**Prinect Axis Control**

**Powerful color measurement for effective quality assurance** - Its high degree of automation rapidly make Prinect® Axis Control® an indispensable helper for the printing press in every print shop. Commercial printers especially like the flatness of the print sheet on the vacuum plate. Packaging printers appreciate that micro print control strips help to reduce the amount of expensive carton used in packaging. The simultaneous adjustment of all ink zones results in a significantly faster makeready for long perfectors.

Prinect Axis Control is available for all Speedmaster® presses equipped with Prinect Press Center® and can be used in straight and perfecting mode.

**Fast and reliable coordination of the print job** - Based on the spectrophotometric information from the stored color values and printing stock and the measurements from the print control strip, Prinect Axis Control calculates the color deviations in the individual ink zones. These deviations between the predefined target value and the actual value are used for calculating the necessary corrective adjustments for up to ten printing units in straight and perfecting mode. Due to the very high measuring speed of 200 millimeters per second, this measurement takes only a short time.
Reliable measurement for every grammage
Regardless of the grammage, the suction is applied evenly over the entire sheet surface. This stops the sheet slipping during the measuring process, even for grammages above 250 gsm.

Variable positioning of the print control strip
Since Prinect Axis Control moves in two dimensions – the measuring bar moves horizontally and the measuring head vertically – the control strip can be positioned anywhere on the print sheet. The variable positioning from the leading edge right up to the trailing edge offers the best conditions for maximum utilization of the print sheet. What’s more, the high resolution of Prinect Axis Control supports the use of innovative Prinect micro print control strips. These control strips are made up of extremely small measurement fields for even more space-saving utilization on the sheet.

Automatic recognition of the print control strip
The Auto Tracking function detects and recognizes the position and type of the print control strip within a 40 mm (1.58 in) corridor. The search area is determined in advance using the touchscreen of the Prinect Press Center. This eliminates the need for manual positioning of the measuring head, thereby saving a considerable time. If the printed sheet to be measured is lying at an angle on the measuring table, this is compensated for automatically and measured compensated for by the sheet position recognition and tracking systems.

Comprehensive reporting • Prinect Axis Control records all quality parameters, measuring results, and the number of measurements in a print job. The data can be analyzed using various job-related parameters by Prinect Pressroom Manager, the Prinect workflow’s information and control center. Its detailed reports are suitable both as a basis for internal analyses and for providing customers with comprehensive proof of print quality.
Permanent process control • Prinect Axis Control also supplies L*a*b* and tone values to the Prinect Color Toolbox. After analysis and, if necessary, correction, they are transferred to the CTP system where the dots are adapted on the plate, so that tone values and image quality are kept as stable during printing as the ink application. This leads to considerably faster makeready and more consistent print quality.

Key functions and benefits at a glance:
• Spectrophotometric color measurement and online color control of ink zones for up to eight printing units in straight or perfecting mode
• Fast and reliable measurement in the print control strip
• Less space required and more process information thanks to micro print control strips
• High measuring speed of 200 mm/sec (7.87 in/sec)
• Variable positioning of the print control strip
• Optimum print sheet suction for precise color measurement regardless of the grammage of the print sheet
• Automatic location and recognition of the print control strip
• Automatic sheet position recognition and tracking
• Simple operation via Prinect Press Center
• Integrated HKS and PANTONE® color databases
• Comprehensive quality reporting and process control
• Possibility to display measurement values at the Prinect Press Center Wallscreen

The touchscreen at the Prinect Press Center clearly shows even the most minor deviations in process and spot colors.

Technical Data

<table>
<thead>
<tr>
<th>Availability</th>
<th>Speedmaster SM 52, Speedmaster SM 74, Speedmaster XL 75, Speedmaster SM 102, Speedmaster CD 102, Speedmaster CX 102, Speedmaster XL 105, Speedmaster XL 145, Speedmaster XL 162</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. no. of presses that can be connected</td>
<td>1</td>
</tr>
<tr>
<td>Measuring location</td>
<td>Print control strip</td>
</tr>
<tr>
<td>Measuring speed</td>
<td>200 mm/sec (7.87 in/sec)</td>
</tr>
<tr>
<td>No. of controllable colors on each side of the sheet</td>
<td>8</td>
</tr>
<tr>
<td>Minimum size of measurement patch (W × H) in the print control strip</td>
<td>3.25 mm × 4 mm (0.13 × 0.16 in)</td>
</tr>
<tr>
<td>Register measurement</td>
<td>–</td>
</tr>
<tr>
<td>Color management/Mini Spot workflow</td>
<td>–</td>
</tr>
<tr>
<td>Display of measurement values on the Prinect Press Center Wallscreen</td>
<td>Optional</td>
</tr>
</tbody>
</table>

Prinect Axis 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 Axis 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 big 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

Three steps to the right result:

1 Checking the tolerance
Prinect Axis 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.

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