



Quantapoint PRISM 3D

Maximizing Value From As-Built Laser Documentation

Do project team members have access to accurate and complete as-built dimensions?

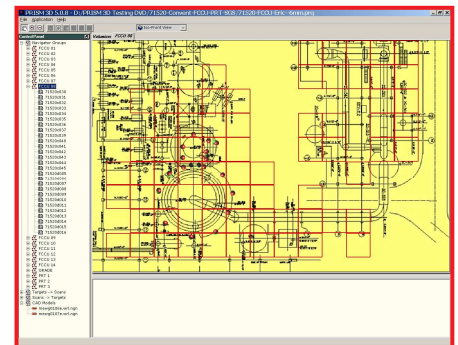
Are clashes or interferences due to incorrect dimensions causing rework?

Is construction rework adding significant time and cost to projects?

These are critical issues facing revamp project teams in today's highly competitive environment, where achieving world-class performance and sustainable competitive advantage relies on seamless execution of projects. *Quantapoint PRISM 3D*TM, winner of a prestigious R&D 100 award, is the most advanced and cost-effective technology available for managing, sharing and extracting dimensional and other information from as-built documentation using laser scanning. With *PRISM 3D*, companies can fully leverage their investment in as-built laser documentationTM to reduce risks through the entire project lifecycle. The result is reduced costs, optimized schedules, increased quality and improved safety, with project **rework being reduced by more than 80%** among other benefits.

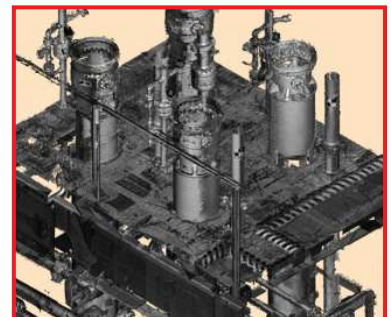
Better Information Sharing and Decision-Making

PRISM 3D provides a **comprehensive and trusted repository** of facility information that includes details such as small-bore piping, conduit, etc. The project team is provided with the information needed for **accurate prefabrication and dimensional fit-up**. This helps to ensure that design, fabrication and construction decisions are based upon consistent, accurate and complete information, reducing field trips, fit-up welds and clashes.



Easier Documentation Viewing and Data Extraction

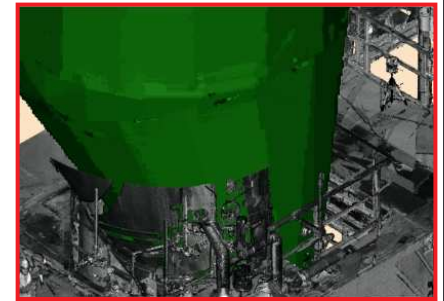
PRISM 3D enables Quantapoint as-built laser documentation to be accessed as **photo-realistic 2D laser scans or interactive 3D laser models**. Dimensional and other information can be easily extracted and specific areas can be easily enlarged or rotated and sections may be hidden to remove obstructions. This can be used to identify **design requirements, interference management options, demolition plans** and other design or construction activities that require accurate dimensional information.



*Quantapoint 3D Laser Model
(Not a CAD Model)*

Improved Designs and Reviews

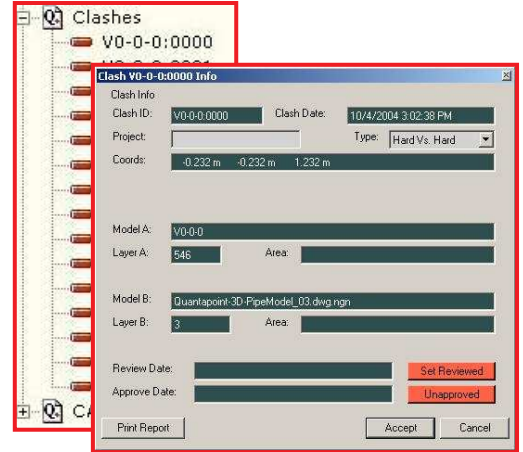
PRISM 3D can display CAD models with 3D laser models. This can be used to visualize proposed modifications for design and constructability reviews, compare and validate CAD models against the as-built laser documentation, or share proposed updates to project team members unfamiliar with CAD software. The result is **more accurate and faster design and review cycles.**



Quantapoint 3D Laser Model with 3D CAD Model

Advanced Clash Detection and Management

PRISM 3D can automatically clash multiple CAD models against 3D laser models using built-in advanced algorithms. Each clash is listed and shown in the models, and provides useful information such as location, models involved and clash type. Clashes may also be reviewed and managed using the built-in approval process, without requiring the reviewer to have CAD software. Reports are available to monitor progress and ensure all clashes are addressed prior to construction. This helps to **ensure clash-free designs.**



Easier Access to Project and Plant Information

PRISM 3D can also be used to add hyperlinks from 2D laser scans and 3D laser models to 2D drawings, equipment data sheets, operating procedures, maintenance history, training materials, vendor manuals, best practices and other information. This integration of facility documentation enables a single entry point for facility information, improving both the usability and accessibility of critical plant information.

Operational Safety Procedure (OSP)	
Cover Sheet	
Division serial number _____ (Assigned by Division EHS 686 office when complete)	
Issue Date:	
Expiration Date:	
Title:	
Location:	
Risk Classification (See EHS 686 Manual Chapter 3.10 Hazard Identification and Characterization)	Without mitigation measures (4, 3 or 2) With specified measures implemented (1 or 0)
Author(s):	
Supplemental technical validation:	
Hazard reviewed:	Reviewer signature:
Signatures	
Division EHS 686 office recommendation:	
Department manager approval:	
Other approval(s):	
Distribution: Copies to affected area, within division EHS 686 office, EHS 686 Reporting Manager (After completion, forward original to the EHS 686 Reporting Manager for archiving.)	

Proven Benefits

PRISM 3D facilitates a **comprehensive dimensional quality control program in support of detailed design work processes.** It delivers complete and trusted as-built laser documentation in an intuitive format for use during all phases of a project – from concept to start-up. Compared to other as-built technologies or traditional surveying techniques, Quantapoint as-built laser documentation has consistently proven to **reduce construction rework by 80% or more, saving millions of dollars and thousands of man-hours.**

“PRISM 3D points the way to work processes where design clashes are seen as discrete events, i.e., exceptions to be eliminated on the engineers’ desktop. Resolving clashes on the construction job site with cutting, welding and physical persuasion is too expensive.”

Tom Greaves, Senior Analyst
Spar Point Research