Creo Inc.
3700 Gilmore Way
Burnaby, B.C., Canada
V5G 4M1
Tel: 1.604.451.2700
Fax: 1.604.437.9891

Request support:
ecentral.creo.com

www.creo.com

Internal: 727-00106A-EN Rev A
Release date: 2 June 2005

White paper

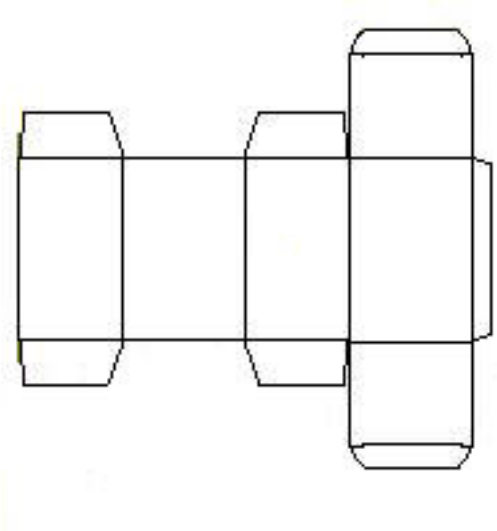
Steve Miller
Product Manager
Tel: 00.1.301.962.8862
steve.miller@creo.com

Creating Production Dies and Layouts from CAD Files

Vancouver, Canada (June 2, 2005)—Prepress operators use CAD files to create production dies for software applications like Creo's Pandora® to assist in creating layouts. But often the CAD files are not supplied by their customers or have been improperly prepared. This forces operators to stop production and wait for the correct files to be returned, or attempt to correct the files themselves. The tools available for correcting these files typically either provide limited functionality, or are overly complex. This can be frustrating, since all the operators really want to do is get the job on press.

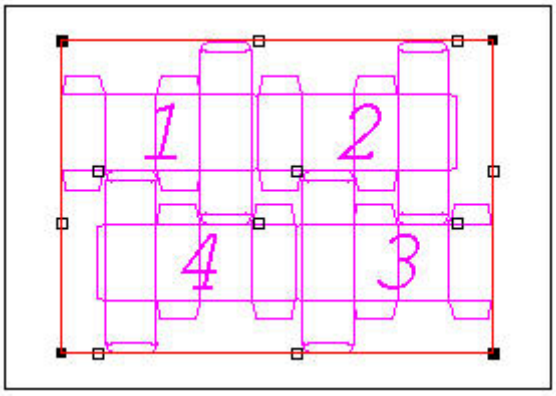
What are CAD files?

Computer-Aided Design (CAD) files are produced by software programs and create the structural shape of a finished product or container.



Converters use the two-dimensional drawing to create a stepped layout that optimizes the manufacturing process by reducing use of substrate and minimizing the time needed on press to fill the order. These

packaging products are almost always non-rectangular shapes that can be folded to create products like cereal boxes.

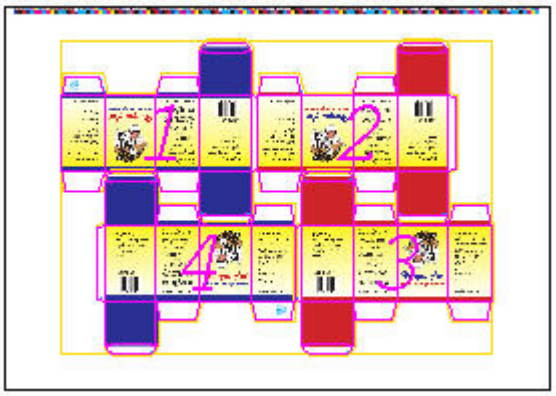


CAD files come in a variety of formats, but those that can be imported into Pandora are Common File Format 2 (CFF2), Drawing Exchange Format (DXF), or Digital Data Exchange System 2 (DDES2), CAD formats specifically designed for the packaging industry.

Why use CAD Files?

Operators use CAD files to automate and streamline the process of creating stepped layouts for production. CAD files enable time-saving features in Pandora such as snap-to-die registration, bleed resolution, and SmartMarks.

CAD files can be imported into a Pandora job and positioned on the layout, and one-up artwork can be automatically positioned or snapped to the CAD die to create multi-up artwork. Marks such as color bars or other data can be added to the layout and automatically positioned in relation to the die, and marks can be bound to individual die stations to create station numbers. You can then export the file as a PDF for output using Prinergy Powerpack™, Brisque® Pack, or another workflow.



Typical CAD preparation workflows

When converters need to prepare CAD files to create production dies, their work typically falls into one of the following categories:

One-up EPS file needs to be stepped to a CFF2 file

The converter has received a one-up Encapsulated PostScript (EPS) file from Adobe® Illustrator® that contains an embedded dieline, and wants to step and repeat this file to create a multi-up die, and then export this as a CFF2 file for use in Pandora.

Stepped EPS file needs to be converted to a CFF2 file

The converter already has a multi-up die saved as an EPS file, but needs to convert this to a CFF2 file.

CFF2, DDES2, or EPS file contains gaps or unknown line types

The converter already has a multi-up CAD file (CFF2, DDES2) or EPS, but Pandora cannot properly read this file due to gaps or missing lines in the outline of the die, or to non-cut line types such as fold or score.

Current Solutions

The software solutions currently available to converters typically fall into two classes: low-end and high end. The low-end consists of quite inexpensive products such as Kandu Bezarc or Adobe Illustrator that offer limited functionality. The high-end consists of more expensive products such as ArtiosCAD, Score!, or Impact Designer Lite that are very complex and are really intended for structural design.

Low-End

At the low-end, converters can use software that already exists in their shop such as Adobe Illustrator, or for approximately $500 USD, purchase a plugin to Adobe Illustrator like Kandu's Bezarc which acts as a graphic translator converting files from Adobe Illustrator to DXF, CFF2, or DDES2.

As many converters already know, Adobe Illustrator is a very powerful tool for creating artwork. It is less successful at generating useful CAD files for production. The product doesn't address all the workflows typically required by converters, and requires that you step and repeat your files using a product not designed for that purpose. Adobe Illustrator with the Bezarc plugin doesn't provide the ability to correct files that may have been improperly prepared.

High-End

At the high-end, converters can use "light" versions of very sophisticated structural design software. These are usually priced at approximately $3500 USD and up. These software applications are very powerful and provide a feature set that goes far beyond the needs of most converters. And because these software programs are intended for use as a structural design application, they often confuse operators due to their bewildering array of options and unfamiliar user interface syntax.

What to Look for in a Solution

Given that converters are looking for a solution to help them quickly create or correct CAD files and get their job on press, all they really need a solution that is **fast**, **lightweight**, and **competitively-priced**.

Look for a fast solution

Converters look to this solution to solve their problems and get them back on track to creating layouts quickly. They don't need to wait while a CAD application grinds out a file. They just need it to work. Quickly.

Look for a lightweight solution

Converters are in the packaging business, not the CAD creation business, and are very familiar with having inappropriately designed software repurposed for the packaging market. The simpler the CAD program the more effective it will be. Converters want to create production dies and only need the features that will help them get their files through Pandora.

Look for a competitively-priced solution

Converters won't invest money in a tool filled with features they'll never use, or won't help them through the workflows they require. Converters will pay for only the features they need.

Creo CAD Correct Solution

Creo's CAD Correct is a fast, lightweight, and competitively-priced solution that performs the key die creation workflows: stepping an EPS file to create a CFF2, creating a CFF2 from a stepped EPS, and correcting a stepped EPS, DDES2, or CFF2 file that contains incorrect die line information.

CAD Correct is fast

Printers can create CAD files in minutes. Often the operator only needs to open the EPS in CAD Correct and save it as a CFF2.

CAD Correct is lightweight

CAD Correct addresses the main workflows converters require.

One-up EPS file needs to be stepped to a CFF2 file

CAD Correct can import an EPS file of the die line separation, identify the die lines, step it to create the die layout, and write out a CFF2 file for Pandora. To accomplish this, you open the file in CAD Correct and ensure that all lines display as cut lines, create a step and repeat, and export the file as a CFF2.

Stepped EPS file needs to be converted to a CFF2 file

For an EPS file that contains stepping information, you first define the die line for one item, and then find all matching die stations. To accomplish this, you open the file in CAD Correct and ensure that all lines display as cut lines, define an individual item or shape, find all matching shapes, and export the file as a CFF2.

CFF2 file contains gaps or unknown line types

For a stepped CFF2, DDES2, or EPS die file that contains gaps or unknown line types, you can define the outer die lines so that Pandora deduces the location and number of one-up positions. The file can then be saved as a CFF2 file appropriate for use in Pandora. To accomplish this, you open the file in CAD Correct and ensure that all lines display as cut lines, define an individual item or shape, find all matching shapes, and export the file as a CFF2.

Stagger features for Flexo or Gravure

CAD Correct also offers the ability to create a staggered step and repeat in cases where you image in the round and want to ensure that the printing plate is always in contact with the media. When stepping an EPS file in CAD Correct, you can select the wrap feature, enter a displacement value that specifies how much to stagger the image, and hold down a shortcut key to create either a castletop or staircase staggered layout.

CAD Correct is competitively-priced

The first copy of CAD Correct comes bundled for any converter that buys a Creo workflow such as Prinergy Powerpack, Brisque Pack, or Prinergy® Evo. Converters using other workflows can purchase CAD Correct for $1500 USD.

Conclusion

Prepress operators don't have an easy task. They typically must try to create and correct CAD files using software that provides either limited functionality or is overly complex. CAD Correct offers a solution that is fast, lightweight, and competitively-priced and allows operators to complete key workflows such as stepping a one-up EPS file to a CFF2, converting a stepped EPS file to a CFF2, and correcting files that contain gaps or unknown line types. CAD Correct helps get their jobs on press.

About Creo

Creo is a world leader in solutions for the graphic arts industry. Core product lines include image capture systems; inkjet proofers; thermal imaging devices for films, plates, and proofs; professional color and copydot scanning systems; workflow management software; and proofing and printing consumables. Creo is also an original equipment manufacture supplier of on-press imaging technology, components for digital presses, and color servers for high-speed, print-on-demand digital printers. Creo trades under the symbols CREO on NASDAQ and CRE on the Toronto Stock Exchange. www.creo.com

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