

# BetaFlex PRO2

## Plate Image & Print Analyzer

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

Correct & Control Plate Image & Print Halftones

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



### New Features

**4-Different Focus Levels**  
for even sharper images of plates  
& down to the plate floor View Washout

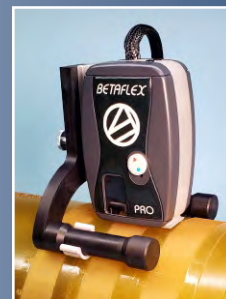
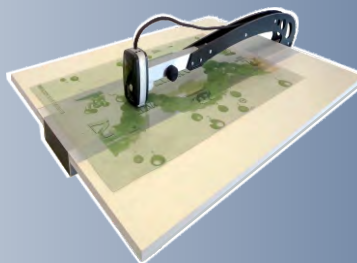
**New Electronics and  
Microprocessor Technology**  
field upgradeable Firmware, new LED  
technology with more powerful illumination

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

**New Transmission LED's**  
for improved inter-instrument agreement

**Better Plates • Longer Runs • The Key to High Quality Flexo**

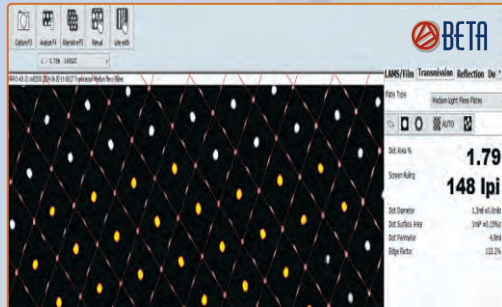
## BetaFlex Pro2 Options & Accessories



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

# The Problems → THE SOLUTION → The Benefits

- Process Variability
- Expensive Unusable Plates
- Uneven Results
- Wasted Materials
- Time Consuming Guesswork



**1.79% Highlight Measurement / 2D Dot Diameter • Dot Surface Area Dot Perimeter • Dot Edge Factor**

**The BetaFlex Pro2 Analyzes Plate Images and Print Halftones to Correct and Control All The Important Criteria**

- **Dot Percent (%)**
- **Optimal Dot shape (3D)**
- **Screen Ruling**
- **Dot Diameter & More**

**User-friendly process control** with unparalleled accuracy and a powerful toolbox of functions!

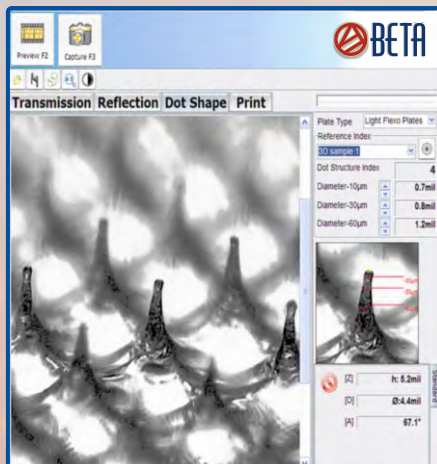
- Better Plates
- Longer Runs
- Superior Highlights
- Fewer Production Issues

**DETECT PRE-PRESS PROBLEMS BEFORE Expensive Errors Spread Through the Production Stream.**

Halftone analysis keeps the operator informed & the process on target.

Built-In calibration System guarantees maximum accuracy and inter-instrument agreement, across the plant or around the world!

## 3D Dot Structure Imaging



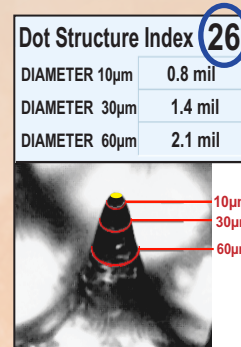
**3D Imaging is the Only Way to Calibrate and Control HD Screening Techniques.**

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.

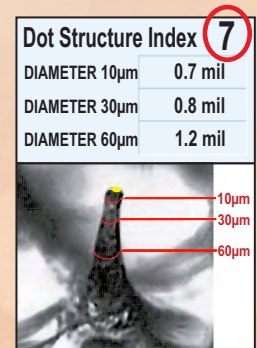
Dot Structure Index gives a simple one-number analysis of the dot shape, diameters at three points along the shoulder accurately describe the stability of

the dot, and a reference and sample image comparison visually shows the shape of the dot. Higher Dot Structure Index numbers show a better dot. Plates are analyzed before or after mounting. Plate wear / damage is evaluated before committing to running potentially bad plates. Software adjustment can be performed for the optimal print dot shape.

## GOOD DOTS

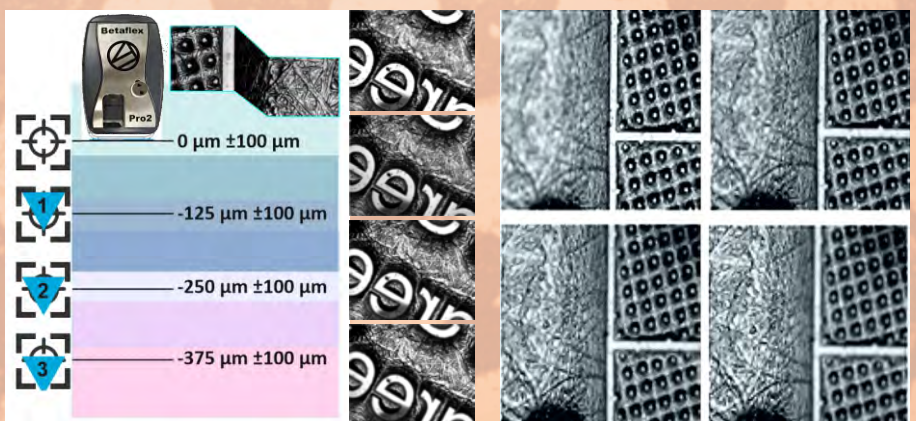


## BAD DOTS



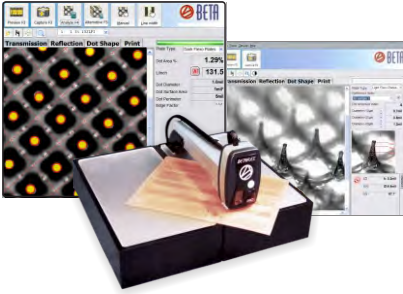
## NEW! 4-Different Focus Levels Down to the Plate Floor

Even sharper imaging and down to the plate floor! Check Washout! Providing important information on the quality of images and cleanliness at all levels.



# BetaFlex PRO2

## Plate Image & Print Analyzer

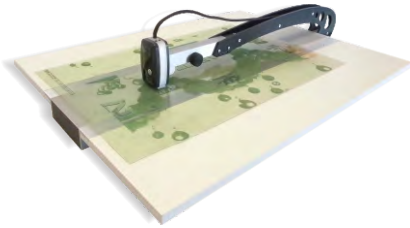


# Options & Accessories

## BETAFLEX PRO2 FLEXO PLATE IMAGE & PRINT 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 Other Features: 4-FOCUS LEVELS, 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, &**

## 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.**

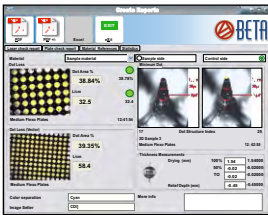
**Also see BetaFlex Pro2 Sleeve System and Adaptor**

## 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



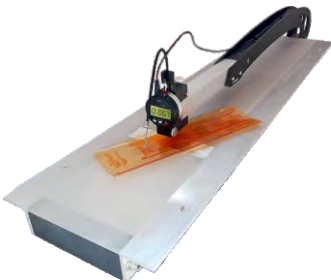
Software data collector/report generator guides the operator to collect just the data needed for high volume production with no unnecessary steps or obstacles for high production. Convenient PASS/FAIL icons evaluate minimum dot and midtone dot while plotting the day's production on a convenient graph. 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

## TYPES MEASURED

Halftone Pos. & Neg. Film, Laser Ablation Mask  
Translucent Photopolymer Plates, Opaque Elastomer Plates,  
Letterpress Plates, Color Print on Paper & Film, Offset Plates

## 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  $1\mu^2$  /  $1\text{mil}^2$   
Dot Perimeter & Edge Factor  $\mu$  / mil  
Mask Stain Density  
Auto Line Width by click in 0.1  $\mu$  / 0.1mil  
Auto, Manual, & Preset screen rulings  
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  
Statistical Functions & Report Generator  
Dot Area Plot, Mean, Standard Deviation  
Data Import and Export  
Configurable Report with include/exclude list  
Measurement data or images

## COMPUTER SYSTEM REQUIREMENTS

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

## CAMERA HARDWARE

Camera USB2.0.....1.3MPixel  
2D TOP VIEW Image resolution.....1.7 $\mu$ /Pixel  
3D OBLIQUE VIEW Image resolution.....1 $\mu$ /Pixel

## ILLUMINATION

Transmission  
Reflection RGB & White  
3D Illumination



The Quality Control Company



800-272-7336 (toll free) 201-939-2400 (U.S.)



[www.betascreen.net](http://www.betascreen.net)



[sales@betascreen.net](mailto:sales@betascreen.net)



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

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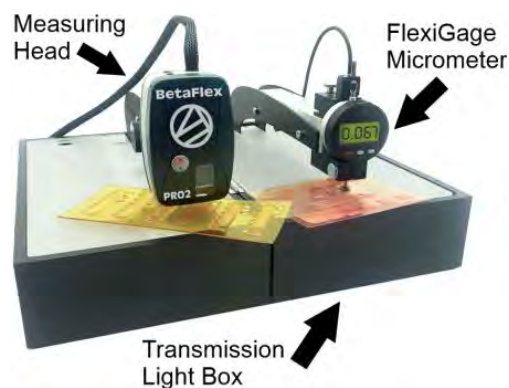
# Betaflex Pro2 and FlexiGage Micrometer

## The Best Just Got Better!

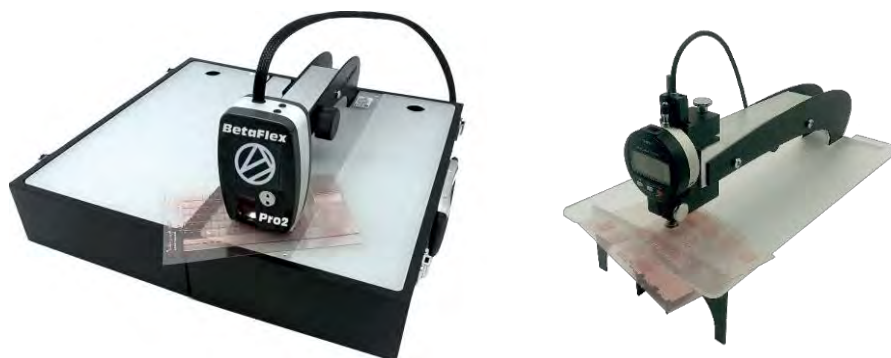
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WITH AN INSTALLED USER BASE OF MORE THAN 1,000 UNITS WORLDWIDE OF THE POPULAR INDUSTRY STANDARD BETAFLX PRO FLEXO PLATE & IMAGE ANALYZER (Flex3Pro), we are proud to announce the introduction of the **NEW BETAFLX PRO2 FLEXO ANALYZER (Flex4Pro)**

The **BETAFLX 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.

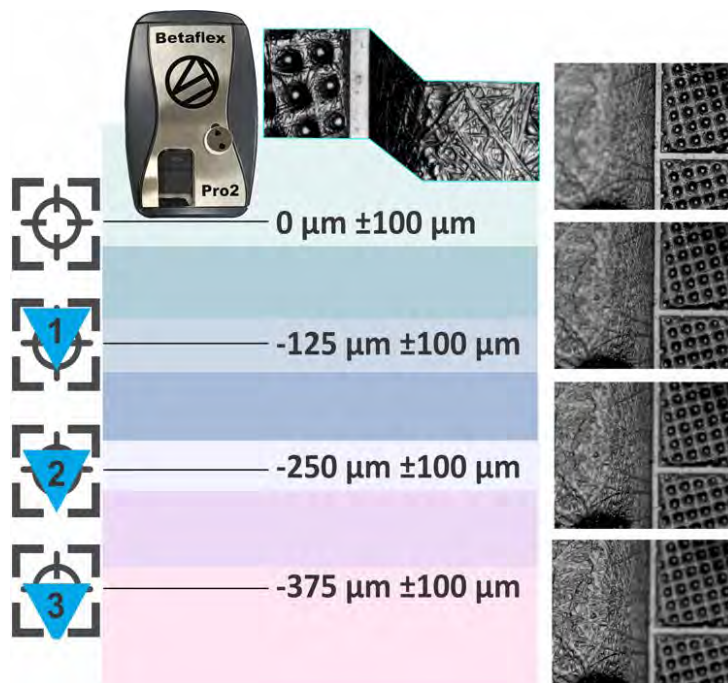


The FlexiGage Micrometer is one of the many options available for the BETAFLX PRO2, see available options. The BetaFlex Pro2 can be used with or without the FLEXIGAGE MICROMETER. The FLEXIGAGE MICROMETER can also be used as a stand-alone without the BETAFLX PRO2.

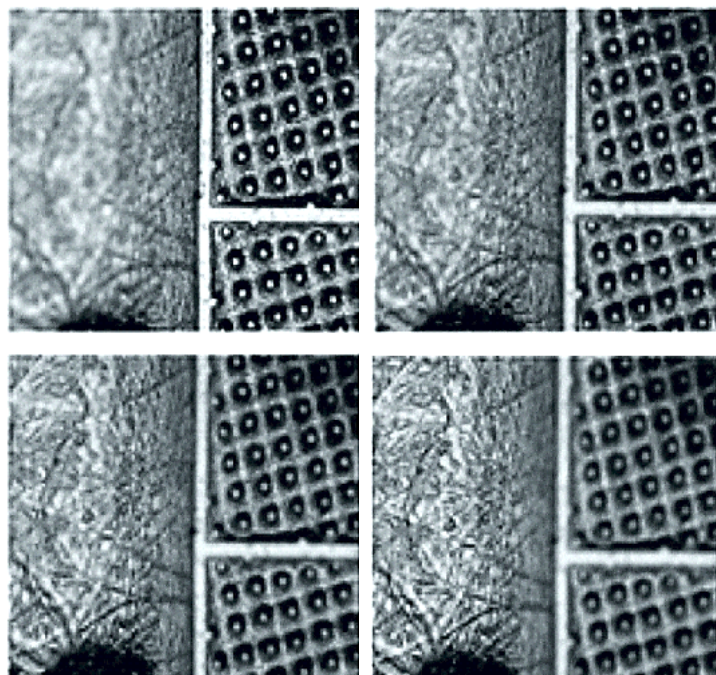


Using the most current and advanced technical resources available the new BETAFLX PRO2 contains enhanced and new features:

- 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 BETAFLX PRO2 adds 4-focus levels to obtain sharp images inside the plate down to the plate floor.**



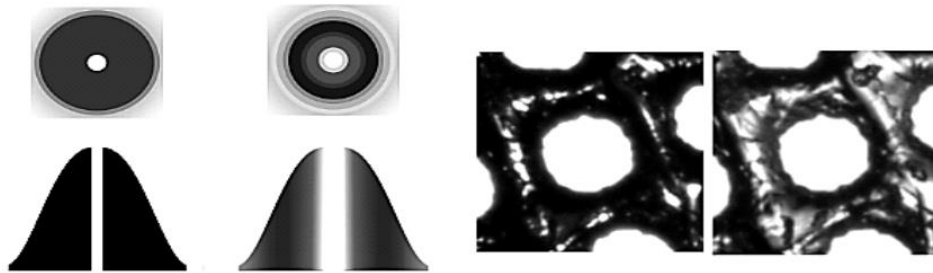
**4-Different Focus Levels**  
**Down to the plate floor**  
**check cleanliness & more**



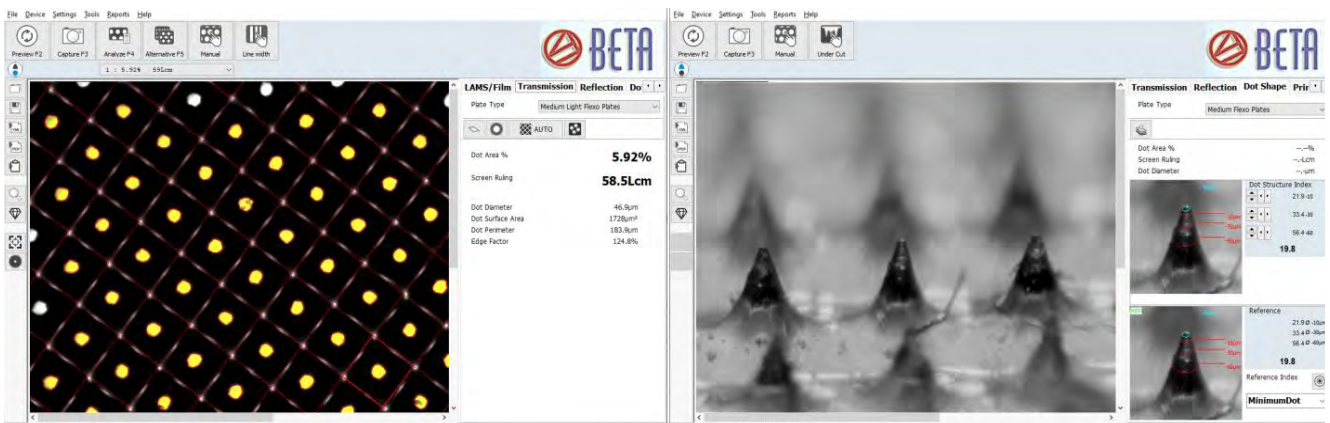
- The focus levels are selected by the Software.



- 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.