

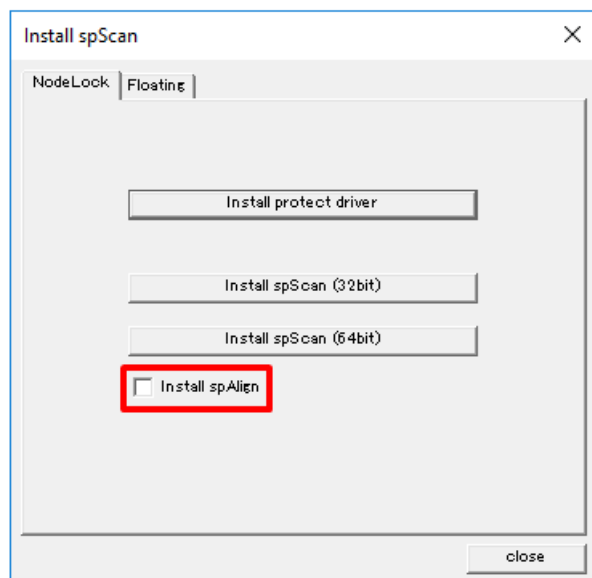
spScan 2019.1

Upgrade News

New Features

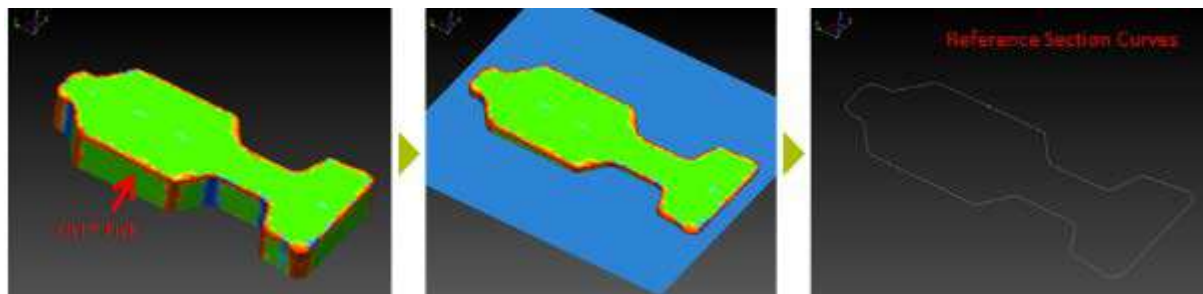
spAlign

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.



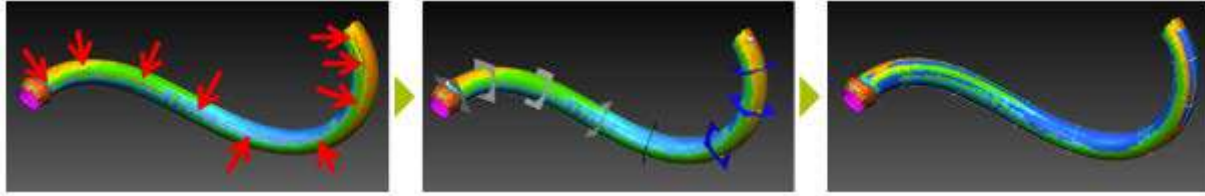
[Curve]-[Create 2D Curves]

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



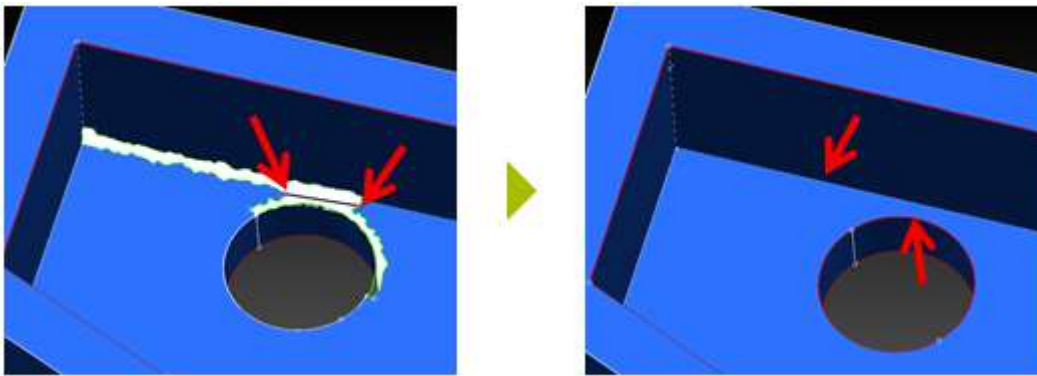
[Surface]-[Create Tube Surfaces]

Pipe and hose shapes can be effortlessly reverse engineered.



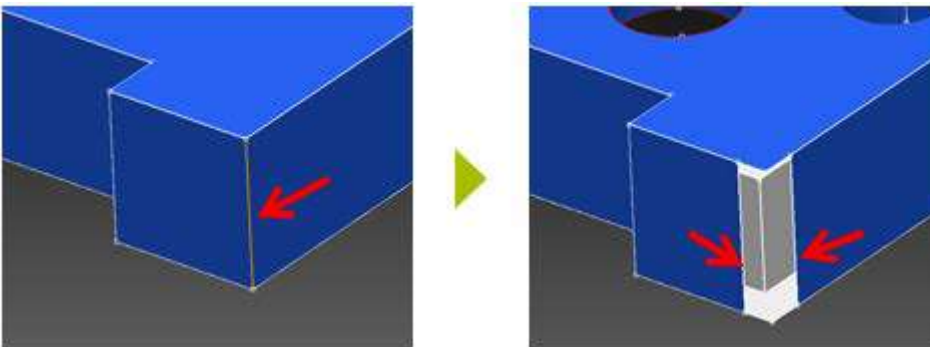
[Surface]-[Surface Repair Tools]-[Connect Surfaces Using Bridge]

- 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]

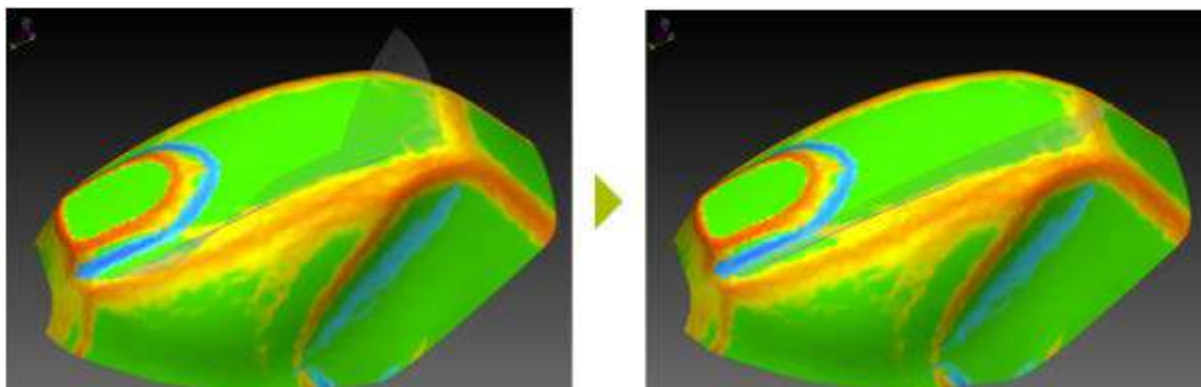
Modify created primitive geometries.

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

Convert reversed data to reference CAD data.

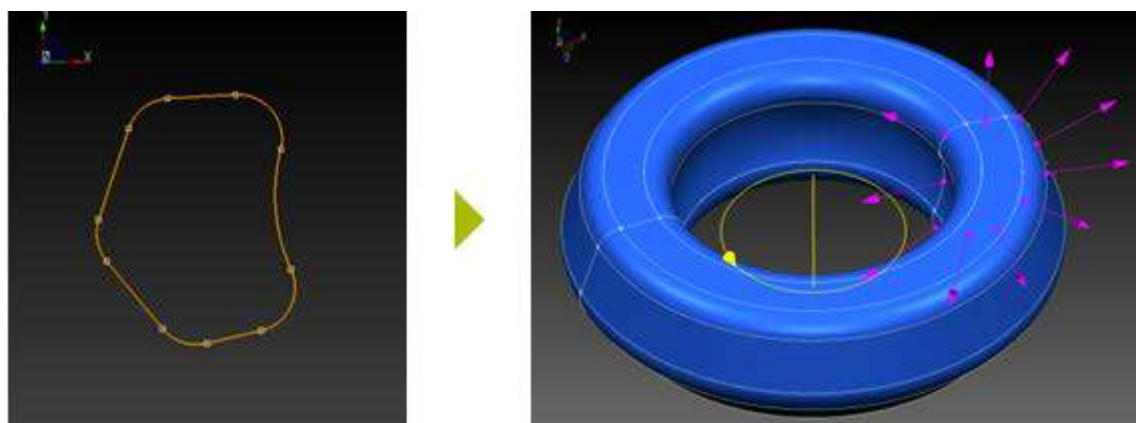
[Demo]-[Edit Curve]-[Create Aesthetic Curve]

A free curve can be approximated to aesthetic curve.



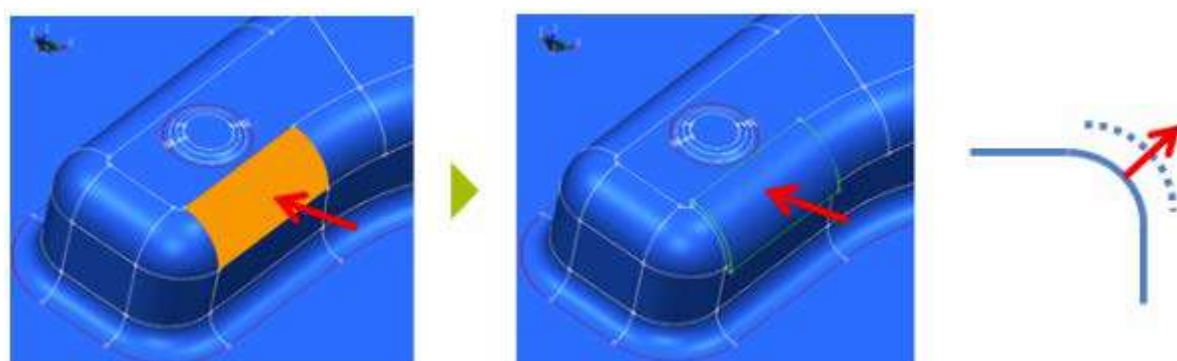
[Demo]-[Create Surface]-[Create Surface of Revolution]

Surface of revolution can now be created.



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

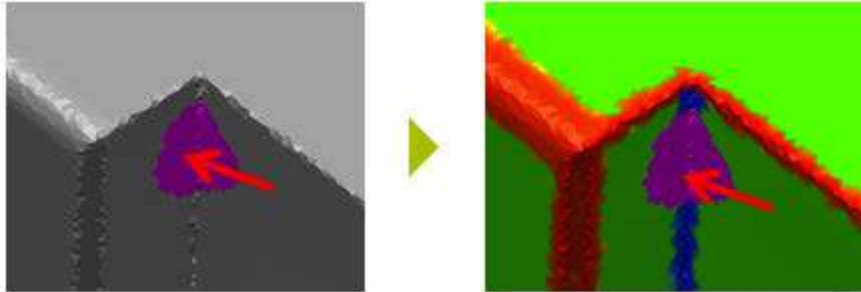
Offset a surface effortlessly.



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]

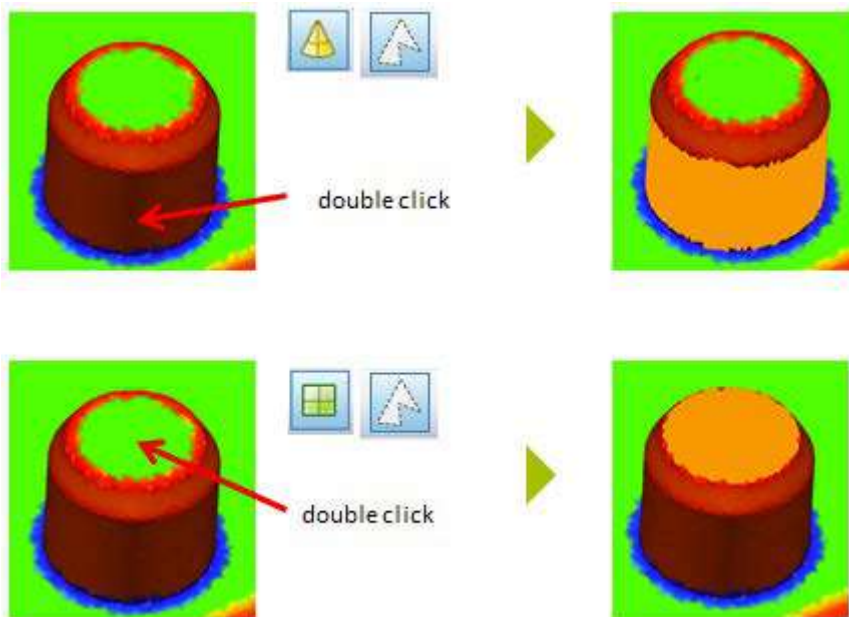
The direction of rotation axis can be specified with angle from coordinate axis.

[Surface]-[Copy]-[Mirror]

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

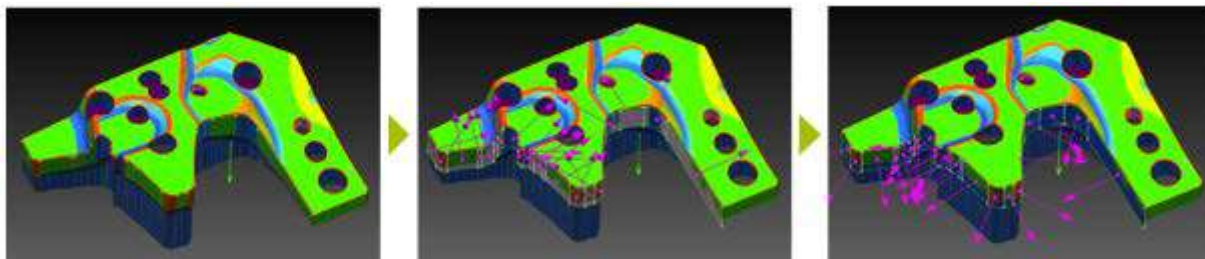
[Surface]-[Create Multiple Base Surfaces]

- 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

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