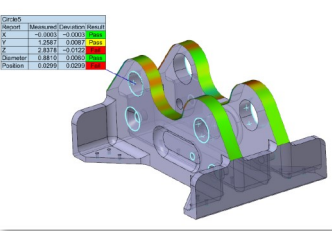
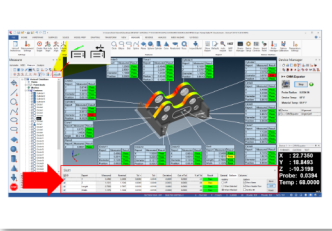


What's New in Verisurf 2019: Release Highlights

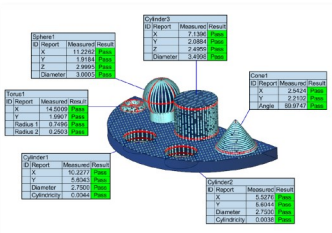
The latest software release from the world's leader in Model-Based Inspection and Reverse Engineering has arrived. **Verisurf 2019** is packed with sophisticated, new capabilities and feature enhancements that streamline any measurement task - simultaneously delivering more power while reducing costs and minimizing waste. Here is a sample of the major product improvements available to maintenance customers in Verisurf 2019. Update to Verisurf 2019 and read the complete Release Notes now on the [Verisurf Downloads page](#).



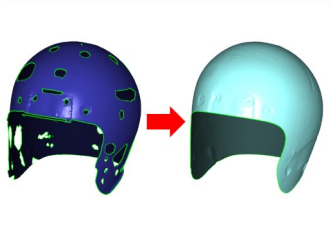
- Instantly identify nonconformances
- Drag balloons to rearrange
- Pass/Fail indicator for any feature



- Conveniently access Measure results
- Customize individual balloon display
- Assign or use CAD feature nominals



- Fast feature fit to clouds or meshes
- Run plans offline to extract features
- Use features or CAD model for nominals



- Expedites reverse engineering
- Rapid, 1-click mesh cleanup
- Fills holes in existing meshes

Real-Time (Live) Feature Balloons

View any desired parameter of a Feature Measurement in real-time as you measure. Use an existing CAD model for comparison with nominals or enter nominal information using the convenient Details Pane at the bottom of the graphics region. Customizable balloons with a Pass/Fail indicator are displayed as you measure each feature.

Details Pane

Display and control the content of feature properties, nominals and balloons by clicking the new Details Pane tool button in the Measure Manager. An Auto Hide Details Pane option is included in Verisurf Preferences that suppresses display of the Details Pane when a feature is not selected. A Result field in the Details Pane labeled Pass or Fail is colored green, yellow, or red based on deviation from allowable tolerance values.

Data Feature Extraction

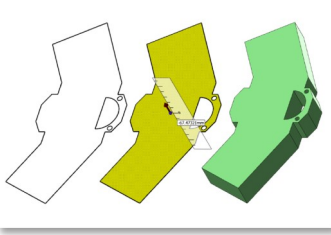
Quickly and easily run measurement plans from pre-measured pointclouds and/or meshes imported into Verisurf. Data Feature Extraction is particularly useful when working with data from laser scanners or pointclouds created while measuring with probing devices. Includes multiple settings for filtering noise and precise feature fitting. Also allows you to align and extract features individually or as a group using Run Offline in Auto Inspect.

Power Mesh

A major new addition to the Verisurf Reverse module, Power Mesh is a 1-click tool that can be used to create, clean up, refine, smooth, and fill holes in a mesh generated from one or more pointclouds. Power Mesh can also be used to improve existing meshes. Located in the pointcloud or mesh object speed menu, Power Mesh creates new mesh object in the Data Tree. New mesh objects created with Power Mesh also inherit



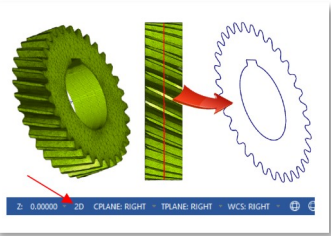
What's New in Verisurf 2019: Release Highlights (cont'd)



- Fast solids from 2D CAD wireframe
- Solids from open/closed/nested wireframe
- Also works with sheet bodies

Push/Pull from Surfaces/Wireframe

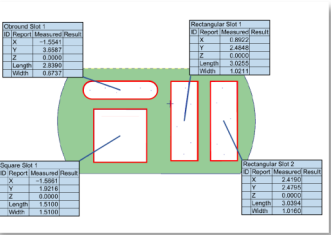
Create surfaces or solid bodies fast during Reverse Engineering using the new Push/Pull from Wireframe feature. Build solids from open, closed, or nested wireframe geometry as well as from sheet bodies. An option is included for maintaining source surfaces to prevent the original surfaces from being absorbed or deleted while generating a solid.



- Expanded slicing option for meshes
- Create slicing plane in screen coords
- Dynamically manipulate slice plane

2D Mesh Slice

The Slice option for meshes has been expanded in Verisurf 2019 to provide greater flexibility in mesh manipulation. Multiple settings provide granular control for creating 2D geometry using the current screen orientation (X, Y, Z, or rotated). Simply click the 2D/3D toggle option in the status bar to change the orientation of the slicing plane.



- Ideal for stamped sheet metal
- Added rectangular and square types
- Min/Max inscribed/circumscribed fit

Multiple Slot Types

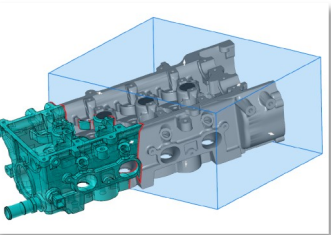
Verisurf 2019 now provides greater flexibility when measuring slots. In addition to the default obround slot type, Verisurf now supports both square- and rectangular-shaped slots. Slot measurement fitting methods have also been expanded to include both Minimum Inscribed and Maximum Circumscribed options.



- Meshes inherit pointcloud colors
- Supports common color scan formats
- Helps visualize model details and text

Color Scans for Meshes

Verisurf now supports color scans from applicable hardware. In addition to spatial location, color-capable scanners also record the object's surface color for each point in a pointcloud. When meshing the pointcloud, each mesh element inherits the appropriate color value from its constituent points. This capability makes it easier to visualize scanned features and overlying text annotations.



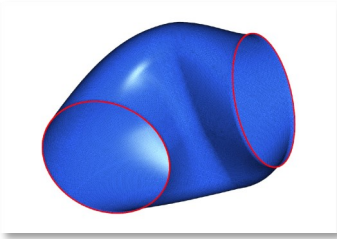
- Added crop box rotation for meshes
- Slide controls for crop box rotation
- Now supports the active WCS

Reverse Crop

The mesh cropping tool in Verisurf 2019 has been expanded to include an ability to rotate the crop box about any active WCS axis. In conjunction with resizing the crop box along X, Y, and Z - this improvement delivers even greater mesh editing flexibility.



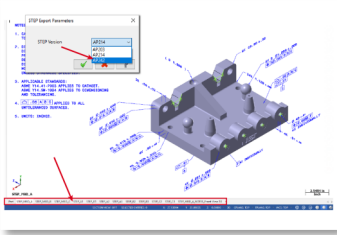
What's New in Verisurf 2019: Release Highlights (cont'd)



Export to Edge Splines

Reverse engineering workflows typically include fitting CAD entities to one or more point-cloud meshes. The 2019 release of Verisurf REVERSE includes a new Export - To Edge Splines in the mesh speed menu. This function exports closed-edge splines to the current CAD level from a selected mesh. Exported splines can be further edited or otherwise used in the modelling process.

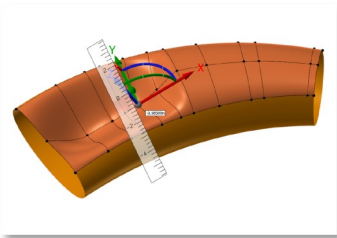
- Simplifies CAD creation from meshes
- Export free mesh edges to splines
- Ideal for cropped, port-shaped parts



STEP AP-242 Support

GD&T and Note annotations contained in imported STEP AP-242 protocol files are now preserved when exporting a Verisurf file using AP-242 option - thereby preserving design intent. Annotations are selectable using the drafting entities filter control. All user-defined views (with associated annotations) are added to Viewsheets in Verisurf for easy retrieval and visualization.

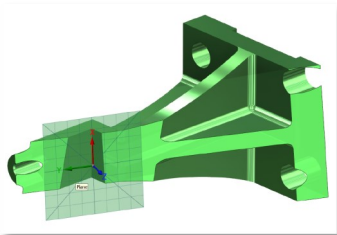
- Design intent preserved on export
- User views added to Viewsheets
- Annotations recognized as drafting entities



Surface Edit

The 2019 Verisurf release introduces a powerful new Edit Surface function (Surfaces tab) that delivers an extensive set of surface modification tools. Modify tangencies and magnitudes of organic, curved surfaces at node points or edit tangencies at the vectors of control points. Easily add or remove node points and isocurves to increase editing control and apply even more granular adjustments.

- Better edit control during reverse
- Modify tangencies and control points
- Add/remove control pts and isocurves



CAD Section Views (with capping)

Embellish your Verisurf 2019 reports with one or multiple section views to clearly convey the most important information. Change the origin, translate, and rotate cutting plane gnomons or modify any sectioning plane display setting to isolate or reveal details. Use the Section View icon in the View toolbar to quickly enable or disable section views. Pick Show Caps to simulate a solid face on the sectioning plan or disable to reveal the solid's interior.

- Flexible visualization of solid sections
- Supports multiple sectioning planes
- With or without cross-section capping



Material Display

Create even more compelling graphics for your reports and presentation using Verisurf 2019's new Material Display tools. Assign one of 7 available surface finish levels for metal, glass, or plastic using the Set Material control on the Home toolbar. When you select Material from the View toolbar, shaded geometry will be rendered based on the assigned material type, finish level, and color.

- Assign as metal, plastic, or glass
- Convenient View menu toggle
- Multiple material intensity levels



What's New in Verisurf 2019: Release Highlights (cont'd)



Glow Highlighting

A new Glow Highlighting option improves geometry entity identification on mouseover. Enable Glow Highlighting from the File/Configuration/Screen dialog. The Stipple option (same dialog) makes it easier to highlight lines along surface or solid edges - particularly when working with wireframe geometry.

- Alternate mouseover highlight option
- Customize auto-highlight glow color
- Stipple/dash option for CAD entities

Verisurf 2019 includes new device support and additional improvements beyond those listed here. Get Verisurf 2019 now:

[Get Verisurf 2019](#)

