

YUSHIN EOAT Automated Design Tool User Manual

Administrator	YUSHIN PRECISION EQUIPMENT CO., LTD
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Contents

itents		
A.Introdu	uction	
A1.	Checking the Operating Environment	Page 3
A2.	Molded Item Preparation	Page 3
A3.	Installation	Page 3
A4.	Starting the Software	Page 5
A5.	Mouse Operations	Page 5
A6.	Display Functions	Page 5
B. Operat	ting Method (Basics)	
B1.	Main Display Functions	Page 6
B2.	Entering Basic Information	Page 6
B2-1.	Importing in Molded Items	Page 6
B2-2.	Component Settings	Page 7
B2-3.	Frame Type/Baseplate Settings	Page 7
B3.	Component Configuration	Page 8
B3-1.	Grip Method Selection	Page 8
B3-2.	Adjustment Type Selection	Page 8
B4.	Suction Pad Configuration	Page 9
B4-1.	Adding	Page 9
B4-2.	Movement	Page 11
B4-3.	Changes	Page 11
B5.	Mini Cylinder Layout	Page 13
B5-1.	Adding	Page 13
B5-2.	Movement	Page 15
B5-3.	Changes	Page 15
B6.	Runner Chuck Layout	Page 17
B6-1.	Adding	Page 17
B6-2.	Movement	Page 19
B6-3.	Changes	Page 19
B7.	Outputting Product Information	Page 20
B8.	Data Output	Page 21
B8-1.	Online Quotation Date	Page 21
B8-2.	3D Model Output	Page 22
B8-3.	2D Drawing Output	Page 22
B9.	Deleting Components	Page 24
B10.	"Back" and "Go forward" Functions	Page 24

В9.	Deleting Components	
B10.	"Back" and "Go forward" Functions	

C. Operating Method (Tutorial)

Creating Dummy Molded Item Data	Page 25
Setting Mold Opening Amount	Page 27
Modifying Molded Item Data	Page 28
Deleting Unnecessary Molded Item Data	Page 28
Setting Molded Item Weight	Page 28
Changing Molded Item Position	Page 28
Changing Base Components	Page 30
Adding/Modifying Auxiliary Pipes	Page 31
Adding	Page 31
Movement	Page 32
Checking Molded Item Interference	Page 32
Creating a Dummy Sprue	Page 33
	Creating Dummy Molded Item Data Setting Mold Opening Amount Modifying Molded Item Data Deleting Unnecessary Molded Item Data Setting Molded Item Weight Changing Molded Item Position Changing Base Components Adding/Modifying Auxiliary Pipes Adding Movement Checking Molded Item Interference Creating a Dummy Sprue

D. Other Operations

D1.	Checking the Molded Item Shape (Function for Viewing 3DCAD Data)	Page 35
D2.	Checking Component Database Version	Page 36
D3.	Creating Templates	Page 37
D4.	Logging Error Messages	Page 37
D3. D4.	Creating Templates Logging Error Messages	Page 3 Page 3

References

A. Introduction

A1. Checking the Operating Environment

(1) The Design Support Tool has been confirmed to work under the following operating environments.

Item	Details
Recommended OS	Windows7 (64bit)
CPU	Core i3 or better
Memory	4GB or more
HDD/SSD	3GB or more free space
Monitor Size	1024 x 768 or greater resolution
Language	Japanese, English, Chinese
3D CAD File Import Format	IGES, STEP

Note) 3D CAD software not required. It should only be made available if the user would like to check the output 3D chuck backing plate using their own CAD software

A2. Molded Item Preparation

(1) Prepare the relevant 3D CAD molded item data. The data should be in "IGES" or "STEP" format.

A3. Installation

(1) Select the language for the installation.

Installer	Language	×
	Please select a language.	
	Japanese	
	ОК	Cancel

(2) Check the license conditions, then click "Agree". This will begin the installation.

(3) Select the folder for the installation, then click "Install". (Folder isn't specified, so set to the desired folder)

중 YUSHIN-EOAT-TOOL 2.00 セットアップ:インストール フォルダ	_ 🗆 X
YUSHIN-EOAT-TOOL 2.00を以下のフォルダにインストールします。異なったフォルダにインストール Iコよ、「参照」 を押して、別のフォルダを選択してください。 インストールを始めるコは [インストール] リッグして下さい。	いする をク
インストール先 フォルダ C¥Program Files¥YUSHIN-EOAT-TOOL 2.00 参照(R)	
必要なディスクスペース: 560.3MB 利用可能なディスクスペース: 295.9GB	
Nullsoft Install System v2.50 く戻る(E) インストール キャ	1211

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(5) Check the shortcut icon that was created on the desktop. This completes the installation



A4. Starting the Software

(1) Click the shortcut icon that was created on the desktop. (The software may take up to 90 seconds or so to launch)



YUSHIN-EOAT-TOOL

(2) The software has started once the screen below appears.



A5. Mouse Operations

(1) Refer to the following.

Select	Move Parallel	Enlarge/Shrink	Rotate Display	
¢		¢	দিয়	
	shift +			
Click the object you wish to select using the left mouse button.	Click the middle mouse button while pressing the shift key and move the object periphery.	Use the mouse wheel to enlarge/shrink.	Drag by clicking the middle mouse button.	

A6. Display Functions

(1) Refer to the following for details about each function.



B. Operating Method (Basics)

B1. Main Display Functions

(1) Refer to the following for details about each function.

New	Open	Save	Modify molded item	Change base component	Com	ponent configu	ration	Back/Go forward
		➡	0				貝	∱
Open the Create New screen	Open a file saved in XML format	Save a file in XML format	Create dummy molded items, delete unnecessary molded items, set molded item weights, change molded item coordinates	Change baseplate, pipe standard, baseplate position	Place a suction pad	Place a mini cylinder	Place a runner chuck	Back to previous, Go forward
Deletion	Assembly	Add/Modify	Interference	Product Information	Output	Settings	Help	1
		1		i csv		\diamond	?	
Delete placed component	Automatically assemble	Add or move auxiliary pipes	Check for interference between molded item and completed model	Check the model number or weight of components	Output quotation data, 3D data, 2D drawings	Switch language, check/update DB version, view/template creation	Operation explanation, user agreement, output query log	

B2. Entering Basic Information

B2-1. Importing in Molded Items



(2) Click "Select File" or drag & drop a file into the window.



(3) Select the 3DCAD molded item data previously prepared in A2.

Note: Only IGES and STEP file types can be imported

Note: There are no restrictions on file size but file size may influence processing speed after import

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○ → 成形。	品データ	× 🔯	成形品データの検索	<u> </u>
整理 ▼ 新しいフォル	ğ-		8=	• 🔳 🔞
田 🚖 お気に入り	名前 ∽	更新日時	種類	サイズ
	MOLD_DATA_YUSHIN001.stp	2017/12/09 14:28	STP ファイル	401 KB
😐 🔜 デスクトップ	MOLD_DATA_YUSHIN002.stp	2017/12/09 14:28	STP ファイル	401 KB
	MOLD_DATA_YUSHIN003.stp	2017/12/09 14:28	STP ファイル	401 KB
	MOLD_DATA_YUSHIN004.stp	2017/12/09 14:28	STP ファイル	401 KB
	MOLD_DATA_YUSHIN005.stp	2017/12/09 14:28	STP ファイル	401 KB
	4			<u>></u>
:	ファイル名(N):	•	3D Files (*.step *.s	stp *.iges 💌
			開<(<u>○</u>) ▼	キャンセル

B2-2. Component Settings

- (1) Select "Default Settings" for the component selection, then click "NEXT".
- Note: Click on "Call Template" if importing a "template" configured in "D. Other Operations > D4. Creating Templates"

— 新規作成 Wizard		
備成高峰の選択 © デフォルト設定	c テンプレート呼び出し	
テンプレートファイ	ル選択	
注)「テンプレート呼び出し」 まずは、テンプレート保存が	E灌択頂くと、お気に入り登録した部品を呼び出し可能となります。 必要なため、詳細はツール内のマニュアルをご参照下さい。	
	< Pack <u>N</u> ext >	Cancel

B2-3. Frame Type/Baseplate Settings

(1) Select the "Frame Type".

- E.g.) If round pipe is selected then select "Aluminum pipe", and if square pipe is selected then select"Aluminum frame"
- (2) From "Select Baseplate ► Select Pitch", select a combination of the Take-out Robot screw mounting part hole pitch (X-Y), hole diameter (hole with relief). If "Select Pitch ► Thickness" is selected, a model number will automatically be selected. (Model number can also be directly input)
- (3) From "Select Baseplate Position", select either "Top configuration", "Center configuration_vertical", or "Center configuration_horizontal" and click "Finish".
 - Note: Top configuration: The baseplate will be positioned on top of the imported molded item Center configuration: The baseplate will be positioned at the center of the imported molded item

🛥 新規作成 Wizard			
フレームタイプ		アルミパイプ	•
ベースプレート選択			
A	ピッチ選択	X70-Y40-D6.6	•
B Y ● D-● `	厚さ	12	•
. ^L • <u>x</u> •.	型番	NAH-BP-H070040-T12	
ベースプレート位置選択			
◎ 上部配置	○ センター配置_縦長	○ センター配置_横長	
詳細設定			
▶ 型開き量設定			
-		< Lack Einish	Cancel

B3. Component Configuration

B3-1. Grip Method Selection

(1) Select a gripping method for component configuration as desired



B3-2. Adjustment Type Selection

(1) Click Adjustment Type and select "Slide-Height"



(2) The only adjustment type available in this version (V2.0) is "Slide-Height".



8

B4. Suction Pad Configuration B4-1. Adding

 Click the suction pad and select "Material" → "Pad Shape" → "Bore". The model number will be automatically selected.(Model number can also be directly input)



(2) Select suction bracket "Mounting Part Type" \rightarrow "Stroke". The model number will be automatically selected. (Model number can also be directly input)



(3) Select the slide bracket "Thickness" \rightarrow "Number of Screw Holes".



(4) Move to above the molded item using the mouse and click the position you wish to place a suction pad.



(5) After confirming the position, click the "Assemble" button.



(6) Suction brackets, pipe connection brackets, and other fastening components will be automatically be positioned, completing the model.



B4-2. Movement

(1) Click "Move" and select the suction pad you wish to move. The selected suction pad will change color



(2) Click the movement direction to move the selected pad. Note: Movement direction matches the direction displayed



B4-3. Changes

(1) Click "Change" and select the suction pad you wish to change. The selected suction pad will change color



(2) Select the item you wish to change. Click "OK" after making a selection. E.g.) Change Bore $6 \rightarrow 20$



(3) Changes are complete.



B5. Mini Cylinder Layout

B5-1.Adding

(1) Click the mini cylinder and select "Stroke". The model number will be automatically selected. (Model number can also be directly input)



(2) Select tip "Material" → "Shape" → "Connector". The model number will be automatically selected. (Model number can also be directly input)



(3) Select the slide bracket type via "Thickness" → "Number of Screw Holes". Note: In V2.0, a "Thickness" of 8 mm is the only option



(4) Move to above the molded item using the mouse and click the position you wish to place a mini cylinder.



(5) After confirming the position, click the "Assemble" button.



(6) Mini cylinders, pipe connection brackets, and other fastening components will be automatically be positioned, completing the model.



B5-2. Movement

(1) Click "Move" and select the mini cylinder you wish to move. The selected mini cylinder will change color



(2) Click the movement direction to move the selected mini cylinder. Note: Movement direction matches the direction displayed



B5-3. Changes

(1) Click "Change" and select the mini cylinder you wish to change. The selected mini cylinder will change color



(2) Select the item you wish to change. Click "OK" after making a selection.



(3) Changes are complete.



B6. Runner Chuck Layout

B6-1. Adding

(1) Click the runner chuck and select "Type" and "Detection". The model number will be automatically selected. (Model number can also be directly input)



(2) Select the slide bracket type via "Thickness" \rightarrow "Number of Screw Holes".



(3) Move to above the molded item using the mouse and click the position you wish to place a runner chuck.



(4) After confirming the position, click the "Assemble" button.



(5) Runner chucks, pipe connection brackets, and other fastening components will be automatically be positioned, completing the model.



B6-2. Movement

(1) Click "Move" and select the runner chuck you wish to move.





(2) Click the movement direction to move the runner chuck. Note: Movement direction matches the direction displayed



B6-3. Changes

(1) Click "Change" and select the runner chuck you wish to change. The selected runner chuck will change color



(2) Select the item you wish to change. Click "OK" after making a selection. E.g.: Changing runner chuck classification sensor from Do not use → Use



(3) Changes are complete.



B7. Outputting Product Information

(1) Click "Product Information" to check information such as the component model number and weight.



(2) The component part information (product name, model number, weight), external dimensions (XYZ) can be viewed.



- 商品情報					j.
商品名	型番	単体重量	数量	合計重量	
高さ調整用シャフト	NAH-AJS15-M5-50	24	4	96	
パイプ(アルミ)	NAH-ARP15-258	41	4	164	
パイプ(アルミ)	NAH-ARP15-396	63	2	126	
ベースプレート	NAH-BP-H070040-T12	333	1	333	
取付クランプ (ベースプレート取付 丸パイプタイプ)	NAH-RPC15-M5	43	4	172	
パイプホルダ	NAH-RPH1515	70	12	840	
スライドブラケット(ネジ穴タイプ 長穴1本)	NAH-SBS-M10-1-T5	20	4	80	
吸着パッド(ベローズタイプ シリコン)	NAH-SC-SIB30-3	4	4	16	
吸着金具(ネジ取付)	NAH-SCH11-10ST	10	4	40	
X: 258 mm Y: 411 mm Z: 137 mm	✓ 完成品重量 成形品重量 総重量			186	57 g 0 g 57 g
詳細			CS	SV出力 閉	じる

(3) Clicking "Details" allows reference information such as the "Load Capacity", "Deflection Amount", and "Suction Force" to be viewed.

Note: The above	are theoretical	values and	are provided	for reference of	only
-----------------	-----------------	------------	--------------	------------------	------

	完成品詳細画面		×
1	◆完成品寸法	◆重量	
	X: 258 mm X	完成品重量	1867 g
CSV	Y: 411 mm	成形品重量	0 g
	Z: 137 mm	総重量	1867 g
	 ◆許容荷重量(参考値) 完成品と成形品の重量はペースプレート接続用ポルトの許 ◆たわみ量(参考値) 完成品の理論たわみ量は1.53mmとなります。 ◆吸着力(参考値) 成形品重量に対し、理論吸着力(5.77kgf)は上回っている **参考裡は理論上の数値となります。 	容荷重(11900g <u>)</u> ます。)内です。 Close
ata Output			

- B8. D B8-1. Online Quotation Data
 - (1) Click "Online quote output" to get a quote using the YUSHIN PARTS SHOP website. Note: Prices cannot be checked within the tool



(2) Click "CSV Output", enter a name for the file, and save it.



— WEB発注見積出力		×
型番	数量	
NAH-AJS15-M5-50	4	
NAH-ARP15-258	4	
NAH-ARP15-396	2	
NAH-BP-H070040-T12	1	
NAH-RPC15-M5	4	
NAH-RPH1515	12	
NAH-SBS-M10-1-T5	4	
NAH-SC-SIB30-3	4	
NAH-SCH11-10ST	4	
		7
		ົ

B8-2. 3D Model Output

(1) To output a completed model, click "3D Model Output", then select "3D Model Output" or "3D model output (including molded items)".

Note: Only IGES or STEP format can be output



B8-3. 2D Drawing Output

(1) To output a 2D completed model, click "2D Drawing Output". Note that outputting a 2D drawing may take up to thirty or forty minutes



- (2) Overall drawing and grip section major dimensions are listed when output
 - E.g.) If there are suction pads in 2 locations then 3 drawings will be output (overall drawing, suction pad 1, suction pad 2)



B9. Deleting Components

(1) Click "Delete" to delete a placed component.

An eraser marker will be displayed. Select the parts that you want to delete to delete them. Note: Only parts in orange can be deleted. Parts not colored in orange cannot be deleted



B10. "Back" and "Go forward" Functions

(1) Clicking "Back" or "Go forward" enables scrolling to previous or later screens.



C. Operating Method (Tutorial)

- C1. Creating Dummy Molded Item Data
 - (1) Click "Molded Item Creation".



(2) Set the values for "Quantity Designation", "Size Designation", and "Product Pitch Designation", and then click "Molded Item Creation".

Note: Only quadrilateral shapes can be made as dummy molded items



(3) The dummy molded item will appear on the screen. Click "Output"



(4) Click "OK" when "Do you want to start design with the output molded item?" appears



(5) Enter a name and save

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整理 マ 新しいフォルダー			H - 🕡
国会お気に入り	名前 🔺	更新日時	種類
	MOLD_DATA_YUSHIN001.stp	2017/12/09 14:	28 STP ファイル
🖬 📰 デスクトップ	MOLD_DATA_YUSHIN002.stp	2017/12/09 14:	28 STP ファイル
	MOLD_DATA_YUSHIN003.stp	2017/12/09 14:	28 STP ファイル
	MOLD_DATA_YUSHIN004.stp	2017/12/09 14:	28 STP ファイル
	MOLD_DATA_YUSHIN005.stp	2017/12/09 14:	28 STP ファイル
	test.step	2017/12/09 16:	12 STEP ファイル
	•		•
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● フォルダーの非表示		1休1子(三)	+++

(6) The Select Component screen then opens. Refer to section B2-2 and onward of the manual for later steps

\bigcirc	- YUGHEN FRICEERON FOULPHILHT CO., LTD. 下規 副く 保存 成形品修正 ペース部品変更 部品記		
		■ 新興作成 Weard 構成即品選択	
		 ● デフォルト設定 ○ テンプレート呼び出し テンプレートワマイル運択 注)「テンプレート呼び出し」を選択頂くと、お気に入り登録した部品を呼び出し可能となり まずは、テンプレート保存が必要なため、詳細はツール内のマニュアルをご参照下さい。 	
	ViewDocument : 1*		
		< Back	<u>N</u> ext > Cancel

C2. Setting Mold Opening Amount

(1) From the Wizard for Create new, enter "Detail Settings" ► "Mold Opening Amount Settings" and click 'Finish".

ー 新規作成 Wizard			_ (0) >
フレームタイプ		アルミパイプ	-
ベースプレート選択			
	ピッチ選択	X70-Y40-D6.6	*
D-0	厚さ	12	•
	型番	NAH-BP-H070040-T12	٠
ベースプレート位置選択			
 上部配置 	○ センター配置_	縦長 c センター配置_横長	Ę
詳細設定			
□型開き量設定			
- 型サイズ_X			1
型サイズ_Y			1
一型開き量			1
		< Back Einish	Cancel

(2) The set mold opening amount appears as dotted lines



(3) If the mold opening amount is exceeded then an error message stating "Mold opening amount is exceeded" will appear Note: The warning displays as an error message but component chart output and ordering are still possible



C3. Modifying Molded Item Data

- C3-1. Deleting Unnecessary Molded Item Data
 - 1) Click "Modify Molded Item", and after checking that "Delete" is not selected, select the target data from the "Molded Item List" and click "OK".
 - Note: Once data is deleted there is no way to restore it If deleted by mistake, please newly import the molded item data again



C3-2. Setting Molded Item Weight

(1) Click "Weight Settings", select resin from "Volume Calculation" ► "Select Material", and click "Calculate" to automatically calculate the weight.

Note: If the model data is not a perfect solid then the volume cannot be calculated In this case, click "Direct Input" and input the weight



C3-3. Changing Molded Item Position

(1) Click "Rotate" to change the molded item direction in "Rotation Settings" (Vertical flip, Reverse flip, Enter rotation angle).



(2) Vertical flip

To change the molded item direction by 180 $^{\circ}$ top-bottom, select "Rotation Settings" \blacktriangleright "Vertical flip" and click "OK".



(3) The molded item will rotate about the Z axis by 180 degrees.



(4) Reverse flip: To change the molded item direction by 180° front-to-back, select "Rotation Settings" ► "Reverse flip" and click "OK".



(5) The molded item will rotate about the Y axis by 180 degrees.



(6) Enter rotation angle: To change the molded item direction by 180° (front-rear), select "Rotation Settings" ► "Enter rotation angle", set the "Rotation angle" and "Rotation axis", and click "OK".



C4. Changing Base Components

- (1) Click "Change Base Component", select the item from "Baseplate Settings" or "Frame Settings" that you wish to change, and click "OK".
 - E.g.: Selecting an aluminum frame from the frame settings



(2) Changes are complete



C5. Adding/Modifying Auxiliary Pipes C5-1. Adding

(1) To add additional pipes for reinforcing after the automated assembly, click "Add/Modify". Click the locations where you would like to add auxiliary pipes.



(2) Addition of auxiliary pipes is complete.

Note: Additional pipes are not applied when saved as XML data



C5-2. Movement

(1) Click "Move" and select the auxiliary pipe you wish to move. The selected auxiliary pipe will change color. E.g.: Only the added auxiliary pipes can be moved (main pipes and sub pipes cannot be moved)



(2) Click the movement direction to move the auxiliary pipe and click "OK" to confirm.



C6. Checking Molded Item Interference

(1) Click "Interference" to check for interference between molded item and completed model



(2) If there is interference, the applicable locations will change color.

E.g.: In this case the suction pad and suction bracket interfere with the sprue Note: The interference checking function checks for interference between the "molded items" and "components" but cannot check for interference between different components



C7. Creating a Dummy Sprue

(1) Click "Add Sprue Data", input the details for "X" → "Y" → "Height" → "Diameter", and click "OK" Note: The direction of the arrow is the positive direction



(2) Sprues are added.



(3) To delete sprues, click "Modify Molded Item". Then, refer to C3-1 Deleting Unnecessary Molded Item Data



D. Other Operations

- D1. Checking the Molded Item Shape (Function for Viewing 3DCAD Data)
 - (1) Click "X" to close the worksheet.



(2) Click "View Creation" and select the molded item you wish to check the shape of, then drag and drop it. Note: Only IGES and STEP file types can be imported



(3) The selected molded item can be checked.



D2. Switching Languages

(1) If switching the language is necessary, click "Settings" ► "Language Switch".



(2) Select the target language and click "OK". Note: Changes to the language are only applied after the software restarts

Set the language to use		×
English		•
	ОК	Cancel

- D3. Checking Component Database Version
 - (1) If switching the language is necessary, click "Settings" ► "Language Switch".

- YUSHIN PRECISION EQUIPMENT CO., LTD.	al a	
	Language switch	
	Template creation	
.	View creation	
<u>□</u> 天	Mold opening amount setting	
	Detail settings	<
	Check version	

(2) Check that the tool version is the "Release Version" and the component database version is the "DB Version" (Currently both are 2.00). Click "Get the Latest Version" to get the latest version.



D4. Creating Templates

(1) Click "Settings" ► "Template Creation".



(2) Select the item that you wish to change, click "OK", and save the template.

Note: Refer to "B. Operating Method (Basics) ► B2. Entering Basic Information ► B2-2. Component Settings" for how to call a saved template



D5. Logging Error Messages

(1) Click "Help" → "Output Query Log" and save the resulting file.



Please read this document before using the "YUSHIN EOAT Automated Design Tool"

In order to use the "YUSHIN EOAT Automated Design Tool" (hereinafter referred to as "SOFTWARES"), it is necessary for the user to agree to all provisions of YUSHIN PRECISION EQUIPMENT CO.,LTD. "YUSHIN EOAT Automated Design Tool" license agreement (hereinafter referred to as "THIS LICENSE AGREEMENT") specified hereinafter.

Those who use any or all of SOFTWARES shall be deemed to agree to each and every provision of THIS LICENSE AGREEMENT at the time when they install any or all of SOFTWARES. Those who do not agree to THIS LICENSE AGREEMENT may not use SOFTWARES. Before using SOFTWARES, please carefully read and thoroughly understand THIS LICENSE AGREE

YUSHIN PRECISION EQUIPMENT CO., LTD. "YUSHIN EOAT Automated Design Tool" License Agreement

Article 1 (Purpose)

The purpose of THIS LICENSE AGREEMENT is to set forth the terms and conditions for using SOFTWARES as agreed between YUSHIN PRECISION EQUIPMENT CO., LTD. (hereinafter referred to as "OUR COMPANY") and the corporate or individual (hereinafter referred to as "USER") who uses SOFTWARES.

Article 2 (Definitions)

In THIS LICENSE AGREEMENT, the following terms shall be defined as specified below.

- 1) SOFTWARES consist of all of the programs, the product information, the CAD/drawings data and other information included in SOFTWARES.
- 2) "INTERNET SERVICE" means the service that provides USERS who access the web site of OUR COMPANY by using SOFTWARES with an access to information such as CAD/drawings data and our product information.
- "Electromagnetic/Optical recording medium" means a medium which electromagnetically or optically records letters, images, sounds and other information on a hard disk, floppy disk, CD-ROM, MO, DVD, USB memory stick, or similar device.
- 4) "Use" means for USER to start up or operate on the computer, to modify, amend or add new data, to store in Electromagnetic/Optical recording medium, to print, to make duplications, regardless of whether or not they are tangible, to transmit, or to recreate by any other method.

Article 3 (Method of Use)

- 1. SOFTWARES allow USER to design a product by him/herself using our products and then easily selecting and procuring our components (hereinafter referred to as "PURPOSE"). USER may use SOFTWARES for the PURPOSE only.
- 2. USER shall comply with all relevant laws in the use of SOFTWARES.
- 3. USER shall install SOFTWARES via the Electromagnetic/Optical recording medium provided to USER or website operated by OUR COMPANY. SOFTWARES may neither be installed nor be put into an installable condition by any other method.

Article 4 (Intellectual Property)

- Copyright, trademark and any other intellectual property of information provided through the INTERNET SERVICE (hereinafter referred to as "AVAILABLE INFORMATION") and SOFTWARES (hereinafter collectively referred to as "INTELLECTUAL PROPERTY") belong to OUR COMPANY or any third party who has provided data to OUR COMPANY, and the said rights are protected by law.
- OUR COMPANY grants USER a non-exclusive, free license to use SOFTWARES within the scope of the PURPOSE under THIS LICENSE AGREEMENT. THIS LICENSE AGREEMENT shall not transfer any right of INTELLECTUAL PROPERTY of SOFTWARES and AVAILABLE INFORMATION to USER.
- USER agrees to comply with any third party agreements (hereinafter referred to as "THE OTHER AGREEMENTS") relating to any programs and data of any third party contained in SOFTWARES and AVAILABLE INFORMATION (hereinafter referred to as "THIRD PARTY'S PROGRAMS").
- 4. USER shall be deemed to have agreed to THE OTHER AGREEMENTS at the time when USER has installed SOFTWARES.
- OUR COMPANY shall not assume any responsibility, even if SOFTWARES, our product data included in SOFTWARES and AVAILABLE INFORMATION or THIRD PARTY'S PROGRAMS infringe any rights of another third party.

Article 5 (Prohibited Matters)

- 1. With regard to SOFTWARES and AVAILABLE INFORMATION, USER may not:
 - (1) Duplicate the whole or any part of SOFTWARES beyond the scope necessary for the PURPOSE or in violation of the provisions of paragraph 3 of the same Article;
 - (2) Amend, modify, tamper with, translate or recreate the whole or any part of SOFTWARES or AVAILABLE INFORMATION;
 - (3) Provide the whole or any part of SOFTWARES or AVAILABLE INFORMATION to a third party or allow a third party to use by selling, transferring, lending or publicly transmitting it, Sublicense, or by any other means;
 - (4) Modify, reverse engineer, decompile, disassemble or otherwise analyze the contents of SOFTWARES; or
 - (5) Publish or display SOFTWARES or AVAILABLE INFORMATION to the public.

Article 6 (Disclaimer and Exclusion of Warranties)

- 1. SOFTWARES ARE PROVIDED TO USER "AS IS". OUR COMPANY DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. OUR COMPANY DOES NOT WARRANT THAT SOFTWARES ARE FREE OF DESIGN ERROR OR DEFECTS NOR THAT SOFTWARES OR THE USE THEREOF ARE NOT AN INFRINGEMENT OF THE RIGHTS OF USER OR ANY THIRD PARTY.
- 2. OUR COMPANY disclaims any warranty with regard to the completeness, accuracy, certainty, or usability of the information provided to USER by SOFTWARES (including AVAILABLE INFORMATION). Please be aware that there is a risk of the occurrence of information leak, etc. in using SOFTWARES and INTERNET SERVICE, which is not necessarily secure. In addition, OUR COMPANY is not in any way responsible for faults resulting from tampering by any third party of data such as information provided to USER by SOFTWARES, data download in or by using SOFTWARES or INTERNET SERVICE, etc.
- 3. USER understands and agrees that OUR COMPANY is not in any way responsible for damage due to faults or failures in equipment such as a computer, business interruption, or loss of business information to USER or damage due to any third party's claim, arising out of USER's use of SOFTWARES or INTERNET SERVICE, regardless of the cause. OUR COMPANY is not in any way responsible either for a delay in work and data loss due to communication line faults, natural disasters, accidents, etc. or damages caused by faults, etc. occurring as a result of using INTERNET SERVICE in any way other than a normal way.
- 4. OUR COMPANY provides neither operation guarantee, warranty against defects, nor technical service at all regarding INTERNET SERVICE.
- 5. USER has the obligation to confirm that any product number generated by SOFTWARES conforms to the requirements of USER. OUR COMPANY (or its overseas subsidiary selling the product to USER) is not in any way responsible for damages to USER arising out of the failure of the product with the said product number to conform to USER's requirements (including but not limited to the conformance to specifications information indicated by CAD data or SOFTWARES and INTERNET SERVICE) or damages to USER due to a third party's claim, regardless of the cause.

Article 7 (Modification and Revision of SOFTWARES, etc.)

- 1. OUR COMPANY may modify or revise SOFTWARES at any time without advance notice.
- 2. OUR COMPANY may voluntarily provide the revised version of SOFTWARES.
- 3. When the revised version of SOFTWARES is provided to USER by OUR COMPANY, USER shall immediately stop using the current version of SOFTWARES and thereafter use the revised version of SOFTWARES.
- 4. OUR COMPANY may interrupt, suspend, discontinue, or abolish the whole or a part of INTERNET SERVICE or modify, revise, or delete the whole or a part of AVAILABLE INFORMATION. OUR COMPANY is not in any way responsible for damages to USER resulting from the above.
- 5. THIS LICENSE AGREEMENT shall automatically govern the use of the revised version.

Article 8 (Products)

- 1. The size of some CAD data in SOFTWARES such as dimensions and shape, may be simplified for the convenience of designing such as enabling easy confirmation of shape, etc. Such simplification of the CAD data may result in differences (dimension, shape, etc.) from the actual products.
- 2. OUR COMPANY does not guarantee the availability of all products shown in SOFTWARES. Even during the effective term of THIS LICENSE AGREEMENT, OUR COMPANY may change the price or shipping date, discontinue or change product, terminate or suspend product sales, or change the specifications of our products in SOFTWARES without advance notice.

Article 9 (Suspension and Return, etc.)

- 1. OUR COMPANY may suspend USER's license to use SOFTWARES at any time at its sole discretion without advance notice, if USER violates any of provision of THIS LICENSE AGREEMENT, if it is necessary to maintain or repair SOFTWARES, if an accident or other event occurs, or when OUR COMPANY otherwise determines that it is not appropriate for USER to continue using SOFTWARES. OUR COMPANY may also request USER to return, discard or delete SOFTWARES and AVAILABLE INFORMATION from all Electromagnetic/Optical recording medium in which SOFTWARES and AVAILABLE INFORMATION were recorded (including CAD data and all other data contained in SOFTWARES and AVAILABLE INFORMATION and their duplicates or recreate) (hereinafter collectively referred to as "RETURN OR DELETE").
- 2. Pursuant to the provision of the preceding paragraph, if OUR COMPANY notifies USER of the suspension of the license to use SOFTWARES, USER shall immediately cease using SOFTWARES.
- 3. Pursuant to the provision of paragraph 1, if OUR COMPANY requests USER to RETURN OR DELETE SOFTWARES, USER shall immediately do so at USER's own expense. OUR COMPANY shall not be liable to USER or any third party for damages resulting from any RETURN OR DELETE.

Article 10 (Term of Agreement)

THIS LICENSE AGREEMENT shall take effect when USER installs SOFTWARES and terminate if any of the following events occur:

- (1) USER voluntarily terminates the use of SOFTWARES;
- (2) OUR COMPANY notifies USER of the suspension of the license to use SOFTWARES pursuant to the provision of Article 9, paragraph 1;
- (3) USER voluntarily performs a RETURN OR DELETE of SOFTWARES; or
- (4) USER violates any of provisions of THIS LICENSE AGREEMENT.

Article 11 (Governing Law and Jurisdiction)

- 1. THIS LICENSE AGREEMENT will be governed by and construed in accordance with the laws of Japan.
- 2. If any dispute arises on the usage of SOFTWARES or INTERNET SERVICE or THIS LICENSE AGREEMENT, the Kyoto District Court in Japan will be the first agreed court with exclusive jurisdiction.
- 3. If any provision(s) of THIS LICENSE AGREEMENT is construed to be void or illegal, all other provisions shall remain in full force and effect.

Article 12 (Survival)

The provisions of Articles 2, 4, 5, 6, 7, 9, 11 and 12 shall survive the termination or expiration THIS LICENSE AGREEMENT.

Article 13 (Consultation)

If any doubt arises on any matter not provided for in THIS LICENSE AGREEMENT or any provision of THIS LICENSE AGREEMENT, OUR COMPANY and USER shall try to resolve it upon consultation between themselves.

Article 14 (Revision of THIS LICENSE AGREEMENT)

OUR COMPANY may revise THIS LICENSE AGREEMENT at its discretion. USER shall be notified of any such revision by of the announcement on the web site of OUR COMPANY, its notification at the time of distribution of the revised version of SOFTWARES, or any other means selected by OUR COMPANY. USER shall be deemed to have agreed to the revision of THIS LICENSE AGREEMENT at the time notification is given.

THIS SOFTWARE uses the open source FreeCAD software (http://www.freecadweb.org/) (LGPL V3.)