

3D Packaging Design and Visualization



Studio

Why work in a flat world if packaging isn't? Studio is a unique set of tools for 3D packaging design made specifically for packaging artwork professionals.

Studio will help you produce better artwork. Whether you are a designer trying out different ideas, or a prepress operator checking a back-match, with Studio you are virtually holding the pack in your hands.

Studio is also a powerful communication tool. It lets you create exciting 3D visuals to show your client, ranging from PDF files with 3D content, to movies, a virtual pack shot or to a shopping shelf.

Other 3D tools can be too complicated. It can take hours to model and render an image. Studio is fast and easy: it integrates with your tools (like Adobe® Illustrator®), it works with your data and speaks the language of packaging.



Studio shows the package in 3D, right in Adobe® Illustrator®, ArtPro or PackEdge.

Benefits

Studio is for all packaging artwork professionals, in design and production:

For Brands

Studio can revolutionize the way you handle packaging and point of sale development. Shorten your artwork approval cycle with interactive 3D visuals. Save mock-up and studio photography costs. Use a virtual alter ego of your entire product range, always up to date with the latest artwork. Increase the success rate of product launches, by seeing upfront how your brand will look in the store next to its competition.

For Packaging Designers

Studio is a fast and easy way to turn your ideas into beautiful 3D images. You can use it for your own inspiration or to impress an important client. There is no more need to cut, fold and glue print-outs all the time because with Studio you see the package on the screen.

You'll find yourself working faster and more creative. And the artwork that you deliver is technically more correct. That way, your designs do not get compromised during production. You might still make conventional mock-ups, but with Studio you have a new option: faster and cheaper virtual mock-ups.

For Tradeshops

Studio is so easy that every operator can use it. Finally, there's an efficient way to offer value-adding 3D services. Use Studio as internal QA tool: check for panel misalignments, spot structural mistakes in time. Create the perfect back-match or perform advanced shrink sleeve distortions and save hours of time performing shrink tests.

For Converters

Check for mistakes before making printing plates, embossing dies or varnish blankets. Avoid rejects by showing your client up-front an accurate virtual mock-up.

Or take Studio on the road and show your prospect what special finishing you could do for his brand.



Studio for Flexibles

No two flexible packages are the same. Pillow bags or pouches exist in all sizes and with all kinds of content. Studio has unique design tools for flexible packaging. You can make great flexible packaging shapes in a matter of minutes.

Shapes

All you have to do is pick a type of package and fill in the settings from the filling machine. To make the pack unique you can interact with it. See it move like the real thing. Add air and liquid filling or insert a geometric shape to mimic a candy bar, biscuit or ice cream. It's so much faster than other modeling tools because it has built in filling and substrate knowledge.



2D and 3D view in PackEdge and Artpro.



Pillow Bag



Gusseted Bag



Stand-Up Pouch



Quattro Seal Bag



Sachet



Diaper Bag

Choose a shape and start designing!

Artwork

You'll see your artwork instantly in 3D in the Studio window in Illustrator, ArtPro or PackEdge. You can make sure that seals or gussets do not obstruct important design elements. And the distribute tool will help you make perfect "back-matches". Open the design in Studio Visualizer to check your opaque white backing and to see metallic inks and sealing reliefs. Thanks to the print modeling technology, Visualizer can even tell you how the backside of the film will look.



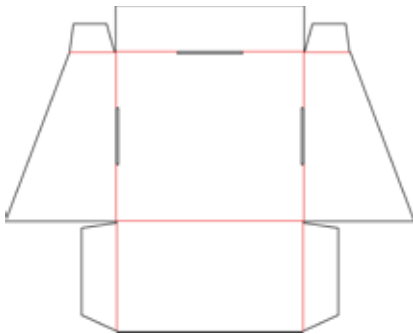
Create pouches, bags...

Studio for Boxes

Folding carton or corrugated packaging can be tough. There are many panels, some of them have odd orientations and it's hard to imagine how it folds and fits together. Studio works particularly well with boxes. It has technology from ArtiosCAD, the preferred choice of the professional structural designer, and several clever artwork tools to handle the complexity of panels.

Fold

If you have the native file from the die makers' CAD system, then you can work right away in 3D. If you only have a flat die-drawing, then Studio will help you to fold it. Studio has the perfect tools for detecting and removing double lines and closing small gaps. With the intuitive folding tool you give your carton or corrugated structure its 3D shape. You can also change the board type and thickness.



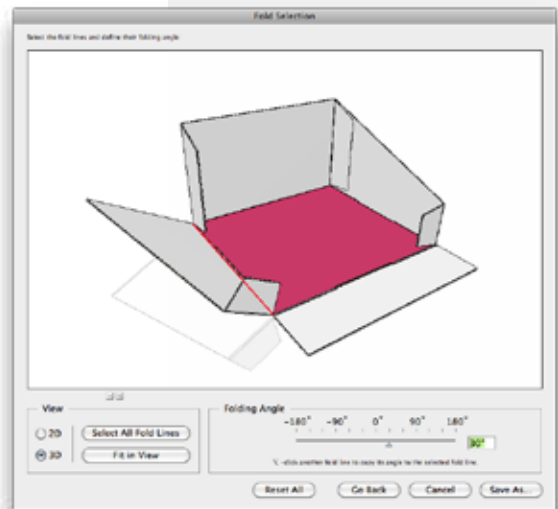
From die drawing to 3D shape.

Artwork

Whether you work with Illustrator, ArtPro or PackEdge, in the Studio window you see your package and spin it around as if you were holding it in your hand. Make a change to the artwork and see immediately how it looks on the box. The Studio window also acts as a navigator: just double-click on a panel to zoom in on the artwork.

Turn the design, not your head

Tired of editing text sideways or upside down? Studio can automatically rotate the canvas so that you always work in a convenient orientation.





The distribute feature creates and positions intelligent copies of selected artwork.

Distribute

When several flaps make up one face, the clever distribute feature creates copies of artwork to make it appear continuous across the panels. You don't need to be a mathematician anymore to make clever designs.

Foils, Embossing, Varnish

Folding carton has a lot of special effects and finishing possibilities. But how do you explain your client how that holographic board with color overprint will look? Or how can you make sure the varnish blanket is correct?

Studio Visualizer can create a lifelike virtual mock-up that you can spin around on the screen in real-time and share with others. It helps you to check your finishing separations, and it helps your client to see in advance what to expect.



Create ultra realistic mock-ups on a range of substrates and with a range of popular finishing effects like embossing, hotfoil, and more..

Studio for Labels



From profile drawing to realistic mock-ups.

Add labels to 3D structural files from a CAD system (like a COLLADA file)



To present labels in 3D you need both the container and the label to look their very best. Luckily Studio has clever tools for that.

First you need the container in 3D. Round shapes (such as bottles, jars and cups) are really easy: like a lathe Studio can revolve any profile drawing into a 3D shape. For less symmetrical containers you will need a 3D file from a CAD system.

On that container Studio can add any number of labels. It will help also you with the placement and even determine the proper die-cut shape.

Conical labels can be challenging: As they wrap around the container, the artwork is optically distorted. Studio has a conic warp tool that can instantly warp selected art to make it appear straight again.

To see clear labels, metallized label paper or any other label substrates, you launch Studio Visualizer and see the package in all its glory. You can also apply custom die-cuts or more special finishing.



Try out different paper stocks for your labels

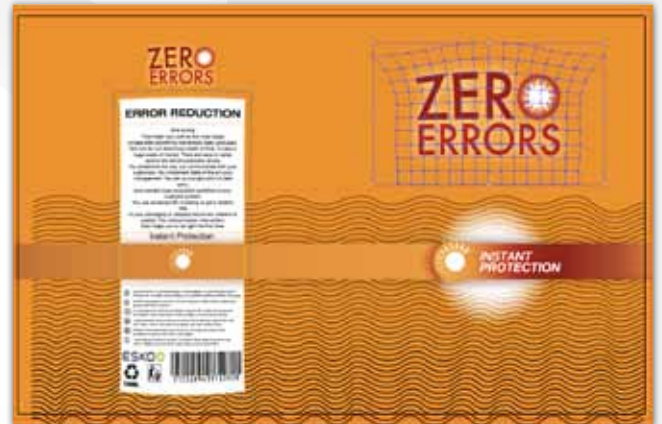
Studio for Shrink Sleeves and Multipacks

Artwork for heat **shrink packaging** is the toughest. As the film shrinks, the branding and the design can be seriously compromised. So artwork needs to be repositioned, or compensated. Without the Studio 3D view, you are working blind.

To prepare, you need the container as a 3D file from a CAD system, a desktop 3D scanner or one of the other Studio Toolkits. Studio can then simulate a virtual shrink sleeve around the object. This truly unique physical simulation can handle round objects, asymmetrical objects and even multi-packs.

Now it is time to apply the artwork (in Illustrator®). You instantly see what artwork elements suffer from the distortion. Vector art, text and images can be pre-distorted with a simple mouse click. Studio gives you multiple suggestions and tweaking possibilities, and of course, live 3D feedback.

Create a 3D PDF and send it to your client so that he understands why you had to change the design.



Compensate for shrinking distortion with Studio for Shrink Sleeves and Multipacks



More Shapes?

With all the toolkits you can quickly and easily make many packaging objects yourself. But there are more options.

For popular packaging shapes you can access our Online Shapes Store and download a Collada file, ready to use. The Store has beverage cans, tubes, PET bottles, plastic bottles and many more. You can access it straight from within Adobe® Illustrator®, ArtPro or PackEdge.

If you need something bespoke, Esko also offers a 3D modeling service. Our professional 3D artists can prepare Collada files for Studio based on CAD files, photographs or real samples.

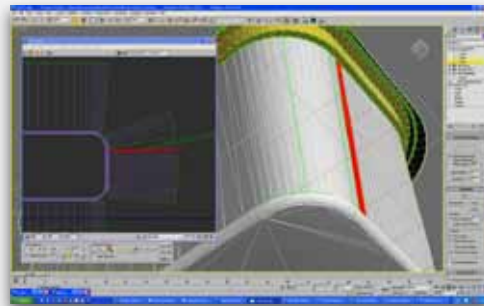
Or if you have your own 3D department, then you'll be happy to know that Studio can integrate with your 3D modeling software, thanks to our commitment to support open file formats such as Collada.



Choose shapes from the Online Shapes Store.



Order bespoke shapes from Shapes Modeling Service



Build your own custom Shapes



Share 3D with Everybody

Packaging is not flat, so to present and discuss your design, or request an approval, you better communicate in 3D.

Studio offers many sharing options:

- **Interactive 3D:** You can send an interactive 3D PDF. You can view it and spin it around in the free Adobe® Reader®. (For examples visit www.esko.com/3dpdf). Or, you send him a Collada file that can be viewed with the free Esko Studio Viewer (see image).
- **Images:** Create pack-shots with a transparent, plain or image background.
- **Movies:** With a spinning animation your client can see the shape, artwork and dynamic print effects in QuickTime player.
- **WebCenter:** You can also upload virtual 3D mock-ups from Studio to WebCenter and invite all the project members to view and approve.



With the free Studio Viewer, your clients can view your designs as if they are holding it in their hands (www.esko.com/studioviewer). Also available for iPhone and iPad.

Print and Finishing effects



The real-time images in Visualizer are ultra-realistic thanks to a patented print modeling technology. Visualizer simulates the printing and finishing operations one by one, in the correct order, and on the right substrate. So what you see, doesn't only look great, it's also technically feasible.



Visualizer print modeling of a foil board overprinted with black, pink and yellow, an opaque white, a holographic hot stamp foil, micro embossing and rounded embossing.

Available materials and effects

- Paper: gloss coated, matt coated, uncoated, textured, colored
- Foil board, coated and uncoated liners
- Clear and white plastic film
- Metal, (colored) glass, rigid plastic
- Label paper (coated and uncoated), clear label paper, metalized label paper
- CHROMOLUX® label papers and boards from M-real Zanders 1 line
- Various AVERY DENNISON label materials
- Process colors
- PANTONE® and PANTONE GOE colors (solids, pastels, metallic)
- Spot colors and opaque spot colors
- Screen printed (opaque) colors
- Reverse printing, surface printing or recto-verso printing
- Spot UV varnish (matt, satin, glossy)
- Proprietary varnishes from Fujifilm® and Sakata INX®
- Embossing and debossing, multi-level, sharp or rounded
- Sculptured embossing
- Die-cutting
- Hot stamp metal foils (gold, silver or colored)
- Cold foils (gold, silver, colored, overprinted)
- Metallic inks (PANTONE® metallics, Eckart silver and gold pigments)
- Kurz® Light Line holographic foils



With Visualizer you can try different options in a matter of seconds. From left to right: A silver hot foil, a silver ink with embossing, a gold hot foil with embossing.

Virtual Reality

Visualizer can present a single packaging object in 3D. But sometimes that is not sufficient. It is in the store that a product needs to communicate the brand and attract customers. So, what better way to predict the success of a new design than to visualize it in a store environment, next to its competition?

Studio Store Visualizer does exactly that. The real-time virtual reality technology from Vtales graphics can visualize new and existing products in a store. With these visuals, all the stakeholders can assess the shelf appeal upfront. That way they can make the right design decisions upfront on color, shape, materials, artwork and shelf layout.

Realism

The real-time rendering reaches an unmatched level of reality. It is all in the details: the shadows at the back of the shelves; the small randomness when placing products on the shelf; the many materials and print effects. The animation and physics add even more realism. Walk through the isles, pick up items, and see them bump into each other.

From Manufacturing Assets

The virtual products are made with Studio or ArtiosCAD. So they link straight into your design or manufacturing data. And you can very quickly swap them with different variations. Store Visualizer can also import 3D objects from many other modeling tools or 3D scanning devices.



Studio and ArtiosCAD can also be used to build a complete store concept for your brand.

Point of Sale Material

Branding does not only happen on the shelves. You can place items on the floor or put them up on the walls. Or dress up the shelves with branded fronts and dividers. Present the complete store concept for your brand in the most visual way.

Environment

In Store Visualizer you can build your own store, just pick floor and ceiling style and start configuring isles and shelf layouts. You can also work with a spherical (360 degree) photograph of a real store and put virtual mock-ups on the empty spots. They blend in almost perfectly.



Integrate virtual packaging mock-ups in real store environments.

Modules

Studio is a modular solution, a mix of plug-ins and applications that work tightly together. You can pick a configuration to fit your current needs. You can always expand later. All the Studio modules run on Mac and PC.

Designer

Add a 3D preview to your artwork editor and share 3D files.

- Place structural design files from ArtiosCAD or from one of the Studio Toolkits
- Place Collada files from the Online Shapes Store.
- Show package in 3D with artwork
- Show multiple artwork files on a multi-piece 3D scene
- Navigate in 3D, zoom in on panels, automatic canvas rotation
- Export to 3D PDF, Collada, U3D or TIFF
- Plug-in for AI® (Mac/PC)
- Available in ArtPro and PackEdge

Toolkit for Boxes

Create folding structures for Designer and Visualizer.

- Assign folds & cuts
- Clean up die drawings
- Pick folding carton or corrugated board types
- Fold up in 3D
- Export to an ArtiosCAD file for Designer or Visualizer
- Plug-in for AI® (Mac/PC)

Toolkit for Labels

Make 3D shapes with one or more labels to use in Designer and Visualizer.

- Import a 3D Collada file
- Add labels to single curved parts
- Or revolve a profile curve into a round 3D shape
- Add flat labels to the top or bottom of revolved shapes
- Add cylindrical or conical labels to the sides or revolved shapes
- Calculate the label die-cut based on the 3D shape
- Export to a Collada file for Designer and Visualizer
- Non-destructive warp tool for conical labels for AI®
- Partially a plug-in for AI® (Mac/Pc).

Toolkit for Flexibles

Create flexible packaging shapes for Designer and Visualizer.

- Create pillow bags, gusseted bags, rectangular stand-up pouches, three & four sided sealed pouches, quattro-seal bags and diaper bags
- Change dimensions & content
- Various tools to Interact with the shape
- Export to a Collada file with matching key lines for Designer and Visualizer
- Application for Mac/PC.

Toolkit for Shrink Sleeves

Create 3D shapes of shrink sleeve packaging and warp the artwork to compensate for the shrink distortions.

- Import 3D objects from a Studio Toolkit or another source (.OBJ, .ZAE, .DAE, .ARD)
- Create round shapes, irregular shapes and multi-packs
- Add a horizontal or vertical heat shrink sleeve
- Physical simulation of material shrink properties
- Export to a Collada file for Designer and Visualizer
- Show shrink distortion statistics in AI
- Pre-distort artwork to compensate for shrink distortion (non-destructive)

Visualizer

Visualize a wide range of substrates, printing and finishing effects in real-time, and share your images or movies.

- Import structural designs from ArtiosCAD, the Studio Toolkits or the Online Shapes Store
- Import PDF or launch directly from AI, ArtPro or PackEdge
- Create wide range of substrates, inks, foils and finishing effects
- Automatically match separation names to effects
- 14 real lighting environments (office, supermarket, outside, photo studio...)

- Export: QuickTime, PNG, JPEG
- Custom or transparent backgrounds
- Collada or EVZ)
- Free viewer for Mac/PC Web/iPad available).

Store Visualizer

Visualize your design in a real store.

- Place virtual objects on empty places in spherical images
- 5 example spherical images included (Custom images can be captured as a charged service)
- Configure a virtual store: floor and ceiling style, isle and shelf layout
- Import: Collada files from Studio or ArtiosCAD; 3D files from other 3D modeling software; transparent PNG images as flat models
- Manage large sets of 3D models in libraries
- Place single packaging objects or fill available space with an array
- Swap objects, rearrange shelves
- Add floor standing units, posters
- Walk around (not with spherical environments) pick up objects
- Physics: Gravity, collision, friction
- Export to very hi-res images
- Export as a self-executing panoramic viewer for Mac or PC
- Stereoscopic projection option available on request.