Cyrel™ Digital flexo plate Imagers (CDI)

The world's leading digital flexo solutions

ESKO artwork

CDI

The world's leading digital flexo solutions

Since its introduction 14 years ago, the Cyrel™ Digital Imager (CDI) has revolutionized the flexo printing industry with the most advanced digital flexo solutions. The success of the CDI family is the result of EskoArtwork's customer-driven development and its long-term technology partnership with DuPont.

Over 90% of all digital flexo plates globally are imaged on a CDI, demonstrating that flexo printers insist on CDI plates and sleeves for their work. They attain superb results that before were only achievable in offset or gravure. With the CDI, trade shops are able to offer superior quality, while printers receive print consistency. It's no surprise that the CDI is the most popular digital flexo plate imager in the world.

CDI devices continue to push flexo print quality further. The CDI family of imaging devices spans the entire range of flexo printing applications: from narrow web label printing to wide format corrugated printing, from one color printed corrugated boxes to highly sophisticated multi-color security printing. Whatever your type of business, flexible packaging, folding carton or corrugated - from small to high volume, from simple to complex jobs that require the highest quality - there is a CDI that fulfills your needs.

Total flexibility

You can choose and configure a CDI to match your current production needs, and expand capabilities as your business grows. The CDI can accommodate all plate and sleeve sizes. And, you have the freedom to choose any brand of digital plate and processing method.

Reliable productivity

Powerful EskoArtwork workflow tools, combined with the unique features of the CDI, offer the fastest plate throughput along with the greatest reliability. Plate wastage is reduced to the absolute minimum.

Repeatable quality

The superior plate quality from a CDI is exactly what a printer needs to achieve outstanding results: fine highlights, excellent details and superb coverage in the shadows. The CDI delivers it the first time, and every time.

With CDI plates and sleeves, you can achieve quality and printing stability that before were only possible with offset or gravure. No wonder that over 90% of all digital flexo plates are imaged on a CDI!

Digital flexo: a better way

Working with DuPont, who produces plates for the process, EskoArtwork introduced the first Cyrel™ Digital Imager (CDI) at Drupa 1995. A black Laser Ablatable Mask (LAM) coating, only a few microns thick, was added to conventional photopolymer plates. On this LAM, the CDI images a 'negative' - similar to burning a film on a plate, but with much greater detail and quality. The advantage of this technology is that digital flexo plates need only 2-3% of the power required to directly engrave a UV-cured photopolymer plate.

Widest choice of plates

With a CDI, you can image flexo plates and sleeves for virtually any kind of application. With the CDI family's broad selection of sizes, you can choose from the widest variety of plate sizes. Any type and brand of digital flexo, digital letterpress plate or thermal ablative film can be used on a CDI.

Plate handling

The off-line plate-loading table provides safe, damage-free and distortion-free plate handling throughout the entire plate making process, from loading to unloading in the imager, UV-exposure or washer. The table includes a helpful plate-cutting tool.

Flexible resolutions and speed

All CDI optics feature fully variable imaging resolutions between 2000 and 4000 ppi, delivering a significantly extended tonal range with smooth vignettes and exceptional highlights and shadows. For special security applications, resolution can be increased to 8000 ppi. The CDI imaging resolution is determined solely by electronics control - there are no moving parts involved at all. So, imaging resolution can be easily adjusted from job to job.

Imaging speed depends on the modular laser optics you have selected for your own CDI. With the Optics 80 multibeam option, the CDI can reach a record imaging speed of up to 8.0 m^2/hr. In fact, the CDI Advance Cantilever can match the fastest plate processing equipment available in the industry.

Sleeves: a seamless way to flexo

Today there is a steady trend of converters who are adopting flexo sleeve technology. Using sleeves increases the printing press speed and delivers perfect register. There are no deformed or distorted sleeves after processing, resulting in the best geometric accuracy. Digital flexo sleeves can compete with gravure to print snack food wrappers, pouches, and frozen food bags that typically carry continuous images and only require a single cut prior to packing and sealing.

CDI seamless sleeves can be imaged on the CDI Advance Cantilever 1750 and the CDI Advance Cantilever 1450. EskoArtwork's sleeve imagers offer cantilever air cylinders - a system that allows one person to easily change a sleeve without additional tools.

Cyrel® Round digital flexo sleeves offer affordable quality on a CDI. Made-to-order digital blanks can be purchased, ready to image, with a variety of choices for different product segments. Every repeat length is available.

CDI Advance Cantilever 1750

The CDI fits in any workflow

The CDI is an essential part of a comprehensive, total flexo solution. The CDI seamlessly integrates with EskoArtwork's packaging workflow, or can work with any third party workflow system. The CDI controller manages the equipment, optimizing CDI productivity.

Smooth and fast packaging workflow

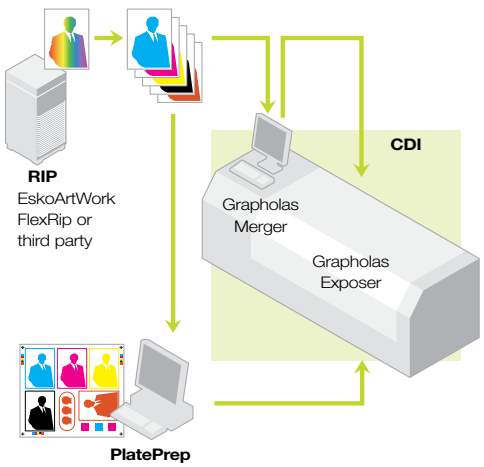
As the market leader in packaging prepress and preproduction, EskoArtwork offers the most complete packaging workflow solution, encompassing all the needs of the entire packaging supply chain. On the CDI the widest range of screens is available to control print quality on any substrate.

Grapholas: Powerful and dedicated front-end

Grapholas is the dedicated CDI front-end, accepting 1-bit TIFF or LEN-files from EskoArtwork's FlexRip or any third party RIP. The Grapholas Merger feature intelligently arranges your jobs on a virtual plate before sending them for exposure on the CDI.

PlatePrep and Digital Flexo Suite: Optimized imaging

PlatePrep is a powerful software tool developed for remote platemaking and for production distributed among several CDIs. It allows operators to easily allocate jobs over various sites, while maintaining centralized control over quality and consistency.
PlatePrep runs on a separate computer on the network - not necessarily near the CDI. It can merge jobs onto one plate, and offers the ability to visually check the content of the RIPped file. And, while the CDI is imaging one plate, it can concurrently prepare the layout for the next plate.



PlatePrep can oversee imaging - without interruption - on several CDIs at different locations.

The Digital Flexo Suite with PlatePatcher considerably helps to reduce plate use, resulting in an increase in CDI productivity.
The PlatePatcher feature minimizes overall plate consumption. Typically used for corrugated printing, PlatePatcher automatically divides large format layouts into a number of smallest-size plate patches, adding crossmarks and reference codes for reassembly.

CDI family: a model for every need

Name	Plate size/Sleeve size	Optics/Productivity
CDI Spark 2120	21" x 20" 533 x 508 mm	10 1.0 m²/h
CDI Spark 2530	25" x 30" 635 x 762 mm	15 1.5 m²/h 25 2.5 m²/h
CDI Spark 4835	48" x 35" 1200 x 900 mm	15 1.5 m²/h 25 2.5 m²/h 40 4.0 m²/h 80 8.0 m²/h
CDI Spark 4260	42" x 60" 1067 x 1524 mm	15 1.5 m²/h 25 2.5 m²/h 40 4.0 m²/h 80 8.0 m²/h
CDI Spark 5080	50" x 80" 1270 x 2032 mm	15 1.5 m²/h 25 2.5 m²/h 40 4.0 m²/h 80 8.0 m²/h
CDI Advance Cantilever 1450	42" x 60" 1067 x 1524 mm max. length 57,1" - 1450 mm max. repeat 50" - 1270 mm	15 1.5 m²/h 25 2.5 m²/h 40 4.0 m²/h 80 8.0 m²/h
CDI Advance Cantilever 1750	50" x 80" 1270 x 2032 mm max. length 69" - 1750 mm max. repeat 50" - 1270 mm	15 1.5 m²/h 25 2.5 m²/h 40 4.0 m²/h 80 8.0 m²/h

www.esko.com

JAN09 – G2558151_US/BIS

EskoArtwork
Kortrijksesteenweg 1095
9051 Gent
Belgium
Tel. +32 9 216 92 11
info.eur@esko.com

EskoArtwork
721 Crossroads Court
Vandalia, OH 45377
USA
Tel. +1 937 454 1721
info.usa@esko.com

EskoArtwork
Block 750C Chai Chee Road
#01-07/08 Technopark @ Chai Chee
Singapore 469003
Tel. +65 6241 21 26
info.asp@esko.com

EskoArtwork
Shinjuku i-LAND Tower 7F
5-1 Nishishinjuku 6, Chome,
Shinjuku-ku Tokyo, Japan 163-1307
Tel. +81 3 5909 7631
info.japan@esko.com

Copyright © 2006 Esko-Graphics. All rights reserved. All specifications are subject to alteration.