

HD Flexo - Full HD Flexo

The new quality standards for flexo printing

HD Flexo and Full HD Flexo are flexo solutions that make sure you no longer have to compromise on print quality. You can have the strong solids with vibrant brand colors and the sharp text and image details and the smooth vignettes.

Flexo no longer comes second to gravure or offset. Plates and sleeves made with HD Flexo and Full HD Flexo deliver consistent and repeatable results that will make you smile.



HD Flexo has set the new flexo printing standard for fine highlights, transition to zero, sharp text and brilliant image details.



Full HD Flexo is adding perfect ink laydown with the right solid density, vibrant brand colors, supreme platemaking consistency and the only fully digitally controlled platemaking workflow available in industry.

Now flexo can compete with gravure and offset in flexible packaging, labels and corrugated printing applications.





HD Flexo: today's flexo quality standard

HD Flexo has quickly become the new standard in flexo printing. HD Flexo is a process for making digital flexographic plates and sleeves for high quality flexo printing. Plates and sleeves give more consistent and higher quality results on the press. HD Flexo can be implemented by upgrading existing Esko CDIs and software.

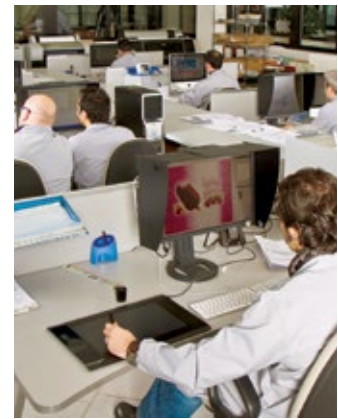
HD Flexo offers improved colors, smooth vignettes and sharp details. HD Flexo matches offset and gravure quality and consistency levels. It has raised the industry standard for flexo printing.

How does it work?

HD Flexo combines high resolution imaging at 4000 ppi using high definition optics in the CDI with unique HD Flexo screening technology.

The result is excellent print quality and a simplified plate production. The high resolution optics deliver more natural gray levels, sharper imaging of text and lines; and a better definition of screening dots.

HD Flexo is able to create a textured surface on the flexo plate or sleeve. This improves ink lay-down and increases ink density on the final print. This boosts image richness and contrast and is especially helpful for brand colors, and for white and spot color printing.



Courtesy of Inc. Flex

HD Flexo quality benefits:

- Smoother, sharper images with an expanded tonal range
- Bright impactful solids and a wider color gamut
- Improved results achievable with existing printing equipment
- Industry standard quality supported by all major plate vendors
- Suitable for labels and tags, flexible packaging, corrugated and carton print

Strong colors in contrast with light tones

Vibrant colors

Natural image reproduction



“ HD Flexo has done a great thing for the process image. HD Flexo brings the 9-12% dots down to 3-6% dots. You get a broader gamut range, sharper image, 150 lpi and tighter halftone dots. You get better ink transfer. HD Flexo gives you more ink saturation. That alone is a big plus.

Joe Lydic, Art Director, Ampac (USA)



Full HD Flexo: no compromises

Full HD Flexo combines all the benefits of HD Flexo with a gravure-like ink laydown and a fully digitally controlled platemaking workflow. Flexo offers now a level of quality and consistency with no need for compromises.

How does it work?


The Full HD Flexo technology combines high resolution imaging at 4000ppi (HD Flexo imaging and screening technology) with digitally controlled main exposure inside the CDI. The digital Inline UV2 main exposure through a LED-array delivers a UV power density high enough to gain full control over the polymerization process during main exposure.



The Inline UV2 digital main exposure now makes flexo platemaking fully digital. Human errors are reduced and the plate consistency is boosted enormously.

Controlling the dot shape

The unique Full HD Flexo platemaking process can digitally control the dot shape: Full HD Flexo plates and sleeves now combine the highlight capability of HD Flexo and the solid ink lay down capability and print stability of 'flat top' flexo plates.



CHIX CRISPS
Barbecue Chix Crisps

Smooth transitions to zero

Solid colors, strong homogeneity

0%	10%	Solid Density	
		DIGITAL FLEXP (1995)	1.25 microcells
		HD FLEXP (2009)	1.4 microcells
		FULL HD FLEXP (2012)	1.7 microcells

“ Thanks to the installation of Esko’s CDI with Inline UV2, Bischof + Klein is able to execute ‘Full HD’ flexo printing with high screen rulings and a convincing solid ink laydown. The first productions in higher print runs up to 250.000m also showed a very consistently reproduced quality, with print results exactly matching the proofs. We therefore already have many production jobs to be handled with Full HD Flexo in the pipeline.

Helmut Wenzl, Operations Manager at the Konzell printing plant of Bischof + Klein

Full HD Flexo: applications and benefits.

Full HD Flexo extends the boundaries of flexo printing for flexible packaging. Depending on the screen ruling used, Full HD Flexo has different capabilities and benefits:

- **Screen rulings between 110 – 130 ppi:** Full HD Flexo improves the quality of solids and whites, print consistency, press speed, and job changeover. Existing presses and anilox rollers can be used.
- **Screen rulings between 130 – 150 lpi:** Full HD Flexo enables the conversion of gravure work to flexo printing. Good image details and contrasts, highlights to zero and smooth vignettes can be achieved. Spot colors can be produced with higher vignette quality.
- **Screen rulings between 150 – 250 lpi:** the perfect solution to move gravure work to flexo. The print quality is stellar: excellent details, brilliant colors and smooth transitions to zero.

NOTE: Any HD Flexo installation can be upgraded to Full HD Flexo for CDI that can be upgraded to Inline UV 2. Full HD Flexo implementation requires that a set of standard operation procedures (SOPs) are followed. SOPs for Flexible Packaging applications are available now, SOPs for Corrugated printing will follow in June 2013 and for Label applications until end of 2013.

Become certified: position your company as a forerunner

HD Flexo and Full HD Flexo are the new standards for flexo quality. Companies that are HD Flexo or Full HD Flexo certified are among the best in their field. These companies are constantly innovating to offer the very best in flexo quality.

Using HD Flexo and Full HD Flexo sets you apart from your competition. Show that your company is an innovator: become HD Flexo or Full HD Flexo Certified.

