Newsletter June 2020



#### Planar v2020 Release

A new version of Planar is about to be released, v2020. This update focuses on GD&T enhancements.



#### **New Features**

## **GD&T Items and Alignments**

The following GD&T items have been overhauled:

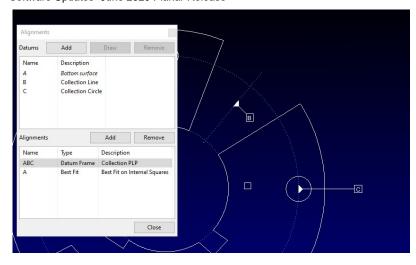


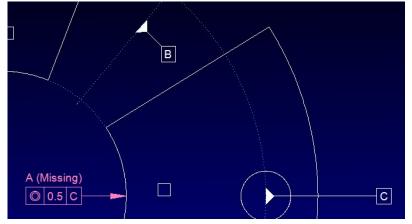
- Straightness
- Circularity
- Profile
- Angularity
- · Perpendicularity
- Parallelism
- True Position
- Circularity

To enhance this upgrade, the user defined alignments section of the software has also been revamped.

The existing best fit alignments on selected features have been kept and the ability to define GD&T Datum features and create alignments from these features has been added.

These GD&T Datums can use CAD or collection entities.





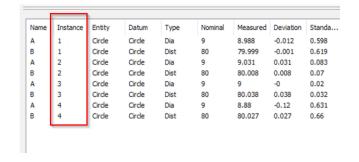
# Part Instance Column and AR Projection

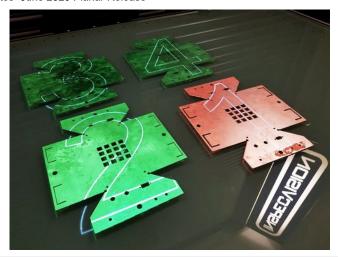
When inspecting multiple parts of the same design the part number/instance is rendered on screen.

To further enhance ease of use the part number can now be projected onto the physical part using Augmented Reality (AR).

This option requires a SurfScan.

If you use a 3rd party application to do SPC analysis then this software can have trouble processing an SPC file with multiple parts in the same inspection report. The Instance column facilitates analysis of these multi-part inspections in 3rd party SPC software.





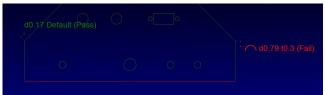
# Deviation Map Custom Alignments + GD&T Profile

The deviation map can now access the user defined alignments.

A new GD&T Profile section of the deviation map has also been added. This facilitates the creation of GD&T profile on sequences of CAD entities, for example it is quite common for regions of a part's external profile to have several GD&T profile tolerances and as well as a general tolerance.

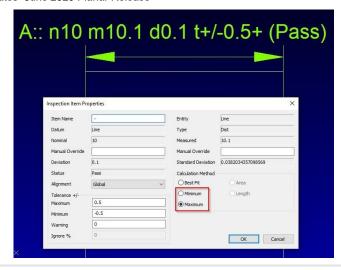
The status of these GD&T profile regions is color coded and included in the report.





### Min/Max Line-Line Distance

The ability to measure the maximum or minimum distance between lines has been added.

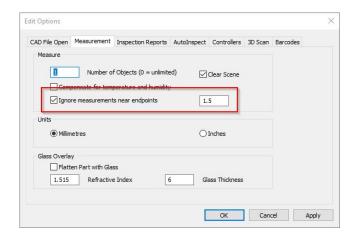


### **Entity End Points**

No scanner or production machine has an infinite resolution.

Consequently the measurement data near the end points of features will be rounded, either in the part or the scanner.

This data can now be ignored. Typically this value would be set to at least the pixel pitch of the scanner.

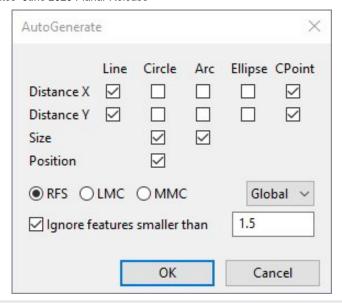


## AutoGen Report Options Extended

The AutoGen reporting options have been enhanced and now include....

- Line Position X/Y
- · Circle Position X/Y
- Arc Position X/Y
- Ellipse Position X/Y
- Collection Point Position X/Y
- Diameter of Circle
- · Radius of Arc
- True Position of Circle with custom alignment and MMC/LMC options

Entities smaller than the defined values can still be ignored.

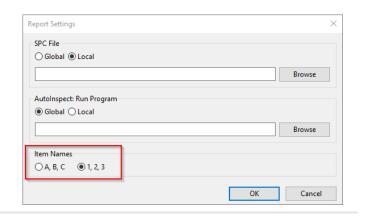


#### Inspection Item Naming Conventions Added

The normal Inspection Item naming convention is Alpha Numeric.

Optionally the user can choose to use a pure Numeric naming convention.

Just in case your reports do not contain enough numbers already.



# 3D Scan Options in Planar File and Improved Scanning Speed

When inspecting different parts with the Opti-Scan it is common to optimize the scan settings for that part. We have enhanced the scanning speed of SurfScan and Opti-Scan systems.

For example a simple non-reflective part may require less scans with less exposure than a shiny complex part.

Most of the Opti-Scan scan settings are now saved with the Planar (.plr) file allowing the user to switch between inspection jobs by simply scanning a barcode.

# Fixes, Enhancements & Distribution

As ever the features listed here are only some of the changes made in this version of the software. A complete change log will be posted into the Internet Updates section of the Planar software when the release is published.

This is a major release and as such requires a full installer to upgrade your system. These installers will be distributed over the next few weeks.

If you would like an advance copy of the manual for this software please contact us using the address below.

If you have any questions regarding this newsletter please contact sales@inspecvision.com.