

Improved printing properties due to automatic ink reduction

Printers are facing a constant increase in the pressure of costs and deadlines, and there are no signs of a significant change in this situation in the future. Consequently, tools that automate the workflow, stabilize and thus improve the printing properties, and result in cost savings are important solutions for print providers in their efforts to remain competitive in the marketplace. GMG InkOptimizer Sheet Fed Offset meets precisely these requirements.

Target groups

- Mediumsized to large sheet-fed offset printing businesses.

Your advantages at a glance

GMG InkOptimizer is a software solution for fully automatic ink reduction. Using sophisticated ink reduction algorithms, a DeviceLink transformation (CMYK-to-CMYK) is applied to individual images or complete pages. Particular mention should be made of the fact that – in contrast to ICC solutions – the integrity of the black channel is preserved in the process. The quantity of CMY inks used is reduced, and the proportion of black ink simultaneously increased, while maintaining an identical color impression. No difference can be determined between the two images, either visually

or colorimetrically. However, the individual color separations differ distinctly.

▼ *Solution is easy to install and operate*

When implementing GMG InkOptimizer in printshops working on the basis of international standards, it has been found that GMG InkOptimizer Sheet Fed can very easily be implemented in an existing workflow. Outstanding results are obtained without timeconsuming and costly proofing. The solution also proves to be very easy to operate in day-to-day work. The user only has to deal with a few menu windows. The only settings to be made are the data formats to be processed and the ink reduction profile to be used. These settings are assigned to a hot folder. If different data formats, ink reduction profiles or target color spaces are used, multiple hot folders are created with the appropriate settings.

▼ *Improved printing properties*

One essential advantage of GMG InkOptimizer Sheet Fed is stabilization of the printing process. Harmonization of the separations makes it easier to set the press to the correct color result with the help of the ink controls on the press. This is due to the fact that the GMG InkOptimizer profiles intervene exactly where the human eye reacts most sensitively – in the grey balance. The more stable

grey balance achieves consistent color behavior in the grey areas and in the tertiary colors, such as brown and olive shades. The smaller color variations during printing lead to simpler and more stable production printing, and thus to higher quality.

▼ *Quality enhancement*

The quality of the printed product is enhanced in that

- The separations are harmonized
- Color variations are reduced
- Repeat jobs can be reproduced better
- Incorrect GCR/UCR settings are corrected
- The contrast and the image definition in the shadows are improved

▼ *Time savings*

Ink-optimized print jobs permit faster and more intuitive

makeready, because less attention has to be paid to the grey and tertiary range owing to the neutral range remaining largely stable. In addition, the lower level of ink application reduces the risk of offsetting, less powder is needed, and the drying time is shorter.

▼ *Cost savings*

Ultimately, all the above points lead to cost savings and thus to greater efficiency. The major cost-saving elements are less waste – resulting from the fact that it takes less time to get the right colors on the press – a shorter makeready time, and thus longer production time. Given this potential for savings, GMG InkOptimizer pays for itself after just a short time.

More information on GMG InkOptimizer is available from your graphic arts dealer or at www.gmgcolor.com.

Technical Data GMG InkOptimizer Sheet Fed Offset

Software requirements	
Operating system	Microsoft Windows 2000, 2000 Server, 2003 Server, XP Professional, Vista
Hardware requirements	
Processor	Intel Pentium Dual Core, min. D950, 4 MB Level 2 (L2) Cache
Memory	2 GB RAM, min. 80 GB hard disk
Miscellaneous	CD-ROM, min. 2 x USB 2.0, network card
Features	
Advantages	Color transformation for ink reduction, preserving the visual impression. Improved printing properties due to shorter press makeready time, faster proof-to-print matching, greater ink stability. Quality enhancement due to harmonization of the separations, reduction of color variations, improvement of contrast and of image definition in the shadows, correction of incorrect GCR / UCR settings. Workflow optimization due to automated workflow, fully automatic on-the-fly color transformation via hot folders, reliability when using previously color-reduced images.

Features	
Advantages	Time savings due to shorter makeready time, shorter drying time. Cost reduction due to less waste, fewer customer complaints because of incorrect color rendition.
Input formats	PDF (up to 1.4), PostScript, TIFF, TIFF-IT, JPEG, CT/LW, EPS (Photoshop® pixel data)
Output formats	PDF (with PDF-to-PDF), TIFF, TIFF-IT, JPEG, CT/LW, EPS (Photoshop pixel data)
Supported languages	English, German, French, Italian, Spanish, Portuguese, Polish, Turkish, Chinese, Japanese, Korean
Scope of supply	GMG InkOptimizer Sheet Fed Offset on CD Standard profiles ISO Coated 27L, ISO Coated 39L with 330% total ink application, ISO Uncoated 29L, ISO Uncoated yellowish 30L, GRACoL 2006, each with three reduction levels User Manual USB dongle
Software components	GMG InkOptimizer Sheet Fed Offset
Options	Extended workflow integration via GMG Connect



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