

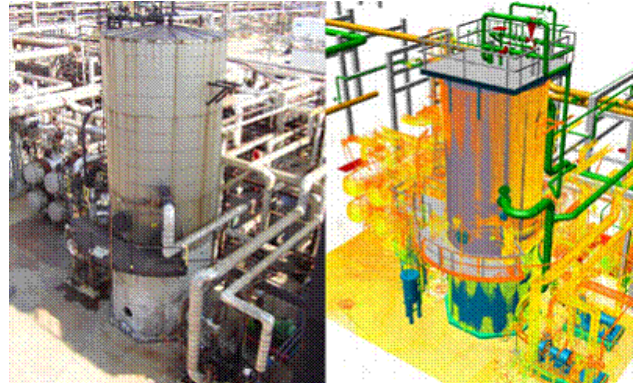
# Laser Scanning and 3D Plant Modeling

Hosted by: [valdes engineering company](#)

**Date:** Tuesday, September 15, 2009

**Time:** 5:30pm – 6:00pm Networking  
6:00pm – 7:00pm Presentation

**Location:** Valdes Engineering Company  
211 W. Ridge Road  
Griffith, IN 46319  
(219) 923-1160



See Examples of 3D Plant Modeling & a Demonstration of 3D Laser Scanning

**Speakers:** Chris Siebern, PLS, PE – Project Manager, Valdes Engineering Company  
Bob Burke, PE – Project Manager, Valdes Engineering Company

## Overview:

Existing manufacturing facilities are typically congested with layers of complex equipment, piping, structural steel and conduit. In many cases, “as-built” design documentation and drawings are incomplete or out of date. This lack of existing or accurate information has been a challenging and costly problem to solve from an engineering and design standpoint. Recent advancements in High Definition Laser Scanning / 3D modeling technology has had a significant and beneficial impact on our ability to safely support and execute plant additions, revamp projects, turnarounds and scheduled maintenance activities.

Laser Scanning allows you to record as-built conditions, map and model facilities, systems, structures, piping, tanks, equipment, etc. in a format that can be utilized in a 3D design environment.

## Audience Members will Learn:

- **The Technology Behind Modeling and Laser Scanning.**
- **The Role of Traditional Surveying in Industrial Settings.**
- **Other Uses for Lasers in Industry (alignment, etc).**
- **How to Incorporate Laser Scanning into Projects.**
- **The Benefits and Pitfalls in Scanning.**

## Benefits of Laser Scanning:

- **Reduced personnel exposure to hazardous conditions.**
- **Better accuracy vs. conventional tape measurements.**
- **Better design coordination with existing conditions.**
- **Reduced field fabrication & re-work.**
- **Fewer field hydro-tests, x-rays, and PWHT's.**
- **Reduced shut-down, turn-around or outage time.**
- **Angular orientations are very accurate.**
- **Millions of points can be measured in minutes.**
- **The need for climbing is minimized or eliminated.**

**Sponsorship:** IEEE Calumet Section  
IEEE Technology Management Council Chicago Chapter (TMC)  
Professional Engineers: This meeting qualifies for Professional Development Hours

## Certificate of Participation

PE Name \_\_\_\_\_

Address \_\_\_\_\_

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State \_\_\_\_\_ ZIP \_\_\_\_\_

Presentation Start Time: 6:00 PM

Presentation End Time: 7:00 PM

PDH Claimed: 1.0 hr.

Presentation Type (Circle all that are applicable): [Live] [Film or Video] [Audio]  
[DVD or CD-ROM] [Web] [Other] Live

Presenter Signature \_\_\_\_\_ Date 9/15/09

Or

Sponsor or  
Facilitator Signature \_\_\_\_\_ Date 9/15/09

Sponsor: IEEE Calumet Section  
Chuck Vamos (cavamos@nisource.com)

Co-Sponsor: IEEE Technology Management Council Chicago Chapter  
Bob Burke, Chairman (robert.burke@ieee.org)

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