

## CASE STUDY

**Market:** Structural design and manufacturing for packaging, label, sign and display applications

**Product:** 3D InterOp Translators

**Challenge:** EskoArtwork's ArtiosCAD structural design software needed 3D CAD model import functionality to maintain competitive edge without straining in-house development resources

**Solution:** Spatial 3D InterOp translators for STEP, IGES, Pro/E, CATIA v4 and v5

**Results:** Spatial's high-quality CAD file format translators dramatically reduce the time it takes for ArtiosCAD users to prepare models for downstream use in manufacturing and assembly of the final packaging articles

## EskoArtwork

EskoArtwork is the global market leader in innovative design, pre-production and collaboration solutions for the packaging and commercial printing industry.

### COMPANY

EskoArtwork is the global market leader in innovative design, pre-production and collaboration solutions for the packaging and commercial printing industry. While headquartered in Belgium, Massachusetts is home to the company's research and development group for its structural design CAD products. Introduced more than 20 years ago, ArtiosCAD is EskoArtwork's flagship product and is known throughout the package design industry for its 3D design and visualization capabilities. ArtiosCAD is used by brand owners (consumer product goods companies) folding carton converters, point of sale (POS) houses and diemakers to design structural packages custom-fit to meet a variety of needs. The market for ArtiosCAD is worldwide; with the software being available in 13 different languages for a range of structural design, product development, virtual prototyping and manufacturing applications.

The industry-leading structural design software for packaging provides easy-to-use design features, realistic views of packaging against backgrounds and extensive support for the latest operating systems and applications. With dedicated tools specifically designed for packaging professionals, and with integration capabilities with product design software such as SolidWorks, ArtiosCAD increases productivity throughout the entire packaging supply chain, a significant reason why nearly 70% of all structural packaging worldwide is designed in ArtiosCAD.

ArtiosCAD gives designers, brand owners, and other stakeholders in the package design process the ability to quickly assess a particular package design treatment to speed the design process. Its design and drafting tools include functions that structural designers need to get their job done accurately and efficiently. Complete 3D integration allows for quick prototyping of designs and presentations, eliminating communication errors and reducing design review cycles.

"The quality of Spatial InterOp Translators significantly reduced our development efforts, sped our time to market and enables us to offer a continuous workflow for structural and packaging designers."

Richard Deroo  
Product Manager, Structural Design  
EskoArtwork



## CASE STUDY - EskoArtwork

### CHALLENGE

Without the ability to import 3D CAD models, structural and package designers have to manually recreate the model in 2D packaging design software. This time-consuming, laborious process is accomplished by taking measurements of the physical object's attributes and keying in the values for all measurements, one-by-one. This is especially arduous if a cutout is needed. Then a physical sample mock-up is made to see if the object fits. If it doesn't the process starts all over again, wasting time and material in an error-prone process. In 2004 EskoArtwork determined that it wanted the next release of ArtiosCAD to include the ability to import 3D CAD models of the products for which packaging was being designed by its customers. This would provide significant time and cost savings for its customers and give the company a competitive edge in the market. However the company lacked the engineering resources to develop this capability in-house so it looked to a third party to source and integrate the technology.



### SOLUTION

After an evaluation process, EskoArtwork selected Spatial's high quality 3D InterOp file format translation technology to enable its customers to import 3D models from product design software packages in a range of industry-standard formats including: STEP, IGES, Pro/Engineer, Catia v4 and v5. This enables EskoArtwork's customers to import objects into ArtiosCAD to easily design a structural package around 3D objects. The Spatial business model allows EskoArtwork to more competitively price ArtiosCAD, with Spatial sharing in the success of ArtiosCAD. "In addition, Spatial's ability to support current CAD versions and serve as a single source, full service provider of all translators has been critical," says Richard Deroo, EskoArtwork Product Manager.

Now the company's customers can do virtual packaging mock ups in 3D using the exact product model because all of the dimensional aspects of the product come with it in the translation. Then, ArtiosCAD provides the ability for the user to fold the box up, see if the object fits, and if it doesn't, no wasted time and material is expended as in the previous trial and error method. Dimensions can be quickly changed to refine the fit, but most likely the packaging is going to fit by default because the user has imported an exact 3D model through the Spatial translators.

"The incorporation of the Spatial InterOp translators has been an invaluable component of ArtiosCAD," notes Deroo. "To be able to directly import 3D objects is not only a time and cost savings, but also from a reliability standpoint, our users are virtually assured they are getting the right fit in the package from the start."

With the actual 3D model imported into ArtiosCAD, users then "run a standard", where a packaging template for a particular box automatically sizes right for the product. From that point the packaging designer makes modifications in terms of window cutouts, may put a secondary box around it and/or fitments – anything that's required from a structural point of view when building the package. ArtiosCAD completes the design workflow by outputting a PowerPoint or movie file, to quickly get client feedback.

"With Spatial we never have to be concerned about the performance of their translators because Spatial provide the highest level of support," says Deroo. Our customers are happy with the performance; and when an issue does arise, it is resolved quickly, which is essential in our industry."

EskoArtwork started with a per seat license for each Spatial translator. In 2008 it became evident that EskoArtwork required a more flexible pricing structure because many of their customers required a full suite of CAD translators, rather than a select few. EskoArtwork opted to switch to Spatial's 3D InterOp suite, which enabled EskoArtwork to package and price the InterOp translators according to the usage needs of their customers and the business needs of EskoArtwork.



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### RESULTS

The ability to import 3D file formats without the need to develop the technology internally proved critical to the development plans for ArtiosCAD. "The quality of Spatial's suite of CAD file format translators has helped us streamline the packaging design workflow," says Deroo. "Some of our competitors are still doing it the other way."

Spatial's CAD file format translators dramatically reduce the time it takes for ArtiosCAD users to prepare models for downstream use such as manufacturing and assembly of the final packaging articles. EskoArtwork's customers generally prefer using the native file importers such as Pro/E, CATIA V4 and V5, since these files provide higher quality translations than IGES and STEP formats can provide and eliminate any file translation errors going to an intermediate format.

"Our long-term partnership with Spatial helps us meet our aggressive product release schedule and maintain our leadership position in the market," continues Deroo. "We don't have to worry about keeping up with all the latest CAD file formats; Spatial ensures that we are up to date with the latest versions. In addition, InterOp's wide range of file formats has helped us expand our penetration into consumer product companies and POP display designers."



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