

BetaFlex PRO

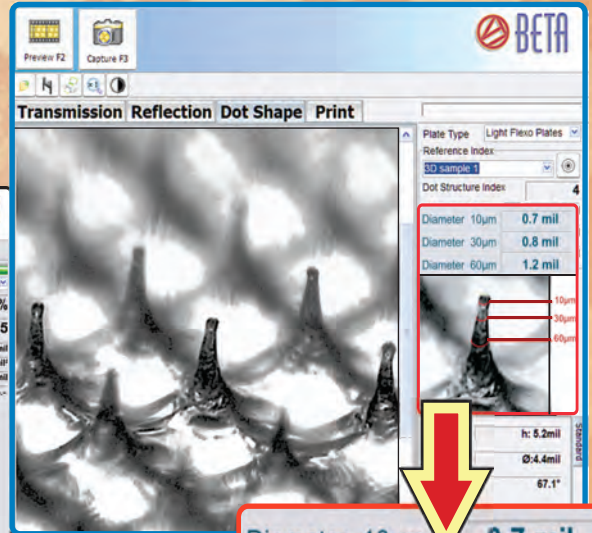
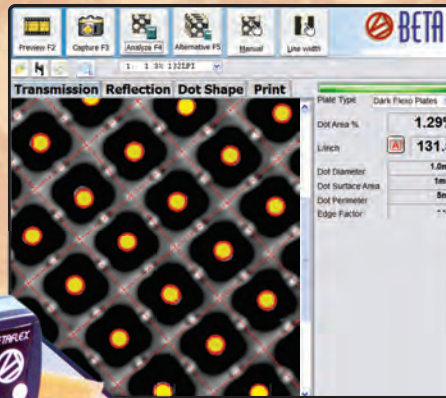
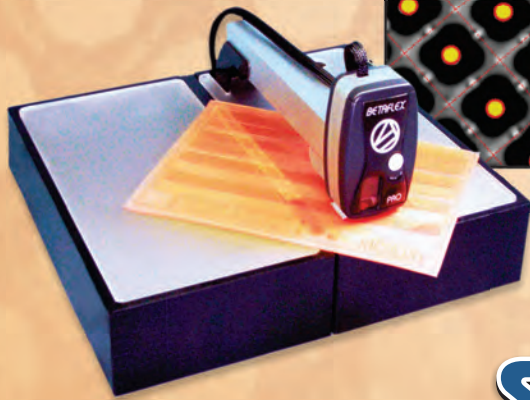
Plate & Image Analyzer

The All-In-One
Analyzer For
Today's Flexo

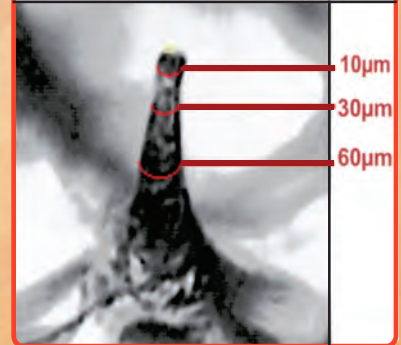
MEASURE HD FLEXO WITH 3D IMAGING
Measure 0.5% Highlights at 300 LPI & BETTER

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



3-D DOT STRUCTURE ANALYSIS

Topographical Visualization
and 3D Imaging Assures
Highlight Dot Integrity

Enlargement Of A Poorly Formed Dot Using 3D Dot Structure Imaging
Measured at 3-points For Highlight Structure

SAVE • TIME • MONEY • MATERIAL
The Key to High Quality Flexo

 **BETA INDUSTRIES**
The Quality Control Company

Contact Beta or Your Dealer
for a **Free 10-Day Trial**
www.betascreen.net
Email: sales@betascreen.net
Tel: 201-939-2400, 800-272-7336



The Problem - Process Variability, Uncertain Results, Wasted Material

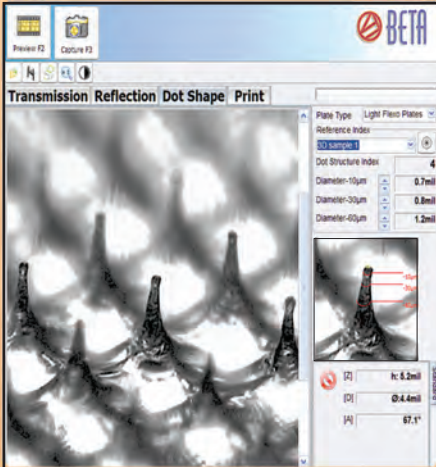
The Solution - The Betaflex system simplifies process control with a familiar interface, unparalleled accuracy, and a powerful toolbox of functions

The Benefits **DETECT PROCESS VARIATIONS BEFORE EXPENSIVE ERRORS SPREAD THROUGH PRODUCTION STREAM.** 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

BetaFlex PRO

Plate & Image Analyzer

3D Dot Structure Imaging



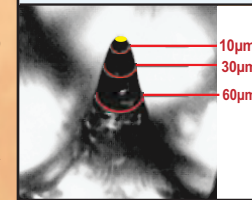
3D Imaging is the Only Way to Calibrate and Control HD Screening Techniques. Photopolymer and elastomer plates are easily imaged, analyzed, and compared to the shop standard. **“Dot Structure Index” simplifies the production worker's job while detailed measurement data is available to the QC manager.**

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. Higher Dot Structure Index numbers show a better dot.

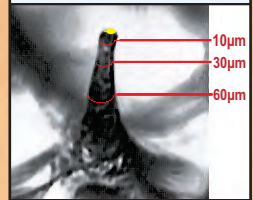
GOOD DOTS

BAD DOTS

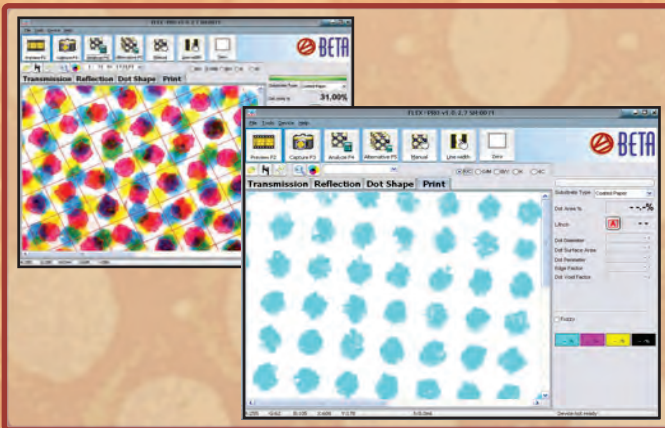
Dot Structure Index	26
DIAMETER 10µm	0.8 mil
DIAMETER 30µm	1.4 mil
DIAMETER 60µm	2.1 mil



Dot Structure Index	7
DIAMETER 10µm	0.7 mil
DIAMETER 30µm	0.8 mil
DIAMETER 60µm	1.2 mil



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.



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.

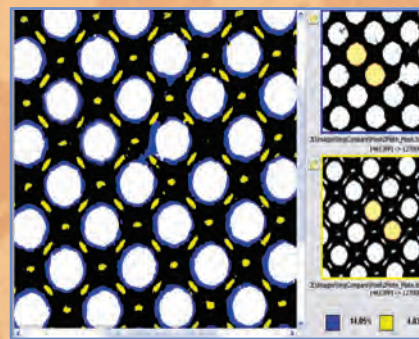


IMAGE COMPARISON

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.

FUNCTION SUMMARY

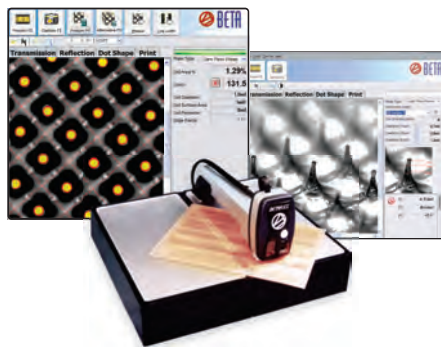
- Dot Area%, Diameter, Perimeter
- Surface Area, Edge Factor
- AM & FM Dot Area • Line Width
- Mean, Range, Standard Deviation

SYSTEM REQUIREMENTS

- Windows 7, 8 or, preferred 10 (64 Bit)
- 8 or 16 GB RAM • 3 GHz Processor
- USB 2.0 port • 1280x1024 recommended
- 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 9.2 lbs. / 4.2 kg.
- Shipping Weight: 13 lbs. /5.90 kg.



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** 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 measure offset plates, masks, & films.**

XXL Long Arm System or XXL Adaptor



FOR LARGE PLATES

Mounts Betaflex Pro sensor (measuring head) and or FlexiGage Micrometer, see below, 30" / 76 cm. into the plate. Mask, plate and print halftone analysis as well as plate thickness, relief measurements with optional FlexiGage Micrometer. **Purchase as a complete system with measuring head or as an accessory to your existing BetaFlex Pro.**

FlexiGage Digital Micrometers



Measure plate gauge, relief of thermal, aqueous, solvent, and direct ablation plates with **FlexiGage Digital Micrometers** to add the data directly to FlexoEye Plus Software ISO database software, see below. The Betaflex Pro Sensor (Measuring Head) and FlexiGage Micrometer can also be mounted on the Sleeve Adaptor or XXL Long Arm System. The **FlexiGage Micrometer** can also be mounted on your existing plate table.

FlexoEye Plus 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. Data is also input from the **Flexigage Digital Micrometers**, see above. Contains the **NEW Workflow Automation Software, QR Code driven relational database workflow generation.**

Roll Mount



DOCUMENT 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.

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

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

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

Width: Maximum 80" (2000mm)

BETAFLUX 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 μ /Pixel
3 D OBLIQUE VIEW Image resolution..... 1 μ /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 1 μ^2 / 1mil²
Dot Perimeter & Edge Factor μ / mil
Mask Stain Density
Auto Line Width by click in 0.1 μ / 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 0.1 ϕ
Dot Structure Index
Dot Diameter at -10 μ , -30 μ , -60 μ depth
3D Minimum Dot Display
3D Diameter, Height, Angle 0.1 μ / 0.1mil, 0.1 $^\circ$
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: 15" x 8" x 6" (36cm x 20cm x 15cm)
Weight: 10 lbs. / 4.53 kg. (Shipping: 16 lbs. / 7.25 kg)
Language Versions: English, German, French, Spanish, Italian, Japanese