VERITY

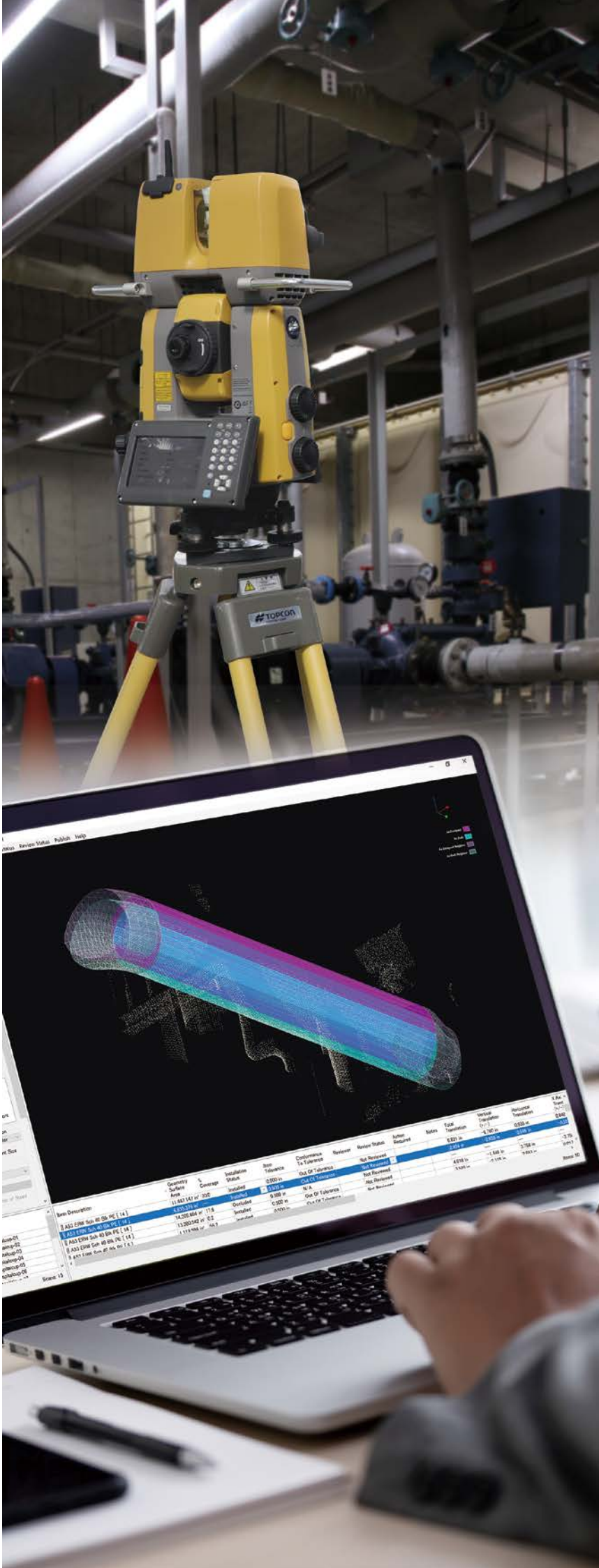
CLEAREDGE3D

VERITY

Construction Verification Software

Automatically Compare Point Clouds vs BIM Model and Visualize Installation Accuracy

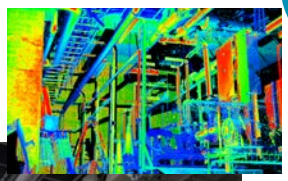
- Instantly understand construction accuracy in 3D
- Achieve efficient inspection of structure and piping
- Minimize risk of budget and schedule changes
- Non-contact inspection using point cloud data from laser scanner
- Export inspection results to project management platforms
- Remotely conduct QA/QC via internet
- Add-on software to Autodesk Navisworks



Automatically Verify As-Built Point Cloud Against BIM Design Model

3D Scan → **Process Point Cloud Data** → **Compare with BIM Model**

Acquire As-Built Point Cloud Data



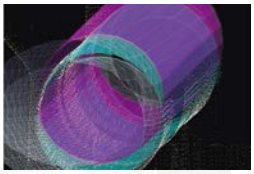
3D Laser Scanner
GLS-2200

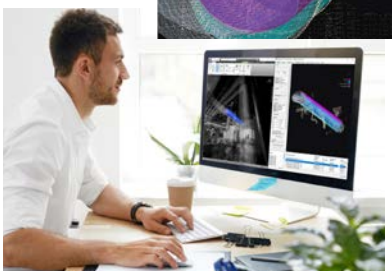
Laser Scanner Total Station
GTL-1000

Scan pipes, steel structure, etc. on site using 3D survey equipment.

Collage

Create point cloud data using processing software MAGNET Collage.





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Automatically compare as-build 3D point cloud with BIM Model.

Increase Productivity of Construction Projects Through Effective Report Sharing

Verity provides an efficient process to inspect and manage installation accuracy. The verification results are formatted into a Report, which can be shared between the Construction company, Designer, and Owner. This allows swift discovery of mistakes and easy consensus-building on how to resolve it. This can minimize risk of schedule delays and eliminate rework, estimated to be around 10% of construction cost.

Effective Auto-Verification Features

Verity automatically compares as-built point cloud with the BIM design model, and outputs pass/fail results and error measurements (displacement, rotation, twist, etc.) Compared with the traditional spot-check method, you can now inspect ALL elements on site, leading to more trustworthy construction results.

Additionally, Verity can color-code elements in Autodesk Navisworks according to inspection results (Pass, Not Found, Out of Tolerance, etc.). This visualization allows instant understanding of the installment status on site.

Online QA/QC from Remote Locations

Inspection results can be viewed in 3D from remote locations via connected devices (smartphones, tablets, etc.).

Operating Environment

OS	Microsoft® Windows® 10,8.1,8 (64bit),7(64bit SP1)
	Home Basic, Home Premium, Professional, Enterprise, Ultimate (recommended)
CPU	Intel® Core i7 - 8700K or AMD Ryzen 7 1700x 3.8 GHz or higher (with SSE2)
RAM	16 GB or more
Graphics card	Nvidia GTX 1050 or more

Navisworks Simulate or Manage is necessary. *Rithm will not work on Navisworks Freedom.

TOPCON

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