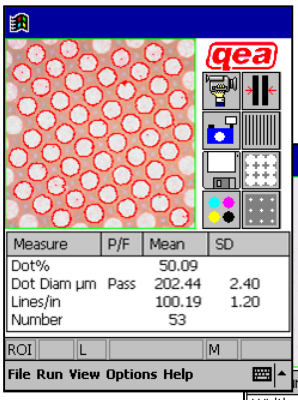
Flexo-M™ Reflective Plate and Sleeve Analysis System

Flexo-M™ is a state-of-the-art image analyzer for quantifying metal-backed plate and sleeve quality in flexographic and letterpress printing. A first in the world, Flexo-M dramatically expands the range of printing materials that can be characterized. Powered by a specially designed light source and optics, a Pocket PC, and QEA's advanced image analysis technology, Flexo-M offers quick, easy, and objective measurements on opaque and metal-backed flexo plates and sleeves for the first time.

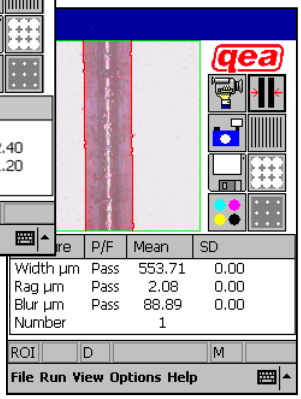
Reflective Read for Opaque and Metal-backed Samples

- Computer-to-Plate (CTP) sleeves, plates, and masks
- In-the-Round (ITR) products
- Metal-backed letterpress, dry offset, and newsprints plates
- Direct laser engraved rubber
- Direct measurements on sleeve mounted on press



Dot Analysis

Line Analysis



Comprehensive Dot and Line Quality Metrics

Flexo-M™ empowers you with all the critical information to control plate and sleeve quality, or to resolve quality problems objectively and decisively.

Dot: Dot%, line screen, screen angle, diameter, area, perimeter, circularity, and box ratio
Line: Line width, edge sharpness, edge raggedness, angle, distance, and discontinuity

Improve Quality, Eliminate Waste, and Do It Right the First Time

Flexo-M™ is a powerful, yet cost-effective tool for evaluating metal-backed plate and sleeve quality. It is part of QEA's highly-acclaimed, state-of-the-art IAS® image analysis systems family.

- **Portability**
  Its compact design makes possible analysis anytime, anywhere.
- **Highlight dots and stochastic screen measurements**
  The intelligent software enables you to analyze these hard-to-measure areas easily and accurately.
- **Easy operation**
  The benefits of a digital CCD camera, high resolution optics, and a Pocket PC offer live viewing of images and touch-screen, interactive operations – all packaged into an innovative, handheld device.
- **Seamless interface with PC**
  The Flexo-M™ can be used standalone or interface via USB to your PC for seamless transfer of data and images.

Other IAS® products for flexographic printing:

Personal IAS: Portable image analysis system for print quality evaluation.

Flexo IAS: An all-in-one portable analyzer that measures quality attributes on flexo plate, film, and print.

FlexoLite: Portable dot analyzer for flexo plates and films.

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System Specifications*

Functional Data

Typical Applications	**Reflective Reads on Flexo Plate and Sleeve** Quality control **Plate Calibration** Cutback curve Min dot compensation / bump curve
Measurements	**Dot % and Area %** (AM or FM screen) **Line Screen** (lines/cm or lines/in) **Screen Angle** (deg) **Dot Quality** Diameter — Circularity Area — Box Ratio Perimeter **Line Quality** Line Width — Angle Edge Raggedness — Distance Fill — Discontinuity
Software Features	Highlight and touching dot analyses Live image viewing ROI based analysis on live or stored image Two-point distance measurement Auto dot-size filtering Auto dark/light dot detection Auto plate brightness calibration Up to 8X zoom capacity Pass/fail tolerances Statistics and graphical plots
Data Storage & Handling	PC compatible data files Saving and retrieval of captured images ActiveSync file transfer with PC

Technical Specifications

Measuring Geometry	Broadband reflective illumination (no external light source required)
Detector	Color CCD (640x480 pixels)
Resolution	5 µm per pixel
Field of View	2.4mm×2.4mm
Screen Ruling	Range 18-236 lines/cm [45-600 lpi] cm or inch display selectable
Substrates	CTP sleeves, plates, and masks ITR (In-the-Round) products Metal-backed plates Direct laser engraved rubber
Plate Size	Unlimited
Minimum Dot Size	< 1% dot at 250 lpi
Repeatability (spatial)	Better than ±2 µm
Repeatability (dot %)	Better than ±1% at 200 lpi
Calibration	Factory calibrated Automatic brightness setup
Measuring Time	6 seconds typical (depends on measurement function)

Physical Specifications

Description	Portable digital image analyzer with reflective lightsource
Display	Hyper amorphous silicon TFT 65,536-color LCD (320×240)
Accessories	Hard-sided carrying case AC-power adapter (100-240 V_{ac}) USB cable User's manual Backup software
Power Requirements	Rechargeable battery for analyzer 4 AA batteries for illumination AC-adapter included (100-240 V_{ac})
Size	23.1cm×9.4cm×5.3cm [9.1"×3.7"×2.1"]
Weight	0.85 kg [2 lbs]
Shipping	46cm×38cm×23cm [18"×15"×9"] 3.6 kg [8 lbs]