



# FlexoCAM

The ultimate tool . . .

for optimum quality control and analysis of your complete flexoplate and print production

## PRODUCT SPECIFICATIONS

FEATURES	FlexoCAM
<b>▼ Media</b>	
Any flexo plate - Flat or In The Round	✓
Printed copy (visual perception readings), film and film lamination	✓
<b>▼ Dot Evaluation</b>	
Halftone dots: 50 lpi - 175 lpi (20 - 70 lpcm)	✓
Accuracy ± 1% over full range of readings	✓
Plate and dot analysis	✓
Geometric measurements	✓
<b>▼ Interface</b>	
Numeric %-display	✓
Dynamic graphic display	✓
Screen angle / ruling calculation	✓
High speed USB link	✓
Positive (negative for film) reading	✓
<b>▼ Optical Range</b>	
Field of view typically from 1.25 x 0.92 mm (at min zoom) to 0.50 x 0.40 mm (at max zoom)	✓
Zoom range (optical magnification) typically 2.8x - 7.0x	✓
Screen magnification typically 160x - 400x	✓
<b>▼ Connectivity &amp; Storage</b>	
FCP file format, JPEG and BMP	✓
Direct application interface (RIPs, spreadsheets, etc)	✓
<b>▼ Light Source</b>	
Co-axial and Radial white light LED	✓
Variable reflective	✓
Powered from separate power supply	✓

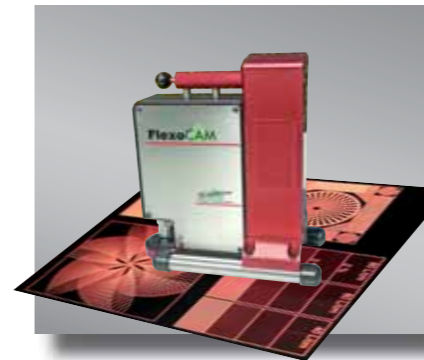
(Specification subject to change without notice)

## TECHNICAL SPECIFICATIONS

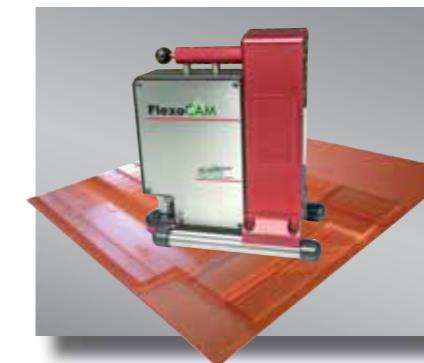
FEATURES	FlexoCAM
<b>▼ Electronics</b>	
Full 24 bit colour RGB camera with 640 x 480 pixel resolution.	✓
USB Control via PC	✓
Additional external ac power supply	✓
<b>▼ Dimensions</b>	
FlexoCAM: 19 x 15.5 x 9.5 cm (W x D x H)	✓
FlexoCAM Case: 37 x 30 x 17.5 cm (W x D x H)	✓
<b>▼ Weight</b>	
FlexoCAM: 2.20 kg (5.0 lbs)	✓
FlexoCAM with Case: 5 kg (11.0 lbs)	✓
<b>▼ Environmental conditions</b>	
Temperature: 16° - 32° C (60° - 90° F)	✓
Humidity: 40% - 60%, non-condensing	✓
<b>▼ Minimum PC-requirements</b>	
Pentium IV, 1 GHz, 256 MB RAM, 1024 x 768, 24-bit Display, USB 1.1, 1+ GB hard drive	✓
<b>▼ Operating Systems</b>	
Windows XP / WIN 2000	✓
<b>▼ Warranty</b>	
12 months return to base. Software upgrades FOC for 12 months.	✓

(Specification subject to change without notice)

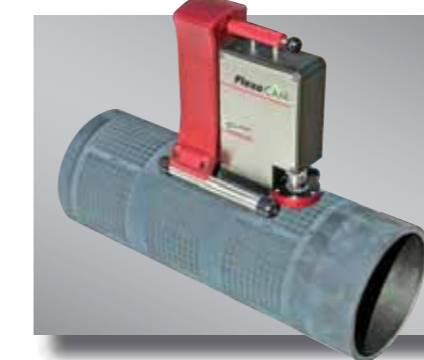
from Film/Masks



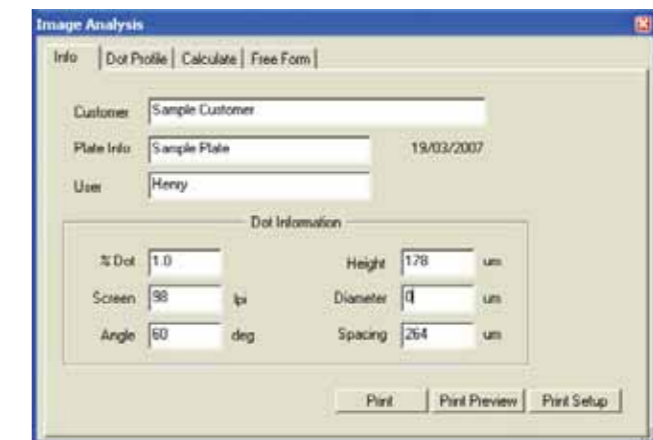
to Plate



and Sleeve

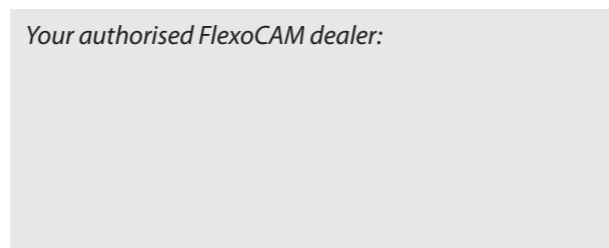


to Printed Media



1 & 2 Blackworth Court  
Blackworth Industrial Estate  
Highworth, Wiltshire, SN6 7NS  
United Kingdom  
Tel: +44 (0) 1793-766-355  
Fax: +44 (0) 1793-766-356  
info@troika-systems.com  
www.troika-systems.com

Your authorised FlexoCAM dealer:



The advent of computer controlled exposure systems has allowed the flexo market to advance to levels of print quality unknown a decade ago. With these increases in quality, and the development of new and varied plate materials, and with the higher screen rulings for halftone production, the need for greater quality control is essential. The Troika FlexoCAM enables users to ensure their desired level of accuracy and consistency with the plates is achieved and maintained.

### WHAT IS FLEXOCAM?

FlexoCAM was developed for the label, carton, newspaper and corrugated markets where accurate halftone dot percentage readings as well as surface inspection and depth measurement are needed.

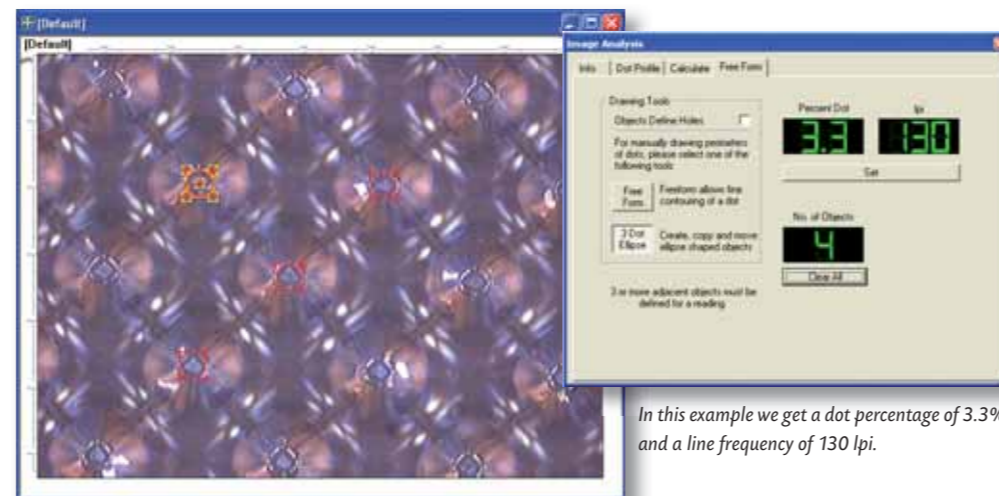
FlexoCAM is capable of measuring and analysing flexoplates on the round or flat, film and print for quality, dot structure and halftone dot readings.

### KEY BENEFITS OF FLEXOCAM

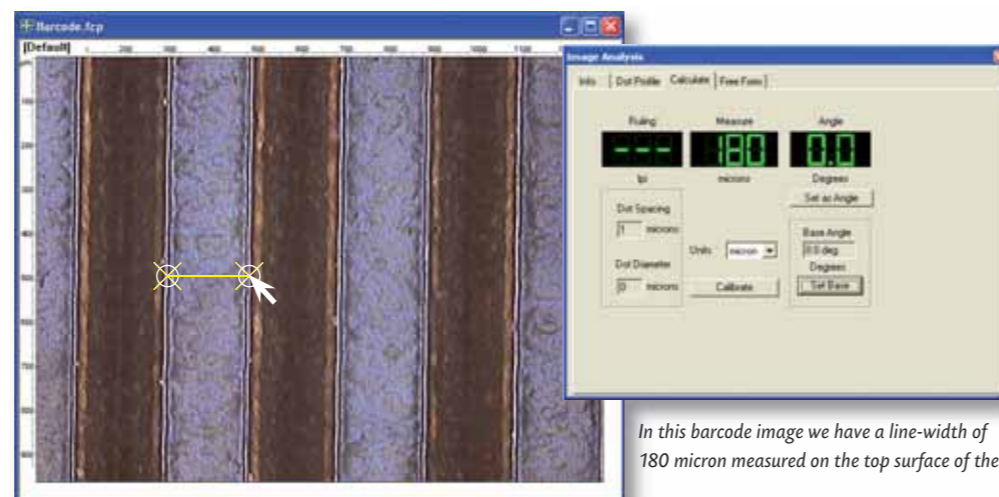
- ▶ An **easy to use** tool that will verify your plates or film/mask are properly calibrated ensuring your jobs are faultless on being mounted.
- ▶ Being able to see the printed jobs with the **FlexoCAM digital microscope** will significantly help with resolving costly and time consuming print issues.
- ▶ The **dot profiling** allows you to see the dot shape and (most importantly) to see the first consistent dot on the plate after processing; knowing that the first printing dots are correct will help reduce press set up time, reduce waste, and the chances of reprints.
- ▶ The FlexoCAM is easy positioned onto the material, and physically does not touch the measuring area, therefore the dots are not compressed ensuring very accurate percentage readings and allowing the dot profiling to be achieved.
- ▶ As FlexoCAM is portable, measurements can be taken in the press room, the plate room or in the anilox storage area; with in the round / sleeves and flat material making it a very practical all-round tool for all the print departments.
- ▶ All measurement information or images can be printed, or exported for use in 3rd party software (like Excel or database programs) for comparison of historic with current information so that you can ensure quality is being maintained.

### DOT PERCENTAGES, SCREEN COUNTS AND MEASUREMENTS

The dot percentage readings, from highlight to shadow dots, and the screen count can be seen within a few seconds. Measurements such as required in text or barcodes can also be achieved in just a few seconds. The images are displayed on the monitor in full colour.



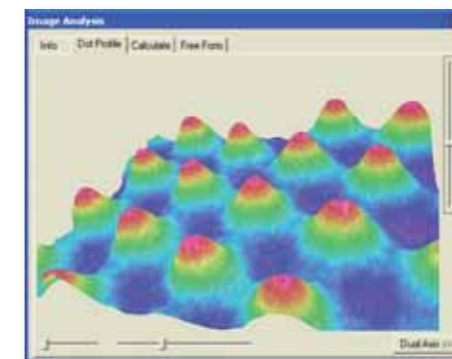
In this example we get a dot percentage of 3.3% and a line frequency of 130 lpi.



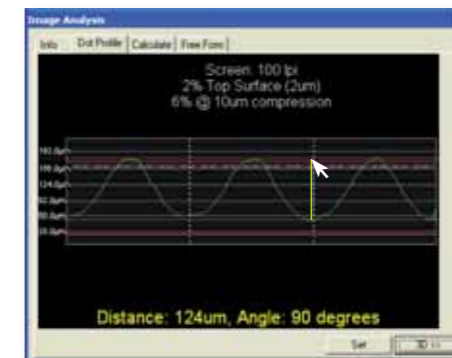
In this barcode image we have a line-width of 180 micron measured on the top surface of the plate.

### DOT PROFILING ANALYSIS

The FlexoCAM Dot Profiling Analysis is a method of viewing the profile of highlight dots between 1% to 15%. It allows you to view and analyse the dots in profile without cutting the media. The camera takes a series of pictures (each with a different focus depth) down to the ground level of the plate. The software then removes all unsharp parts of each level and combines the levels to a rendered 3D grid model, which can then be analysed and rotated in any direction.



Rotatable and scalable 3D-view of analysed dots.



The Dot Profile Analysis graph displays an electronic cut through the plate and also allows direct measurements inside the graph like dot heights and angles.

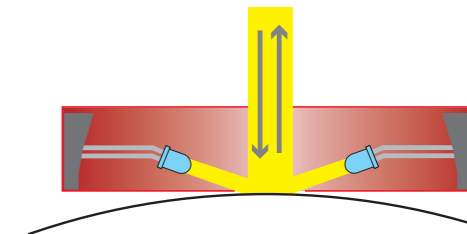
### WHAT CAN BE MEASURED?

FlexoCAM enables you to measure:

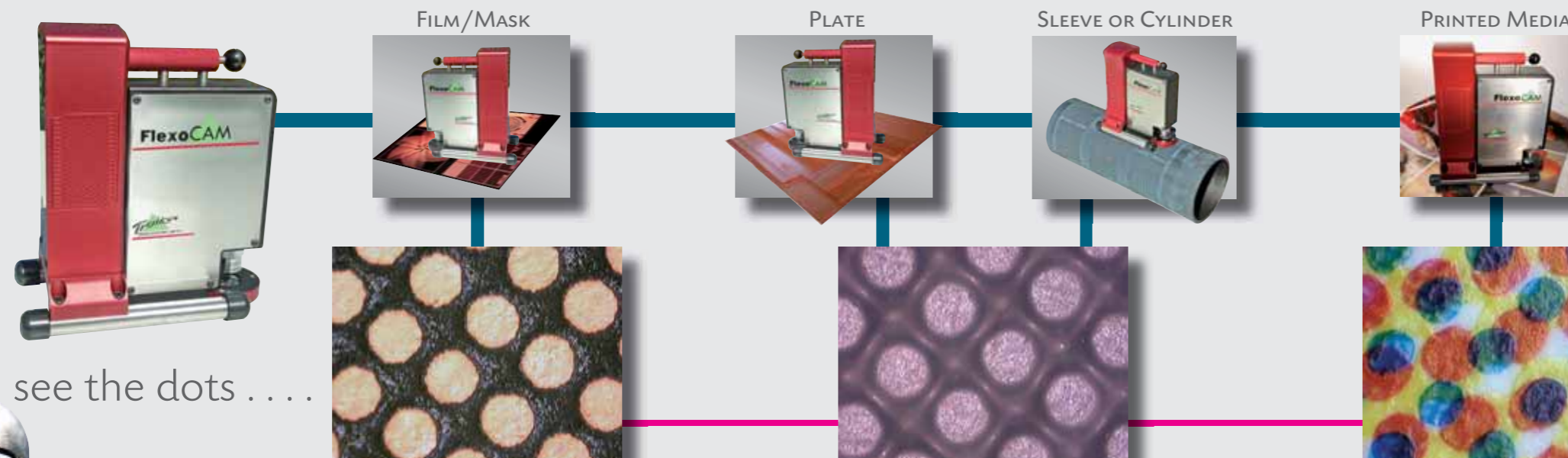
- Line frequencies (lpi /lpcm)
- Dot percentages (%)
- Dot Profile Analysis (shape, height, angles etc.)
- Distances and diameters
- Angles and angle offsets

### COAXIAL AND RADIAL LIGHT

The FlexoCAM is equipped with two light sources: Coaxial light is directed straight down onto the surface of the material and reflected back up the same path and onto the camera. It is essential for the Autofocus and readings.



The Radial Light is an 8-LED lighting system that is designed to illuminate the side of the dots, which leads to an optimum illumination for accurate readings.



### REMOTE VIEWING

For further investigations the images taken by the FlexoCAM can be transferred to a remote location (i.e. by Email to your plate supplier). They can be stored in their proprietary .fcp format and contain all measured values needed for a remote evaluation. The remote site only needs the **FlexoCAM Remote Viewer** software, which is available free of charge.

REMOTE ANALYSIS → @ Email