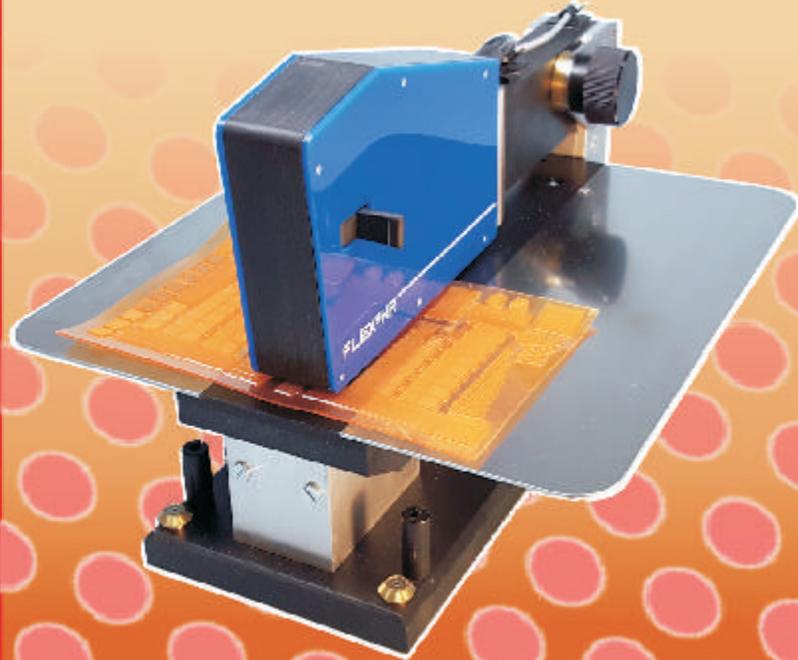


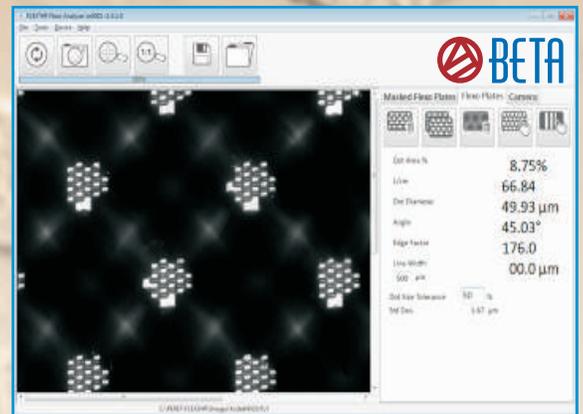
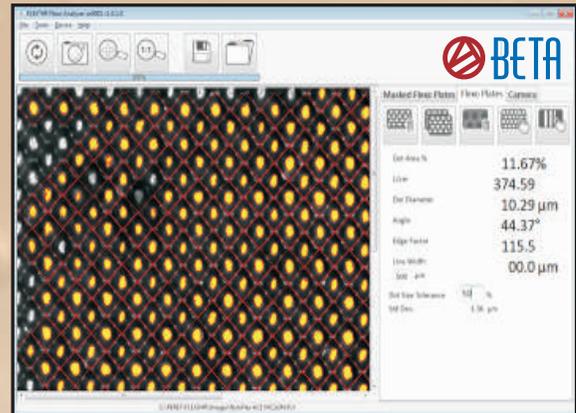
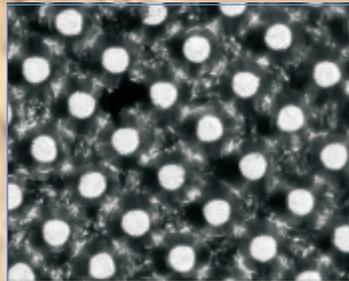
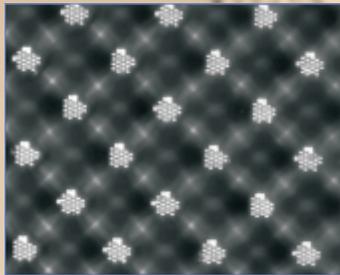
BetaFlex HR

HIGH RESOLUTION



MICRO STRUCTURE ANALYZER

Easily Accurately
Analyze Flexo Plate
Solid & Dot Surface
Micro-Structures



BETA INDUSTRIES
The Quality Control Company

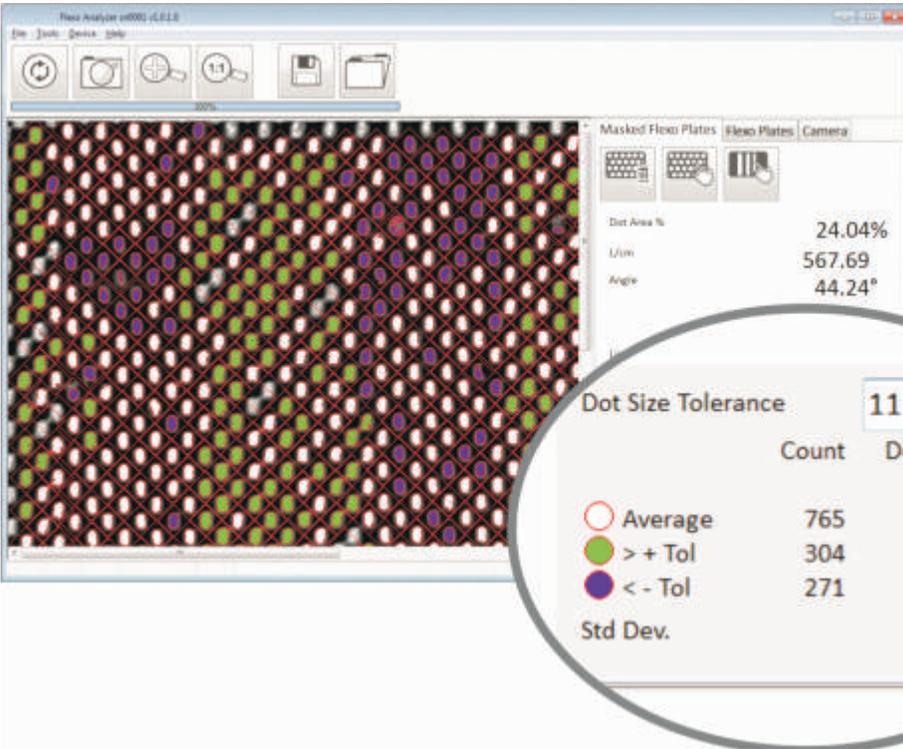
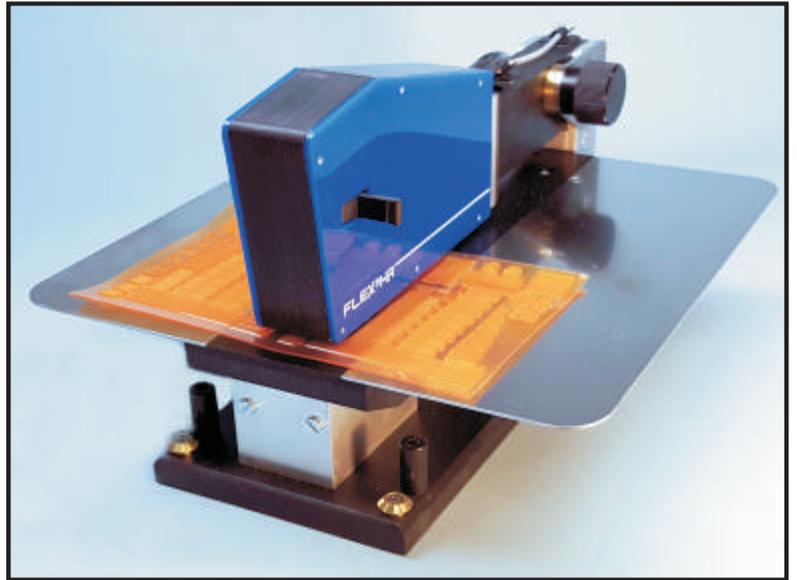
Betaflex HR (High Resolution) Flexo Analyzer

Significant improvements in flexo printing have come about with the introduction of high resolution laser imagers and specialized plate surface treatments. The results are smoother solids, cleaner halftones, and sharper type. The full benefit of these techniques requires consistent performance of each step in the process; laser energy, laser focus, beam uniformity, face and back exposure, plate processing, etc.

The physical size of the elements created are typically beyond the capability of the Betaflex PRO with screen frequencies over 1000 lines per inch (390 l/cm) and features of 0.0004 inches (10 microns) or less. Features of these microscopic dimensions need to be measured and evaluated for uniformity, shape, and position. The principles of Process Control apply here in the same way as they do in halftone control.

The Betaflex HR Flexo Analyzer operates in transmission mode to capture and analyze images of laser ablation masks and processed plates at extremely high resolution (43,000 pixels per inch) with excellent contrast and sharpness. No operator adjustments of focus or illumination are required, giving highly accurate and repeatable measurements. One USB port provides power and handles image capture within the Windows software.

The screen capture below shows the results of a typical microcell pattern applied to a solid printing area. An array of 1440 cells per inch with each cell approximately 9 microns (0.00035 inches) in diameter is imaged on the mask. The software evaluates each cell, comparing it to the target value and the user-selected tolerance.



The result is a color coded display of cells that are above, below, or within the user-specified tolerance. This unique display capability reveals a vertical arrangement of out-of-tolerance cells, indicative of a beam formation error. Diagnostic information is instantly available to the operator and the technician, assuring highest quality and consistency.

Additional software features are currently under development for the Betaflex HR. These will assist the operator in taking advantage of advanced platemaking technology for meeting their customers' highest quality expectations.

