

Leica Geosystems **TruStory**

Leica 3D Disto for taking measurements



■ Company

Dietrich's AG
Hauptstrasse 37
D-85579 Neubiberg
kontakt@dietrichs.com
www.dietrichs.com

■ Challenge

To measure and mark out a car port on a free floor plan with the prescribed heights

■ Solution

Measurement with the Leica 3D Disto and direct transfer to Dietrich's CAD system

■ Result

- Fast and efficient measurements by only one person
- Reliable measurements and simple operation thanks to the direct connection to the usual CAD system
- Taking inaccessible measurements
- Marking out the CAD points
- The 3D Disto takes exact measurements, making it easy to complete the task of prefabrication of construction elements

In order to make a wooden construction, accurate measurements have to be taken first. If the ground is uneven, the floor plans are not straight, whether the buildings are old or existing, exact measurements are required for the project to run smoothly.

By accurately taking stock of the situation, more prefabricated parts can be made, and with greater accuracy. For the most part, additional adjustments to lengths and distances and extra work on the construction site are no longer needed. The use of material is more efficient and the assembly time is reduced.

Measurements, construction and production

The site for the client's new car port was measured accurately by just one person with the Leica 3D Disto. This system can be used to measure both the height and the area. The measurements

were automatically transferred to a mobile computer system and were immediately available in the Dietrich's 3D-CAD/CAM software.

Data recorded in this way serves as the basis for planning the 3D construction of the car port. After construction, all individual parts were transferred from the CAD software for production to a CNC controlled joinery factory and then delivered to the construction site for assembly.

Staking the points and assembly

On the construction site, all assembly points, positions of bore holes, etc. were identified with the Leica 3D Disto using a laser point from the Dietrich's CAD system and marked out. The combined measurement and construction data served as the

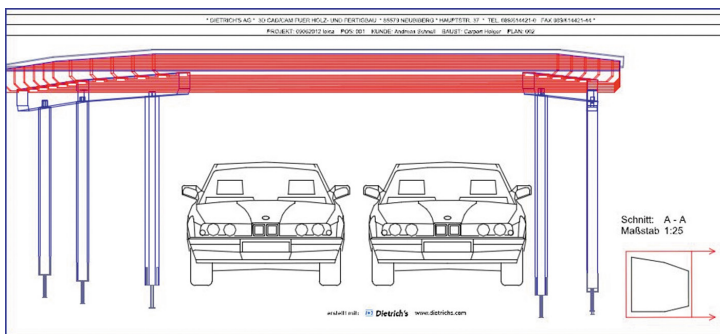


The Leica 3D Disto records exactly the shapes of the area and marks the assembly points.



Product Highlights

- High accuracy
- Measuring from a single point
- Measuring inaccessible points
- Scan function for automated measurements
- Integrated camera function for documentation (simplifies assessments)
- Connection to Dietrich's CAD software
- Software-assisted marking out



basis for this. This allowed for the on-site installation to run smoothly, effectively, and without error. Using the 3D Disto led to a cost savings of roughly 30% due to one-man operation, and the time savings of using this cutting edge solution instead of using traditional methods.

