

FLEXO IASTM *The Ultimate Solution to Objective Image Quality Analysis for the Flexographic Professionals*

Image Analysis System



It's a dream come true!

The Flexo IASTM is the ideal tool for productivity and quality improvement in flexographic printing. It's the latest addition to QEA's Personal IASTM line of portable instrumentation for print quality evaluation using state-of-the-art image analysis technology. For the first time, quantitative, objective decisions can be made in every step of the flexographic process – from proof to film to plate to print – all using a single instrument, anytime, anywhere, on materials of any size, and any random location on a sample. No limitations to photopolymer or digital plates. No more uncertainties, guessing games, or hot debates on who's right and who's wrong!

The Design

The Flexo IAS's revolutionary design brings together modern CCD image capturing and advanced image processing and analysis software in a powerhouse hand-held unit. Its built-in Pocket PC enables image viewing, quantitative analysis, reporting, data logging, and communication directly with a PC, all in an innovative, easy-to-use and easy-to-master package.

Capabilities

The Flexo IASTM is a high resolution, analytical digital microscope that simply obsoletes the use of a loupe. It's a dot analyzer that provides critical information on dot size, dot shape, dot gain, % dot, line screen and screen angle. It's also a print quality analyzer that's a must-have for evaluation of registration, line bleed, line density, edge sharpness, edge raggedness, resolution, text quality, optical density, tone reproduction, gray balance, color consistency, graininess, mottle, satellites, voids, background, ghosting, slur, and many, many more ...

Available Now

The Flexo IASTM is available now. For more information, please visit <http://www.qea.com>, email us at info@qea.com, or call 781-221-0080.



Quality Engineering Associates, Inc.

99 South Bedford Street, #4, Burlington, Massachusetts 01803, USA

Tel: 781-221-0080 • Fax: 781-221-7107 • Email: info@qea.com • URL: www.qea.com

System Specifications*

Functional Data	Transmissive – T		T	R
	Reflective – R			
Measurement	Dot % in halftone (AM and FM)		✓	✓
	Dot % in highlight (AM and FM)		✓	✓
	Line screen		✓	✓
	Screen Angle		✓	✓
	Dot quality		✓	✓
	Diameter	Circularity		
	Area	Box Ratio		
	Perimeter			
	Line quality			
	Line width	Angle	✓	✓
	Edge raggedness	Distance		
	Fill	Discontinuity		
	Line density	Contrast		✓
	Blurriness			
Area quality			✓	
Reflectance	Graininess			
Visual Density	Mottle			
Color L*a*b* and Density			✓	
Tone reproduction			✓	
Reflectance	Dot %			
Density	(Murray-Davies)			
% Area coverage	Print contrast			
Gray balance				
MTF (modulation transfer function)			✓	
Typical Applications	Plate Calibration		✓	
	Cutback curve			
	Min dot compensation / bump curve			
	Text quality			
	Stroke width		✓	✓
	Edge raggedness			
	Stroke density			✓
	Barcode			
	Line width, distance between lines		✓	✓
	Edge raggedness			
	Density			✓
Contrast				
Intercolor bleed			✓	
Trapping			✓	
Color Registration			✓	
Print Defect Characterization			✓	
Mottle	Background / GS			
Graininess	Banding			
Satellites	Ghosting			
Voids	Slur			
Extraneous marks				
Software Features	Uses ISO-13660 for print quality calculations ROI based analysis on live or stored image Two-point distance measurement Auto/manual color plane selection Auto line orientation detection Dot highlight facility Auto dot-size filtering User configurable push buttons Pass/fail tolerances Statistics and graphical plots			
Data Storage & Handling	PC compatible files of raw data and analyzed results Saving and retrieval of captured images ActiveSync file transfer with laptop or PC Excel-Link (optional)			

Physical Specifications

Description	Portable digital image analyzer with reflective lightsource and backlight
Display	Hyper amorphous silicon TFT 65,536-color LCD (320 × 240)
Accessories	Hard-sided carrying case (Analyzer) AC-power adapters USB cable User's manual & test target Backup software
Power requirements	Rechargeable battery for analyzer 8 AA batteries for illumination AC-adapters included
Size	Analyzer (cm): 23.1 × 9.4w × 5.3h [9.1" × 3.7"w × 2.1"h] Backlight (cm): 24.2 × 19w × 6.5h [9.5" × 7.5"w × 2.6"h]
Weight	Analyzer: 0.85 kg Backlight: 1.12 kg
Shipping	46 cm × 39 cm × 41 cm [18" × 15.5" × 16.2"] 5.4 kg [12 lbs]

Technical Specifications

Measuring geometry	Transmissive: Broadband collimated backlight Reflective: Broadband diffuse
Detector	Color CCD
Resolution	5 µm per pixel
Aperture size	2.4 mm × 2.4 mm
Screen Ruling	Range: 18 – 236 l/cm. [45 – 600 lpi] cm or inch selectable
Plate Types	Digital, conventional Capped, uncapped Digital mask
Plate Size	Unlimited
Plate Thickness	.45mm – 6.5mm+ .0165" - .25" +
Minimum Dot Size	< 1% dot at 250 lpi
Print Substrates	Paper, film, board, foil
Repeatability (spatial)	Better than ±2 µm
Repeatability (optical density)	Better than ±0.05
Repeatability (dot %)	Better than ± 1% at 200 lpi (measured in highlight & midtone)
Calibration	Factory calibrated Reflective: automatic drift compensation Transmissive: automatic brightness setup
Measuring Time	6 seconds typical (depends on measurement function)

*(9/4/2002) All specifications subject to change without notice.