Lattice Technology

New Product Feature Highlights

October 2012 Product Release

Lattice3D Reporter Ver. 6.0a

[R-1] Native 64-bit Support

Description: Support Microsoft Excel 64-bit edition.
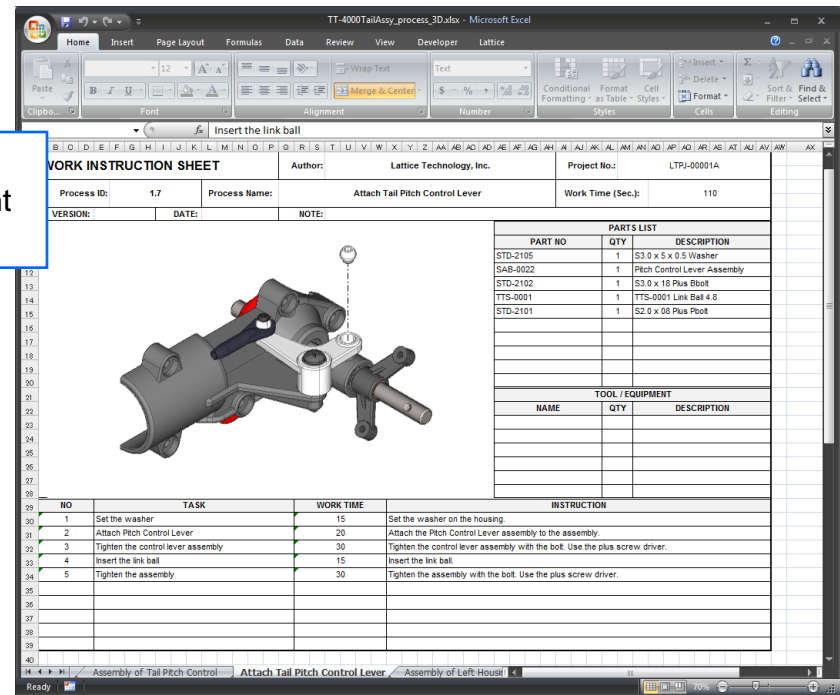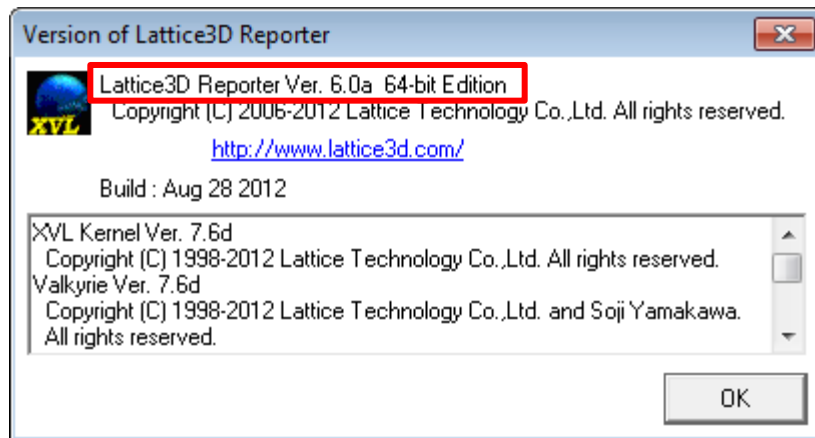
Installation file

The 32-bit and 64-bit versions have different installers.
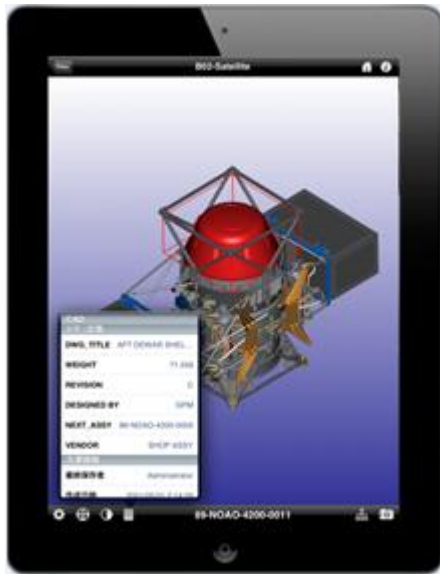

Microsoft Excel 64-bit Edition

* The 32-bit and 64-bit versions use the same license files.

[R-2] Checking Published XVL File

Description: You can check if the XVL file is viewable in iXVL Player.

Menu: Right click menu: [File] > [Properties]

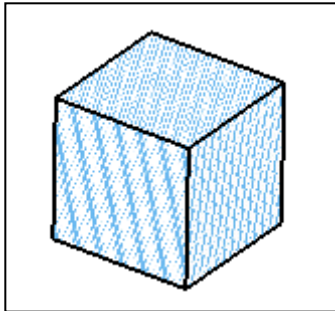You can check if the XVL file is viewable in iXVL Player.
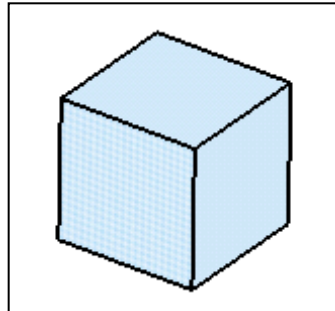
[R-3] Mipmap Support

<u>*Description:*</u> Can use mipmaps for better texture display.

<u>*Menu:*</u> Right click menu: [View] > [Display Options] > Display Speed/Quality tab
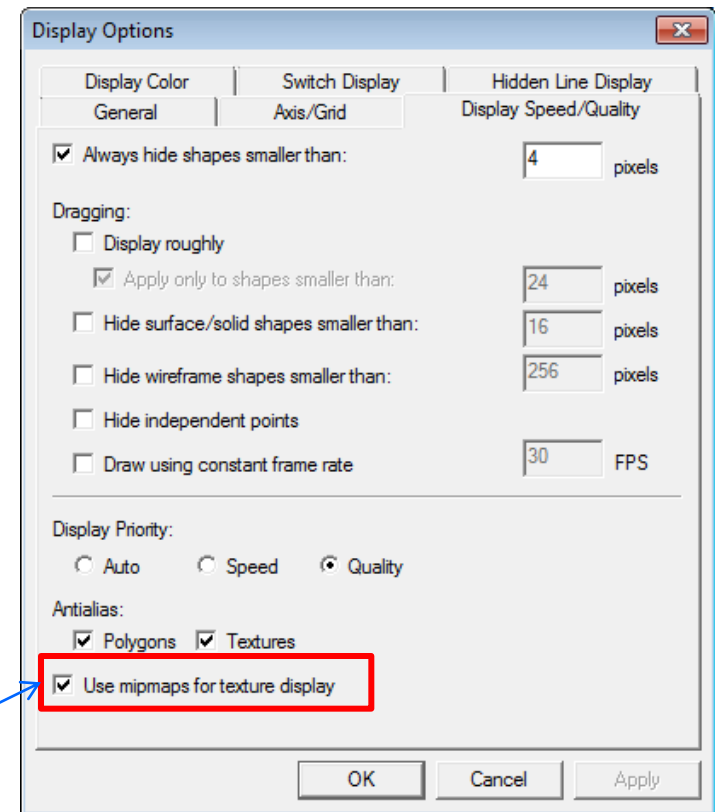
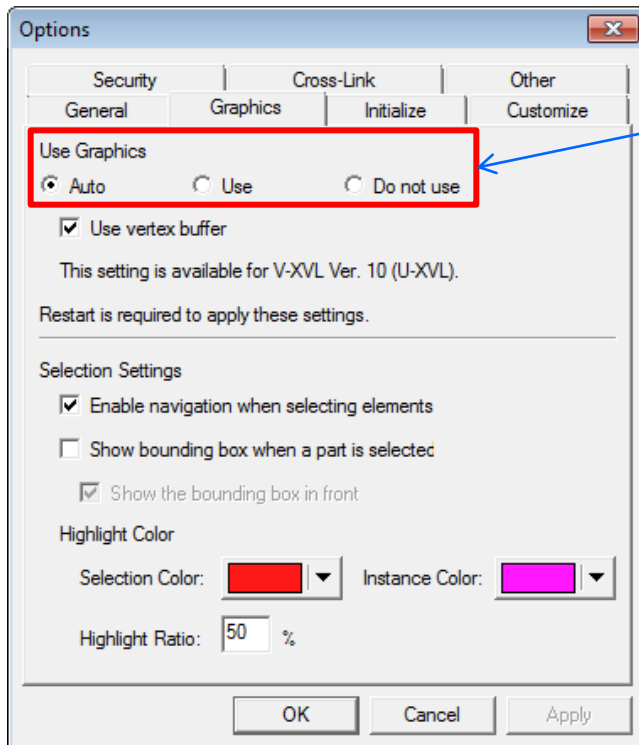* With mipmaps, textures look smoother.

Mipmap = OFF

Mipmap = ON

Check this to use mipmaps.

[R-4] Automatically Enable the Graphics Accelerator

![Lattice Technology logo]

Description: Usage of the graphics accelerator can be automatically determined by the application.

Menu: [Options]: [Graphics] tab

Default setting is **Auto**

Use graphics accelerator:

Auto: Usage of graphics accelerator is automatically determined by the application.

Use: Use graphic accelerator.

Do not use: Do not use graphic accelerator.

[R-5] Enhancements in Illustration Display Mode

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Description: Includes several illustration display enhancements.

Menu: Right click menu: [View] > [Display Options] > Hidden Line Display

Can select hidden line or illustration line mode from the Display Toolbar.

Allows parts to be displayed as shaded in illustration mode.
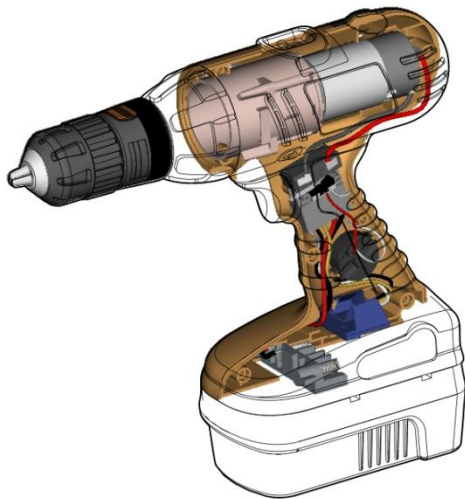
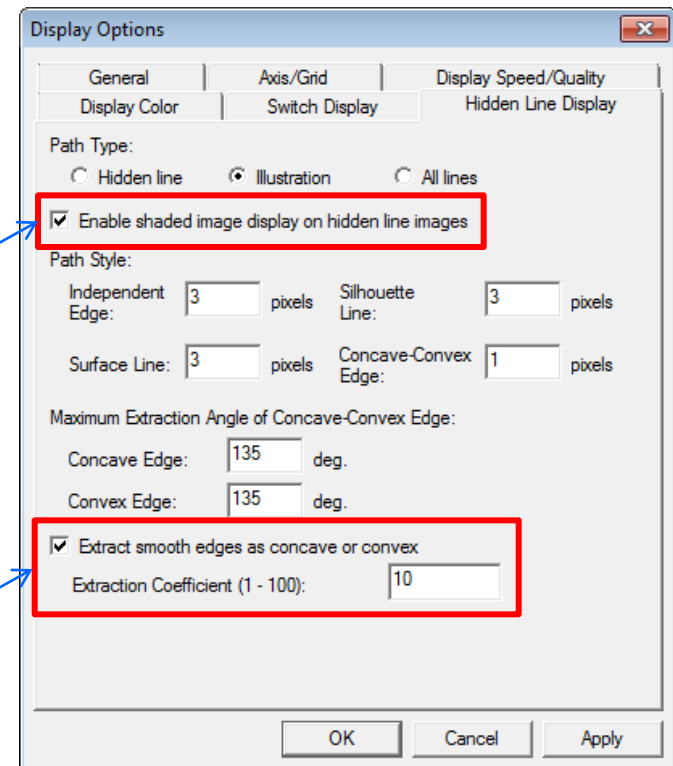Specifies the smooth edge extraction coefficient for the illustration view.

Illustration view with shaded parts

[R-6] Process Animation Enhancements

Description: Process animation supports more features and objects.

• Supports Manufacture Tree.
• Supports multiple text alerts in a single task.
• Displays text alert leader lines.
• Simultaneously display all paths and alerts in single process.
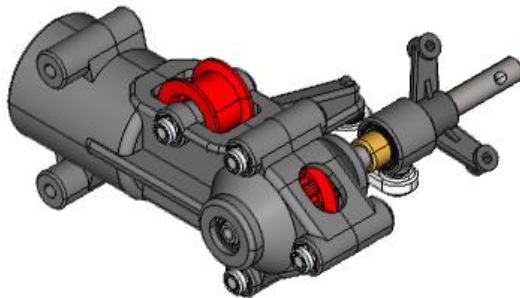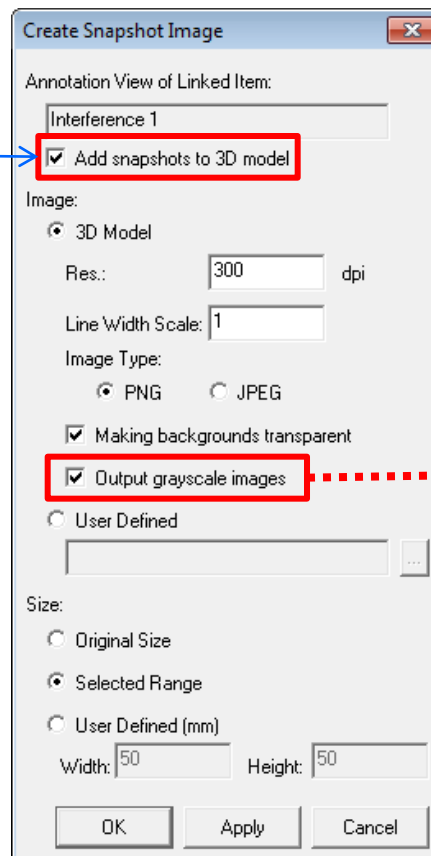• Process part is now called "task".

All animation trace lines and text alerts in the selected process are displayed together. This enables exploded part views to be displayed as shown.
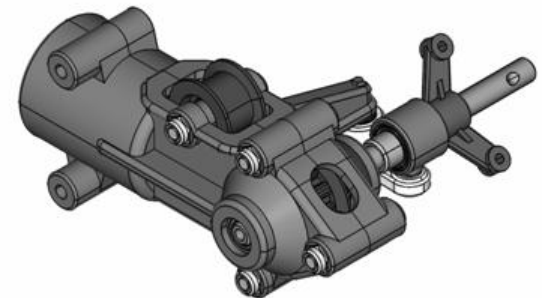
[R-7] Snapshot Enhancements

Description: Can create grayscale snapshots.
When creating a snapshot with Lattice3D Reporter, can specify whether or not to add that snapshot to the 3D model.

Menu: [Create/Update Snapshot Image]

Check this on to add created snapshots to the 3D model.

3D View

Snapshot image in grayscale

[R-8] New Start-up Options

Description: The following start-up parameters have been added.

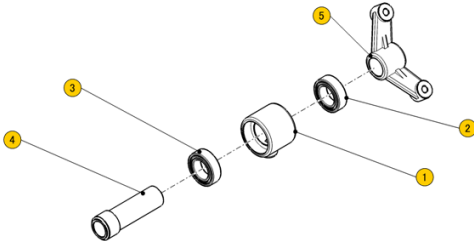| Parameter	Description
VIEW_DIRECTION_TYPE	Specifies the initial view direction.
VIEW_QUALITY_LOD	Specifies whether to perform LOD display.
VIEW_QUALITY_LOD_TYPE	Specifies the display accuracy of the initial view when LOD is enabled.
SYSTEM_RESET_TYPE	Allows specification of targets to be initialized upon troubleshooting.
VIEW_MIPMAP_TEXTURE	Specifies whether to use mipmaps for texture display.
VIEW_OBJECT_DRAW_ORDER	Specifies whether to draw shapes in the same order as that of the assembly tree.
VIEW_LINE_LUMINANCE_LIMIT	Specifies the reference value for adjusting the colors of letters and lines when the background color is close to black or white.
VIEW_RENDERING_TIME	Specifies the interval between each drawing process.
VIEW_ACCELERATE	Specifies whether to use hardware acceleration.
VIEW_CURVE_BUFFER_OBJECT	Specifies whether to use vertex buffer objects of edges for hardware acceleration.
VIEW_SURFACE_INDEX_BUFFER_OBJECT	Specifies whether to use vertex buffer objects of face indices for hardware acceleration.

*See "Lattice3D Reporter Start-Up Options Manual" for more detail.

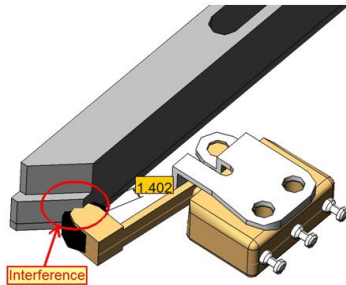# Template Enhancement

[R-9] New Sample Templates

Description: The following new sample templates are included in the installation package.

Location: <Installation directory>\Template

2D Work Instructions (2DWorkInstruction.xls)

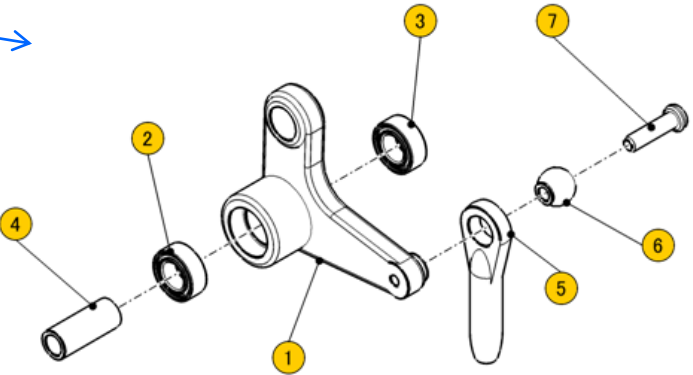This template publishes an exploded part view and a list of tasks for each process.

Annotation View (DR.xls)

This template publishes a snapshot image and the comments for each annotation view.

[R-10] Printable Process View

Description: Can publish a process as an exploded parts view and a process list.

WORK INSTRUCTION SHEET		Author:	Lattice Technology, Inc.	Project No.:	LTPJ-00001A
Process ID:	1.6	Process Name:	Assembly of Tail Pitch Control Lever	Work Time (Sec.):	125
VERSION:	DATE:		NOTE:		

Exploded part view (2D image). The balloon numbers indicate the assembly order based on the process list.

PARTS LIST

PART NO	QTY	DESCRIPTION
TT-3216	1	TT-3216 Tail Pitch Control Lever
STD-2107	2	S4.0 x 7 x 2.5 Bearing
TTS-0002	1	TTS-0002 Collar 3 x 4 x 10
TTS-0012	1	TTS-0012 Ball Link 4.8 x 20
TTS-0001	1	TTS-0001 Link Ball 4.8
STD-2101	1	S2.0 x 08 Plus Pbolt

TOOL / EQUIPMENT

NAME	QTY	DESCRIPTION
GNR1001	1	Plus Screw Driver

Process List

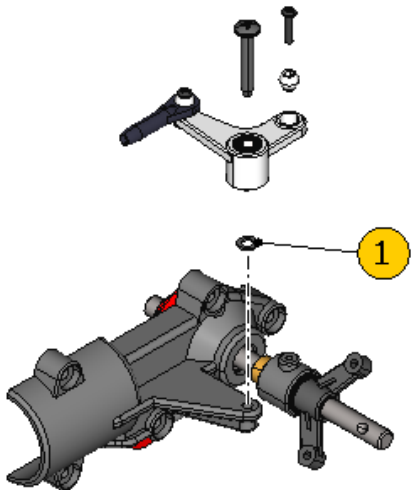| NO	TASK	WORK TIME	INSTRUCTION
1	Set the control lever	15	Set the control lever.
2	Insert the bearing	15	Firmly insert the bearing to the control lever.
3	Insert the bearing	15	Insert the bearing to the other side of the control lever.
4	Insert the collar	20	Firmly insert the collar to the control lever.
5	Set the ball link	15	Set the ball link.
6	Insert the link ball	15	Insert the link ball to the ball link.
7	Tighten the ball link	30	Tighten the ball link with the bolt. Use screw driver.

[R-11] Process Parts List

Description: You can publish the parts list of the current process.

PARTS LIST		
PART NO	**QTY**	**DESCRIPTION**
STD-2105	1	S3.0 x 5 x 0.5 Washer
SAB-0022	1	Pitch Control Lever Assembly
STD-2102	1	S3.0 x 18 Plus Bbolt
TTS-0001	1	TTS-0001 Link Ball 4.8
STD-2101	1	S2.0 x 08 Plus Pbolt

The process parts list shows the parts, assemblies and manufacture assemblies of the process.

Process Tree (XVL Studio)
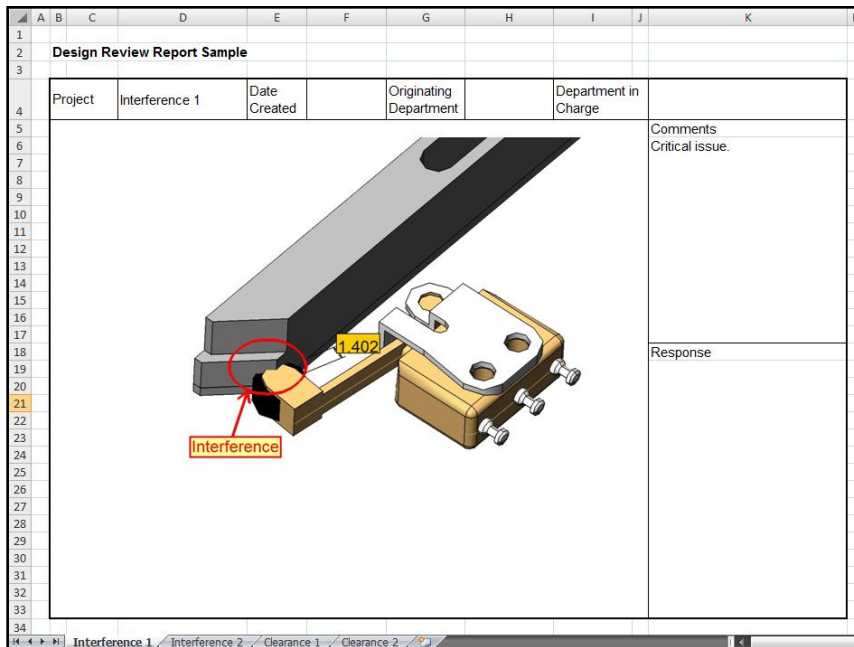
[R-12] Tool/Equipment List

Description: You can show the tools and equipment used in the process.

WORK INSTRUCTION SHEET		Author:	Lattice Technology, Inc.	Project No.:	LTC00031
Process ID:	1.1	Process Name:	OP010	Work Time (Sec.):	320
VERSION:		DATE:	NOTE:		

PARTS LIST

PART NO	QTY	DESCRIPTION
324-5675-038	1	Clutch Outer Basket
324-5675-035	1	Inner Basket
324-5675-040	1	Pressure Plate
324-5675-024	1	Disks
324-5675-007	6	Clutch Bolt and Washer
324-5675-005	2	Bearing Half
324-5675-002	1	AP

TOOL / EQUIPMENT

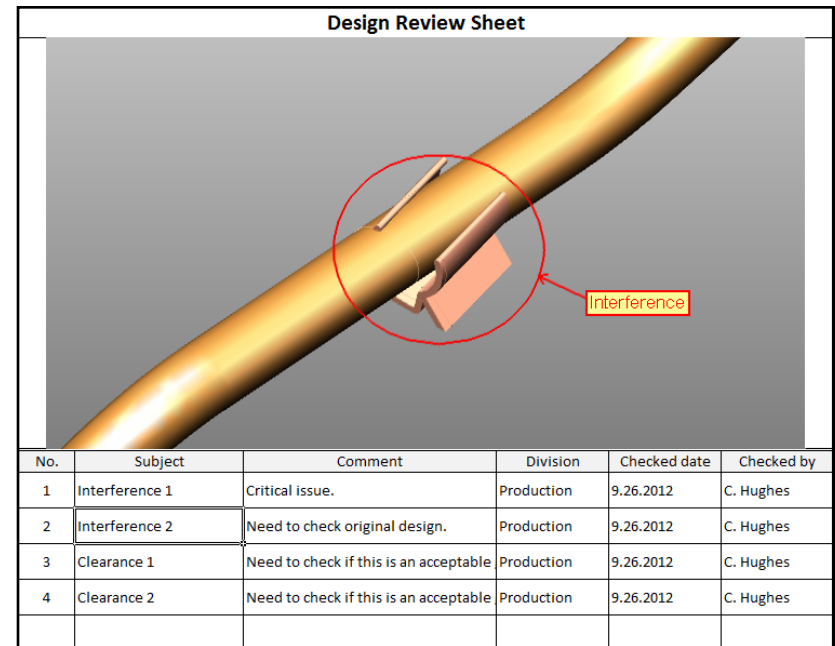| NAME	QTY	DESCRIPTION
GEN-0040	1	Impact driver
SOK-0010	1	Socket M10

The Tool/Equipment list shows the tools and equipment used in the process.

[R-13] Annotation View List

Description: You can publish annotation views in 2D and 3D.

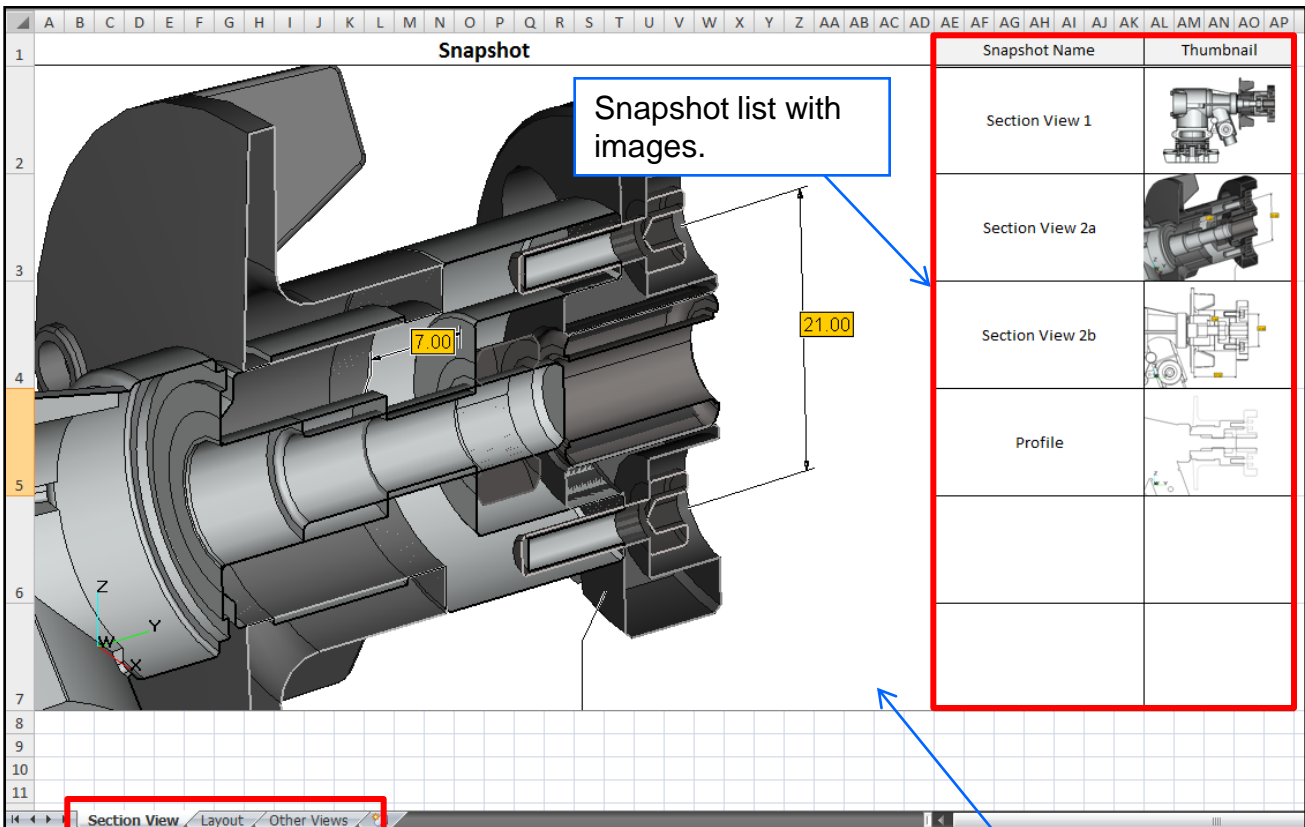**2D annotation view example. Each sheet contains a 2D view and the comments of an annotation view.**
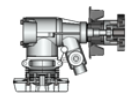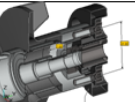

3D annotation view example. The table lists the annotation views, and the selected annotation view is shown in the 3D view.

[R-14] Snapshot List

Description: You can publish a snapshot list with thumbnail images.

Snapshot list with images.

Snapshot tree (XVL Studio)
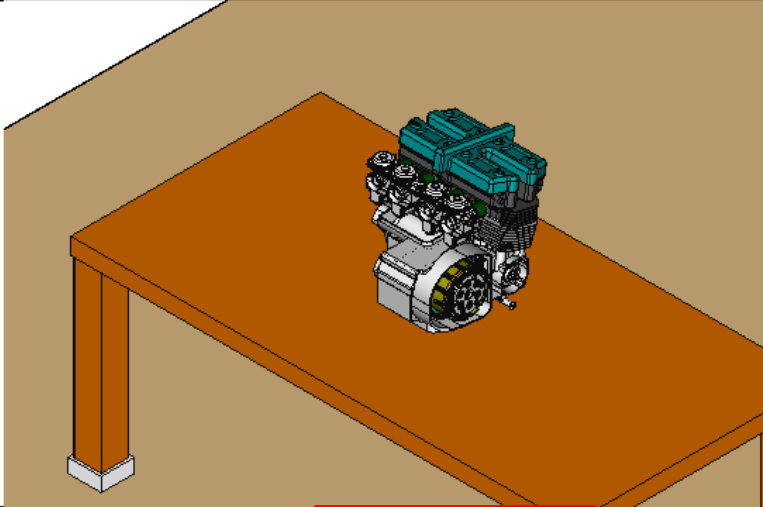
Snapshot list can be published per snapshot folder.

Selected snapshot is shown in the 3D view.

[R-15] Process List with Parts

Description: You can publish a process list that includes the parts for each task.

When multiple parts are included in a task, they are listed on multiple lines.

PART	QTY
Outer Basket #1	1
Inner Basket	1
Pressure Plate	1
Disks (Default) #1	1
Bolt and Washer #1	6
Bearing Half #1	2
AP(KAM)	1

WORK INSTRUCTION SHEET

Author:	Lattice Technology, Inc.	Project No.:	LTC00031
Process ID: 1.1	Process Name: OP010	Work Time (Sec.):	320
VERSION:	DATE:	NOTE:	

NO	TASK	WORK TIME	PART	QTY	
1.1:1	Set Outer Basket	60			Set Outer Basket of th...
			Outer Basket #1	1	
1.1:2	Attach Inner Clutch Pack	80			Attach Inner Clutch Pa...
			Inner Basket	1	
			Pressure Plate	1	
			Disks (Default) #1	1	
1.1:3	Insert Bolt and Washer	40			Insert bolts and nuts.
			Bolt and Washer #1	6	
1.1:4	Tighten bolts	100			Tighten bolts using M10 Impact driver.
1.1:5	Attach AP Bearing	40			Attach AP Bearing.
			Bearing Half #1	2	
			AP(KAM)	1	

Questions?

E.	support@lattice3d.com
T.	+1.415.274.1670
F.	+1.415.274.1671
W.	www.lattice3d.com