

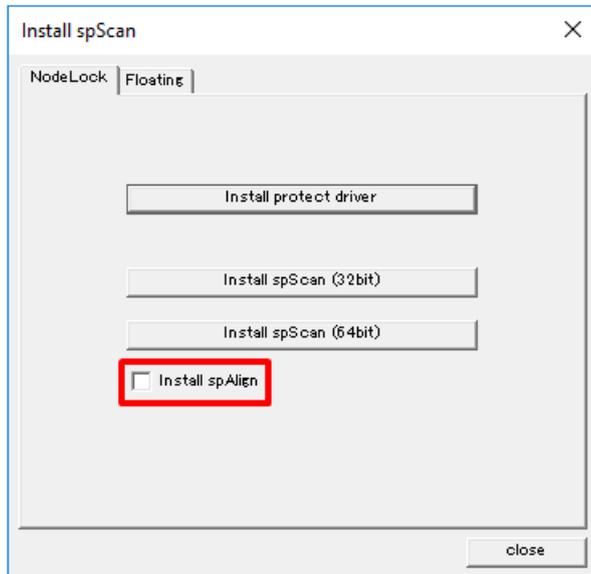
spScan 2019.1

Upgrade News

New Features

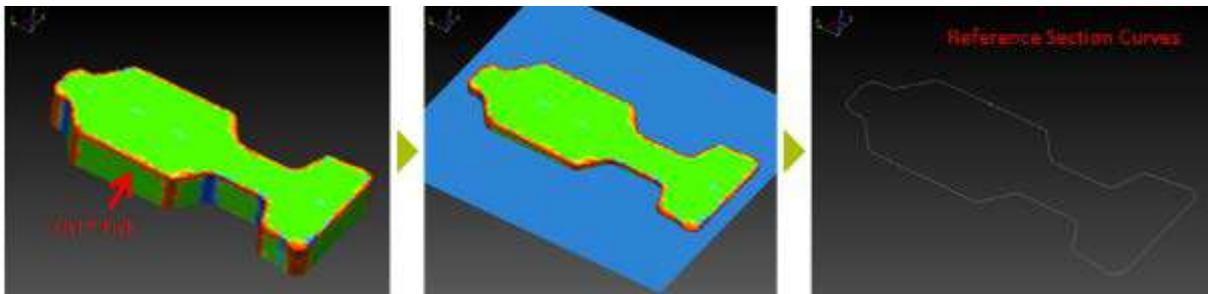
spAlign

spAlign can now be installed from the installer.



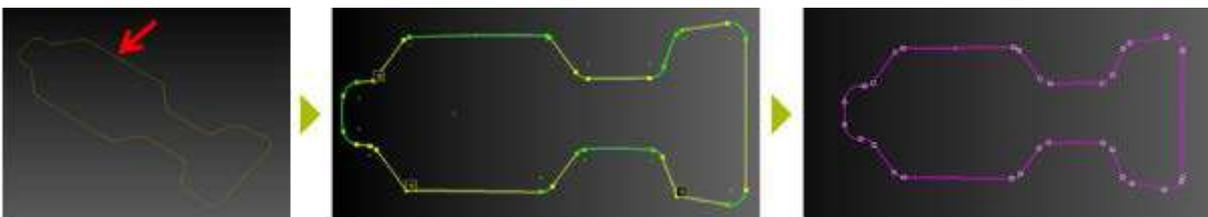
[Curve]-[Create Reference Section Curves]

Create cross sectional curve from the intersection between a specified plane and polygon mesh and register as reference curves.



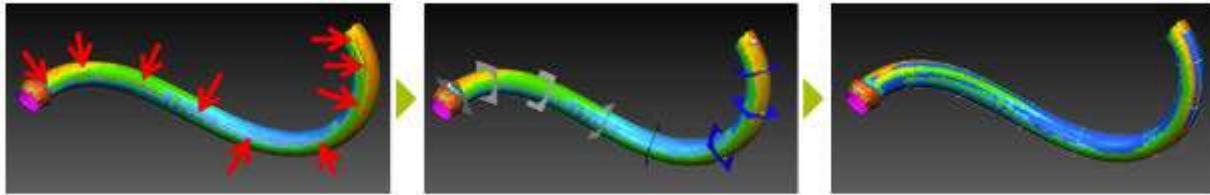
[Curve]-[Create 2D Curves]

2D curves can now be created using cross sectional curves.



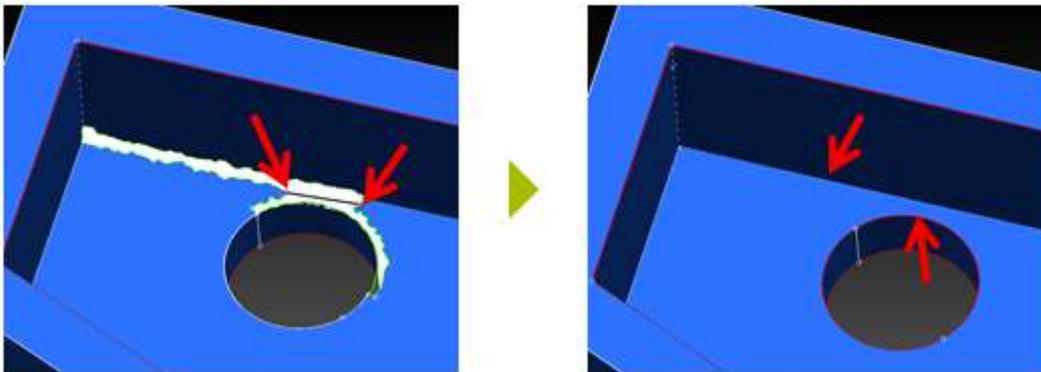
[Surface]-[Create Tube Surfaces]

Pipe and hose shapes can be effortlessly reverse engineered.



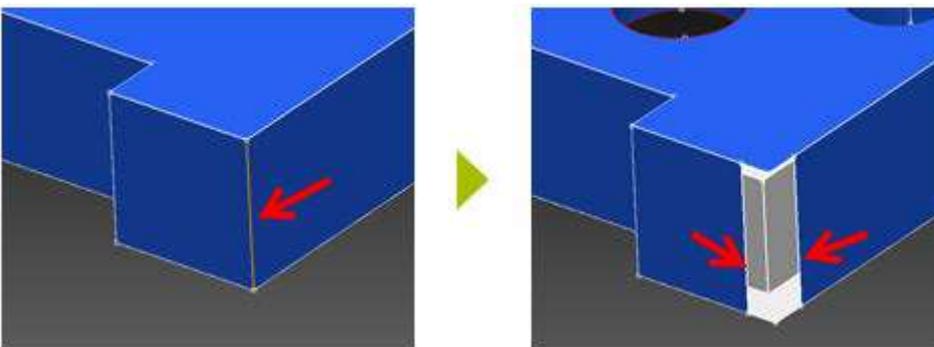
[Surface]-[Surface Repair Tools]-[Connect Surfaces Using Bridge]

- A C-shaped part can be fixed to become two boundaries.
- Two separate faces can be effortlessly connected.



[Surface]-[Surface Repair Tools]-[Unshare Edges]

- Separate a shared edge to create two R-stop-curves.
- Use this feature for post-process modification of automatic edging and multiple base flat surface creation.



[Surface]-[Surface Repair Tools]-[Recreate Surfaces]

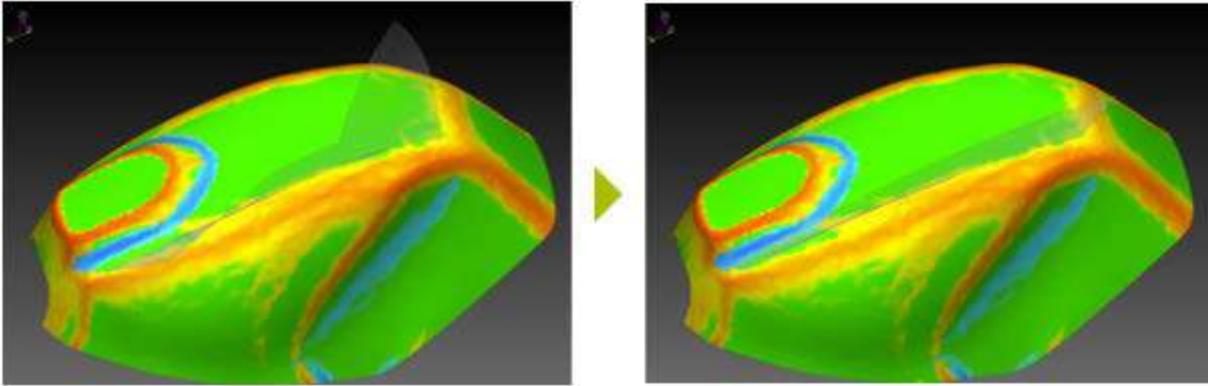
Modify created primitive geometries.

[Demo]-[Tool]-[Switch CAD Data]

Convert reversed data to reference CAD data.

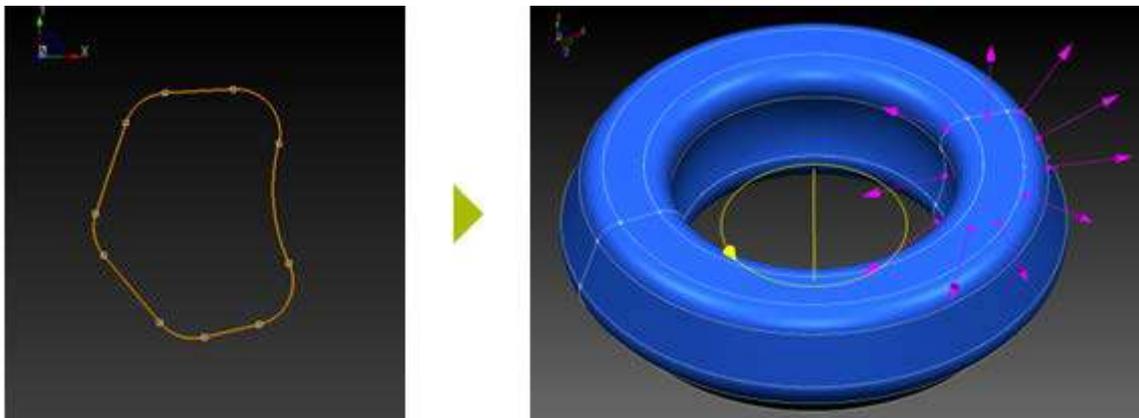
[Demo]-[Edit Curve]-[Create Aesthetic Curve]

A free curve can be approximated to aesthetic curve.



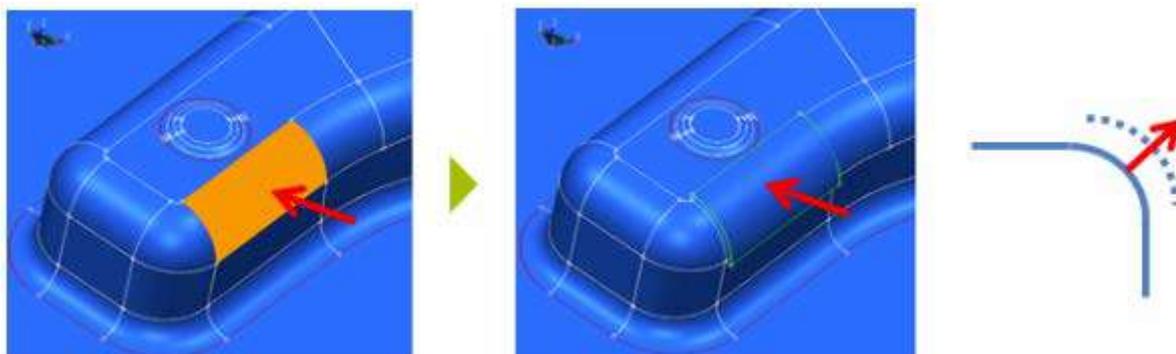
[Demo]-[Create Surface]-[Create Surface of Revolution]

Surface of revolution can now be created.



[Demo]-[Create Surface]-[Create Offset Surface]

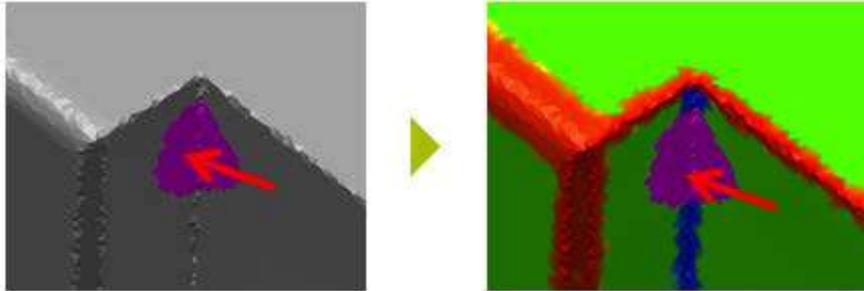
Offset a surface effortlessly.



Improved Features

Display polygon mesh

- Now, the display of the backside always reflect the user mode, regardless of the display mode.
- Polygon mesh are now easier to view when reversing a solid shape.



[File]-[Import]-[Point Cloud/Polygon Mesh]-[STL]

Large data of kilometer scale can be imported.

[Edit]-[Element Attribute Settings]

The initial display color settings of line and circle have been swapped.

[Curve]-[Create Polygon Edge Curve]

- Added an option to obtain the boundary of polygon mesh.
- Added an extraction method specific to gridded polygon mesh. Efficiency is improved when using with CAE.

[Surface]-[Create Primitive Surface]

Improved polygon mesh that are selected by double-clicking.

[Surface]-[Create Fillet Surface with Radius]

- Now there is no need to switch selection of curves.
- Now the error can be previewed.

[Surface]-[Copy]-[Rotate]

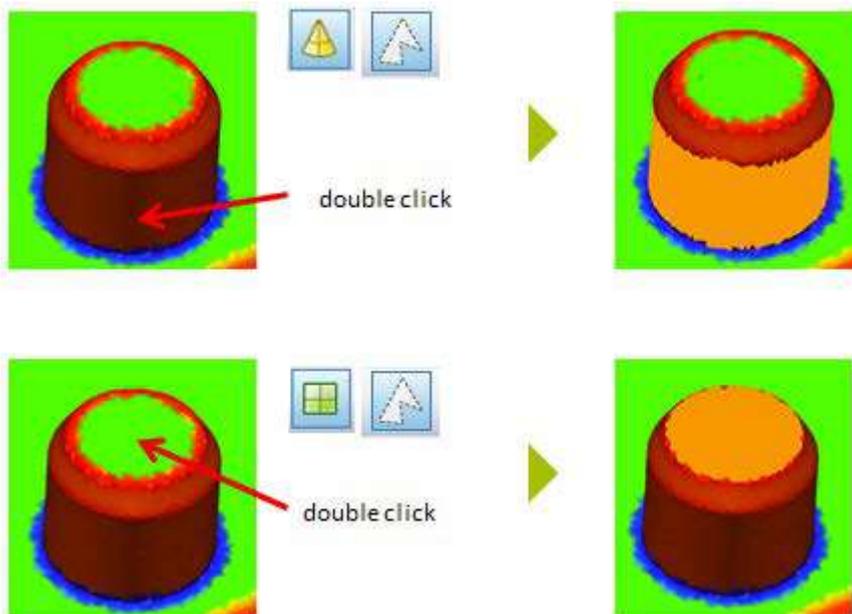
The direction of rotation axis can be specified with angle from coordinate axis.

[Surface]-[Copy]-[Mirror]

The normal direction of a mirror plane can be specified with an angle from the coordinate axis.

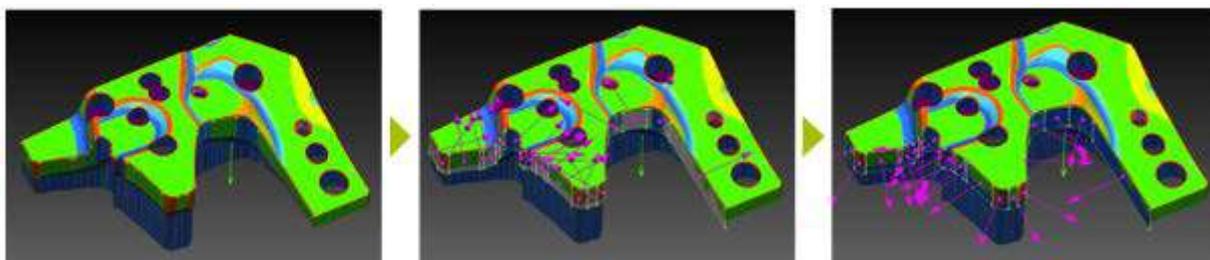
[Surface]-[Create Multiple Base Surfaces]

- This was [Surface]-[Create Multiple Primitive Surfaces] in spScan 2018.1 with enhancement to create a spline surface as well. The menu name has been changed.
- You can change the mode for selection by double-clicking in the Selection toolbar.
- Added a setting to round up coordinate values.
- Improved display method for preview.
- Added surface modification feature during a preview.
- Improved edging in the post-processing, allowing edging even with an already created surface.
- Improved polygon mesh that are selected by double-clicking.



[Surface]-[Extrude Surface]

- Previously a beta feature, [Demo]-[Create Surface]-[Extrude Surface] in spScan 2018.1, is now part of the regular menu.
- The surface direction can be adjusted at creation.



[Help]-[About spScan]

Now the license information is displayed.

[Help]-[System Information]

- Previously a beta feature, [Demo]-[System Information] in spScan 2018.1, is now included in the regular menu.
- Extended information is displayed.

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

A curve can be projected onto a plane.

[Demo]-[Virtual Intersection Curve]-[Auto Create Virtual Intersection Curve]

Calculation time is reduced due to acceleration of process.

[Demo]-[Virtual Intersection Curve]-[Edit Virtual Intersection Curves]

- Improved the logic behind the extension.
- Improved the logic behind the smoothing.
- Now smoothing is possible, even when there is a curve next to an outer edge.

Resolved Issues

Tree's File View and System View of the tree

Addressed issue where the display of undo history was faulty when deleted.

[Polygon Mesh]-[Auto Edit]

Addressed issue where the execution cannot be canceled during verification.

[File]-[Import]-[CAD]-[SCANDS]

Addressed issue where a warning about no compatibility is given, and the import fails.

[Curve]-[Auto Edit Curve]

Addressed issue where the process does not end when curvature is referenced.

[Curve]-[Remove Tiny Curve]

Addressed issue where a false shape is created.

[Curve]-[Edit Vertex]

Addressed issue where the reference curve is also highlighted when selecting.

[Curve]-[Create Polygon Edge Curve]

- Addressed issue where exception error occurs when creating.
- Addressed issue where a curve is not divided.

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

Addressed issue where a surface is missing after failing to divide.

[Surface]-[Create Fillet Surface with Radius]

- Addressed issue where precision error occurs.
- Addressed issue where a curve cannot be selected.

[Surface]-[Create Multiple Surfaces]

Addressed issue where the results of spScan 2018.1 and previous ones are different.

[Surface]-[Divide Surface]

Addressed issue where surface type information (base flat surface, fillet surface, blend surface) is not inherited after cutting.

[Surface]-[Extrude Surface]

- Addressed issue where topology is wrong.
- Addressed issue where the direction of consecutive surfaces are not aligned.

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.