



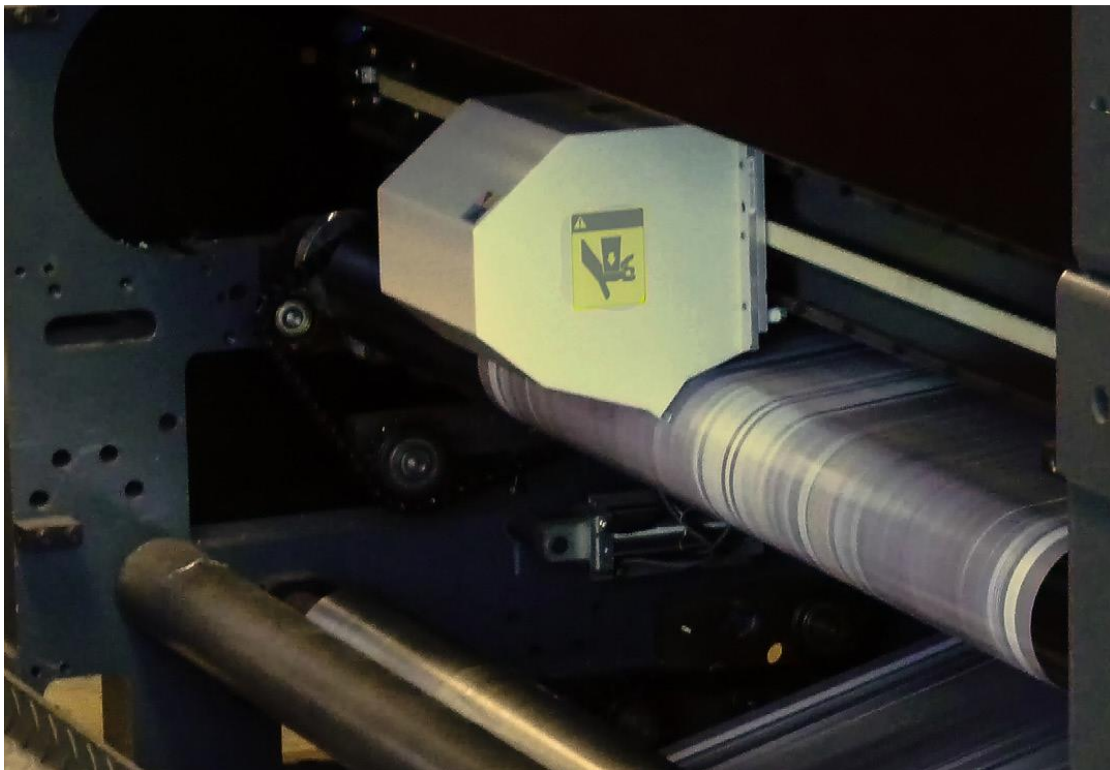
GRAPHIC
MEASUREMENTS
INC.

Clarios

Spectral Color Measurement

Fast, intuitive spectral measurement and closed-loop color control for high-speed webs

The Clarios system makes on-web color control more precise, yet easier to use, so press crews can start up more quickly and manage color with more confidence from the start of the job to the last impression. Color information is shown to the press operators in graphic displays that signal the right steps for quickly achieving excellent color. Key-by-key feedback on density and page-by-page status for Tone Value curves can be immediately displayed with a single touch. The Clarios archive saves the color targets, paper types, and scan settings for thousands of jobs so that one successful make-ready can pay dividends again and again. Every reading, at any web speed, on every scan is a spectral measurement which conforms to essential ISO and CIE norms for graphic color measurement.



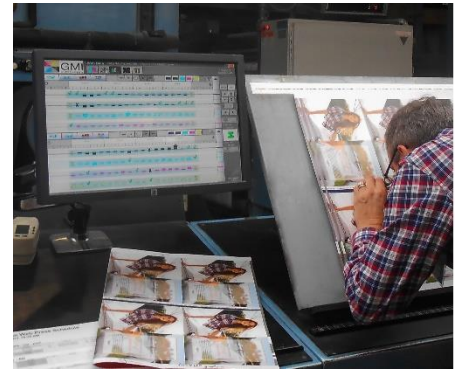
Graphic Measurements LLC
1207 Beta Court
Rockwall TX, 75087

US/CAN Sales: NASales@gmicolor.com
Europe Sales: EMEAsales@gmicolor.com
Asia Sales: APACSales@gmicolor.com
Latin/South America Sales: LASales@gmicolor.com



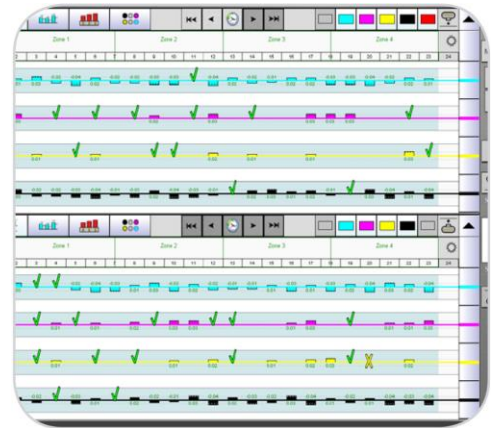
Closed-loop color control

When paired with a compatible press or ink key control system, such as the GMI Mercury system, Clarios enables closed-loop color control. The Clarios software will feed recommended key positions to the ink key controls based on the spectral color readings taken by the Clarios probe. These control algorithms are in daily use at several hundred sites, effectively managing top-quality color for products including currency, magazines, direct-mail, packaging, and many more.



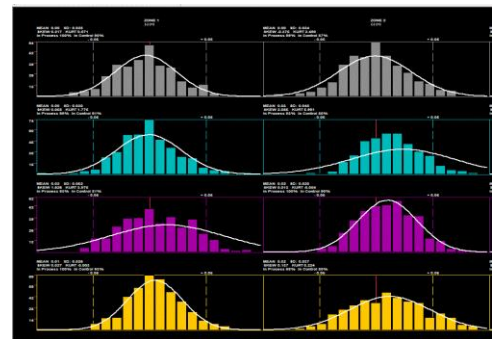
Manual color control

When operated without a closed-loop connection, Clarios will enable your operators to quickly understand the correct adjustments to make. Accurate color information is provided in graphic displays that signal the correct steps for quickly achieving excellent color. Feedback on density can be displayed for each key, and tone value curves can be monitored page-by-page. Process color gamut is graphed in L^*a^*b compared to industry-reference conditions. Trend charts allow operators to identify shifts and maintain long-run process control.



See accurate color conditions, now and later

Clarios users get high-quality color information from spectral measurements. During a run, density measurements are available for every key, so you know at a glance which units are meeting your customer's specifications. Clarios time-stamps and organizes all measurements and stores them for future analysis and reporting. The Clarios Archive saves color targets, paper types, and scan settings, and the preferred settings are stored for quick recall. The Job Queue feature arranges upcoming jobs for quick access.



A fine-tuned design from years of real-world application experience

- Rapid Response Scan measures faster during make-readies
- Press Status view drives smarter corrective action
- Spectral Gamut view confirms compliance with L^*a^*b print requirements
- Live trend charting identifies stable print conditions
- Control up to 4 surfaces (2 webs) from a single central workstation, or install convenient 'client' stations anywhere along the press line
- Ready-to-go process control reports at the Clarios Color Manager station
- Color Conformance report sums up results from full gamut of process colors
- On-line diagnostics and updates available with internet access



Improve quality and economics with optional modules

CIP Presetting

Pre-set any press console that Clarios can control. Translate PPF files from your laser CtP system into recommended ink key profiles. Starting the make-ready from calculated profiles, improved by built-in self-calibrating algorithms, CIP Presetting has proven to reduce start-up time and waste by up to 40% compared to subjectively estimated profiles.

Spectral Reporting

The colorimetric data that's automatically gathered during every Clarios scan is stored and organized into Statistical Process Control reports and charts. These customizable process control analyses are specifically designed for spectral assessment of press stability and of conformance to IS standards for print conditions

Smart Densities

This enhanced functionality for Clarios automatically compares the colorimetric ton values that are currently printing versus the ideal colorimetric tone curves of the ISO standards. Then, Clarios recommends the specific target densities that will bring the print as close as feasible to the standard's ideal tones. Printers need only relate to familiar density numbers, there is no need for the complications of L*a*b.

Tone Value Analysis

Improve pre-press plate curves and other color management controls with precise information extracted from actual production runs. Collect and report detailed data on Tone Value Increase, and other important print condition metrics, from highlights through shadow tones. Measurement results can be formatted for export to Excel®, and in other general-purpose formats.

RunTime Data Export

Extend the intelligence of the basic TVA module by fully automating the data extraction and export from Clarios. The results of each Clarios scan are formatted in conformance with ISO 28178 and then delivered in near-real time to a shared network drive. The measurements are ready for immediate processing by any of a range of third-party color management tools that can support ISO 28178 data input. This data export is automated, so manual operator intervention is not needed to reliably gather detailed spectral results from a running press.