

# Structural design, manufacturing and communication for packaging and displays



ArtiosCAD

ArtiosCAD is the world's leading structural design solution for packaging and displays. Over 20 years of experience result in the strongest collection of dedicated tools for structural design, product development, virtual prototyping and die-making.

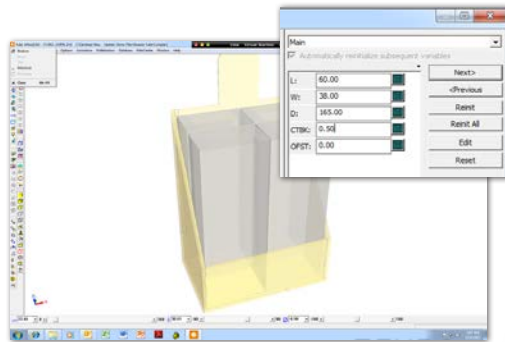
# Structural design of packaging & displays

## Drafting tools built for productive design

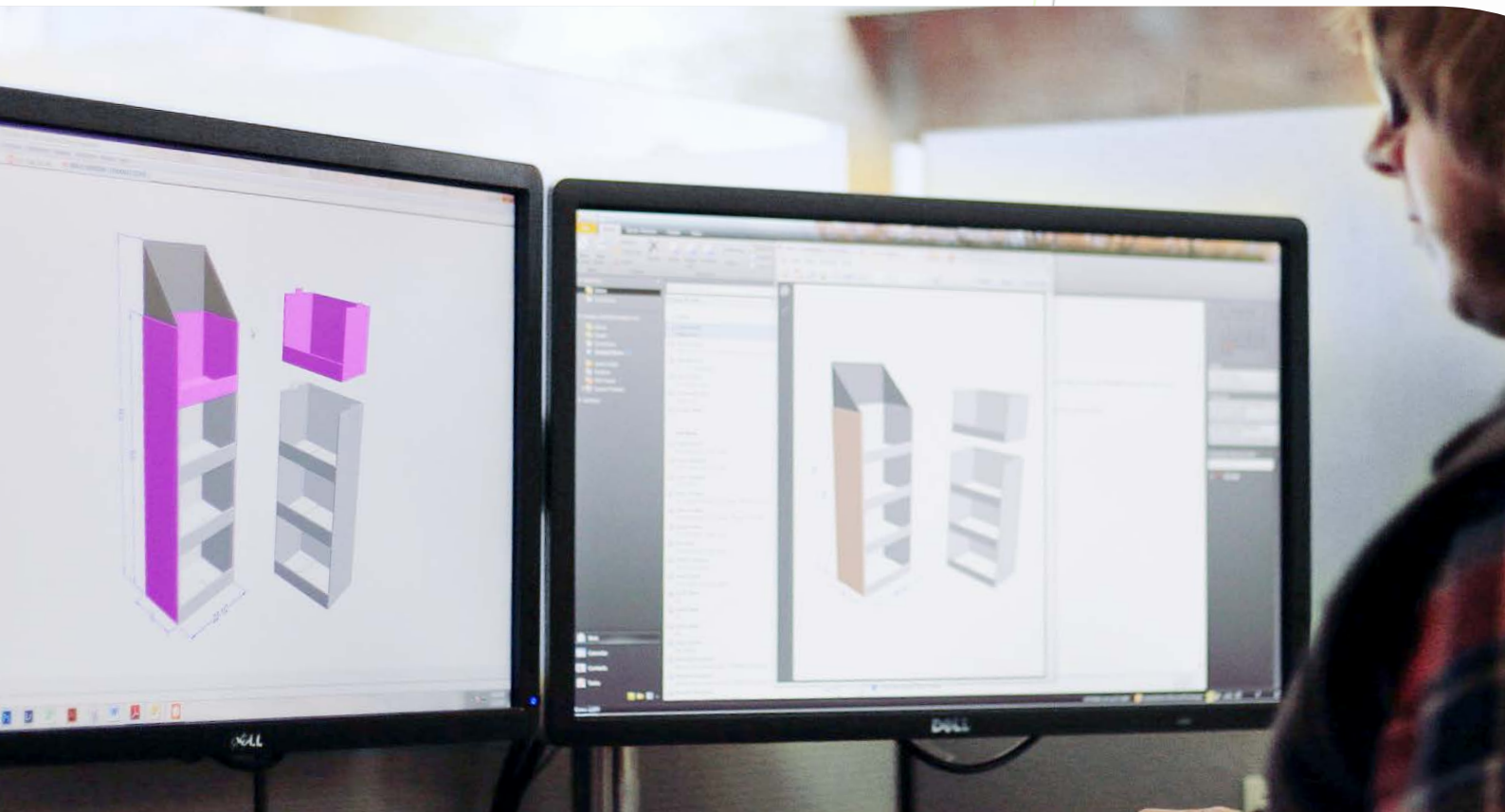
Around the world, ArtiosCAD proves that no other packaging design editor delivers faster throughput. Powerful 2D drafting tools are designed specifically for structural designers and die makers.

The tools give the user extensive graphical feedback, making ArtiosCAD very precise, yet easy to learn and use. Many of the design tools work automatically, dramatically increasing the productivity of designers.

Dynamic Drafting automatically displays horizontal and vertical alignment lines and snaps other points of interest while you are drawing. This real-time feedback reduces the need for construction lines, allowing you to work much faster.



ArtiosCAD builds a display automatically based on your input.



# Smart resizable design templates save time and eliminate errors

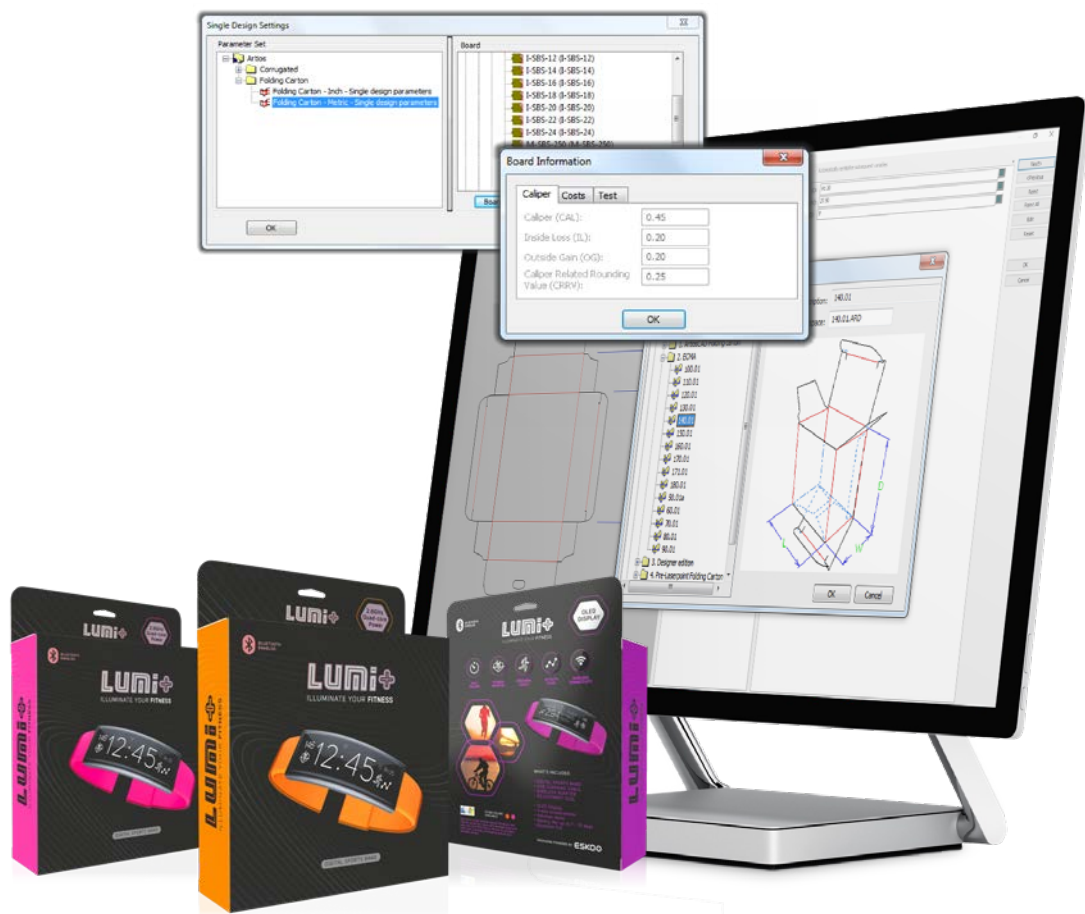
Create packaging or display designs in seconds by choosing from the catalog of resizable design templates.

ArtiosCAD comes complete with design templates for corrugated, folding carton packaging (such as ECMA, FEFCO) and POP displays.

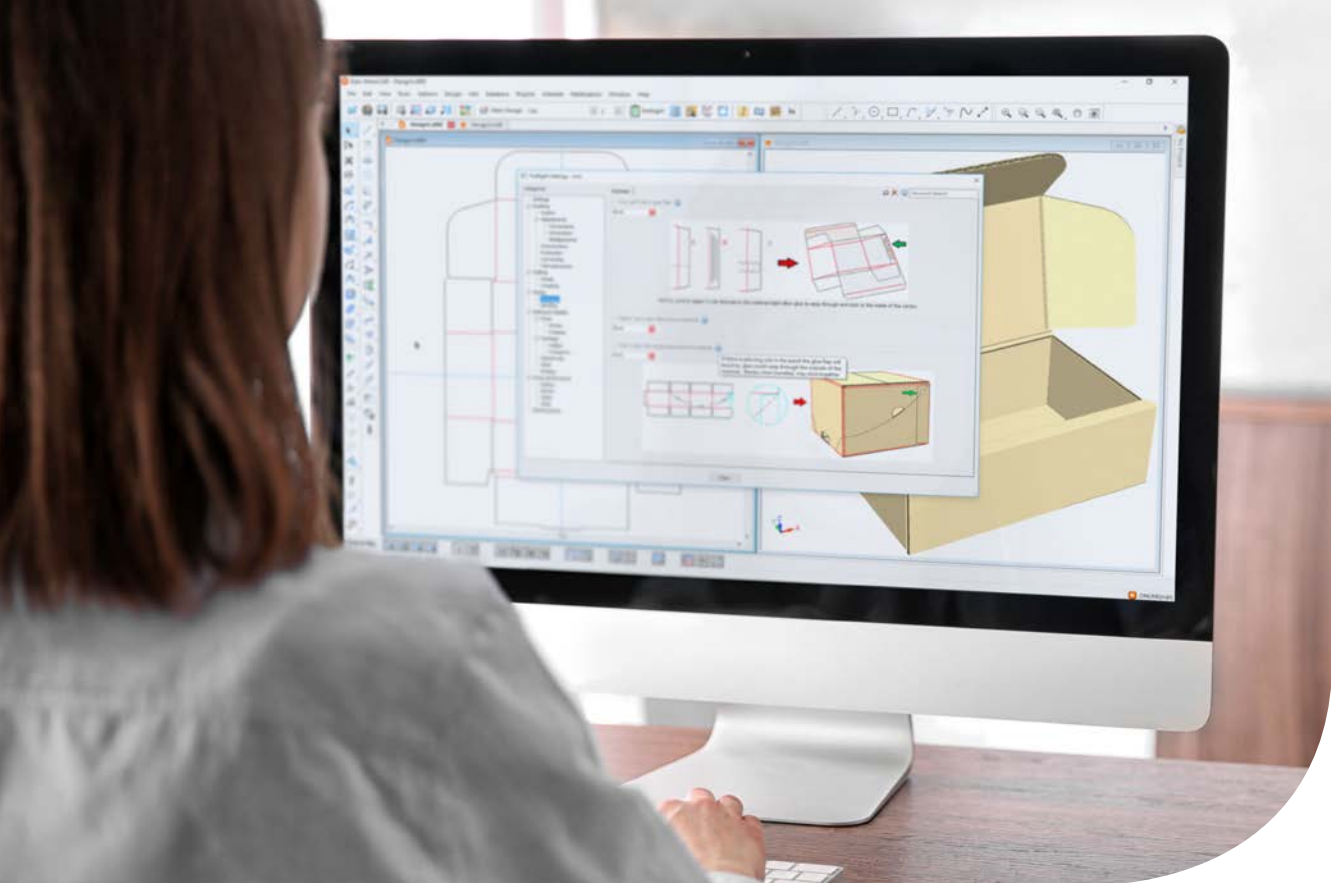
A single template can automatically be resized to create thousands of designs with fixed dimensions. ArtiosCAD can also save hours of design work by turning custom designs into new, resizable templates.

Only ArtiosCAD has easy to use tools to build a corporate library of resizable design templates. Such a standard library improves the quality and consistency throughout your packaging and display production workflow.

Build templates that include intelligent defaults, on-screen documentation, style alternatives and built-in error checking. This way, you make sure that everyone in the supply chain uses each template correctly.







## Quality control for your structural designs

With varying experience levels of design staff, structural design decisions can often cause die cutting inefficiencies. These decisions can turn out to be costly. An optimal structural design, however, reduces your setup time and boosts die press speeds.

### An industry first

ArtiosCAD features an integrated Preflight module that automatically analyzes structural designs and flags quality issues in the originating application to avoid downstream production errors and save time for converters.

This patent-pending software alerts designers to potential issues in their structural designs before releasing the file to estimating or production, reducing the risk of errors and rework and boosting operational uptime and efficiency.

### Benefits of ArtiosCAD Preflight

- Faster design times
  - › Save up to 15 minutes per design by eliminating manual checks
  - › Best in class design principles are validated
- Consistent design quality
  - › All your designers use the same design checks
- Quality control at the click of a button
  - › Reduce the iterative cycles between design and die making
  - › Create accurate production-ready designs
- Improve die press throughput
  - › Optimize each design so the die press can run at maximum speeds
  - › Catches potential production issues during the design phase

# Designing displays efficiently

ArtiosCAD makes the job of designing displays a lot easier. You can either start from scratch or use an extensive library of parametric rebuildable design templates. Just enter the dimensions and ArtiosCAD will build the complete display automatically.

It's easy to design multi-component products in a single workspace. Use various board types or other substrates to produce multiple parts of the display. This multi-part design canvas allows you to group parts according to the type of substrate.

It is also possible to accurately position rigid components into the display, such as clips and hooks.

Export 3D virtual mock-ups to present designs to your clients and to create comprehensive assembly instructions.

## Professional displays at the click of a mouse

The online ArtiosCAD Display Store puts a vast library of production ready parametric design templates at your fingertips.

Get inspired, or infinitely use and re-use these display templates in ArtiosCAD to build complete displays with your specific dimensions.

The store offers ArtiosCAD files optimized for cutting with a Kongsberg table. In addition most designs come with a 3D PDF preview and a video with assembly instructions.



The ArtiosCAD Display Store for resizable, production ready display designs is quick, simple and eliminates the need for design labor.

# Work faster: **design in 3D**

## **Make accurate and realistic 3D models in minutes**

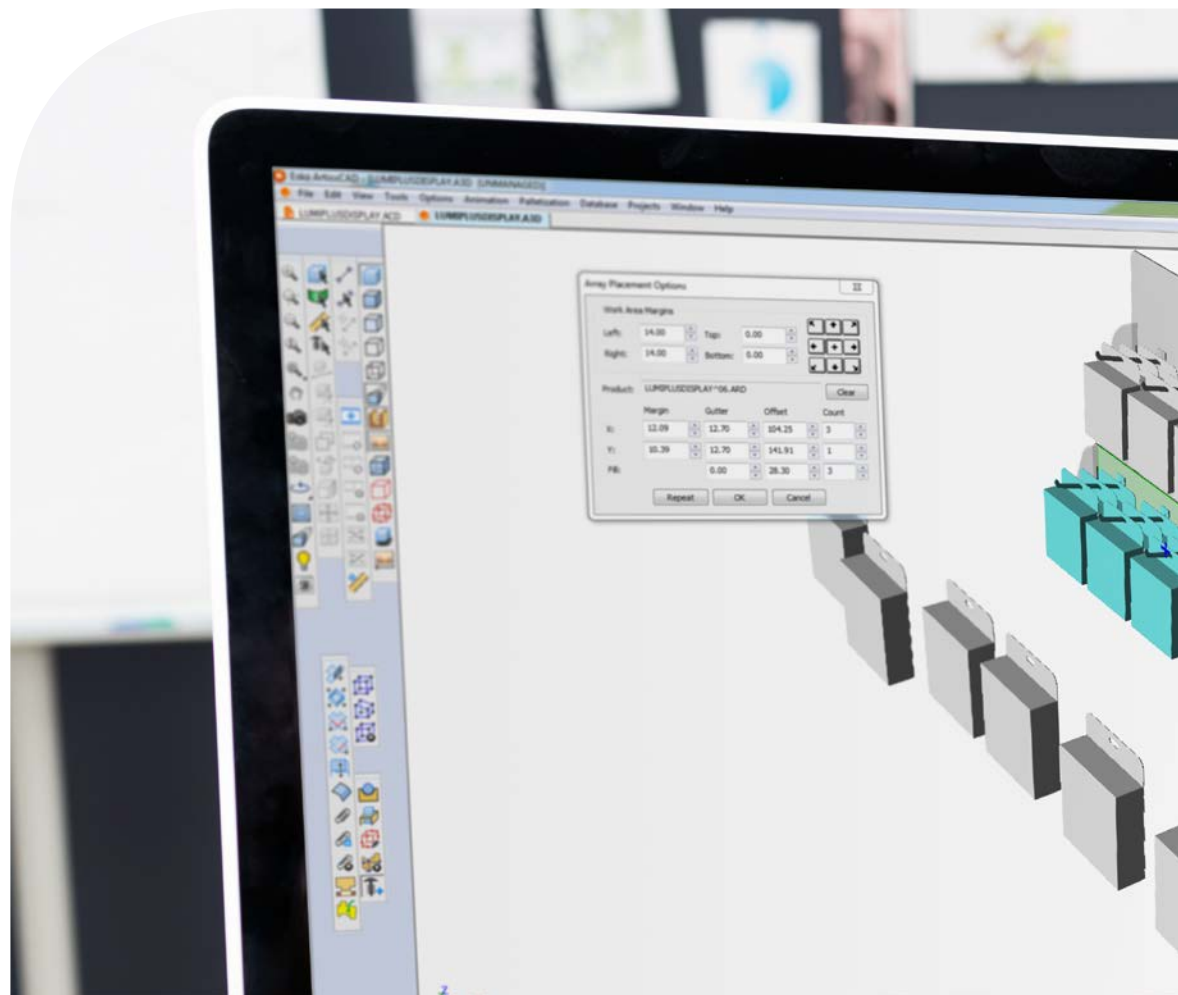
Show your customers new designs directly in 3D. Even designs with curved creases and bends can be folded and visualized in 3D, therefore making assembly drawings even easier.

Users can export a 3D image or a 3D animation to various file formats (including AVI or QuickTime movies, animated VRML file, PDF...).

Folding complex designs accurately becomes a breeze with the unique 'Fold to Meet' tools. The sequence of how it was folded and animated is 'remembered' for every design.

If you want to wow your customers, you can output photo-realistic 3D files complete with material properties, high-resolution artwork, floor shadows and more.

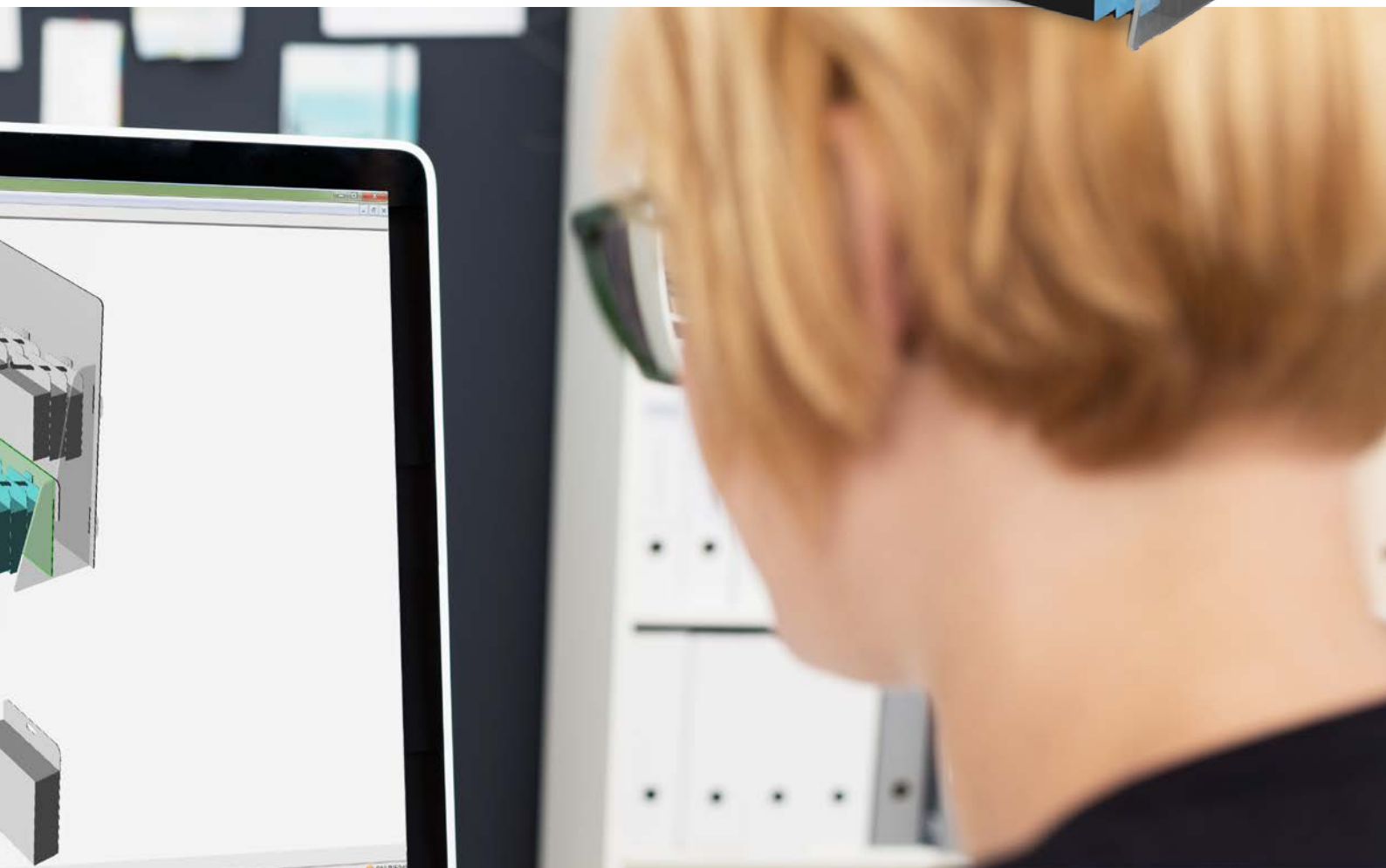
You can also create completely animated presentations that demonstrate products, their packaging, and the assembly of all the parts.



## Package the virtual product

Making packaging and displays for products with complex shapes can be a time consuming challenge. ArtiosCAD allows you to import 3D CAD models of a product to automatically build a package with the appropriate dimensions around that product. This way it becomes very easy for designers to create packaging that accurately fits the product.

Users can import a wide variety of industry standard 3D formats, including Collada, IGES, STEP, SolidWorks, CATIA, Pro Engineer, Inventor, SAT, Siemens NX, Parasolid and VRML.



## Automated reports provide powerful communication

Users can create reports that 'automatically' format themselves based on the items and information required.

3D thumbnails, with animation, can be added to reports to help others throughout the company visualize all components of any packaging project.

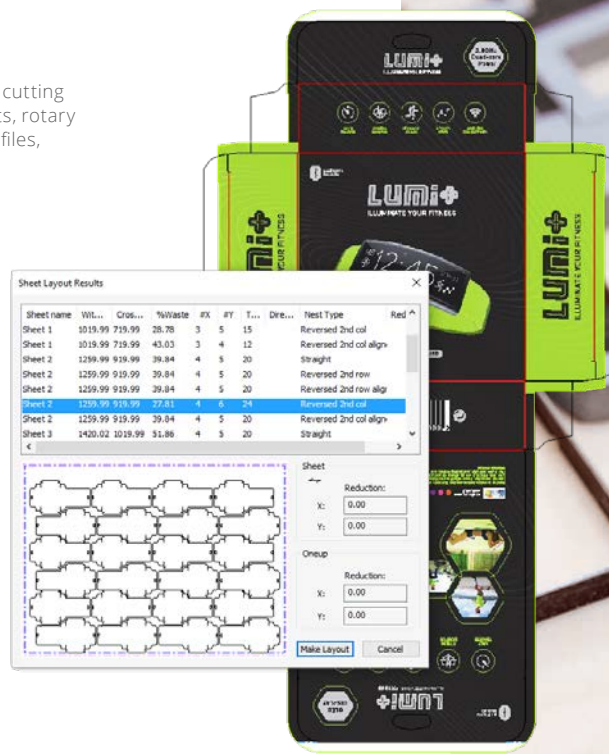
You can generate automated bill of material reports on multi-part design projects with the click of a button.

All reports can be saved in PDF, XML, HTML and Excel formats which makes it easy to communicate them to users and systems.





Produce optimized layouts, cutting dies, counters, stripping sets, rotary tooling, ejection rubber profiles, blankers...



## ArtiosCAD for die makers

### Efficient sheet layouts

ArtiosCAD allows you to build sheet layouts quickly. What's more, it automatically suggests optimal layouts with the lowest cost or waste.

The proposed solutions can be sorted by variables such as 'sheet waste', and 'number of designs on the sheet'. 'Near miss' solutions that require a small reduction in the design are also shown, allowing designers to make minor adjustments to achieve the most efficient layout and reduce costs or waste.

### Automated tooling design

ArtiosCAD provides powerful and comprehensive features for the production of dies, counters, stripping sets, rotary tooling, ejection rubber profiles and blankers.

You can design die boards and stripping sets ready for the laser. Quickly build rotary tooling (including die splits, rule paths and bridging on teeth) ready for any output including lasers and die saws.

ArtiosCAD automatically generates complex counter designs ready for production, including one-piece steel counters.

Dynamic feedback of the holding power of die-board mounting holes saves significant time and ensures security of the die-board to the die-press.

Ejection rubber profiles for cutting dies are generated with a single mouse click with the automatic, optimized cutting layout of the rubber profiles.

ArtiosCAD also includes a complete set of blanking tools to create steel, flat-top, grid and combo blankers.



## Perfect integration with your current design workflow

### Seamless CAD and graphics integration

Structural and graphical designers often run into obstacles working together. Correctly integrating CAD information in Adobe® Illustrator® or ArtPro+ is key to an error-proof workflow.

For the perfect round trip workflow, download the free Data Exchange plug-in for Adobe® Illustrator® at [www.esko.com/downloads](http://www.esko.com/downloads).

### Import ArtiosCAD files into Illustrator

Import your native ArtiosCAD files directly in Adobe® Illustrator® without any conversion. All CAD data and layers are preserved in Adobe® Illustrator®. This enables the graphic designer to accurately place artwork, thus eliminating errors.

### Export graphics from Illustrator to ArtiosCAD

Export graphics and vector data from Adobe® Illustrator® and import in ArtiosCAD while maintaining the registration between the graphics and the structural design.

### From CAD design to pallet pattern

The seamless integration of ArtiosCAD with palletizing software allows you to calculate a suitable pallet pattern based on the structural design file of the box.

Alternatively, the palletization software is able to drive the structural design based on the selected pallet pattern.

This eliminates the need to duplicate data, streamlines shipping estimates and enables right sized package design.

# Improve efficiency with ArtiosCAD Enterprise

## Centralized, web-accessible database

ArtiosCAD's Enterprise database, powered by WebCenter, provides 24/7, worldwide access to all your CAD projects, assets and information.

ArtiosCAD's enterprise database is a scalable solution that meets the needs of multi-plant enterprise environments and small single-plant companies alike.

## Secure, password protected user access

All access to the database requires a username and password. Full security can be established and customized by users and groups, protecting projects and documents in the database.

## Your enterprise database in the cloud

With ArtiosCAD Enterprise all valuable corporate assets that you need to access, such as common board tables, customer lists, projects, CAD files, specs, bills of materials and forms are at your fingertips and shared between all users, no matter where they are.

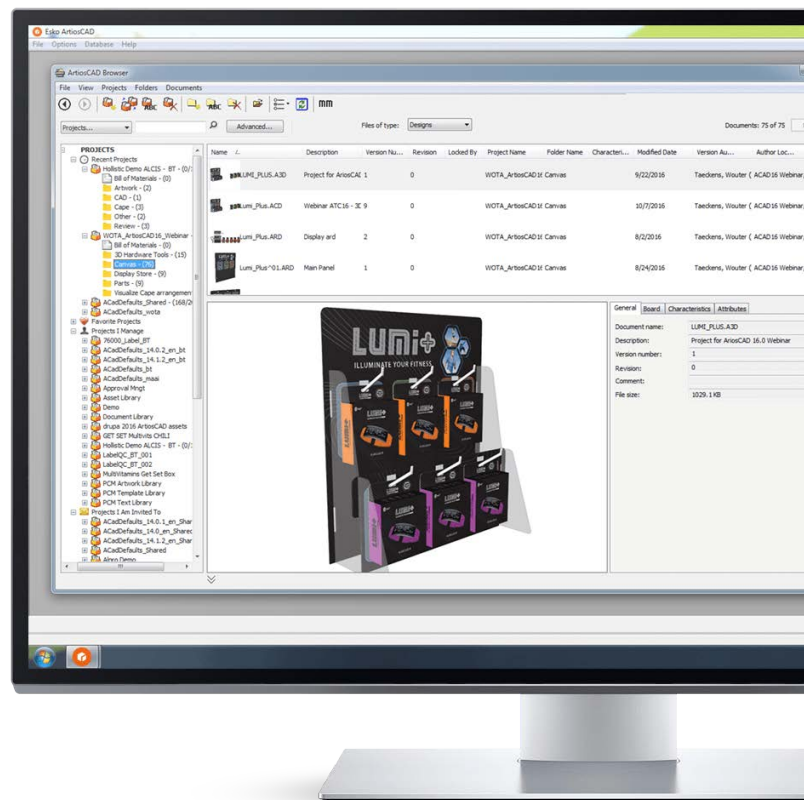
This cloud-based solution means all data is centralized in a common, secure, web-accessible database making it mobile, transferable and instantly accessible. Users can

access data directly through the ArtiosCAD client or via a web browser. ArtiosCAD Enterprise will assure the common database in the cloud is always the latest, most up to date and immediate data.

## Continuous connection

You can access the ArtiosCAD database online, 24/7. If you don't have online access, ArtiosCAD's intelligent database caching allows users to have complete access to their work while offline.

Once back online, all user changes are logged and synchronized with the central database insuring all data is current and accountable.



ArtiosCAD's Enterprise database provides 24/7, worldwide online access to all your CAD projects.

# Key ArtiosCAD modules

## 2D or 3D Drafting Solution

- Create new designs with flexible and easy to use tools that are optimized to create packaging with the minimum mouse movements and keystrokes.
- Create designs in seconds using the extensive library of folding carton, corrugated and POP styles.
- Add value from conceptual design through production tooling by fully integrating graphics

- Turn ArtiosCAD into an information management tool by adding an unlimited number of user-defined attributes to the database that can be manually entered or be automatically calculated based on the geometry of the design.
- Fold up flat designs in 3D for quality inspection and client presentations.
- Assemble multi-component designs in 3D.
- Create 3D animation of folding sequence, multi-part assembly or POP set up.

## Resizable Design Tools

- Create reusable, parametric designs using any of ArtiosCAD's drafting tools.
- Convert fixed designs to variable geometry for complete flexibility to rebuild different variants.
- Play back parametric designs step-by-step to examine how a design was built, and edit it during playback.

- Access a library of general-purpose geometry tools to quickly add components to designs.
- Add parametric designs to the Style Catalog to make them available to all users.

## 3D Modeling Solution

- Create 3D models of products such as cans, bottles, glasses and bags.
- Define cross section for the shape of the 3D product or modify to create a model that varies in shape.
- View 3D models of sample products with their packaging designed in ArtiosCAD.

- Import 3D solid models from other 3D modeling programs directly into ArtiosCAD.
- Export CAD designs as 3D models in native 3D modeling formats.
- Automatically create exact fitting inserts and fitments for packaging with contours and cutouts based on imported 3D models.

## Layout Tools

- Powerful nest and copy tools graphically construct sheet layouts.
- Automatically calculate sheet layouts that minimize production costs.

- Create a layout pattern of blanks and send to leading palletizing solutions to eliminate duplicate data entry and streamline shipping estimates.

## ArtiosCAD integrates into virtually any workflow

- Import formats: CFF2, DDES, DDES3, DXF, HPGL, EPS, PDF, Elcedo
- Export formats: CFF2, DDES, DDES3, DXF, HPGL, PDF, EPS, Elcedo, CAPE CIF

- 3D import formats: Collada, ACIS, CGM, CATIA, ProE, STEP, IGES, SolidWorks, Siemens NX, Inventor, JT or Parasolid 3D solid models
- 3D export formats: Collada, STEP, IGES, ACIS, VRML, U3D, 3D PDF or XCGM 3D solid models
- AVI and MOV movie animation

## Enterprise benefits

- One centralized packaging projects database for an entire company and its subsidiaries
- Securities and privileges to the central databases controlled by a user login

- Project management of all assets of a packaging or display project
- Online accessible 24/7

ArtiosCAD comes with a wide range of modules so it is tailored to your needs. Get the full overview on [www.esko.com/ArtiosCAD](http://www.esko.com/ArtiosCAD).