



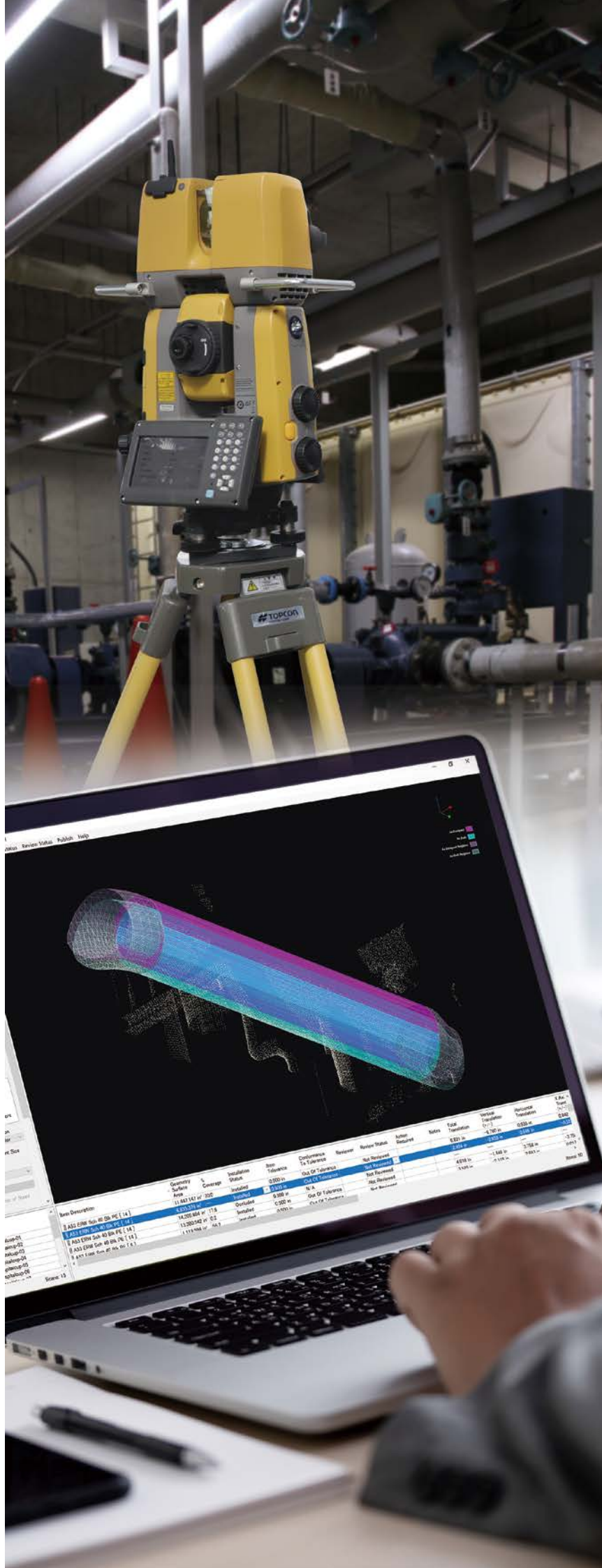
CLEAREDGE<sup>3D</sup>



Construction Verification Software

## Automatically Compare Point Clouds vs BIM Model and Visualize Installation Accuracy

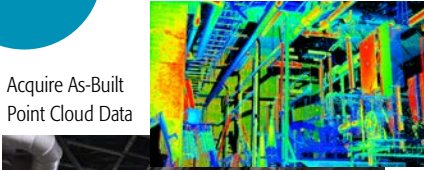
- Instantly understand construction accuracy in 3D
- Achieve efficient inspection of structure and piping
- Minimize risk of budget and schedule changes
- Non-contact inspection using point cloud data from laser scanner
- Export inspection results to project management platforms
- Remotely conduct QA/QC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





# Automatically Verify As-Built Point Cloud Against BIM Design Model

**3D Scan**



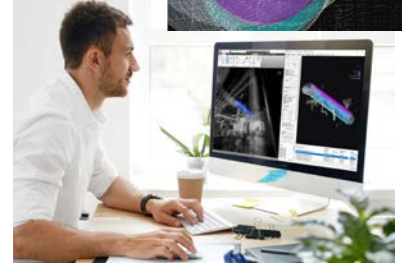
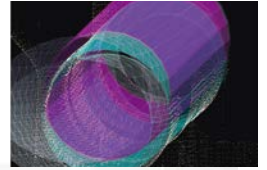
Scan pipes, steel structure, etc. on site using 3D survey equipment.

**Process Point Cloud Data**



Create point cloud data using processing software MAGNET Collage.

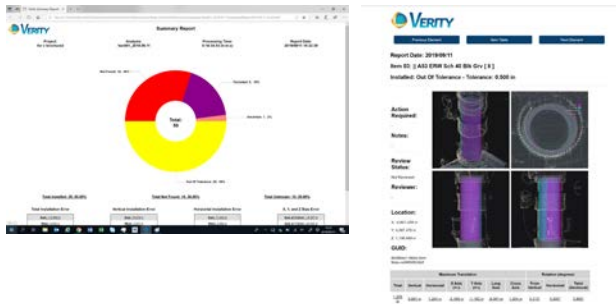
**Compare with BIM Model**



Automatically compare as-built 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.



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