spGauge

2021.1　New Features

（ January 2021 ）

Armonicos Co., Ltd.

INDEX （2021.1）

－ New Features －

－ Others －

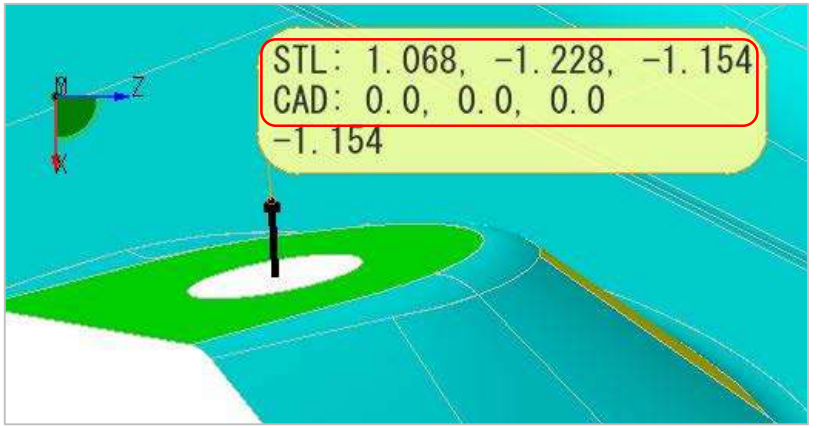
1． 3D Local Coordinate system Hole Inspection

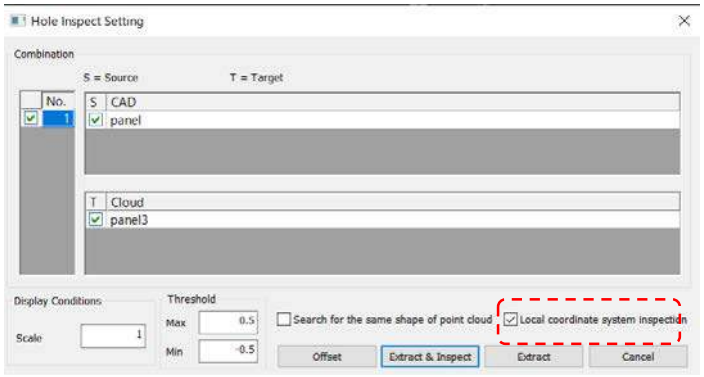
During holes inspection, you can set the normal of each hole’s center axis to the Z axis, and each hole’s horizontal direction to the XY axis direction.

Related Menu [Inspection]-[Hole]-[Set Condition & Inspect]

Global coordinate system inspection

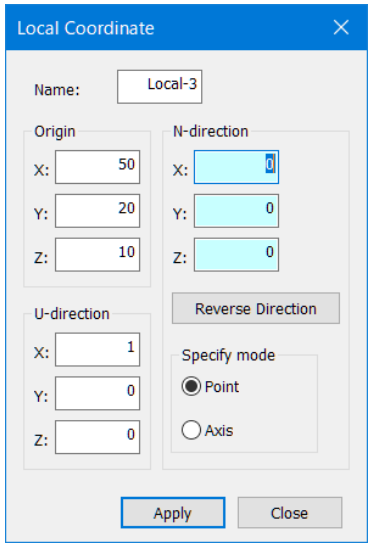
Local coordinate system inspection

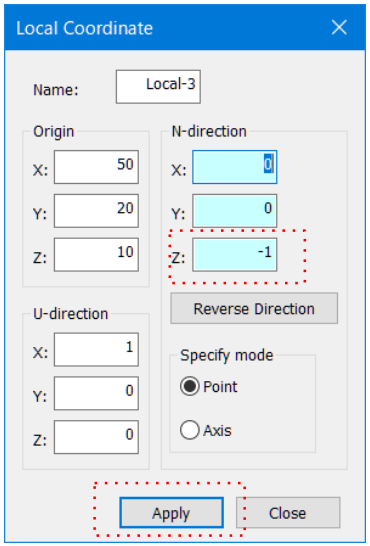


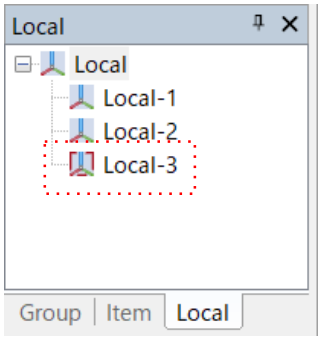


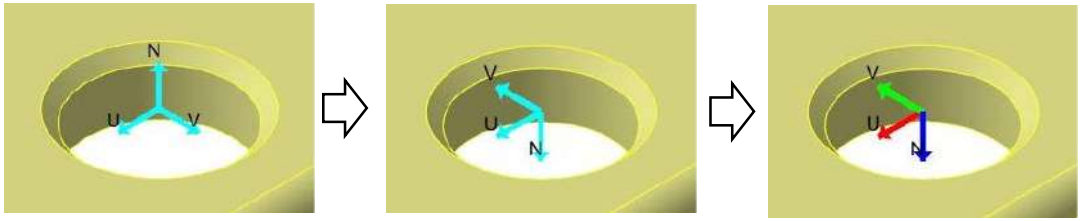
You can define multiple 3D local coordinate systems.

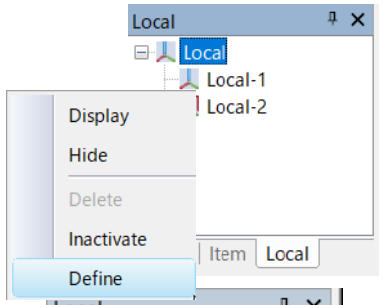
Tree [Local]-[Define]

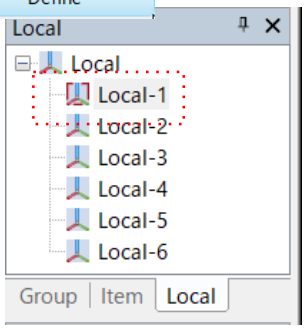


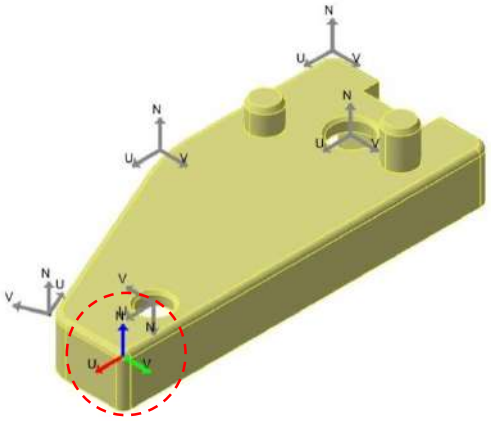












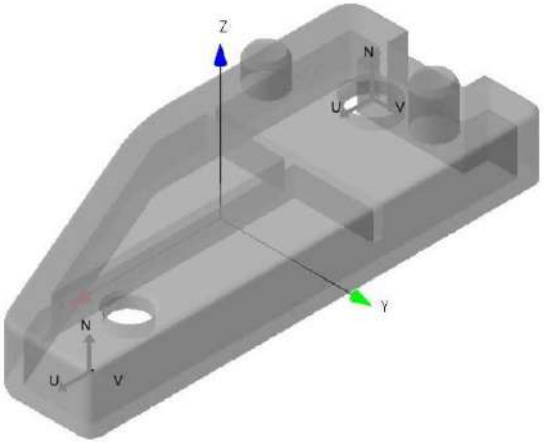
Activate local coordinates

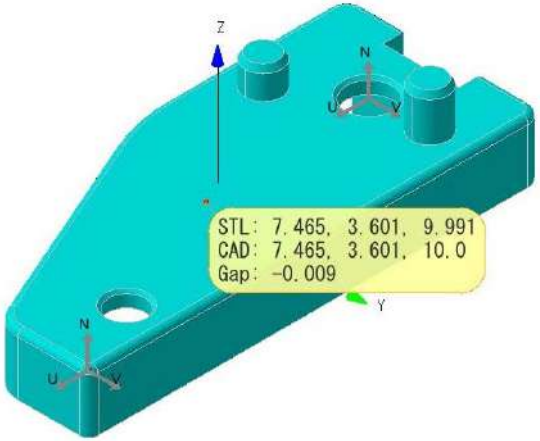
1 . 3D Local Coordinate system Point Inspection

You can define multiple 3D local coordinate systems, and inspect a point using the local coordinate system.

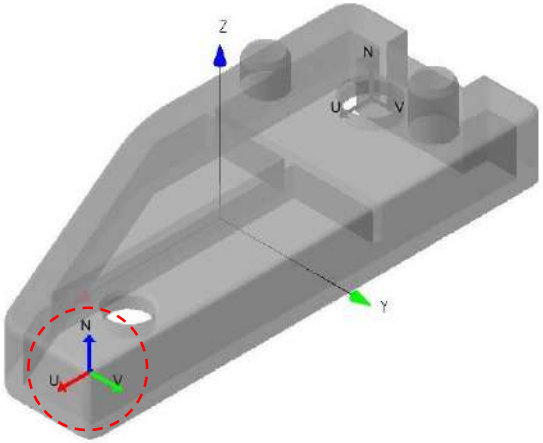
Related Menu **[Inspection]-[Point]-[Set Condition & Inspect]**

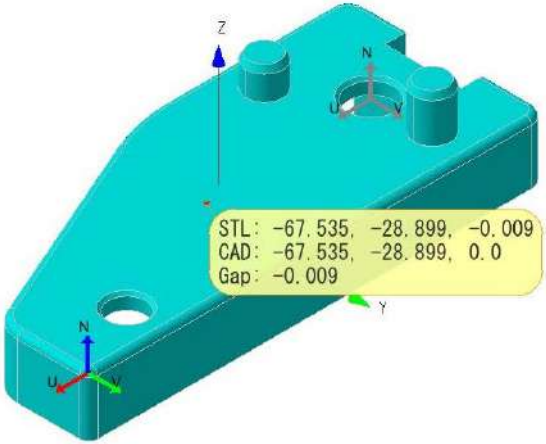
Global coordinate system inspection



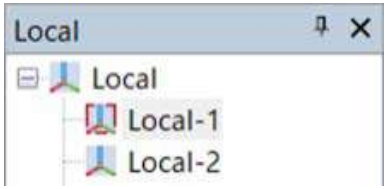


Local coordinate system inspection

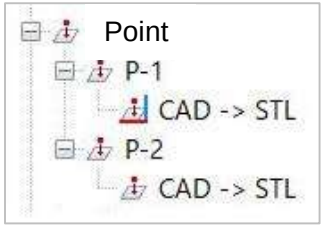




Local-1: Active



P-1: Local inspection
P-2: Global inspection

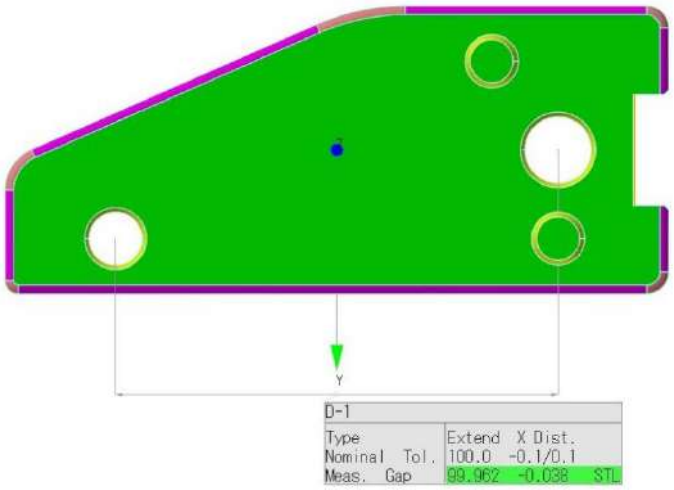


1． 3D Local Coordinate system GD&T

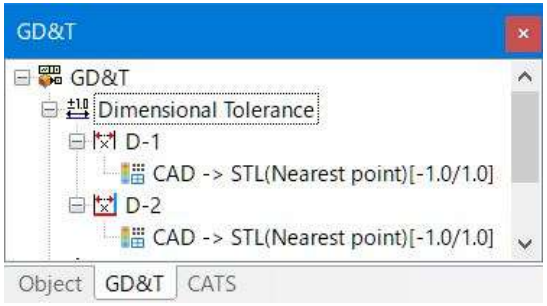
You can define multiple 3D local coordinate, and inspect GD&T dimension using the local coordinate system.

Related Menu **[Inspection]-[GD&T]-[Dimensional Tolerance]-[Define]**

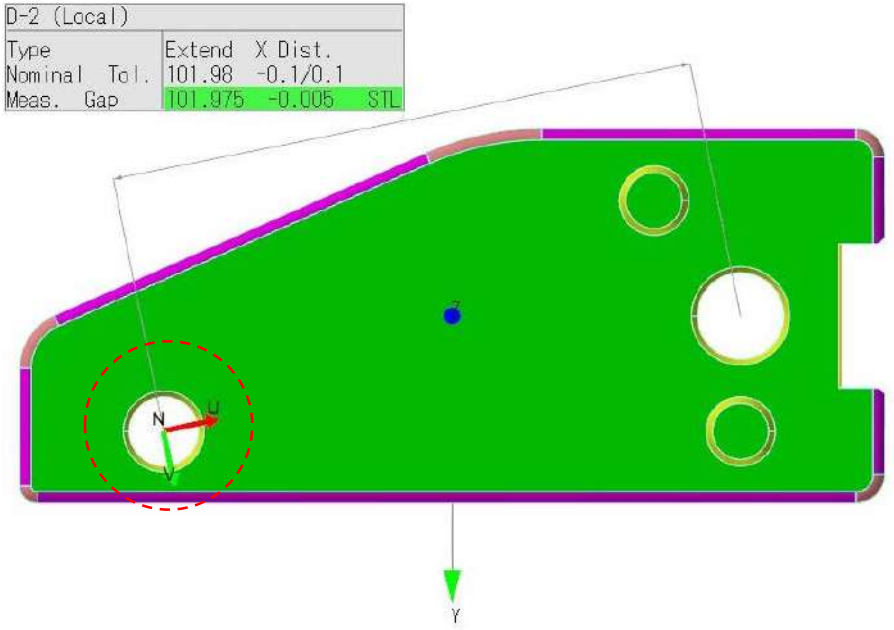
Global coordinate system inspection



D-1: Global inspection
D-2: Local inspection



Local coordinate system inspection

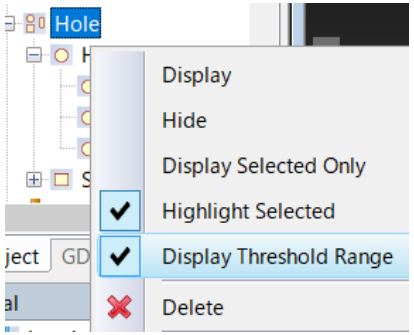


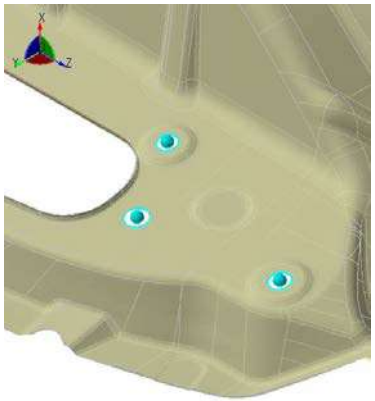
Inspection direction of GD&T dimensional tolerance is defined to be active local coordinate direction.

2． Display Threshold Range Hole Inspection

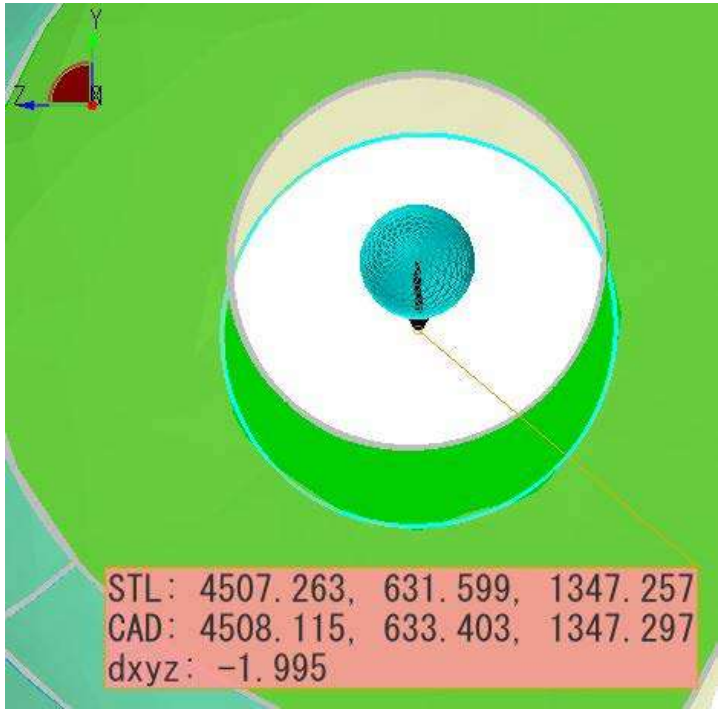
You can display the threshold range of a hole center.

Tree **[Inspection]-[Hole]-[Display Threshold Range]**

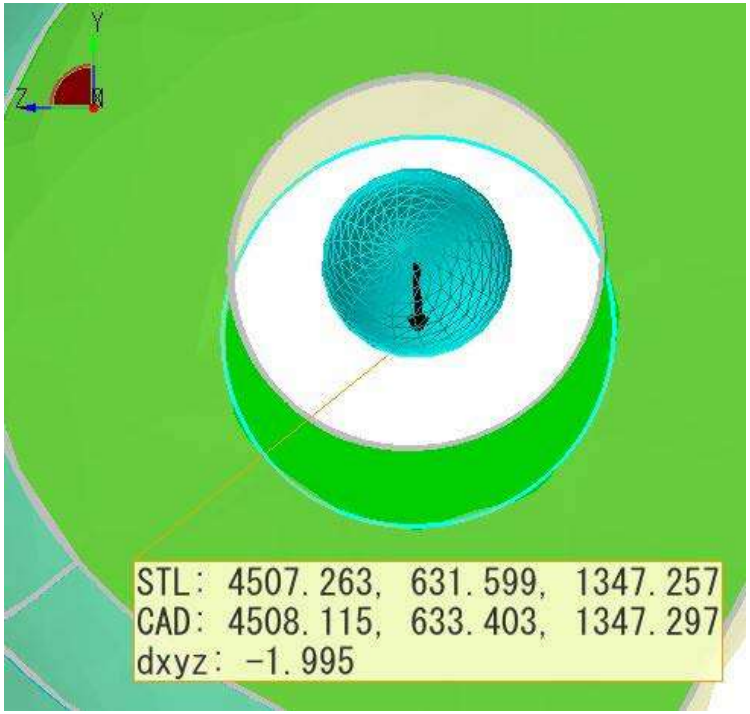




Threshold value： 1.5mm



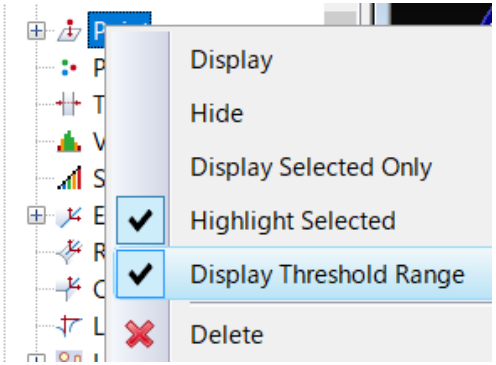
Threshold value： 2.5mm

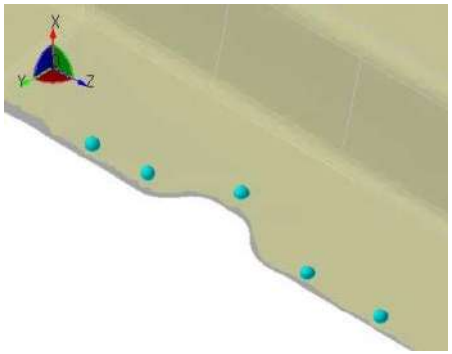


2． Display Threshold Range　Point Inspection

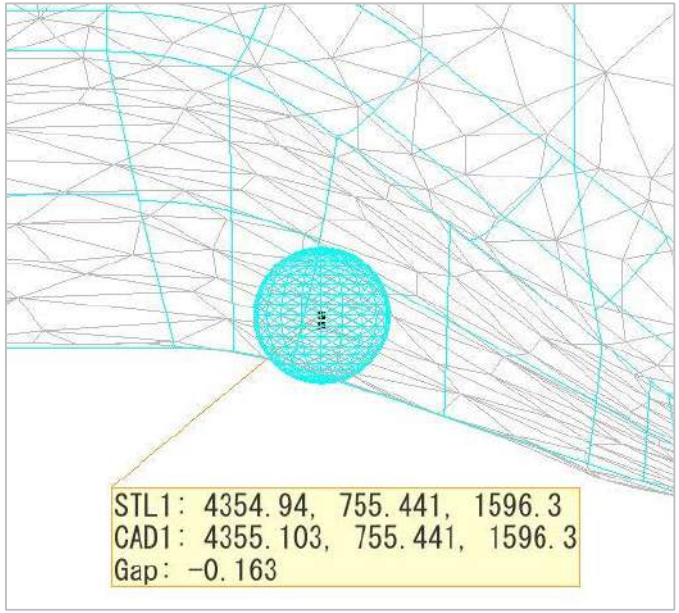
You can display the threshold range of point inspection

Tree　**[Inspection]-[Point]-[Display Threshold Range]**

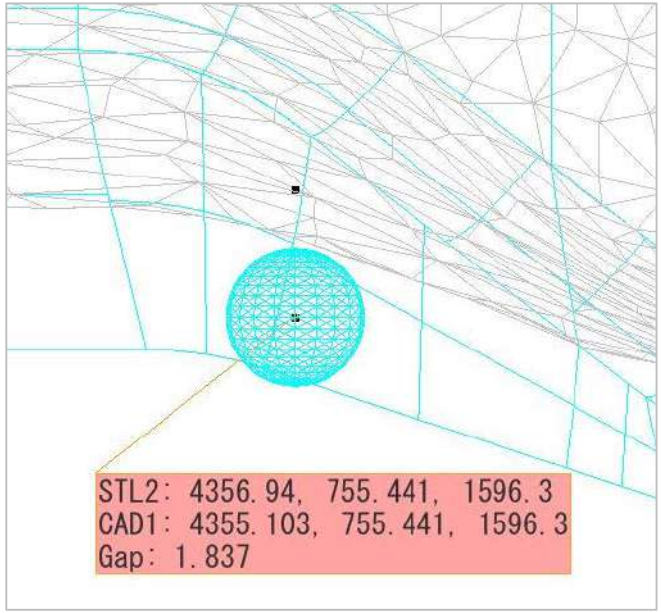




Under the threshold range（OK）



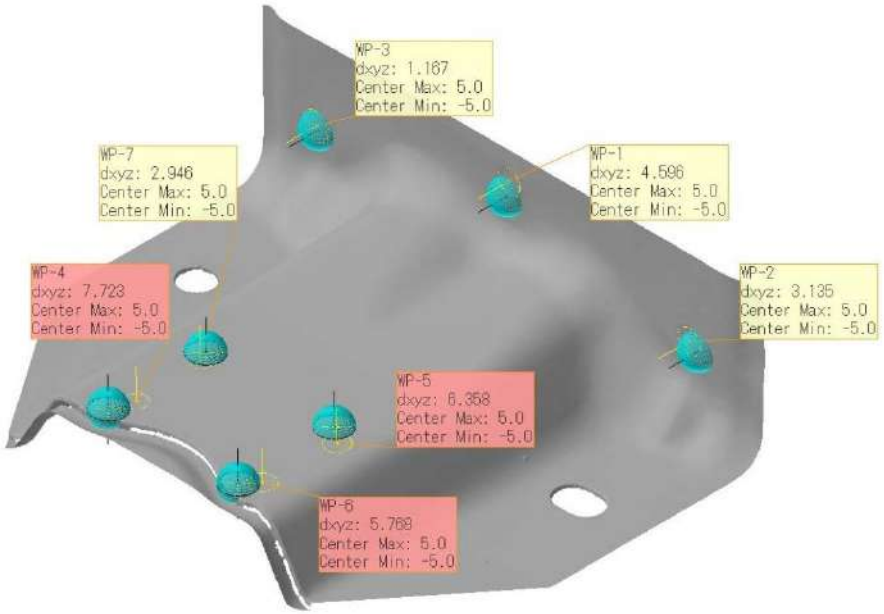
Out of the threshold range（NG）

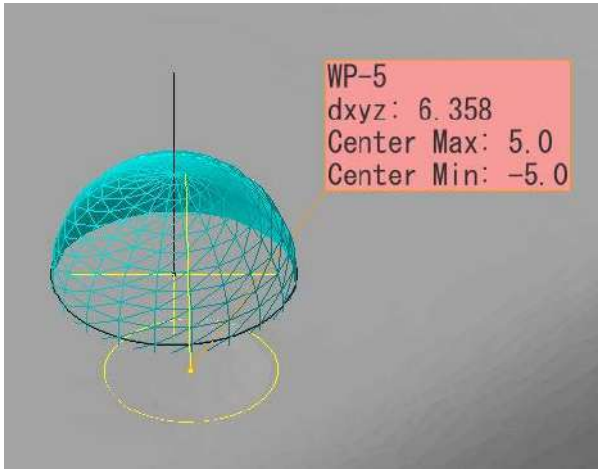


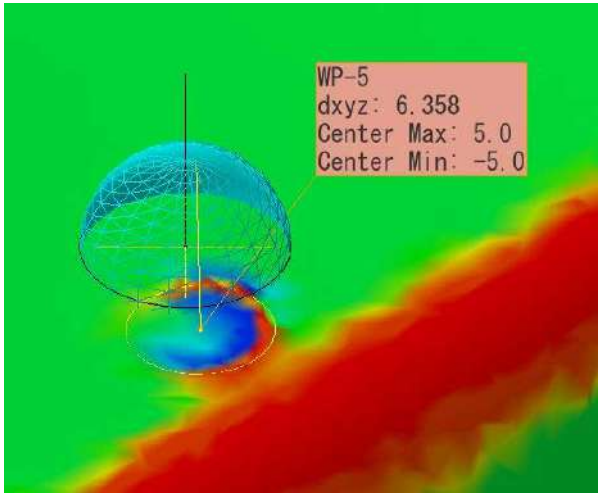
2． Display Threshold Range　Welding Point

You can display the threshold range of the welding point inspection.

Tree　**[Inspection]-[Welding Point]-[Display Threshold Range]**





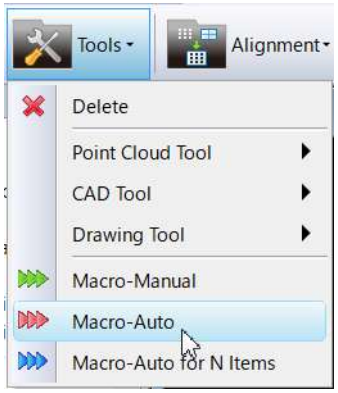


3． Macro-Auto Icon

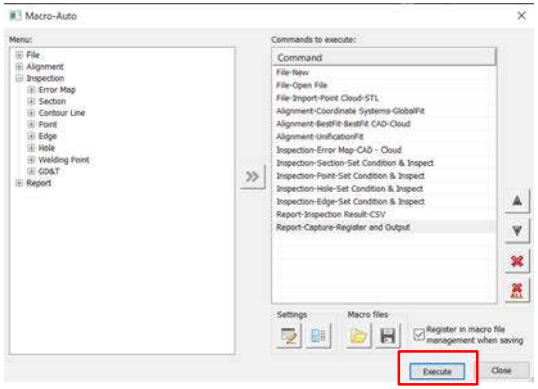
You can execute the command “Macro-Auto” simply by clicking the icon on toolbar.

Related Menu **[Tool]-[Macro Files Management]** （[Tool]-[Macro-Auto]）

2020.1



Execute on the dialog



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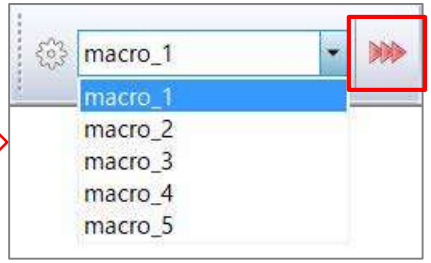
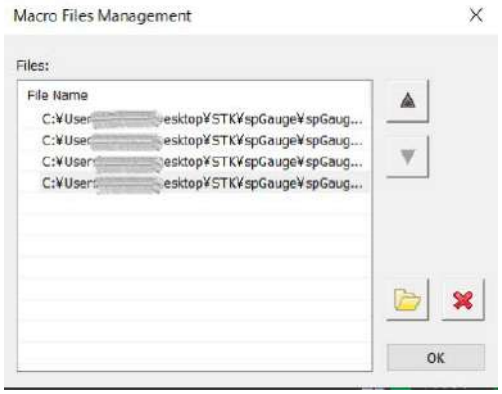
(Toolbar)

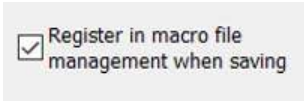
Select/Execute



Register macro files



On [Tool]-[Macro-Auto], you can set the option to automatically register in macro files when saving

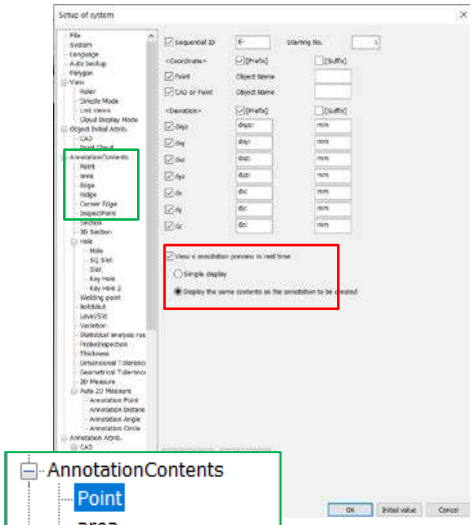


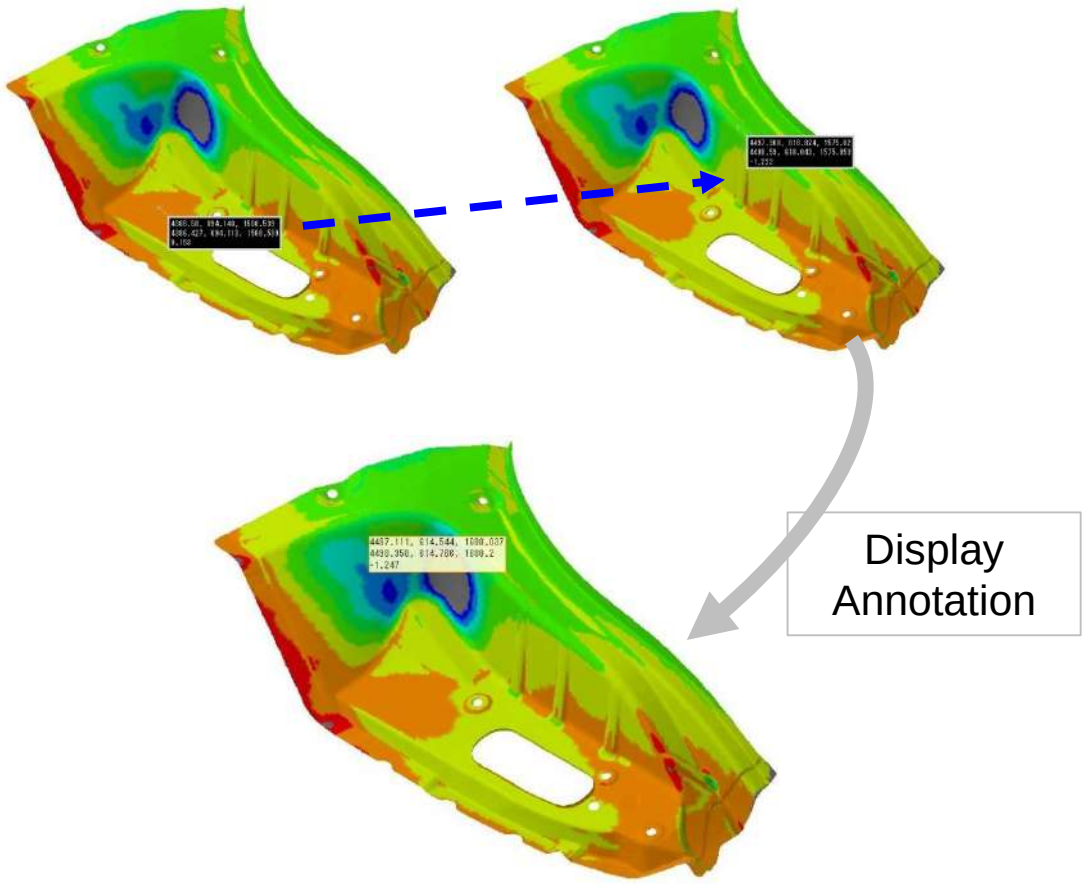
4 . Display gap in real time

Gap annotation is displayed in real time following the mouse cursor position.

Related Menu **[Report]-[Annotation]-[Add Annotation]**

System setting



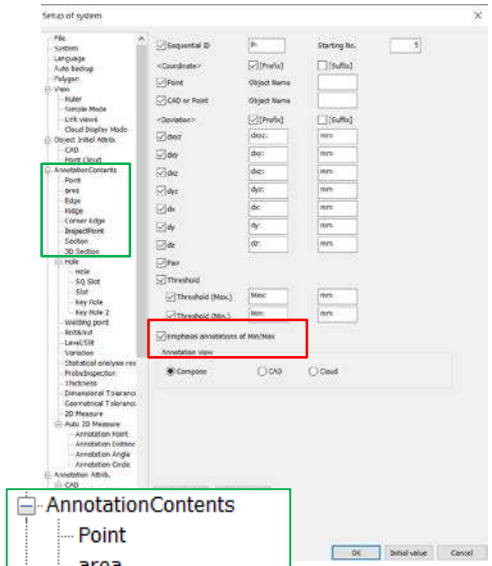


5. Point Inspection Display Max/Min Annotation

During point inspection, you can use emphasis annotations in order to check the maximum and minimum gaps.

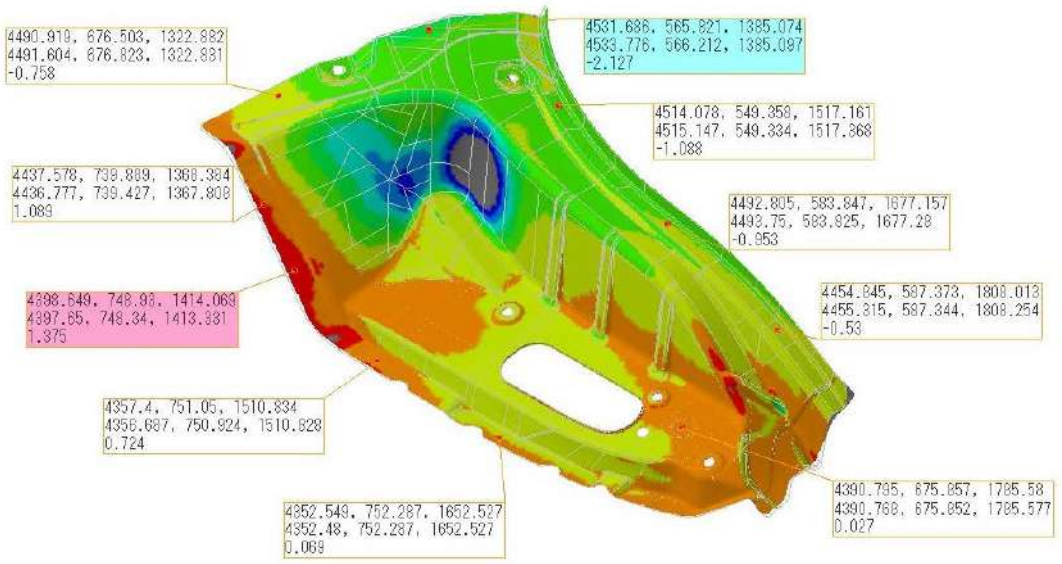
Related Menu **[Inspection]-[Point]-[Set Condition & Inspect]**

System Setting



[Red] Max gap

[Blue] Min gap



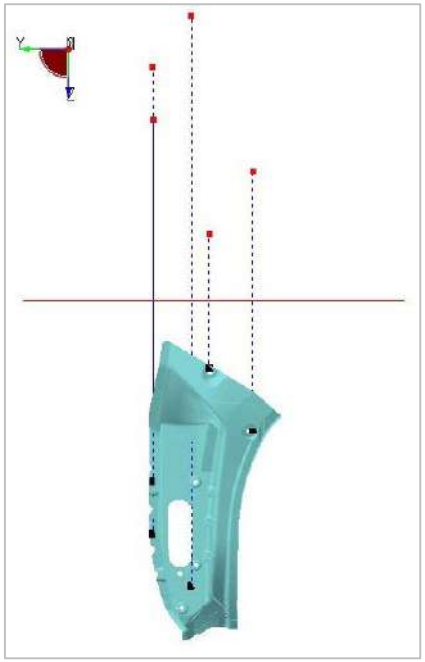
6. Point Inspection Mirror

You can mirror and copy an already defined inspection point.

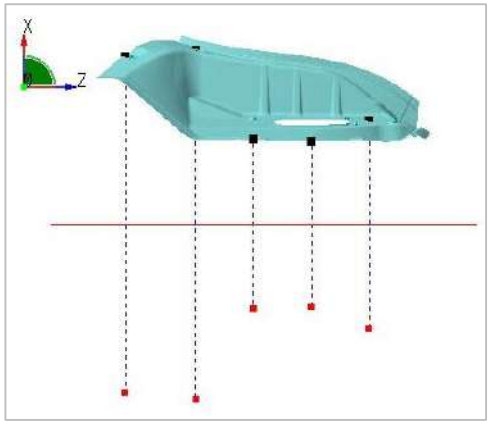
Related Menu **[Inspection]-[Point]-[Mirror]**

Tree **[Inspection]-[Point]-[Mirror], [Inspection]-[Point]-(Object)-[Mirror]**

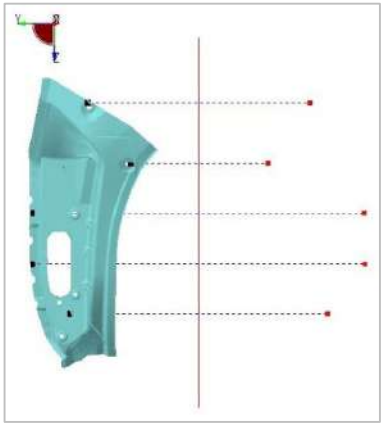
Z Direction

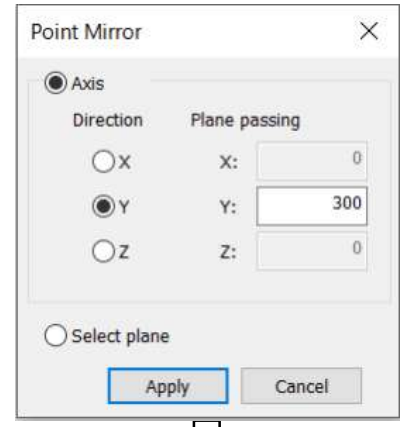


X Direction



Y Direction



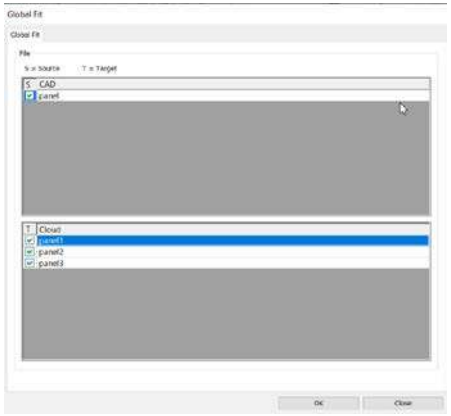


7 . Improved Global fit

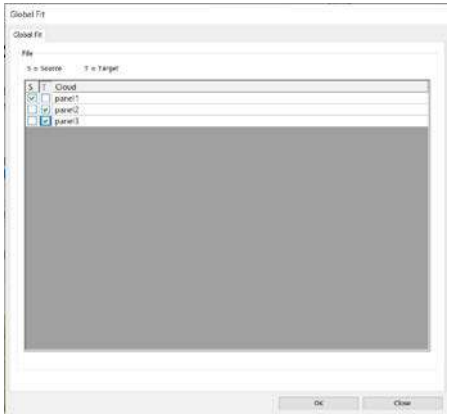
Global fit has improved to enable Global-fitting multiple point cloud objects, simultaneously.

Related Menu **[Alignment]-[Coordinate Systems]-[GlobalFit]**
[Alignment]-[Coordinate Systems]-[GlobalFit Cloud-Cloud]
[Tool]-[Macro-Auto], [Tool]-[Macro-Auto for N Items], Globalfit of [Inspection]-[Auto Inspection]

CAD – Point cloud

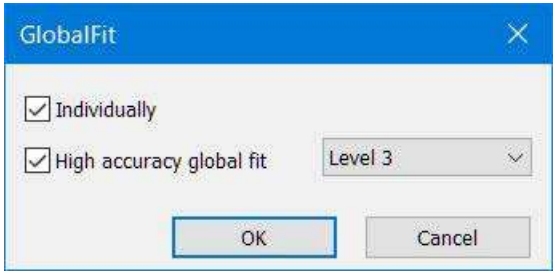


Point cloud – Point cloud

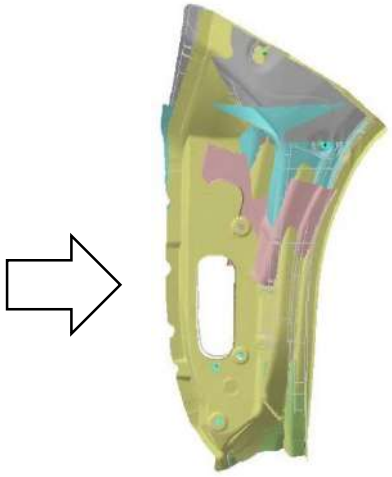


Point cloud

CAD

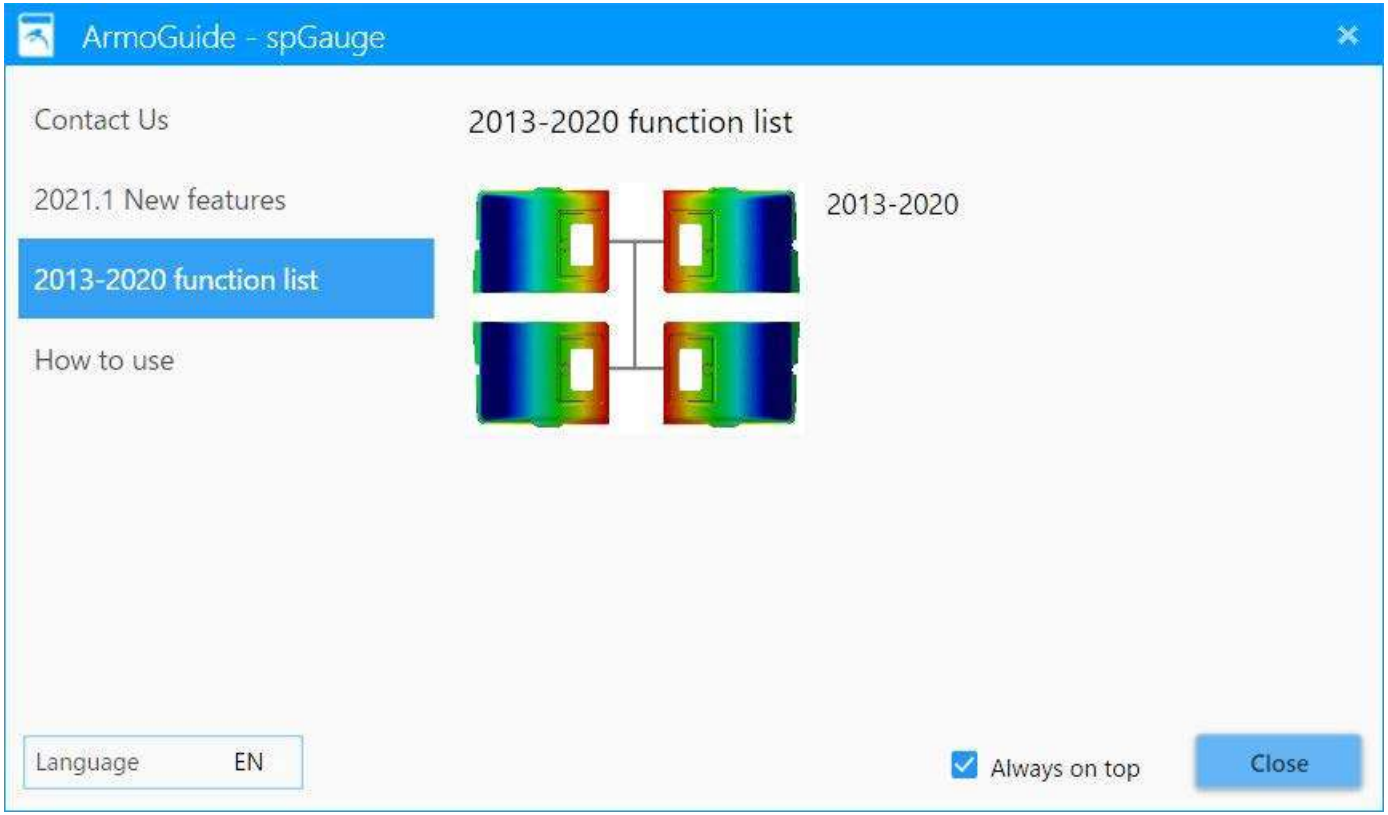


Executed Global fit



Guide Dialog

A new guide dialog was introduced to enable you to browse spGauge latest features, features list per version, utilization tips and more.



Improved items

✔ Unification fit

- When registering on the “Detail Fit”, the highlight response on CAD surface has improved.
- The response of registering/removing ”Plane”, ”Axis”, ”Point cloud”, etc., on the list has improved.

✔ [Edit]-[Delete]

- When executing [Edit]-[Remove] the highlight response on CAD surface has improved .

✔ Processing time of [Inspection]-[Deformation]

- The thin-out time has been reduced.
- The deformation evaluation time has been reduced.

Addressed Issues

✔ Windows10 (2004)

- The issue regarding the freezing of the system on Windows10 (2004) has been addressed.

✔ Exporting Viewer Light

- The issue regarding the inability of exporting a specific point cloud data has been addressed.

✔ Drawing Tool

- The issue regarding the inability of the creation of [Circle(2Points/Radius)].

✔ Importing CAD

- The issue regarding the slow processing time when importing specific IGES data has been addressed.

✔ Edge inspection

- When defining multiple edges using [Edge]-[Define], the <Start Point>-<A point on the 1st element> in the inspection section, used to be automatically checked. That issue has been addressed.

✔ Macro-Auto

- The ineffectiveness when setting the <Base Search Range> of point inspection on [Macro-Auto] has been addressed.

Developer

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