

Trimble Announces Ground Penetrating Radar Integration for Real-Time Asphalt Compaction Quality Control

Trimble Roadworks GSSI integration improves asphalt paving safety, profitability and sustainability with compaction metrics on every pass

WESTMINSTER, Colo., March 3, 2025— [Trimble](#) today announced that the Trimble® Roadworks paving control platform for asphalt compactors will now integrate with [Geophysical Survey Systems Inc's](#) (GSSI) highly accurate and rugged ground penetrating radar sensor, PaveScan RS, providing asphalt compaction metrics with every pass. With this announcement, Trimble, and its SITECH dealer network, will serve as a key global aftermarket reseller of GSSI's density profiling sensors (DPS), allowing broader access to DPS across the paving industry.



The integration of high-speed ground penetrating radar with Trimble Roadworks gives asphalt paving contractors a solution for mapping the dielectric profile — or percentage of air voids — throughout the asphalt compaction process rather than by testing core samples after the completion of a project. This functionality can transform asphalt paving projects by delivering real-time quality control metrics on every pass.* As a result, contractors can accelerate project timelines and optimize resources to help ensure safer, more profitable and more sustainable outcomes for highways agencies.

“Giving asphalt compactor operators the ability to monitor compaction quality as they go can significantly improve compaction workflows,” said Kevin Garcia, general manager of civil specialty solutions at Trimble. “Now, an operator can ensure that the asphalt density is correct before they leave the area, rather than waiting until the job is done and then drilling holes in the asphalt to test the density.”

The ability to monitor quality throughout the project in real time takes the guesswork out of roller patterns and can significantly reduce the likelihood of rework or fines for work that doesn't meet compaction specifications. The result is construction of longer-lasting, more sustainable roads that require less maintenance. Additionally, by eliminating the need for coring at the end of the project, this solution means improved on-the-job safety for road crews.

“Until now, the only reliable way to determine the compaction quality of asphalt paving is by cutting cores next to live traffic the following day,” said Curt Turgeon, paving engineer at the Minnesota Department of Transportation, which has been piloting the new Trimble and GSSI integration. “Contractors Quality Control typically requires gauge readings amongst the truck and roller traffic. Reducing or even eliminating these kinds of exposures is essential to creating the safest workplace possible. The immediately accurate full-width quality control feedback to the operator and foreman make this integration compelling, but the safety benefits alone are enough to make this a game-changer for anyone involved with asphalt paving.”

GSSI's ground penetrating radar technology is known for its accuracy, durability and ability to provide subsurface inspection data non-destructively.

“We are proud to announce this integration with Trimble, a widely recognized leader in paving technology solutions,” said Chris Green, president and chief executive officer at GSSI. “Momentum has been building around DPS with both contractors and road owners over the past few years, and collaborating with a forward-leaning aftermarket supplier like Trimble was the obvious next step in the widespread adoption of PaveScan RS. With this integration, Trimble Roadworks customers can improve safety, lower project costs, and significantly reduce rework on asphalt paving jobs.”

Availability

GSSI PaveScan RS sensors for Trimble Roadworks will be available to order through Trimble's worldwide dealer channel beginning this month. For more information, visit <https://civilconstruction.trimble.com/en/products/machine-control-and-guidance/roadworks>.

*Source: [The National Center for Asphalt Technology](#)

About Trimble

Trimble is a global technology company that connects the physical and digital worlds, transforming the ways work gets done. With relentless innovation in precise positioning, modeling and data analytics, Trimble enables essential industries including construction, geospatial and transportation. Whether it's helping customers build and maintain infrastructure, design and

construct buildings, optimize global supply chains or map the world, Trimble is at the forefront, driving productivity and progress. For more information about Trimble, visit: www.trimble.com.

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