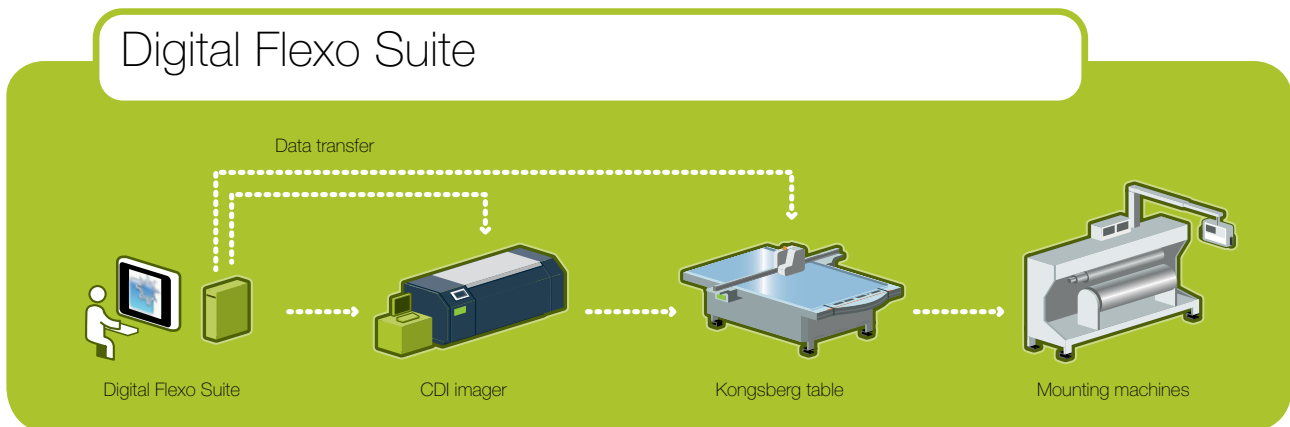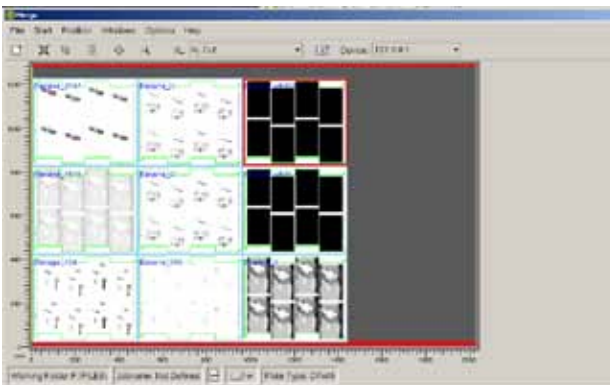# Digital Flexo Suite

The Digital Flexo Suite is a powerful and easy-to-handle workflow automation for the flexo plate making department. There are several software bundles optimized for Labels, for Flexible Packaging / Folding Carton and for Corrugated. Each bundle contains tools to enhance the plate making efficiency and to reduce plate wastage.

Digital Flexo Suite

Data transfer

Digital Flexo Suite   CDI imager   Kongsberg table   Mounting machines

Bundles

- The **Digital Flexo Suite for Labels** contains tools for job imposition and quality control (PlatePrep & Bitmap Viewer), innovative flexo plate cutting (XN/XL table connectivity) and plate identification.
- The **Digital Flexo Suite for Flexible Packaging and Folding Carton** contains tools for job imposition and quality control (PlatePrep & Bitmap Viewer), innovative flexo plate cutting (XN/XL table connectivity) and plate identification.
- The **Digital Flexo Suite for Corrugated** contains a tool to analyse large bitmap files and to reduce the file into small plate slugs (PlatePatcher). The corresponding mounting information is sent to the Kongsberg table (Plot & Cut workflow) or to a mounting device. The software suite also contains tools for job imposition and quality control (PlatePrep & Bitmap Viewer), innovative flexo plate cutting and plate identification.

Less plate wastage due to intelligent impositioning and automated flexo plate cutting.

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Digital Flexo Suite for Labels

LEN or TIF files are uploaded into the Digital Flexo Suite and merged intelligently to reduce plate wastage.
The optimized plate and the corresponding cutting layout are simultaneously sent to the CDI and the Kongsberg XN/XL table. Both the CDI imaging file (LEN) and the Kongsberg cutting file (ACM) carry identical names and registration marks, which are automatically imaged on the flexo plate (for later identification and registration).

Benefits
- Less plate wastage due to intelligent impositioning and automated flexo plate cutting
- Significant labor and error reduction
- Fast cliché identification in plate and press department
- Precise cutting along arbitrary shapes (option)
- Fit to press cut in one pass

Scribing

Options
- **Staggered Cut**: cut out a layout which defers from the LEN file for nested and staggered layouts
- **Tiff Output**: output hardware imaging files in TIF format instead of LEN

Staggered Cut

# Digital Flexo Suite for Flexible Packaging and Folding Carton

LEN or TIF files are uploaded into the Digital Flexo Suite and merged intelligently to reduce plate wastage.
The optimized plate and the corresponding cutting layout are simultaneously sent to the CDI and the Kongsberg XN/XL table. Both the CDI imaging file (LEN) and the Kongsberg cutting file (ACM) carry identical names and registration marks. These are automatically imaged on the flexo plate (for later identification and registration).

Benefits
- Less plate wastage due to intelligent impositioning and automated flexo plate cutting
- Significant labor and error reduction
- Fast cliché identification in plate and press department
- Precise cutting along arbitrary shapes (option)
- Fit to press cut in one pass

Options
- **Staggered Cut**: allows cutting non-straight lines in a flexo plate which is typically required to cut nested or staggered designs.
- **Centerline**: aims at automating the flexo plate production for bag, envelope and other direct press cylinder mounted plates. The centerlines on the backside of the plates are used to mount the plates directly to a groove on a press cylinder.
- **MicroCross**: a patented solution for embedding non-printing mounting marks in a flexo plate. It serves analogue mounting devices and leads to strong plate waste reduction.
- **Video Drill**: software tool to replace an existing method for drilling holes into a specifiable position in a flexo plate.
- **Tiff Output**: output hardware imaging files in TIF format instead of LEN.
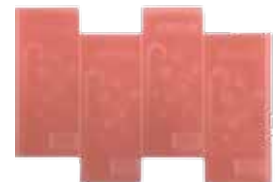
Staggered Cut

Digital Flexo Suite for Corrugated

LEN or TIF files are analyzed and split into smaller individual components to **reduce plate wastage** (PlatePatcher). Patches are imaged on the CDI and automatically cut out of the flexo plate by the Kongsberg XN/XL table. The carrier sheet can be plot (Die-cut & patch map) and cut to size going through the Digtal Flexo Suite workflow.

The **Plot and Cut** workflow is post print solution which is included in the Digital Flexo Suite for Corrugated and can be used for convenient flat visual mounting of unsensitive register work.

An optional **analogue paper mount workflow** (EPS output channel) can be added to the Digital Flexo Suite for Corrugated. It allows outputting a patch map in EPS file format. The EPS file is typically sent to a 1:1 paper plotter such as HP, Epson or Bieffebi Mounter, to obtain a map of the patched separations.

AutoMount workflow for perfect multicolor screened registration, is optionally available for the DuPont Macroflex and the AV Flexologic Optimount.

PreMount is the latest and most revolutionary mounting workflow for the Post-Print corrugated industry. It is literally the world upside down: raw material is mounted before it is imaged, cured, washed and dried!

The PreMount Workflow leads to an incredible reduction of plate consumption, offers a perfect print register and on top of all the workflow is kept simple (no experience required).

The optional **45° bevel knife** can cut the patches with a slope. The slope increases the glue contact and thus the sealing against solvent. On top of this the software can be configured to automatically cut the corners of the patches to reduce the pealing effect.

Benefits
- Significant plate wastage reduction
- Significant labor and error reduction
- Automated flexo plate cutting
- Automated carrier sheet preparation (plotting and cutting).
- Support for multiple workflows

Options
- **Bevel Cut**: 45° bevel knife to cut patches with a slope
- **AutoMount Output**: digital connection to several mounting machines such as AV Flexologic Optimount, DuPont Macroflex, Bieffebi (contact us!). Analogue Mirror Mounting workflow over EPS out available too.
- **iMask**: automated mask generator for the production of liquid photopolymer sheets for corrugated post-print (requires Tiff Output). Leads to reduced polymer consumption.
- **PreMount**: revolutionary mounting technique delivering high register precision and quality with a minimal plate and solvent consumption
- **Staggered Cut**: allows the cutting of non-straight lines in a flexo plate which are typically required to cut nested or staggered designs.
- **Tiff Output**: output hardware imaging files in TIF format instead of LEN.

Kongsberg table

- Kongsberg XL/XN20 (1680 x 1270 mm) or Kongsberg XL/XN22 (1680 x 2190 mm)
- FlexiHead-C Tool head (camera registration)
- XN/XL-Guide
- General purpose knife tool
- Fibre tip tool
- 45° bevel knife (only for corrugated)
- 2 vacuum zones
- Double density drill pattern (vacuum)
- 6kW vacuum pump
- PC

Accuracy and speed

The built-in camera (optional) allows fast and most accurate registration of the images. Using its accuracy and speed, plates are perfectly cut for direct press mounting without monopolizing the operator's precious time.
The washed out flexo plate can be labeled and cut by the Kongsberg table.
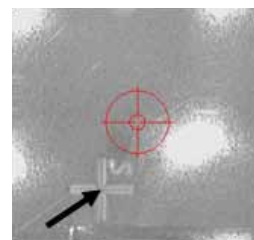
Hardware requirements (PC Digital Flexo Suite)

- Intel Dual Core processor
- 2 GB RAM
- Network board
- Screen resolution height of 1024 pixels
- CD ROM drive
- 32-bit or 64-bit operating system: Microsoft Windows 2000 SP4 / XP (SP3) / 2003 Server / 2008 Server / Vista / 7
- FTP server installed and enabled
- Grapholas 5.5 MR2 on the CDI

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