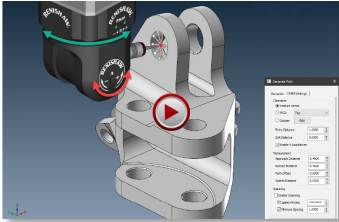


## What's New in Verisurf 2021: Release Highlights

**Verisurf 2021 Inspection Automation for the Manufacturing Enterprise:** Verisurf 2021 delivers increased inspection productivity with CMM Plan creation enhancements particularly for 5-axis probing and 5-axis contact scanning. Users can also look forward to additional CMM controller support, enhancements for GD&T feature control frames & ballooning, and new SDK integration. [CLICK HERE FOR OVERVIEW VIDEO >>](#)

[CLICK PLAY BUTTON ON IMAGES BELOW FOR VIDEOS](#)

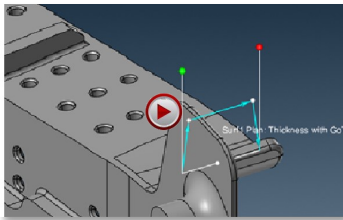
### 5-Axis CMM Probing Efficiency



- Renishaw REVO & PH20 ready
- Easy implementation of advanced probing
- Clearance and anti-collision support

New **Enable 5-Axis Moves** in *Automate-Generate Path* adds all the benefits that come with head-touches including 5-axis tactile scanning. Probing points by means of articulating the head instead of moving the heavy mass of the CMM's movable structure offers speed and accuracy benefits. Programming of a probe head that can articulate to complex angles to acquire points is a bit advanced, but Verisurf makes it easy. Instead of typing in code/text, *Automate* is a live-simulation program creation (*Plan*) application with easy to learn and implement click-drag, rotate, scroll, push-pull methodology, therefore much more user-friendly.

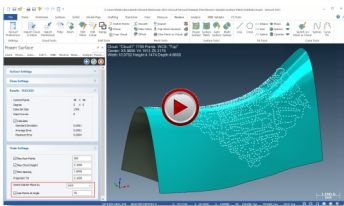
### New Thickness Feature



- CMM Plan one-click part thickness
- Automatic GoTo's & collision avoidance
- Works for manual devices & scanners too

New **Thickness** feature enhancement for *Dynamic Surface Point* adds improvements for CMM Plan creation. This enhancement provides great new capabilities not only for CMM Plan creation but also for portable CMM probing and even non-contact scanning. For CMMs, it will even create automatic GoTo moves for the proper clearance and collision avoidance as well.

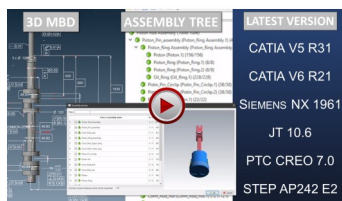
### Power Surface Enhancements for Reverse Engineering



- Added option to Orient Starter Plane for surface fit
- Added point filter option to Use Points at Angle (point normal direction from Starter plane)

The **Power Surface** feature of the *Reverse* module has been enhanced with the added functionality to use pointclouds or meshes in addition to the already available wireframe capabilities it has had for some time. As part of the upgrades to *Power Surface*, new tools were added to use starter plane fit options such as least squares, minimum zone, or graphics view, and also an option to use point vectors to help for a better surface fit. Features offer better results for certain parts and can ease the process.

### Optional CAD Translator Updates



- CATIA update to V5 R31 & V6 R21
- Siemens NX 1961 & JT 10.6
- CREO C7.0, STEP AP242 E2

CAD Translator V8.0 with new assembly import preview and management features with support for CATIA V5 R31 and V6 R21 support, Siemens NX 1961 and JT 10.6, ProE/Creo V7.0 with MBD Import, STEP AP242 E2, CATIA/NX/JT/ProE Tree/Ops Mgr import, Captured Views import and display, ability to import hidden layer entities or leave behind to reduce file clutter. The STEP AP242 E2 now supports STL triangular meshes.



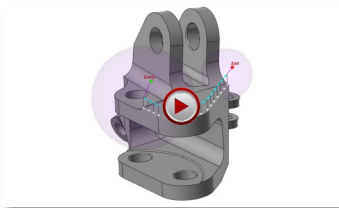
## What's New in Verisurf 2021: Release Highlights (cont'd)



- Boeing DPD compliant
- PTB—lowest deviation classification
- NIST—enhanced NIST report output

### Trusted Metrology Software

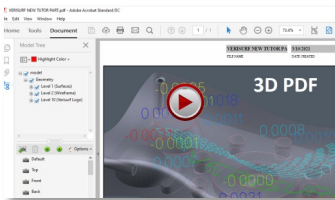
From Boeing's Digital Product Definition requirements to those of PTB and NIST, Verisurf excels at meeting and exceeding the expectations of those fine institutions. The software even includes built-in NIST testing that runs the feature fits through the math and number crunching out to several digits past necessary accuracy or tolerances with margins that far exceed industry standards and minimums.



- Translucent sphere to guide entry/exit
- Dynamically adjust vector intuitively
- Sphere size reflects entry/exit distance

### Custom Clearance CMM Path

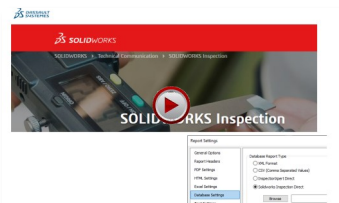
A new, custom option has been added to the clearance controls in the *Generate Path* feature that includes independent and combined control over probe clearance vectors. Intuitive translucent sphere guidance tool is used to easily direct the entry and exit paths while sphere diameter animates the entry and exit distance.



- Export model to 3D PDF
- Raster to Vector improved
- Click-drag fillet, chamfer, trim entities

### CAD Enhancements

Numerous CAD improvements include mirror about X & Y in a single operation, raster-to-vector improved to cleaner and more accurate, edit of entities such as fillet, chamfer & trim now click-drag. Improvements for detecting and creating custom holes, redefining surface flow, save CAD to PDF, display all chaining arrows... are some of the highlights.



- SOLIDWORKS Inspection added to Report Database output
- First Article Inspection & ballooned drawing reporting

### SOLIDWORKS Inspection First Article & Balloon Dwg Reports w/ Verisurf

Verisurf now connects inspection reporting with AS9100 and PPAP requirements of ballooned drawings as with FAIR (First Article Inspection Reports) of Quality Control departments. This ties together Verisurf's *Automate & AutoInspect* inspection Pan high-functioning capabilities, and concludes with **SOLIDWORKS Inspection**-specific output. The workflow is fed from Verisurf Reports output to database.



## What's New in Verisurf 2021: Release Highlights (cont'd)



- **New Feature Control Frame Builder**
- **Communicate GD&T callouts with ease**
- **Display in Plans, Reports, Balloons**

### **Feature Control Frames Added to CMM Plans & Measured Features**

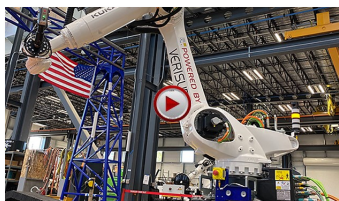
Keep your QA departments process connected and make everything look professional while staying current on ASME and ISO protocols. In Verisurf *Automate*, *Report Manager* and *Measure* users can setup GD&T feature control frame callouts with the new **Feature Control Frame Builder** in the Details Pane of those application areas. Use for reporting and display to present them as they are on drawings. Also added ability to include Control Frames in Excel spreadsheets/reports as well.



- **Upgrades from Renishaw for REVO & PH20 5-axis probing heads**
- **zCAT enhancements**
- **API iSCAN3, Radian Pro & Plus, Faro 6 Probe**

### **Device Interface Upgrades for CMMs & Laser Trackers**

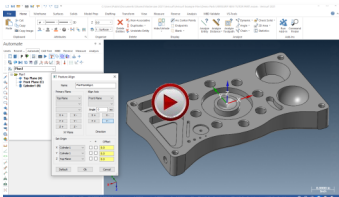
Enjoy all of the latest enhancements from metrology hardware OEMs optimized by Verisurf's device-independent software, updated to the device's most current, released operational interfaces. Particularly of note for Verisurf 2021 are enhancements for programmable CMMs (I++ DME interface) and portable laser trackers. Improvements and additions for metrology systems include Renishaw REVO and PH20 CMM probing heads, zCAT portable programmable CMM, Faro tracker 6Probe, API Radian Pro, Radian Plus & iSCAN3 trackers and scanners, and Hexagon-Leica ATS600.



- **Connect with collaborative systems**
- **Robots, database, CNCs, automation**
- **Configurable/customizable**

### **Verisurf SDK—External App Interaction & Integration**

Enhancements to the Verisurf SDK for communication and automation in conjunction with other cooperative devices are included in the V2021 release. Documentation and support provided to connect and communicate with your system.



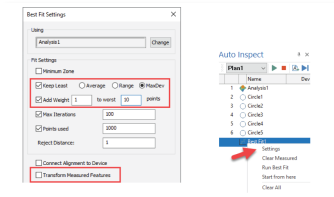
- Feature Align improvements in Plan:**
- **Uses Plan Nominals automatically to create WCS for Feature Align live in a Plan improving and simplifying workflow**
  - **Intuitive dialog allows Change Dependencies without recreating alignment**

### **Feature Align—Automate & Report Manager Enhancements**

Enhanced to use the Nominals from the Plan to automatically create a WCS while simultaneously using the Measured to perform the Feature Align to that WCS, and it is all done live. This greatly improves the workflow for all users performing Feature Aligns in a Plan, whether created in Automate or Report Manager. Adds support to Change Dependencies of a Feature Align in a Plan without recreating the Feature Alignment and enhanced to display the Objects in the Feature Alignment in the Using field. This helps users quickly identify what Objects are used in the Feature Alignment and enables the user to Change the Objects used in the Feature Align.



## What's New in Verisurf 2021: Release Highlights (cont'd)



### Best Fit—Automate & Report Manager Enhancements

Numerous enhancements related to use of Best Fit in Automate/AutoInspect Plans and Report Manager will help add productivity for automated CMMs and user-prompted inspection routines for manual and portable CMMs. Best Fit in a Plan can now use Features and Datum Features for calculating Composite Position of patterns. Best Fit now support Feature Weights and Datum Feature Maximum Material Boundary (MMB). Best Fit can now be run offline in a plan. Added Best Fit Weight for Features and Analysis Objects into Automate, Report Manager and the Measure Details Pane. New Settings added to the Best Fit for a Plan. New controls for Analysis objects and Transform Measured Features option. Best Fit Edit settings added to the Auto Inspect object speed menu.

- New Best Fit features, simple to apply
- Classic on-the-fly controls now in Plans
- Save parts from going to the scrap bin



### Verisurf External Productivity Utilities

*Verisurf Workspace Selector* utility selects and loads multiple Verisurf-configured workspaces for personalized or application-based environment customization. *Verisurf Report Merger* utility selects and merges multiple, macro-enabled Excel worksheets or Adobe PDF files. *Verisurf Cleaner* utility deletes temporary Verisurf files used for updates (primarily useful to beta testers who perform frequent installations during testing of new software versions). *Verisurf GUI* utility launches the desired version of Verisurf and quickly resets Graphical User Interface elements to their default state. *Verisurf Helper* utility searches across all Verisurf installed PDF files for any search term.

- Workspace Selector
- Report Merger • GUI utility
- Cleaner (storage space) • Helper



### Kubotek Kosmos K-Compare—Integrated with Verisurf Validate

Based on the approved file translate and revision analysis software approved by top OEM manufacturers such as Boeing, K-Compare CAD file translation validation software is integrated into Verisurf *Validate*. It allows Verisurf users to satisfy Digital Product Definition (DPD) standards. Verisurf 2021 incorporates the latest revision to the newly designated *K-Compare Validate*. Current Verisurf customers will be upgraded to the *K-Compare*-enabled version of Verisurf *Validate* from the now-discontinued product, and new customers will be benefiting from *K-Compare Validate* going forward.

- Satisfy DPD standards @ major OEMs
- Supports all popular CAD file formats
- Includes K-Compare latest enhancements

*Verisurf 2021 includes additional improvements beyond those listed here. Get Verisurf 2021 now:*

Get Verisurf 2021

