

Ingredient automation is our world.

Welcome to AZO!

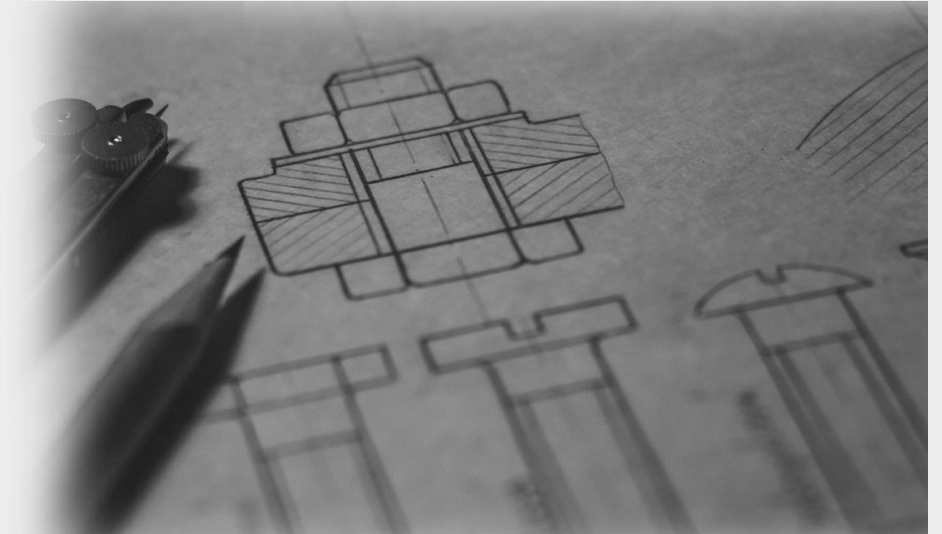


## CRITERIA AND SOLUTION

*Measuring distances using a folding ruler – calculating pipe circumference with a tape measure – images for orientation – laborious creation of sketches by hand*

In the past, the effort of recording dimensions on site for existing buildings and installations was often a time-consuming process which left system designers with a degree of uncertainty in the positioning of equipment.

This process has been significantly simplified through the acquisition of a 3D laser scanner. Using a laser-based scanning system, it is now possible to generate a high quality record of dimensions in the form of a point cloud which, with the support of image material, offers improved visualisation of the installations, building, equipment and interference contours.



Recording

Transferring

Processing

Making available

Measuring

Modelling



## TECHNICAL HARD & SOFTWARE

*The AZO 3D scan equipment is easy to transport and can also be taken onto an aeroplane as hand luggage.*

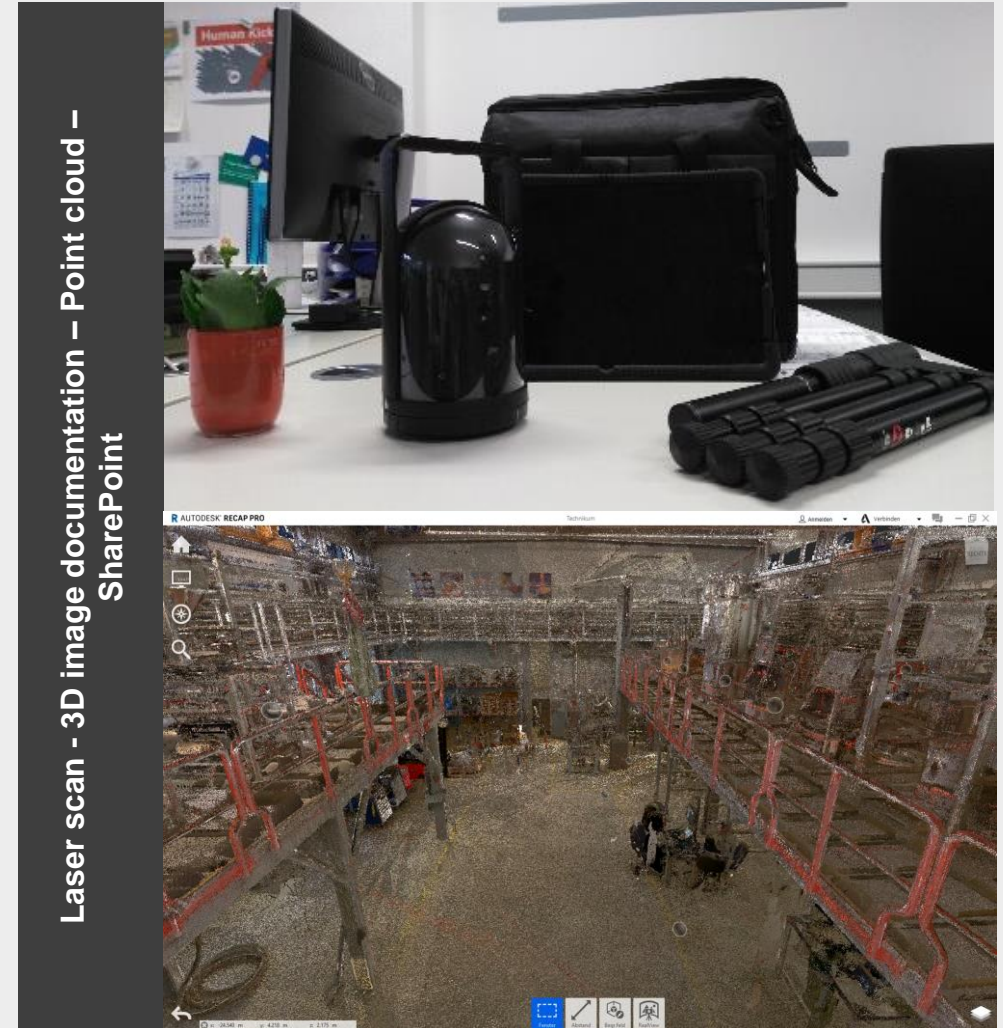
### OUR LASER SCANNER - LEICA BLK360

- Laser class 1
- Protection class IP54 (IEC 60529)
- Replaceable Li-ion battery
- Field of view: 360° horizontal / 300° vertical
- Visibility: up to 60 m
- 360,000 points per second
- Accuracy: 4 mm at 10 m / 7 mm at 20 m
- Temperature ranges: +5°C - +40°C

The 3D laser scanner is positioned on a tripod at the location to be scanned and controlled via an iPad using the Autodesk®ReCap software.

Thanks to a range of scan qualities, there are options for scanning different scenarios as desired. **THE RESULT** is a **coordinate-based point cloud including 360° images** for improved visualisation.

Once the point cloud has been processed, we make the file available to you via a **private SharePoint**; we are happy to advise you on the next steps. You can examine the result yourself using a freeware solution from Autodesk, and contact us at any time.



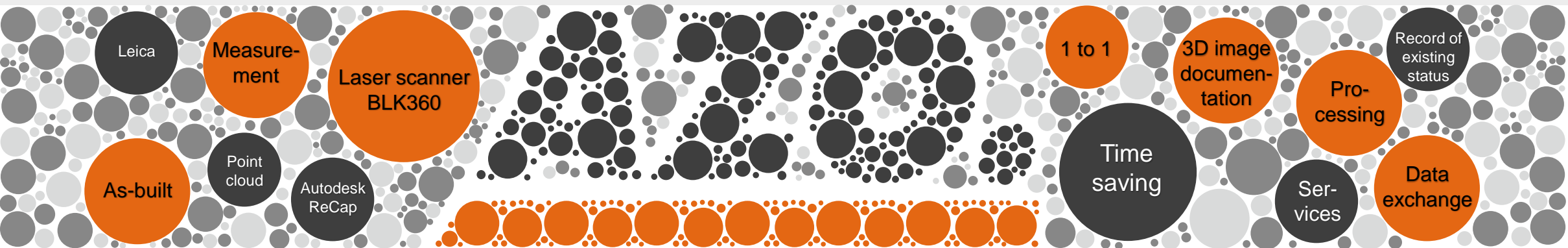
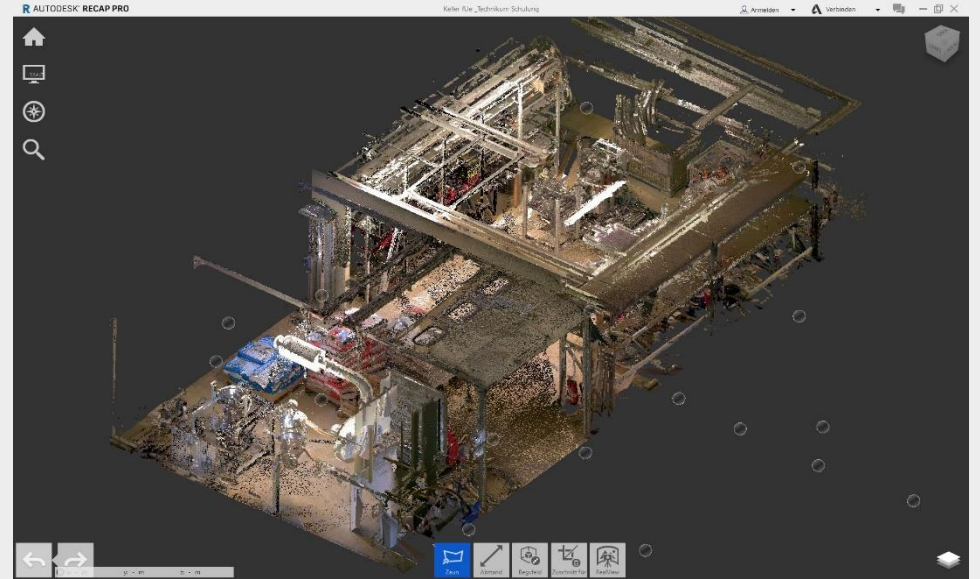
## INTEGRATION PROCESSES – ADDED VALUE

### FROM YOUR PERSPECTIVE

- Image documentation of your existing installation (as-built)
- Point cloud for next processing steps
- No need for additional measurements when positioning components
- Save time/costs using explicit recording instead of manual measurements
- Incorporation of point cloud into VR technology & Navisworks
- Implementation of 3D models in your existing system/building

### FROM AZO'S PERSPECTIVE

- Rapid overview of the installation for our employees
- Minimise errors by recording the environment
- Overlaps with other equipment avoided (e.g. ventilation ducts)
- Improved certainty for system design
- Dimensions can be measured at any time





**THANK YOU FOR YOUR INTEREST!  
ANY QUESTIONS?**