Volvo Construction Equipment
Building Tomorrow

COMPACT ASSIST

Intelligent Compaction for Soil and Asphalt Compactors

The game-changer

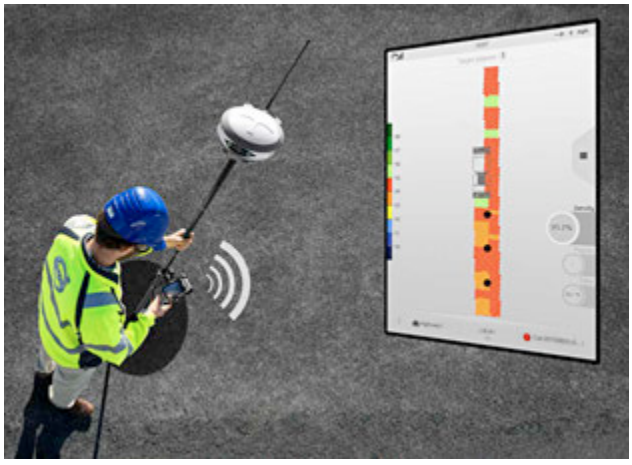
Unlock the full potential of your machine's productivity with Compact Assist, Volvo's Intelligent Compaction system for soil and asphalt compactors. Intelligent Compaction offers real-time insight into the worksite using pass mapping, temperature mapping and Volvo's Density Direct feature for asphalt compaction, as well as pass mapping and Compaction Meter Value (CMV) mapping for soil compaction. With easy access to clear and detailed data, the operator is able to eliminate under-compaction and over-compaction utilizing the best display on the market.

Volvo Co-pilot Display

Volvo Co-Pilot utilizes one of the largest and clearest images of the worksite. For a simple, easy-to-use interface, the 10" in-cab display minimizes interaction to keep the focus on operations. Tap, zoom, and select options just as you would on your own mobile tablet or smartphone.

Meet your targets

Gain real-time estimated density with Volvo's ground-breaking quality control tool. Intelligent Compaction with Density Direct (for asphalt compactors only) allows you to account for the effects of the entire paving train by calibrating to cores or an asphalt density gauge. This patented process lets you estimate the density value (EDV).



Maintain consistent improvement

Easily access and extract all machine, job and material data onsite or anywhere with cloud data download. Compatible with VETA, the system provides extensive detail of the performance of the roller without the need for any post processing or proprietary software. Using the saved data you can identify areas for improvement, and maintain consistency of targets.

A solution for every need

Receive more built-in features than anywhere on the market with the Compact Assist packages. Only Volvo can offer solutions from local estimates of stiffness, to complete mapping of estimated density, and various levels in between.

ACHIEVE MAXIMUM EFFICIENCY

Produce more consistent, high quality compaction with Compact Assist. Maintaining consistent coverage is key to ensuring properly compacted surfaces. The Intelligent Compaction system provides real-time insight into the work using pass mapping, temperature mapping and compaction measurement through CMV and Density Direct, enabling the operator to eliminate any wasteful and damaging over-compaction, saving you time and money.

Revolutionizing the Paving Industry

Meet your targets

Track the consistency of your work with Intelligent Compaction with Density Direct, the ground-breaking quality control tool.

Day / Night mode

Avoid distraction with the touchscreen's night mode. The operator will have a clear view of all key data at all times.

Volvo Co-pilot Display

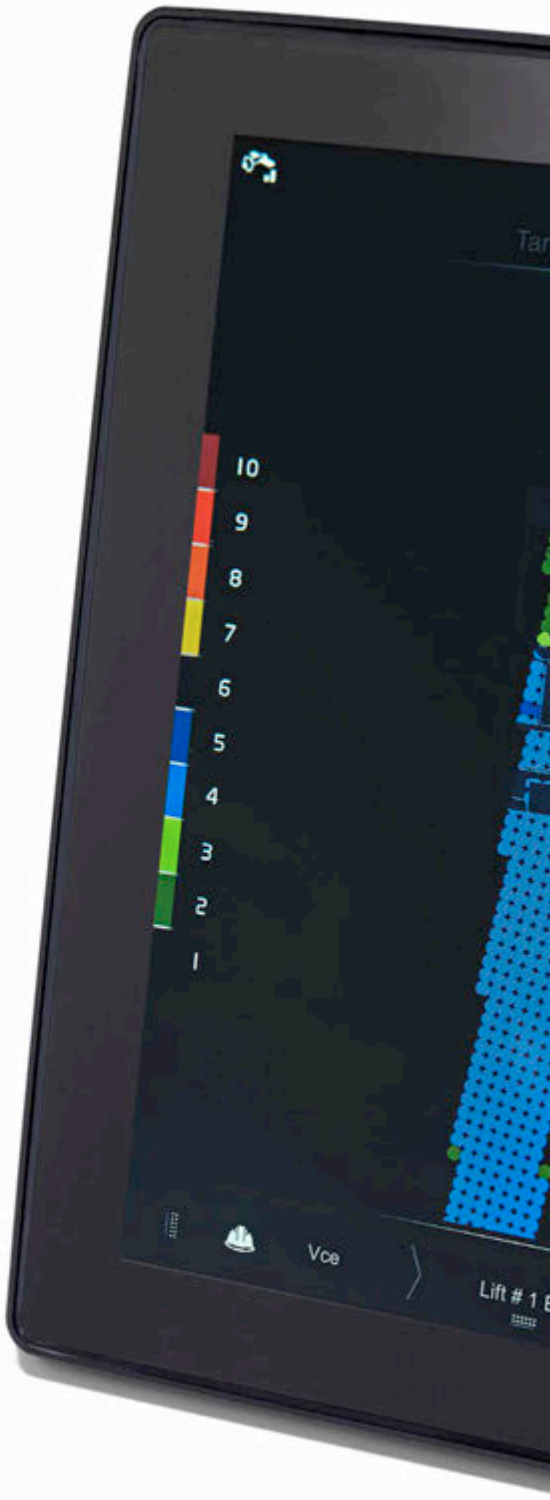
Tap, zoom, and select options with the high resolution, easy-to-use, 10" Volvo Co-Pilot touchscreen.

Neural Network (Density Direct)

This unique artificial intelligence algorithm adapts to new asphalt mixes and lifts, calibrating to final mat density.

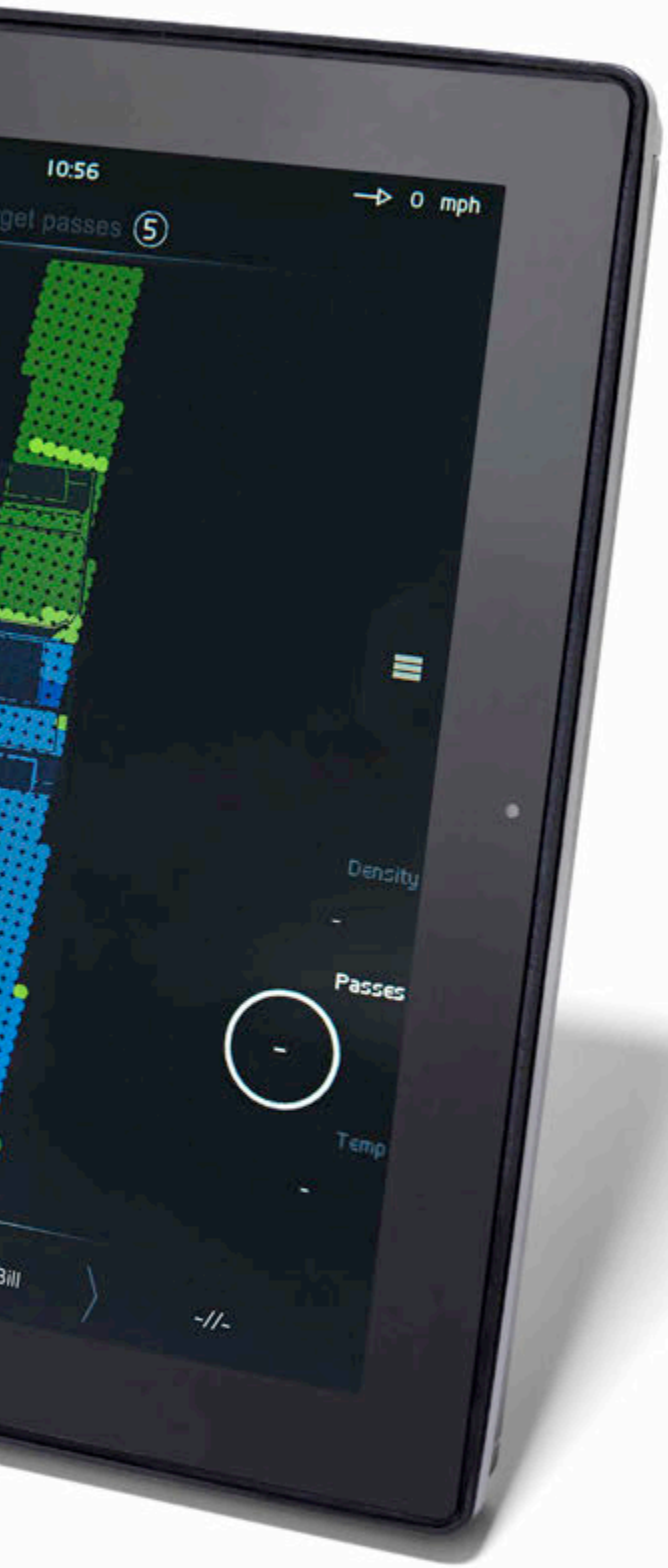
A solution for every need

From an integrated compaction gage through our unique Density Direct feature, Volvo provides an Intelligent Compaction solution for every need.



High precision DGPS

Achieve higher precision with use of an RTK Base station, or by connecting to a Network RTK correction service where available.



Compatible with VETA software

Compact Assist provides extensive detail of the performance of the roller without the need for any post processing.

ACHIEVE MAXIMUM EFFICIENCY

Gain real-time insight into the work using pass mapping and temperature mapping or CMV mapping, eliminating wasteful over-compaction.

Connectivity

Flash-drive connectivity and sim card ready Co-Pilot allow you to access and store data in the Volvo Cloud and enable auto-upload.

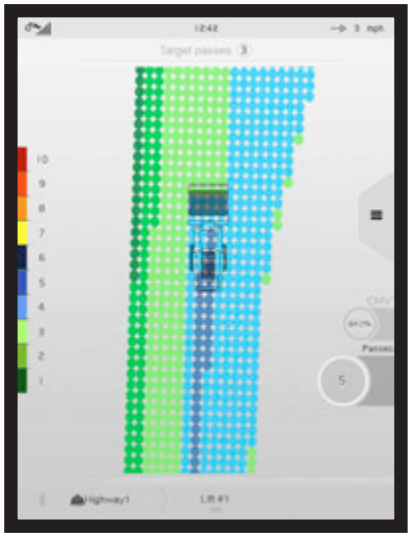
Touchscreen protection

The touchscreen is waterproof and vibration proof, rated IP65, and can be locked or stowed away safely when not in use.

Maintain consistent improvement

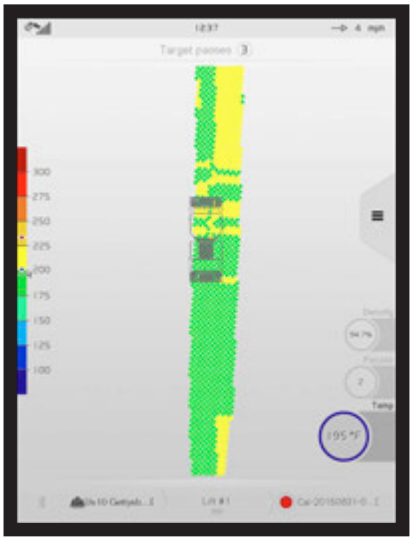
Easily access and extract all machine, job and material data which has been automatically logged and stored.

Main modules



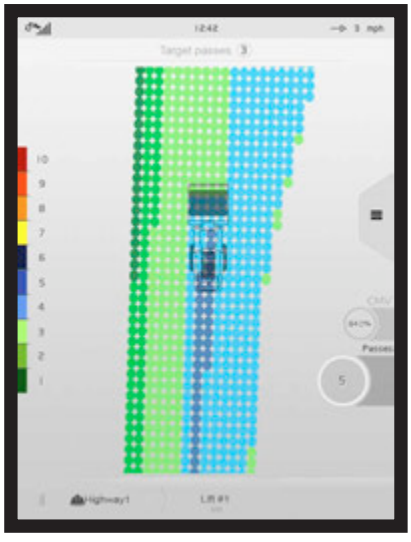
Pass mapping

- The pass mapping visually tracks the number of times the roller has passed over a given area
- The Current Pass count is displayed in real time in the ‘Passes’ tab
- Operators can choose whether all passes are counted, or only passes when vibration is engaged
- Asphalt: Enables the operator to ensure he or she has completed his rolling pattern and uniformly covered the entire mat without over or under compaction
- Soil: Enables the operator to quickly see compaction coverage over the complete jobsite, allowing for optimizing of rolling patterns and minimizing redundant work



Temperature mapping (for asphalt compactors only)

The temperature mapping visually tracks the latest temperature over the path of the roller
- The surface temperature is displayed in real time in the ‘Temp’ tab
- Temperature sensors mounted on both ends of the machine measure temperature in the direction of travel
- Records and displays temperature range seen during calibration
- Current temperature button lights blue / red if target temperature zone is exceeded
- Allows operators to avoid the “tender zone”, the temperature band at which compaction may displace the asphalt rather than compact it



Compaction mapping

CMV:
- Estimate the relative consistency in the load bearing capacity of soil
- Proof rolling a road base material prior to paving to determine unstable points that can cause later failures in the asphalt
- Used on asphalt as an uncalibrated method of measuring compaction performance
- Drum bounce detection for alerting operator to over compacted material.

Density (EDV):
- The density mapping screen tracks the latest density estimate over the path of the roller
- The patented calibration process feeds three density measurements from cores or density gages into the Neural Network
- Following calibration, the system displays the Estimated Density Value (EDV) of the material
- Displayed in real time in the ‘Density’ tab.

Equipment

Module:	Volvo Compaction Gauge	Compact Assist for Soil	Compact Assist for Asphalt	Compact Assist with Density Direct
Compaction Mapping (CMV)	●	●	-	●
Pass Mapping	-	●	●	●
Temperature Mapping	-	-	●	●
Density Mapping (EDV)	-	-	-	●
Features:				
Drum Bounce light	●	●	-	-
Vibration sensing	●	●	●	●
Dual Temperature Sensors	-	-	●	●
Volvo Copilot Display	-	●	●	●
Day / Night Mode	-	●	●	●
Full touchscreen display	-	●	●	●
Pinch to Zoom	-	●	●	●
Water and vibration proof to IP65	-	●	●	●
GPS Beacon	-	●	●	●
1m / 36” accuracy DGPS / GNNS	-	●	●	●
Compatible with most RTK GPS Base stations	-	●	●	●
GPS RTK modem built into screen	-	●	●	●
Network RTK Compatible**	-	●	●	●
UTM / State Plane / Local Coordinates	-	●	●	●
Alignment File Upload	-	●	●	●
Tracks rolling speed, frequency & amplitude	-	●	●	●
Simple data documentation	-	●	●	●
USB Data download	-	●	●	●
Cloud data download* (Over the air)	-	●	●	●
Over the air software updates*	-	●	●	●
Direct VETA compatibility; no data processing required	-	●	●	●
Day / Night Mode	-	●	●	●

* Requires data plan from celluar supplier
** May require 3rd party subscription

OPTIONS

Base station kit	Rover kit	
		RTK Base station, 2.5cm/1” Accuracy
		RTK Rover, 2.5cm/1” Accuracy
		Base station kit includes a GPS 3320 GNSS radio receiver with all supporting equipment to setup the land base.
		The rover kit includes a GPS 3320 GNSS radio and receiver and an XF3 handled PDA data collector and supporting components.
		Both kits are required to comply with AASHTO PP 81-14 andmost state agency IC specifications.

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.

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