

# BETA FLEXPRO

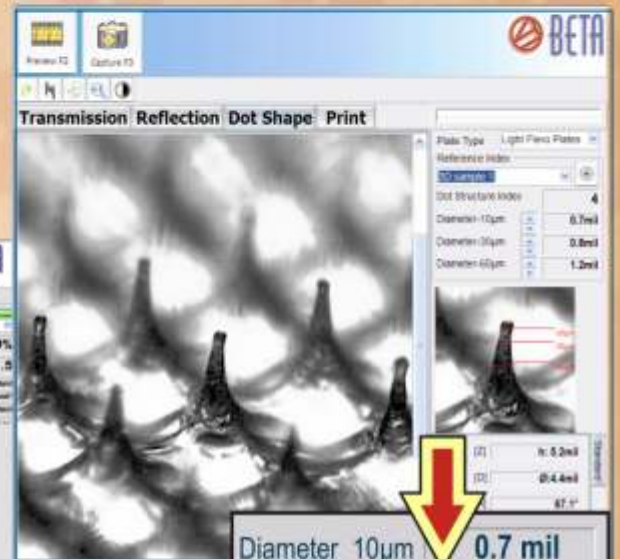
Flexo Plate & Image Analyzer

The Precise &  
Productive  
Tool For  
Today's Flexo

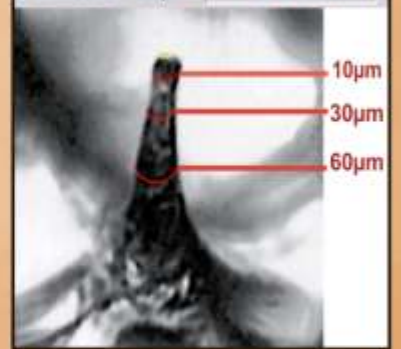
## Measure HD FLEXO WITH 3D IMAGING

Flexo Plates • Laser Masks • Film  
Offset Plates • Prints • Stain Density  
Halftone Dot Area • Letterpress Plates

Color Separation  
Image Analysis  
Comparison



Diameter 10µm	0.7 mil
Diameter 30µm	0.8 mil
Diameter 60µm	1.2 mil



## 3D DOT Structure Imaging



## 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 Quality Control Company

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**The Problem** - Process variability, uncertain results, wasted material

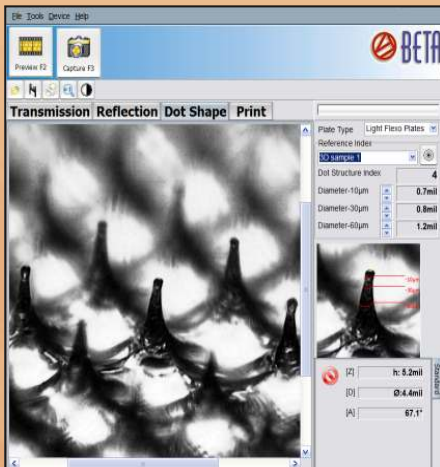
**The Solution** - The Betaflex system simplifies process control with a familiar interface, unparalleled accuracy, and a powerful toolbox of functions.

# BETA FLEXPRO

Plate & Image Analyzer

**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

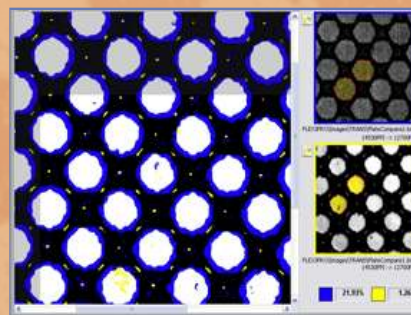
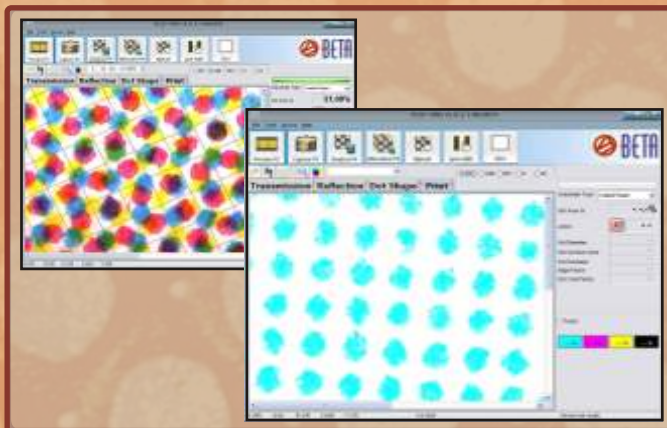


**3D imaging is the only way to calibrate and control HD screening techniques.** Photopolymer and elastomer plates are easily imaged, analyzed, and compared to the shop standard. **The Pass/Fail indicator simplifies the production worker's job while detailed measurement data is available to the QC manager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



## 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.

**IMAGE 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.

### SYSTEM REQUIREMENTS

- Windows XP, Windows 7
- 1 GB RAM • 1 GHz Processor
- USB 2.0 port • 1024x768display
- 100 MB for program & images

### HARDWARE SPECIFICATIONS

- 1.3 MegaPixel mono camera
- USB powered • 1.7microns/pixel
- Self-contained case 6x8x15 in.
- Weight 10 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.....1.3MPixel  
2 D TOP VIEW Image resolution.....1.7 $\mu$ /Pixel  
3 D OBLIQUE VIEW Image resolution.....1 $\mu$ /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  $\mu$  / 0.1mil  
Dot Surface Area 1 $\mu^2$  / 1mil<sup>2</sup>  
Dot Perimeter & Edge Factor  $\mu$  / 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  $\mu$  / 0.1mil  
2D Angle measurement with ruler in 0.1 $\circ$   
Dot Structure Index  
Dot Diameter at -10 $\mu$ , -30 $\mu$ , -60 $\mu$  depth  
3D Minimum Dot Display  
3D Diameter, Height, Angle 0.1  $\mu$  / 0.1mil, 0.1 $\circ$   
Full Image Exchange between devices

# Betaflex Pro OPTIONS & ACCESSORIES



## BETAFLEX PRO FLEXO PLATE & IMAGE ANALYZER

**OPERATES AT THE HIGHEST POSSIBLE RESOLUTION FOR HD FLEXO** to provide the most accurate measurement possible in both **3D DOT STRUCTURE MODE** and **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 measure offset plates, masks, & films.**

## Betaflex Pro Sleeve Adaptor



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:** Complete with Betaflex Pro Sensor Head or adaptor only to attach your existing Sensor Head directly.

**Format:** Cut off: 12" to 49" (300mm - 1250mm)

**Diameter:** 3.75" to 15.7" (95.5mm - 398mm)

**Width:** Maximum 80" (2000mm)

## FlexoEyePlus Software



The new 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 **FLEXI-GAGE DIGITAL MICROMETERS**, see below

## Flexi-Gage Digital Micrometers



**Measure plate gauge and relief of thermal, aqueous, solvent, and direct ablation plates with Flexi-Gage Digital Micrometers** to add the data directly to FlexoEye Plus Software. Use your plate gauge table with Flexi-Gage Light 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 **Flexi-Gage Standard** for sleeves from 80" X 16.7"

## XXL Long Arm Adaptor



for **LARGE** plates

Mounts Betaflex Pro sensor head and or Flexi-Gage 30" into the plate. Mask, plate and print halftone analysis as well as plate thickness and relief measurements with optional Flexi-Gage Digital Micrometer.

## Roll Mount



**DOCUMENTS PLATE WEAR AND DAMAGE WHILE THE PLATE IS STILL ON PRESS.** The Betaflex Pro Sensor Head 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.