



ClassNK-PEERLESS **MODELER**

ClassNK-PEERLESS **VIEWER**

Upgrade News 2017.1

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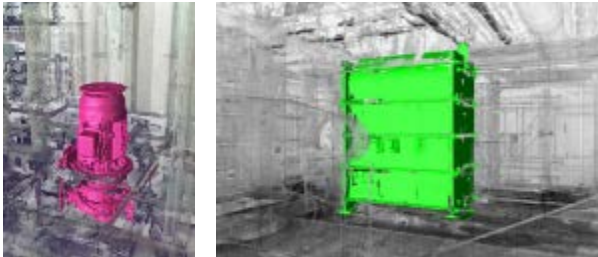
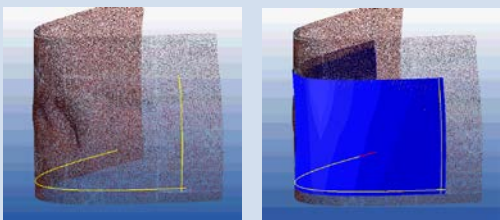
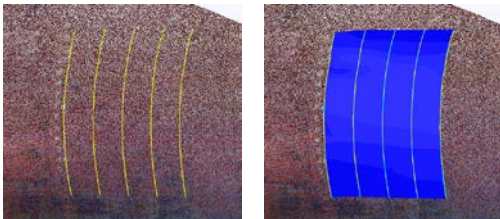
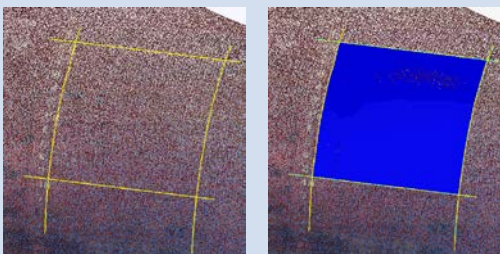
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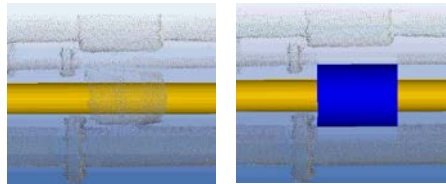
1. ClassNK-PEERLESS Modeler

From version 2017.1, ClassNK-PEERLESS will be released as ClassNK-PEERLESS Modeler.

1.1. New Features

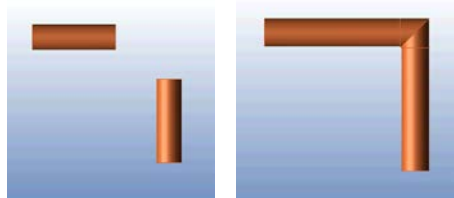
This software release contains the following new features.

Category	Description	Armo ID
Polygon Mesh / Equipment	Release the function for creating polygon mesh from the selected point clouds. The function for making a polygon mesh from the point cloud of the facility equipment size.	1337
	 <ul style="list-style-type: none"> • Polygon mesh can be created within a short time. • By using on the various works such as the initial design, interference, space confirmation, etc., it is possible to quickly conduct examination of mounting and repair. 	
Polygon Mesh / Edit	Release the function for delete/ remove / copy of the selected polygon mesh.	
Polygon Mesh / Export	Release the function for outputting the created polygon mesh.	
Surface / Sweep	Release the function for creating the Sweep surface.	1359
		
Surface / Loft	Release the function for creating the Loft surface.	1364
		
Surface / Boundary	Release the function for creating the interpolation surface.	1375
		
Cylinder (Pipe & Points)	Release the function for creating the Cylinder Create a cylinder by specifying the pipe (cylinder) with same axis and the point clouds on the side.	1258



Primitive Release the function for creating the Primitive Geometry.

Pipe / Miter bend Release the function for butt connection of the straight pipes (Miter Bend). 1365



Pipe / Create Reducer Release the function for creating a new Reducer.

Grouping Color Release the function for grouping the closest points to the selected color. 1348

Tool / Rotate and parallel-move the points manually. 1409

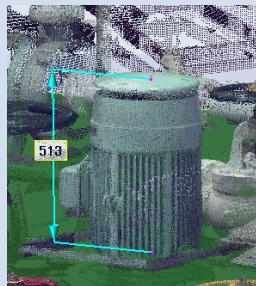
Move Point Cloud In this function, the shape that is already created will not be moved.

Precision Evaluation Display error map between point cloud and element. 1358

This function can perform highly accurate evaluation.

Measurement / Release the function for measuring the distance between 2 points.

Distance Axis The display position of the distance dimension can be specified.



3D Annotation / Release the function for the import of the 3D annotation file.

Import

3D Annotation / Release the function for the import of the 3D annotation file.

Export

Sketch / Smoothing Release the function for smoothing curve. 1403

Sketch / Release the function for connecting consecutive curves into one. 1394

Connect Curves

Sketch / Connect Release the function for concatenating curves. 1394

Separated Curves

Sketch / Divide Release the function for the division of the curve at the specified position. 1393

Sketch / Intersect Create intersection curves between Sketch plane and Point cloud. 1391

Point Cloud The intersection curves to be created will be one.

In the case of complicated situation, stable intersection curves can be created by defining a polyline as a guide.

Sketch / Create intersection curves between Sketch plane and geometry. 1402

Intersect Shape

Sketch / 3D Curve Create a 3D curve from the line on the Sketch plane. 1355

The created 3D curve can be used for creating a spline surface or can be output as a section line.

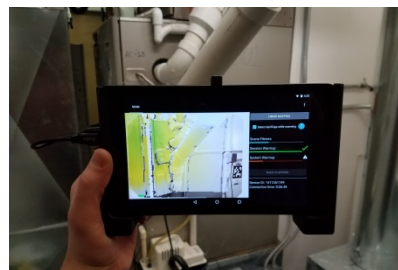
Sketch / Sketch Plane Define a new Sketch plane where it is offset from the current position. 1395

Sketch / Import	Release the function for the import of the line information (DXF) on the Sketch plane.	1412
Field Alignment Piping / Actual Flange Shape	<p>Release the function for fitting the Flange to the point cloud.</p> <p>In Peerless, the Flange is created perpendicular to the straight pipe.</p> <p>As a matter of fact, there are manufacturing errors, it cannot be defined at right angles.</p> <p>In this function, modeling according to the current situation will be performed by fitting the Flange to be created to the point cloud.</p> <p>And then, The Flange to be created will be a cylinder.</p>	1397
Field Alignment Piping / Flange Angle	Release the function for the output of the coordinates and angle of the flange and cylinder end.	1360
Export spGauge	<p>Release the function for the export of the file for the inspection software "spGauge".</p> <p>http://www.armonicos.co.jp/products/spgauge/</p>	1528

1.2. Improvements

This software release contains the following improvements to existing functionality.

Category	Description	Armo ID
Import Point Clouds	Support the importing of a new format. (Blue)	1334
	1. 3D Laser Scanner	1335
	FARO : (*.fls, *.fws, *.lsproj)	1363
	Leica : (*.ptx)	1406
	Z+F : (*.zfs, *.zfpj)	
	2. 3D Text Point Clouds	
	Text File (*.asc, *.xyz, *.csv)	
	Leica PTS File (*.pts)	
	PEERLESS Point Cloud File (*.pcs)	
	DPI-8 (*.dp) : https://www.dotproduct3d.com/dpi8x.html	



Lidar LAS Files (*.las)

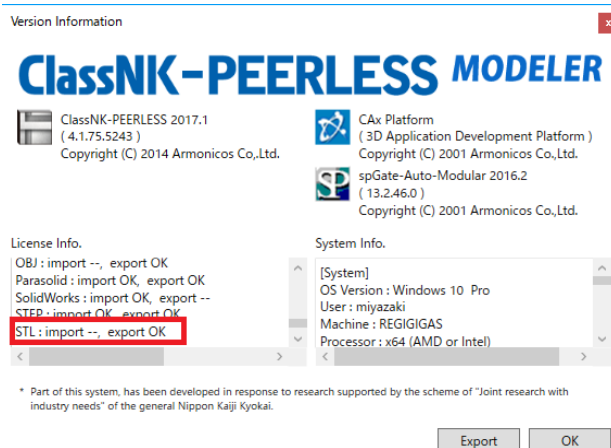
Export / VRML	Support VRML format export.	1284
Export / DXF	Support DXF format export.	1371
Export / CADMATIC	Output as a group for each feature. The output accuracy can be changed when outputting a spline surface.	1318

Export / STL

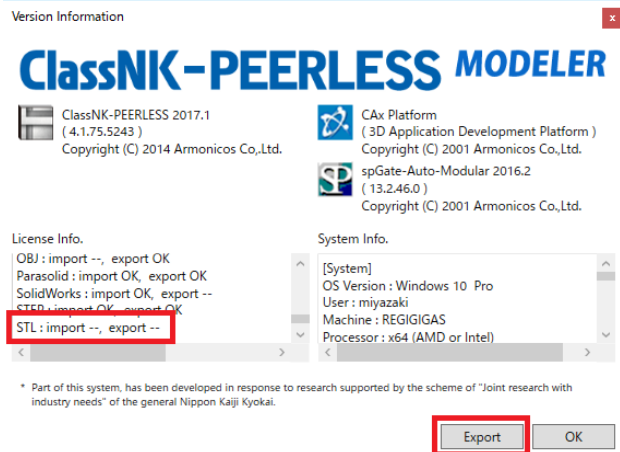
All users can export STL.

Please check whether it is possible to export STL on your environment by the following procedures.

1. Start-up Version Information Command.
2. Please check "License Info" in the Version Information Dialog.
3. If it looks like the figure below, STL export is possible with the current license. Please use as it is.



4. If it looks like the figure below there is no license. Please press "Export" button and export License Information.

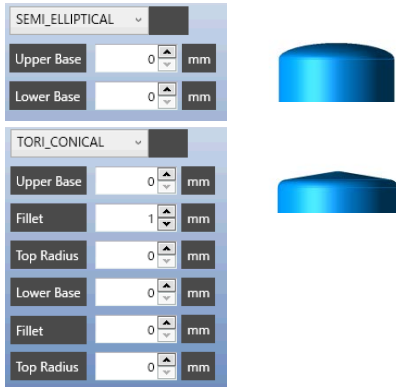


- Please send the exported license file below. (Mail Attachment)

Mail to : peerless@armonicos.co.jp

Subject : STL Export License

- Based on the information you sent, we will issue a password to add the license and return it by E-mail. After receiving the password, please start-up the License Manager and update the license.

Export Center Line	The output of the center line (Circular Arc Element) of the Elbow and Bend can be selected. Support DXF format export.	1371
Pipe / Auto Recognition	Improve the processing logic of piping automatic recognition function. As a result, recognition errors are improved by 25% compared to the 2016.3 Version, and the recognition rate is increased by 50%. (According to our test data)	1160
Pipe / Coordinate	When the newly defined piping interferes with the point clouds, the interfering point clouds will be highlighted.	1250
Pipe / U bolt	Improve U Bolt setting panel. The rotation angle can be set from the panel.	1415
Shaped Steel / Square Steel	Add square steel to the corresponding types in the function of creating steel.	1265
Cylinder	Add the type of cylinder end shape. 	1309
Simple Evaluation	Display error map between point cloud and element. High speed evaluation can be performed by this function. In the case of a point referenced from multiple faces, the speed will be improved by adopting the distance to the first element found, rather than the shortest distance value.	
3D Annotation / Edit	Edit the contents of the 3D annotations.	
2D / 2D List	Improve not to export to DXF for elements that are not displayed.	1556
Sketch /	Add midpoint snap function.	1418

Midpoint Snap

Layout / Link

Move from the [Tool] menu to the [Layout] menu.

1406

1.3. Bug Fixes

This software release contains the following bug fixes.

Category	Description	Armo ID
Pipe / Move	Solved the problem in which the flange and valve connected to the moving piping did not move.	1135
Measurement	Solved the problems in which a spline surface is not the measurement target.	1410
etc	Modified the small bug.	

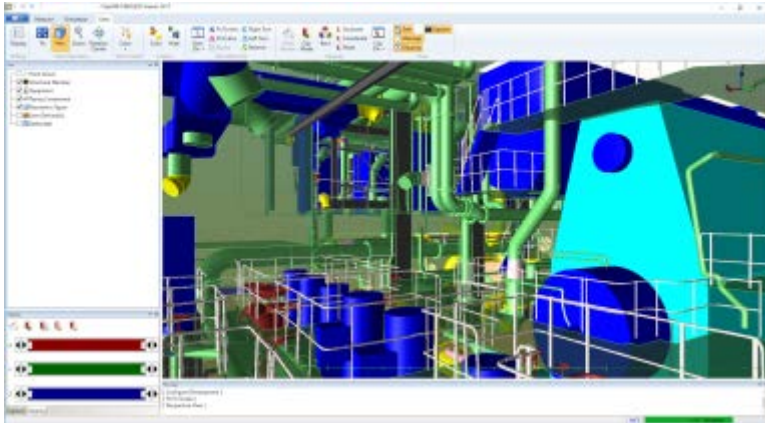
2. ClassNK-PEERLESS Viewer

ClassNK-PEERLESS Viewer is available and free of charge.

The Measurement function, Simulation function and the Display function same as the Modeler is provided for “Vision”, “Measurement” and “Examination”.

Of course, distribution is also free.

Please use the free viewer in various scenes such as the designer measures the data, the administrator checks the data, the customer views the data, etc.



3. Installation Notes

3.1. Version Compatibility

Before installing this version, be sure to note the following warning regarding the compatibility.

- This version can open and work with PEERLESS project file data created in versions 2016.3 and before. However, there is no guarantee concerning PEERLESS project file data created in versions 2017.1 and later.

3.2. Upgrade Notes

- When the latest version is installed in the same environment where an older version is installed, the software will be upgraded.
- If you have modified the data base in a previous ClassNK-PEERLESS' version, then you have to update them manually in the latest version.

3.3. Using Viewer

- Viewer can be used among affiliated companies. Distribute the Viewer's installer as necessary.
- Review the license agreement before continuing with the installation of the Viewer.