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 pre-press 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 to your client, ranging from PDF files with 3D content to movies, or a virtual pack shot.

Other 3D tools can be too complicated. It can take hours to model and render an image. Studio is fast and easy, because 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 Packaging Designers

Studio is a fast & easy way to turn your ideas into beautiful 3D images, 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 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, so that your design does 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 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.

Studio is now also compatible with ArtPro and PackEdge and some 3D tasks can even be automated with Automation Engine.

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

Shapes

All you have to do is pick the right type of package and fill in the settings from the filling machine. To make the pack unique you can interact with it and 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 fast because it has filling and substrate knowledge already built in.

Artwork

Import the flexible packaging shape in Illustrator, ArtPro and PackEdge and you’ll see your artwork instantly in 3D in the Studio window. You can check if important design elements are not obstructed by fin seals or gussets. And the distribute feature will help you to make perfect “back-matches”.

Open the design in Studio Visualizer to check your white backing and to see metallic inks and sealing reliefs. Thanks to the print modeling technology, Visualizer can even tell you how the back side of the film will look.
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. The toolkit contains 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.

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.
Create ultra realistic mock-ups on a range of substrates and foils.

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. Good for you to check your finishing separations, and good for your client to see in advance what to expect.
Many label packaging is round. If you can provide a profile drawing, Studio can revolve it around a vertical axis and off you go into the 3rd dimension: Studio can add cylindrical and conical labels.

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

To see transparent materials, special label substrates, custom die-cuts or special finishing, you launch Studio Visualizer and see the package in all its glory.
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 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 preview.

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

With all the toolkits you can easily make 3D objects yourself.

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

If you need something exclusive, EskoArtwork also offers a 3D modeling service. Our professional 3D artists can prepare Collada files for Studio based on CAD files, photographs or real samples. If you already have a 3D department, you’ll be happy to hear that Studio can integrate with these tools. Thanks to our commitment to support open file formats Studio can both import and export Collada 3D files.

PDF goes 3D

Working in 3D is very useful for communication. Show a preview of the package to your customer for discussion or approval.

Studio offers several options:
- Interactive 3D PDF files: If you send that to your client, he can view it and spin it around in the free Adobe® Reader®
- Images: Create TIFF/PNG/JPG 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.

Choose shapes from the Online Shapes Store.

3D preview in Adobe Reader.
Print and Finishing effects

The real-time images in Studio 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
• 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, MetalFX®, 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.
Modules

Studio is a modular solution, a mix of Illustrator plug-ins and applications that work tightly together.

You can pick a configuration to your current needs and always have the option to expand later:

- **Designer**
  Designer is the heart of Studio. It adds a 3D preview to the editor and lets you create 3D PDF files.
  - Place structural design files from ArtiosCAD or from one of the toolkits
  - Place Collada files from the Online Shapes Store
  - See the Package in 3D with the artwork
  - Navigate in 3D, zoom in on panels, automatic canvas rotation
  - Export to 3D PDF, US3D or TIFF
  - Available as plug-in for Adobe® Illustrator® (Mac/PC)
  - Also available in ArtPro and PackEdge.

- **Toolkit for Boxes**
  Toolkit for Boxes is a plug-in for Adobe® Illustrator® to create folding structures for Designer and Visualizer.
  - Assign folds & cuts
  - Clean up die drawings
  - Pick folding carton or corrugation board types
  - Fold up in 3D
  - Export to an ArtiosCAD file for Designer or Visualizer
  - Available as a plug-in for Adobe® Illustrator® (Mac/PC).

- **Toolkit for Labels**
  Toolkit for Labels is a plug-in for Adobe® Illustrator® to create round objects with labels for Designer and Visualizer.
  - Revolve a profile curve into a round 3D shape
  - Add flat labels to the top or bottom
  - Add cylindrical or conical labels to the sides
  - Exports to a Collada file for Designer and Visualizer
  - Non-destructive warp tool for conical labels
  - Plug-in for Adobe® Illustrator® (Mac/PC).

- **Toolkit for Flexibles**
  Toolkit for Flexibles is an application to create flexible packaging shapes for Designer and Visualizer.
  - 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
  - Exports to a Flexible Bag file with matching key lines for Designer and Visualizer
  - Application for Mac OS.

- **Toolkit for Shrink Sleeves**
  With Toolkit for Shrink Sleeves you can 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)
  - 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

- **Visualizer**
  Visualizer can show a wide range of substrates, printing and finishing effects in real-time. With Visualizer you can share images or movies.
  - Application for Mac and PC
  - Import structural designs from ArtiosCAD, the Studio Toolkits or the Online Shapes Store
  - Import PDF or launch directly from Illustrator, ArtPro or PackEdge
  - Wide range of substrates, inks, foils and finishing effects (see previous page)
  - Automatically match separation names to effects
  - 10 real lighting environments (Office, Supermarket, outside, ...)
  - Export movies (QuickTime)
  - Export images (PNG, JPEG).
  - (Custom or transparent backgrounds are possible)
  - Export as 3D (Collada or EVZ. Free viewer application for Mac/PC available).