

SOLUTION HIGHLIGHT

Avizo® Software for Non-Destructive Testing

Powering 3D Visualization and Analysis of Complex Structures and Materials



Avizo® software provides comprehensive features for non-destructive analysis and 3D visualization of complex structures and materials. Scientists and engineers can visualize and analyze their data sets in a number of different ways: porosity, voids distribution, cell size distribution, connectivity between the cells, etc.

Avizo® Software for Non-Destructive Testing

Powering 3D Visualization and Analysis of Complex Structures and Materials



Advanced image registration: fusion of multi-modal data (Scan, CAD model, etc.) to perform variance comparison

Multi-modal Data Processing

Avizo's high-end image enhancement, 3D model reconstruction, and data fusion techniques enable the NDT user to efficiently import and process a wide range of 2D/3D multi-modal data (CT scans, micro-tomography, PET, MRI, ultrasonic and Eddy-current data, etc.), providing simultaneous and comprehensive analysis of the specimen structure.

Advanced Analysis of Porous and Multiphase Media

Avizo's 3D volumetric reconstruction and visualization techniques enable the analysis of complex structures such as porous materials and multiphase systems.

Avizo's skeletonization and network characterization features provide comprehensive understandings of data sets of dendritic and fracture networks.

Powerful Quantitative Analysis

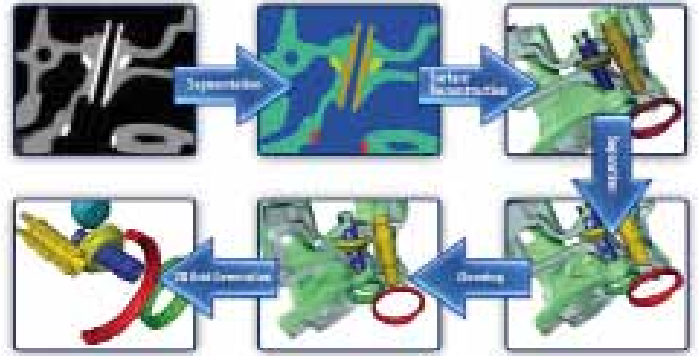
Avizo allows the user to extract properties of individual feature elements from images or simulated data. Measurements can include counts, distributions, areas, volumes, average thickness, pore diameter, orientations, and more. These operations can be performed manually or automated for repetitive tasks. The user can benefit from advanced query, plotting and export capabilities through the built-in spreadsheet tool or external applications such as MS Excel® or Matlab®.

Variance Comparison

Avizo's automated analysis workflow efficiently supports variance comparison tasks. Reference geometry data can be superimposed with the measured geometry to get an instant overview of the deviation(s) at each point of the specimen.

On the Fly Pre-processing of Very Large Data Sets

Avizo's seamless integration with GPU Computing techniques bring interactive image processing of very large data sets, where the progress can be tracked and influenced interactively.



Advanced image segmentation

Roaming Gigabytes of Volume on Your Desktop

Avizo offers a unique approach to allow users to interactively navigate through data sets that are larger than their system RAM. This multi-resolution technique allows for interactive visualization and navigation through vast amounts of data.

Versatile and Extensible Architecture

Avizo's versatile and extensible architecture can easily be integrated into a wide range of NDT workflow configurations, from the data pre-processing to the post-processing stage, from laptops to fully immersive environments, including cluster set-ups and remote hardware.

Avizo Configurable Solutions

Avizo is a flexible and modular software that can be configured according to your specific 3D data visualization and analysis needs.

Editions	Visualize to understand :
Avizo Standard	Scientific Visualization
Avizo Earth	Geosciences and Oil & Gaz.
Avizo Fire	Materials Sciences
Avizo Wind	Simulation Post-processing
Avizo Green	Environmental Data

XPand	XLVolume	XScreen	XTeam	XSkeleton	XReaders
Develop custom modules	Very large data support	Multi-screen and VR	Share multiple sessions	Network reconstruction	Read CAD data

www.vsg3d.com



Avizo is a trademark of Mercury Computer Systems, SAS. Matlab is a registered trademark of the Mathworks, Inc. All other products mentioned may be trademarks or registered trademarks of their respective holders. Mercury Computer Systems believes this information is accurate as of its publication date and is not responsible for any inadvertent errors. The information contained herein is subject to change without notice. Copyright © 2009 Mercury Computer System, SAS