# *Prinect* Image Control



Full sheet color measurement system for optimal quality in the printed image • Prinect® Image Control is the world's leading spectrophotometric measurement system for monitoring the entire printing process. The system's great advantage is that measurement is not restricted to the print control strip but covers the entire print image while at the same time providing automatic online control for all printing units. This minimizes color fluctuations and enables users to work with reproducible color values at all times. In conjunction with the Mini Spot® workflow, Prinect Image Control ensures reliable control of day-to-day print production. Detailed reports facilitate internal analyses and the provision of documentary evidence to customers. The color measurement system can be used for up to four presses at once.

Prinect Image Control is available for Speedmaster® SM/SX 52, Speedmaster SM/SX 74, Speedmaster XL 75, Speedmaster SM/SX 102, Speedmaster CD/CX 102 and Speedmaster XL 106.

Fast and reliable makeready of the print job • Makeready with Prinect Image Control is carried out largely automatically, based on prepress data. Print control strips, Mini Spots, and controllable solid patches are recognized automatically in the print image. Based on the spectrophotometric information from the stored target color values and printing stock and the measurements from the print control strip and print image, Prinect Image Control calculates the color deviations of the individual ink zones. Spectrophotometric control enables the influence of paper and ink on the measuring result to be analyzed separately. Unlike conventional density control, the print process is continuously monitored with the colorimetric target values and the regulation target values are automatically adapted, if necessary.

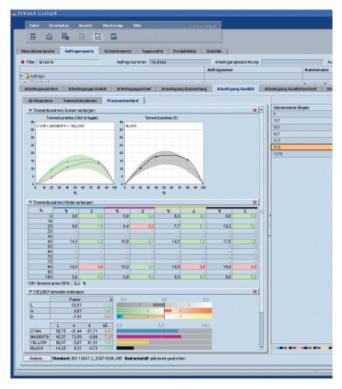


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Process analysis at the touch of a button – in the integrated Quality Monitor and Prinect workflow.

Quality analysis of the ok sheet and ongoing process control • Once the printer has adjusted the ok sheet, he can immediately check how it matches the standard. Quality Monitor, the optional software for quality analysis, analyzes the measuring data from the print control strip and additional measuring elements known as Mini Spots. Besides the evenness of zonal inking, it is also particularly important to analyze the tone value increase curves and the color match with the color space of the print standard. Quality analyses are also available for process control purposes during print production.

## Image control to satisfy the highest demands

Reproducible results and compliance with standards are an essential part of high-quality print products. Precise reproduction of logos and color areas is extremely important to manufacturers of brand products, for example. Prinect Image Control is therefore also able to control homogeneous image elements in the print control strip and also directly in the print image. The software automatically recognizes controllable solid areas from the prepress PPF data.

Prinect Image Control is the only system on the market to support direct control of CMYK images, CMYK halftone areas and solid tone areas, as well as spot colors. If an ok sheet has been archived as a reference for print production, Prinect Image Control ensures these colors remain as consistent as possible. This is necessary, because even if the solid tone values of the print control strip comply with the standard, halftone images and color areas may change during the print process.

Should tone values in the image areas fluctuate during the production run, the color changes are automatically corrected by Prinect Image Control exactly where the fluctuations occur. This direct image control is particularly useful for work and turn jobs, repeat jobs, and in packaging printing, if, for example, spot color areas need to be maintained within small tolerances.

Comprehensive reporting • Prinect Image Control records all quality parameters, measuring results, and the number of measurements in a print job. The data can be analyzed by Prinect Pressroom Manager, the Prinect workflow information and control center, using various job-related parameters. The resultant detailed reports are suitable both as a basis for internal analyses and for providing customers with comprehensive proof of print quality.

Effective color management • Prinect Image Control measures the complete sheet with approximately 50 million L\*a\*b values in just 20 seconds. This speed enables complex test forms to be measured in a very short time. All measurements can be exported, e.g. to Prinect Color Toolbox, at the touch of a button.

## Functions and benefits at a glance:

- · Quality control center for prepress and pressroom
- · Color measurement system for up to four presses
- Spectrophotometric control using print control strips and additionally directly in the print image
- Less color deviations due to control directly in the print image
- Easy operation similar to Prinect Press Center, including makeready assistant
- Automated, user-friendly makeready based on prepress data
- Integrated analysis of process quality (Quality Monitor)
- Measurement values can be displayed on Prinect Press Center Wallscreen
- Reliable process control in day-to-day print production using Mini Spots
- Fast measurement of test charts and data export to Prinect Color Toolbox
- Integrated HKS and PANTONE® color databases
- Integrated and central quality reporting in Prinect Pressroom Manager with Analyze Point
- · Calibration check and recalibration with Netprofiler



With Prinect Image Control, measurement is not restricted to the print control strip. Mini Spots ensure control in day-to-day production.

## Technical Data

Availability	Speedmaster SM/SX 52, Speedmaster SM/SX 74, Speedmaster XL 75, Speedmaster SM/SX 102, Speedmaster CD/CX 102, Speedmaster XL 106
Max. no. of presses that can be connected	4
Measuring location	Print control strip plus image
Measuring speed	200 mm/sec (7.87 in/sec)
No. of controllable colors on each side of the sheet	10
Minimum size of measurement field (W × H) in the print control strip	3.25 mm × 4 mm (0.13 in × 0.16 in)
Register measurement	-
Color management/Mini Spot workflow	with option Color Interface
Display of measurement values on Prinect Press Center Wallscreen	Optional

Prinect Image Control ensures standards-compliant measurement (spectrophotometric, D50, 2°, 45°/0°)

# Netprofiler – the software for independent calibration.

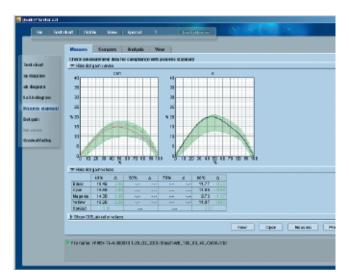
Netprofiler is the calibration software from Heidelberg for spectrophotometric color measurement systems such as Prinect Image Control. It minimizes negative effects on color reproduction by correcting deviations in color data and using calibrated color references to adjust measured values to standardized target values. Calibration can be performed independently at the print shop without external service engineers.

Regular calibration of color values • Heidelberg is the only manufacturer to offer print shops the possibility of performing colorimetric calibration on their color measurement systems. This is a great advantage for true-color production because incorrect color values are often the result of changes to color data in measuring equipment that can occur after a certain period of operation without recalibration. Netprofiler ensures that the settings of the color measurement systems always match the certified standard factory settings and that the device is working with optimum accuracy. This is the only way to prevent color deviations in production and operate several measuring devices reliably at one company.

Fast and systematic coordination • Netprofiler provides binding documentation of all measuring results – a significant benefit for coordination with customers and standardized printing within the narrow tolerances of ISO 12647-2.

## Netprofiler functions and benefits at a glance:

- · Colorimetric calibration
- Optimum adjustment of color measurement systems at all times
- · Fewer complaints thanks to color fidelity
- Compliance with ISO 9000
- · Identical colors across all sites
- · Reliable, certified quality



Netprofiler ensures optimum adjustment of the color measurement system at all times.

### Three steps to the right result

### 1 Checking the tolerance

Prinect Image Control checks its own measuring accuracy using a reference color chart. The result shows whether the measurement is within the required tolerances.

#### 2 Calibration

After this check, Netprofiler automatically starts the calibration process, i.e. it corrects deviations from target values.

## 3 Certification

If the print shop has an online connection to Heidelberg's web-based remote service, a detailed report is automatically prepared. A certificate confirms the device has been checked as specified by the manufacturer.