



DuPont™ Cyrel® DigiFlow

flexographic workflow



What is DuPont™ Cyrel® DigiFlow ?

- DuPont™ Cyrel® DigiFlow is a workflow enhancement that allows full support of solid screening programs in a standard digital workflow.
- The DigiFlow exposure unit creates a controlled atmosphere which allows optimum formation of screened solids while retaining all the productivity and consistency of the digital workflow.
- Solid screening programs will allow flexographers to achieve higher solid ink density when required with either digital Cyrel® or digital Cyrel® FAST plates



How Does DuPont™ Cyrel® DigiFlow Work?

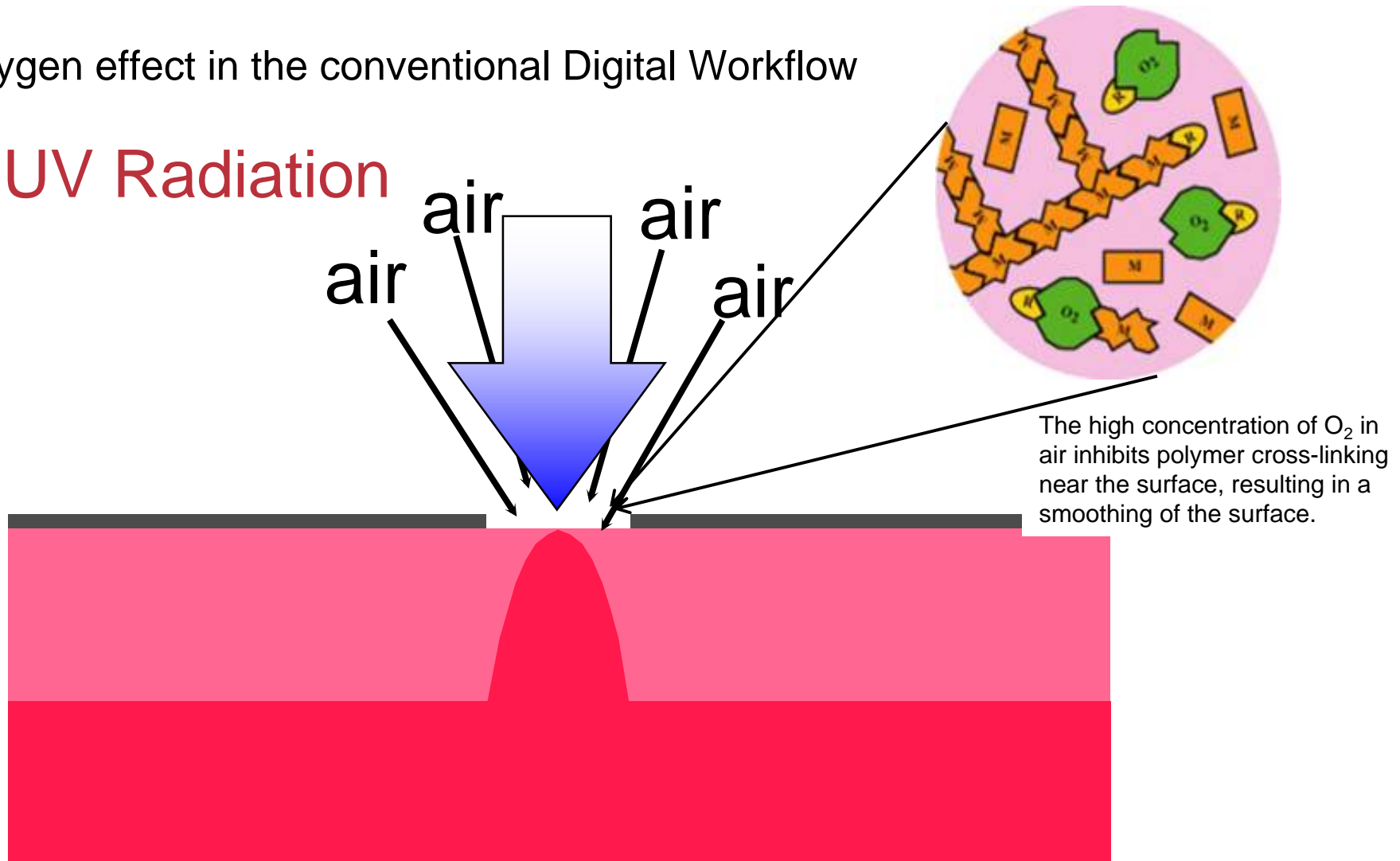
- Digital Cyrel® is imaged on an Esko CDI in the normal manner. During imaging, screening patterns such as Esko Groovy screens, HD Flexo Microcell or others are applied to the plate being imaged.
- The DigiFlow Exposure unit incorporates a modified exposure chamber that creates a precisely controlled atmosphere during the main exposure process.
This controlled atmosphere allows 1:1 reproduction between the LAMs layer and the plate, which results in hybrid digital dots and screened solids in the finished plate.
- The DigiFlow exposure unit is also fully supportive of the standard digital workflow. Simply return to standard operating mode for regular plates with standard digital dots
- DigiFlow is fully compatible with both solvent process and Cyrel® FAST digital plates



DuPont™ Cyrel® DigiFlow - Technical Details

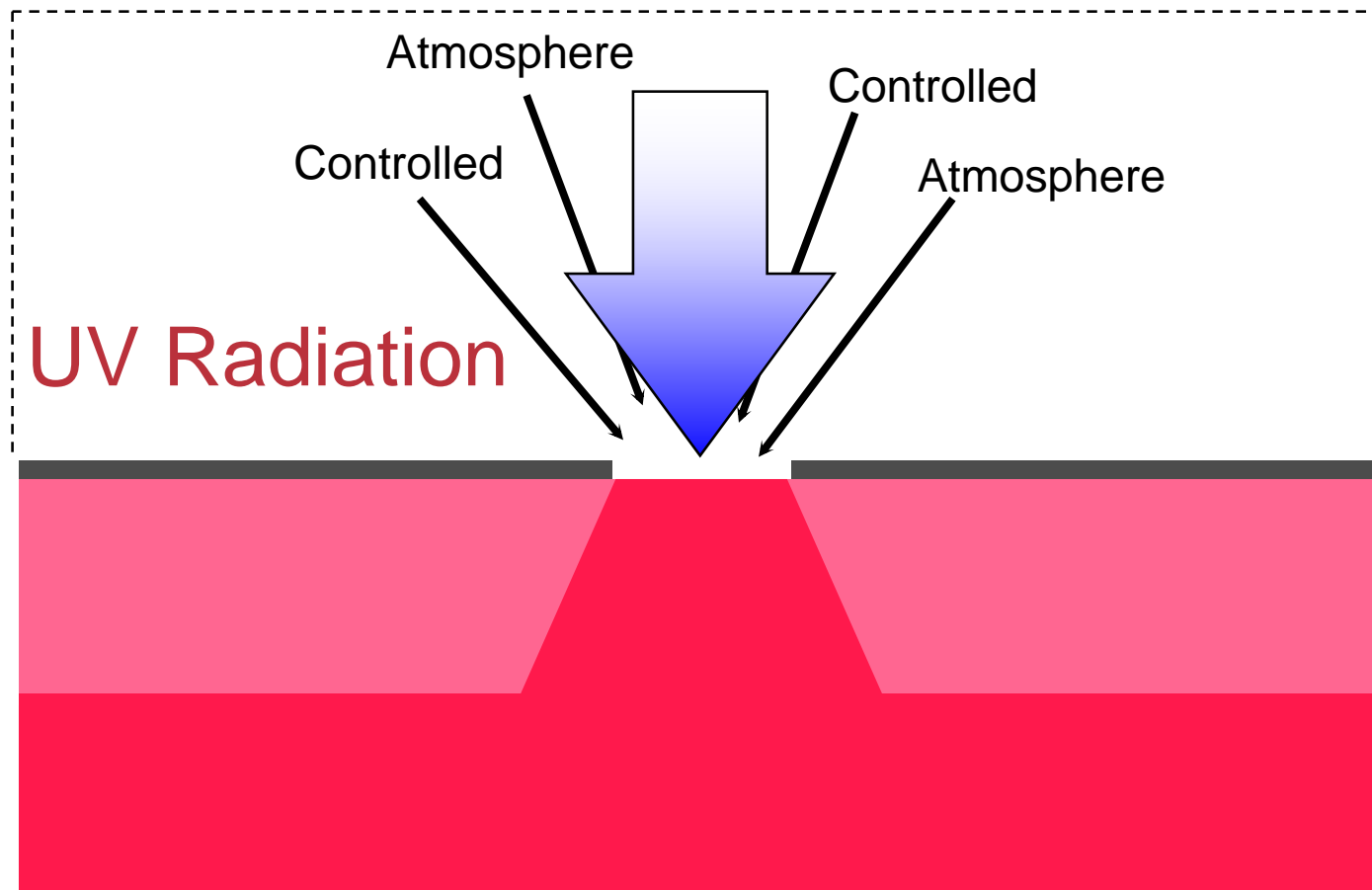
The Oxygen effect in the conventional Digital Workflow

UV Radiation



DuPont™ Cyrel® DigiFlow - Technical Details

The dot shape under a carefully controlled atmosphere – DuPont™ DigiFlow



So what's the difference between DigiCorr & DigiFlow?

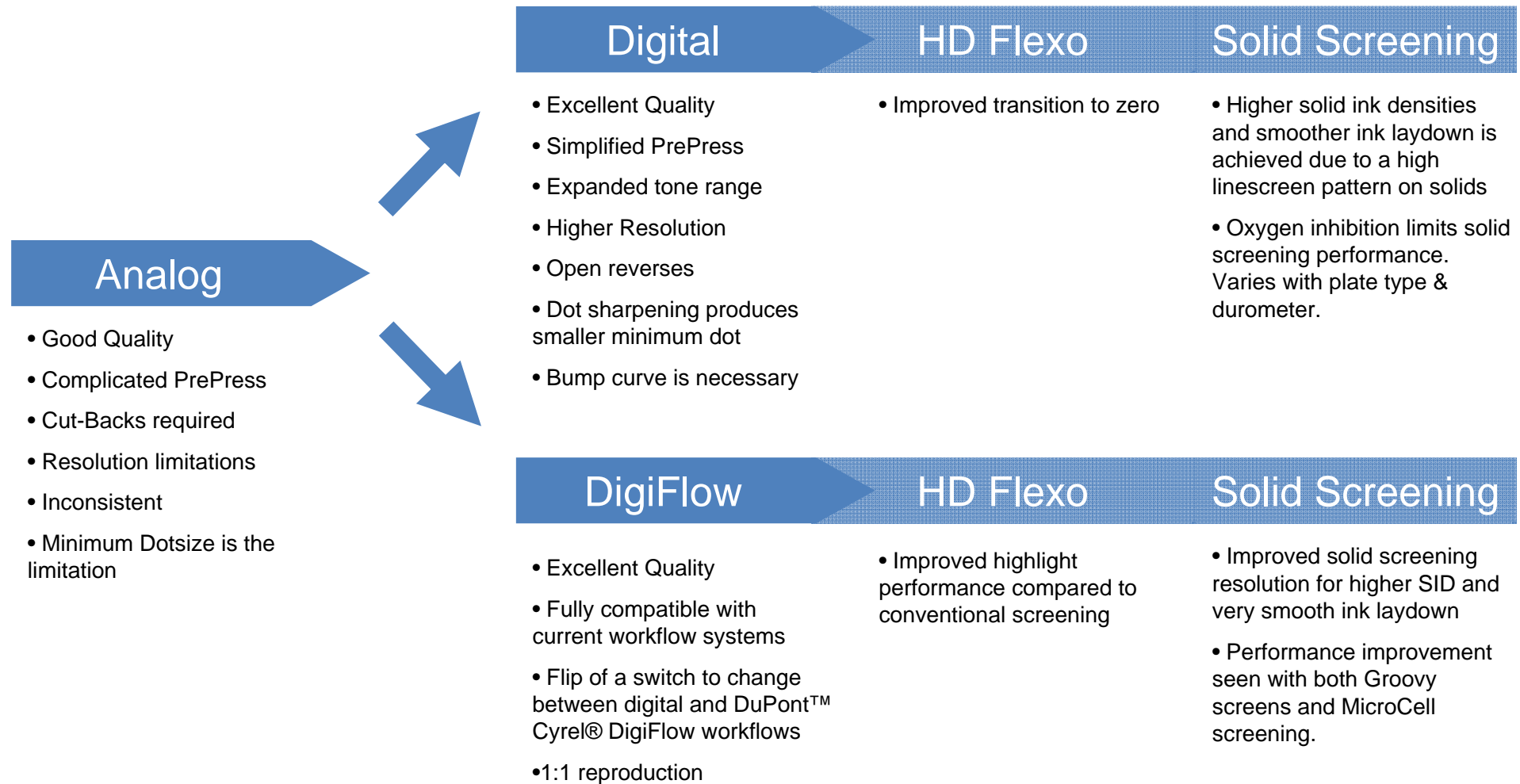
- Cyrel® DigiCorr was specifically developed to reduce fluting when printing with thick digital Cyrel® plates on corrugated board.
- The DigiCorr workflow exposes the digital Cyrel® in a nearly pure nitrogen atmosphere.
- This results in a hybrid dot with a broad base, steep shoulders and deep relief that is ideal for the corrugated market.



DigiFlow optimized for Flexible Packaging and Tag & Label

- The need in the flexible packaging and tag & label markets was to maintain all the benefits of the digital dot and utilize the existing workflow while incorporating the benefits of new solid screening technologies
- DigiFlow mixes precise amounts of oxygen and nitrogen to create a controlled exposure atmosphere that optimizes solid screening while maintaining small and consistent highlight dots.
- Digital Cyrel[®] and digital Cyrel[®] FAST plates with solid screening and exposed in DigiFlow exhibit significantly higher solid ink density with a much smoother appearance, and higher overall print contrast.

Digital Cyrel® - Technology Evolution & Workflow Options



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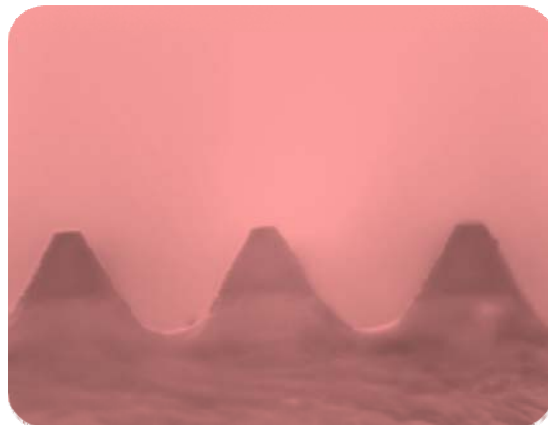
DuPont™ Cyrel® DigiFlow is a digital workflow enhancement designed to expand the capabilities of digital Cyrel® and digital Cyrel® FAST. The DigiFlow exposure system enables 1:1 image reproduction when a screened solid is beneficial, and with the flip of a switch returns to the standard digital exposure workflow whenever that is the preferred solution.

Features & Benefits

- Optimizes performance of solid screening programs such as Groovy or Microcell
- Improved solid ink densities
- Increased color gamut
- Easily integrated into existing workflows
- Compatible with all CDI Versions & HD Flexo
- No additional platemaking steps
- Maximum workflow flexibility
- Minimal consumable cost
- No environmental impact

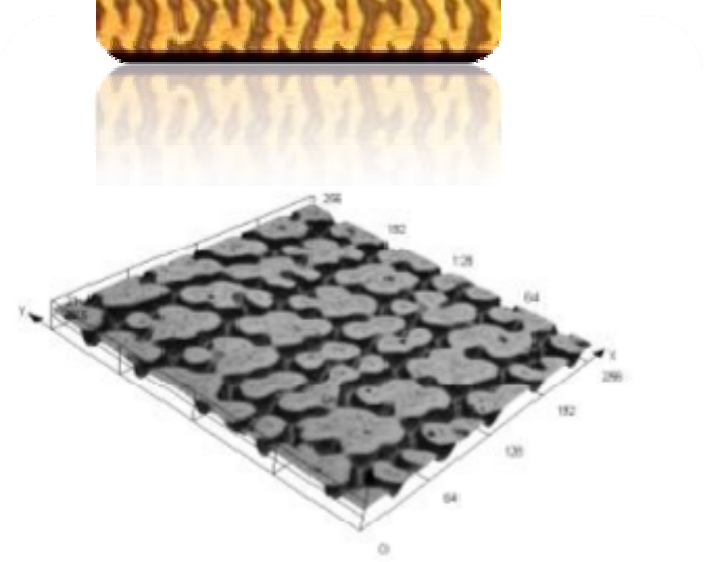
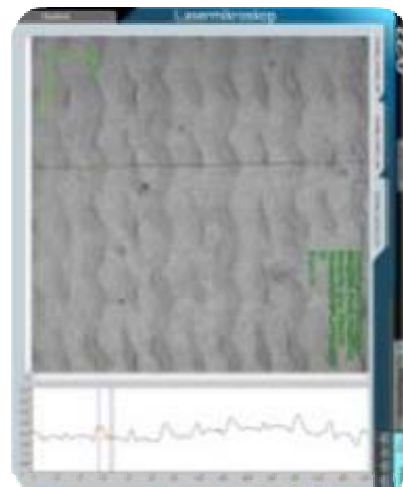
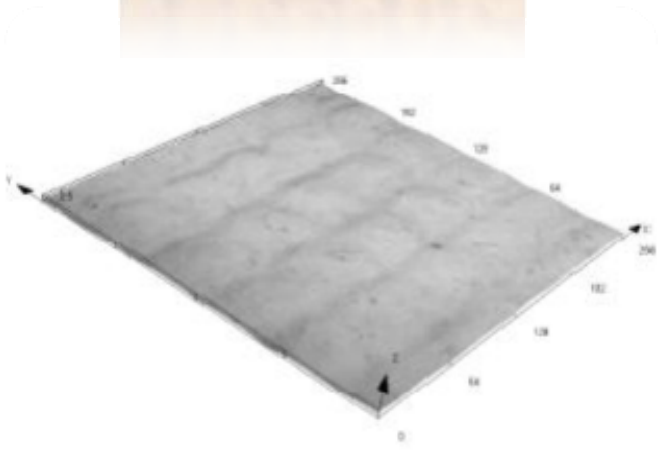
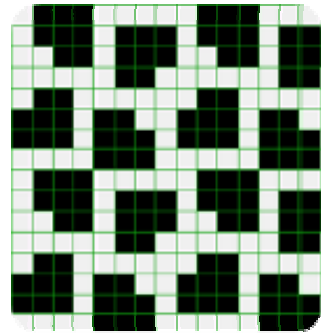
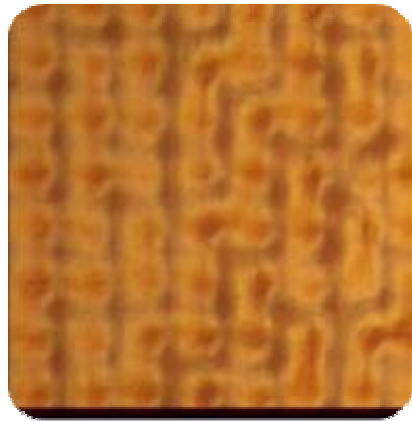


DuPont™ Cyrel® DigiFlow - Hybrid Dot



fine print elements on the plate

DuPont™ Cyrel® DigiFlow - Technical Details

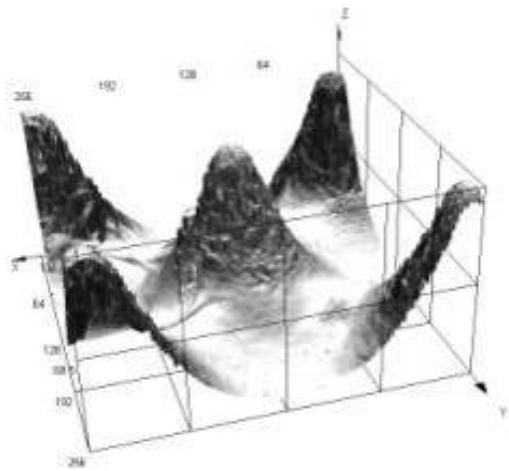


Surface in air

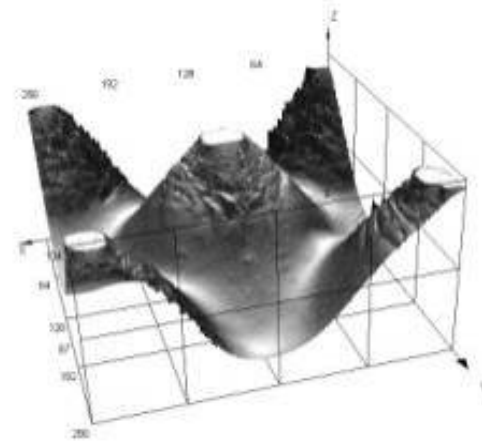
Corresponding LAMS mask

Surface in DigiFlow

DuPont™ Cyrel® DigiFlow - Technical Details



Dots formed in air



Dots formed in controlled
DigiFlow atmosphere

Digital Cyrel® DFH – Visual Comparison

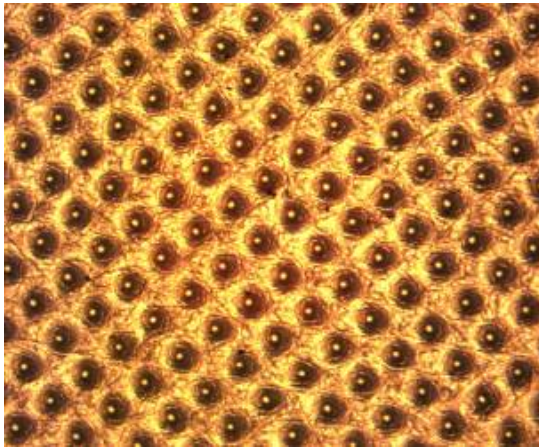


Digital Cyrel® DPR – Visual Comparison



DuPont™ Cyrel® DigiFlow – fine screen elements

67DFH 70L/cm(175Lpi), 1%



67DPR 70L/cm(175Lpi) 1%

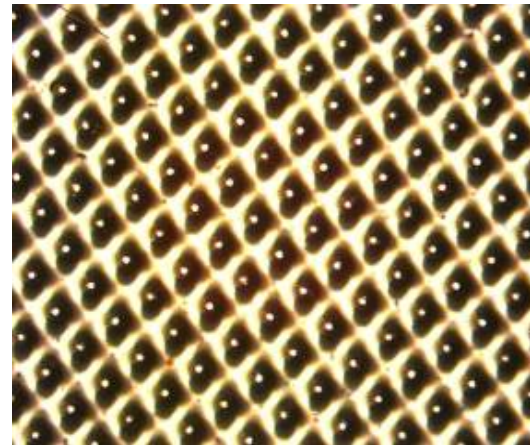


Plate Surface



Print

DuPont™ Cyrel® DigiFlow – Summary

- *Improved solid ink densities in wide web flexible packaging*
- *1:1 Image reproduction*
- *No additional platemaking steps*
- *Low initial investment*
- *Minimal consumable cost*
- *Easily integrated into existing workflows*
- *Maximum workflow flexibility*

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The continuing evolution of the digital Cyrel® workflow



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