spGate 2020.1

Upgrade News

2020.1 Upgrade Details

[Import/Export]

[Enhancements]

[Specification change]

Note: All brand and product names are trademarks or registered trademarks of their respective holders.

[Import/Export] 1. Supported 3D CAD Format Version Enhancements

Import

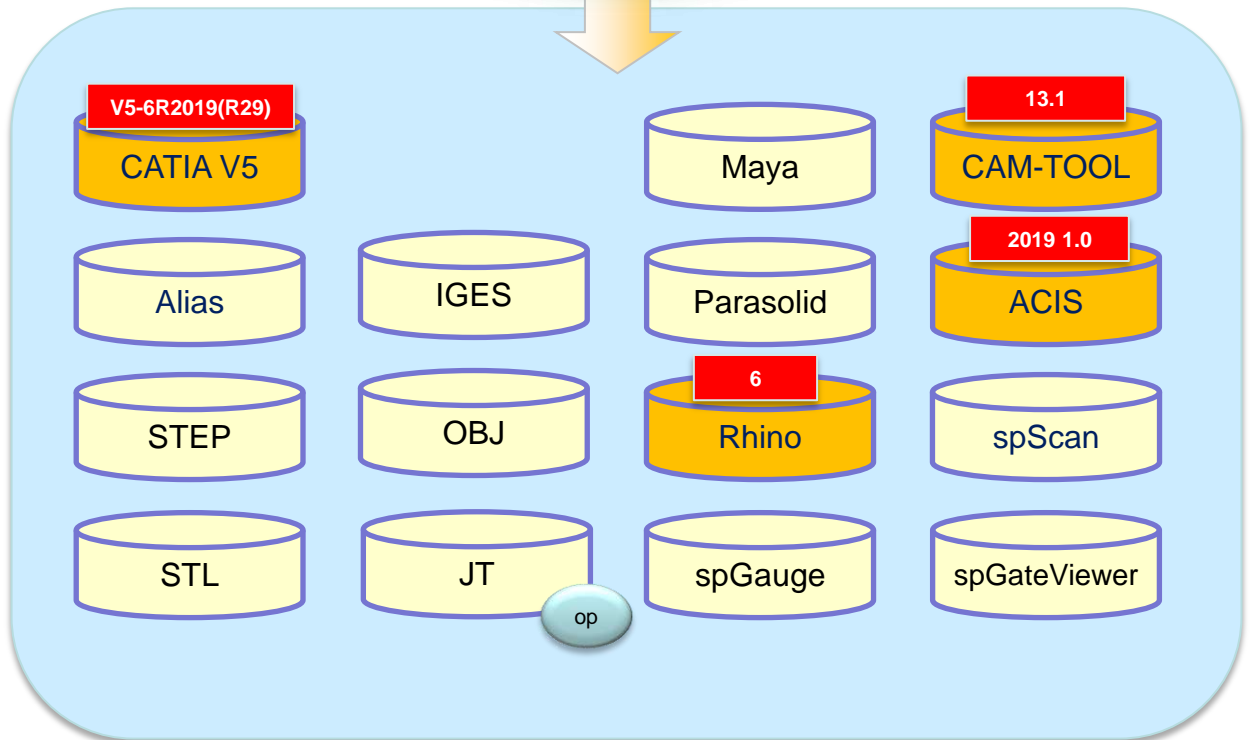| V5-6R2019(R29)			NEW
CATIA V5	NX	Creo	CFIO
Alias		**31.0** Parasolid	**2019 1.0** ACIS
STEP	IGES	**6** Rhino	**2017.1 - 2019.1** spScan
STL	OBJ	**2019** SOLIDWORKS op	JT op

spGate 2020.1
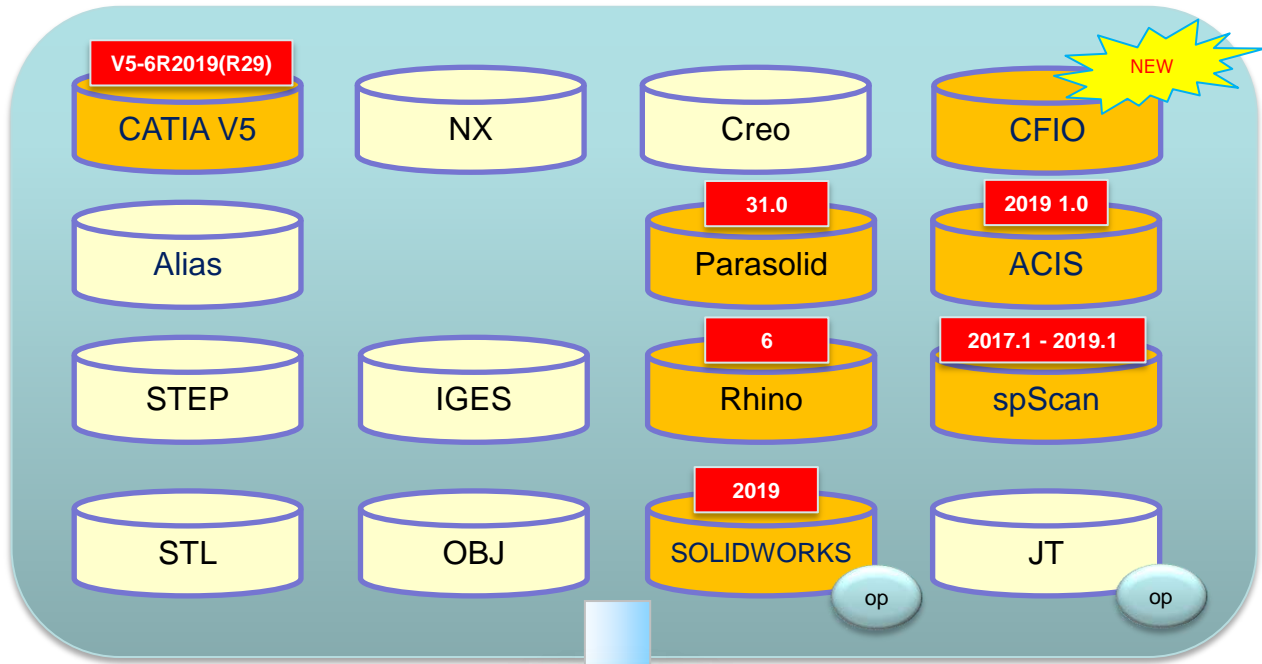
3D CAD op — SolidWorks Reader and JT Reader/Writer require optional licenses.

**Ver. No.** Enhanced — Latest version supported in this upgrade.

Export

V5-6R2019(R29)			**13.1**
CATIA V5		Maya	CAM-TOOL
Alias	IGES	Parasolid	**2019 1.0** ACIS
STEP	OBJ	**6** Rhino	spScan
STL	JT op	spGauge	spGateViewer

[spGate-Job-Manager]

spGate-Job-Manager 2020.1

The [Check Interference] tab has been added to Add Job dialog of spGate-Job-Manager.
The interfering locations can be exported as IGES and you can import it to your CAD to review the interfering locations.
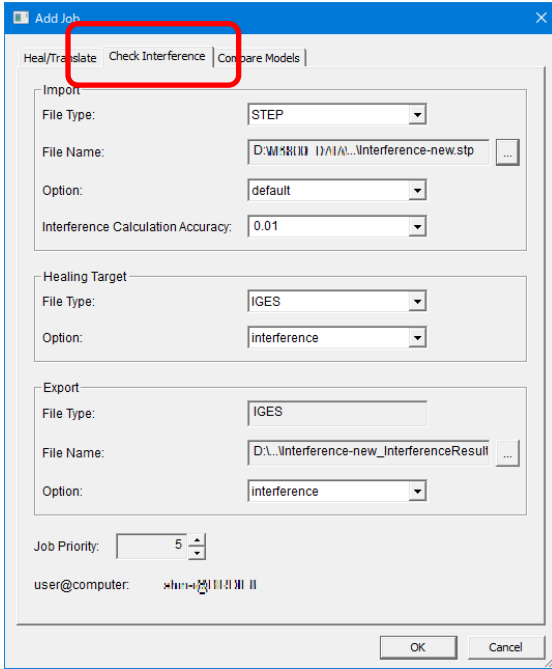
High precision interference check takes time.
spGate-Job-Manager allows the process to be done in a batch during the night time.

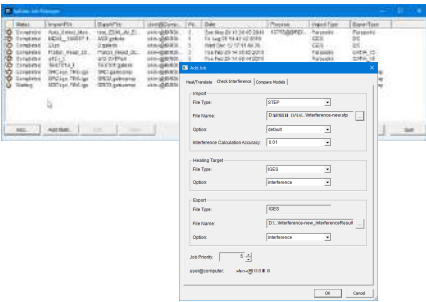Visually check by importing interfering parts to CAD

CATIA

Export interfering parts as IGES

spGate-Job-Manager
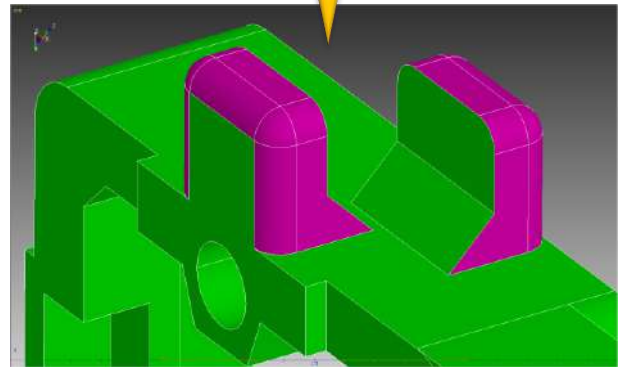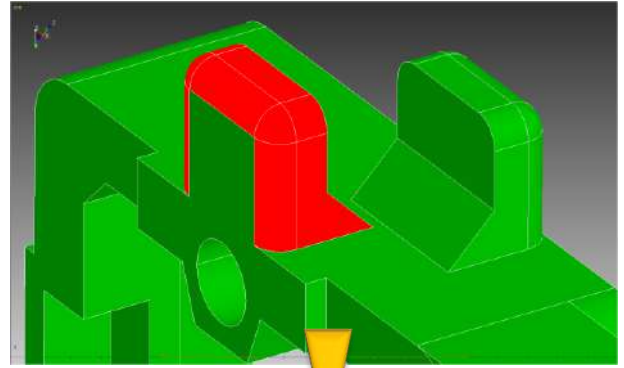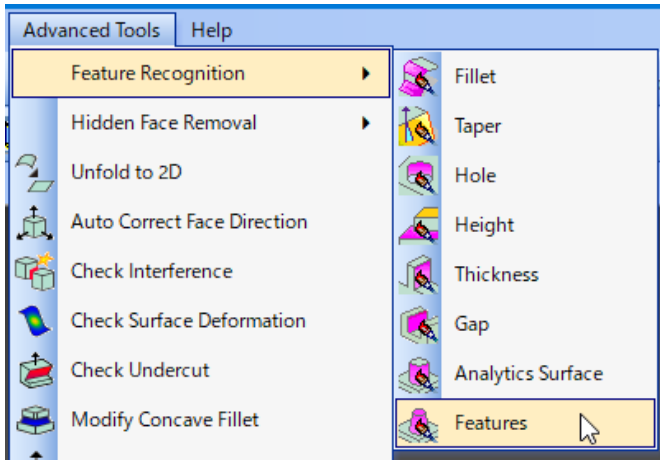
IGES

NX

[Enhancement] 3. Feature Recognition

[Menu: Advanced Tools/Feature Recognition/Features]

Change the color of faces that are of similar shapes for the entire CAD model, automatically.
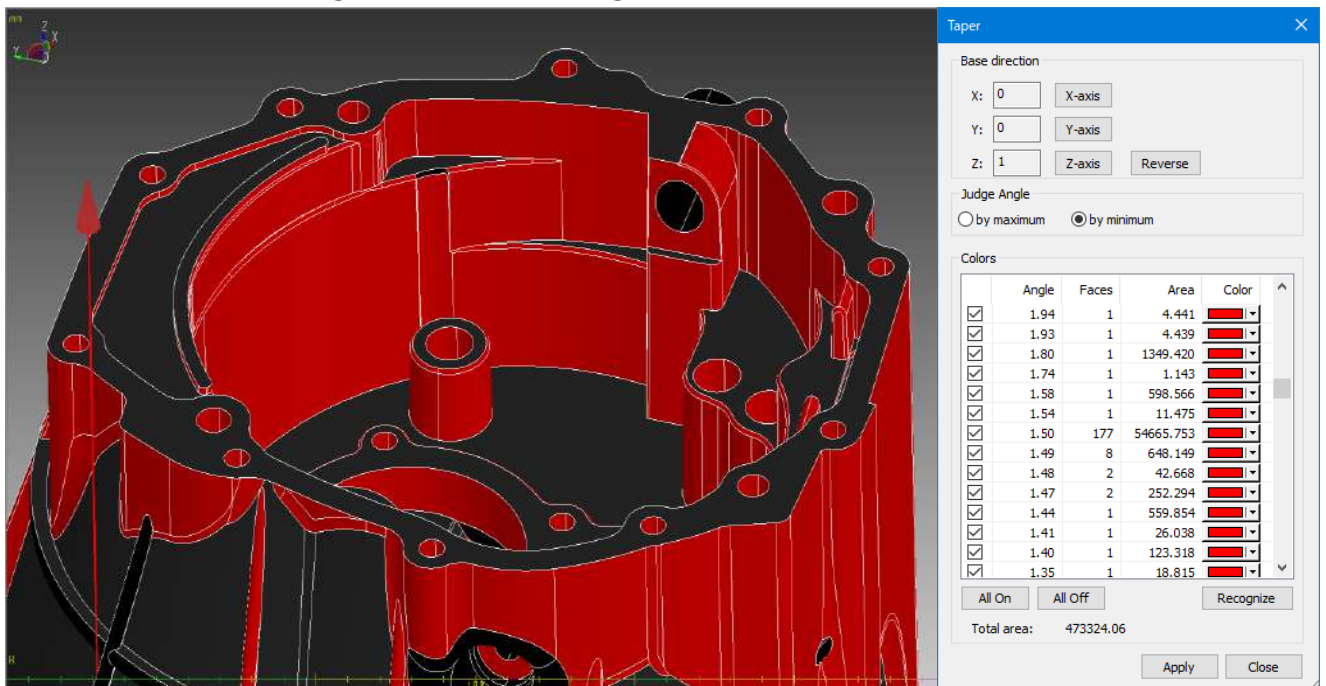Detects the parts that are of the same topology, irrespective of the size of faces, automatically.

[Enhancement] 4. Area of Vertical Faces Sticking to the Die

[Menu: Advanced Tools/Feature Recognition/Taper]

You can compute the total area of the surfaces that are near vertical, by using the feature recognition for tapers.
Use this for checking the faces sticking to the die cast.

	Angle	Faces	Area	Color
☑	1.94	1	4.441	
☑	1.93	1	4.439	
☑	1.80	1	1349.420	
☑	1.74	1	1.143	
☑	1.58	1	598.566	
☑	1.54	1	11.475	
☑	1.50	177	54665.753	
☑	1.49	8	648.149	
☑	1.48	2	42.668	
☑	1.47	2	252.294	
☑	1.44	1	559.854	
☑	1.41	1	26.038	
☑	1.40	1	123.318	
☑	1.35	1	18.815	

Total area: 473324.06

[Enhancement] 5. Current work coordinate as origin

[Menu: File/Import]

Now you can import CATPart's active coordinate origin as the origin of the model in spGate.

~ 2019.2

2020.1
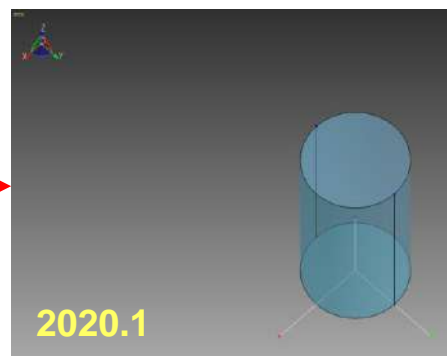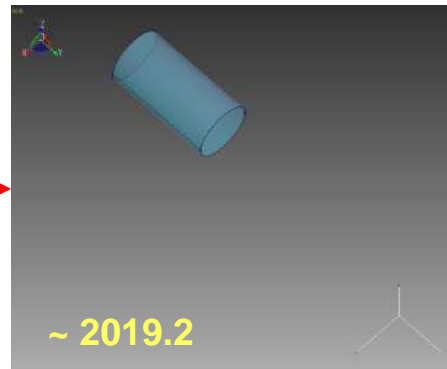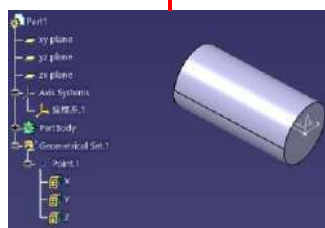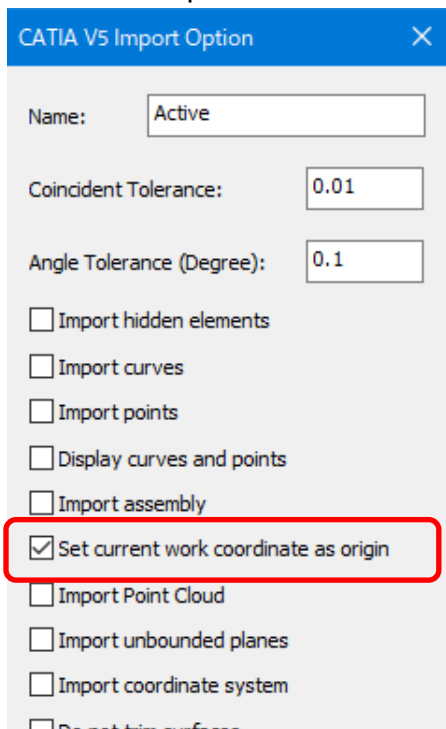
[Enhancement] 6. Mirror
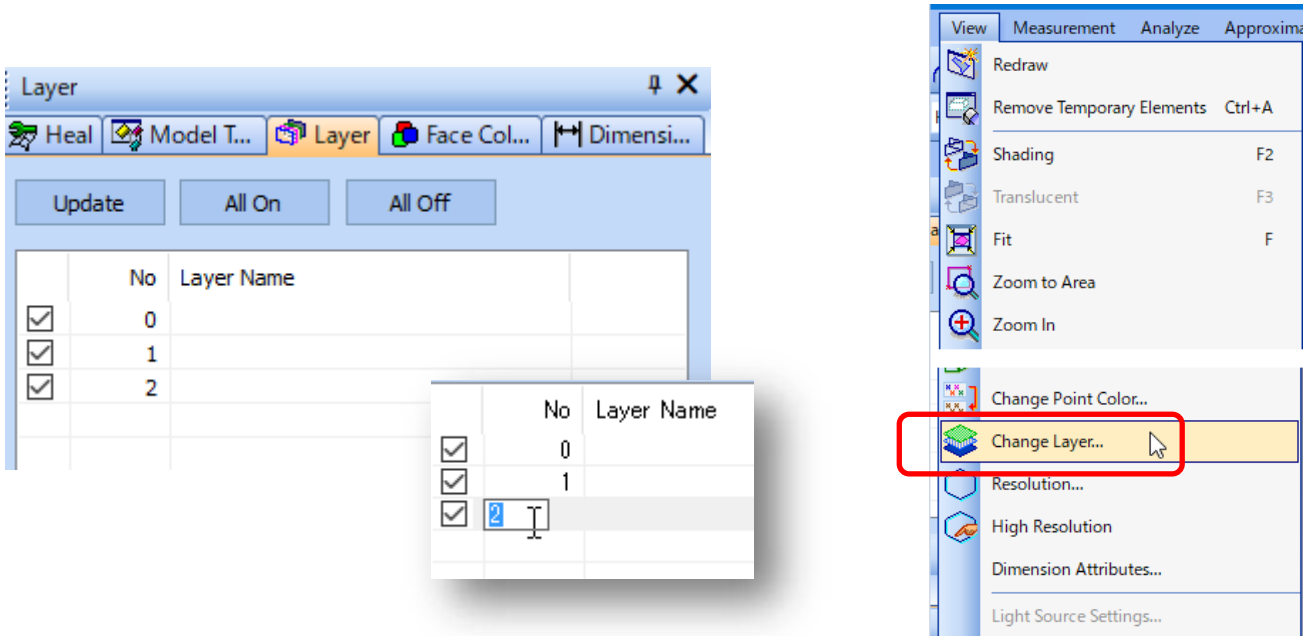
[Menu: Modify/Mirror]

[Mirror] feature has been added to [Modify] menu.
This is useful when comparing bilateral symmetry.
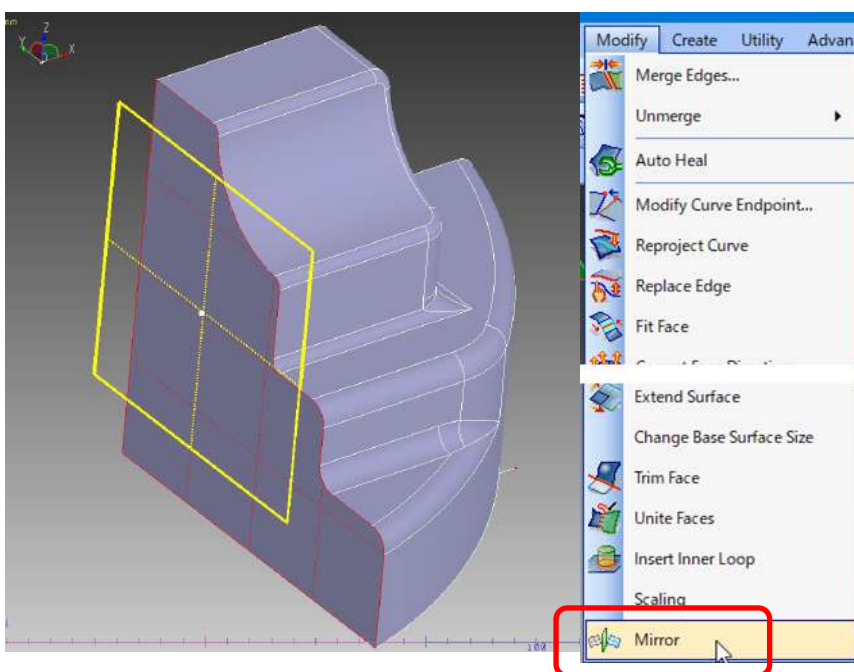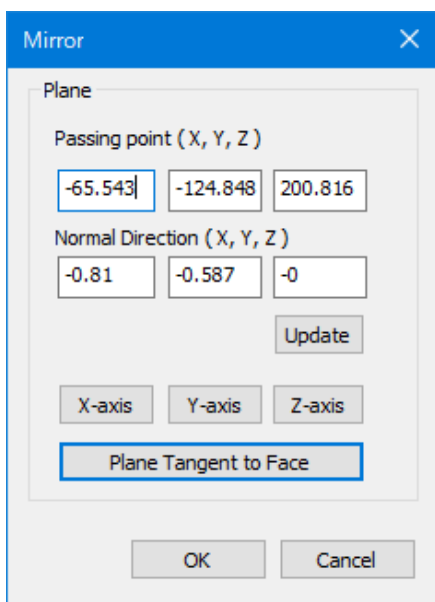
[Enhancement] 7. Change Layer

[Menu: View/Change Layer]

Now you can change the layer of a specific face.
By changing the layer number in the Layer pane, multiple layers can even be integrated.

[Enhancement] 8. Electrode taper extension / color change

[Menu: Advanced Tools/Feature Recognition/Features]

The taper of electrode parts can now be extended and the color can be modified as well.
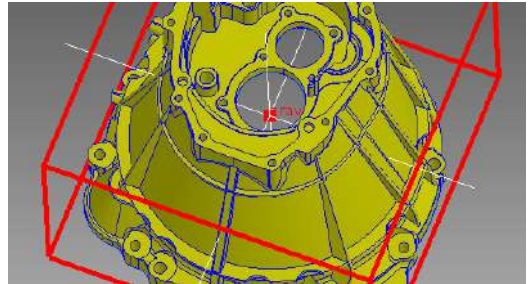The amount of protrusion from open pockets can also be specified.
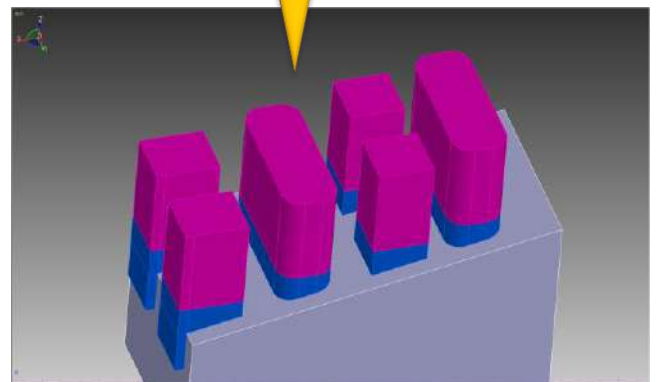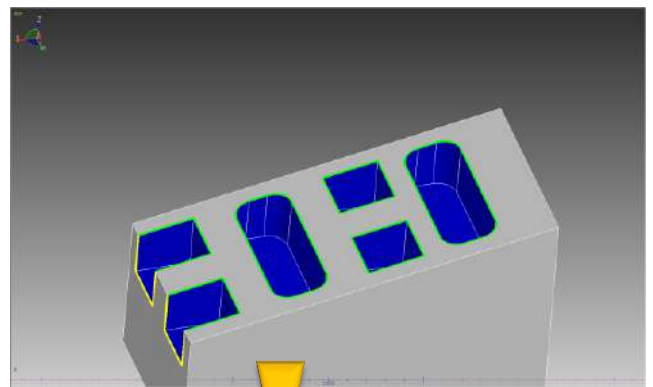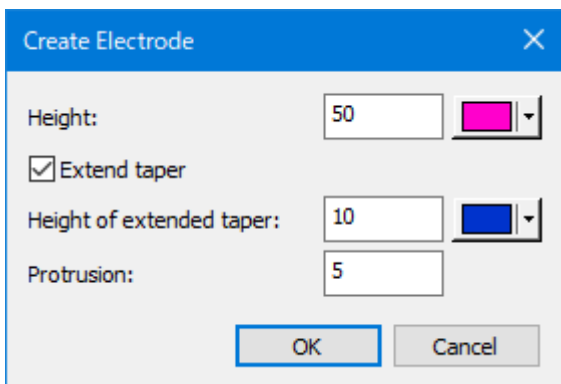
■**Check Undercut**

Enhanced the menu, so that the base
axis direction can be indicated by
either "a straight line" or "the normal
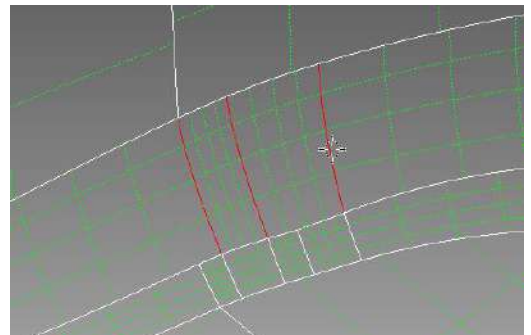direction of a face."

■**Volume | Surface Area | Center of Gravity**

Now the base axis (X, Y, and Z axes) is
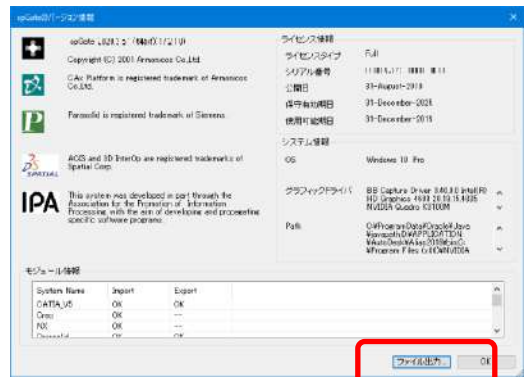created at the location of the center of
gravity.

■**Repair Non-Tangent Faces**

Now you can pick multiple edges
in:[Modify]-[Repair]-[Non-Tangent
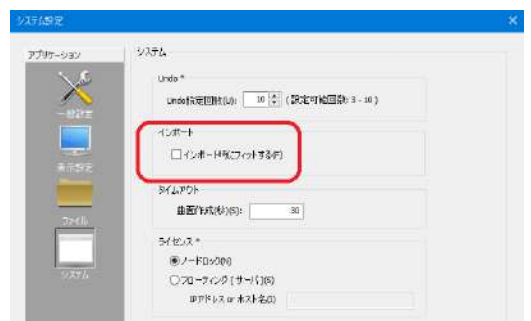Faces].

■**Log file**

Integrated the log information exported
from [Help]-[Version Information]-[Output
File...] and "SystemInfo.exe."

■**Fitting control after import**

Now you can choose to fit the model right
after importing to the view or not.

Developer