Kubota V2203-M	32,8 kW @ 2 450 min <sup>1</sup>	0 - 9,6 km/h
SD45D	4 807 kg	2 449 kg	4 712 kg	31,7 Hz	99 kN	1,98 mm	Cummins 4BT 3.3	59,7 kW @ 2 200 min <sup>1</sup>	0 - 7,4 km/h
SD45F	5 147 kg	2 789 kg	4 893 kg	31,7 Hz	99 kN	1,71 mm	Cummins 4BT 3.3	59,7 kW @ 2 200 min <sup>1</sup>	0 - 7,7 km/h
SD70D	7 595 kg	3 780 kg	7 381 kg	30,8/33,8 Hz	143/104 kN	1,98/1,20 mm	Cummins B4.5T	73,8 kW @ 2 200 min <sup>1</sup>	0 - 13,0 km/h 0 - 8,4 km/h
SD77DX	7 595 kg	3 780 kg	7 381 kg	23,3-33,8 Hz	143/104 kN	1,98/1,20 mm	Cummins B4.5T	73,8 kW @ 2 200 min <sup>1</sup>	0 - 13,0 km/h 0 - 8,4 km/h
SD77F	7995 kg	4 180 kg	7 781 kg	23,3-33,8 Hz	171/135 kN	1,98/1,33 mm	Cummins B4.5T	73,8 kW @ 2 200 min <sup>1</sup>	0 - 11,3 km/h 0 - 7,7 km/h
SD100D	11 490 kg	6 460 kg	11 275 kg	30,8/33,8 Hz	264/206 kN	1,92/1,29 mm	Cummins QSB 4.5 - COM III	97 kW @ 2 200 min <sup>1</sup>	0 - 12,0 km/h 0 - 8,4 km/h
SD105DX	11 490 kg	6 460 kg	11 275 kg	23,3-33,8 Hz	264/206 kN	1,92/1,29 mm	Cummins QSB 4.5 - COM III	97 kW @ 2 200 min <sup>1</sup>	0 - 12,0 km/h 0 - 8,4 km/h
SD105F	12 020 kg	6 990 kg	11 805 kg	23,3-33,8 Hz	347/262 kN	2,14/1,39 mm	Cummins QSB 4.5 - COM III	97 kW @ 2 200 min <sup>1</sup>	0 - 11,3 km/h 0 - 8,1 km/h
SD122D	12 515 kg	7 260 kg	12 200 kg	30,8/33,8 Hz	281/206 kN	1,90/1,17 mm	Cummins QSB 4.5 - COM III	119 kW @ 2 200 min <sup>1</sup>	0 - 13,1 km/h 0 - 5,1 km/h
SD122DX	12 515 kg	7 260 kg	12 200 kg	23,3-33,8 Hz	281/206 kN	1,90/1,17 mm	Cummins QSB 4.5 - COM III	119 kW @ 2 200 min <sup>1</sup>	0 - 13,1 km/h 0 - 5,1 km/h
SD122F	13 425 kg	8 170 kg	13 110 kg	23,3-33,8 Hz	293/284 kN	2,03/1,31 mm	Cummins QSB 4.5 - COM III	119 kW @ 2 200 min <sup>1</sup>	0 - 12,7 km/h 0 - 4,5 km/h
SD160DX	16 199 kg	11 093 kg	16 062 kg	23,3-33,8 Hz	339/264 kN	1,97/1,28 mm	Cummins QSB 6.7 - COM III	129 kW @ 2 200 min <sup>1</sup>	0 - 12,4 km/h 0 - 4,5 km/h
SD160F	16 489 kg	11 383 kg	16 352 kg	23,3-33,8 Hz	339/257 kN	2,21/1,68 mm	Cummins QSB 6.7 - COM III	129 kW @ 2 200 min <sup>1</sup>	0 - 11,8 km/h 0 - 4,8 km/h
SD190DX	19 645 kg	12 725 kg	19 509 kg	23,3-33,8 Hz	339/221 kN	1,97/1,28 mm	Cummins QSB 6.7 - COM III	153 kW @ 2 000 min <sup>1</sup>	0 - 12,5 km/h 0 - 4,5 km/h
SD200DX	20 643 kg	13 723 kg	20 506 kg	23,3-33,8 Hz	368/239 kN	1,76/1,14 mm	Cummins QSB 6.7 - COM III	153 kW @ 2 000 min <sup>1</sup>	0 - 11,5 km/h 0 - 4,0 km/h
SD200F	20 328 kg	13 408 kg	20 191 kg	23,3-33,8 Hz	359/273 kN	1,99/1,51 mm	Cummins QSB 6.7 - COM III	153 kW @ 2 000 min <sup>1</sup>	0 - 11,9 km/h 0 - 4,1 km/h

Model	Drum Width	Drum Diameter	Shell Thickness	Diameter over Pad feet	Number of Pad feet	Pad Height	Pad Tip Area	Gradeability (Theor.)	Fuel Capacity
SD25D	1 067 mm	787 mm	12 mm	-	-	-	-	60 %	45 L
SD25F	1 067 mm	787 mm	12 mm	914 mm	45	64 mm	55 cm <sup>2</sup>	50 %	45 L
SD45D	1 372 mm	1 000 mm	20 mm	-	-	-	-	54 %	98 L
SD45F	1 372 mm	1 000 mm	20 mm	1 153 mm	63	76 mm	125 cm <sup>2</sup>	49 %	98 L
SD70D	1 676 mm	1 219 mm	22 mm	-	-	-	-	63 %	178 L
SD77DX	1 676 mm	1 219 mm	22 mm	-	-	-	-	70 %	178 L
SD77F	1 676 mm	1 219 mm	22 mm	1 372 mm	84	76 mm	125 cm <sup>2</sup>	70 %	178 L
SD100D	2 134 mm	1 500 mm	25 mm	-	-	-	-	55 %	267 L
SD105DX	2 134 mm	1 500 mm	25 mm	-	-	-	-	62 %	267 L
SD105F	2 134 mm	1 500 mm	25 mm	1 702 mm	120	101 mm	125 cm <sup>2</sup>	60 %	267 L
SD122D	2 134 mm	1 510 mm	30 mm	-	-	-	-	68 %	267 L
SD122DX	2 134 mm	1 510 mm	30 mm	-	-	-	-	75 %	267 L
SD122F	2 134 mm	1 510 mm	30 mm	1 764 mm	120	127 mm	125 cm <sup>2</sup>	71 %	267 L
SD160DX	2 134 mm	1 600 mm	35 mm	-	-	-	-	65 %	267 L
SD160F	2 134 mm	1 510 mm	30 mm	1 764 mm	120	127 mm	125 cm <sup>2</sup>	55 %	267 L
SD190DX	2 134 mm	1 600 mm	35 mm	-	-	-	-	60 %	267 L
SD200DX	2 134 mm	1 650 mm	40 mm	-	-	-	-	59 %	267 L
SD200F	2 134 mm	1 620 mm	25 mm	1 875 mm	136	127 mm	125 cm <sup>2</sup>	49 %	267 L

\* (incl. cabin and inside scraper)

Product improvement is a continuing goal at Volvo. Designs and specifications are subject to change without notice or obligation.

# DIMENSIONS



	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>	<b>L</b>
<b>SD25</b>	1 220	1 067	84	35°	2 148	837	1 060	146	2 250	19°	957	3 180
<b>SD45</b>	1 590	1 372	88	41°	2 569	1 036	1 306	150	2 830	35°	955	4 053
<b>SD70/77</b>	1 870	1 676	74	38°	3 249	1 247	1 651	171	2 922	29°	1 516	5 044
<b>SD100/105/122</b>	2 286	2 134	79	38°	3 463	1 471	2 134	171	3 091	33°	1 726	5 895
<b>SD160</b>	2 406	2 134	136	38°	3 463	1 471	2 134	194	3 116	33°	1 736	5 994
<b>SD190</b>	2 536	2 134	176	38°	3 463	1 471	2 134	194	3 116	32°	1 861	6 280
<b>SD200</b>	2 486	2 134	176	38°	3 463	1 471	2 134	194	3 114	32°	1 861	6 280

	<b>M</b>	<b>N</b>	<b>O</b>	<b>P</b>	<b>Q</b>	<b>R</b>	<b>S</b>	<b>T</b>	<b>U</b>	<b>V</b>	<b>W</b>	<b>X</b>
<b>SD25</b>	1 673	885	788	550	15°	188	14°	27°	217	728	1 586	12°
<b>SD45</b>	2 400	1 325	1 075	697	17°	301	15°	30°	305	1 092	2 020	12°
<b>SD70/77</b>	2 673	1 500	1 173	855	21°	367	15°	31°	385	1 296	2 210	15°
<b>SD100/105/122</b>	3 100	1 625	1 475	1 069	24°	375	19°	28°	483	1 466	2 379	17°
<b>SD160</b>	3 099	1 626	1 588	1 159	24°	506	20°	25°	533	1 476	2 386	15°
<b>SD190</b>	3 214	1 626	1 588	1 205	25°	455	15°	19°	443	1 476	2 386	15°
<b>SD200</b>	3 214	1 626	1 588	1 205	25°	465	15°	20°	468	1 482	2 386	15°

# STANDARD FEATURES/OPTIONAL EQUIPMENT

Standard ● Optional ○	SD25D	SD25F	SD45D	SD45F	SD70D	SD77DX	SD77F	SD100D	SD105DX
Air pre-cleaner	-	-	○	○	●	●	○*	●	●
Automatic vibration on/off and Impactmeter	-	-	-	-	○	○	○	○	○
CE-conformity kit	○	○	○	○	●	●	○	●	●
CompAnalyzer	-	-	-	-	○	○	○	○	○
CompGauge	-	-	-	-	○	○	○	○	○
ROPS cab with heating (204 kg additional weight)	-	-	-	-	○	○	○	○	○
ROPS cab with A/C and heating (249 kg additional weight)	-	-	-	-	○	○	○	○	○
Gauges: Hourmeter, tachometer, fuel, coolant temperature	●	●	●	●	●	●	●	●	●
Gauge Package: engine oil pressure, hydraulic oil temperature, voltmeter	-	-	-	-	○	○	○	○	○
Inside drum scraper bar	○	○	○	○	○	○	○	○	○
Isolated ROPS/FOPS platform with railing and seat	●	●	●	●	●	●	●	●	●
Patented two piece clamp-on padfoot drum shell kit	○	-	○	-	○	○	-	○	○
Strike-off blade	○	○	○	○	○	○	○	○	○
Traction control system	-	-	-	-	○	●	●	○	●
Tyres with diamond tread	-	-	○	-	●	●	-	●	●
Universal front drum scraper	○	-	○	-	●	●	-	●	●
Variable frequency	-	-	-	-	○	●	●	○	●
VPM meter and Speedometer	-	-	-	-	○	○	○	○	○
Warning Beacon	○	○	○*	○*	○**	○**	○**	○**	○**
2 front and 2 rear working lights	○*	○*	○*	○*	●	●	○	●	●

\*included in the CE-Kit

\*\*only Standard with cabin

Partial listing of standard equipment and available options

Standard ● Optional ○	SD105F	SD122D	SD122DX	SD122F	SD160DX	SD160F	SD190DX	SD200DX	SD200F
Air pre-cleaner	○*	●	●	○*	○*	○*	○*	○*	○*
Automatic vibration on/off and Impactmeter	○	○	○	○	○	○	○	○	○
CE-conformity kit	○	●	●	○	○	○	○	○	○
CompAnalyzer	○	○	○	○	○	○	○	○	○
CompGauge	○	○	○	○	○	○	○	○	○
ROPS cab with heating (204 kg additional weight)	○	○	○	○	○	○	○	○	○
ROPS cab with A/C and heating (249 kg additional weight)	○	○	○	○	○	○	○	○	○
Gauges: Hourmeter, tachometer, fuel, coolant temperature	●	●	●	●	●	●	●	●	●
Gauge Package: engine oil pressure, hydraulic oil temperature, voltmeter	○	○	○	○	○	○	○	○	○
Inside drum scraper bar	○	○	○	○	○	○	○	○	○
Isolated ROPS/FOPS platform with railing and seat	●	●	●	●	●	●	●	●	●
Patented two piece clamp-on padfoot drum shell kit	-	○	○	-	○	-	○	-	-
Strike-off blade	○	○	○	○	○	○	○	-	-
Traction control system	●	○	●	●	●	●	●	●	●
Tyres with diamond tread	-	●	●	-	●	-	●	●	-
Universal front drum scraper	-	●	●	-	○*	-	○*	○*	-
Variable frequency	●	○	●	●	●	●	●	●	●
VPM meter and Speedometer	○	○	○	○	○	○	○	○	○
Warning Beacon	○**	○**	○**	○**	○**	○**	○**	○**	○**
2 front and 2 rear working lights	○*	●	●	○*	○*	○*	○*	○*	○*

\*included in the CE-Kit

\*\*only Standard with cabin

Partial listing of standard equipment and available options



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 – **More care. Built in.**



*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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