

Leica Geosystems Launches Tilt-compensated Total Station Pole Solution



Leica Geosystems, part of Hexagon, has introduced the Leica AP20 AutoPole, an innovative solution for automated total stations that boosts productivity to the next level through tilt compensation, automatic pole height readings and unique target identification.

The AP20 AutoPole combines an intelligent sensor module with the new AP Reflector Pole and operates with Leica

Geosystems' existing automated total stations to create an advanced solution for autonomous workflows. It opens up new possibilities and solves three common workflow challenges: holding the pole vertical and stable, entering the pole height manually into the field software and locking to a foreign target on a site with multiple reflectors.

Autonomous Workflows

The tilt compensation of the AP20 AutoPole increases efficiency when working with total stations. There is no longer a need to level the pole for measurements and stakeout. Tilt compensation decreases measurement time and increases flexibility and safety on site by enabling the measuring of points in locations that are inaccessible or put the user at risk. By updating the pole height automatically in the field software, the system ensures that the height on record is always correct, which avoids errors, time-consuming postprocessing and returning to the field to remeasure. Additionally, the AP20 AutoPole's target identification ensures the user's instrument will always lock to the correct target. The innovation is another step towards autonomous workflows in line with Hexagon's mission to develop autonomous solutions that lead to increased productivity, safety and sustainability.

"At Leica Geosystems, we understand that tight time schedules, growing expectations for accurate on-demand data and budget constraints put a lot of pressure on surveyors and construction professionals," said Hans-Martin Zogg, business director, total stations, at Leica Geosystems. "The [AP20 AutoPole](#) is a game changer because it solves several challenges simultaneously. Its tilt compensation and automatic pole height readings are absolutely unique in the industry and will transform how professionals measure with total stations."

"As a surveying company, the only way we can stay competitive and profitable is to acquire spatial data simply, quickly and efficiently," said Clifton Webb, director of Warner Surveys. "The Leica AP20 helps us stay ahead of the curve by increasing our productivity and flexibility. It allows us to measure points that were impractical or unsafe to measure before."



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