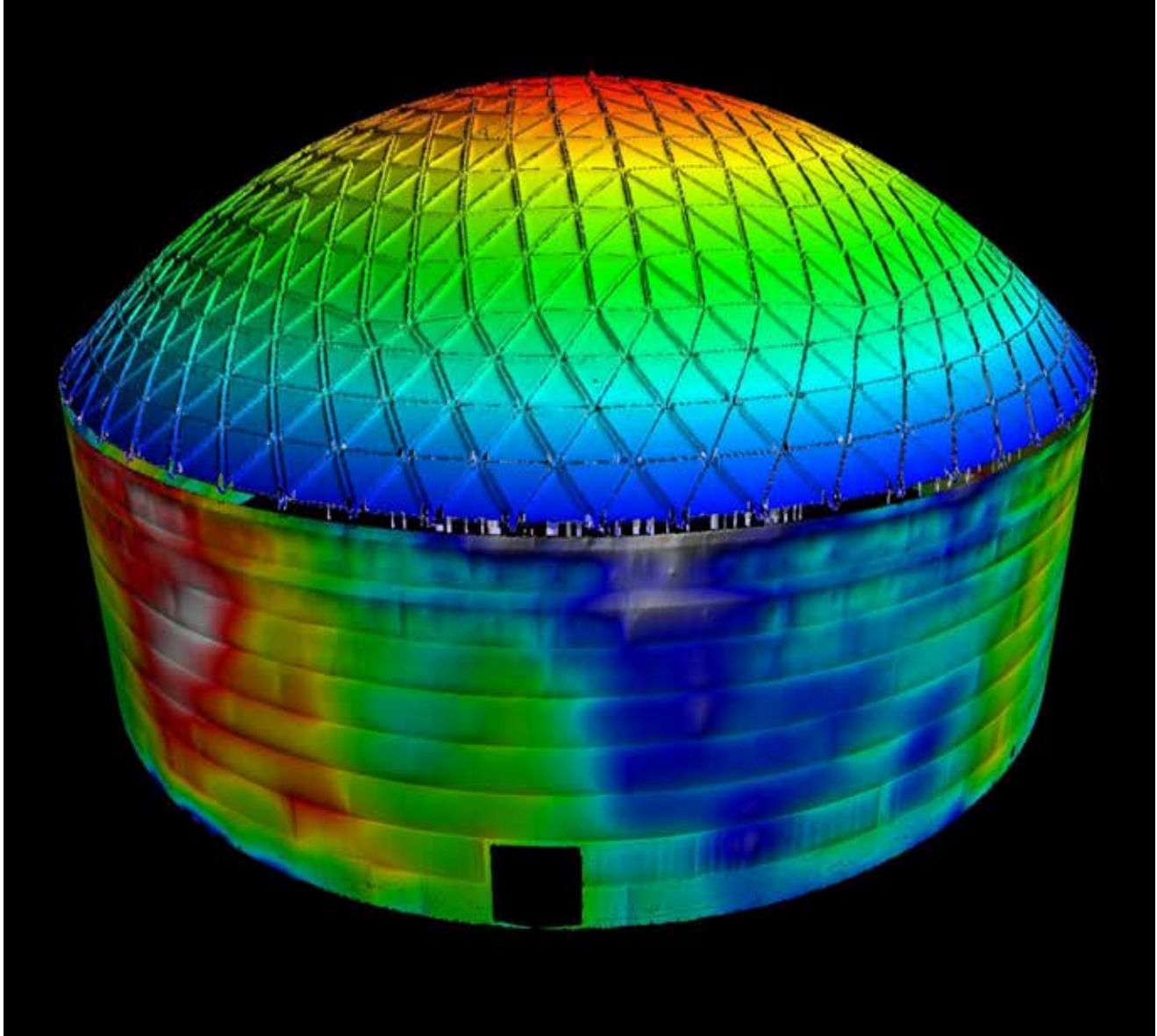


## 3D Prime Tank Evaluation

# 3D Prime Tank Evaluation

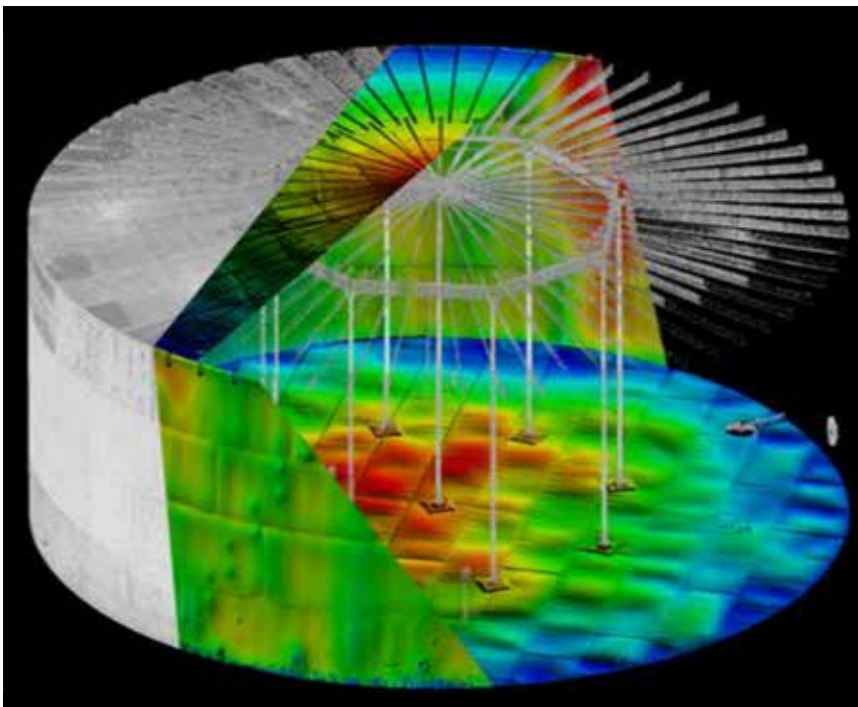
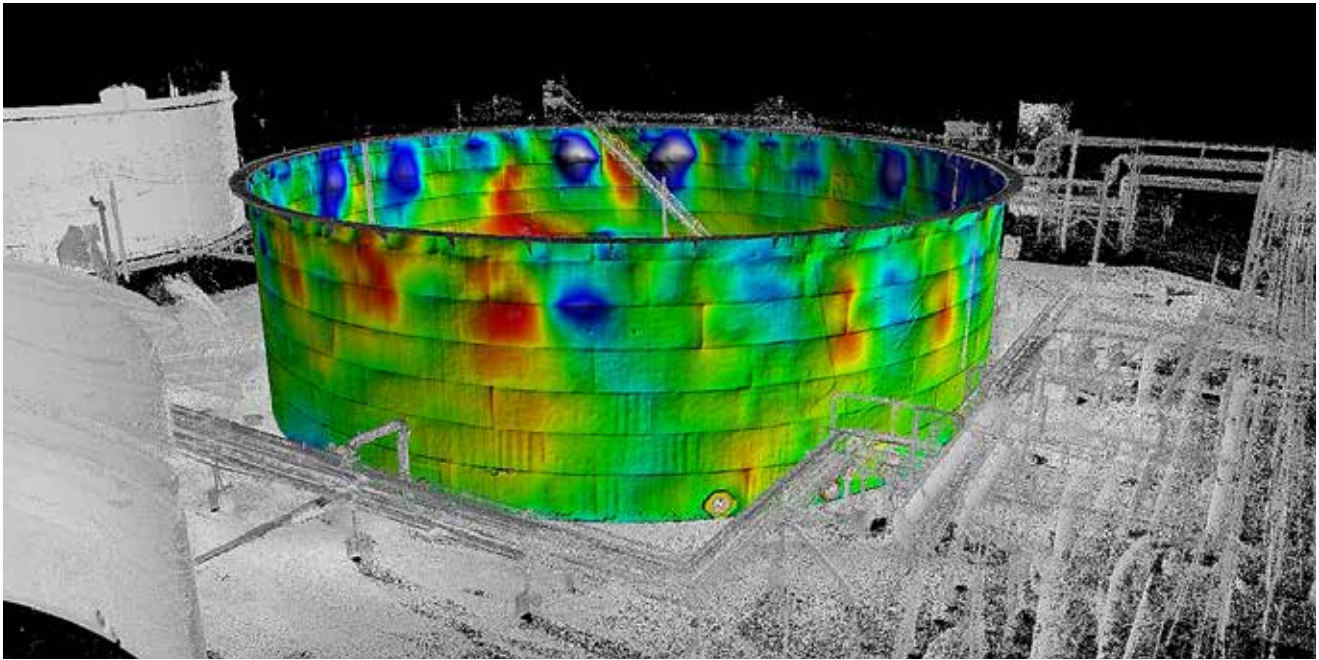
Aboveground Tank Inspection, Engineering,



For over 25 years, TEAM Tank Consultants have served the aboveground storage tank industry with specialized inspection, engineering and turnkey services. Our 3D Prime Tank Evaluation services are backed by experienced professional engineers.

This unique technology was developed through a strategic alliance of field-experienced tank inspectors and an industry-leading 3D software developer. Through this unique association, a proprietary digital aboveground storage tank registration and evaluation software was created. This software has been field-tested and refined over the past four years and is now the most unique AST-specific point-cloud software program available, utilized by major refiners, pipeline and chemical companies.





### Confidence / Accuracy

Standard deviation views and datasheets are produced for all point-cloud analyzed surfaces of the tank and components. Accurate and tightly registered models allow the proper comparison to code requirements and creation of a tank life expectancy diagnostic.

Our extensive tank knowledge, experienced engineers and inspectors coupled with high-tech practical 3D experts have developed the ultimate tank inspection and evaluation tool.

### High Definition

The 3D Prime technology utilizes high definition mapping models to display all structural stress riser categories and compare it to all applicable codes or client requirements.

This analysis displays sharp detail of the weld lines and appurtenances along with their relationship to the structural stresses.

The report controller can zoom in for instant review of anomalies.

**Created to identify and analyze your assets for the ultimate in fitness for service determinations.**

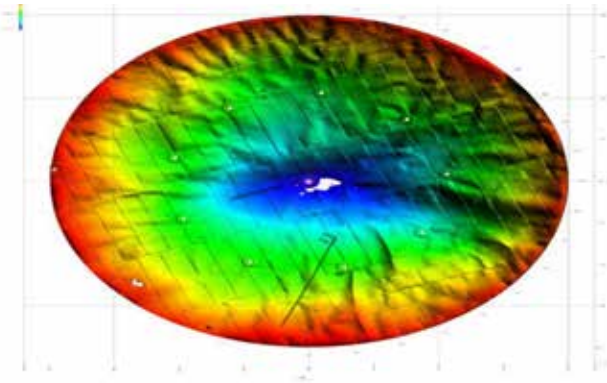
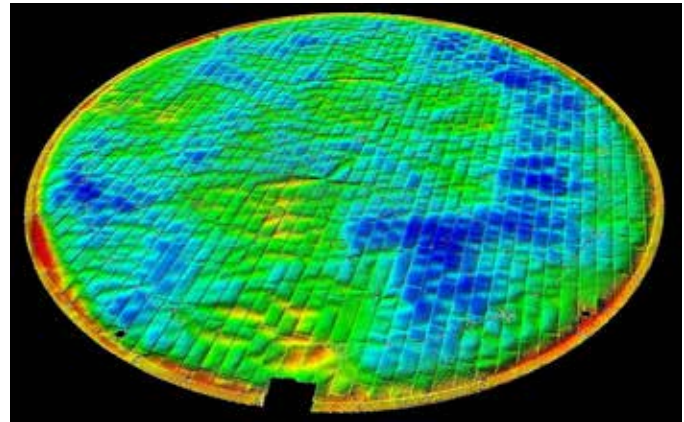
**+ This report is customizable to fit your needs and data can be stored for future trends and comparisons.**

### Tank Bottom Analysis and Edge Settlement

Advanced and traditional settlement analyses are automatically provided in the report for all styles and sizes of tank bottoms.

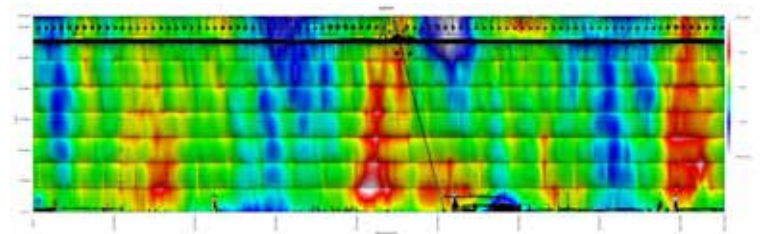
Corrosion or inspection findings can be layered over weld seams and stress risers within the report displays.

This analysis gives real risk intelligence appropriate for a finite element analysis or operational service life of the tank.

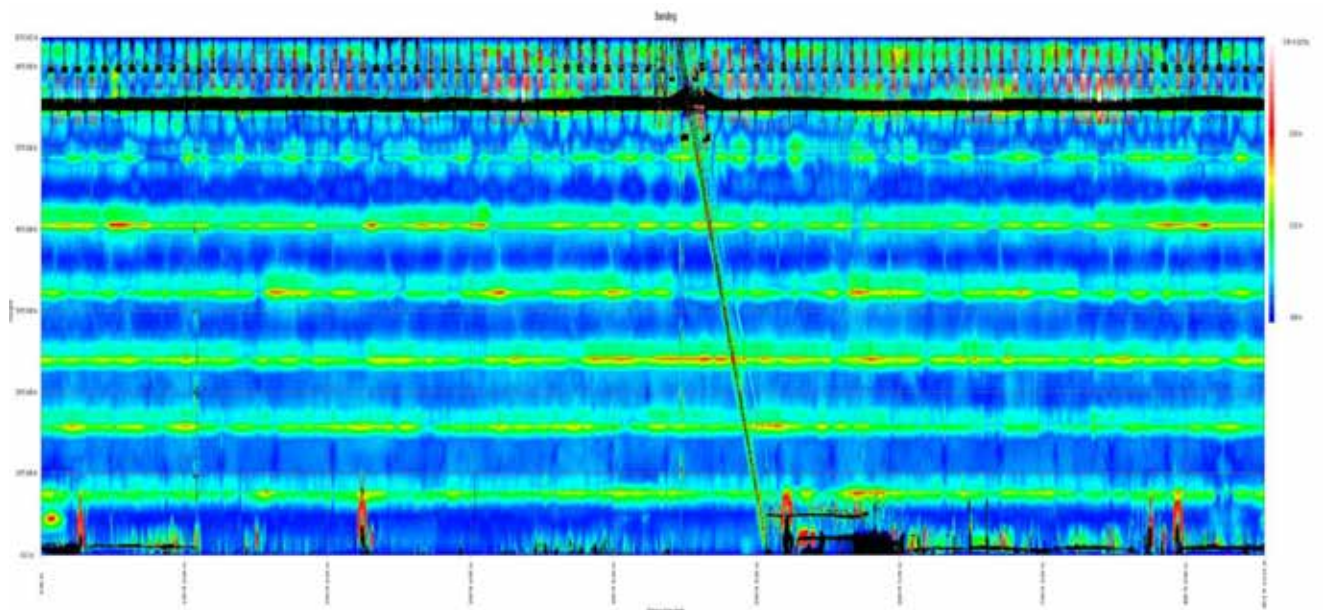


### Shell Condition Assessment

Only TEAM Tank Consultants offer “Shell Alignment Evaluation,” which allows for combined verticality and roundness in high definition that reveals all deflections and stress risers, including weld lines, critical zones and nozzle attachments.



This 3D Prime technology can isolate any structural deficiencies, as shown in the below 3D image of shell banding.





## Floating Roof Rim Space, Function and Design Analysis

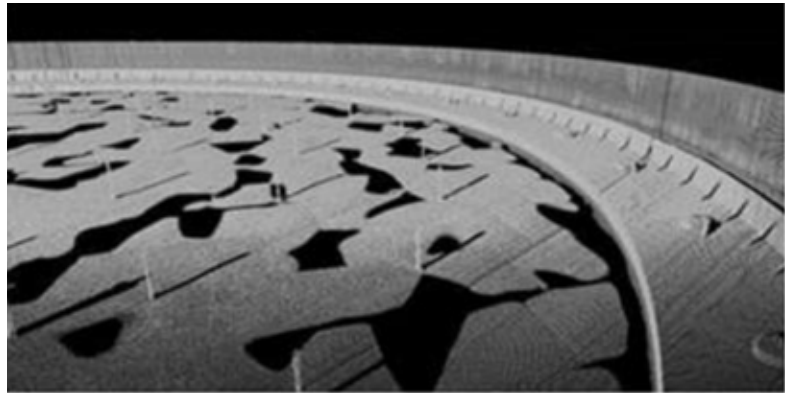
For floating roofs, these images give multi-perspective views that show rim space variance.

These models and rollouts provide centered, floating or as-scanned roofs.

These features illustrate the rim space by taking the shell alignment in relation to the geometry of the floating roof at any given circumference or height.

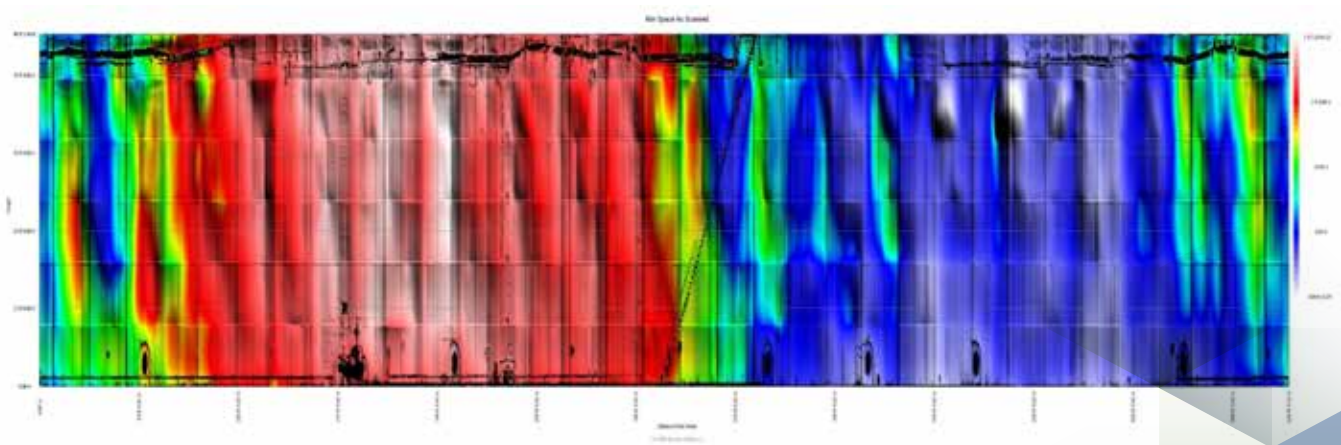
As a premium add-on package, we offer a 3D Model with clash simulation video along with 2D clash drawings. This package captures, displays, and function-tests full coverage dimensional data for floating roof optimization.

Floating roofs and seals can now be fully understood and truly customized to fit and navigate the unique shape and design of your tank.



## Rim Space-to-Shell Rollout

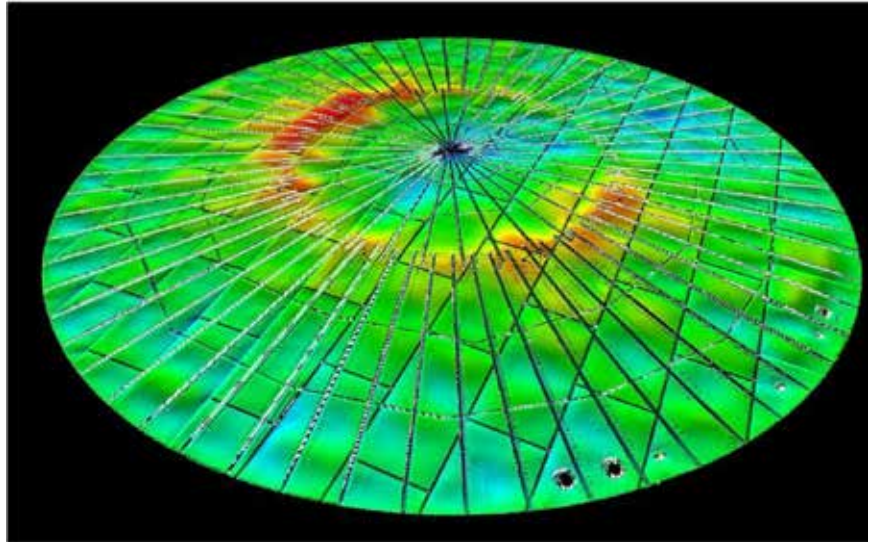
High Definition 3D Prime Tank Evaluation creates an easy visual case for a floating roof and seal problem.



### Fixed Roof Analysis

This 3D Prime technology can be performed on any type of fixed roof without scaffolding or man lifts. It is able to isolate the roof shape and detect any local deviations.

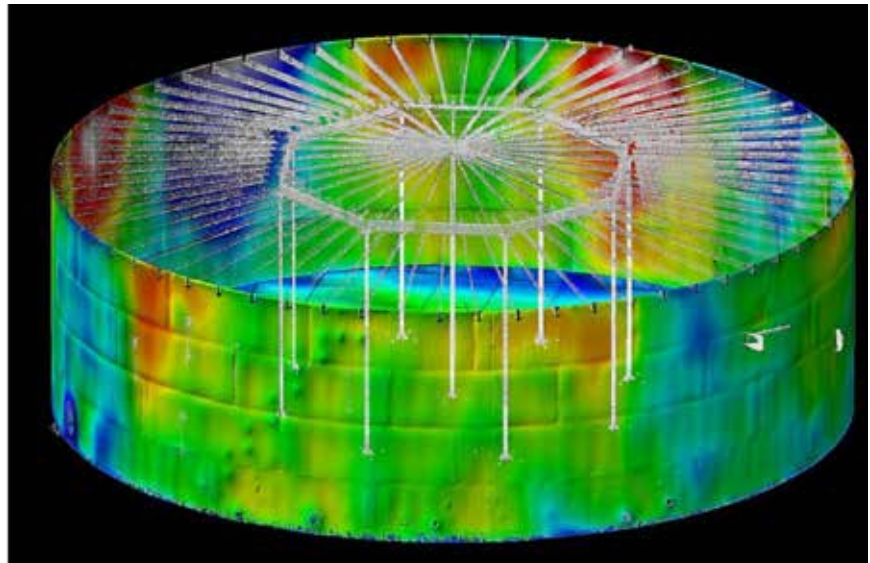
High definition views of the roof plates identify the relationship to rafter, girder and column deflection transfer.



### Column Girder & Rafter Analysis

Analysis can be performed on any style of column, displaying the exact location of columns and direction of the tilt with twist, recognizing the overall group trend of deflection.

Multiple views supported with data show all girder/ rafter deflection. The report provides location and maximum values of lateral, vertical and twist deflection along with a table of the most severe results.



### Berm Surveys and Liquid Flow

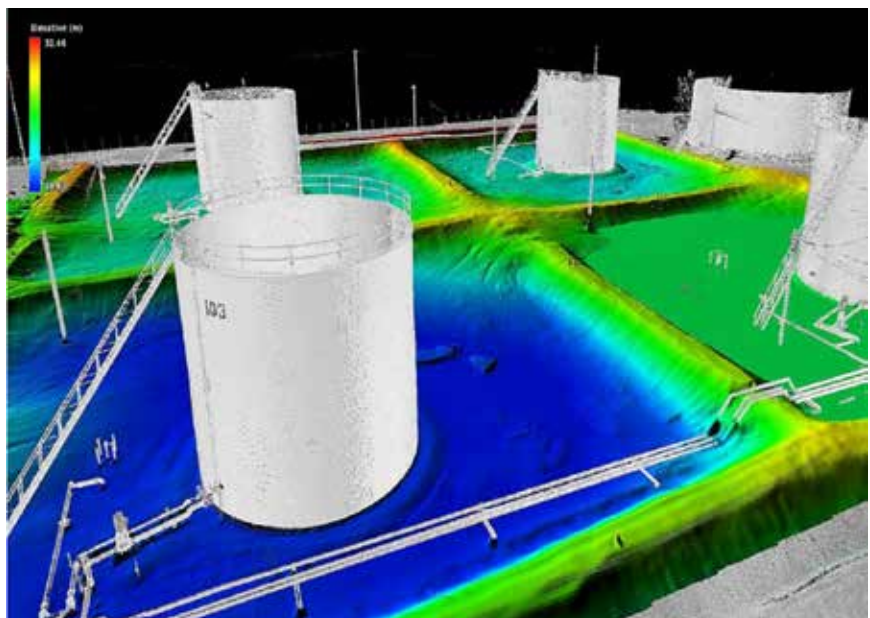
This 3D Prime technology allows reports to simulate dike fill capacities and overflow location areas to meet industry regulations.

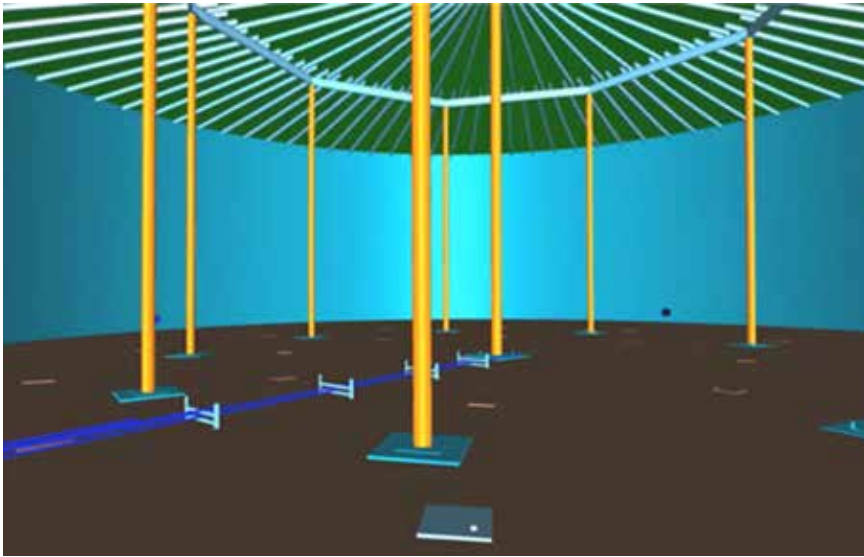
Berms can be captured and analyzed for current conditions and future comparisons.

Video simulation compares berm liquid flow and volume to tank capacities for true secondary containment analysis with the ability to identify breach locations and recognize flow to adjacent berms or undesired locations.

Secondary models can be generated to simulate proposed modifications to dike walls or berms to meet compliance.

Models can also provide topographical mapping of the tank facility.





### Why TEAM?

- + Single supplier for asset integrity management solutions worldwide
- + Company-wide commitment to safety
- + Trained and certified expert technicians
- + Engineering and technical support

### Analysis and Reporting

Most reports can be generated within a few business days on a rush basis. Reports can be customized to meet individual client needs.

- Full API 653 and 650 internal and external inspections
- Tank calibration / strapping
- Fixed and floating roof analysis
- Floating roof simulation through digital function tests
- As-built models, CAD drawings
- Before-and-after repair, alteration, settlement or event comparison
- Interval trending analysis with statistical comparison data and projections
- Datasheets and 3D models for FEA and FFS
- Video tank overviews
- 3D stress models
- Column analysis, rafter and girder assessment with full layout views and individual component analysis
- Berm containment surveys and simulations
- Reports can be customized to meet individual client needs

**TEAM experts are available 24 hours a day,  
7 days a week, 365 days a year.**

Find your local contact at [TeamInc.com](http://TeamInc.com).





