

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 do not 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.

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.

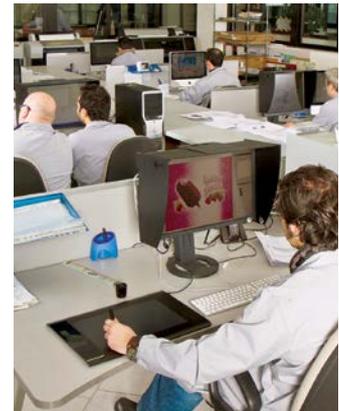
HD Flexo offers improved colors, smooth vignettes and sharp details. HD Flexo matches offset and gravure quality and consistency levels. It has raised the industry standard for flexo printing.

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

“ 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. Full HD Flexo brings 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.



Inline UV2 exposure makes flexo platemaking fully digital

Controlling the dot shape

Thanks to the Inline UV exposure of the plate in the CDI, Full HD Flexo plates have digitally controlled dot shapes. Full HD Flexo plates and sleeves combine the highlight capabilities of HD Flexo with the solid ink lay down capability and stability of “flat top” dot flexo plates and sleeves.

Strong colors in contrast with light tones

Vibrant colors

Natural image reproduction

Solid colors, strong homogeneity

Smooth transitions to zero

0%	10%	Solid Density	
		DIGITAL FLEXO	1.25 microcells
		HD FLEXO	1.4 microcells
		FULL HD FLEXO	1.7 microcells

Achieved solid ink densities depend on type of anilox and ink.

Full HD Flexo delivers HD Flexo highlight quality combined with gravure-like solid ink laydown

“ 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 **benefits.**

HD Flexo configurations can be upgraded to Full HD Flexo, if the CDI is upgraded to Inline UV2 and the necessary software updates are implemented. For each application a Standard Operating Procedure guarantees the best results.

Full HD Flexo for labels

- Considerable reduction of mottling on lower cost substrates
- Improvement in ink density
- Reduction of gear marks
- Greater stability in the highlights



Full HD Flexo for corrugated post-print

- Fluting reduction
- Improved image quality
- Improved highlight stability
- Better ink laydown, even with harder printing plates
- Significant solid ink density increase



Full HD Flexo for flexibles

Depending on the screen ruling used, Full HD Flexo has multiple benefits:

- › **110 – 130 ppi:** Improved quality of solids and whites, print consistency, press speed, and job changeover. Existing presses and anilox rollers can be used.
- › **130 – 150 lpi:** Move gravure work to flexo printing. Good image details and contrasts, highlights to zero and smooth vignettes. Spot colors with higher vignette quality.
- › **150 – 250 lpi:** Perfect to move gravure work to flexo. Stellar print quality, excellent details, brilliant colors and smooth transitions to zero.



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. Show that your company is an innovator: become HD Flexo or Full HD Flexo Certified.

