



Volvo Construction Equipment

# DD105, DD105 osc

Volvo Double Drum Compactors 9.9-10.5 t / 21,825-23,150 lb 114 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 customers around the globe. 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 support training at our best-in-class Customer Center in Shippensburg and through hands-on training. Using a great Product Demonstration Center featuring a dedicated area for most common applications, visitors operate equipment from our entire product line under a variety of simulated working conditions. This facility is in year-round use by our dealers and customers.

### 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.





Volvo Trucks



Renault Trucks



Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction Equipment



Volvo Penta



Volvo Financial Services



# MEET JOBSITE REQUIREMENTS

Compact in delicate environments, such as on bridges, over pipes and close to residential areas, with the DD105 OSC model variant. The oscillatory drum eliminates vertical vibrations for high performance and non-damaging oscillation movement.

# Primed for performance

The industry-leading Volvo DD105 double drum compactor is primed with a range of features to ensure high-performance and efficient compaction. Unobstructed drum visibility combined with intelligent features help the operator achieve precise compaction with a smooth and consistent finish regardless of site conditions.

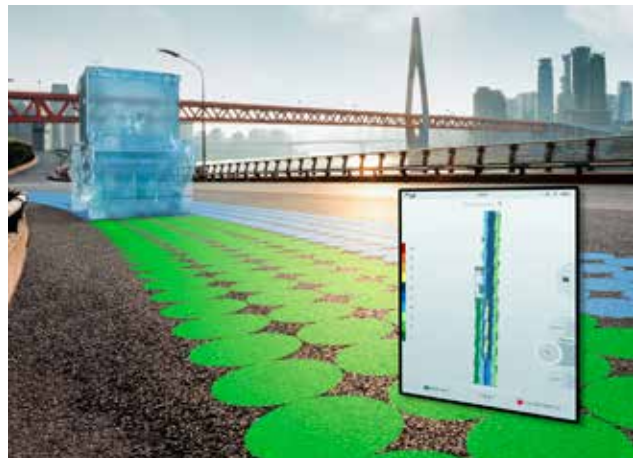
## Unobstructed visibility

From the operator platform, the forward view and adjustable seat offer superb visibility of the jobsite, as well as unobstructed sightlines down to the drum and spray bars for maximum safety and rolling precision. Off-set steering enhances the view of curbs and obstructions for safe, efficient and high quality compaction.



## Intelligent compaction

Unlock the full potential of your machine with Compact Assist, the optional Intelligent Compaction system from Volvo. For a more efficient and precise job, Compact Assist offers real-time insight into the work using pass mapping and temperature mapping. *Not applicable to DD105 OSC*



## Comfortably productive

Whether you choose an enclosed cab or an open ROPS/FOPS canopy, both offer a comfortable, low-noise and productive operator environment. Benefit from all-around visibility, which can be improved further by sliding or rotating the adjustable seat. Keep an eye on the task at hand with easy-to-reach controls and maximum operator safety with well-positioned handrails.



## Smooth, high quality finish

Operate more effectively with the drum vibration system, which offers multiple amplitudes for different applications, ensuring a high-quality performance every time. With ergonomically positioned controls and joystick, manoeuvrability is improved for the operator, who can rely on the Anti Slip Control (ASC) to easily load and unload the machine without damaging the road.



# Secured productivity

The Volvo DD105 double drum compactor is exceptionally efficient and designed for ease of operation, even in the toughest operations. Powered by an advanced Tier 4 Final engine with productivity-enhancing ECO mode, high centrifugal force and auto-idling features built in, this compactor ensures high quality performance with minimal fuel consumption and emissions.

## Productivity on tap

The industry-leading drum wetting system automatically provides consistent drum coverage and variable flow to prevent material pick-up for reduced downtime. Features use less water and include primary and backup pumps, spray bars, hand serviceable nozzles, triple filtrations and drum wipers.



## Drive your costs down

Optimize efficiency, while minimizing operating costs with Volvo's Tier 4 Final engine. Equipped with the adaptive power system and intelligent features, power is delivered to the compactor only when it is needed. Decrease emissions with the auto-idling feature and reduce fuel consumption by up to 30% with ECO mode, optimizing productivity without impacting performance.



## Machine monitoring made easy

With Volvo CareTrack, stay ahead of unscheduled downtime, maximize productivity and check that your machine is being operated efficiently. Remain informed, receive reports, alarms and information such as fuel status, machine location and hours so you can plan your service more efficiently.



## Roll with the experts

With a rich heritage of engineering excellence, you can count on Volvo Construction Equipment to design durable machines, built to work harder and longer. As road experts, our mission is to keep your machines working at the optimum efficiency and productivity required for the job. We help protect your business and your profits from the ground up.





# MORE WORK, FEWER PASSES

Achieve target density with the compactor's high centrifugal force, so you can do more work in fewer passes. Even in high altitudes, the compactor operates more effectively thanks to Volvo's drum vibration system.



# EASY MAINTENANCE

Volvo's DD105 is designed to quickly and safely perform daily service and maintenance checks, and refill the water tank from ground level. For ease of maintenance, the swing-up hood provides complete access to the engine hood and hydraulic components. For added convenience, a single key can be used to access service hatches, while fuses and relays are grouped together, maximizing uptime.



# Up your uptime

The DD105 compactor's impressive productivity is combined with excellent durability and simple service and maintenance requirements, ensuring optimal uptime. The compactor offers safe and easy maintenance access – taking the hassle out of daily service checks. Take advantage of our unique, local dealer support network to ensure your compactor achieves ultimate uptime, and generates maximum profit and growth for your business.

## Durable by design

Built to work, the durable compactor is designed to withstand the harshest conditions using high quality components with detailed engineering in mind. The robust structure features protected components and intelligent hose routing to secure machine uptime and profitability to your business.



## Retain Volvo quality

With Genuine Volvo Parts, you can be sure that your machine retains the renowned Volvo quality. Parts are extensively tested and approved because every part is vital for uptime and performance. This proven concept acts as a solid investment in your machine's future.



## Here to support you

Volvo is here to support you whenever you need it. As a complete solutions provider, we listen to your requirements to ensure machine uptime and availability. With our extensive dealer coverage and trained technicians, Volvo has a comprehensive network to fully support you using local knowledge and experience.

## Control service costs

We can help support the profitability of your operation with a range of Customer Support Agreements and solutions that offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase machine uptime.



# Superior compaction

## Unobstructed visibility

The operator platform boasts all-around visibility, easy-to-reach controls and vibration and noise insulation.

## MORE WORK, FEWER PASSES

Achieve target density with the high centrifugal force, so you can do more work in fewer passes.

## Smooth, high quality finish

Ensure high quality performance with the drum vibration system and ergonomically positioned controls.

## Machine monitoring made easy

Remotely monitor machine usage, productivity, fuel consumption and more with CareTrack, ensuring maximum uptime.

## Drive your costs down

Maximize fuel efficiency with Volvo's adaptive power, ECO mode and auto-idle features without compromising performance.

## Productivity on tap

Industry-leading, automatic drum wetting system provides uniform drum coverage to prevent material pick-up.





## MEET JOBSITE REQUIREMENTS

Compact in delicate environments, such as on bridges, over pipes and close to residential areas, with the DD105 OSC model variant.

### Comfortably productive

Enhance productivity and safety with all-around visibility, rotating seat, ergonomic controls and well-positioned handrails.

## EASY MAINTENANCE

Optimize efficiency with the swing-up hood, providing easy and complete access to the engine and hydraulic components.

### Intelligent compaction

Maintain consistency and track targets with the optional Compact Assist, offering pass mapping, temperature mapping, and Volvo's ground-breaking Density Direct feature.

### Durable by design

Built with Volvo proven components, the DD105 can be relied on for longevity and sustained uptime.

### Control service costs

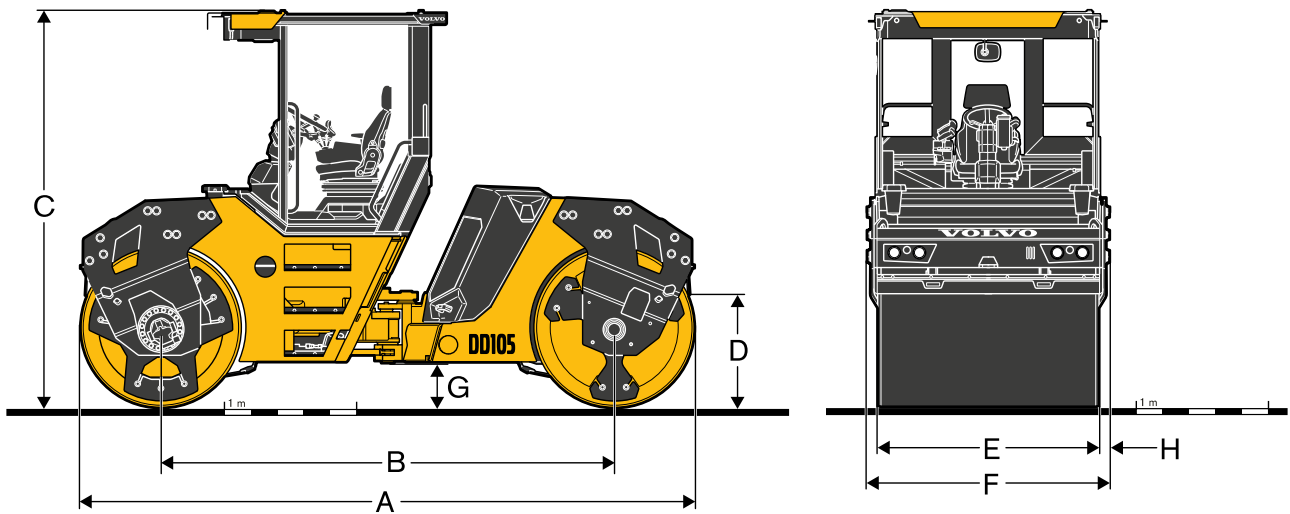
Control costs with a wide variety of Customer Support Agreement solutions, offering preventative maintenance, total repairs and uptime services.

# Specifications

Model	DD105						DD105 OSC			
	with open ROPS/FOPS canopy			with enclosed cab			with open ROPS/FOPS canopy		with enclosed cab	
<b>Machine weights</b>										
Operating weight (1)	kg	lb	10,000	22,051	10,075	22,217	9,851	21,718	9,926	21,883
Weight @ front drum	kg	lb	5,050	11,136	5,087	11,219	5,124	11,296	5,161	11,378
Weight @ rear drum	kg	lb	4,950	10,915	4,988	10,998	4,727	10,421	4,765	10,505
Shipping weight (2)	kg	lb	9,463	20,866	9,538	21,032	9,376	20,670	9,451	20,836
<b>Drums</b>										
Width	mm	in	1680	66.1	1,680	66.1	1,680	66.1	1,680	66.1
Diameter	mm	in	1,220	48.0	1,220	48.0	1,220	48.0	1,220	48.0
Shell thickness	mm	in	22	0.9	22	0.9	22	0.9	22	0.9
Finish	machined surface; chamfered and radiused edges									
<b>Vibration</b>										
Frequency	hz	vpm	40 / 50	2,400 / 3,000	40 / 50	2,400 / 3,000	39	2340	39	2340
Amplitude	mm	in	0.86 / 0.45	0.03 / 0.02	0.86 / 0.45	0.03 / 0.02	0.72 (tangential)	0.03 (tangential)	0.72 (tangential)	0.03 (tangential)
Centrifugal Force (low / high amplitude)	kN	lbf	112 / 99	25,179 / 22,256	112 / 99	25,179 / 22,256	-	-	-	-
Centrifugal Force (total/per eccentric)	kN	lbf	-	-	-	-	144 / 72	32,372 / 16,186	144 / 72	32,372 / 16,186
<b>Propulsion</b>										
Type	closed-loop hydrostatic, parallel circuit to both drums									
Drum drive	2-speed axial piston motors with planetary gear drive									
Travel speed	km/h	mph	5.2-11.4	3.2-7.1	5.2-11.4	3.2-7.1	5.2-11.4	3.2-7.1	5.2-11.4	3.2-7.1
<b>Engine</b>										
Make / model	Volvo D3.8, EPA Tier 4 final									
Engine type	4 Cyl, Electronic, Turbo charged CAC									
Rated power @ 2,600 r/min	kW	hp	85	114	85	114	85	114	85	114
Electrical	12 V DC, 130 A alternator, Starter 3 kW, Battery 1360 CCA (SAE)									
<b>Brakes</b>										
Service	Dynamic hydrostatic through propulsion system									
Parking secondary	Spring-applied, hydraulic release on both drum drives									
<b>Water system</b>										
Type	Pressure spray drum wetting system with central water tank									
Spray bars	Two spray bars per drum									
Nozzles	Hand-serviceable spray nozzles, 6 per spray bar									
Filtration	Filter baskets in fill necks, primary filter at each pump, fine filter for each nozzle									
Drum wipers	Front and rear urethane wipers for each drum									
Water tank capacity	l	gal	800	211.4	800	211.4	800	211.4	800	211.4
<b>Miscellaneous</b>										
Articulation angle	°		+ / - 35							
Oscillation angle	°		+ / - 7.5							
Inside turning radius (to drum edge)	mm	in	4,600	181	4,600	181	4,600	181	4,600	181
Fuel tank capacity	l	gal	175	46.2	175	46.2	175	46.2	175	46.2
DEF tank capacity	l	gal	20	15.9	20	15.9	20	15.9	20	15.9
Hydraulic oil capacity	l	gal	85	22.5	85	22.5	85	22.5	85	22.5
Gradeability (theoretical)	%		39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6
<b>Sound Level</b>										
Operator's Ear, acc. to ISO 6396	LpA dB(A)						77			
External, acc. to ISO 6395 (Directive 2000/14/EC)	LwA dB(A)						107			

(1) incl. 50% fuel, 50% water, 75 kg / 165 lb operator

(2) incl. 50% fuel, no water, no operator



**DIMENSIONS**

	DD105 and DD105 OSC			
	with open ROPS/FOPS canopy		with enclosed cab	
	mm	in	mm	in
A	4,650	183.1	4,650	183.1
B	3,430	135	3,430	135
C	2,999	118.1	2,999	118.1
D	751	29.6	751	29.6
E	1,680	66.1	1,680	66.1
F	1,838	72.4	1,838	72.4
G	350	13.8	350	13.8
H	79	3.11	79	3.11

# Equipment

STANDARD EQUIPMENT		
	DD105	DD105 OSC
<b>Engine</b>		
Eco Mode	•	•
Battery disconnect switch	•	•
V-belt protection	•	•
<b>Operator environment</b>		
Open ROPS/FOPS canopy	•	•
Operator seat, steering wheel and main controls: lateral sliding and rotating +/- 90°	•	•
Propulsion control lever	•	•
Adjustable steering wheel	•	•
2 charger sockets 12V	•	•
Storage compartments	•	•
Easy to clean anti slip cab floor	•	•
2 cup holders	•	•
Seat switch with timer delay	•	•
3" seat belt	•	•
Seat belt alarm	•	•
Interior light	•	•
<b>Vibration and drum system</b>		
Auto vibration	•	•
Selectable vibration: front, rear, both	•	•
Drum offset function to both sides	•	•
2 frequencies, 2 amplitudes	•	•
<b>Electrics and electronics</b>		
4 Halogen work lights in frame (2 each bumper)	•	•
Rotating Beacon	•	•
Permanent wetting system water level display	•	•
Permanent fuel level display	•	•
Information display:	•	•
Fluid temperatures	•	•
Engine speed	•	•
Vehicle speed	•	•
Asphalt temperature gauge kit	•	•
Impact meter	•	•
Trailer loading function	•	•
Emergency stop button	•	•
Back-up alarm	•	•
<b>Water system</b>		
Two spray bars per drum	•	•

OPTIONAL EQUIPMENT		
	DD105	DD105 OSC
<b>Operator environment</b>		
Enclosed cab with integrated ROPS/FOPS, tinted safety glass and openable side windows to the rear	•	•
Air conditioning system	•	•
Radio with Bluetooth, USB, MP3	•	•
Steering spinner knob	•	•
<b>Vibration and drum system</b>		
8 Amplitude Feature	-	•
<b>Electrics and electronics</b>		
4 or 8 Halogen work lights on canopy / cab	•	•
4 or 8 LED work lights on canopy / cab	•	•
4 LED work lights in frame (2 each bumper)	•	•
8 LED work lights in frame (4 each bumper)	•	•
4 work lights on drum edges: LED or Halogen	•	•
Road light kit (w/o work lights in frame)	•	•
Volvo Caretrack	•	•
Anti slip control	•	•
Anti theft	•	•
Tachograph preparation	•	•
<b>Structure</b>		
Special paintwork	•	•
<b>Fluids</b>		
Biodegradable hydraulic oil	•	•

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**SELECTION OF VOLVO OPTIONAL EQUIPMENT**

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**Enclosed cab**



**Anti Slip Control**



**Multiple working light packages**



**Temperature gauge kit**



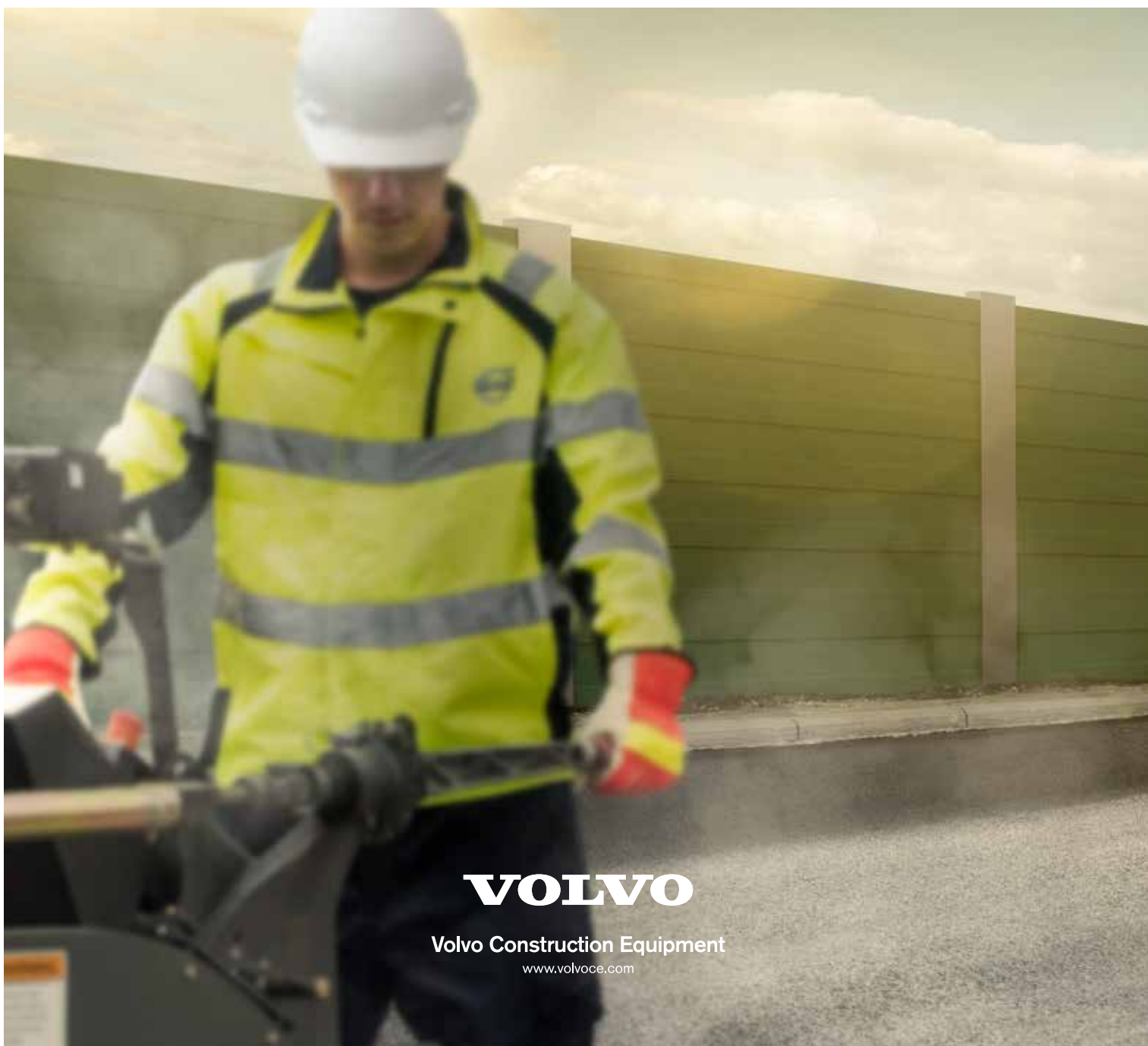
**Impact meter**



**Selection of drums**



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