



Dimensional Control of Modular Construction

Fenstermaker offers solutions to complex surveying tasks associated with large scale dimensional control needs, workflows and processes utilizing the latest technology in high precision robotic total stations and laser scanners for improved speed, accuracy and reliability.

Fenstermaker offers Dimensional Control Services

Fenstermaker's extensive experience in dimensional control has better prepared us for meeting expedited time frames associated with large scale modular construction. Our ability to staff up or down based on the demand is contributed to Fenstermaker's long history of surveying excellence and current capability to operate 30 - 50 survey crews simultaneously.

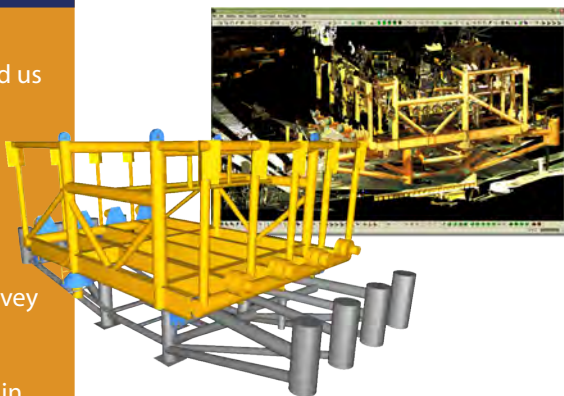
Modular construction, while large scale in nature, has some of the tightest industry tolerances on fabricated components ranging from 1/8" to 1/16" of accuracy. These accuracies are critical to insuring precise fits upon final installation. Fenstermaker has invested in the tools and training necessary to achieve these tolerances. Sub-millimeter, 1/2 second, Leica 5005 total stations and high speed laser scanners are well suited for any dimensional control challenge. Precision instruments without proper targeting will yield nominal results, therefore Fenstermaker's in-house fabricators create custom targets adapted to the unique challenges associated with modular construction.

Fenstermaker's key personnel include piping and structural designers, engineers and surveyors who understand how to read design plans, evaluate the difference between design and fabrication components and can pick out the subtle differences critical to proper alignment.

Our SurvDC specialists can aid your team in structural layout and piping reduction necessary for fabrication. Fenstermaker's team can report dimensional control results in many different formats while all final deliverables are signed and certified by licensed engineers and land surveyors.

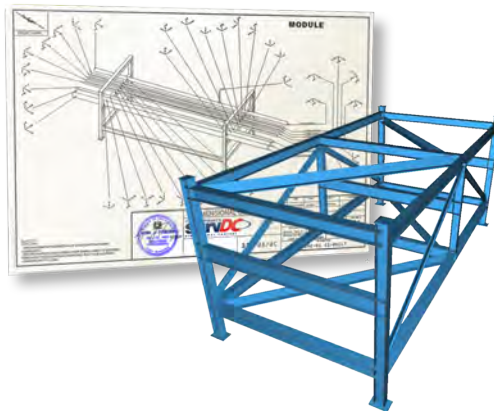
Cameron Subsea Manifold

This manifold was scanned with the Leica HDS 6000 and shot with the Leica 1201 using several different metrology prisms. Leica Cyclone was used to create the 3D model.



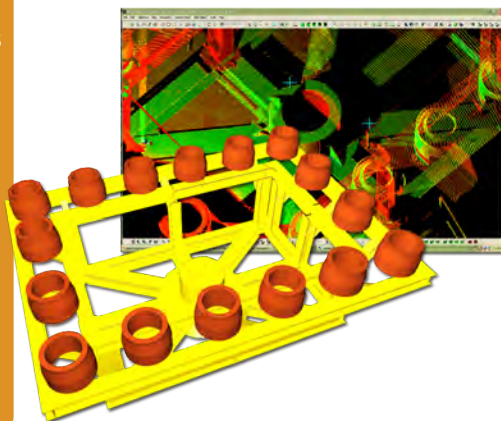
Fabricated Piping Module

Typical DC submittals include 3D isometric drawings of surveyed modules. Isometrics illustrate critical bolthole and piping as-built deviations from design.



Subsea Manifold

Combination laser scan of manifold and Leica 1201 robotic total station provides Fenstermaker with tools needed to precisely map and model all critical dimensions to within millimeters prior to installation.



Fenstermaker News

- 7/20/2007
 Fenstermaker awarded dimensional control project for CAMERON Subseas, testing deepwater manifold connections for TOTAL.
- 10/10/2007
 Omega Natching, Inc. secures Fenstermaker for dimensional control services on BP Mardi Gras Transportation System Project, Jumper Fabrication.
- 11/08/2007
 Fenstermaker to scan 3D model and provide 2D fabrication drawings for renovations to chlorine caustic unit at Georgia Gulf Chemicals and Vinyls in Plaquemine, LA.
- 01/10/2008
 Fenstermaker forms new Surv360 Advanced Technologies Division to support it's Underwater Acoustics, Laser Scanning and Dimensional Control services..
- 05/12/2008
 Advanced Technologies Division awarded 18 month dimensional control project for TOTAL Port Authority refinery expansion project.
- 11/15/2008
 Fenstermaker under contract to scan and survey 3 subsea manifolds for BP-Atlantis project under direction of Omega.
- 12/10/2008
 Fenstermaker dimensional control services under contract to provide large scale fabrication support to Dynamic Industries, BP Whiting Canada Crude Module Project.
- 01/12/2009
 Dynamic Industries awards Fenstermaker large modular Dimensional Control contract for Exxon Mobil, Sakhalin Project in Russia to be fabricated at the Port of Lake Charles.

Ryan J. Fuselier, P.E., P.L.S.
 Fenstermaker & Associates
 135 Regency Square
 Lafayette, LA 70508
 337-237-2200 phone
 337-232-3299 fax
www.fenstermaker.com