GMG Software Solutions for Color Management and Proofing

gmg color

GMG – The Standard in Color Management and Proofing

25 years of experience in the graphic arts industry – particularly in the field of color management and proofing since the early 90s – guarantee high-quality solutions when it comes to the subject of color. GMG is represented by branches and authorized dealers the world over. More than 9,000 systems are in use throughout the world and across the entire spectrum of the graphic arts industry, at advertising agencies, prepress houses, offset printers and international gravure printers. The GMG ColorProof system has for years been the de-facto standard for virtually the whole gravure printing industry in Europe. International customers, such as Prinovis, Schawk, Hearst Magazines or Adidas, rely on GMG for their high-quality productions.

GMG has always achieved top results in both colorimetric and visual tests at the independent proofing shootouts regularly held around the globe, such as the Digital Proof Forum in Stuttgart and Wuppertal, Germany, the IPA Proofing Roundup in Chicago, USA, and TAGA in Italy.

Quality, reliability and repeatability are the characteristic features of GMG solutions. But they apply not only to GMG's products – they are equally the yardstick for our support services and our international sales activities.

GMG is dedicated to supporting standards. Consequently, it is only natural that profiles for all common international printing standards, such as ISO, PSR, SWOP/GRACoL and 3DAP, are included in the scope of supply of GMG products. Needless to say, they are optimized both colorimetrically and visually.

However, our aim is not just to support and meet the specifications of all common industry standards. For GMG, it is important to achieve a higher standard than specified by the various organizations. We additionally see it as being our task to actively and globally promote the standardization concept, i. e. printing and proofing to industry standards.
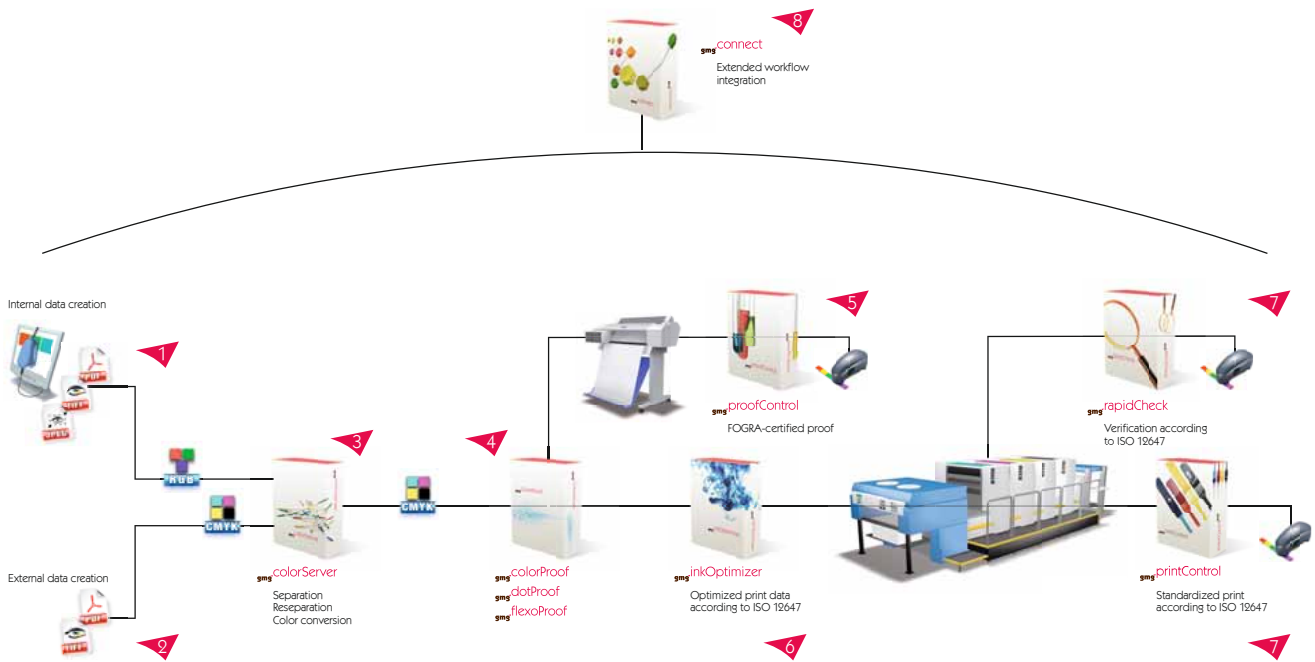
These endeavors are already clearly reflected in the current product portfolio – but we are not yet satisfied with our achievements to date. Consequently, we are permanently working on advanced developments in order to be able to supply our customers in the graphic arts industry with complete solutions for standardizing and simplifying the color management workflow – from the idea to the finished print product.

GMG Headquarter in Tuebingen

GMG Color Management Workflow

A typical color management workflow involves numerous companies and departments. However, the multiple interfaces frequently cause problems. To ensure that the required quality is ultimately produced, it is essential to structure the entire color management workflow as efficiently as possible. Since data can be delivered from external suppliers ◄2 or created internally ◄1 , having to work with a wide variety of data formats, and also color spaces, is inevitable.

GMG ColorServer ◄3 plays a central role in the color management workflow, since its task is to convert the data to a uniform color standard by separation, reseparation or color conversion. This is the only way of ensuring that all images have a uniform color appearance when printed.

The next step involves use of the GMG proofing system ◄4 to proof the data in accordance with the printing standard subsequently to be used. The proof can be verified using GMG ProofControl ◄5 which documents the fact that the proof really does comply with the predefined parameters, such as ISO

12647-2 or a user-defined in-house standard, and is valid as a contract proof.

Ink reduction is then performed with GMG InkOptimizer Sheet Fed Offset ◄6 . This leads to improved printing properties in sheet-fed offset printing, because the optimized print data make it easier for the printer to achieve the color appearance of the contract proof – provided, of course, that the press really complies with the parameters of the ISO standard or a user-defined in-house standard. GMG PrintControl and GMG RapidCheck ◄7 are used for this task. GMG RapidCheck examines whether the press prints in accordance with the defined standard. If this is not the case, the parameters are corrected with the help of GMG PrintControl.

GMG Connect ◄8 enables an optimized integration of GMG products in existing workflows.

Use of the GMG products in the different process steps guarantees problem-free, high-quality production.

GMG Products at a Glance:
Solutions for Digital Proofing

GMG ColorProof

In recent years, GMG ColorProof has established itself in many countries as the most professional solution for producing digital contract proofs – the complete proofing solution for the toughest quality demands. Our software solution contains all the components you need for high-end proofing applications, amongst others the Adobe® PDF Print Engine technology. GMG ColorProof is used wherever absolutely reliable, continuous color management of the highest quality is of crucial importance – by printers, prepress businesses, publishing houses, advertising agencies, photographers, print buyers and many others throughout the world. You, too, should opt for the authoritative RIP standard in the graphic arts industry!

GMG DotProof

Color-accurate contone proofs do not always satisfy the demands on true contract proofs. In many cases, it has to be a halftone proof that also permits conclusions regarding the screen structure during subsequent printing. Unlike many competitor products, GMG DotProof produces a genuine, color-accurate halftone proof of contract-proof quality. The proof print is based on the 1-bit data of the imagesetter RIP. This allows dependable and timely checking, i. e. before platemaking, to detect any interpretation errors, incorrect overprinting or trapping settings, tonal breaks and moiré effects. A halftone proof saves time and money and increases production reliability.

GMG FlexoProof

The product portfolio in flexo and packaging printing is characterized – in comparison with standardized offset and illustration gravure printing – by far greater substrate and spot color diversity. Consequently, the demands on a digital proofing system are also higher in the packaging sector. GMG sets new standards in this field with its GMG FlexoProof software, which is specifically geared to the needs of the flexo and packaging markets.

GMG ProofControl

GMG ProofControl – the quality control software for proofs – is a key element in a networked and standardized work environment. It offers you totally new capabilities for color-accurate verification of a proof within seconds on the basis of incorporated target values from international industry standards. Expensive imperfect prints and embarrassing complaints from customers are avoided, and customer loyalty is lastingly improved. GMG ProofControl is an indispensable quality control tool for anyone who has to communicate the achieved proof quality to third parties.

GMG ProofMedia

Optimum quality hardcopy inkjet proofs are only possible when all system components interact smoothly and are well integrated. The printing substrate is essential in this context since it is largely responsible for color space size and repeatability of proofs. The GMG proof substrates are specified, manufactured and controlled to the highest quality requirements of contract proofing. They offer a high paper tint accuracy, excellent drying and ink limit capabilities. GMG offers printing substrates with optimally coordinated profiles for all proofing requirements in the fields of offset, newspaper, gravure and packaging printing.

GMG Solutions for Color Management

GMG ColorServer

GMG ColorServer is an intelligent software solution for efficient color space transformations from one color standard to another. It permits simple, time-saving and inexpensive optimization of data for a wide variety of printing processes without requiring any in-depth knowledge of color management. PDF or pixel data are automatically separated, converted or reseparated to this end. GMG's DeviceLink approach avoids the classical limitations, such as exist with ICC profiles. Moreover, the resolution can be adapted, and output-dependent sharpening performed. This product enables you to face future challenges in the graphic arts industry – the transition from handcrafted, single-piece manufacturing to industrial, automated production. GMG ColorServer is primarily suitable for use in repro houses, prepress businesses and printshops, as well as for print buyers and advertising agencies who would like to create their printing data themselves – in unbeatably high quality!

GMG InkOptimizer

GMG InkOptimizer is used to optimize the color composition of printing data – automatically and in a matter of seconds. This significantly improves the printing quality. Optimization is based on GMG's 4D DeviceLink profiles. The CMY color component is replaced by black while exactly retaining the color impression. Sophisticated ink reduction algorithms ensure that only the structure of the separations is altered, not the color impression. The improved color composition makes it possible to stabilize the entire printing process, meaning that, for example, the gray balance reacts less to color fluctuations. Depending on the printing process and the substrate, GMG InkOptimizer simultaneously achieves up to 20% savings on ink!

GMG Solutions for Printing Process Control

GMG PrintControl und GMG RapidCheck

With GMG PrintControl and GMG RapidCheck, GMG provides two working tools that no printshop should be without. GMG PrintControl is a low-cost and very user-friendly solution for effectively controlling printing processes and achieving maximum production reliability by standardizing printing presses. The ISO 12647-2:2007 and 12647-3 standards are supported, as well as in-house standards and different calibration methods. The user is intuitively guided through the procedures for defining optimum, reproducible printing conditions.

With GMG RapidCheck, measurement of the control wedges makes it possible to verify in a matter of seconds whether a press really is printing in accordance with the defined standard, or whether all printing parameters comply with the required printing standard. In the event of deviations, the parameters are very easily and quickly corrected with the help of GMG PrintControl. GMG PrintControl and GMG RapidCheck involve little effort, guarantee users greater production reliability, and have a positive influence on the company's economic efficiency.

Integrated GMG Solutions for Color Management and Proofing

GMG Connect

GMG Connect combines the proofing and color management products from GMG to create a networked, centrally controllable workflow solution. All process progress can be monitored at any time, since GMG system installations at different locations can be accessed by intranet or Internet. This synchronizes color management and proofing with GMG products across all locations in order to guarantee consistent quality standards. The color management and proofing functions can be integrated in existing workflow systems, e.g. from Kodak, EskoArtwork or DALiM TWiST, or in editorial systems and media asset databases. Browser-based remote proofing and color management are likewise possible. Individual jobs can be created in automated fashion on the basis of XML and XMP data. The installation and maintenance of dozens of different hotfolders is thus a thing of the past.

GMG ColorMaster in a Box

GMG ColorMaster in a Box is a workflow concept based on optimum interconnection of the products GMG ColorServer, GMG ColorProof, and GMG ProofControl. GMG ColorMaster is a complete solution for simple realization of an automated RGB workflow up to the Color OK, and subsequent conversion to a wide variety of printing standards, including proofing and verification. GMG supplies predefined settings and optimized profiles for all important target color spaces, making it very easy for the user to set up an automated workflow. The high degree of automation permits time savings of up to 50% in the prepress sector. GMG ColorMaster in a Box comprises a DVD containing color profiles, predefined GMG workflows and color management settings, as well as video tutorials. This package is particularly suitable for agencies, repro shops, prepress businesses and print buyers who create data for a wide variety of media and printing processes, or who process printing data for production in different countries and thus have to give consideration to different standards.

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

Dealer's stamp