BetaFlex PRO2

Plate & Image Analyzer

The All-In-One Industry Standard for Today's Flexo

Control 0.5% Highlights at 300 LPI & BETTER
Control HD Flexo With 3D Imaging

Save Time • Money • Materials

New Features

4-Different Focus Levels
for even sharper images of the plate and down to the plate floor

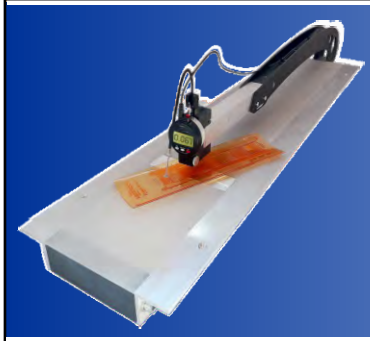
New Electronics and Microprocessor Technology
field upgradable Firmware, new LED technology with more powerful illumination

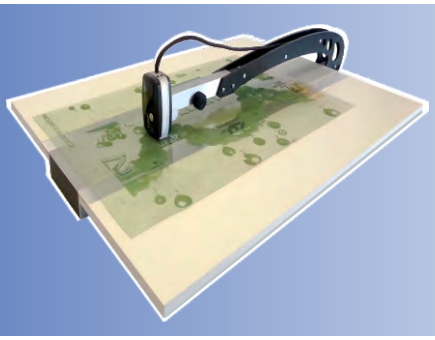
Reflection Illumination, Including RGB Illumination
from two sides and IR illumination for black ink separation

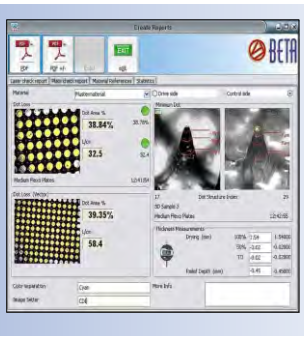
New Transmission LED's
for improved inter-instrument agreement

The Key to High Quality Flexo

BetaFlex Pro2 Options & Accessories







Micrometer Table • FlexiGage Micrometer • XXL Long Arm System • FlexoEyePlus Software • Roll Mount

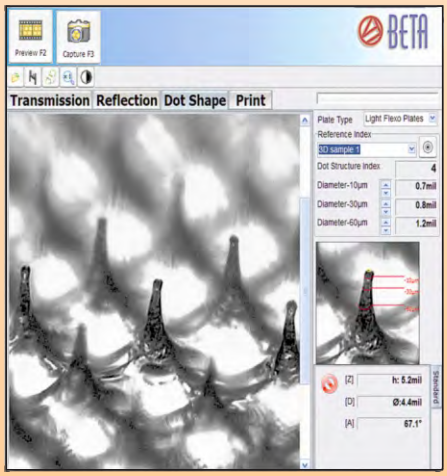
The Problem - Process Variability, Uncertain Results, Wasted Material

The Solution - The Betaflex Pro2 simplifies process control with a familiar interface, unparalleled accuracy, and a powerful toolbox of functions

BetaFlex PRO2
Plate & Image Analyzer

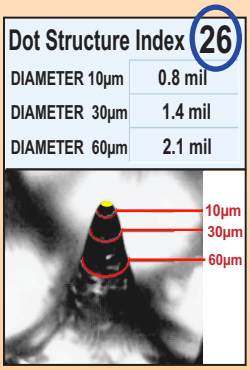
The Benefits **Detect Process Variations Before Expensive Errors Spread Through The Production Stream.** Automatic data collection, plotting, and statistical analysis keeps the operator informed and the process on target. The built-in calibration function and target system provides maximum accuracy and inter-instrument agreement across the plant and around the world.

3D Dot Structure Imaging

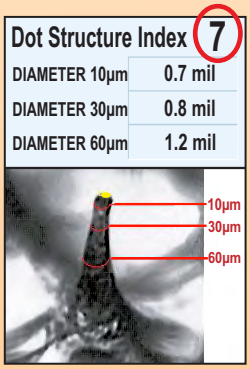


3D Imaging is the Only Way to Calibrate and Control HD Screening Techniques. Photopolymer and elastomer plates are easily imaged, analyzed, and compared to the shop standard. **"Dot Structure Index" simplifies the production worker's job while detailed measurement data is available to the QC manager.**

GOOD DOTS



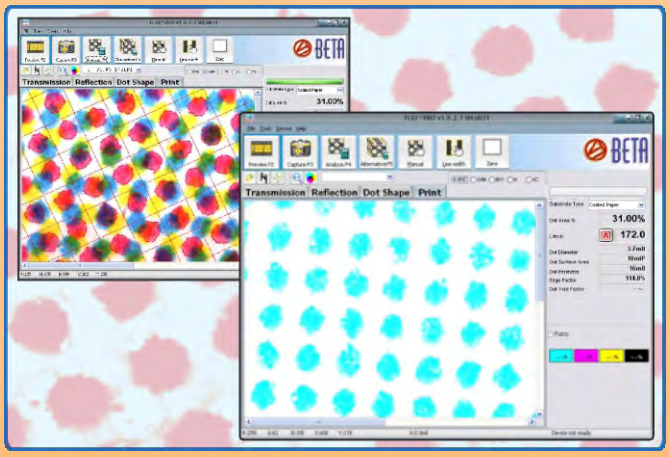
BAD DOTS



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.

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.

Analyze LAMS after imaging, fotopolymer plates, elastomere plates, 3D flexo dot shapes, floor cleanliness, and print samples. The Betaflex Pro2 is self contained and portable, easily transportable and ideal for service calls.

The BetaFlex Pro2 measuring head can be dismounted and used without the base for 3D analysis applications that only require the reflection light source such as DLE Plate measurements.

SYSTEM REQUIREMENTS

- Windows 10/11, 32 or 64 bit (preferred)
- 8 or 16 GB RAM • 3 GHz Processor
- USB 2.0 port • 1920x1080display
- 400 MB for program & images

FUNCTION SUMMARY

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

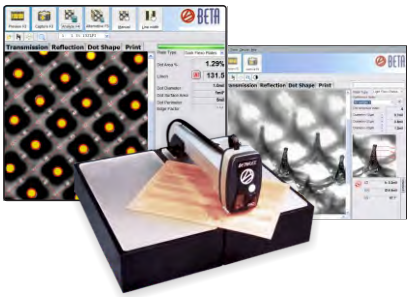
HARDWARE SPECIFICATIONS

- 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 PRO2
Plate & Image Analyzer

OPTIONS & ACCESSORIES



BETAFLEX PRO2 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.**

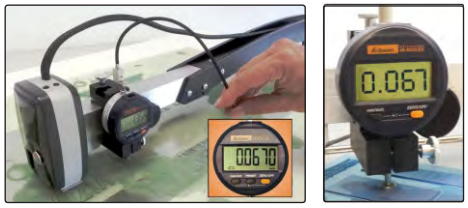
XXL Long Arm System or XXL Adaptor

FOR **LARGE** PLATES

Mounts Betaflex Pro2 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.**

Also see BetaFlex Pro2 Sleeve System and Adaptor

FlexiGage Digital Micrometer



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.

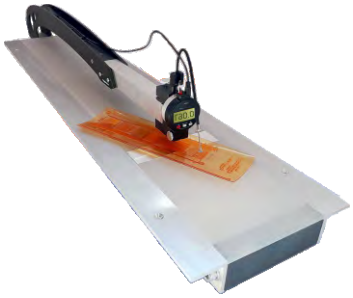
FlexoEyePlus Software

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,*** **NOW WITH WORKFLOW AUTOMATION! Relational database to track plates and jobs through the entire process. QR codes, ERP system, and the Esko Automation Engine are used to maintain an active accessible database.**

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 Micrometer Table



Portable and Easy-to-Fit or Retrofit Micrometer Table with High Precision Micrometer(s) for perfect measurement of depth and relief of your flexographic plates. The optional FlexiGage Software makes it easy to maintain a database for ISO or internal quality records and documentation.

Two Available Options:

FlexiGage Micrometer 1: resolution 0.00005 - 0.001 mm
FlexiGage Micrometer 2: resolution 0.0005" - 0.01 mm

Measure Plates as large as 60" / 1524 mm.

BetaFlex Pro2 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.....1.7µ/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 1μ^2 / 1mil^2
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 0.1ø
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
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

BETA INDUSTRIES
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Flexo Analyzers & Calibration, Densitometer-Spectros, Color Viewers, Magnifiers, Testing Equipment