

ColorPilot – INTELLIGENT COLOR MEASUREMENT

The use of color measurement and regulation systems increases the productivity of valuable printing presses. Print production with CCI and ColorPilot gives a printing plant some important advantages: Die Messgeräte bewerten Farben objektiv – für stets gleich bleibend hohe Qualität im Druck, die sich bei Bedarf sicher reproduzieren lässt.

- Beim The measuring devices evaluate color objectively for consistently high - quality printing which can be faithfully reproduced when needed.
- When matching color to the print standard or an OK sheet from the last time the job was printed, make-ready times are much shorter which saves materials and expensive press time.
- Even with short runs, the printer can quickly detect color variations and thus maintain defined tolerances.
- Quality verification – important for internal evaluations or vis-à-vis the customer.
- Fewer customer complaints or even none at all.
- Integration in a network enables color control for jobs to be prepared in an office and the results can be evaluated after printing

Space-saving integration

The ColorPilot measurement and regulation system is integrated in the color matching desk to save space. Presetting can be done in an office or directly at the press. The system uses densitometry to measure print control strips, also on perfected sheets, which can be located at the sheet front or tail edge at a speed of 25 cm per second. Both solid and screen patches it records eight measurement values per millimeter. ColorPilot measures a complete print control strip on a 3B size sheet (740 x 1040 mm), attends to automatic calibration and displays any deviations on the screen – all in less than 14 seconds. Correction of the ink slide positions only takes another four seconds because all printing units are regulated simultaneously. With every regulation, an artificial intelligence takes into account the effects of the previous regulations. Since regulation of the ink slides is only effective once the ink/water balance is stable, a trend display is provided to help the printer recognize when this condition has been reached.

Very small measuring patches

The measuring patches on the print control strips are very small: 3 mm wide, 4 or 6 mm high. The system establishes the median values of 24 or 32 measured values per patch which guarantees even inking over the entire run and significantly reduces make-ready time and the number of waste sheets. All quality measurements are logged and therefore available for quality analysis or quality verification.

FM 21

FM 21 – The proven ColorPilot technology has been supplemented by measurement condition M1

One challenge of many modern paper types is optical brightening agents. ISO 12647-2:2013 defined new measuring conditions (M0-M3). Measuring condition M1 is intended to reduce deviations of the device measurement results due to fluorescence. Unlike measuring condition M0, M1 precisely defines the UV component in the lighting. The production process requires just this type of measuring instrument according to M1 to meet the requirements of ISO 12647-2 in practice.

All existing installations can easily be retrofitted.



Technical specification

Separate modules for Lab and density

Direction of illumination: 45°

Direction of receiving: 0°

Illumination System: Circular mirror

Light source: Halogen lamp, LED

Density module with narrow-band glass interference filters and polarization filters

Colorimetric module with illuminant D50, observer 2°

Black backing

Measuring condition: M0, M1

Density range: 0.000 – 3.600

Density resolution: 0.001

Spectral range: 380 nm – 900 nm

Channels: 256

