

Roller Management System

Intelligent Soil and Asphalt Compaction



Compaction can determine the success
or failure of a project.

Learn more at topconpositioning.com



Achieve uniform compaction with real-time feedback and mapping

What is intelligent compaction?

Intelligent or Smart Compaction (IC) uses rollers with sensors and GNSS or LPS to monitor soil or asphalt progress in real time. It ensures uniform compaction, reduces unnecessary passes, and provides quality control data, leading to better construction performance and efficiency.

Why is proper compaction so important?

Proper soil and asphalt compaction creates solid foundations for critical infrastructure like utilities, dams, and buildings, reducing settlement and structural failure risks.

For roads, correct compaction extends lifespan by preventing cracks, potholes, and water infiltration. Well-compacted materials minimize maintenance costs and delays, delivering significant long-term savings for infrastructure projects and taxpayers.

How does the Topcon Roller Management System work?

The RMS includes the MC-X1 controller and a robust android tablet, which receives CORS Network corrections like Topnet Live*. The system features the GR-i3F full constellation GNSS receiver and can be supplemented with a UR-S1 radio modem for local base stations or a 360° prism for LPS. Easily connect with a roller's built-in OEM sensors or enhance performance by adding compaction and asphalt temperature sensors — with all data seamlessly captured in Sitelink3D.

- » Accurate and validated work with high-quality documentation
- » Modular components tailored to your machines and project requirements
- » Direct import into Veta or generate reports in Sitelink3D for pass counts, stiffness and temperature
- » Quick connectivity for effortless as-built data transfers, smooth roller-to-roller communication, and reliable remote support



You can have it your way

For more information on options for your roller, contact your Topcon dealer today!

* Topnet Live offers a wide range of global GNSS correction services that may incur additional charges.