

Leica Geosystems Combines New UAV Technology with DJI Aerial Platform



Leica Geosystems has announced the new Leica Aibot, the latest unmanned aerial vehicle (UAV) system based on DJI's aerial platform, the M600 Pro, to rapidly and autonomously acquire mobile 3D mapping data. With the new UAV technology, the Switzerland-based geomatics solutions provider aims to allow users to get a complete dataset in less time with a user-friendly and innovative interface. This opens up new business opportunities while requiring less time, money and effort than traditional methods.

Leica Geosystems' software suite supports the new UAV workflows. Using Leica Infinity for point cloud, digital surface model and orthophoto generation enables surveyors to easily process and visualise aerial data to maximise productivity and speed-up data delivery. Supporting users to share data to Cylcone and Cloudworx, the integration of the

UAV point cloud with terrestrial scan data enables users to make the most informed decisions. This complete set of data results in higher project efficiency.

With constant new ideas, projects and numerous challenges it is crucial for the business to have access to transformational technologies such as the new Leica Aibot, that keeps projects on schedule with the maximum accuracy and precision, said Martin Schwall, owner and managing director of IngenieurTeam GEO. He said his team looks forward to continue using Leica Geosystems technology and adding Leica Aibot to their portfolio.

Automating operations

The new [UAV technology](#), developed in partnership with DJI, the world's leading manufacturer of UAVs, allows users to process and analyse millions of data points gathered from above and visualise the data to provide actionable information. UAV data can be combined with existing survey technologies, such as a total station, GNSS and laser scanning, providing a more complete set of information.

Throughout a project lifecycle of planning, designing and construction, Aibot provides easier access to critical information to perform volume calculations and monitor site progress. From creating digital terrain models to stripping and bulk earthworks and trenching to finally fine grading, paving and compaction, the solution supports easier actuals comparisons. This provides a more transparent view of site progression monitoring and volume calculations with safer operations to keep projects on schedule.

New level of accuracy

Leica's new UAV can identify gaps early with a level of accuracy previously unknown for the construction industry. High definition imagery and 3D mapping allow for the viewing of site mapping or progress documentation, meaning users save time and money at all stages of the project.

The Leica Aibot opens tremendous amounts of opportunity and helps the customers to speed up digitisation of processes and to automate existing workflows, said Valentin Fuchs, Leica Geosystems UAV product manager. It enables customers to run businesses that are more efficient than their predecessors and be more profitable.

[Further information about the Leica Aibot can be found here.](#)