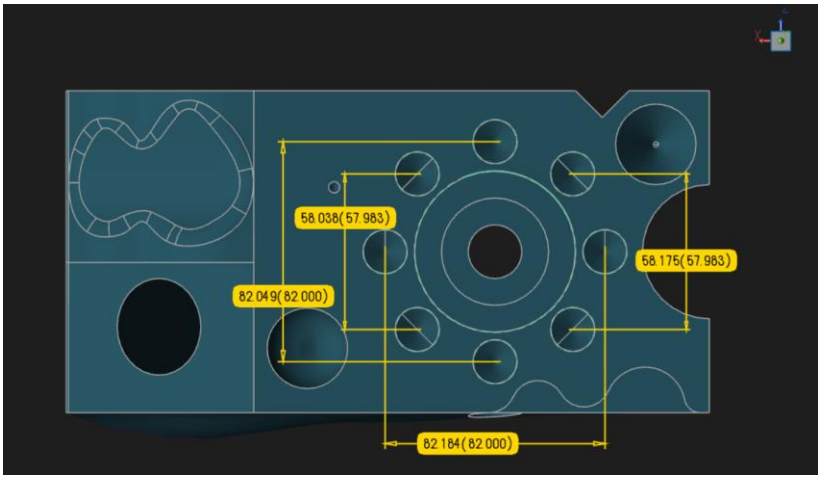
Inspire 2023.1 What's New

New branding

Inspire is updated to the new branding to support the Nexus platform.

Move Dimension Leader Lines

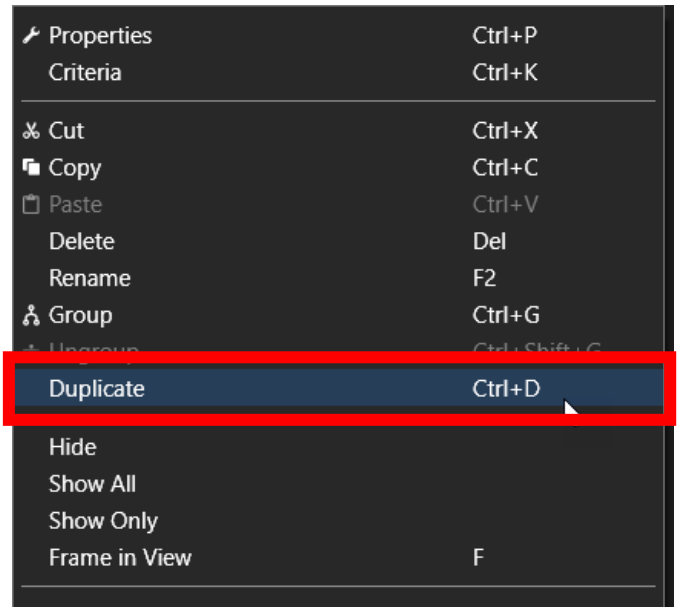
Move the dimension leader lines in the measurement plane as well as along the leader line.

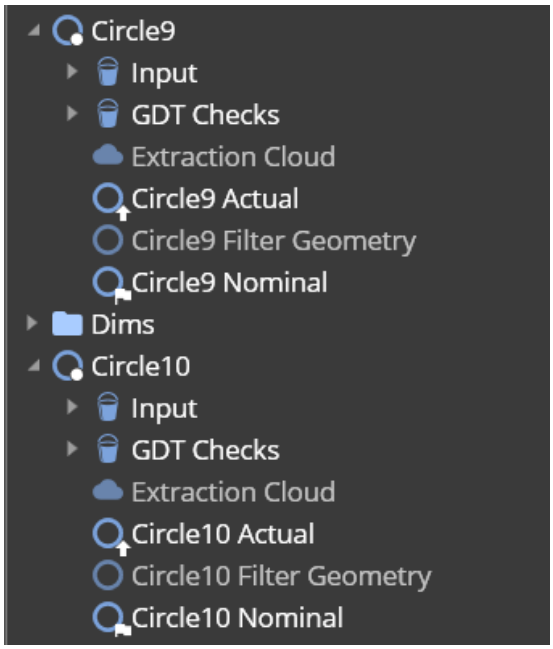


Duplicate Objects in the Tree

You can now Duplicate objects in the tree by right-clicking the object and selecting "Duplicate" or CTRL+D.

This makes an exact replica of the object being duplicated as opposed to a Reference to that object when you "Copy" and paste it.

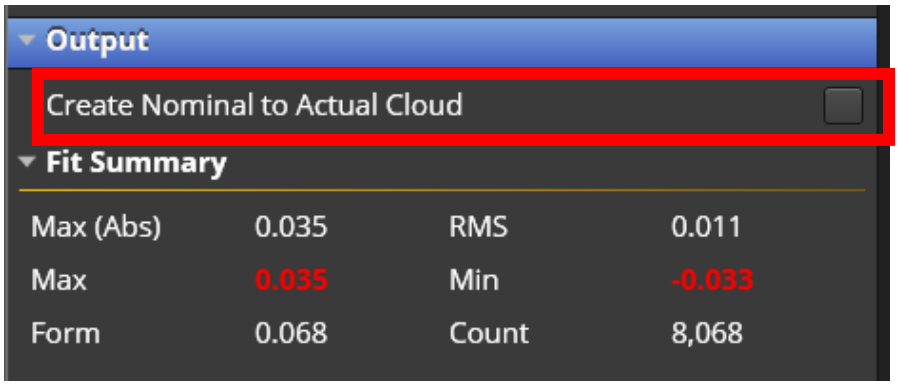


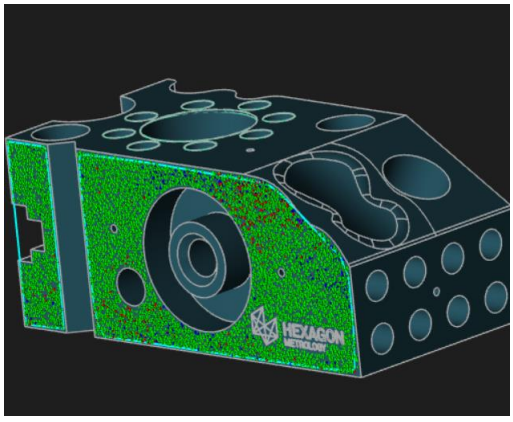


Create Colorized deviation Clouds to 3D Features

Instead of having to create Comparisons of the Extraction Clouds to the Nominal features, you can now check the box in the Feature Properties.

You will have all the same color controls and settings.





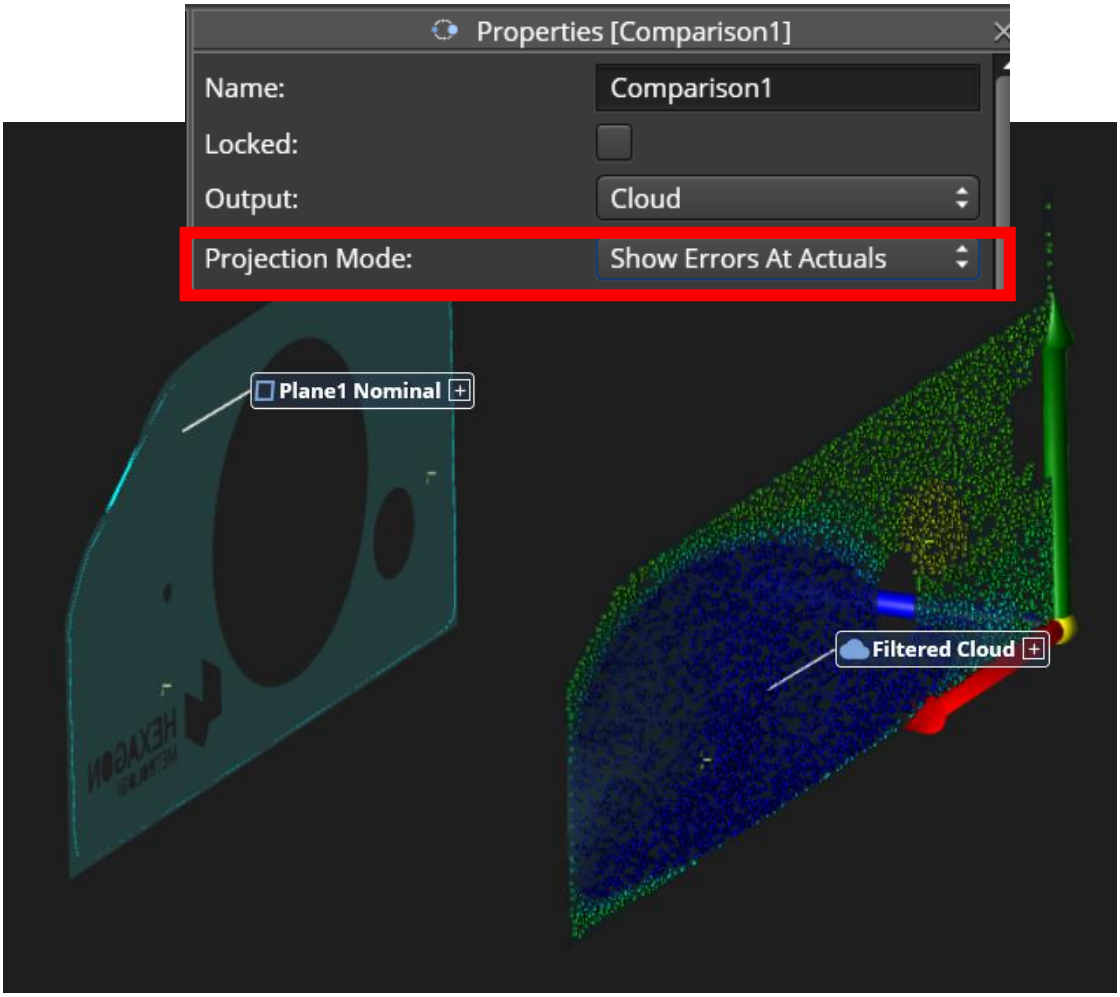
Highlighting Nominal Features during measurement

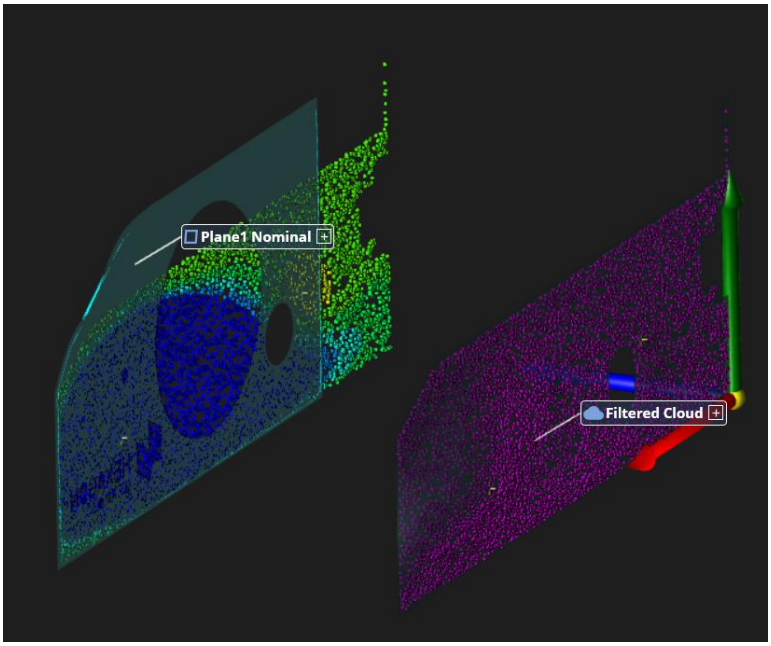
During measurement execution, the Nominal features are highlighted more prominently in the CAD screen with a thicker and brighter line.

Project Comparison errors on Actuals

You can now choose to show your colorized errors at the Nominal OR the Actual data by changing the Projection Mode.

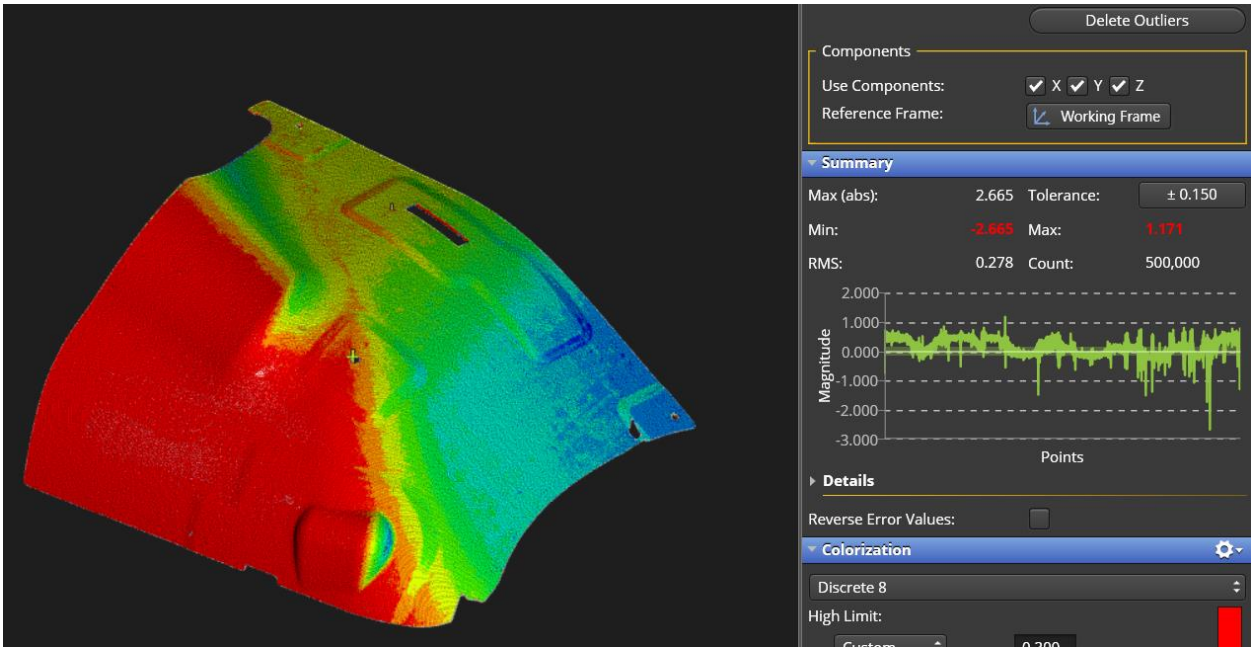
The example is a comparison of a Nominal Plane to a filtered cloud from a surface feature.


Properties [Comparison1]
Name:
Comparison1
Locked:
Output:
Cloud
Projection Mode:
Show Errors At Actuals
Plane1 Nominal
Filtered Cloud


Plane1 Nominal
Filtered Cloud

Comparisons to STL show positive and negative deviations

Comparisons to STLs and other imported Meshes only showed absolute deviations in previous versions. These now can distinguish the front and back side of the mesh.

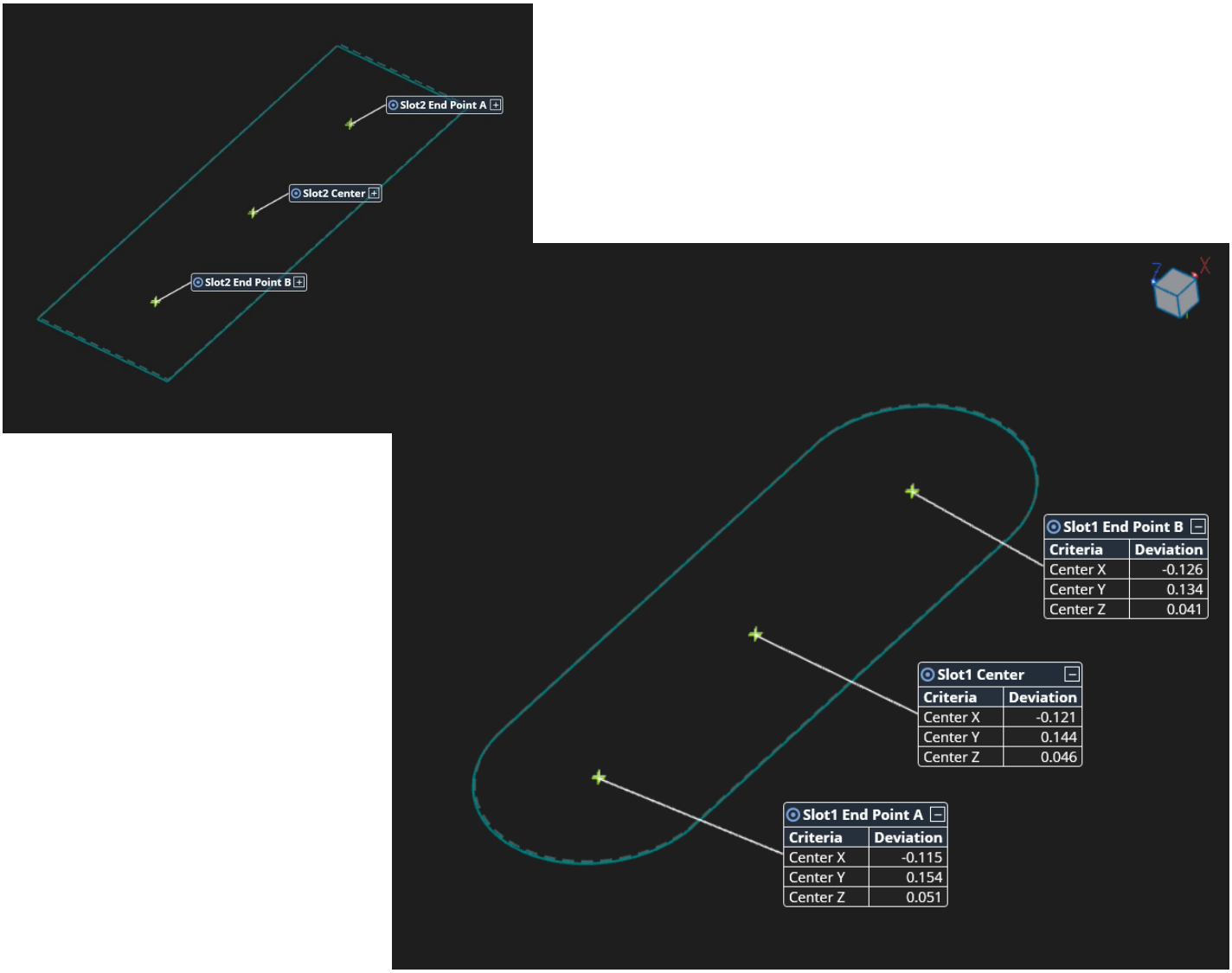


Cardinal Points for slots

Cardinal Points for slots can be created from the Feature Properties.

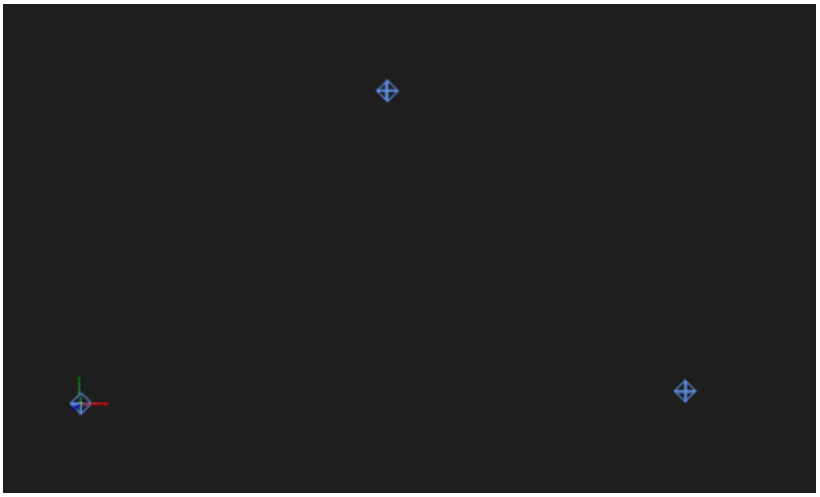
Round Slots: Points are created at the center of the radii at each end and a center point

Square Slots: Points are created a half-width away from each end and at the center.



Best Fit Points to Points Alignment: Force point pairs

In cases where a Best-Fit Points-to-Points alignment will not solve correctly because of a symmetric pattern or multiple solutions of equal error, you can now force the alignment to match the Actual measurements to the Nominals by the order they were picked.



Points

Nominals (Fixed):

Name	X	Y	Z
SetPoints.csv			
P1	-0.080	0.000	0.000
P3	711.130	0.109	0.669
P5	388.545	353.099	7.443

Actuals (Moving):

Name	X	Y	Z
PtGroup1			
P1	-0.323	0.115	0.002
P3	711.040	0.613	0.679
P5	388.878	352.481	7.431

Advanced

Allow to Vary:

Leica AT403-1: 1.00000

Allow to Vary: ☐ Reset

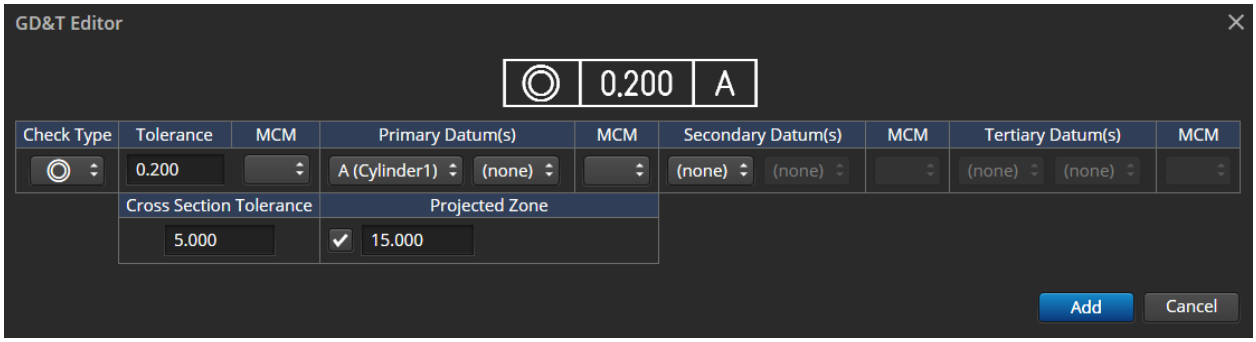
Auto-Match Tolerance: 6.350

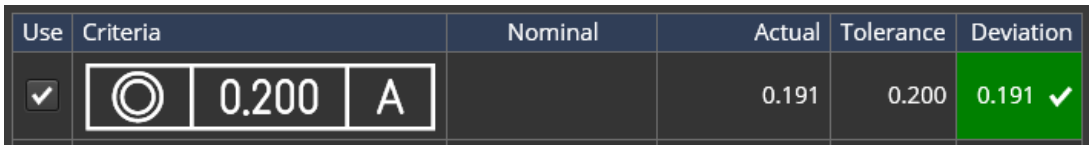
Match by Input Order: ☑

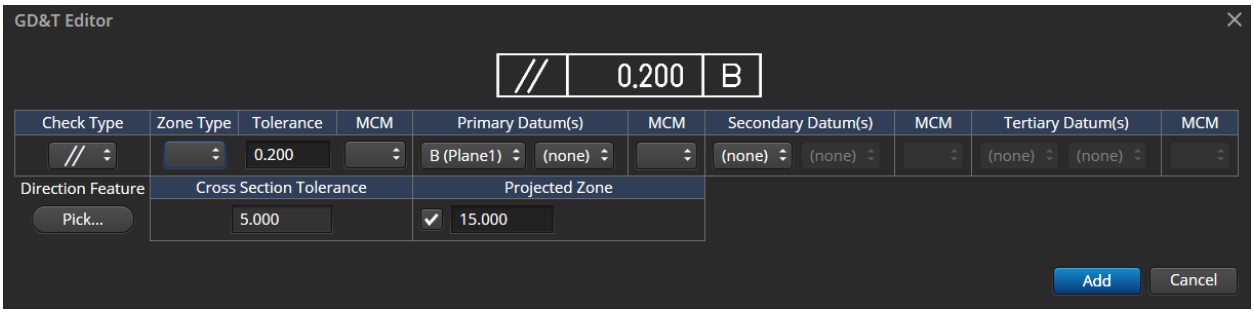
GD&T: Projected Tolerance Zones

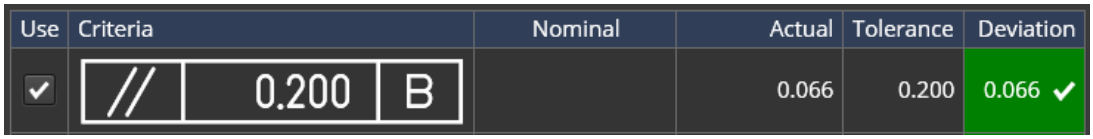
Added the ability to use Projected Tolerance zones in GD&T checks. Includes:

- Angularity
- Perpendicularity
- Parallelism
- Concentricity
- True Position
- Composite True Position







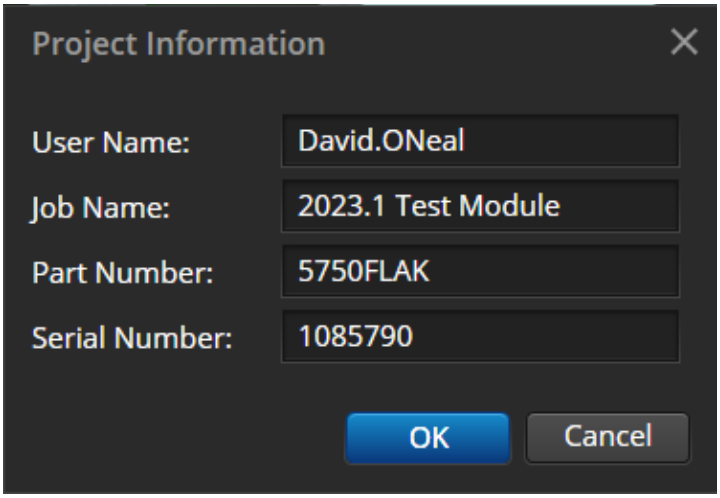


Action Additions

Set Project information for the job file

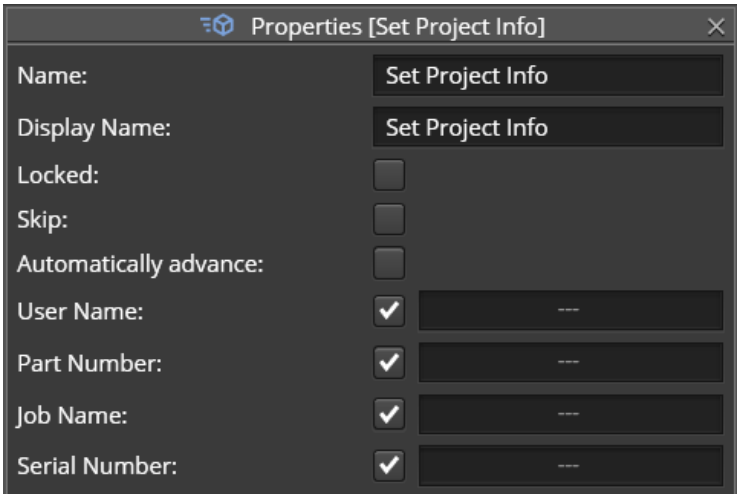
Go to File > Project Info…

Store project metadata with your file.



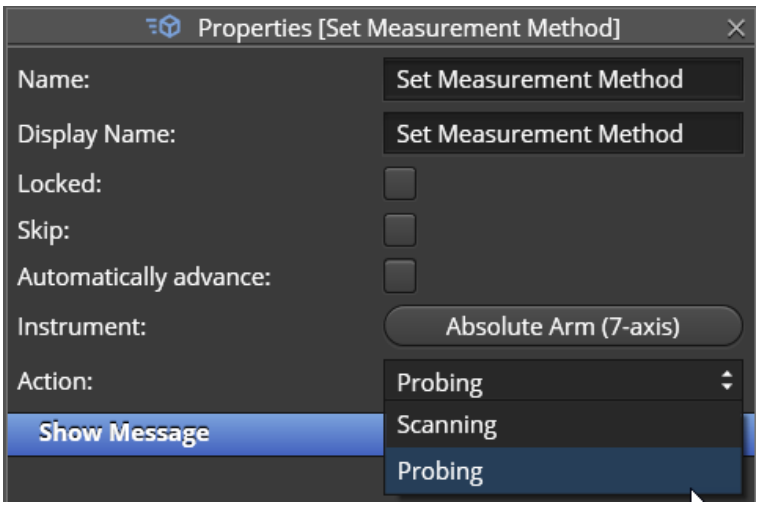
Set Project Info Action

Automatically prompt user to enter project info for the job file



Set Measurement Method

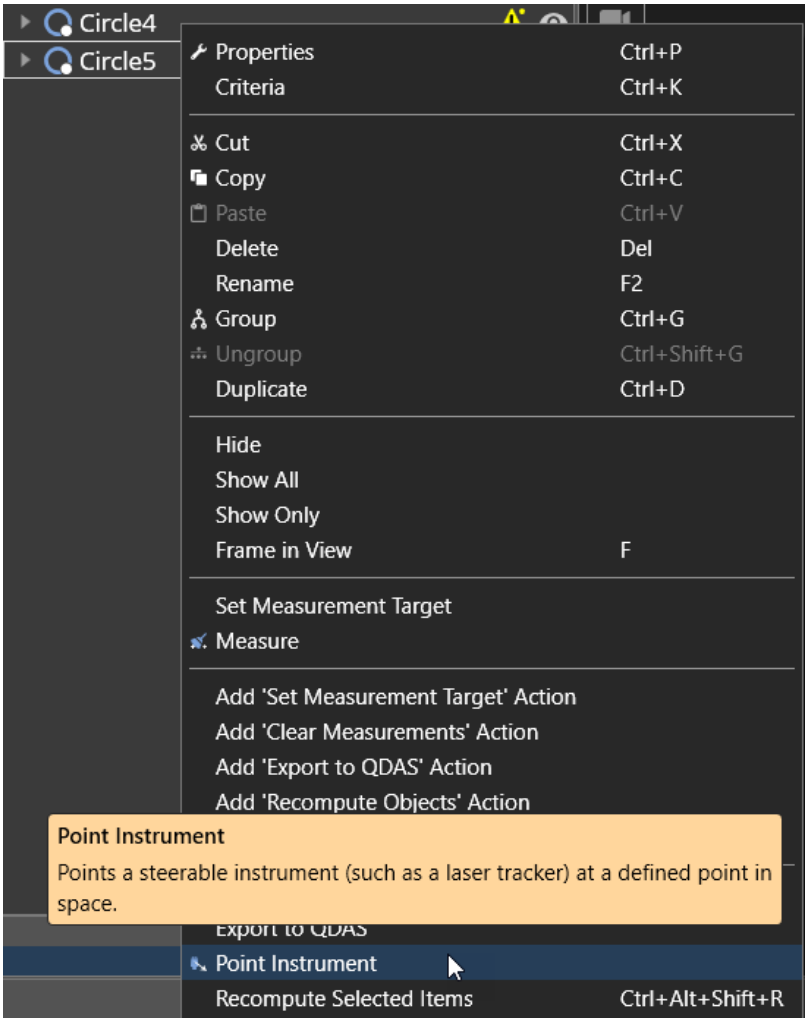
Set the Probe or Scanner active in your measurement program

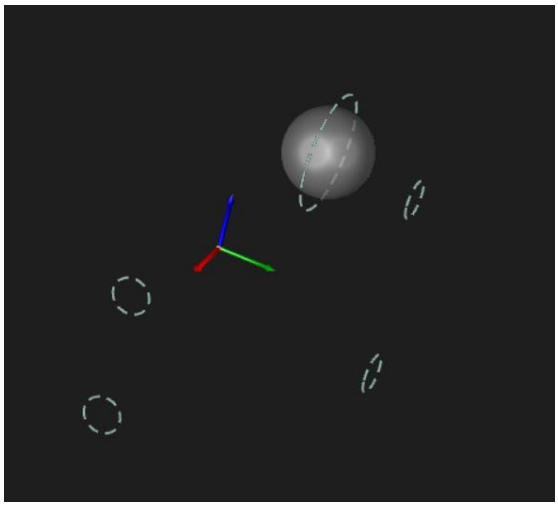


Point Instrument at Feature Centers

You can Point an Instrument at any point-reducible feature by either:

1. Right-clicking on the instrument and selecting “Point Instrument” and then selecting the feature
2. Right-clicking the Feature and selecting “Point Instrument”





Python Commands: Added commands and arguments

- Simplified IN_ImportCAD
    - Removed constructor argument for setting which is already accessible via app settings from scripting
    - Changed the IsSupportedCADFile() to take an optional file path argument. If supplied it will be used instead of the FilePath property on the command instance
- Added IN_ClearDataField to clear the value of specified data field descriptions. Also updated IN_SetDataField to allow an empty value for new data field.
    - Added IN_ChangeMeasurementOrder to reorder Action measurement targets. Replaces use of IN_Move for Actions items.
- Added custom view names to the IN_SetPresetView script command.
- Added new script command IN_ExportToCAD for exporting to supported CAD formats.

CAD

Updated supported CAD formats

- Autodesk Inventor 2023
- CATIA V5_6R2022
- Creo 9.0
- JT 10.6
- NX 2206
- Parasolid 34.1
- Revit 2023

New CAD format

- Microstation DGN 7