

Color Management in Large Format Printing





Challenges in large-format printing

Different color results on a wide variety of substrates

- ▶ Customers expect always the same color rendering, regardless of the production method – large-format printing, digital printing or conventional printing processes.
- ▶ A coherent corporate design needs to be realized – from the logo on the truck livery to the stationery and the brochure.
- ▶ High color accuracy is increasingly becoming a necessity in large-format printing.
- ▶ Manual color adjustment of data and profiles is a very time-consuming procedure, and often fails to produce the required quality.

Complex data handling

- ▶ Data is supplied from different sources and with a wide variety of color settings.
- ▶ Regardless of the quality of the data, the customer expects the best possible print quality, usually the equivalent of offset.
- ▶ Data has to be converted and normalized – an elaborate, manual procedure that is highly susceptible to error.
- ▶ Depending on the age and quality of the front-end system used, complex files with spot colors and transparencies can lead to delays in the production process.

Demanding profile creation

- ▶ Different printing processes, a wide variety of media and complex tools call for a high level of expertise when creating profiles.
- ▶ Distributed color management on each front-end results in different color rendering on the individual printing machines.



Consistent color results ...



- ▶ Centrally controllable GMG color management ensures consistent color results.
- ▶ The high-quality color conversions offered by GMG ColorServer optimally convert colors – including spot colors – to the color space of the required output devices.
- ▶ The visual color impression is preserved, regardless of the printing process, press and substrate.
- ▶ An ISO Coated V2 appearance can easily be produced in large-format printing, in order to obtain a visual match with offset printing.
- ▶ When producing under pressure of time, a job can be split over several machines and printed in parallel. Since the color results are identical, the individual prints can be combined without any loss of quality.

Reliable data handling ...



- ▶ GMG ColorServer automatically and consistently converts incoming data to the required target color space – whether it is from ISOcoated V2 color, RGB or any other color space.
- ▶ Fully automatic preparation of the printing data for the respective output device is helpful in the event of a change of printing press or substrate at short notice.
- ▶ As a result of using the Adobe® PDF Library, GMG ColorServer can flatten PDF files containing transparencies, and convert the colors of other elements in PDF files so exactly that manual conversion, e.g. via Adobe Acrobat®, is unnecessary. Consequently, these files can also be processed without difficulty in relatively old RIPs – resulting in major financial savings.
- ▶ Centrally controlled color management via GMG ColorServer increases production reliability.
- ▶ Errors detected at the prepress stage can be corrected at a fraction of the cost that would later be incurred on the press.



Rapid creation of high-quality profiles ...



- ▶ GMG SmartProfiler and a corresponding measuring device put users in a position to very quickly and easily calibrate a wide range of large-format printers, and create their own high-quality GMG ColorServer profiles.
- ▶ GMG ColorServer profiles can be created for highly diverse substrates, such as paper, films, textiles, leather, glass, etc.
- ▶ GMG SmartProfiler and GMG ColorServer ensure consistent and repeatable results, and thus consistent quality.
- ▶ While no in-depth knowledge of color management is needed, consistent color results are guaranteed.

... no problem with GMG



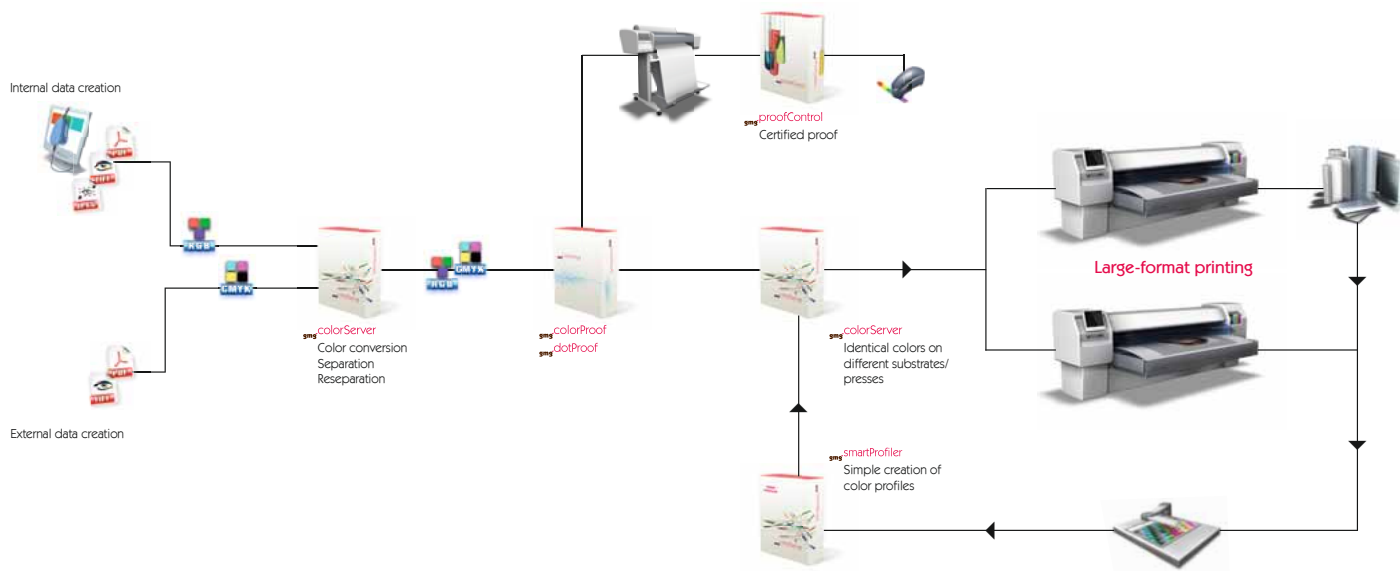
With GMG software solutions, you have the right tools at your fingertips for optimizing your color management process from start to finish, be it for proofing with GMG ColorProof or for color management with GMG ColorServer and GMG SmartProfiler.



Creative

Prepress

Printing process



GMG software solutions keep you in control of color – from prepress to printing. GMG products form a single, modular family and support the common international standards, as well as your in-house standards, of course. Give them a try and convince yourself.



The GMG software solutions are available online at www.gmgcolor.com for free testing using your own data.



GMG ColorProof

There are not yet any standards for large-format printing. Consequently, reference standards from offset printing are generally used, such as ISOcoated V2. The data is output with GMG ColorProof and verified with GMG ProofControl.



GMG ColorServer

GMG ColorServer is of core importance within a color management workflow, especially in relation to production reliability. As a central color management system, it ensures that almost identical printing results are obtained on a variety of printing systems, despite different printing technologies. It fully automatically matches RGB, CMYK and mixed data to a consistent color standard by separation, re-separation or color conversion. This is the only way to ensure that all data is identical in color appearance. The DeviceLink approach devised by GMG avoids known drawbacks of ICC technology, such as re-separation of the black channel.



GMG SmartProfiler

GMG SmartProfiler is indispensable in large-format printing. Its Wizard enables users to calibrate and profile their large-format printers and the host of substrates without requiring any in-depth knowledge of color management. This ensures that maximum color accuracy and repeatability is achieved, and thus maximum production reliability, regardless of the output device and the substrate.





About GMG

With more than 25 years of experience in the graphic arts industry – particularly in color management and proofing since the early 1990s – the GMG name is synonymous with a guarantee for high-quality solutions for everything to do with color. Over 10,000 systems are in successful 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.

GMG is committed to supporting standards. So, it is a matter of course that the scope of supply of GMG products includes profiles for all common international printing standards, such as ISO, PSR, SWOP/GRACoL, 3DAP, etc., which are colorimetrically and visually optimized to meet the toughest demands.

GMG solutions are characterized by quality, reliability and repeatability. But these features describe not only the GMG products. They are equally the yardstick for our customer support and our international distribution activities.

The success of our past achievements does not leave us complacent. We are permanently working on improvements to our products in order to provide 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.

Dealer's stamp

gmg ^{color}

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