



What's New in VGSTUDIO MAX

Discover the Exciting New Capabilities of
Our Latest Version (as of September 2023)

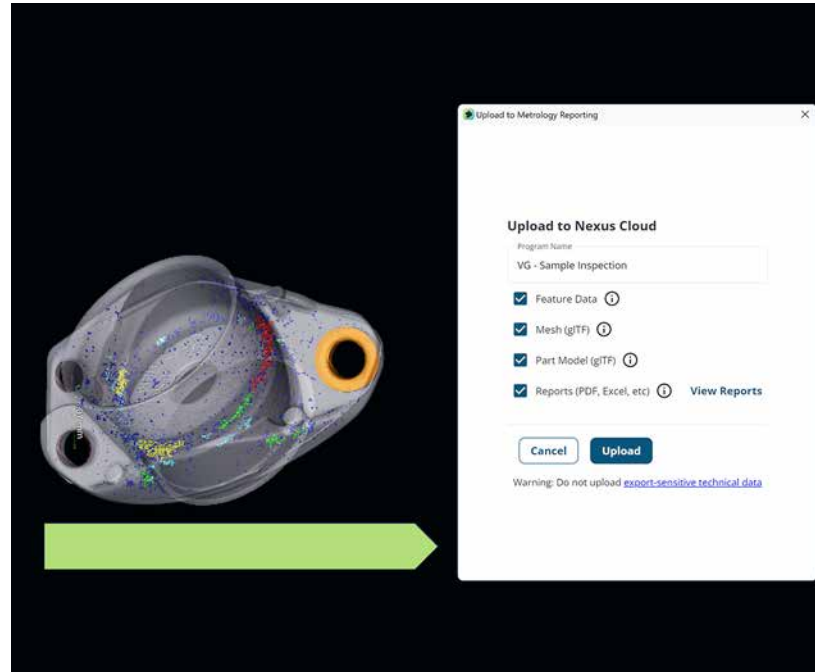


Feature Highlights

Export to Hexagon's Metrology Reporting

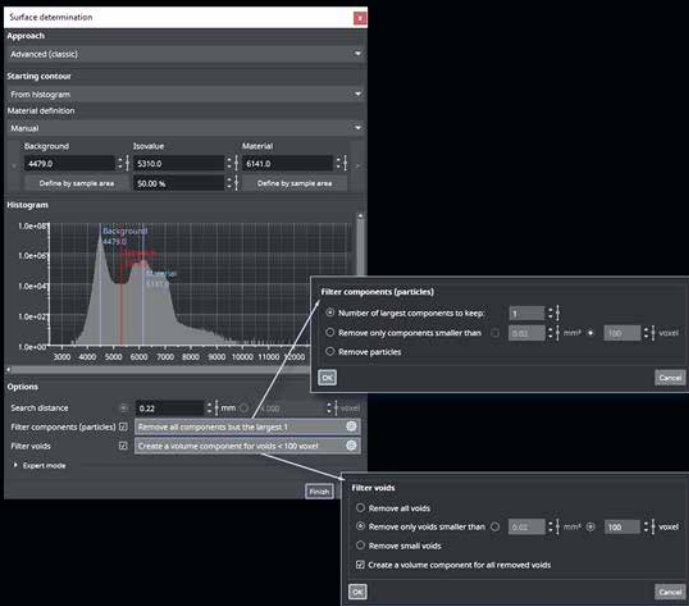
You can now share inspection results, part information, and PDF reports from our software directly to the Metrology Reporting platform with the click of a button. With Metrology Reporting, data-driven decision making has never been easier:

- > Consolidate disparate reporting tools into one central location.
- > Track the real-time status of measured parts, get failure details, and view metrology reports on any device at any time.
- > Use centralized data to automate workflows and reduce labor costs. Learn more about this simple, intelligent, and accessible cloud-based reporting and visualization tool [here](#).



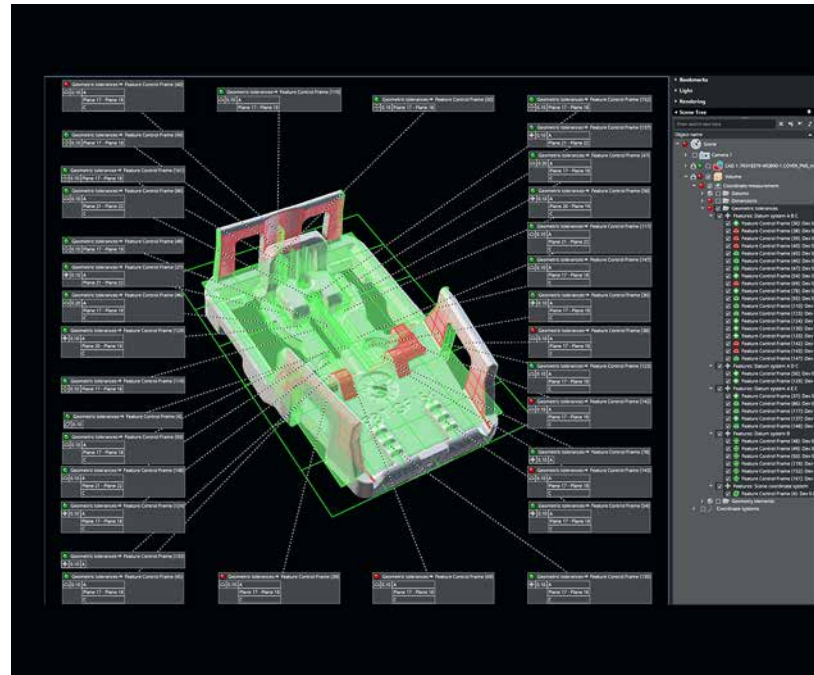
New Options for Handling Particles and Voids in the Advanced Surface Determination

You can now configure up to what size particles and voids should be filtered out of the advanced classic and multi-material surface determination. The calculation is now done based on the result surface instead of the starting contour to avoid particles and voids being found again during the advanced surface determination within the search distance. There is a new option for the advanced classic surface determination to create a two-component volume where the voids are separated from the material. This way, you can use the component selection to specify whether or not the surface of voids is to be considered in subsequent analyses (e.g., wall thickness analysis or nominal/actual comparison).



Enhanced Visualization of Tolerance Zones

The improved visualization as a volumetric zone makes it even easier to understand the programmed tolerance on the nominal part, as well as the tolerance state of the real object. The tolerance zones are color-coded in green (OK) or red (not OK) depending on their evaluation state. Geometric tolerances will now show their tolerance zones when selected in the Scene Tree and when automatic images are reported.

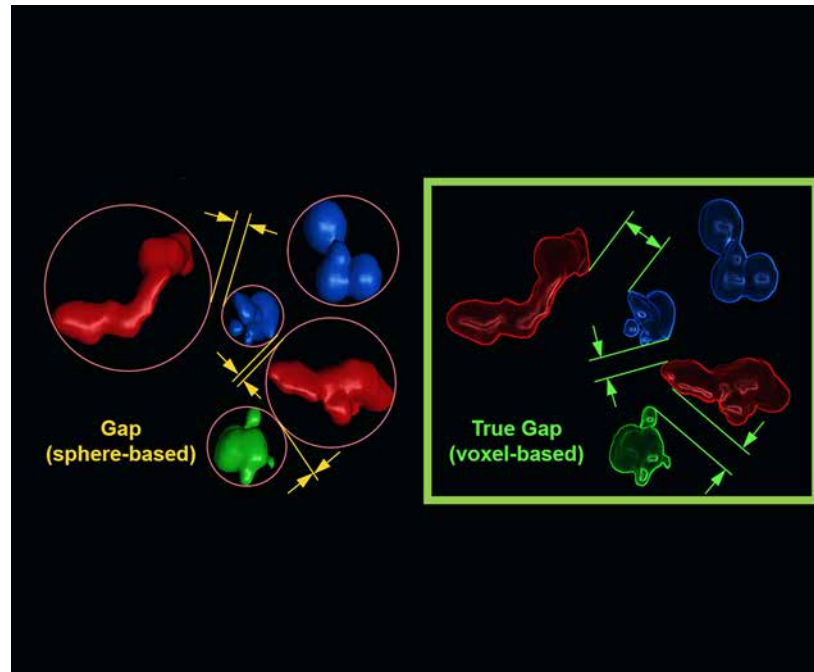


Porosity/Inclusion Analysis

The New Go-To Standard for Porosity/ Inclusion Analysis: Exact Calculation of the True Gap between Pores

Use our new voxel-based gap calculation to measure precise distances between pore surfaces and accurately determine the smallest gap for subsequent evaluation. This is an important addition to the software's well-known gap calculation based on circumscribed sphere measurement. This new feature allows for easier reporting and opens up entirely new possibilities in the porosity/inclusion analysis of CT scans:

- > Measure the distance between hundreds of pores faster and more precisely than possible with conventional means like microscopy on metallographic specimen.
- > Decrease the potential for false rejects. The new voxel-based gap is now the default calculation for the porosity/inclusion analysis. Customers who wish to continue using the sphere-based gap calculation may do so by changing the selection before conducting their analysis.



Reporting and Traceability



Make Better Quality Decisions with Interactive 3D Images in Reporting

The new interactive indication images in 3D for porosity analyses provide valuable additional context to the 2D indication images, making it much easier to see where exactly in the part an indication is located. This allows you to more accurately gauge the effect the indication might have on the part's quality.

Customizable Report Fonts

You can now adjust the font size for most reporting elements, providing a welcome layer of flexibility when customizing your report layouts and enabling you to easily highlight important information, e.g., part serial numbers or evaluation states.

	Tolerance	Max. tolerance	Status
Ratio indication volume/total volume		1.00 %	Valid
Equivalent diameter		5.00 mm	Valid
Volume			No tolerance
Projected area (yz-plane)			No tolerance
Projected area (xz-plane)			No tolerance
Projected area (xy-plane)			No tolerance
Directional variability (Porosity)			No tolerance
Diameter			No tolerance
Indication volume			No tolerance
Cut surface			No tolerance
Max. edge distance (cut)			No tolerance
Min. edge distance (inside)			No tolerance
Min. edge distance (outside)			No tolerance
Indication count			No tolerance

Text settings

Font size

Easier Interaction with 3D Content in Reports

It's now easy to see which parts of a report represent interactive 3D content. Gone are the days of any accidental zooming of viewports when scrolling through reports. The improved camera makes it much simpler to focus the 3D views on relevant areas of the reported part.

Coordinate Measurement

Usage of Contours as Final Volume Surfaces

The new fixed contours approach (available with the Coordinate Measurement Module) allows you to specify one or several contours (which can be ROIs, meshes, CAD models, or the surfaces of other volumes) and directly convert them into a volume surface. Each contour will be converted to a separate volume component. Should components overlap, subsequently specified components will replace the ones previously created.

Automated Update of Dependent Objects

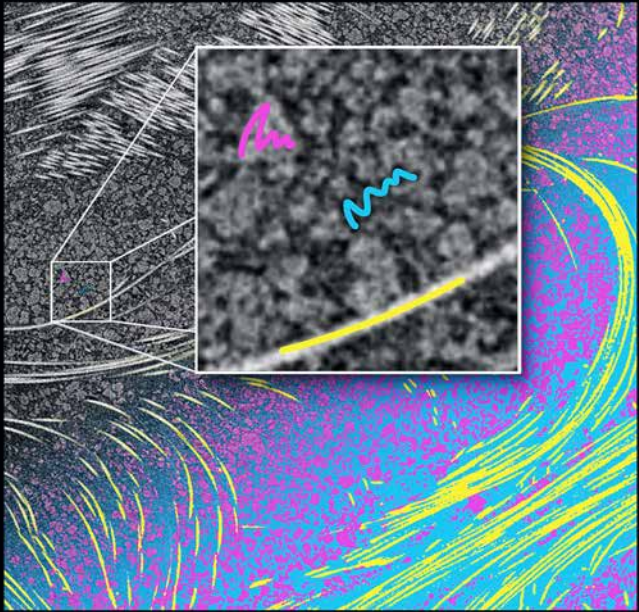
This new option allows you to automatically update all of an element's dependent objects when editing it. Simply activate this option in your preferences and enjoy no longer having to manually trigger updates.

“Customizable Report Images

We now support .svg, .gif, and .jpg images, making it easier to add custom images to reports without needing to convert them first. Custom images also support animations that might be in .svg or .gif files, extending the way reports can be customized.”



Paint & Segment



Paint & Segment Labeling on Extracted ROIs

Speed up your workflows and train models more quickly by using extracted ROIs rather than the entire volume. To improve an existing segmentation locally, quickly train and apply a model for a subset of the volume and merge it with the original one.

Enhancements for ROIs

Create ROI Intersections Directly in Dialog Box

Enjoy a more streamlined process and fewer mouse clicks thanks to the new ability to create ROI intersections directly in the ROI creation dialog box.

Reconstruction

Improved Misalignment Correction for CT Reconstruction

In our new semi-automated workflow, you can now easily auto-optimize the determination of the ideal misalignment correction.



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