spGauge

New Features in spGauge 2024.1

Armonicos Co., Ltd.



INDEX (spGauge 2024.1)



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- 7. Select geometry from tree
- 8. Email notification when Macro is done
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- 10. Customization of view operations in spGauge Viewer Light

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Improved Items

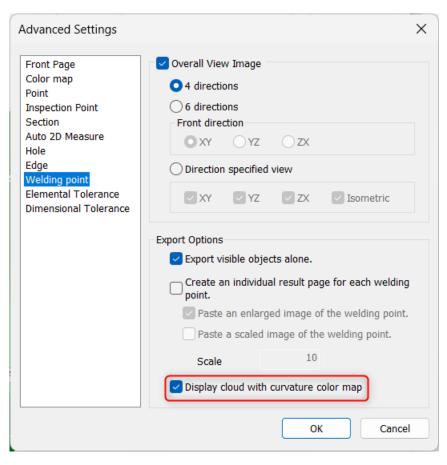
Addressed Issues

1. Curvature color map in welding point report



[Result Report] The curvature error map of the point cloud can now be exported.

Menu [Report]-[Result Report]: [Advanced Settings]



[Display cloud with curvature color map]

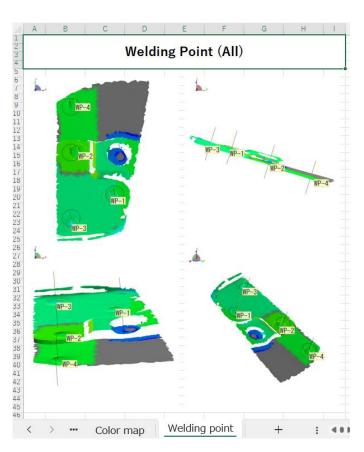
- When ON, the image capture for welding points will display curvature gradients.
- When OFF, the image capture for welding points will display error gradients.

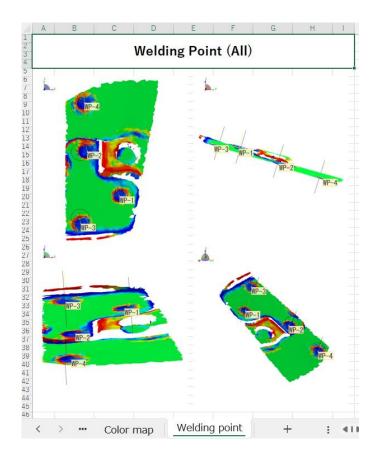
1. Curvature color map in welding point report



Display cloud with curvature color map

OFF ON





2. Welding point extraction results in report



×

Extracted

Status Extracted Failed

Extracted

Extracted

Extracted

Extracted

Extract Welding Point Manually

Welding point

WP-30

WP-31

WP-32

WP-34

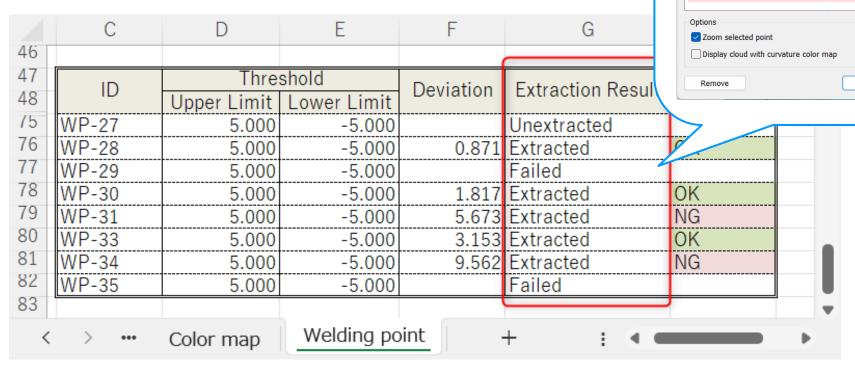
✓ Failed

Unextracted

Target

- A new column for extraction results has been added to Excel: "Extracted/Unextracted/Failed"
- The extraction results match the display of the [Extract Welding Point Manually] dialog.
- Only "Extracted" points are exported to "individual results" page.

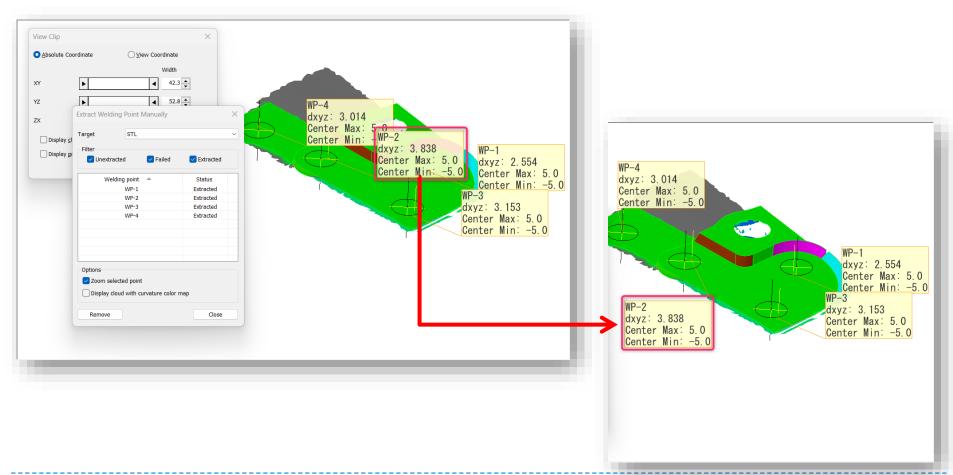
Menu [Report]-[Result Report]: [Advanced Settings]



3. Move annotations during manual extraction



- Welding point inspection: Annotations can be moved by dragging, even during [Extract Manually] command.
- The positions of moved annotations will be retained, even after manual extraction is complete.

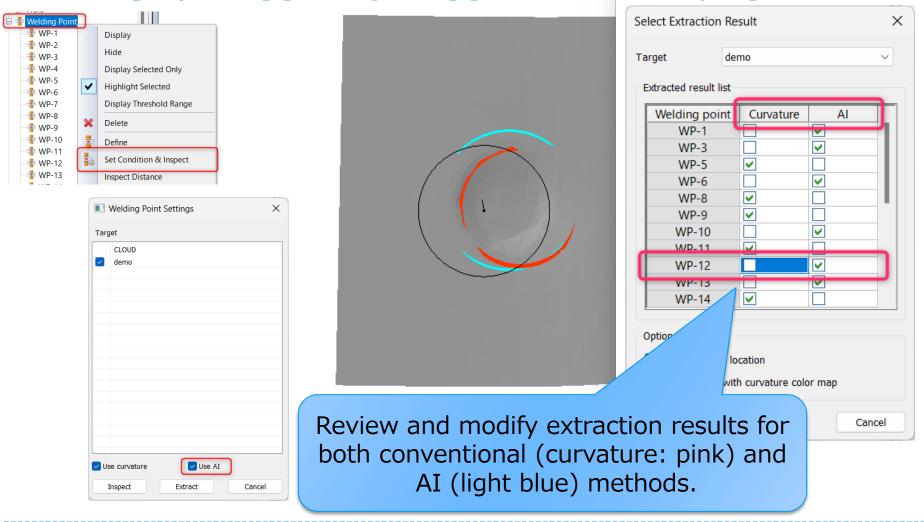


4. Welding points inspection: Use AI



Added an option to use AI for extracting welding point locations.

Menu [Inspection]-[Welding Point]-[Set Condition & Inspect]

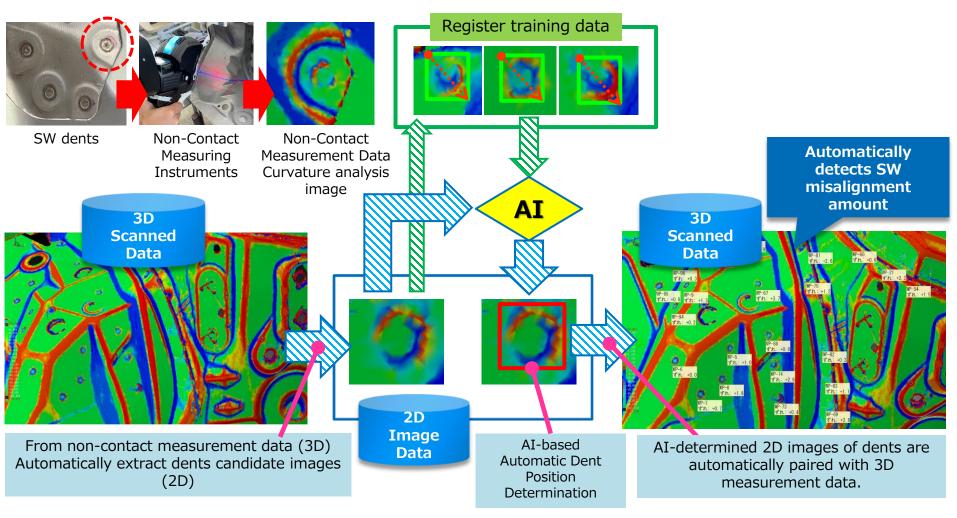


4. Welding points inspection: Use AI



Added an option to use AI for extracting welding point locations.

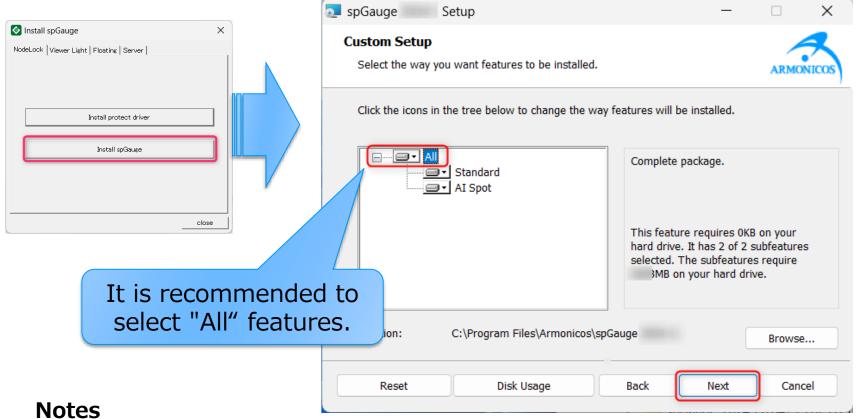
Menu [Inspection]-[Welding Point]-[Set Condition & Inspect]



5. Installer: AI option



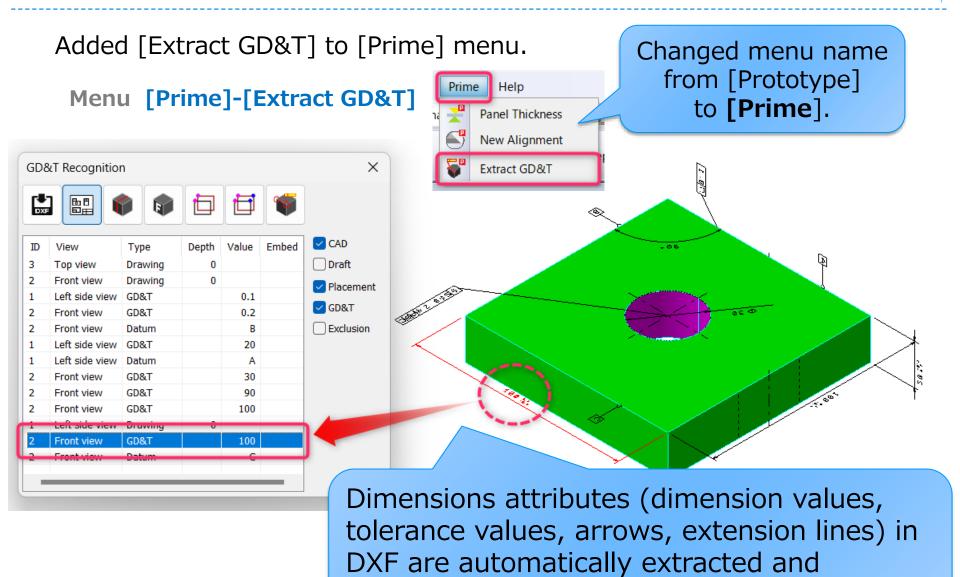
Installer: You can choose whether to install the module that uses AI to extract welding point locations.



- The AI option for welding point inspection can be used only if "All" features are installed.
- To check disk space, use [Disk Usage].
- Do NOT install [AI Spot] feature by itself alone.

6. Extract GD&T from 2D drawing (DXF file)

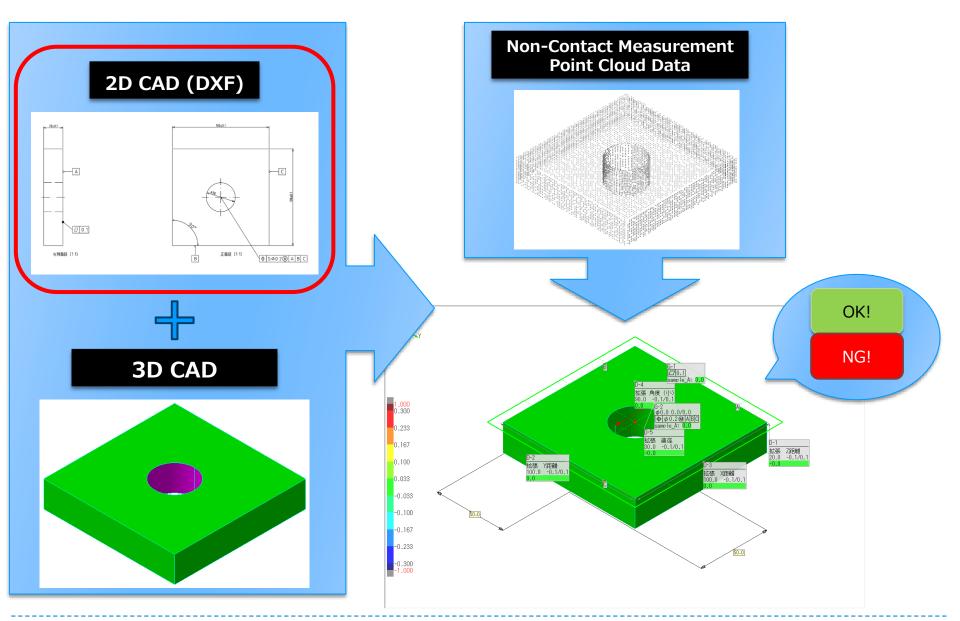




registered to spGauge.

6. Extract GD&T from 2D drawing (DXF file)



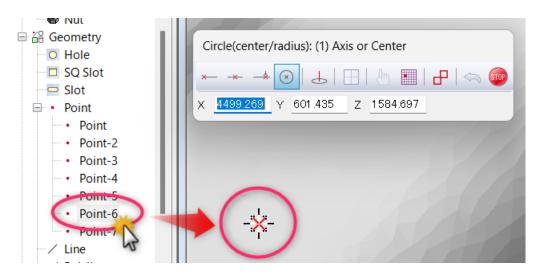


7. Select geometry from tree



When using [Drawing Tool] commands, geometry objects can be selected from the Object Tree.

Menu [Tool]-[Drawing Tool]



Example: [Tool]-[Drawing Tool]-[Circle]-[Circle (Center/Radius)]

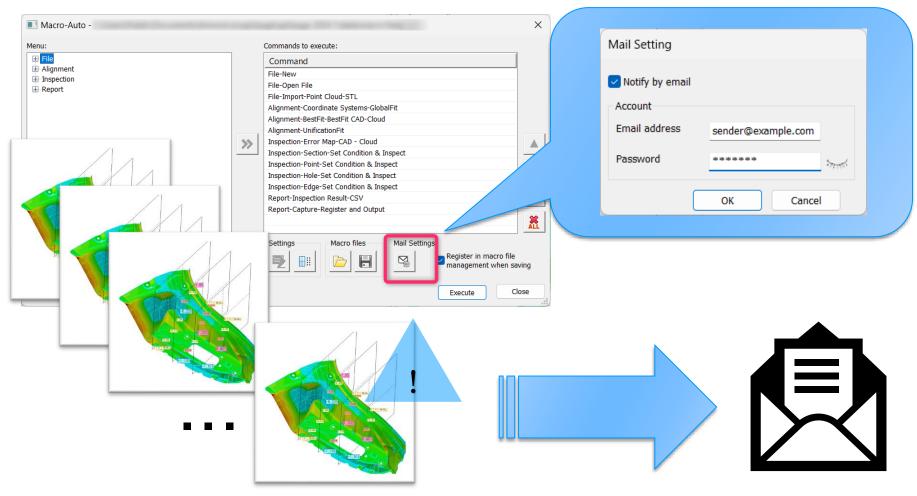
- While creating a circle, hovering over a point in the tree (placing the mouse cursor over a tree object) will highlight the corresponding object in the view.
- Picking the object will finalize selection as an element for drawing.

8. Macro-Auto: Email notification



Receive email notification when Macro-Auto is done.

Menu [Tools]-[Macro-Auto]

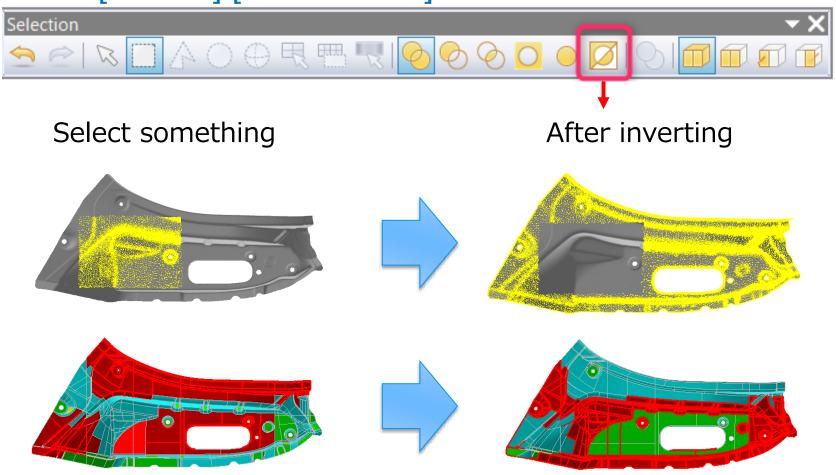


9. Invert selection



Added an invert selection icon to the toolbar. Invert selection can be used with CAD as well as with point cloud data.

Toolbar [Selection]-[Invert Selection]

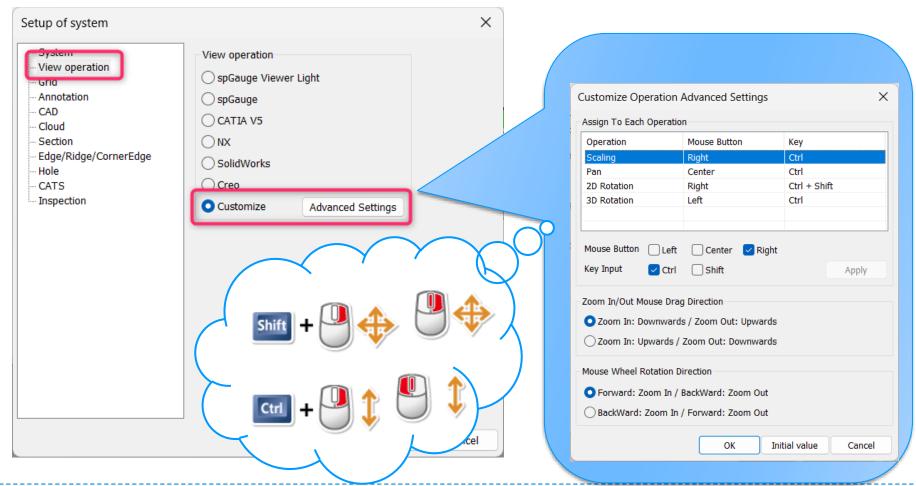


10. Viewer: Customize view operation



Customization of view operations through mouse and keyboard inputs is now available in spGauge Viewer Light.

Menu spGauge Viewer Light: [File]-[System Settings]

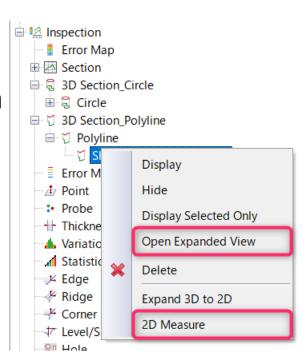


Improved Items



✓ Changed the location of the menu [Open Expanded View].

✓ Added [2D Measure] to 3D cross section



- ✓ Press F1 to open relevant help
 - ✓ Pressing the function key [F1] while launching a menu command opens the corresponding help page.

Addressed Issues



- ✓ Addressed an issue where objects created with [Drawing Tool] would be visible on tree but might not in the view. (16418)
- ✓ Addressed an issue causing freezing during the [Drawing Tool]-[Extend Curve] operation. (16402, 16381)
- ✓ Addressed an issue where an error occurred during specific operations in [Drawing Tool]-[Intersection]. (16383)
- ✓ Addressed an issue in [Drawing Tool]-[Divide Curve], where it became impossible to select anything during specific operations. (16382)
- ✓ Addressed an issue where point clouds were not displayed in [3D Development View]. (16421, 16423)
- ✓ Addressed an issue in [Report]-[Result Report], where graph annotations on the view were deleted during Excel and PDF report output. (16375)
- ✓ Addressed an issue where annotation data with white text would become invisible in spGauge Viewer Light. (16373)

Note: The numbers in parentheses are for internal use.

Addressed Issues



- ✓ Addressed an issue in mouse operation [Zoom In/Out]: In [Edit]-[System Settings]: [System]-[View Operation], when CAD selection is set to "NX," the mouse direction during zoom in/out view operations was reversed for NX. (15660)
- ✓ Addressed an issue where an error occurred when executing [Inspection]-[Evaluate Curvature] after executing [Tool]-[Point Cloud Tool]-[Delete Selected]. (16465)
- ✓ Addressed an issue where the tree name became incorrect when defining 3D sections in [Inspection]-[3D Section]-[Circle]-[Define] and [Inspection]-[3D Section]-[Polyline]-[Define] for inspections involving CAD & CAD or cloud & cloud. (16350)
- ✓ Addressed an issue where non-visible objects could be selected using the selection methods [Line with Select Cloud] and [Circle with Selecting Cloud]. (16365)
- ✓ 2D Measurement: Disabled "Select Front Side Points" in Selection tool. (16353)
- ✓ In the [Caliper] tab, when [Specify points by rectangular selection] is active, the following selection tools are disabled: [Sphere], [Specify by Face(s)], [Select by color], [Select Front Side Points]. (16354)

Note: The numbers in parentheses are for internal use.

Addressed Issues



- ✓ Addressed an issue in 2D Measurement (2D & 3D Section). After registering a section or 3D section object through [Settings & Inspection] and then deleting it through 2D Measurement [Delete], an error occurred when selecting "Visible," "Visible (Front Only)," or "Visible (Back Only)" with the [Surface Selection Filter] selection tool. (16513)
- ✓ 2D Measurement (3D Section): Addressed an issue where using "Select Out" in the [Selection Tool] after registering an object in 3D section sometimes selected unintended elements. (16514)
- ✓ [Tool]-[Point Cloud Tool]-[Polygon]-[Extraction of Trim Line]:

 After performing partial removal with [Tool]-[Point Cloud Tool]
 [Delete Selected], executing [Tool]-[Point Cloud Tool]-[Polygon]
 [Extraction of Trim Line] caused an error. (16476)
- ✓ [Tool]-[Point Cloud Tool]-[Polygon]-[Extraction of Trim Line]:

 After dividing polygons with [Tool]-[Point Cloud Tool]-[Division],

 executing [Tool]-[Point Cloud Tool]-[Polygon]-[Extraction of Trim

 Line] caused an error. (16486)

Note: The numbers in parentheses are for internal use.

Others



✓ System Requirements

- ✓ Support for Windows 2012 has ended.
- ✓ Windows 11 is now supported.
- ✓ Support for Microsoft Office 2016 has ended.
- ✓ Microsoft 365 is now supported.
- ✓ A warning message now appears when running spGauge on an unsupported OS.

Others



✓ License

- ✓ In an environment where both Node-Locked and Floating licenses are available, Node-Locked licenses are now given priority.
- ✓ Protect driver has been update to Sentinel Protection Installer 7.7.1.

Notes:

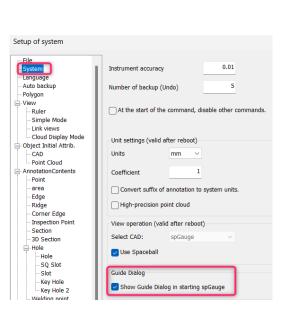
- Windows 11 and Windows Server 2022 is supported.
- If the License Protection Installer is already installed, uninstall the old driver from Control Panel first. Afterwards, run [Install Protection Driver] from spGauge installer to install Sentinel Protection Installer 7.7.1.

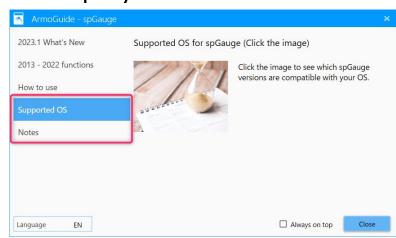
Others



✓ Display the guide dialog.

- ✓ Added "Supported OS" and "Notes."
- ✓ Updated document content to make it easier to understand that clicking on the image will display the PDF.





Note:

If you do not want the guide dialog to appear when spGauge starts up, go to [Edit]-[System Settings] then [System]-[Guide Dialog] and uncheck [Show Guide Dialog in starting spGauge].





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