

# Trimble, Hilti and Boston Dynamics to Integrate Robots into Construction Site



Trimble, Hilti and Boston Dynamics have announced a collaboration to explore the integration of Trimble's and Hilti's construction management software solutions, GNSS technology and reality capture devices with Boston Dynamics' Spot Robot platform. The objective behind the partnership is to explore the use of autonomous robots, equipped with Trimble and Hilti survey instruments, in the construction industry.

*(This news article contains a video)*

Autonomous robots can play a significant role in construction, specifically in production and quality control workflows by enabling automation of routine and tedious tasks, reducing workload and improving safety. The companies will collaborate to develop a

"proof-of-concept" solution. Equipped with Trimble's and Hilti's [reality capture devices](#) as its payload and directly communicating with a cloud-based construction management application, the [Boston Dynamics](#) Spot Robot will be able to provide consistent output, deliver improved efficiency on repeatable tasks and enable up-to-date as-built data analysis.

## Daily site scans and progress monitoring

The autonomous, terrain-agnostic capabilities support the dynamic nature of the construction environment, enabling the robot to bypass obstacles and maintain its defined path to support routine tasks such as daily site scans, progress monitoring, asset management and remote support. Multi-directional communication between the robot, [Trimble's](#) and [Hilti's](#) payloads and the cloud application support a continuous flow of information and closes the loop for the construction environment.



"Utilizing robots for routine tasks in hazardous environments to improve safety, efficiency, and data capture consistency is part of our digital transformation vision," said Aviad Almagor, senior director for Mixed Reality and Brain-Computer Interface (BCI) at Trimble. "We are excited for this latest collaboration and looking forward to the potential integration of our hardware and software solutions with the Boston Dynamics' Spot Robot to enhance field-oriented workflows, reduce amount of rework and facilitate on-site tasks."

## Transformation of the construction industry

"Trimble's and Hilti's domain knowledge, market leadership and technologies are a great fit for our robotic platform," said Michael Perry, vice president of Business Development at Boston Dynamics. "Deploying an integrated solution in the real-world environment doing dirty and dangerous work, before, during and after the construction stage, is a common vision for the three companies, which can help drive the transformation of the construction industry."

