

3D VISUALIZATION IN APM MECHANICAL INTEGRITY

in partnership with Visionaize, Inc.

GAIN REAL-TIME VISIBILITY OF YOUR ASSET RISKS

Accelerate your digital transformation journey with 3D models.



3D VISUALIZATION CAPABILITIES

The APM Mechanical Integrity module of GE Vernova's APM solution reduces risks, lowers inspection costs, and helps manage regulatory compliance. Its integrated applications including Risk Based Inspection, Inspection Management, Thickness Monitoring, and Compliance Management were developed to optimize a customer's Mechanical Integrity (MI) program. Now, GE Vernova has partnered with Visionaize to offer its V-Suite Starter, adding 3D visualization capabilities and greater situational awareness of fixed assets to improve productivity and decision-making.

V-Suite Starter provides data-driven visualizations of key APM Mechanical Integrity attributes such as risk, corrosion analyses, and integrity operating windows, allowing users to be effective in their daily jobs and integrity departments to optimize their overall inspection programs. Customers can contextualize real-time and historical asset data on the 3D model that is available online and offline. Visionaize works with GE Vernova internal APIs to connect to APM in the cloud or on-premises.



25%

Reduced rework

60%

Reduced inspection time

50%

Faster finding information

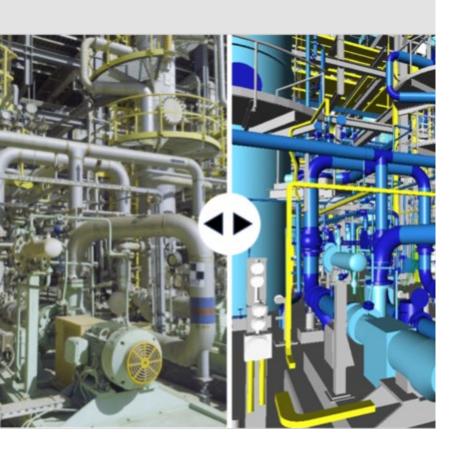
Information provided by Visionaize and can vary based on the number of assets and sites



Key features:

V-SUITE STARTER

- 3D Integration with APM
- Dynamically Display/Colorize
 Mechanical Integrity Digital Twin model
 - Corrosion Loops
 - Corrosion Monitoring Location
 - Corrosion Analysis Summary
 - Damage Mechanisms
 - RBI Risk
 - Integrity Operating Window
- Available in Desktop & Mobile



FEATURES & FUNCTIONS

View / manipulate / navigate

- Asset navigation
- Measurement
- Asset properties (internal & external)
- Image viewing
- Activate predefined display filters
- Help system

Search

- Search on asset attributes
- Search for views or assets by name
- Run predefined queries
- View results in 3D
- Save predefined queries

Knowledge book

- Open predefined knowledge views
- Create new knowledge views
- Create marked points & labels (ex: TML)
- Display & hide assets & layers within the view
- Modify asset attributes
- Add file links to assets

Print

- Print current view
- Export to image file

CUSTOMER USE AND BENEFITS

Value Drivers

- Minimize downtime:
 More efficient planning accelerates
 planned and unplanned downtime
- Reduce operating costs:
 More efficient inspection and maintenance
- Reduce risk & improve worker safety: Situational awareness, less time in hazardous environments
- Faster incident to resolution:
 Accurate 3D model allows inspectors to take action in APM from the field.
- Simplify regulatory compliance: Quickly identify needed compliance documentation

V-Suite Starter vs. **Engineering CAD solutions**

- True operational digital twin: Exact replicas of the physical environment
- Robust integration with enterprise applications
- Quick to deploy and maintain
- Intuitive & easy to use
- Scalable:

Template-based solution simplifies replication across sites and reduces implementation cost by 40-60%

APM Mechanical Integrity + V-Suite Starter

- 3D immersive model: Mimic the asset hierarchy for the assets mapped from APM Mechanical Integrity into V-suite
- Information pods: Equip analysts with critical information of the 3D mapped APM components during key decision-making steps (e.g., RBI data, Corrosion analyses etc.)
- Download the 3D model: Provides a schematic view of the asset with key information to the operators/inspector during field data collection
- **Smarter actions:** Corrective recommendations as follow up actions

Learn more

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Request a demo