

Leica Geosystems – when it has to be right

With close to 200 years of experience pioneering solutions to measure the world, Leica Geosystems products and services are trusted by professionals worldwide to help them capture, analyze, and present spatial information. Leica Geosystems is best known for its broad array of products that capture accurately, model quickly, analyze easily, and visualize and present spatial information.

Those who use Leica Geosystems products every day trust them for their dependability, the value they deliver, and the superior customer support. Based in Heerbrugg, Switzerland, Leica Geosystems is a global company with tens of thousands of customers supported by more than 3,500 employees in 28 countries and hundreds of partners located in more than 120 countries around the world. Leica Geosystems is part of Hexagon, Sweden.

Leica Geosystems customers are active across a wide spectrum of industries. And what our customers measure is equally diverse. Sometimes it's a single point: a height above sea level, the distance from one wall to the other. Sometimes, many points are involved, as complex objects are positioned and assembled with micron-level precision, or the entire face of a building is scanned into a 3-dimensional drawing. And sometimes, a complete image must be captured and analyzed, to create accurate maps, multilevel representations and 3D fly-through models.

From measurement to map to model

Like no other company, Leica Geosystems offers solutions for all these needs. From an architect calculating how much paint is needed, to an engineer designing a bridge, to a surveyor optimizing wireless phone tower coverage.

Leica Geosystems solutions encompass a workflow that transforms raw data into useful information, turning measurements into maps, and maps into models that capture the real world. With the broadest range of competencies within the geomatics industry, Leica Geosystems delivers a comprehensive range of products that work together in a complete, end-to-end workflow. Systems that integrate and operate consistently allow our customers to work faster, more efficiently, and more productively.

Capture

In the data processing business, there's an expression: "garbage in, garbage out," and it's nowhere more true than in the capture phase of the geomatics workflow. Accurately capturing reality is the starting point for valid measurements.

Reference

To be meaningful, a captured reading must be compared to a known reference point. Once referenced, the reading becomes a data point with a known position and significance, the basis for measurement.

Measure

Gather two or more referenced data points and you have a single, accurate measurement – the distance

between them. Additional information can be gleaned from the relationships between points in a group, building up a data model that matches the real world.

Analyze

Once complete, the data model can be analyzed to determine meaningful, useful information about the real world. Complex models comprise thousands of measurements, demanding powerful software algorithms to crunch through the spatial data – software that Leica Geosystems specializes in.

Present

The results of these analyses are presented to the user in the most practical form for use. Sometimes all that's needed is a single numerical reading; in other cases, graphical presentation – graphs, maps and 3D representations – is easier to work with. Leica Geosystems software sets the standard for this critical last step.

Not every Leica Geosystems customer operates across the entire workflow; many have specialized needs within one phase. But all benefit from the breadth of expertise we offer, the depth of our research, and the commitment to each other's success. Our customers recognize the advantage of sourcing solutions from a single supplier who can meet their needs – both today and tomorrow, as demands change, business expands, and activities grow more complex.

Working together with these professionals, we solve problems, develop new ideas and invent new technologies. It is this collaboration which ultimately shapes Leica Geosystems products and services, drives our customers' businesses, and improves the world in which we all live.

www.leica-geosystems.com