Seamlessly integrated construction scanning workflows

Topcon scanning solutions enable construction trades to work more productively, more efficiently, and enable your team to stay better informed. Together with ClearEdge3D, the seamlessly integrated workflows cover a range of applications including documenting a job site in its as-built conditions and performing construction verification to ensure that your project’s accuracy is built 100% to plan.

GLS-2000 Scanner
- Fast, precise scanning
- Reduced noise, high-quality point clouds
- Full dome field-of-view (fov)
- World’s first – direct height measurement
- Scan from surveyed points to significantly reduce office processing time

MAGNET® Collage and Collage Web
- Fast processing from any scanner plus instant on-line sharing
- Process, combine, and analyze 3D point clouds from diverse sensors
- Share and collaborate with 3D point clouds and meshes
- Third-party hardware processing

Quickly process and share data with your construction team

The innovative GLS-2000 has a ruggedized design that provides users with an impressive solution even in the most extreme work environments. Combined with MAGNET Collage, data processing is easier and faster for any level of user.

Be productive. Our universal scanning workflows go fast.

Efficient workflows mean processed data and intelligent deliverables without waiting hours. The optimized integration between hardware, software and process automation cuts down time from reality capture to final deliverables.
Build better and model faster with ClearEdge3D software

After capturing a point cloud with the GLS-2000 and rapidly processing with MAGNET Collage, ClearEdge3D’s automated modeling and object recognition software completes the process by creating as-built documentation and enabling construction verification.

- Reduce risks to budgets and schedules
- Clear indication of construction quality with as-built tolerances
- Increase project profitability by avoiding rework
- Fully integrated with Autodesk® Navisworks®
- Quickly update your coordination model to as-built conditions

Construction Verification Software
Verify construction quality in a fraction of the time by comparing as-built point clouds against design and fabrication models.
- Reduce costly rework by finding flooring issues while concrete is still workable
- Reduces ASTM E1155 reporting from days to minutes
- Perform QA/QC workflows in house
- Easily visualize floor deviations with heat maps, contours, and grid points
- Quick and reliable communication of quality issues to all stakeholders

Real-Time Floor Flatness and Levelness (FFL) QA Software
Conveniently perform FFL analysis directly from scan data loaded into Autodesk Navisworks, an AEC industry standard platform.
- Reduce costly rework by finding flooring issues while concrete is still workable
- Reduces ASTM E1155 reporting from days to minutes
- Perform QA/QC workflows in house
- Easily visualize floor deviations with heat maps, contours, and grid points
- Quick and reliable communication of quality issues to all stakeholders

Automated 3D Modeling Software
Reduce your as-built modeling time by up to 75% with automated feature extraction and pattern recognition technologies.
- Complete better than half of the model with zero man-hours
- QA tools to verify accuracy and fit for every object
- MEP, plant, structural, and Architectural modeling capabilities
- Model 3D as-built pipes, structural elements, ducts, walls, tees, and conduits
- Full interoperability with Autodesk Revit, Plant3D, PDMS, CadWorx, and INOVx
End-To-End Scanning Solution

Together, Topcon and ClearEdge3D provide the ideal scan-to-BIM and construction verification solution. Each element works better together to provide seamless end-to-end data workflows.

Build per plan with 100% verification
Find mistakes before they become expensive problems. Evaluate construction quality and provide as-built tolerance by comparing point clouds against design and fabrication models.

Increase modeling productivity by 2-3 times
Obtain faster, more accurate 3D modeling from MEP, structural and architectural elements with automated feature extraction and pattern recognition technologies.

Share point cloud data over the web with project stakeholders
MAGNET Collage Web is a web-based service built to share and collaborate with point clouds, meshes, UAV data, and BIM data. It provides Virtual Design and Construction (VDC) teams and contractors easy access to project data 24/7 without installed software.