

# Laser Scanner LS - FARO Cloud for AutoCAD



## [A] Draw-To-CAD

The Draw-To-CAD feature transmits points, digitized in FARO Scene (left window) in real-time to FARO Cloud for AutoCAD (right window).

## [B] Managing point clouds with scan areas

Point clouds may be divided into several areas which may even be colored uniquely to help identifying them.

## [C] Use orthophotos from the FARO Heritage Package

Importing orthophotos from FARO's Heritage Package allows you to digitize on a scaled 2D image which still carries the depth information.

## [D] Use the AutoCAD object snap features

Each scan point is a snapable object to AutoCAD. This helps you to draw "as-built" as easy as never before.

## FARO Laser Scanner LS

The FARO Laser Scanner LS is a portable non-contact measurement system which uses laser technology to accurately measure manufacturing plants, processing facilities, and in specialized applications ranging from forensics to heritage sites. The system rotates 360 degrees and automatically measures everything within the line of sight from the scanner's position. The stand-alone system records millions of 3D measurements in real time.

### Enjoy the merged power of AutoCAD applications and the FARO Laser Scanner LS

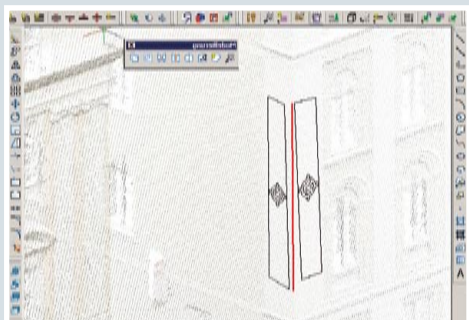
FARO Cloud for AutoCAD is an AutoCAD based application which allows you to load big amount laser scan data into the AutoCAD environment to use them together with all the powerful drawing features, AutoCAD applications are known for! You want to utilize your point clouds to create an as-built CAD model? You want to have light-weight drawing files despite they are linked with Megabytes of scan data? You need to create polygonal planes and intersect them whenever needed? You want to know, whether your newly designed equipment will clash with the existing parts of your plant? You want to take advantage of the existing AutoCAD knowledge of your design team? If your answer to one or more of these questions is "yes", then FARO Cloud for AutoCAD is what you need!

## Features

- ▶ Use large point clouds within any AutoCAD application
- ▶ Take advantage of your AutoCAD knowledge with minimum learning effort
- ▶ Avoid "heavy" CAD files, loaded with too many scan points
- ▶ Unique dynamic link between FARO Scene and FARO Cloud for AutoCAD
- ▶ Use FARO Clouds plane features to create intersections of polygonal planes

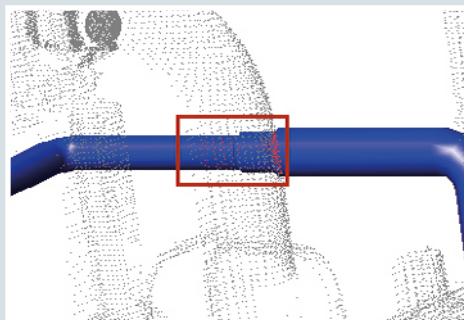
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## Functions



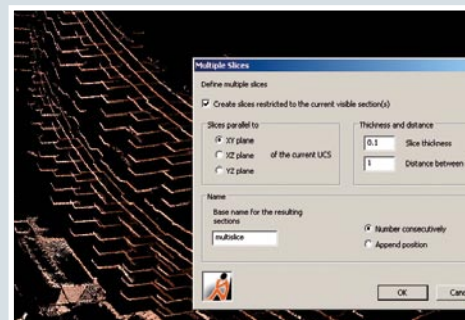
### Working with fitted planes

Alignment of FARO Cloud planes at the walls and on the pavement. Intersecting two planes will create the corner line. Three planes will end in their intersection point.



### Clash detection

The easy-to-use clash detection feature of FARO Cloud for AutoCAD will let you know immediately whether your newly designed equipment will fit reality.



### Create multiple slices

It has never been more straight-forward to create one or multiple slices from point clouds within AutoCAD.

### Typical applications

Creation of as-built CAD models or comparison of the once planned situation against what was built in reality – no matter whether it is in Architecture, Civil Engineering, Mechanical Design or Land Surveying.

## Available Features

- Import of (colored) point clouds
- Visualization of the scan points with correct sequence of view and continuously optimized resolution
- Support of AutoCAD object snap
- Draw-to-CAD - dynamic link between FARO Scene and FARO Cloud
- Simultaneous evaluation of high-res orthophotos in point clouds
- Point cloud organization by the means of scan areas
- Viewing and hiding of scan areas
- Colorization of scan areas
- Creation of multiple slices from point clouds
- Fitting and working with planes (PRO version)
- Three dimensional drawing and working with oriented images (PRO version)
- Clash detection against AutoCAD solid objects (PRO version)

## Technical specifications

### Platforms:

AutoCAD 2004/2005/2006/2007/2008 and all specialized applications based on AutoCAD (ADT, Map3D, Civil3D,...)

**Scan file format:** PTC (directly exported from FARO Scene), ASCII (x, y, z), both in grayscale and color.

**Languages:** English, German

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