

RapidCheck – Printing process control at a click of the mouse

Proofs are produced as an inexpensive way of giving the customer a preliminary impression of what the colors will look like in the subsequent print product. The proof is typically signed by the customer and serves as the "contractual basis" for the subsequent print product, which is why it is also known as a "contract proof".

The task of the printer is to reproduce the contract proof identically in production printing. Time after time, however, this proves to be impossible - and the reason is not always clear. Is the proof incorrect, i.e. not reproducible, or are there problems with the press?

To rule out problems with the proof, GMG offers the ProofControl application which establishes beyond doubt and in a matter of seconds whether the proof is within the specified tolerances.

If this is the case, a label is printed out that documents the quality of the proof and is stuck onto the proof. The printer then knows for sure that he has a reproducible proof in his hands.

If he then also knew that his press was operating within the defined tolerances, there would be nothing else to stand in the way of reliable production.

The tool he needs for this purpose is called RapidCheck and comes from the Tucanna software forge. After all, only with a standardized printing process can predictable results be produced.

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What is RapidCheck?

RapidCheck is a solution that examines whether all printing parameters comply with standards ISO 12647-2 and 12647-3 or user-defined in-house standards.

A single measuring procedure is all it takes to acquire the relevant data, analyze them and present them in graph form. A report is generated automatically and can be printed out. In the event of deviations from the specified tolerances, the printer can quickly make the necessary corrections on the press and thus ensure compliance with the selected printing standard.

Target groups

RapidCheck is one of the standard work tools of any printshop that uses the above-mentioned printing methods (sheet-fed offset, flexographic printing, etc.) and has corresponding four-color printing presses.

Which printing parameters are checked?

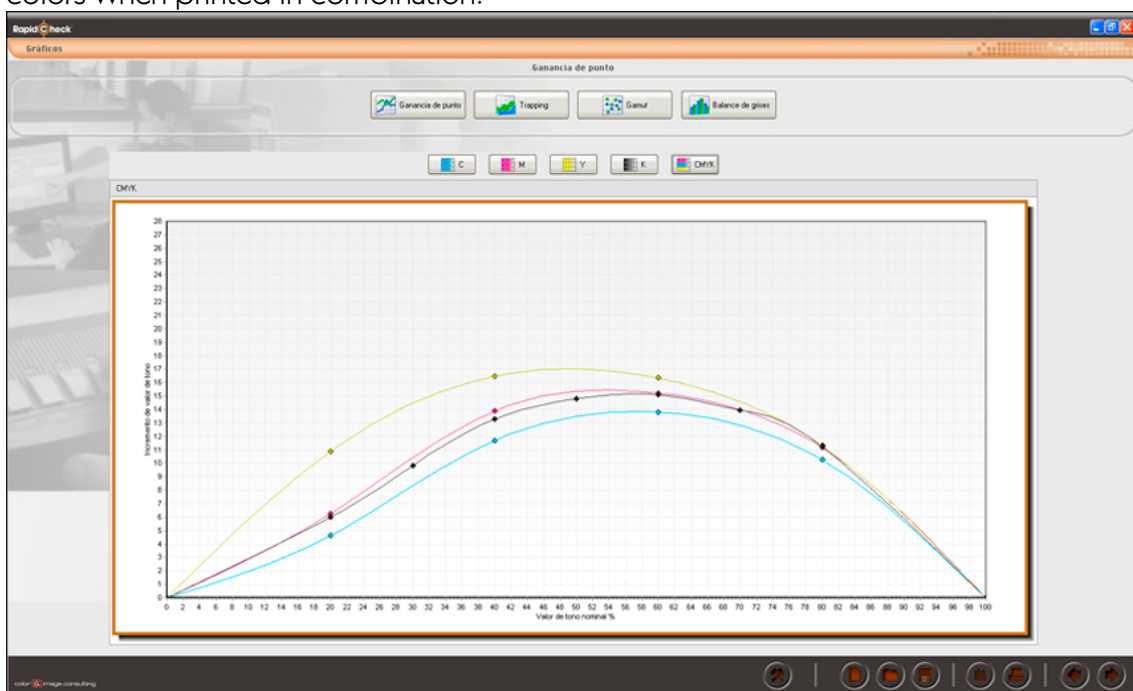
RapidCheck analyzes the following printing parameters:

Density

The density of the four process colors Cyan, Magenta, Yellow and Black is displayed.

Dot gain

The colors are displayed individually, and there is additionally a display of the four process colors when printed in combination.



Graphic display of the dot gain

Trapping

Trapping is displayed with the help of easy-to-interpret bar charts for the colors Cyan + Magenta, Cyan + Yellow, and Magenta + Yellow.

Gamut

Different displays permit colorimetric analysis of the color space (reference color space in comparison with the color space actually measured), the primary colors (C, M, Y) and the secondary colors (R, G, B) (absolute deviation from the target value and its direction), the paper color (deviation from the standard).

Grey balance

Any color deviation present is displayed in three-dimensional form: the absolute deviation from the target value, and the direction of the deviation, both in Hue as well as in Lightness.

Data analysis report

A formatted report containing all the results of data analysis is generated automatically. Apart from the underlying parameters, the results for density, trapping, and the various color deviations are presented in graph form.

The "Conclusions" section is particularly important. It unequivocally states whether the dot gain, grey balance, etc. are inside or outside the defined tolerances.

For which printing methods is RapidCheck available?

RapidCheck supports the following standards:

- ISO 12647-2 (Paper Type 1, gloss coated; Paper Type 2, matt coated; Paper Type 3, LWC; Paper Type 4, uncoated, white; Paper Type 5, uncoated, yellowish)
- ISO 12647-3 (Newspaper ISO 26; Newspaper ISO 30)

And is thus suitable for the following printing methods:

- Sheet-fed offset
- Web offset
- Newspaper printing

In addition to these ISO standards, all kinds of in-house standards are also supported. The values for the in-house standards can be created with the help of the PrintControl Pro software, and imported into RapidCheck. Consequently, RapidCheck is also an extremely attractive proposition for flexographic printing, where ISO standardization has not yet gained a foothold.

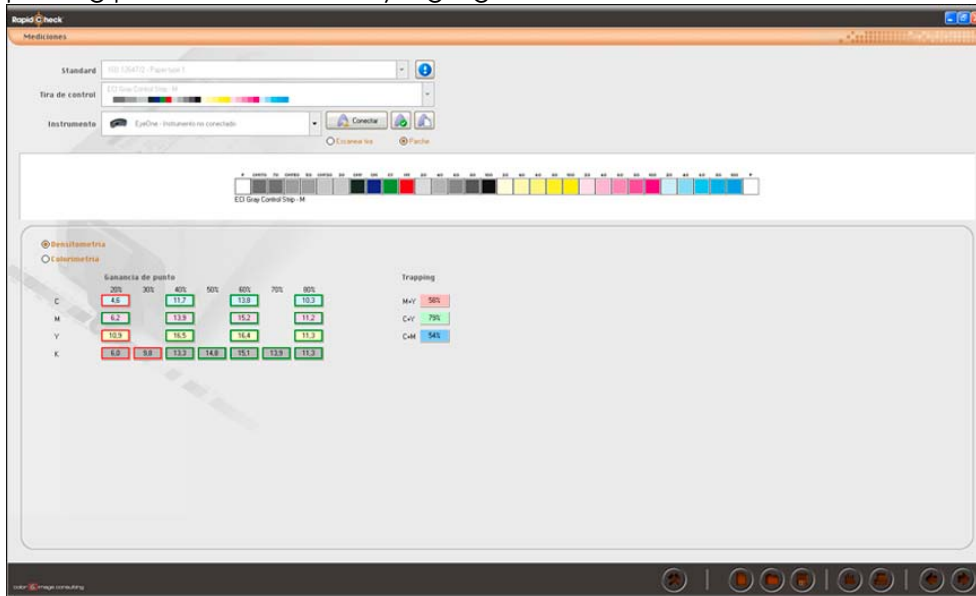
The values determined can be exported and further processed in PrintControl Pro (see Product Information on PrintControl Pro), e.g. in order to generate a new CtP curve.

Extremely user friendly

RapidCheck is an extremely user-friendly product. A single mouse click starts the measuring and analysis procedure. A connected spectrophotometer, such as the EyeOne from X-Rite, rapidly measures the data, which are automatically transferred to the RapidCheck software for analysis. The user has nothing more to worry about.

The results are displayed in graph form, allowing the user to grasp them at a glance.

The printable report contains all the results of the analysis. Any problems occurring in the printing parameters are clearly highlighted.



Main window of RapidCheck, with ECI Gray Control Strip, measured values, etc.

Technical data

Software requirements

Operating system:

Microsoft Windows 2000, Windows 2003, Windows XP, Windows Vista

Hardware requirements

Processor:

Intel Pentium or compatible, 600 MHz or higher

Memory:

Minimum 256 MB RAM, 512 MB recommended, 20 MB hard disk

Graphics card:

1024x768 resolution or higher

Port:

Powered USB interface

Supported standards:

ISO 12647-2 (with all 5 paper types), ISO 12647-3 with the specifications for Newspaper 26 and 30, and in-house standards

Supported media wedges:

Three versions of the ECI_bvdm Gray Control Strip, RapidCheck media wedge, and user-defined media wedges

Supported measuring instruments

Instruments:

EyeOne from X-Rite, and SpectroDens from Techkon

Import options:

Data from PrintControl Pro

Export options:

Data for PrintControl Pro

Supported languages:

English, Spanish, Italian, Portuguese, Chinese, Russian

Scope of supply:

RapidCheck software, User Manuals on CD, Dongle