GMG Software Solutions for Color Management and Proofing
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 11,000 systems are in use around the globe in every segment of the graphic arts industry – from advertising agencies, prepress houses, offset, flexo, packaging, digital, and large-format printers, all the way to 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 see it as our job to actively promote the concept of standardization worldwide, i.e. the idea of printing and proofing to industry standards. We have additionally set ourselves the task of making and keeping color as accurate as possible. The current product portfolio already clearly reflects these endeavors – but we are still not satisfied with our achievements to date.

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.

Our efforts are also expressed in a growing number of strategic partnerships. As a result, the extensive range of GMG solutions can now be integrated in many applications, contributing to optimizing the proofing, printing and packaging systems of third-party suppliers.
Various companies and departments play a part in a typical color management workflow. To ensure that the required quality is ultimately produced, despite the numerous interfaces, this workflow has to be designed to be as efficient as possible. Since data is both supplied from external sources and generated in-house, the work inevitably involves a wide variety of different formats, and also color spaces.

Consequently, GMG ColorServer is of central importance in the color management workflow. The software sets the data to a consistent color standard by means of separation, reserialization, or color conversion. This ensures that all data has the same color appearance on the press. When combined with GMG SmartProfiler, it takes next to no time to create color profiles and calibrations for a diverse range of output devices, such as digital printing and LFP systems.

In the next step, the data are proofed in accordance with the ultimate printing standard using the GMG proofing system – either locally or at a different location by means of remote proofing. GMG ProofControl is used to verify the proof in order to document that it really does comply with the specified standard and is valid as a contract proof.

GMG InkOptimizer reduces the amount of chromatic color used and thus saves ink. In sheet-fed offset printing, for example, this additionally leads to improved printing properties, because the optimized printing data make it easier for the printer to match the color appearance of the contract proof – presupposing that the printing press complies with the parameters of the ISO Standard or a defined in-house standard. GMG PrintControl is used for this purpose. It checks whether the printing press really does print in accordance with the defined standard. If this is not the case, the parameters are corrected.

GMG FlowConnect permits optimum integration of the GMG products in existing workflow environments.

Use of the GMG solutions in the various stages of the process 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 proofs. 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 SmartProfiler
GMG SmartProfiler offers a very easy way of creating GMG ColorServer profiles and calibrations for digital printing machines and large-format printers. No in-depth knowledge of color management is necessary. The software offers presettings for specific applications, guiding the user step-by-step through the procedure for creating individual profiles. This ensures that maximum color accuracy and repeatability – and thus maximum production reliability – are obtained for any and every output system.

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
GMG PrintControl is an inexpensive and very user-friendly solution for effectively controlling printing processes and achieving maximum production reliability by standardizing printing presses. It supports ISO Standards 12647-2:2007 and 12647-3, in-house standards, and various calibration methods. The user is intuitively guided through the procedures for defining optimum, repeatable printing conditions. By measuring a control wedge, it can be verified in a matter of seconds whether a printing press really does print in accordance with the defined standard, and whether all the printing parameters comply with the required printing standard. The parameters are very easily and quickly corrected in the event of deviations.
Integrated GMG Solutions for Color Management

GMG FlowConnect

Increasing automation in the graphic arts industry is leading to growing demand for a networked, centrally controllable color management solution. It should be possible to check every step of the process at any time – even when using systems from different manufacturers. GMG FlowConnect is the link between the GMG ColorServer/GMG InkOptimizer color management solutions and automated workflow systems, currently including Enfocus Switch and DALiM TWiST. GMG FlowConnect permits company-wide control of the GMG software in the production workflow.

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