



Volvo Construction Equipment

# DD105

VOLVO DOUBLE DRUM COMPACTOR 10.5 t 85 kW



# 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

# Exceptionally efficient.

Introducing the new Volvo DD105 double drum compactor – the first of a new generation of exceptionally efficient machines, designed to help you protect the environment and your profits. Powered by an advanced Stage IV engine with efficiency-enhancing Eco mode and auto-idling features built in, this compactor ensures high quality performance with minimal fuel consumption, emissions and noise.

## Engine

Built on decades of experience, the advanced Stage IV Volvo engine with variable speed fan drive delivers maximum power and efficiency.



## Eco mode

Reduce fuel consumption by up to 30% with Eco mode. Noise and emissions are also decreased, without impacting performance.



## Auto idle

When stationary, the auto idling feature automatically reduces engine speed to idle after five seconds, decreasing fuel consumption and noise. The machine returns to high idle when moved out of neutral.

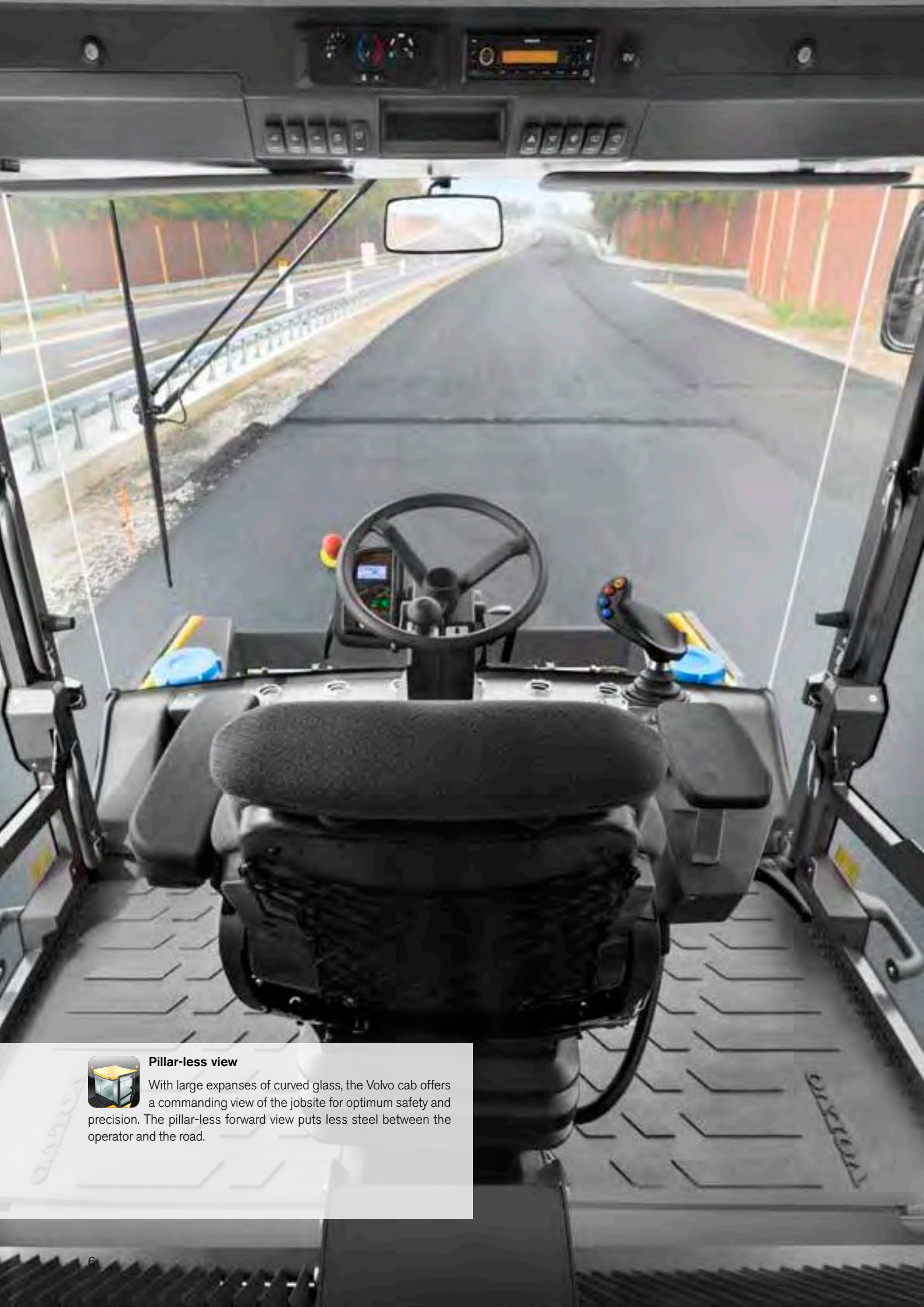




#### **Adaptive power**

Volvo automatically adjusts engine output according to jobsite requirements. Power is delivered only when needed for optimum performance and efficiency thanks to the Eco mode and auto-idling features.





#### **Pillar-less view**

With large expanses of curved glass, the Volvo cab offers a commanding view of the jobsite for optimum safety and precision. The pillar-less forward view puts less steel between the operator and the road.

# A home away from home.

With industry-leading comfort, control and visibility the Volvo DD105 offers one of the most productive operator environments on the market. The comfortable seat slides and rotates to provide clear views of the mat and drum edge while the padded floor reduces noise and vibrations for a smooth, quiet ride and minimal fatigue.

## Seat

Sliding and rotating seat with clear views of the mat and drum edge. The clear floor design keeps moving parts tucked away and clean in the rear wall.



## Cool environment

Control your climate with Volvo's efficient, industry-leading climate control system. With well-spaced vents quickly heating or cooling the cab, this air circulation and defrosting system increases comfort and productivity.



## Ergonomic controls

The compactor's controls are easy to reach and help minimise fatigue. The display is easily in view and allows the operator keep an eye on the road at all times.



## Low noise

By locating the engine in the rear frame, as far away from the operator as possible, noise in the cab is kept to a minimum – increasing operator comfort and performance.



# Primed for performance.

The Volvo DD105 double drum compactor is primed with a range of features to ensure high performance and efficiency. The new drum vibration system, off-set steering & anti slip control deliver excellent compaction with a smooth and consistent finish whatever the site conditions.

## Machined drums

Each drum is specially machined to ensure it is perfectly cylindrical for a smooth, even finish. The edges are chamfered to avoid marking the mat while rolling.



## Off-set steering

Off-set steering enhances the operator's view of curbs and obstructions for safe, efficient and high-quality compaction.



## Anti Slip Control (ASC)

ASC ensures excellent traction at all times. Not only does ASC guarantee even performance, it is especially important when loading and unloading the compactor for transport – enhancing site staff safety and preventing damage to the road.





#### **Drum vibration system**

Volvo's new eccentric design reduces vibration system start up power consumption by 50% while improving performance. This allows the roller to operate more effectively even at high altitudes.



# Superior compaction.



## **Cab**

Comfortable, climate-controlled cab with excellent visibility minimises operator fatigue.

## **Visibility**

Pillar-less forward view allows excellent visibility to the drum edges, water spraying system and worksite.

## **Seat**

Sliding and rotating seat with clear views of the mat and drum edge.

## **Superior compaction**

The Volvo DD105 delivers industry-leading compaction with a smooth, even-quality finish.



## **Adaptive power**

Engine output is adapted according to jobsite requirements for maximum fuel efficiency.







#### **Eco Mode**

Eco Mode decreases fuel consumption by up to 30% without impacting performance.

#### **Low noise**

Noise in the cab is kept to a minimum for a comfortable and productive work shift.



#### **Water spraying system**

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

#### **Off-set steering**

Visibility is increased for greater precision and safety.



#### **Service Access**

Swing-up hood design provides easy and complete access to the engine and hydraulic components for efficient inspections and maintenance.



#### **Drum vibration system**

Volvo's drum vibration system reduces start up power consumption by 50%.



#### **Water spraying system**

Industry-leading, automatic drum wetting system provides uniform drum coverage with variable flow – preventing material pick-up for reduced downtime. Features include primary and backup pumps, spray bars, nozzles, triple filtration and drum wipers.



# Productivity on tap.

Volvo's industry-leading automatic water spraying system with triple filtration provides uniform drum coverage with variable flow – preventing material pick-up for reduced downtime. The low positioning of the water tank affords the machine a low center of gravity for excellent stability while the large 800 l volume extends refill intervals and therefore, more uptime.

## Drum visibility

Unobstructed sightlines down to the drum and spray bars allow perfect placement and make it easy to monitor water flow. This allows the operator to maintain excellent control over the machine for consistent results.

## Easy refill

Easy access to the water tank at ground level allows for quick and safe refill – keeping the compactor on the job for longer.



## Backup pump

The compactor is fitted with two water pumps that alternate during normal operation. This allows the compactor to remain on the job even if a pump malfunctions, as a constant flow of water to the drum surface can still be provided. Uptime is optimised.

# Maintenance made easy.

The Volvo DD105 double drum compactor offers the industry's safest and easiest maintenance access – taking the hassle out of daily service checks. Technicians can access all service hatches – as well as the cab door and ignition – with a single key while fuses and relays are grouped together for speed and convenience. Achieve maximum uptime from your compactor.

## Safe entrance/exit

Well positioned handrails allow the operator to keep three-point-contact at all times when entering/exiting the compactor for increased safety even in low-light or wet weather.



## Volvo single key

A single key allows all access, service and operation to one or more Volvo compactors for the ultimate in fleet management convenience.



## Hand serviceable sprays

The fan-spray nozzles and screens in the water spraying system can be cleaned quickly and easily without the use of tools. This minimises the time required for maintenance.



## Fuses and relays

Fuses and relays are grouped and centrally mounted in the roof of the operator platform, protected from water or damage. This design speeds up routine maintenance for maximum uptime from the machine.





#### **Service access**

The swing-up hood design provides easy, complete access to the engine and hydraulic components, allowing inspections and maintenance to be performed more efficiently. Unobstructed daily checkpoints with ground-level access to the engine, radiator, battery and filters saves time and helps ensure daily maintenance is properly completed.







# Adding value to your business.

Being a Volvo customer means having a complete set of services at your fingertips. Volvo can offer you a long-term partnership, protect your revenue and provide a full range of customer solutions using high quality parts, delivered by passionate people. Volvo is committed to the positive return of your investment.



## Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle of your machine? By listening to your requirements, we can reduce your total cost of ownership and increase your revenue.



## CareTrack

CareTrack is the state-of-the-art telematics system designed for Volvo Construction Equipment. Stay informed, receive reports, alarms and information such as fuel status, machine location and hours so you can plan your service more efficiently. Stay ahead of unscheduled downtime and check that your machine is being operated efficiently.



## Genuine Volvo Parts

Our attention to detail is what makes us stand out. This proven concept acts as a solid investment in your machine's future. Parts are extensively tested and approved because every part is vital for uptime and performance. Only by using Genuine Volvo Parts, can you be sure that your machine retains the renowned Volvo quality.



## Service Network

In order to respond to your needs faster, a Volvo expert is on their way to your job site from one of our Volvo facilities. With our extensive infrastructure of technicians, workshops and dealers, Volvo has a comprehensive network to fully support you using local knowledge and global experience.

# Specifications.

## Machine weights (with cab)

Operating weight <sup>1</sup>	kg	10 500
Weight @ front drum	kg	5 330
Weight @ rear drum	kg	5 170
Shipping weight <sup>2</sup>	kg	10 025

## Drums

Width	mm	1 680
Diameter	mm	1 220
Shell thickness	mm	22
Finish	Machined surface; chamfered & radiused edges	

## Vibration

Frequency	Hz	40 / 50
Amplitude	mm	0.87 / 0.44
Centrifugal force	kN	112 / 99

## Propulsion

Type	closed-loop hydrostatic, parallel circuit to both drums	
Drum drive	2-speed axial piston motors with planetary gear drive	
Travel speed high	km/h	11
Travel speed low	km/h	5
Gradeability (theoretical)	%	38

## Engine

Make / model	Volvo D3.8 , EU Stage IV	
Engine type	4 Cyl, Electronic, Turbo charged CAC	
Rated power @ installed speed	85 kW @ 2600 rpm	
Electrical	12 V DC, 135 A alternator	

## Brakes

Service	Dynamic hydrostatic through propulsion system	
Parking secondary	Spring-applied, hydraulic release on both drum drives	

## Water system

Type	Pressure spray drum wetting system with central water tank	
Pumps	2 diaphragm water pumps	
Spray Bars	One spray bar 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	Inside & outside urethane wipers for each drum	
Water tank capacity	l	800

## Steering

Type	Articulated frame center pivot steering with offset	
Inside turning radius	mm	4 600
Articulation angle	35°	
Oscillation Angle	7.5°	
Offset	mm	150

## Fluid Capacities

Fuel tank capacity	l	175
AdBlue® tank capacity	l	20
Hydraulic oil capacity	l	65

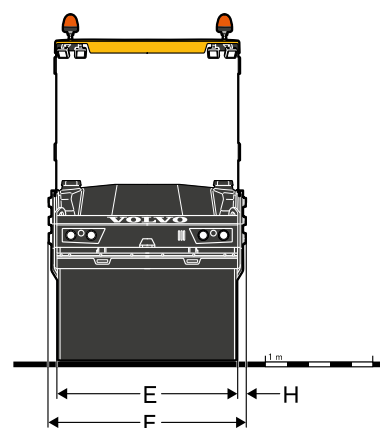
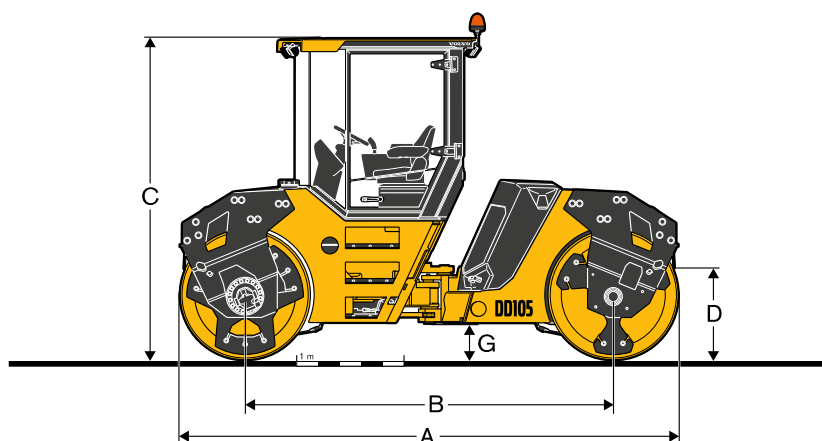
<sup>1</sup> incl. 50% fuel, 50% water, 75 kg operator

<sup>2</sup> incl. 50% fuel, no water, no operator

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## DIMENSIONS

Unit		mm
A	Overall length	4 650
B	Drum base	3 430
C	Overall height (top of cab)	3 000
D	Curb clearance	750
E	Drum width	1 680
F	Overall width	1 845
G	Ground clearance	350
H	Side Clearance	82,5





# Equipments.

## STANDARD EQUIPMENT

### Operator environment

Operator seat, steering wheel and main controls: lateral sliding and rotating +/- 90°

Propulsion control lever

Air conditioning system

Adjustable steering wheel

2 charger sockets 12V

Integrated ROPS/FOPS

Storage compartments

Easy to clean anti slip cab floor

2 cup holders

Openable side windows to the rear

Seat switch with timer delay

3" seat belt

Seat belt alarm

Interior light

Tinted safety glass

### Vibration and drum system

Auto vibration

Selectable vibration: front, rear, both

Drum offset function to both sides

2 frequencies, 2 amplitudes

### Electrics & electronics

Permanent wetting system water level display

Permanent fuel level display

"Information display:

- Fluid temperatures

- Engine speed

- Vehicle speed"

4 cab mounted worklights: Halogen

Trailer loading function

Rotating Beacon

Emergency stop button

Back-up alarm

### Engine

Eco Mode

Battery disconnect switch

V-belt protection

## OPTIONAL EQUIPMENT

### Operator environment

Radio with Bluetooth, USB, MP3

### Electrics & electronics

4 cab mounted worklights: LED

8 cab mounted worklights: LED or Halogen

4 work lights on drum edges: LED or Halogen

Asphalt temperature sensor

Anti slip control

Impact meter

Anti theft

Road light kit

Tachograph

### Structure

Special paintwork

### Environment

Biodegradable hydraulic oil

### Attachments

Chip spreader

Edge cutter and edge compactor

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

### Chip spreader



### Anti slip control (ASC)



### Edge cutter and edge compactor



### Work lights



### Impact meter



### Radio with Bluetooth, USB, MP3



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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