

spScan 2022.1

Upgrade News

New Features

[Edit]-[spScan Settings]-[Save Settings]

Various spScan settings can be saved as a .spScanSettings file.

Abolished the [Edit]-[Migrate Settings] menu.

Created a new menu, [Edit]-[spScan Settings], and added [Save Settings] feature.

[Edit]-[spScan Settings]-[Load Settings]

Various spScan settings can be imported from a .spScanSettings file.

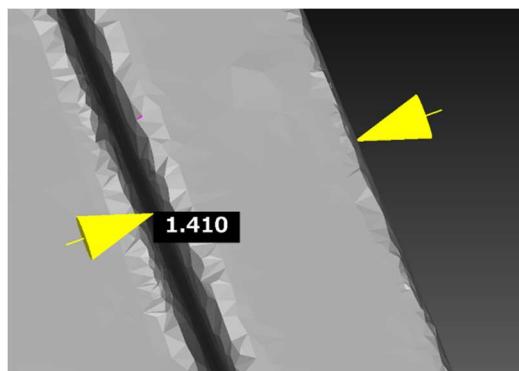
Abolished the [Edit]-[Migrate Settings] menu.

Created a new menu, [Edit]-[spScan Settings], and added [Save Settings] feature.

[Analyze]-[Distance]-[Distance(Polygon Mesh and Polygon Mesh)]

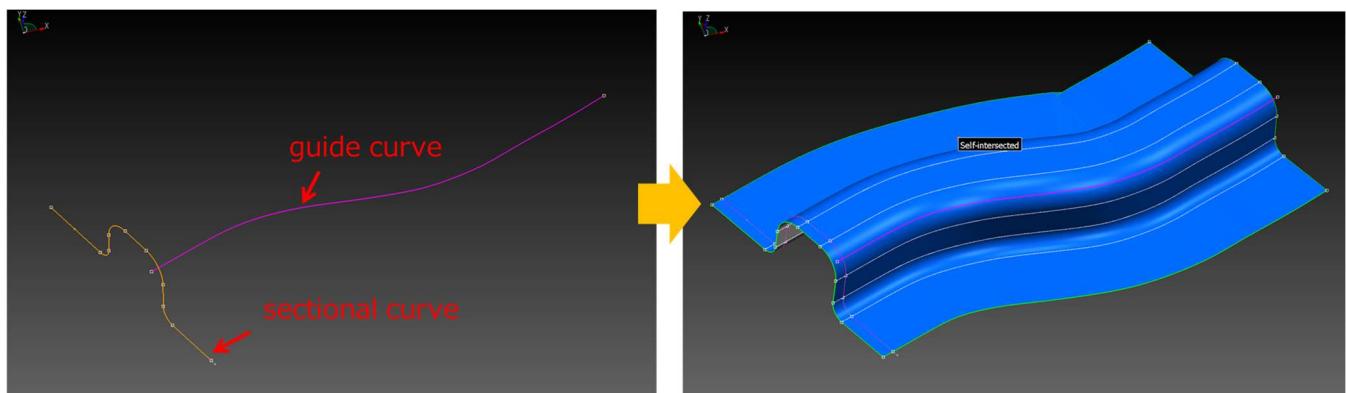
The distance between polygon meshes can be measured.

The distance dimensions of the rib thickness of a solid and the panel-thickness of a pressed panel can be verified.



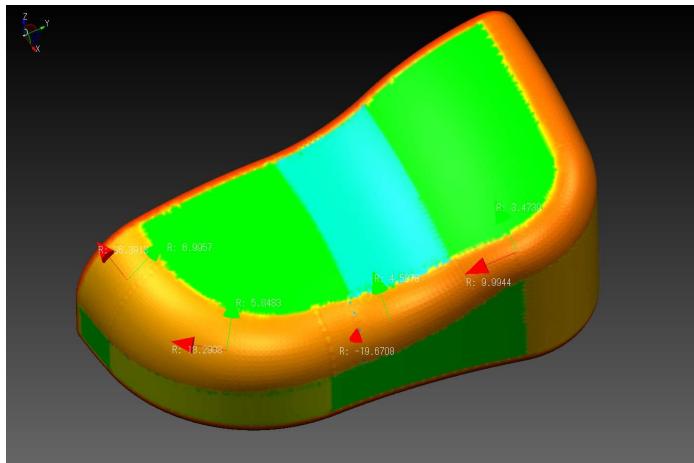
[Demo]-[Create Surface]-[Create Sweep Surface]

A sweep surface can now be created.

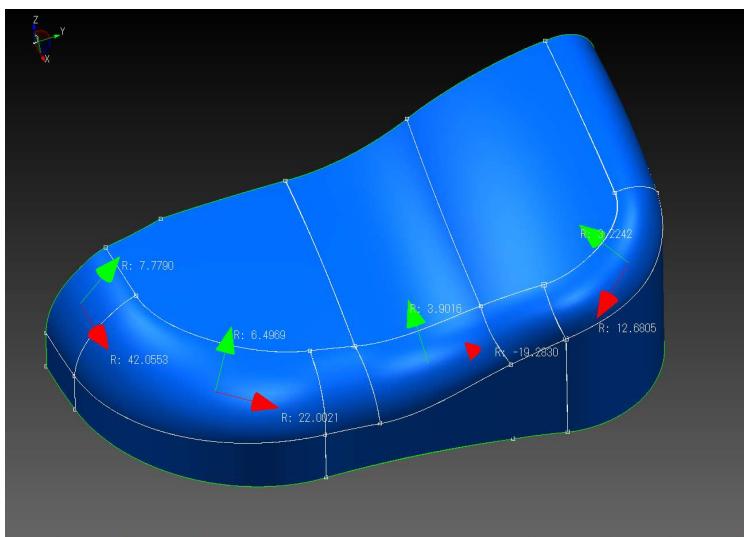


[Demo]-[Analyze]-[Principal Curvature Direction (Mesh)]

Display the curvature as well as the maximum and minimum principal curvature directions of polygon mesh using arrows.

**[Demo]-[Analyze]-[Principal Curvature Direction (Surface)]**

Display the curvature as well as the maximum and minimum principal curvature directions of a surface using arrows.



Enhanced Features

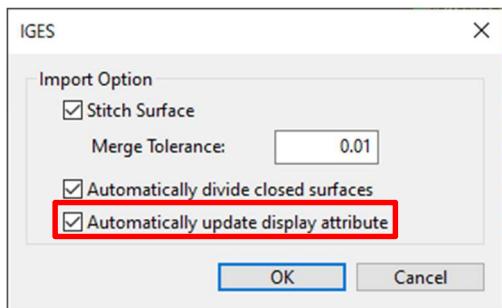
[File]-[Open]

Accelerated the processing time.

➤ An example of the response time improvement: 280 sec → 60 sec. Almost 4.7 times!

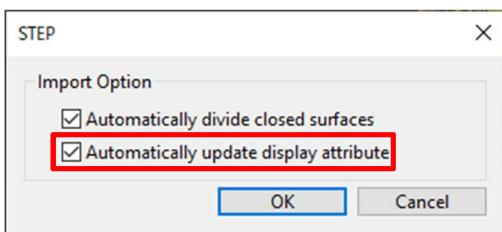
[File]-[Import]-[CAD]-[IGES]

The display attribute can be updated upon import.



[File]-[Import]-[CAD]-[STEP]

The display attribute can be updated upon import.



[File]-[Export]-[CAD]-[IGES]

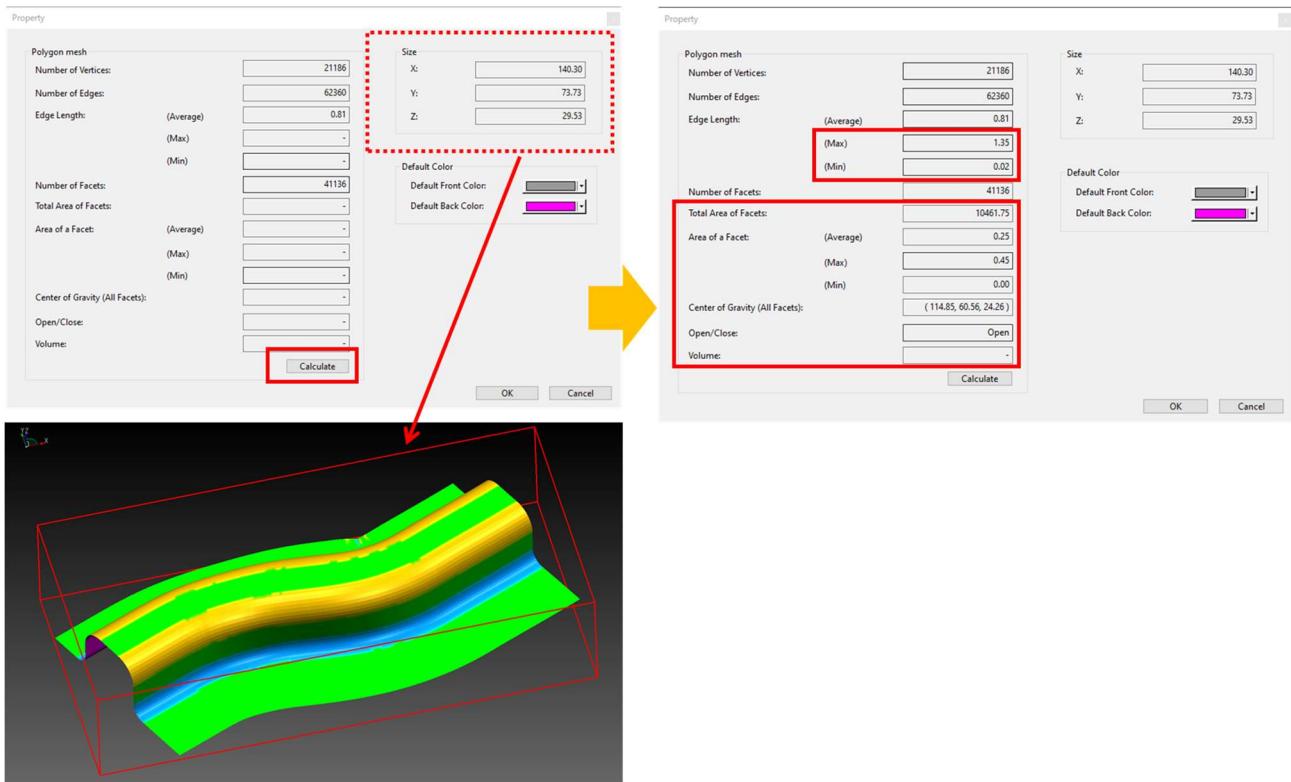
- Approximate to primitive shapes upon export.
 - The surface size can be modified.
 - Accelerated the processing time.
- An example of the response time improvement: 60 min → 2 min. Almost 30 times!

[File]-[Export]-[CAD]-[STEP]

- Approximate to primitive shapes upon export.
- The surface size can be modified.
- Accelerated the processing time.

Polygon Mesh

Added items shown in the property.



Selecting polygon Mesh

The selected polygon meshes are not initialized when selecting polygon mesh using [Rectangle], [Circle], [Polygon] selection filter, even when the view has been changed through [Zoom] or [Pan]. Note, however, while selecting polygon mesh, the view operations such as [Central axis fixed rotation], and [Rotation around specified center of rotation] is not allowed.

[Polygon Mesh]-[Reshape Outer Edge]

[Clip View] and [Select] commands can be executed while a menu command it running.

[Curve]-[Remove Curve]

Accelerated the processing time.

- An example of the response time improvement: 1798 sec (almost 30 min) → 90 sec (1 min 30 sec) Almost 20 times!

[Surface]-[Create Multiple Base Surfaces]

The potential surfaces can be selected or unselected in the unit of elements during the preview.

[Surface]-[Patch]-[Create Patch]

Changed the settings of [Preserver Shape] to exclusively target boundary curves and curves with surface continuity configured, instead of all curves as it was in version 2021.1.

[Surface]-[Patch]-[Create Patch Surface]

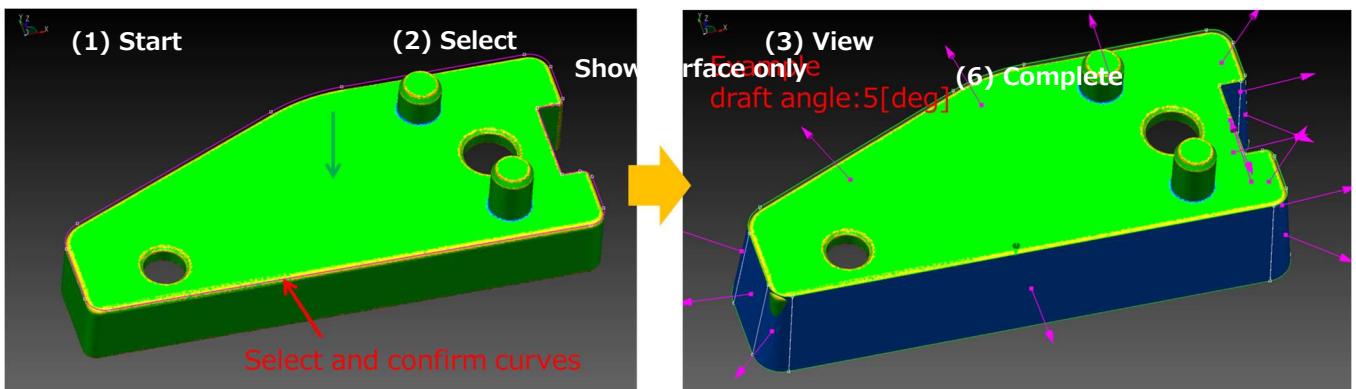
- When there is a G0 curve that is not continuous, the "CHECK!" annotation remains even after exiting the menu command.
- According to the state of the polygon mesh, improved so that the patch surfaces do not deform extremely.

[Surface]-[Patch]-[Auto Create Patch]

- When there is a G0 curve that is not continuous, the "CHECK!" annotation remains even after exiting the menu command.
- According to the state of the polygon mesh, improved so that the patch surfaces do not deform extremely.

[Surface]-[Extrude Surface]

A gradient (angle) can be configured on an extruding surface.

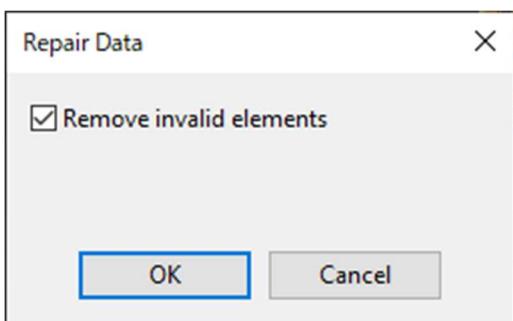


[Analyze]-[Remove Annotation]

The menu is now available in the Polygon Phase and Grouping Phase, due to the addition of [Analyze]-[Distance (Polygon Mesh and Polygon Mesh)].

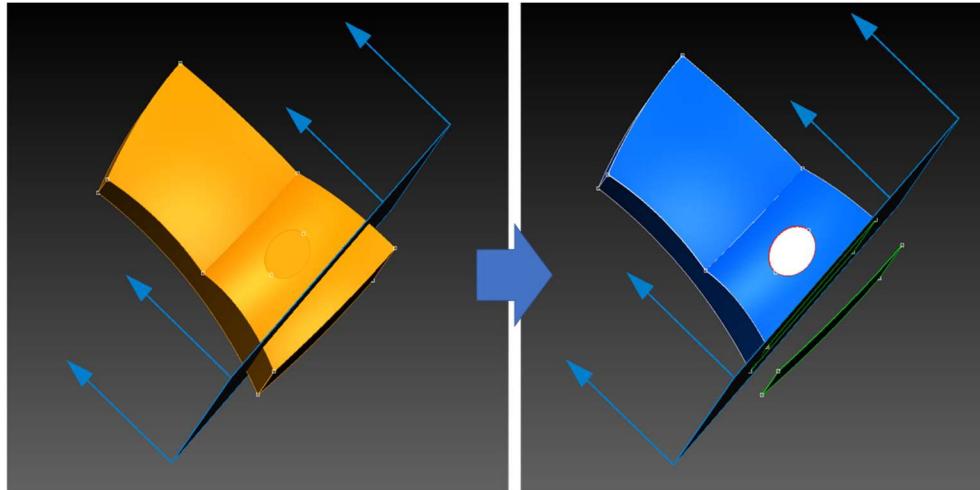
[Demo]-[Tool]-[Repair Data]

Enabled creating a new file for data correction, and automatically import polygon mesh data, and surface data after removing surfaces with a defect.



[Demo]-[Edit Surface]-[Cut with Plane]

- Modified to divide a surface which has an inner loop.
- Modified to build a topology even when dividing a surface which does not have a group.



Resolved Issues

[Curve]-[Create 2D Curves]

- Addressed an issue where the [Distance]/[Maximum distance] dialogs are not displayed.
- Addressed an issue where the initial locations of [Distance]/[Maximum distance] dialogs are not saved for relaunching.

[Surface]-[Create Surface]

Addressed an issue where Polygon Mesh Error Display mode is changed to Polygon Mesh Curvature Display mode in the middle of creating a surface.

[Surface]-[Patch]-[Create Patch Surface]

Addressed an issue where one cannot Redo while selecting a patch surface.

[Demo]- [Edit Surface]-[Cut with Plane]

Addressed an issue where a curve cannot be divided and a curve with length 0 is created.

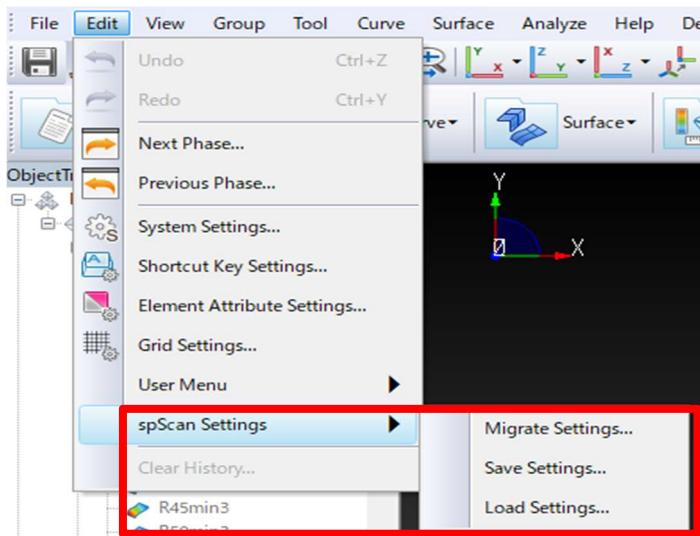
[Demo]- [Tool]-[Repair Data]

Addressed an issue where spScan slows down after executing the command.

Others

[Edit]-[spScan Settings]-[Migrate Settings]

- Changed the location of [Edit]-[Migrate Settings].
- Abolished the old [Edit]-[Migrate Settings] menu.
- Created a new menu, [Edit]-[spScan Settings], and added [Migrate Settings] feature.



[Edit]-[Context Menu Settings]

Moved the [Context Menu Settings] menu from [Demo] to [Edit] menu.

[Curve]-[Project Curve (Specified Plane)]

Moved the [Edit Curve]-[Project Curve (Specified Plane)] menu from [Demo] to [Curve] menu.

[Curve]-[Create Perimeter Line]

Moved the [Create Perimeter Line] menu from [Demo] to [Curve] menu.

[Surface]-[Change Surface Size]

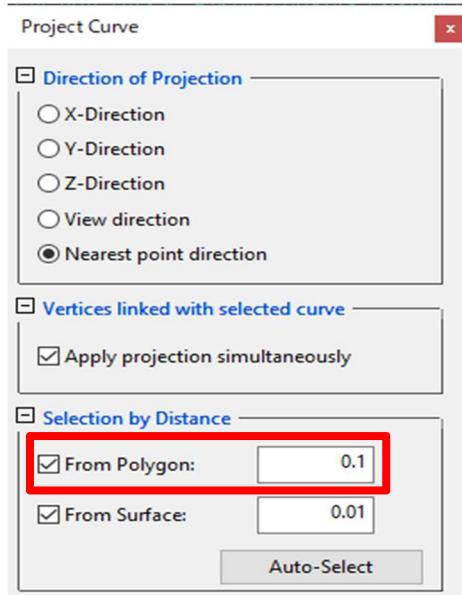
Moved the [Edit Surface]-[Change Surface Size] menu from [Demo] to [Surface] menu.

[Surface]-[Create Surface of Revolution]

Moved the [Create Surface]-[Create Surface of Revolution] menu from [Demo] to [Surface] menu.

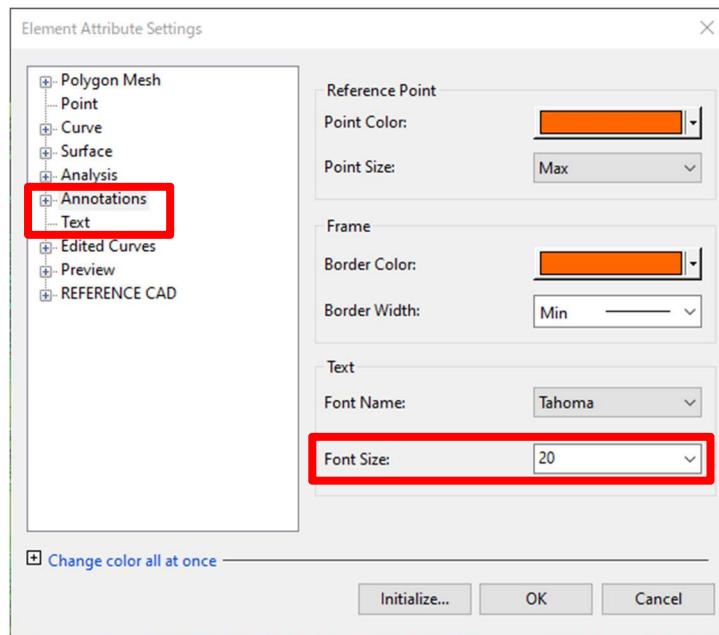
[Curve]-[Project Curve]

- Changed the initial value in the projection to the polygon mesh from 0.3 to 0.1 (mm).
- The value configured in the dialog previously will now be saved.



[Edit]-[Element Attribute Settings]

- Changed the initial Font Size in Annotations and Texts settings from 12 to 20.
- The annotation size can be modified in [Annotations] and [Text] under [Edit]-[Element Attribute Settings] menu.



Developer

Armonicos Co., Ltd.

Hamamatsu ACT Tower 21st floor, 111-2 Itaya-machi, Naka-ku,

Hamamatsu City, Shizuoka Prefecture 430-7721 Japan TEL: (+81)53-459-1000 FAX: (+81)53-459-1155

E-mail: spScan@armonicos.co.jp

- The copyright of this product as well as this documentation belongs to Armonicos Co., Ltd.
- This product and documentation can be used only under management of a registrant based on the software licensing agreement of this product.
- No copy, duplication, reproduction of part or all of this product and documentation shall be made without the consent of Armonicos Co., Ltd.
- The contents indicated by the specification of this product and the documentation may be changed without a prior notice.
- All company names and product names in this product and documentation are trademarks or registered trademarks of their respective companies.
- Compliance with Applicable Laws regarding Exports: Please do not use the product, or related information, technologies and materials, or goods and services made from the product, or related information, technologies (collectively, "Products") for the following purposes.
 1. Exporting the Products from Japan (including taking the Products out of Japan, indirectly exporting the Products through trading agencies, and disclosing the Products to non-residents in Japan) to a person who intends or is likely to intend to use the Products for developing, manufacturing, using or storing (collectively, "Development") nuclear weapons, biological weapons, chemical weapons or missiles (collectively, "Weapons of Mass Destruction" or "WMD") or other military purposes.
 2. Using the Products yourself for the purpose of Developing WMD or for other military purposes, or providing the Products to a person who have such purposes outside of Japan.