

Flexo Plate & Image Analyzer

The Precise & Productive Tool For Today's Flexo

# Measure HD FLEXO WITH 3D IMAGING

SIR O

Transmission Reflection Dot Shape Print

Flexo Plates • Laser Masks • Film

Offset Plates • Prints • Stain Density

Halftone Dot Area • Letterpress Plates

NEW

Color Separation
Image Analysis
Comparison



3D D T Structure Imaging



Topographical Visualization and 3D Imaging Assures
Highlight Dot Integrity

ENLARGEMENT OF 3D DOT STRUCTURE IMAGING MEASURED AT 3-POINTS FOR HIGHLIGHT STRUCTURE

SAVE • TIME • MONEY • MATERIAL

The Key to High Quality Flexo



The Problem - Process variability, uncertain results, wasted material

**The Solution** - The Betaflex system simplifies process control with a familiar interface, unparalleled accuracy, and a powerful toolbox of functions.



## The Benefits Detect process variation before expensive errors propagate through the

system. Automatic data collection, plotting, and statistical analysis keeps the operator informed and the process on target. The built-in calibration function and target system provides maximum accuracy and inter-instrument agreement across the plant and around the world

# 3D Dot Structure Imaging



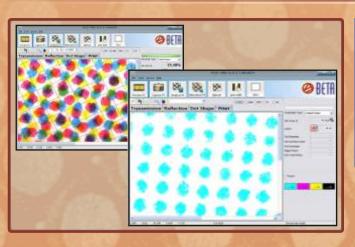
3D imaging is the only way to calibrate and control HD screening techniques. Photopolymer and elastomer plates are easily imaged, analyzed, and compared to the shop standard. The Pass/Fail indicator simplifies the production worker's job while detailed measurement data is available to the QC manager and technician.

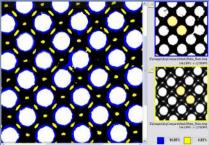


Using reflection illumination, plates are analyzed before or after mounting, flat on the bench, or mounted on the press. Plate wear and damage can now be evaluated before committing to running potentially bad plates.

Dot Structure Index gives a simple one-number analysis of the dot shape,

diameters at three points along the shoulder accurately describe the stability of the dot, and a reference and sample image comparator give a visual guide to the shape of the dot.





COLOR SEPARATION ANALYSIS from printed halftones, separated and analyzed for true halftone dot area analysis & correction. Useful for gray balance control and for printing without targets.

### IMAGE COMPARISON

Automatically rotates, scales, and overlays images to display and measure differences in dot area. See dot size change from mask to plate to print, plant to plant, or week to week. See changes in the process or materials, the plant or the method, before expensive errors spread through the system.

#### SYSTEM REQUIREMENTS

- Windows XP, Windows 7

- 100 MB for program & images

#### HARDWARE SPECIFICATIONS

- 1.3 MegaPixel mono camera
- 1 GB RAM 1 GHz Processor
   USB powered 1.7 microns/pixel
- USB 2.0 port 1024x768 display Self-contained case 6x8x15 in.
  - Weight 13 lbs

#### **FUNCTION SUMMARY**

- DOT Area%, Diameter, Perimeter Surface Area, Edge Factor
  - AM & FM dot area
     Line Width
  - Mean, Range, Standard Deviation

## Betaflex Pro Specifications

### **SAMPLE TYPES**

Halftone Pos. & Neg. Film, Laser Ablation Mask **Transparent Flexo Plates, Opaque Elastomer Plates Offset Plates, Letterpress Plates Color Print on Paper & Film** 

#### **CAMERA HARDWARE**

Camera USB2.0	1.3MPixe
2 D TOP VIEW Image resolution	1.7µ/Pixel
3 D OBLIQUE VIEW Image resolution	1u/Pixel

#### **ILLUMINATION**

**Transmission Reflection RGB & White 3D Illumination** 

#### **MEASUREMENT RESULTS AND FUNCTIONS**

**Dot Area 0.5%..98% % in 0.01%** Screen ruling...35 LPI-300 LPI Dot Diameter 0.1 µ / 0.1mil **Dot Surface Area 1µ² / 1mil²** Dot Perimeter & Edge Factor µ / mil **Mask Stain Density** Auto Line Width by click in 0.1  $\mu$  / 0.1mil Auto, Manual, & Preset screen ruling Fast alternative selection with drop down list.... **Full FM Screen Analyses Manual Dot selection by click Local Magnifier function Native Image Comparison** 2D Distance measured w/ruler 0.1 µ / 0.1mil

2D Angle measurement with ruler in 0.1ø **Dot Structure Index** Dot Diameter at -10µ, -30µ, -60µ depth **3D Minimum Dot Display** 

3D Diameter, Height, Angle 0.1 µ / 0.1mil, 0.1ø Full Image Exchange between devices