



Produce reliable quality. Prinect color measurement systems.





The whole spectrum of the color world. **Color measurement systems of Heidelberg.**

Each time getting the color right is essential in all print shops. In addition, fast and stable over the entire run. For this purpose, Heidelberg has been using spectral color measurement systems for over 30 years, which not only show the density but also the color itself as seen by the human eye. Whether ink formulation in packaging printing or ISO standard in commercial printing, everything is based exclusively on colorimetric CIE L*a*b* values.

This core competence of Heidelberg, in combination with a number of patents, such as the unique opaque white control, is continuously being further developed. The measurement condition M1 is now available on all systems.

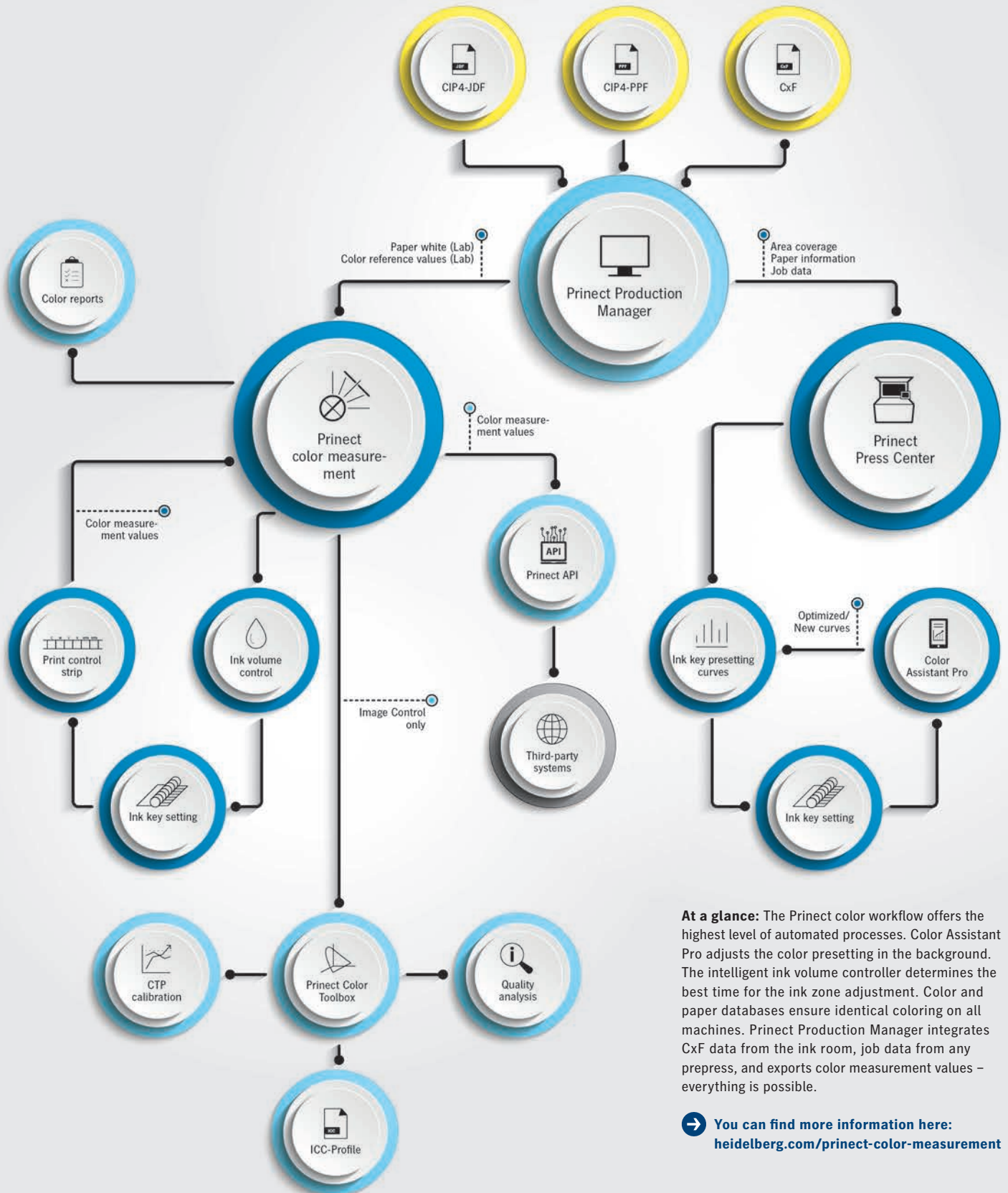
The Central Color Database with the standard interface for importing and exporting CxF data includes target values for PantonePLUS®, HKS, and FOGRA51/52 in the scope of delivery without additional licensing. Another Heidelberg innovation – In addition to the target values specified in the dry state, the wet color values required in the pressroom are also saved. This makes the set-up even faster.

The calibration software Netprofiler keeps the color measurement device close to the delivery status and is very easy to use from the printer. With the measuring report and certificate, you can pass any ISO audit.

A decision in favor of color measurement systems from Heidelberg is not just a decision in favor of the original spectral color measurement in sheetfed offset printing, but also a decision for the future.

Integrated color management.

Color settings with Prinect.



At a glance: The Prinect color workflow offers the highest level of automated processes. Color Assistant Pro adjusts the color presetting in the background. The intelligent ink volume controller determines the best time for the ink zone adjustment. Color and paper databases ensure identical coloring on all machines. Prinect Production Manager integrates CxF data from the ink room, job data from any prepress, and exports color measurement values – everything is possible.

➔ You can find more information here: heidelberg.com/prinect-color-measurement

Launching true-color production. **Prinect Easy Control.**



Prinect Easy Control is the ideal introduction to spectral measurement technology – simple to operate and easy removal of the measuring device. This means that the high-precision spectrophotometer is also available for work outside the press. Prinect Easy Control is also the most economical system in its class. Job and color information are stored together and easy to recall for reprints at any time. The system is integrated in the press control station to save space. The operator can carry out checks without leaving his work station, and concentrate on print quality at all times. The measuring speed of up to 135 mm/second (5.91 in/sec.) ensures continuous productivity: an A3 sheet takes only four seconds to measure.

Prinect Easy Control:

- Integrated in the press control station
- Powered horizontal measuring device travel, manual vertical setting
- Sheet fixing with gripper magnets and rollers under the measuring device

Highlights:

- Measuring speed up to 135 mm/second (5.91 in/sec.)
- Common storage of job and color information for faster inking-up on repeat jobs
- Automatic detection of the print control strip saves time and eliminates the need for manual assignment
- Free positioning of the control strip on the printed sheet (e. g. leading edge, center, trailing edge) for flexibility and material savings

→ You can find more information here:
heidelberg.com/easy-control

One copy just like the next.

Prinect Image Control 4.



When it comes down to absolutely uniform inking over the entire sheet, you are always on the safe side with Prinect Image Control® 4. No other unit in the world spectrally scans the whole print sheet and balances out even the smallest deviations in the print image – automatically. It automatically detects not only all measuring elements but also solid areas using the prepress data and incorporates them into the control process.

CMYK images and halftone areas can be perfectly corrected using print samples and proofs. Prinect Image Control 4 is able not only to measure opaque white, but also to control it. This permits much more reliable control of the chromatic colors when printing on foils or metal surfaces.

When not only perfect color but also flawlessness on the sheet must also be achieved, the option “Offline Inspection” is available for inspection at 200 dpi for PDF matching and for sheet-to-sheet inspection.

Prinect Image Control 4:

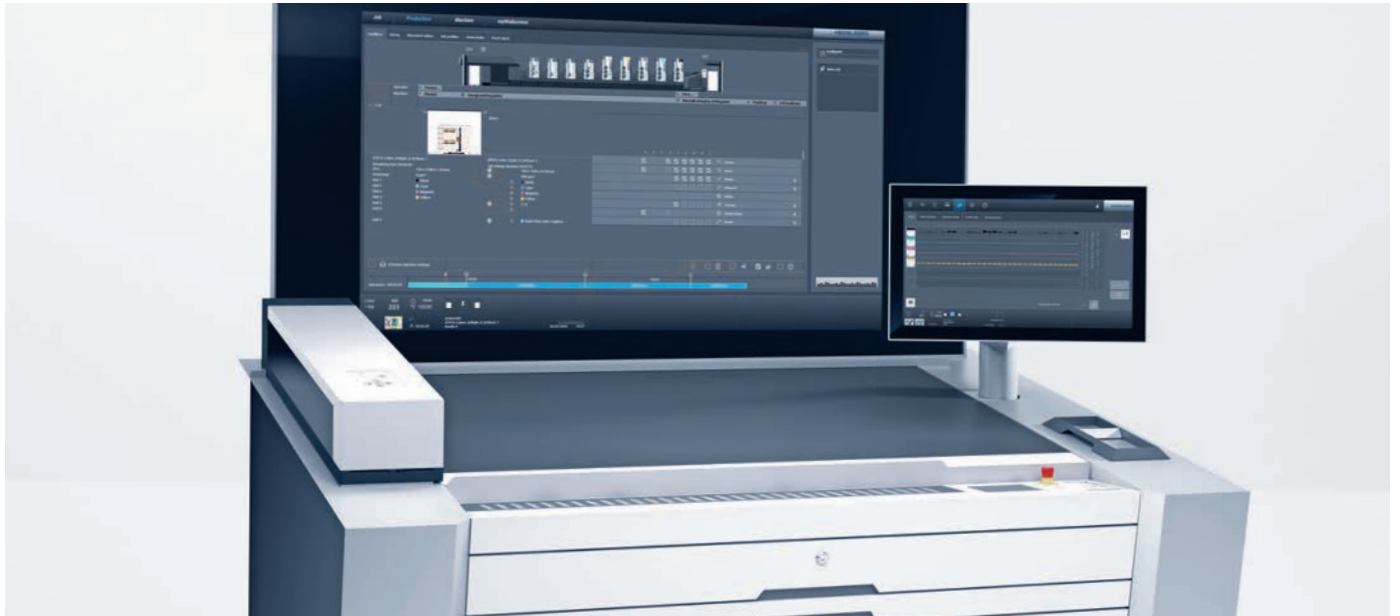
- Standalone color measurement system for connection to up to four Speedmaster® printing presses
- Autofocus to compensate for different printing substrate thicknesses
- Space-saving micro print control strips can be used without restriction across all formats
- Additional display of the color deviation on the Wallscreen XL of the Prinect Press Center XL 3
- Netprofiler for colorimetric calibration

Highlights:

- Extremely high resolution of 50 million pixels or CIEL*a*b* values
- Proof Match for faster alignment of the finished print with proofs and print samples
- Optimum flatness from lightweight paper to cardboard through vacuum suction
- Automatic feedback of the measured values to the prepress from Prinect and other suppliers

➔ **You can find more information here:**
heidelberg.com/image-control

High-performance quality assurance. Prinect Axis Control.



Prinect Axis Control® is the high-performance color measurement system for packaging and commercial printing. Set-up consists exclusively of assigning the inks. And even this is only necessary if something changes. The print control strip is automatically located and recognized on the printed sheet, as is the paper white. This means that Prinect Axis Control measures every job around three minutes faster than comparable equipment.

The maintenance-free LED lighting dispenses with costly bulb changes. A strong vacuum and automatic tracking of the print control strip almost virtually eliminate measuring errors and therefore repeat measurements.

Prinect Axis Control:

- Operation and display via the Prinect Press Center XL 3 touchscreen
- Additional color deviation display on the Wallscreen XL
- Measuring head with powered horizontal and vertical travel
- Autofocus to compensate for different printing substrate thicknesses
- Space-saving micro print control strips can be used without restriction across all formats
- Netprofiler for colorimetric calibration

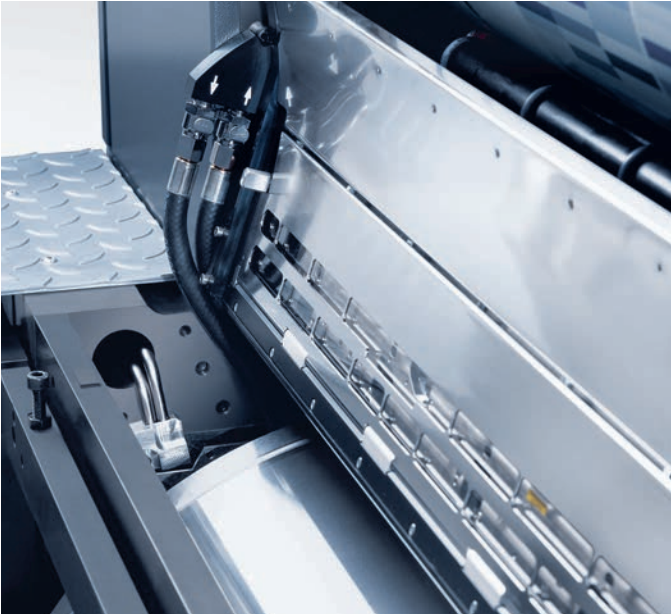
Highlights:

- Fastest spectrophotometer in its class, with a measuring speed of 200 mm/second (7.87 in./sec.)
- Automatic print control strip tracking, including sheets in an inclined position
- Maintenance-free LED lighting for long service life and cost savings

➔ You can find more information here:
heidelberg.com/axis-control

Set-up without stopping.

Prinect Inpress Control 3.



Our innovations for your success.

Discover the opportunities offered by industrial printing production of tomorrow. Push to Stop enables you to change orders fully automated for the first time in the history of offset printing – from the last to the first good sheet, right up until production starts.

The spectral measurement system Prinect Inpress Control 3, the only one of its kind in the world, finds the print control strips, the paper white, and the register marks fully automatically – and starts ink control without intervention by the operator. The color deviation ΔE , which is important in packaging printing in particular, is continuously displayed and adjusted on the fly, without pulling the sheets.

When exactly the required coloring is attained, the good-sheet counter starts automatically and the machine begins production. In addition, a tab can be inserted into the paper pile. Prinect Inpress Control 3 in combination with other automation components lays the foundation for Push to Stop, a feature for fully automated job changes without any interruption, from the last to the first good sheet and the start of production. In this way you shorten your set-up times in the long term and achieve unbeatable production speeds.

Prinect Inpress Control 3:

- Complete package for color and register control
- Operation and display via the Prinect Press Center XL 3 touchscreen
- Additional color deviation display on the Wallscreen XL
- Space-saving micro print control strips can be used without restriction across all formats
- Netprofiler for colorimetric calibration

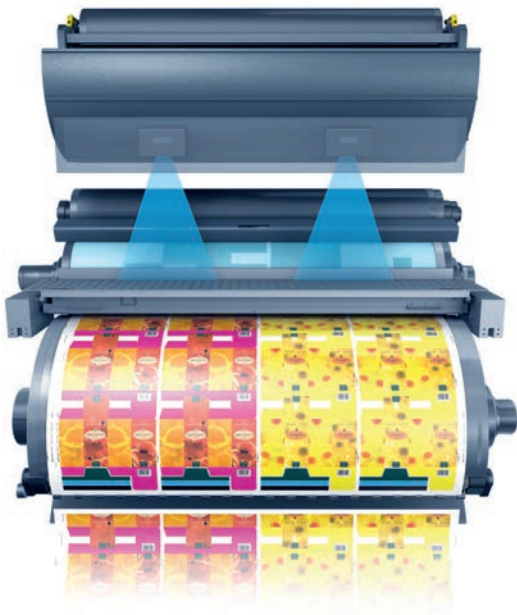
Highlights:

- Fully automatic set-up
- Quality Assist: automatic run start on reaching the good sheet
- Register control as standard
- Unique ΔE display during production without pulling sheets, for maximum quality runs

→ **You can find more information here:**
heidelberg.com/inpress-control

Reliable, flawless printed sheets.

Prinect Inspection Control 3.



Particularly in packaging and label printing, guaranteeing the quality of a printed product is not just a matter of correct inking. Printing errors need to be identified at an early stage in order to ensure there are no complaints.

Prinect Inspection Control 3 delivers top performance when it comes to sheet inspection. Two high-resolution color cameras in the coating unit of the press fully check each sheet for material defects, hickeys, ink splashes, scumming and so on to prevent follow-up costs. The blower air-assisted optimized sheet guidance permits a comprehensive inspection right up to the trailing sheet edge.

Full integration into Intellistart 3 and the print shop's workflow, manual makeready processes are no longer necessary. Prinect Inspection Control 3 sets itself up independently in the background, and triggers a PDF comparison. All processes are always displayed transparently in Quality Assist.

Prinect Inspection Control 3:

- Two high-resolution color cameras for precision inspection
- Maintenance-free LED lighting
- Optimized sheet guidance through targeted blast air support for high inspection quality up to the trailing edge of the sheet
- Comprehensive inspection reports
- InsertStar® tape inserter for tabbing defective sheets
- Available for Speedmaster XL 75, XL 106 and CX 104

Highlights:

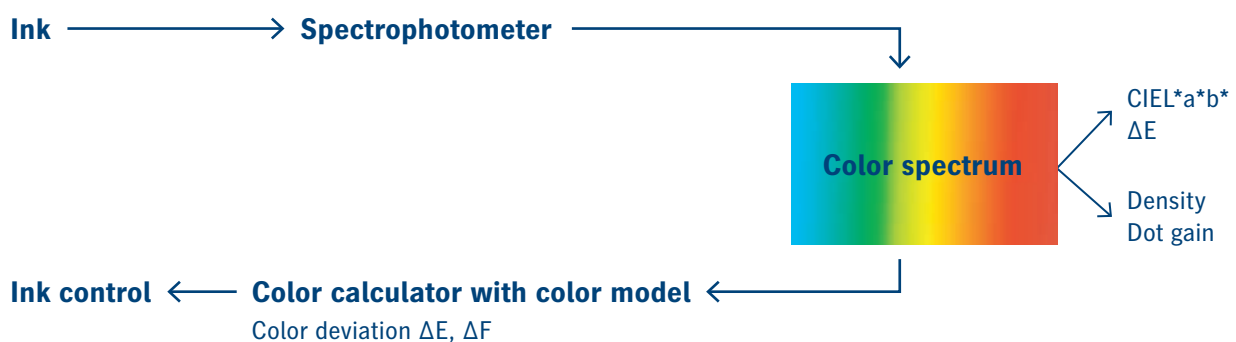
- Automatic loading of job data in conjunction with Operating Assistant for shorter setup times
- Automated transfer of inspection areas and test tolerances from prepress to the Prinect workflow
- Printed sheet automatically checked against PDF files from Prinect prepress

→ You can find more information here:
heidelberg.com/inspection-control

When density alone is not enough. Hitting and holding colors.

Spectral measurement alone will not ensure optimum coloring during printing. What is crucial is the adjustment of the ink zones. Colorimetric control from Heidelberg is the only shortcut to the desired, standard-compliant result.

Colorimetric control from Heidelberg



Modern color measurement systems work on the basis of a spectrophotometer. These systems have the advantage of seeing more, and therefore also supply more information than traditional densitometers. In addition to the colorimetric values CIEL*a*b* and ΔE , they also supply the density as an important control variable for the printer and the dot gain derived from it.

This type of ink control is crucial in ensuring that our color measurement systems hit the colors more exactly. This is because unlike density control, where the adjustment of the ink zone motors is based exclusively on the measured difference in density, we are calculating the adjustment from the colorimetric, i.e. the visually visible, difference.

You can see this difference. Because the color can look different even if the density is the same. Only colorimetric control enables you to stably control pastel tones or directly notice ink soiling right up to the accidental use of the wrong ink.

Another advantage is that colorimetric control enables you to measure a color sample once, and then immediately achieve the desired shade at the press. If the color sample or reference color cannot be produced with the ink in the ink fountain, this is indicated immediately – before the run is printed and can result in a complaint later from the customer. Three percent of all complaints are still down to the wrong inks being used!



How can we help you? Get in touch with us.

We hope this brochure inspired you. There is more we can tell you about how we could make your printing business more efficient and profitable.

If you are interested in **Prinect color measurement systems** or would like to learn more about what we can offer feel free to **contact us**. We're only ever an e-mail or phone call away.

Reach us by email

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