Betaffex PRU2 Plate & Image Analyzer

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

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



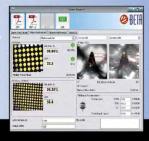
New Features

- 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
- New Reflection Illumination Including RGB Illumination from two sides and IR illumination for black ink separation
- New Transmission LED's, controlled by the microprocessor improving inter-instrument agreement

The Key to High Quality Flexo Save Time • Money • Materials

Betaflex Pro2 Options & Accessories











The Problem - Process Variability, Uncertain Results, Wasted Material BetaFlex PR02

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

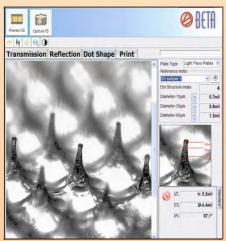


The Benefits Detect Process Variations Before Expensive Errors Spread

Through The Production Stream. Automatic data collection, plotting, and statistical analysis keeps

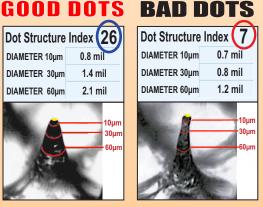
the operator informed and the process on target. The built-in calibration function and target system provides maximum accuracy and inter-instrument agreement across the plant and around the world.

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.

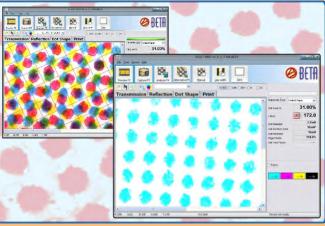
	
Dot Structure Index (26)	
DIAMETER 10µm	0.8 mil
DIAMETER 30µm	1.4 mil
DIAMETER 60µm	2.1 mil
10µm 30µm 60µm	



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

FUNCTION SUMMARY

HARDWARE SPECIFICATIONS

- Windows 10/11, 32 or 64 bit (preferred)
 Dot Area%, Diameter, Perimeter
- 8 or 16 GB RAM 3 GHz Processor

USB 2.0 port • 1920x1080display

- Surface Area, Edge Factor
- · AM & FM Dot Area · Line Width
- Mean, Range, Standard Deviation Shipping Weight: 13 lbs. (5.90 kg.)
- 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.)

400 MB for program & images

Plate & Image Analyzer



Betaflex PRO2 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.

FlexiGage Digital Micrometer

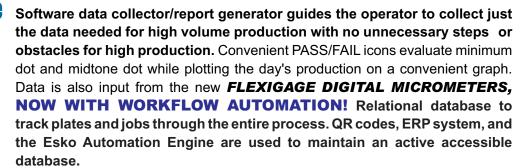




Measure plate gauge, relief of thermal, aqueous, solvent, and direct ablation plates with FlexiGage Digital Micrometers to add the data directly to FlexoEye Plus Software ISO database software, see below. The Betaflex Pro Sensor (Measuring Head) and FlexiGage Micrometer can also be mounted on the Sleeve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

FlexoEyePlus Software





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 Pro2 Measuring Head or w/o to attach your existing Betaflex Pro2 Measuring Head directly.

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

Width: Maximum 80" (2000mm)

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 1µ2 / 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 0.1ø

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



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

Email: <u>sales@betascreen.net</u>
Tel: 201-939-2400, 800-272-7336

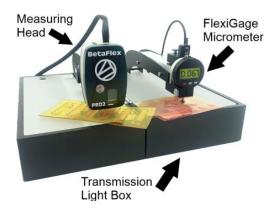


Betaflex Pro2 and FlexiGage Micrometer

The Best Just Got Better!

With an installed user base of more than 1,000 units worldwide of the popular industry standard BETAFLEX PRO FLEXO PLATE & IMAGE ANALYZER (Flex3Pro), we are proud to announce the introduction of the NEW BETAFLEX PRO2 FLEXO ANALYZER (Flex4Pro).

The BETAFLEX PRO2 combined with the new FLEXIGAGE MICROMETER are a perfect combination for measuring and controlling flexo plates for process control in production. The new four focus level feature provides information on plate cleanliness levels, the new operating software simplifies the operation of the device. The FLEXIGAGE MICROMETER enables quick measurement of plate gauge and relief depths.



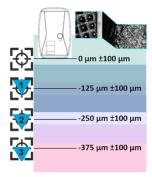
The FlexiGage Micrometer is one of the many options available for the BETAFLEX PRO2, see available options. The BetaFlex Pro2 can be used with or without the FLEXIGAGE MICROMETER. The FLEXIGAGE MICROMETER can also be used as a stand-alone without the BETAFLEX PRO2.



Using the most current and advanced technical resources available the new BETAFLEX PRO2 contains enhanced and new features:

- Mechanical improvements include additional bearings for the vertical arm movement and a new connector between the measuring head and transmission light box.
- New electronics and microprocessor technology, field upgradable firmware, new LED technology with a more powerful light source.
- New illumination in the reflection mode, including RGB illumination from two sides and IR illumination for black ink separation.
- New illumination in transmission mode, controlled by the microprocessor improving inter-instrument agreement,

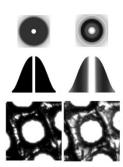
• The BETAFLEX PRO2 adds 4-focus levels to obtain sharp images inside the plate down to the plate floor.



• The focus level is selected by the Software.



 High Contrast image transmission optics for measurement (identical to BETAFLEX PRO) and Detail Contrast Image for visual control switchable by Software



Redesigned Software reorganizing all functions to improve the ease of use.



- The Stain Density Factory calibration has been improved
- LAMS readings are displaying the corresponding density value
- CMYK readings in 4 colors using the IR Illumination for black color
- The verification on the TARGET now implements an additional feature for remote device calibration. The calibration can be done remotely without the need to ship back the device to the factory, if the deviation does not exceed a certain tolerance.
- New Software Functions like measurement of dot area and screen ruling in 3D and improved dot recognition in transmission measurement mode (2D mode).

The new BETAFLEX PRO2 is next generation technology for controlling the plate making process.