

The Precise
& Productive
Tool For
Today's Flexo

@ RFTA

0.8 mil

1.2 mil

60µm

# MEASURE HD FLEXO WITH 3D IMAGING

Flexo Plates • Laser Masks • Film

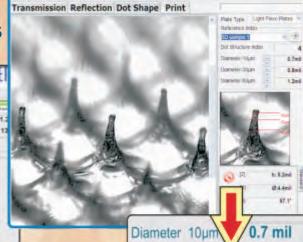
Offset Plates • Prints • Stain Density

**Halftone Dot Area • Letterpress Plates** 

Color Separation Image Analysis

Image Comparison





Diameter 30um

Diameter 60µm

3-D DOT

NEW! STRUCTURE ANALYSIS

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



Contact Beta or Your Dealer for a Free 10-Day Trial www.betascreen.com www.betascreen.net 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 variations 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



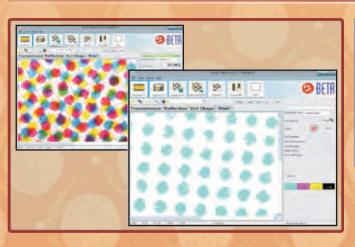
3D Imaging is the Only Way to Calibrate and Control HD Screening Techniques Photopolymer and elastomer plates are easily imaged, analyzed, and compared to the shop standard. The Pass/Fail indicator simplifies the production worker's job while detailed measurement data is available to the QC manager and

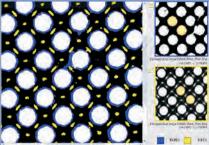


Using reflection illumination, plates are analyzed before or after mounting, flat on the bench, or mounted on the press. Plate wear and damage can now be evaluated before committing to running potentially bad plates.

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.

technician.

### 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 7, 8, XP
- 4 GB RAM 3 GHz Processor
- USB 2.0 port 1280x800 display
- 400 MB for program & images

#### HARDWARE SPECIFICATIONS

- 1.3 MegaPixel mono camera
- USB powered 1.7 microns/pixel
  - Self-contained case:
  - 6x8x15 inch (15x20x38) cm.
    - Weight 13 lbs. (5.89 kg.)

#### **FUNCTION SUMMARY**

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

### BETAFLEX PRO SPECIFICATIONS

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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..... 1.3MPixel

2 D TOP VIEW Image resolution..... 1.7μ/Pixel

3 D OBLIQUE VIEW Image resolution...... 1µ/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  $\mu$  / 0.1mil, 0.1ø

**Full Image Exchange between devices** 

**Statistical Functions & Report Generator** 

**Dot Area Plot** 

**Mean, Standard Deviation** 

**Data Import and Export** 

**Configurable Report with include/exclude list** 

**Measurement data or images** 

#### SIZE AND WEIGHT

Self contained portable case

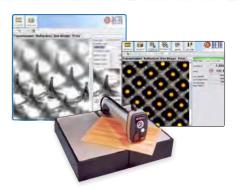
Transport size LxWxH: 18" x 14" x 12" / 45 cm x 35.5 cm x 30.4 cm

Weight: 10 lbs. / 4.53 kg. (Shipping: 16 lbs. / 7.25 kg)

Language Versions: English, German, French, Spanish, Italian, Japanese



## Betaflex Pro OPTIONS & ACCESSORIES



#### **BETAFLEX PRO FLEXO PLATE & IMAGE ANALYZER**

**Operates At The Highest Possible Resolution for HD Flexo** 

for the most accurate measurement in 3D DOT STRUCTURE MODE or 2D MODE as well as for stochastic screening.

Other Features: COLOR SEPARATION IMAGING (Print Mode), IMAGE COMPARISON, BAR CODE ANALYSIS, Measure Dot Area, Screen Ruling. Edge Factor and more. Data and images are easily captured and printed with the integral report generator and statistical analyzer. Also measures Offset & Letterpress plates, masks, & films.

## FlexiGage Digital Micrometers



Measure plate gauge, relief of thermal, aqueous, solvent, and direct ablation plates with Flexi-Gage Digital **Micrometers** to add the data directly to FlexoEyePlus Software. Use your plate gauge table with FlexiGage uses your plate table while the Betaflex Pro sensor can be mounted on the Sleeve Adaptor to measure sleeves in 2D and 3D mode with, FlexiGage Standard for sleeves from 80" X 16.7" (2000 mm X 424.18 mm)

## FlexoEyePlus Software



Optional software data collector/report generator guides the operator to collect just the data needed for high volume production with no unnecessary steps or obstacles for high production.

Convenient PASS/FAIL icons evaluate minimum dot and midtone dot while plotting the day's production on a convenient graph. Data is also input from the new FLEXIGAGE DIGITAL MICROMETERS, see above

XXL Long Arm Adaptor



Mounts Betaflex Pro sensor head & FlexiGage Micrometer 30 inches (920 mm) into the plate. Mask, plate and print halftone analysis as well as plate thickness and relief measurements with optional FlexiGage Micrometer.

\*Available as the BetaFlex XXL Long Arm System which includes Betaflex Pro Sensor or sold separately without sensor.

### **Betaflex Pro Sleeve Adaptor**



**Roll Mount** 



Dual transmission illuminators produce sharp, high-contrast images for accurate halftone dot analysis for the Betaflex Pro Measuring Head in both 2D & 3D modes.

Two Available Options: With Betaflex Pro Sensor Head or w/o to attach your existing Sensor head directly.

Format: Cut off: 12" to 49" (300 mm - 1250 mm) **Diameter:** 3.75" to 15.7" (95.5 mm - 398 mm)

Width: Maximum 80" (2000 mm)

\*Available as the BetaFlex Pro Sleeve Adaptor System which includes Betaflex Pro Sensor or sold separately without sensor.

**Documents plate wear and damage while the plate is still** on press. The Betaflex Pro sensor attaches to the Roll Mount, stabilizing the sensor on a stationary plate cylinder for 3D mode measurements. Web print samples can also be imaged on a stationary web over a turning bar or flat area on the press.