# **Studio Toolkit for Flexibles**

# User Guide







# Contents

1. Copyright Notice	3
2. Introduction	5
2.1 About Studio	5
2.2 Workflow and Concepts	6
2.3 Quick-Start Tutorial	7
3. Creating a New Bag	
3.1 Pillow Bags	11
3.1.1 Panel Order and Fin vs. Lap Seals	13
3.2 Gusseted Bags	14
3.2.1 Open or Closed Gussets	
3.3 Stand-up Pouches	15
3.3.1 Stand-Up Pouch without Bottom Seal	16
3.4 Quattro Seal Bags	17
3.4.1 Seals for Quattro Seal Bags	
3.5 Sachets	
3.5.1 Sachet Type and Orientation	22
3.6 Diaper Bags	
4. Live Shaping	
4.1 Starting and Stopping Live Shaping	
4.2 Live Shaping and Done/Stalled	
4.3 Air and Liquid Content	
4.4 Making the Shape Smooth or Wrinkly	
4.4.1 Setting the Stiffness Value	
4.5 Working with Pullers	
4.5.1 Creating and Changing Pullers	
4.5.2 Deleting Pullers	
5. Using the Studio Toolkit application	
5.1 Saving and opening Collada files	
5.2 Import Into	
5.2.1 Obtain a 3D file for a container	
5.2.2 Using graphic files	31
5.3 Move and Rotate	
5.4 Repeat	
5.5 Tabs	
5.6 Preferences	

1

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2

# 2. Introduction

#### Important note

The **Studio Toolkit** application is a standalone application allowing to import, edit and create 3D objects, and save the object(s) as Collada file.

Eventually, it will replace the "Studio Toolkit for Flexibles" application. However, this first version of Studio Toolkit does not contain all functions and possibilities the Studio Toolkit for Flexibles has. Therefore Studio Toolkit for Flexibles is still included in this release.

For basic flexible packaging, you can use the **Studio Toolkit** application, but for more complex bag creations, you can still use Studio Toolkit for Flexibles.

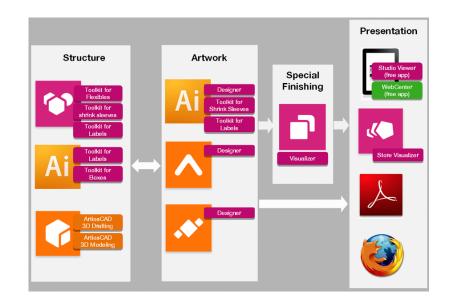
**Note:** If you want to use a bag created in Studio Toolkit for Flexibles into the Studio Toolkit application (e.g. to create a repeat or a combination of different objects), you need to keep in mind that this version of Studio Toolkit only imports Collada files, while Studio Toolkit for Flexibles exports .bag files. You can however open a bag file in Studio Designer, and save it as a collada file there.

# 2.1 About Studio

Studio is a unique set of tools for 3D packaging design made specifically for packaging artwork professionals.

Working in 3D for packaging typically consists of 3 steps: first you create a shape or "structure". Next you apply artwork to that shape. And finally you present the result as an image, movie, etc.

To achieve this, Studio has different modules (shown as purple rectangles in the image underneath). It takes you through different software applications, such as Adobe Illustrator and the Studio Toolkit.





#### Step 1: Create a Structure

The first step is to prepare a 3D packaging shape, with a matching 2D key line template. This shape can come from one of the Studio Toolkits, from ArtiosCAD or from Esko's Shape server.

The **Studio Toolkits** allow to create or modify structural design files for a specific use or workflow. Every Studio Toolkit consists of an Adobe Illustrator plugin and/or specific functionality inside the **Studio Toolkit** application. The Studio Toolkit application allows to import, create, modify or combine shapes, and save the result as a collada file.

- With the **Studio Toolkit for Boxes** plugin you can clean up die-drawings of boxes, and fold them into a 3D shape.
- You can use the **Studio Toolkit for Flexibles** functions in the Studio Toolkit application to create 3D models of flexible packaging.
- With the **Studio Toolkit for Labels** plugin, you can create round objects with one or more labels, and automatically warp artwork for conical labels. With the Studio Toolkit for Labels functions in the Studio Toolkit applications, you can draw labels on existing shapes.
- With Studio Toolkit for Shrink Sleeves in the Studio Toolkit application you can create a heat shrink sleeve around one or more shapes, and simulate the distortion. Using the Studio Toolkit for Shrink Sleeves plugin, you can apply counter distortion to your artwork.

#### Step 2: Apply Artwork

The second step is to make sure the production artwork fits to the structure.

In Adobe Illustrator, ArtPro or PackEdge, you can use **Studio Designer** to get a preview of the 3D object with its artwork, check every detail, and fix specific issues.

With Studio Visualiser you can simulate print substrates and a wide range of print and finishing effects.

#### Step 3: Share

You can share your 3D design using the Studio Viewer or Webcenter, or use your 3D design in Store Visualizer.

In Studio Designer and Visualiser, you can export your 3D designs to share realistic virtual packaging mock-ups as movies, images or interactive 3D.

## 2.2 Workflow and Concepts

#### **About Studio Toolkit for Flexibles**

Studio Toolkit is an application that runs on Mac OS or on Windows, and allows you to design and create flexible packages like potato chips bags, candy bar wrappers, stand-up pouches and diaper bags, to name but a few of the many possibilities.

The design will be saved to a Collada file, and this file can then be imported in Adobe® Illustrator®, or in specialized Esko editors such as ArtPro, PackEdge or Visualizer.

#### Using the collada file in Studio Designer

Once a .bag file is placed in an Illustrator, ArtPro or PackEdge document, the Studio window can display a three-dimensional preview of the packaging with the Illustrator/ArtPro/PackEdge artwork rendered on it. This allows you to see how the graphics will look on the final bag. Studio also contains productive tools for quick and accurate aligning.

With Studio you can export the 3D design to various file formats such as 3D PDF for interactive viewing or a TIFF rendering to use in ads.

Using the collada file in Visualizer

Placing the Collada file in Visualizer allows you to render special finishes, such as foils or varnishes on the 3D design. The rendered images can be exported to QuickTime movies or to a wide variety of image formats that can be used in advertising.

## 2.3 Quick-Start Tutorial

As an introduction exercise, we will explain how you can make a 3D PDF of a simple pillow bag. We assume you have Studio Toolkit for Flexibles , Adobe Illustrator and Studio for Adobe Illustrator installed.

- 1. Start Studio Toolkit.
- 2.



Click the New Bag button

3. Select the Pillow Bag type and click OK.

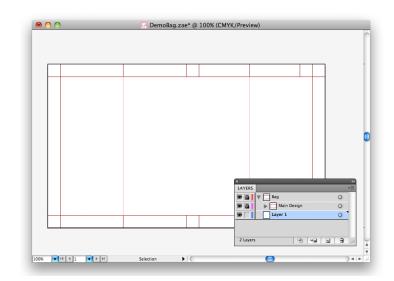
A bag will be shown in 3D, using the default dimensions, and some basic Live shaping is applied. The **Bag** tab contains the 2D foldout layout of the pillow.

Com In Zoom Out Fit in Window     Import Into New Bag     Add Sleev Add Label     Move and Rotate     Repeat     Import Into     New Bag   Add Sleev   Add Label     Move and Rotate   Repeat     Import Into   New Bag   Add Sleev   Add Label     Move and Rotate   Repeat     Import Into   New Bag   Add Sleev   Add Label   Move and Rotate   Repeat     Import Into   New Bag   Add Sleev   Add Label   Move and Rotate   Repeat     Import Into   New Bag   Add Sleev   Add Label   Move and Rotate   Repeat     Import Into   New Bag   Add Sleev   Add Label   Move and Rotate   Repeat     Import Into   New Bag   Add Sleev   Add Into   New Bag   Move Into   New Bag   New Bag	00					Unt	itled			$\Box$
Filew Bg         Dimensions         Width:       100.0 mm         Length:       130.0 mm         Seals       Top Seal:         Top Seal:       10.0 mm         Bottom Seal:       10.0 mm         Size:       10.0 mm         Order:       Right Over Left         Position:       Centered         0.0 mm	•	O,	$\otimes$	∠_	1	1	2	+ <b>‡</b> +		
Dimensions         Width:       100.0 mm         Length:       130.0 mm         Seals       Top Seal:         Top Seal:       10.0 mm         Bottom Seal:       10.0 mm         Size:       10.0 mm         Order:       Right Over Left         Order:       Right Over Left         Order:       Right Over Left         Order:       Right Over Left         Order:       Size:	Zoom In	Zoom Out	Fit in Window	Import Into	New Bag	Add Sleeve	Add Label	Move and Rotate	Repeat	
3D Bag	30	Bag							Dimensions Width: Length: Seals Top Seal: Bottom Seal: Back Seal Size: Type: Order: Position: Package Cor Add objec	100.0 mm 130.0 mm 10.0 mm 10.0 mm 10.0 mm 10.0 mm Right Over Left © Centered 60.0 mm tt Size:

**4.** You can apply Live Shaping but we will skip this step for now. Click File > Save and save the bag as a Collada file.



**5.** Start Adobe® Illustrator® and open the saved file. If you have the latest version of Studio installed, you can open the files in Illustrator. Illustrator will show you a document with a locked layer that contains the keylines. This is the foldout layout of the pillow bag that we just made. The biggest rectangle in the center is the front face of the bag.



- 6. Open the Studio Window: Choose Window > Esko > Studio Designer > Show Studio . The bag shape created in Studio Toolkit will appear. Click and drag the mouse to rotate it. Use Adobe® Illustrator® to create the graphic artwork for the bag.
- 7. Click the update button in the bottom left corner of the Studio Window to render the graphics preview on top of the 3D visualization of your bag or choose Window > Esko > Studio Designer > Refresh Studio .

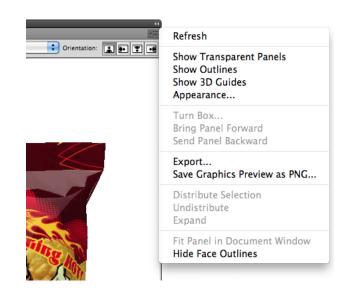
The shortcut key to activate the tool is Cmd+Option+6 or Ctrl+Alt+6 .



#### Tip:

Click the fly-out menu button to gain quick access to important functionality such as exporting to 3D PDF.

8. On the fly-out menu, choose Export....

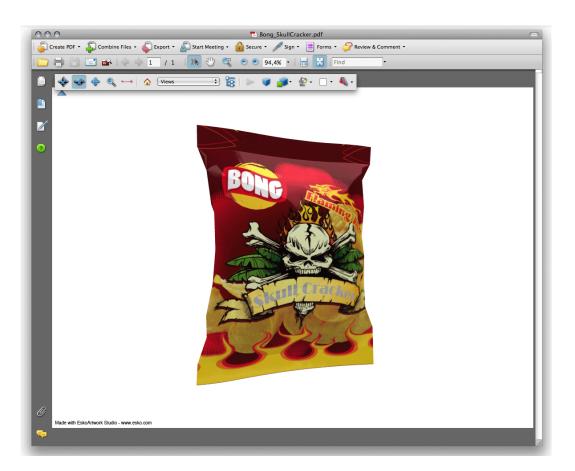


9. Choose PDF File with 3D Design as file type and click Save As...

	Export	
Preview:	File Type: PDF File with 3D Design 🛟	Save As
	Document Width: 297 mm 🗘 Height: 210 mm 🛟	Cancel
Texture Size: 0.2 megapixel	- 3D Presentation	
	View Angle: From Studio Window	
	⊕ 0°	
	Perspective: 45°	
	Include Graphics at: 72 ppi	

**10.**After exporting, open the resulting PDF file in Adobe® Reader® 8 or Adobe® Acrobat® and use the 3D tools to rotate, zoom,...

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# 3. Creating a New Bag



Click the New Bag button

1.

to create a new flexible bag.

Choose a bag type:		
		D
Pillow Bag	Gusseted Bag	Stand-Up Pouch
Quattro Seal Bag	Sachet	Diaper Bag
		Cancel OK

2. Select a bag type and click Ok .

A bag of the selected type will be created, using default settings. A 2D tab containing the 2D die is added.

If the bag is selected, all parameters can be changed in the right panel.

Note:

When creating or changing a bag, some initial Live Shaping will be applied to the 3D bag.

## 3.1 Pillow Bags

A pillow bag is a simple flexible bag with a top and bottom seal, and a centered or off-center vertical backseal. The most common examples of pillow bags are potato chips bags and certain candy bar wrappers.



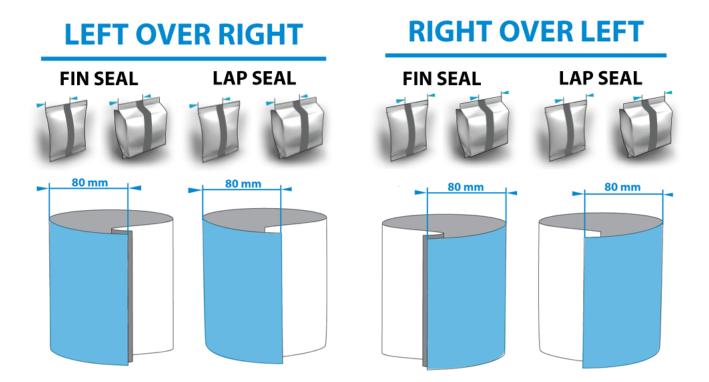




### Settings:

- Dimensions: Width, Length Top Seal and Bottom Seal
- Back Seal: Size, Type (Fin Seal or Lap Seal), Order, and Position. See *Panel Order and Fin vs. Lap Seals* on page 13

## 3.1.1 Panel Order and Fin vs. Lap Seals



A back seal can be folded (Fin Seal) or glued (Lap Seal) to the back side of the package in two ways: Left over Right or Right over Left. Depending on the selection, the image of the seal will be adjusted.

For gusseted and pillow bags, you can specify the **Position** of the back seal: select **Centered** to center the back seal on the back panel, or disable **Centered** and provide an offset value in the field below that option.

#### Note:

The offset value in the Position field is the width of the left or right back flap, whichever is on top as specified in the **Order** list (Left over Right or Right over Left). In other words, if the Order is set to Left over Right, the Position value you type is the width of the Left back flap.

# 3.2 Gusseted Bags

A gusseted bag is a more complex flexible bag with top, bottom and back seals and gussets at both sides. The gussets allow the bag to make a more block-like shape. Just like pillow bags, Studio Toolkit supports back seals that are either centered or off-center at the back. For gusseted bags, you can also choose whether you want an open or a closed (glued) gusset.



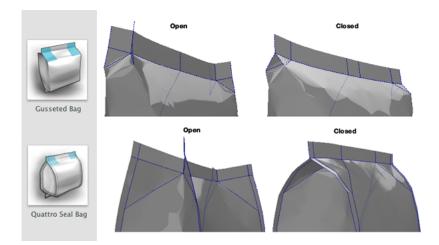
#### Settings:

- Dimensions: Width, Length, depth
- Seals: Top Seal & Bottom Seal, Open or Closed Gusset. See Open or Closed Gussets on page 14
- Back Seal: Size, Type (Fin Seal or Lap Seal), Order, and Position. See *Panel Order and Fin vs. Lap Seals* on page 13

### 3.2.1 Open or Closed Gussets

For gusseted and quattro seal bags, you can specify whether you want to have **Open Gussets** for the top and/or bottom gussets.

3



Note: For pouches you can only choose to have open or closed bottom gussets.

# 3.3 Stand-up Pouches

A stand-up pouch is a flexible bag with top, left, right and optional bottom seals, with a gusset in the bottom part but not in the top part. You can specify an open or a closed (glued) gusset.

Currently, only pouches in one piece are supported, meaning that the bottom is part of the complete package. Studio Toolkit for Flexibles only supports rectangular pouches.

Tip:

You can also create a pouch without bottom seals. Simply set the bottom seal value to 0mm/inches.



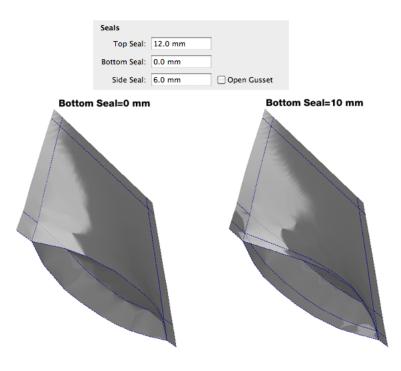


### Settings:

- Dimensions: Width, Length, depth
- Seals: Top Seal, Bottom Seal and Side Seal. Open or Closed Gusset. See Open or Closed Gussets on page 14

## 3.3.1 Stand-Up Pouch without Bottom Seal

You can create a stand-up pouch with no bottom seal by setting the Bottom Seal value to 0mm/inch.



# 3.4 Quattro Seal Bags

Like the gusseted bag, the quattro seal bag is a complex flexible bag with top and bottom seal and gussets at both sides. The gussets can be open (unglued) or closed (glued) near the top and/or bottom seals.

Different from the gusseted bag, the quattro seal bag **also has four vertical side seals**. Studio Toolkit also supports the version without any side seals: simply set the side seals value in the application to 0mm/inch.

Common for a quattro seal bag is the fact that the (back) seal is "hidden" in one of the four corners of the bag. A quattro seal bag can have a tapered or square bottom and/or top. This bag type is commonly used for products such as coffee pads, cookies and animal food.



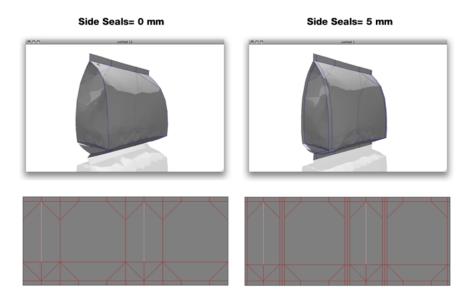


#### Settings:

- Dimensions: Width, Length, depth
- Seals: Top Seal, Bottom Seal and Side Seal, Open or Closed Gusset. See Open or Closed Gussets on page 14.
- The Join position: see Seals for Quattro Seal Bags on page 18
- Style: Tapered or Square. See Seals for Quattro Seal Bags on page 18

## 3.4.1 Seals for Quattro Seal Bags

You can create a quattro seal bag without side seals by setting the Side Seals value to 0 mm/inch

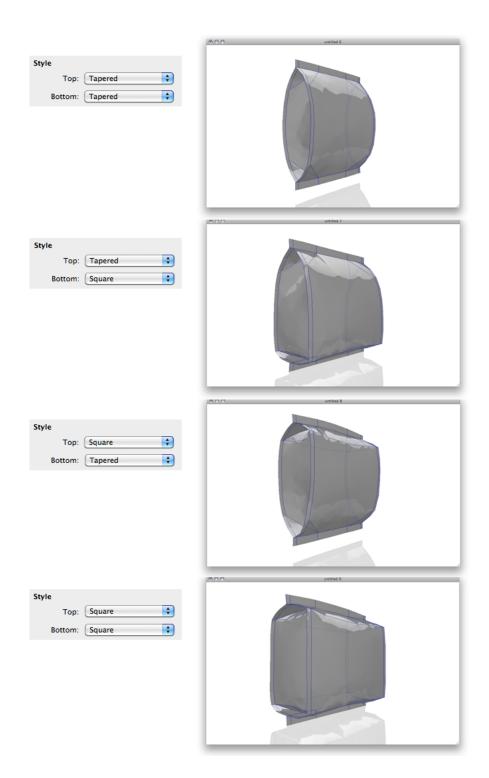


The **Back Seal** for quattro seal bags is hidden in one of the four corners of the bag. The **Join** setting in Studio Toolkit for Flexibles allows you to specify whether the back seal is hidden in the back left or the back right corner of the bag.

Seals		
Top Seal:	10.0 mm	🗌 Open Gusset
Bottom Seal:	10.0 mm	🗌 Open Gusset
Side Seal:	5.0 mm	
Join 🗸	Back Left Back Right	•

Quattro seal bags can have a tapered or square top and/or bottom .





# 3.5 Sachets

A sachet is a simple flexible bag type with three seals and a fold, or with four seals:

- For three-seal sachets, Studio Toolkit lets you choose whether the fold is at the top, right, bottom, or left side of the sachet.
- For four-seal sachets, you can only change the orientation of the die shape, either horizontally aligned front and back or vertically.

The sachet bag type is commonly used for powder products like dried herbal mixes, instant soup, baking powders,...

A four-seal sachet, sealed along the four sides:



A three-seal sachet with a fold at the bottom and seals along the left, right and top sides:





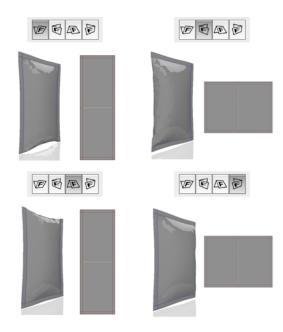
### Settings:

- Dimensions: Width, Length
- Type and Orientation. See Sachet Type and Orientation on page 22
- Seals: Top & Bottom Seal, Left & Right Seal

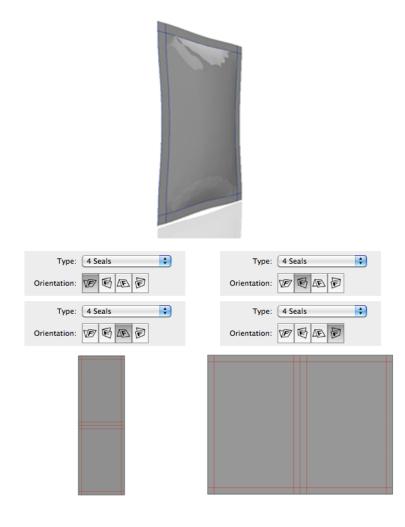
## 3.5.1 Sachet Type and Orientation

Studio Toolkit for Flexibles supports both three-seal sachets with a fold and three seals, and four-seal sachets.

If you have specified a three-seal sachet with a fold, Studio Toolkit for Flexibles allows you to choose where you want the fold to appear (left, right, top or bottom).



If you chose a sachet with four seals, the orientation has no effect on the 3D representation, because there is no fold. However, it applies to the layout of front and back of the 2D die: either front and back will be joined vertically or horizontally.



# 3.6 Diaper Bags

The diaper bag is a very complex flexible bag type. A diaper bag has a bottom seal, side gussets at the bottom (horizontal gussets at the bottom) and top gussets at the top (vertical gussets at the top) of the bag.

Diaper bags are commonly used for diapers, sanitary napkins, ....

#### Note:

Certain variants of the diaper bag die shape may not be supported by Studio Toolkit.



## Settings:

- Dimensions: Width, Length, depth
- Bottom Seal.



# 4. Live Shaping

When you interact with a real bag, it responds instantly. When you interact with a virtual bag in Studio Toolkit, your computer has to perform heavy calculations to find a new realistic looking shape. This could take a long time to complete. Instead of waiting for every shaping operation to be finished completely, Studio Toolkit shows the shaping process live and offers you the possibility to keep on interacting, even while it is still shaping. This is called Live Shaping . If computers were infinitely powerful, Live Shaping would be obsolete.



You do not have to wait for Live Shaping to finish. Simply interact with the shape, wait and see how Live Shaping reacts and as soon as you are happy with the result, you save it.

## 4.1 Starting and Stopping Live Shaping

When creating a new bag, a small amount of live shaping is applied to it automatically. To start the Live Shaping process, click the Live Shaping button.

At any time you can decide to stop Live Shaping. Just click the Done button. The shape will pause in its current state. To continue Live Shaping, click the Live Shaping button in the Document Window.

Using the Pauze / Resume button, you can also temporarily pauze the Live Shaping.

Note:

After Live Shaping, you can no longer change the dimensions or other parameters of the bag. By clicking Restore Shape you can undo the live shaping and make changes to the parameters possible. After that, you can redo the Live Shaping.

Note: If you Undo during live shaping, Studio Toolkit will first stop the live shaping (same as clicking the "Done" button) before undoing it. This way, you can use Redo to return to the point before the Undo

## 4.2 Live Shaping and Done/Stalled

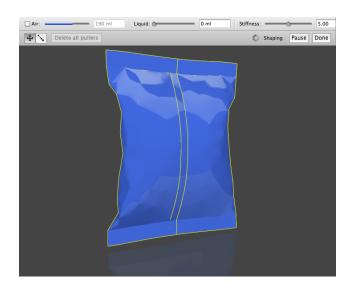
When a certain bag has reached its final form, Live Shaping will indicate this by displaying Done . The bag will start shaping again when needed, for example when adding some more air. If for some reason the bag does not Live Shape anymore but still has not reached its final form yet, Live Shaping will display Stalled . In this case it is best to save the file and send it to your Esko contact person for further investigation. It is definitely not an intended state of Live Shaping.

Note that you do not have to wait until Live Shaping stops. You can stop it as soon as you find it reached a pleasing form and save the file.

Note: In some cases, putting the stiffness slider to zero unstalls the file.

## 4.3 Air and Liquid Content

When you create a new document of any of the three different packaging types, the bag will automatically start to fill up with air. You can compare this with a bag that is not completely airtight. It will not stop air from moving in or out of the bag. In the **Shape** section of the Window, the blue air bar will give you an indication of the actual amount of air that is currently in the bag.



You can take control over the amount of air that is put into the bag by checking the Air box. When checked, you actually simulate an airtight bag. Use the slider to specify how much air should be put inside the bag. As Live Shaping might need some time to catch up with the new conditions, the actual content (the blue bar) might lag behind a little.

**Note:** If you move the slider too much to the right, you might put an exaggerated amount of air in the bag and make it look overstretched.

Next to air, Studio Toolkit for Flexibles also allows you to add **Liquid**. The difference between air and liquid lies in their respective weights. As liquid is heavier than air, the liquid will be concentrated in the lower part of the package. During Live Shaping, a bag that is filled with liquid will gradually fall down until it eventually lies on the floor.

Adding liquid is also a convenient way to simulate the shape of bags that contain bulky materials such as frozen vegetables or meatballs. If you add liquid while the **Air** box is checked, the total volume of the bag will increase. If you add liquid while the Air box is not checked, part of the air in the bag is simply replaced by liquid.



**Note:** The gravity effect when adding liquid is visualized quite slowly with Live Shaping. Temporarily reducing **Stiffness** might speed it up.

There are several ways to make a package look more wrinkly or more smooth.

### 4.4.1 Setting the Stiffness Value

The **Stiffness** of the package can be manipulated by moving the slider in the Shape section of the Control Window. The higher the stiffness, the more the substrate will try to straighten itself. The lower the stiffness, the easier the package will 'collapse', as if it were made from a soft, thin foil.

Altering the stiffness has a direct impact on Live Shaping. The resulting shape will be re-calculated and the amount of air and liquid will be added or subtracted accordingly.

Stifness:	
	3.69

## 4.5 Working with Pullers

The **Puller** tool allows you to interactively change the shape of the package by creating pullers. A puller grabs a point on the package and pulls it in the desired direction. Pullers look like small needles. One end of a puller is attached to the bag, the other end is a target position fixed in space. A puller will pull the attached point on the surface of the bag towards the target position.

### 4.5.1 Creating and Changing Pullers

To use pullers, first make sure you are in the 3D View. Activate the Pullers tool. Since pullers interact with Live Shaping it is often most convenient to first pause Live Shaping too.

To create a new puller, just hold the left mouse button when the cursor is somewhere on the bag. This will create a puller that is attached to that point on the bag. The other end of the puller can now be moved by dragging the mouse while holding down the mouse button.

### 4.5.2 Deleting Pullers

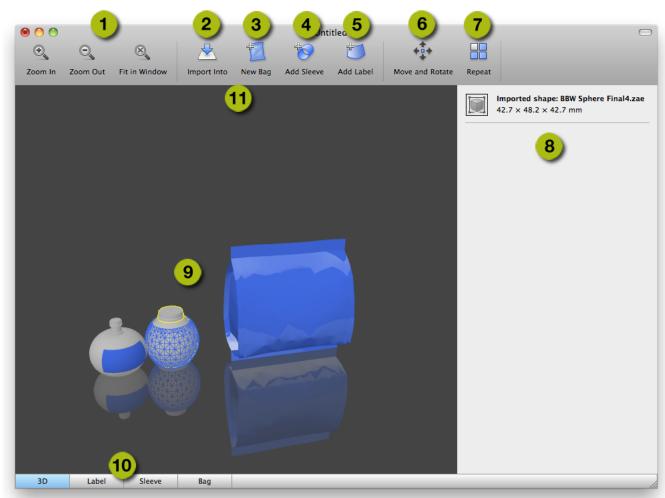
You can click the Delete all pullers button to remove all pullers from the bag.

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# 5. Using the Studio Toolkit application

The **Studio Toolkit** application is a standalone application allowing to import, edit and create 3D objects, and save the object(s) as Collada file.



- 1. The **Zoom** buttons, allowing to change the zoom factor of the preview window. You can click and drag to rotate the view.
- 2. Import Into allows to import 3D or image files. See Import Into on page 30
- 3. The New Bag tool, used in Studio Toolkit for Flexibles
- 4. The Add Sleeve tool, used in Studio Toolkit for Shrink sleeves
- 5. The Add Label tool, used in Studio Toolkit for Labels
- 6. The Move and Rotate tool. See Move and Rotate on page 32
- 7. The Repeat button. See Repeat on page 35
- 8. The Settings pannel, allowing to change or view the parameters on the selected object
- 9. the Preview panel
- 10. The different Tabs. See Tabs on page 36



**11.**When performing some specific functions (such as Move and Rotate, ...), a settings bar is added underneath the Toolbar.

# 5.1 Saving and opening Collada files

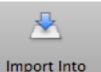
When saving a file from **Studio Toolkit**, the file is saved as a Collada file, containing the shape and all printable parts.

This means the file can be opened by any application that is capable of handling Collada files, such as Studio Designer.

However, the Collada files saved by Studio Toolkit also contains native Studio Toolkit information, allowing to reopen the file in Studio Toolkit, maintaining its editability, the active tab, zoom and view factor, etc.

**Note:** When dropping a Collada file onto the Studio Toolkit application, Studio Toolkit will determine if it is a Collada file saved in Studio Toolkit or not. A native Studio Toolkit Collada file will be opened, a regular Collada file will be imported.

## 5.2 Import Into



Using the **Import Into** button your open scene. you can import a 3D shape into your open scene. If you already have a 3D object in your scene, the newly imported 3D shape will be placed next to it.

For more info on how to obtain a 3D file, see Obtain a 3D file for a container on page 30

When importing a Collada file, any printable parts from this file will be preserved when saving to a Collada file.

**Note:** Collada files saved by Studio Toolkit can also be opened instead of imported. In that case, the file will be reopened as it was saved, with the same active tab, zoom and view, and maintaining full editability. See *Saving and opening Collada files* on page 30

You can also use the **Import Into** button to import an image (JPG or PNG) in a 2D tab (e.g. the "Sleeve" tab), to get a preview of this image on the corresponding 3D object. See *Using graphic files* on page 31

**Note:** Studio Toolkit can not import .bag files. If you need to compose flexible bags or boxes saved as .bag files, we suggest you convert these to Collada files in Studio Designer first.

### 5.2.1 Obtain a 3D file for a container

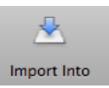
There are several ways to obtain a 3D file :

- You can get a shape on Esko's online Shapes store
- You could hire a 3D artist to make the shape with a 3D modeling tool, such as Cinema 4D, 3DS Max, Maya or Strata. If you are experienced with these tools, you could do it yourself.
- Contact the mold-designer and ask him for a Collada or OBJ file of the container.
- If you have a physical sample of the object, you can use a tabletop 3D laser scanner. See www.nextengine.com for an example of such a scanner. This device can output .obj files.
- If the object is a round shape, you can use Studio Toolkit for Labels to create it yourself. For more information, we refer to the Studio Toolkit for Labels documentation.

The format needs to be collada (.zae or .dae) or .obj. Collada stands for COLLAborative Design Activity for establishing an interchange file format for interactive 3D applications) These 3D files do not need a printable part at this stage, you will add that yourself in the next step.

## 5.2.2 Using graphic files

In Studio Toolkit you can import graphic files to get a preview of the result, and to assist in positioning e.g. the overlap. You can also use it to place a technical drawing on the sleeve.



Using the Import Into button

you can import an RGB JPEG or PNG file.

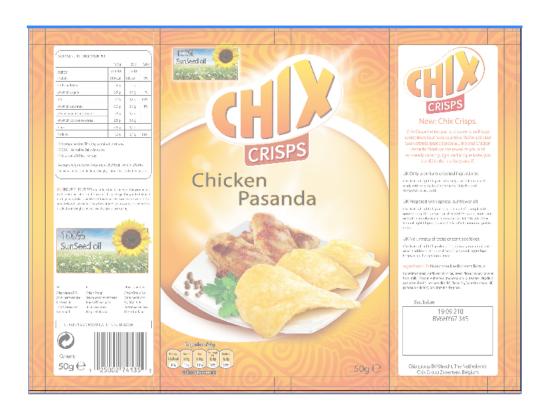
- If a 2D tab is selected, the image will be imported in that tab
- If an object is selected in the 3D tab, the image will be imported in the corresponding 2D tab, and this 2D tab will become active

By default, the image will be aligned with the bottom left corner of the image on the bottom left corner of the printable part. You can move the graphic by clicking and dragging the border. The border (left, right, top or bottom) or corner you clicked, will become magnetic, and snap to the borders and folding lines of the 2D shape, allowing easy alignment.

This magnetism is shown using a thick blue line.

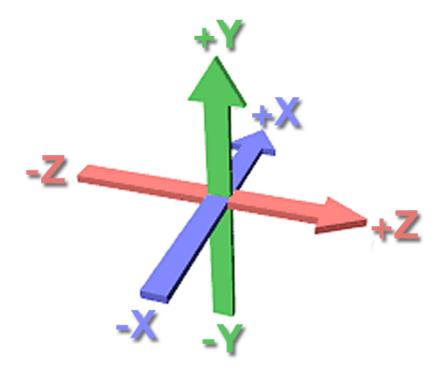
The 3D tab will show a 3D representation of the file with the corresponding graphics on it.



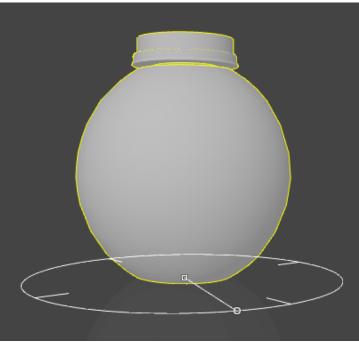


# 5.3 Move and Rotate

Since you are working in a 3D environment, you can move and rotate any object based on 3 axis.



If the Move and Rotate tool is selected, you can select one of three modes in the settings bar:



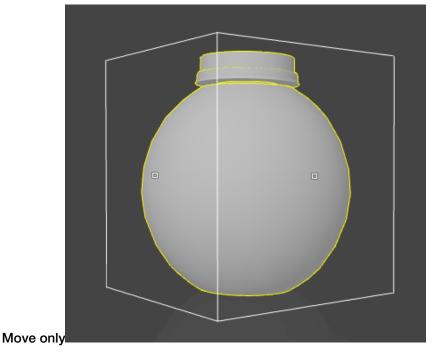


Simple Move and Rotate

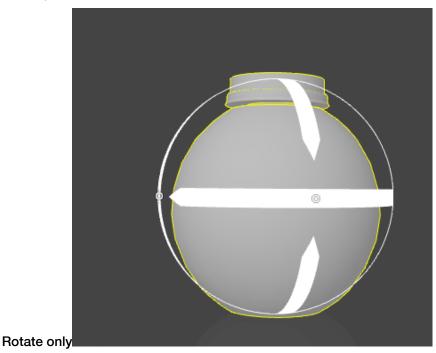
- Click and drag the center anchorpoint or change the Offset X and Z value to move the object over the X and Z axis. Holding down the shift while dragging will constrain the movement to either only along the X or Z axis.
- Click and drag the anchor point on the circle or change the **Rotation** value to rotate the object on the Y axis. Holding down the shift while dragging will constrain rotation to multiples of 45 degrees.



• Simple Move and Rotate keeps the object aligned with the floor. However, by setting the **Distance from Floor** option in the settings bar, you can also move the object over the Y axis,.



• Click and drag any of the anchorpoints or change the Offset X, Y or Z value to move the object over the X, Y and Z axis.



• Click and drag any of the anchorpoints or change the Rotate X, Y or Z value to rotate the object over the X, Y and Z axis. Holding down the shift while dragging will constrain rotation to multiples of 45 degrees.

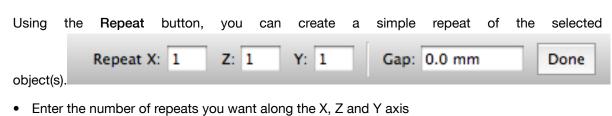
5

**Tip:** After rotating, you might need to align the object with the floor again. You can do so by switching to Simple Move and Rotate, and set the **Distance from floor** to zero.

If you click and drag but not on any of the anchor points, you will change the camera position, but the object will NOT move. This might be necessary to make all handles visible.

**Note:** When moving or rotating a 3D shape, the depending parts (sleeves and labels) are moved / rotated along.

## 5.4 Repeat



- Enter a Gap value to add distance in between the objects
- Click Done





After the repeat, you will have multiple instances of a single object. This means making changes to one of the objects will also modify the others, while you can move and rotate the instances independently.

Note: If you have one instance selected, you can use Edit > Select all copies to select all instances.

# 5.5 Tabs

At the bottom of your Studio Toolkit window, you can see the different Tabs.

First is always the **3D** tab. Next to that, a 2D tab is shown for every 2D object created in Studio Toolkit: a Sleeve, a Label, a Bag, ...

Deleting an object will also delete the corresponding 2D tab. Different instances (created using **Repeat** share the same 2D tab. In that case the 2D tab will be deleted if the last instance of the object is removed.

You can rename any 2D tab by double clicking the name and entering the new name.

**Note:** The name entered for the 2D tab will be stored as the name for the technical drawing in the collada file, and will thus be used when importing the collada file e.g. in Studio Designer.

You can switch between the 3D tab and the 2D tab of the selected object, by choosing View > Go to 3D or View > Go to 2D, or by using its shortcut Cmd-G

## 5.6 Preferences

You can open the preferences by choosing Studio Toolkit > Preferences... (Mac) or Edit > Preferences... (Windows).

In the preferences, you can set the unit to be used for **Dimensions** (millimeter, centimeter or inch) and for **Volumes** (milliliter, centiliter or US fluid Ounce).

Preferences
Dimensions: millimeter (mm) 🗘
Volumes: milliliter (ml)
Cancel OK