# FARO Plant Ready Package for AutoCAD®

Laser Scan to Digital Deliverables for the Industrial Plant Lifecycle



The Plant Ready Package for AutoCAD® combines FARO's innovative Focus<sup>3D</sup> Laser Scanner, intuitive SCENE registration software and PointSense Plant. The intellectual point cloud extraction tool for delivering real world information into intelligent plant models. Efficient delivery and analysis of accurate as-built information benefits project owners by enabling them to reduce overall project costs while meeting or exceeding scheduled deadlines. FARO's customized Plant Ready Package for AutoCAD® provides customers with a fully comprehensive field-to-finish solution for every phase of the industrial plant lifecycle.

#### **Testimonial**

FARO X330 scanner and SCENE come together to provide us with the tools we need to quickly and efficiently gather accurate data for our client's projects. With the addition of PS Plant to our toolset, we have a cohesive, complete product that allows us to gather, process and deliver a product that not only meets but exceeds our client's expectations. The intuitive functionality and the ability to provide a wide range of deliverables has made this toolset not only invaluable to our company but an essential tool for satisfying our client's needs.

Okey B. Wagner II, GISP Mapping Specialist, Open Range Field Services, LLC, openrangefieldservices.com

#### Scan



Capture reality accurately with a FARO Focus<sup>3D</sup> Laser Scanner

#### Process



Agent Theoremain Control Theorem



Process and register in SCENE



#### **Advantages**

- Fast, straightforward and accurate scanning capability
- Point cloud imagery with authentic color for true-to-life visualization
- Improved and automated registration workflow with an intuitive user interface
- Intuitive routines for catalog driven pipe modelling, structural modeling and tie-in point extraction
- Work with laser scan data directly inside AutoCAD<sup>®</sup>
- Catalog driven pattern recognition for industry standard components or user created fittings
- Clash detection between solids and cloud data
- Support for insulated pipe runs
- One complete ready-made solution for all common industrial plant applications

#### Deliver



Model and deliver in PointSense Plant for AutoCAD®



## FARO Plant Ready Package for AutoCAD®

Laser scanning is still an emerging technology, which places high demands on equipment and software. This bundle combines the most advanced hardware with the most sophisticated software into one all-inclusive package for a seamless workflow.







# Focus<sup>3D</sup> X Series Laser Scanner

The smallest and lightest laser scanners on the market - the Focus<sup>3D</sup> X Series are ideal tools for indoor and outdoor applications. The fast and accurate Focus<sup>3D</sup> Laser Scanners offer everything you expect from professional 3D laser scanners along with FARO's established and well-known level of simplicity.

- Focus<sup>3D</sup> X 330 offers extra long range 330 meters.
- Focus<sup>3D</sup> X 130 is a mid-range device offering precise scanning up to 130 meters.
- The HDR imaging function and high-resolution photographs deliver realistic and true-to-detail scan results with spectacular image quality.
- The Focus<sup>3D</sup> X 30 Laser Scanner is specially designed to fit the need of short-range and interior scanning applications, capturing data up to 30 meters.
- All Focus<sup>3D</sup> X Series scanner types offer the ability to perform exceptional scanning in bright sunlight.

## SCENE Software

SCENE processes and manages scanned data easily and efficiently by using automatic object recognition as well as scan registration and positioning. SCENE can also generate high-quality colorized scans very quickly, while providing the tools for automated target-less scan positioning.

- Once SCENE has prepared the scan data, evaluations and further processing can commence immediately.
- Scan projects can be published on a web server at the touch of a button.
- The new SCENE WebShare feature allows easy access to laser scans with a standard Internet browser.

## PointSense Plant

Plant engineers can process point clouds directly into AutoCAD<sup>®</sup>. Industry standard piping systems and structural steel elements can then be extracted efficiently. The resulting models can be converted directly into plant design programs such as Plant 3D<sup>®</sup>, MEP<sup>®</sup>, CADWorx<sup>®</sup>, AutoPLANT<sup>®</sup> etc. PointSense Plant has all of the comprehensive tools and functionality to model, manage and process 3D scan data in AutoCAD<sup>®</sup>.

- Intuitive routines for modelling piping and structural systems from 3D laser scans
- Intelligent shape extraction assisted by industry standard catalogues
- Determine precise flange tie-in points
- Analyze pipes, tanks, vessels and foundations for deformation
- Calculate tankvolumes at various intervals while accounting for deadwood

## Technical Requirements

Operation system	Dependent on the version of AutoCAD® being used, recommended is a 64 bit system.
Platform	AutoCAD® and the associated vertical products such as Civil 3D, Architecture or Map 3D subsequent to the 2013 versions. From the 2015 releases onwards 64-bit support only. Should you be using older Autodesk® products please check with your FARO distributor.
Hardware requirements	Computer: Graphic card as recommended by Autodesk®, processor at least 2.5 GHz, RAM at least 8 GB; Laser scanner type to suit job in hand.
Data requirements	Registered, that is to say the scans are oriented to each other.
Supported scan data formats	Riegl RiScanPro-Projekte (RSP), Leica (PTZ, PTS, PTX), ASCII, LAS, E57, Zoller&Fröhlich (ZFS, ZFPRJ), Topcon (CL3, CLR) Leica (PTG) and Faro (FLS, FWS).

#### Demo & Trial

Request a laser scanner demo or software trial via: www.faro.com/about-faro/contact/general-contact All solution components are available as single products. www.aec.faro.com Freecall: 00 800 3276 7253 info@faro-3d-software.com