

Trimble CCSFlex Compaction Control Systems Soil Compactors

ccsFlex
COMPACTOR CONTROL SYSTEM



The Trimble® CCSFlex™ Compaction Control System for soil compactors is an easy-to-use, reliable, flexible and affordable option to leverage compaction control technology and be more competitive.

The CCSFlex “in a case” system provides pass count mapping for soil compaction machines. Select the low cost “system in a case” solution and add sensors for increased system capabilities as needs change. CCSFlex is easy-to-use as you can operate without a GPS base station and without designs. The system is installed as an aftermarket system, retrofitted onto any soil compactor with open or enclosed cab. Add-on options to measure compaction values and achieve higher accuracy positioning are available.

Trimble CCSFlex Compaction Control System maximize soil compactor performance. It helps achieve target material compaction faster, more accurately, with less rework. CCS900 can detect sub-surface material anomalies, soft spots and hidden obstructions. Problem areas can be excavated, re-graded and compacted, prior to the start of more costly phases of the construction process, such as paving.

Trimble CCSFlex Compaction Control System for Soil Compactor Configurations and options

SYSTEM IN A CASE	APPLICATIONS
PASS COUNT MAPPING Sub-meter level horizontal mapping using SBAS positioning	Soil compaction applications, where monitoring pass count mapping allows the contractor to run more efficiently, and where pass counts targets need to be met.
OPTIONS	
HIGHER ACCURACY MAPPING MS972 Options and SNM940 Connected Site Gateway or SNRx10 Site Net Radio	Accuracy levels ranging from standard to high precision, matching needs and budgets can be selected. Options include: <ul style="list-style-type: none"> - Location RTK with precise horizontal – ideal for applications where the horizontal accuracy needs to be 1-2cm - Full RTK – ideal for applications where a vertical GPS-RTK accuracy is required - GLONASS – ideal for application with more limited GPS satellite reception
COMPACTION MAPPING CM310 Compaction Sensor	The CM310 Compaction Sensor measures and records the vibratory effort of the soil compactor drum. The sensor provides vibratory parameters and generates soil compaction measurements, including frequency and amplitude, Compaction Meter Value (CMV), Resonance Meter Value (RMV) or drum bounce. The CCSFlex system displays compaction information in real time to the operator on the rugged graphical control box mounted in the cab for immediate indication whether target design density has been achieved.
IN FIELD REPORTING Third party printer	A mobile printer from a third party can be added to the system to print the in-field report off the CCSFlex system.

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System in a Case

Pass Count Mapping System Configuration – Key System Features:

- Cost effective, simple configuration for increased rolling pattern efficiency
- Displays pass count maps, allowing operator to track where pass count target has been met
- Displays coverage maps, allowing operator to judge his time window for compaction across the surface
- Operation using base station-free Satellite-based Augmentation Systems (WAAS, EGNOS, MSAS)
- In-field compaction reports viewed on the control box
- Upgradeable to higher accuracy horizontal mapping
- Ease of operation with no need for a GPS base station and 3D design



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System Options

Pass Count Mapping System Configuration – Key System Features:

- Ideal for compaction of lifts and layer control of expensive material
- Displays compaction measurements, pass counts and machine coverage
- Operation using base station-free Satellite-based Augmentation Systems (WAAS, EGNOS, MSAS)
- MS972 GNSS receiver options for higher accuracy horizontal mapping—Location RTK with precise horizontal, full RTK and GLONASS
- SNM940 Connected Site Gateway or SNRx10 Site Net Radio for receiving correction information for higher accuracy positioning
- In-field compaction reports, viewed on the control box can be optionally printed out in the cab with portable printer

