

# 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**

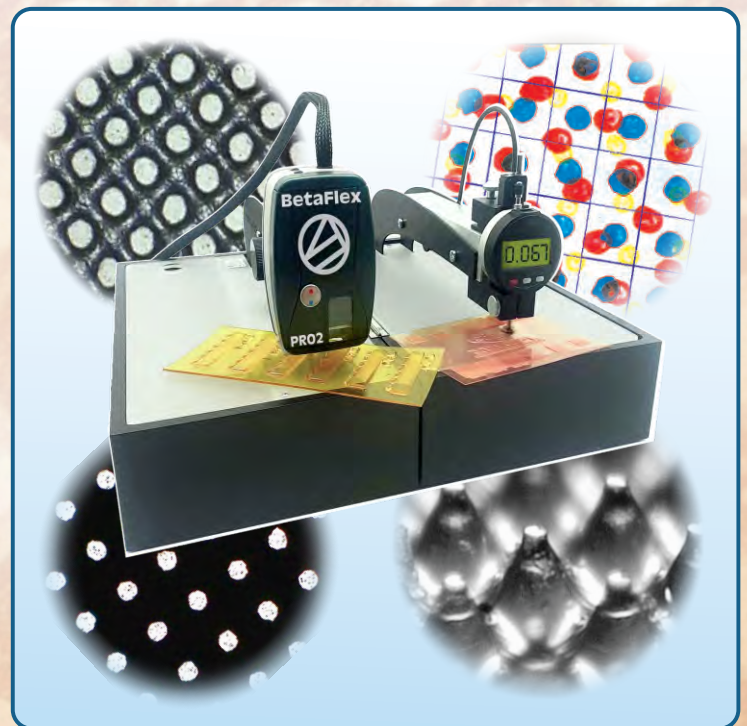
## New Features

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

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

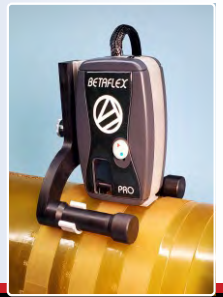
**Reflection Illumination Including  
RGB Illumination**  
from two sides and IR illumination for  
black ink separation

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



**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

**BetaFlex PRO2**

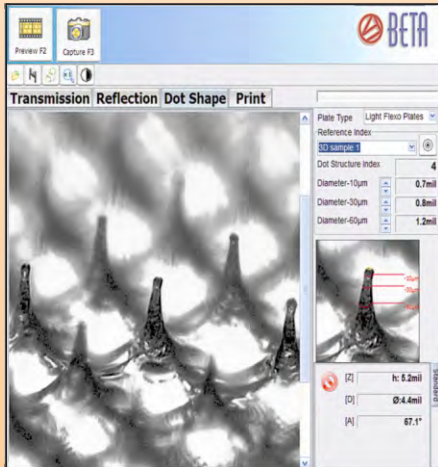
**The Solution**- The Betaflex Pro2 simplifies process control with a familiar interface, unparalleled accuracy, and a powerful toolbox of functions

**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



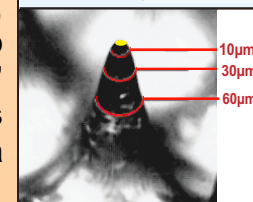
**3D Imaging is the Only Way to Calibrate and Control HD Screening Techniques.** Photopolymer and elastomer plates are easily imaged, analyzed, and compared to the shop standard. "Dot Structure Index" simplifies the production worker's job while detailed measurement data is available to the QC manager.

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.

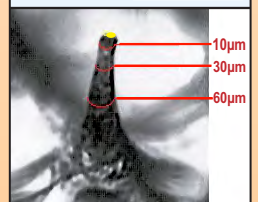
**GOOD DOTS**

**BAD DOTS**

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

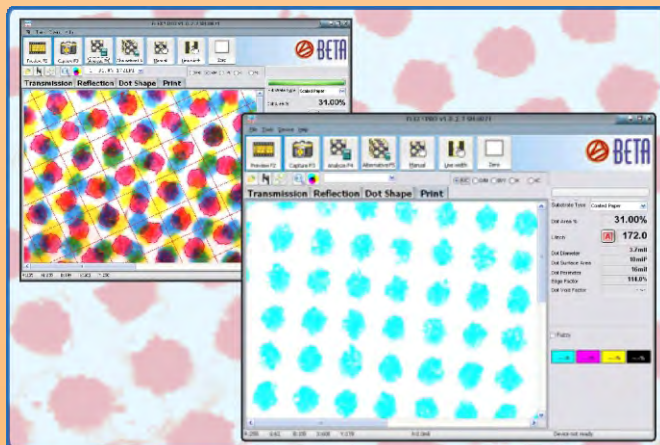


Dot Structure Index	7
DIAMETER 10µm	0.7 mil
DIAMETER 30µm	0.8 mil
DIAMETER 60µm	1.2 mil



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.

**Analyze LAMS** after imaging, photopolymer 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 dismantled 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
- 1920x1080 display
- 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

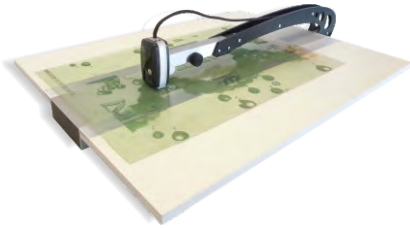


# OPTIONS & ACCESSORIES

**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

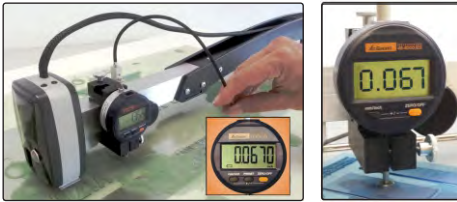


### FOR LARGE PLATES

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.**

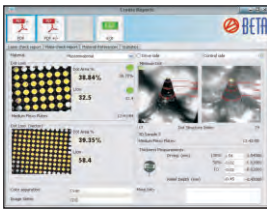
**Also see BetaFlex Pro2 Sleeve System and Adaptor**

## 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



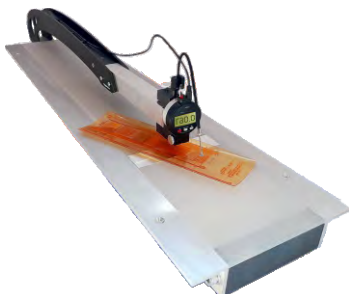
**Software data collector/report generator guides the operator to collect just the data needed for high volume production with no unnecessary steps or obstacles for high production.** Convenient PASS/FAIL icons evaluate minimum dot and midtone dot while plotting the day's production on a convenient graph. 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.....1.7 $\mu$ /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  
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



**The Quality Control Company**

Contact Beta or Your Dealer  
for a **Free 10-Day Trial**  
[www.betascreen.net](http://www.betascreen.net)

Email: [sales@betascreen.net](mailto:sales@betascreen.net)  
Tel: 201-939-2400, 800-272-7336

