Trimble Study Shows Automated Compaction Delivers Substantial Cost, Labor and Sustainability Gains

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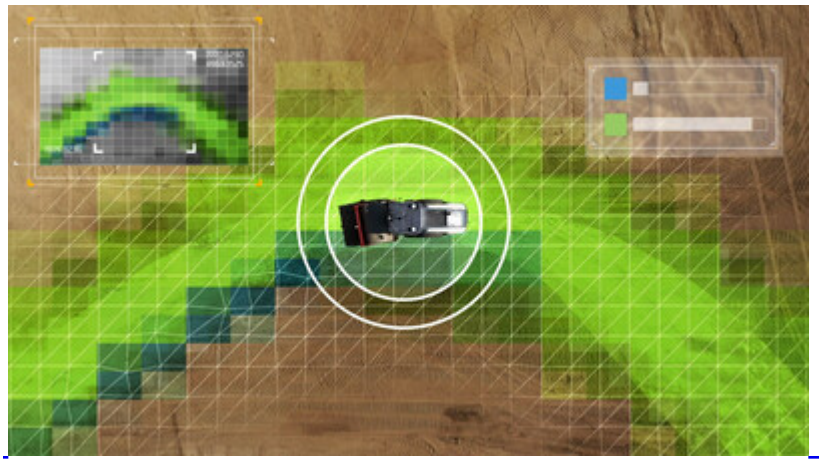
Horizontal Steering Control for Soil Compaction Delivers 26 Percent Savings of Both Carbon and Fuel During Field Testing

LAS VEGAS, March 14, 2023 /PRNewswire/ -- Trimble (NASDAQ: TRMB) announced today that in field testing, horizontal steering control on a soil compactor delivers demonstrable savings in cost, labor and environmental impact. The goal of the Trimble study was to quantify the impact of horizontal steering control on compaction overlap and its relationship to overall carbon dioxide (CO2) emissions.



The field study compared fuel burned, pass count and total time required to complete a compaction operation performed manually and using the Horizontal Steering Control functionality for Trimble® Earthworks Grade Control Platform for Soil Compactors. Trimble Earthworks Horizontal Steering Control automatically steers a soil compactor using a 3D model or compaction pass line, which helps to improve compaction productivity and quality by precisely controlling overlap between passes.

"We know that horizontal steering control makes operators of all skill levels more productive, efficient and accurate, but we wanted to put our own technology to the test in the field to determine exactly what improvements were possible, especially when it comes to carbon emissions and the environmental impact of a job," said Michael Granruth, director, Business Development, Trimble Civil Infrastructure Solutions. "We must work together as an industry to address environmental sustainability, and we are pleased that the data from this study shows we're making small steps in the right direction through the use of technology."

Results were released in the study "Quantifying Productivity and Sustainability" at ConExpo 2023, North America's largest trade show for construction machinery, building material machines, mining machines, construction vehicles and construction equipment. The Trimble booth is located in the Las Vegas Convention Center West Hall #W-41522.

To ensure consistent data for analysis the study team established control variables that included area to be compacted, machine type and soil composition. Comparing the results to manual operation, the use of assisted steering functionality that was tested provided:

- Reduced time to complete the task by an average of 29.36 percent
- Reduced fuel consumption by 26.46 percent
- Potential carbon savings of 15,262 pounds, or an average of 26.46 percent
- Potential labor savings of up to 40 percent

While phase one of Trimble's testing was focused on quantifying the productivity and sustainability of horizontal steering control for soil compaction, future field studies are planned to validate similar findings across various machine types, including excavators, dozers and motor graders.

To download the study, visit https://heavyindustry.trimble.com/productivity-and-sustainability-study.

About Trimble Construction

Trimble is developing technology, software and services that drive the digital transformation of construction with solutions that span the entire architecture, engineering and construction (AEC) industry. Empowering teams across the construction lifecycle, Trimble's innovative approach improves coordination and collaboration between stakeholders, teams, phases and processes. Trimble's Connected Construction strategy gives users control of their operations with best-in-class solutions and a common data environment. By automating work and transforming workflows, Trimble is enabling construction professionals to improve productivity, quality, transparency, safety, sustainability and deliver each project with confidence. For more information, visit: construction.trimble.com.

About Trimble

Trimble is an industrial technology company transforming the way the world works by delivering solutions that enable our customers to thrive. Core

technologies in positioning, modeling, connectivity and data analytics connect the digital and physical worlds to improve productivity, quality, safety, transparency and sustainability. From purpose-built products to enterprise lifecycle solutions, Trimble is transforming industries such as agriculture, construction, geospatial and transportation. For more information about Trimble (NASDAQ: TRMB), visit: www.trimble.com.

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