



Maintaining Above-Ground Storage Tanks (AST) is important not only to secure the product within the tanks, but also for compliance with regulatory requirements such as American Petroleum Institute (API) 653

#### **AST Services**

Our industry-leading technical experts support tank farms and terminal operations with a full line of services that minimize risk, improve safety and ensure asset reliability.

Services include inspection and assessment for API 653 program compliance along with other state and federal regulatory bodies mandating requirements for AST assets.

As a Total Quality Assurance provider, we offer additional related services not commonly available including laser scanning and laboratory analysis of products for microbiologically influenced corrosion (MIC) or other corrosive factors which differentiates us in the AST Services market.

#### API 653 & STI SP001 Inspections

Routine tank inspection interval inspections are provided using certified and experienced API 653 inspectors.

A complete inspection program is planned as specified by you prior to the initiation of the on-site work.

In addition, Non-Destructive Examination (NDE) technicians and the accompanying equipment needed to collect data for standard and exceptional API 653 assessment needs are assigned.

We provide full API 653 visual inspections, settlement surveys, magnetic flux leakage (MFL) floor scanning, vacuum box testing, chime weld (annular ring) inspection, and shell and roof ultrasonic crawlers.

# Engineering Evaluations & Repair Recommendations

When requested, our engineers can conduct Risk Based Inspection (RBI) assessments, evaluate API 653 reports and supporting NDE data and provide a comprehensive fitness-for-service report complete with repair recommendations and post repair maintenance and inspection recommendations as needed.

We will also provide, at your request, the necessary on-site quality control inspection to ensure that repair work meets the required standards.

## 3D Laser Scanning & Dimensional Control

Our high-definition 3D digital internal/ external data collection techniques capture the entire surface areas of your tank in a very short period of time.

These highly accurate tank point cloud models are then processed immediately for analysis. This analysis can produce reports utilized in many different ways such as: accurate as-built 2D and 3D CAD drawings, settlement surveys, "tank strapping" API volume tables, deformation analysis and virtual 3D environments. The resulting completely to-scale, fly-through models can be published to the Cloud for collaboration.

This secure SOC2 compliant data-centric platform can contain hyperlinks to external pertinent asset data as required. Linked data typically includes information related to inspections, repair projects and operations. In addition, for tanks receiving a new internal

In addition, for tanks receiving a new internal floating roof or dome, an as-built laser scan is critical to proper design, installation and operation of the new roof..



#### Aware - Tank Module

Our Aware – Tank module fulfills regulatory required complete asset tracking and analysis for your piping, pressure vessels, tanks, valves, and rotating equipment specifically for design, reference and inspection data.

With our Aware Tank module, the software effortlessly tracks your tank corrosion monitoring and trending with inspection scheduling and turnaround planning as fundamental features. Recommendations are also generated by regulations, industry standards and unique cooperate requirements that you can customize and configure.

The software also highlights equipment with past due inspection statuses, high corrosion rates, and short remaining life as well as generates visuals around problem areas.

The module also provides an integrated risk-based inspection (RBI) software option and Relief Value inspection and testing data tracked with data analytic tools.

The Tank module improves safety through increased visibility of your high-risk equipment with faster reporting and standardized documentation while avoiding forced outages.

#### **Key Features**

- Visual Aware: Interface with AutoCAD Drawings
- Mobile Aware: Document Inspection Results out in the Field
- Upload Photos, Documents, Videos, any kind of file
- Graphing & Trending Capability
- Dashboards available on Tablets
- Role-Based Security Model
- Receive Alerts & Notifications
- Managed Solution Available
- Interface with Spreadsheets and other Software Products
- Preconfigured Standard Reports
- Advanced Search Capabilities
- Interface with CMMS

### **Tank Inspection Service Summary**

- API 653 Engineering
- API 653 Post Repairs Inspection
- API 653 Visual Inspection
- Baseline Inspections for New Construction
- Bottom Plate Corrosion Mapping
- Comprehensive Final Reports with Detailed Drawings & Photos

- Evaluations & Repair Recommendations including API 579 Fitness-for-Service
- High-Quality Concise Reports
- MFL Floor Scanning
- QA/QC for New Construction or Repairs
- Settlement Evaluations (API 653)
- STI SP001 Inspection
- Seal Inspections
- Ultrasonic Inspection
- Vacuum Box Inspection
- Verticality & Roundness

### Additional Value-Add Tank Inspection Services

- Aware Tank Module
- Alternating Current Field Measurement (ACFM) Weld Inspection
- B-Scanning
- Calibration Tank Capacity Tables & Incremental Factor Run Sheets
- Failure Analysis
- Laser Scanning







