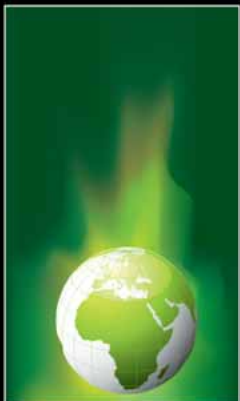
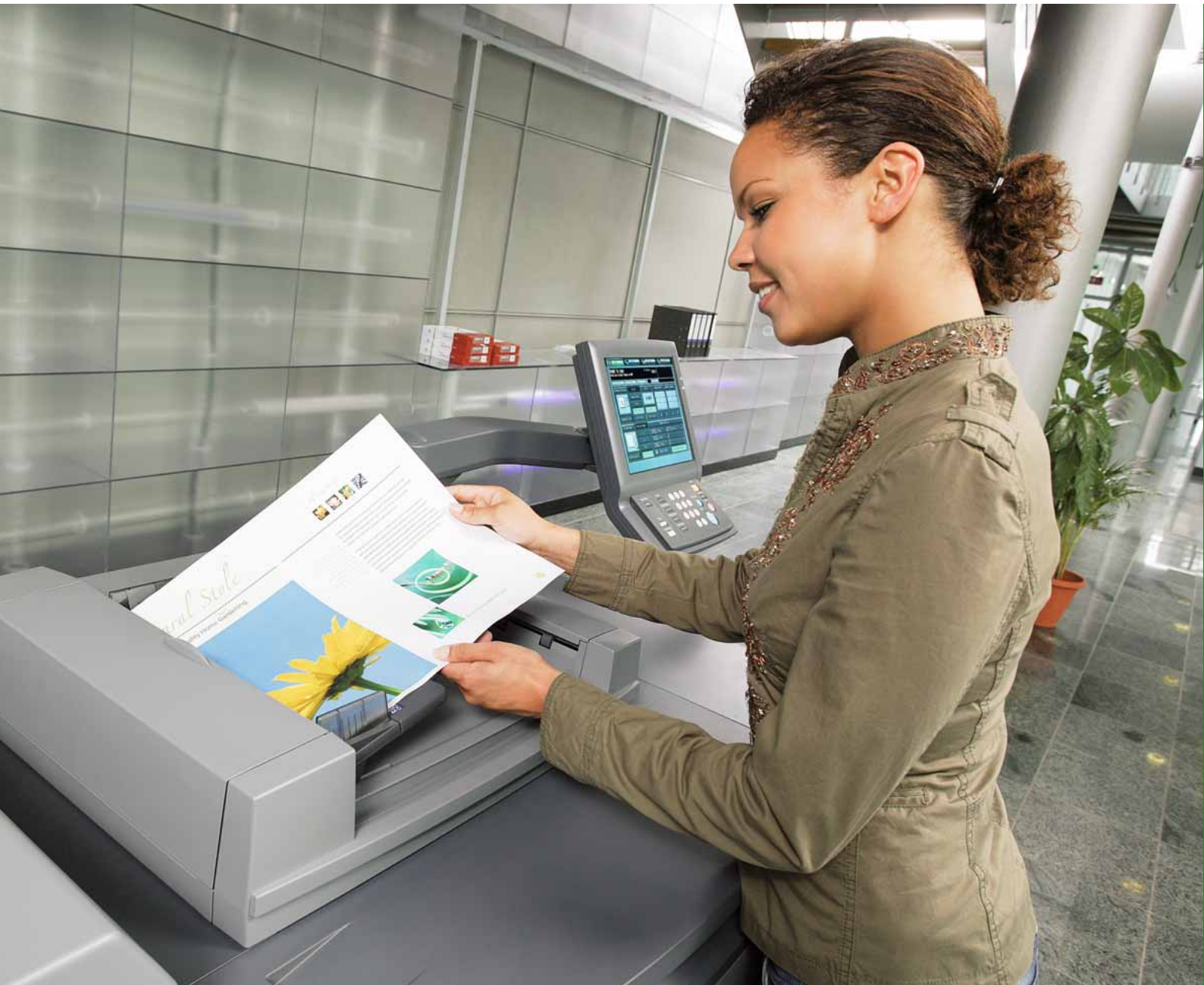


Color Management in Digital Printing

gmg^{color}





Challenges in digital printing

Hybrid production

- ▶ More and more printers are opting for a hybrid production environment, comprising digital and offset printing.
- ▶ As a result, a single print job is often produced by different printing processes – e.g. the cover of a magazine by personalized digital printing, and the inside pages by offset printing.
- ▶ Customers expect always the same color rendering, regardless of the production method – digital printing, large-format printing or conventional printing processes.

Different color results

- ▶ High color accuracy, maximum production reliability, and repeatable print quality are increasingly becoming a necessity in digital printing.
- ▶ Customers expect rapid production. Therefore, it should be possible to split production over several digital printing machines. However, device-dependent color differences can make this difficult.
- ▶ Distributed color management on each front-end results in different color rendering on the individual printing machines.
- ▶ Manual color adjustment of data and profiles is a very time-consuming procedure, and often fails to produce the required quality.

Demanding 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.
- ▶ 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.
- ▶ Data has to be converted and normalized – an elaborate, manual procedure that is highly susceptible to errors and for which there is no time when producing many short-run jobs.

Consistent color results ...



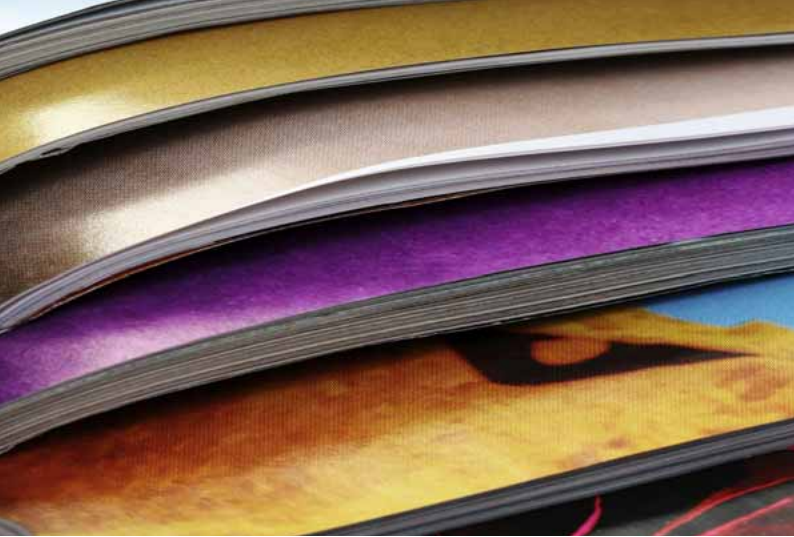
- ▶ Centrally controllable GMG color management ensures consistent color results.
- ▶ GMG SmartProfiler and GMG ColorServer allow you to very easily create the necessary color profiles and calibrations for a particular output device with the help of a Wizard. No in-depth knowledge of color management is required.
- ▶ 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 also easily be produced in digital printing, in order to obtain a visual match with offset printing.
- ▶ Thanks to consistent print quality on different printing systems, the printing process can be flexibly selected at the last minute, while „load balancing“, i.e. splitting of the workload, makes it possible to achieve optimum capacity utilization.

Repeatability ...



- ▶ As a result of GMG profiling, standards such as ISO 12647-2:2007 are optimally reproduced in the available color gamut of the printing system, leading to a dramatic improvement in production reliability and print quality.
- ▶ Calibration with GMG SmartProfiler ensures optimum reproducibility of the required quality standard.
- ▶ Simple quality control can be performed with GMG ProofControl, which offers rapid evaluation of the media wedges to verify compliance with the defined color standard.





Reliable data handling ...



- ▶ GMG ColorServer automatically and consistently converts incoming data to the required target color space – whether it is from ISO Coated V2, RGB or any other color space.
- ▶ 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.

... no problem with GMG!



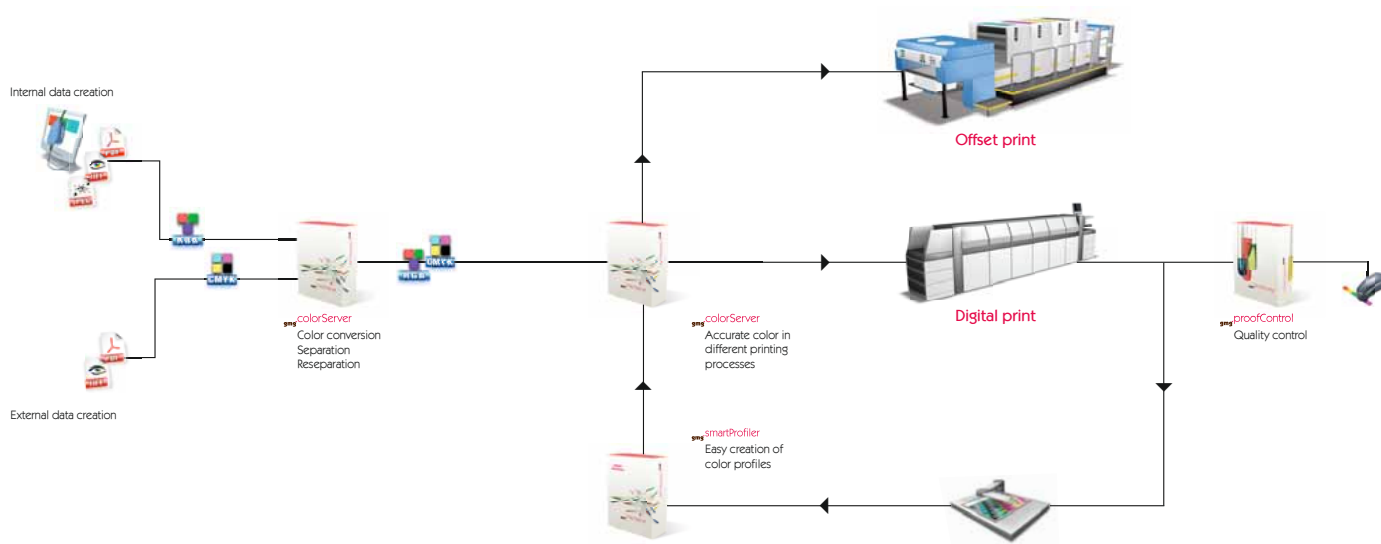
With the GMG software solutions GMG ColorServer and GMG SmartProfiler, you have the right tools at your fingertips for quickly and reliably optimizing your color management process from start to finish – and thus for ensuring trouble-free, high-quality production.



Creative

Prepress

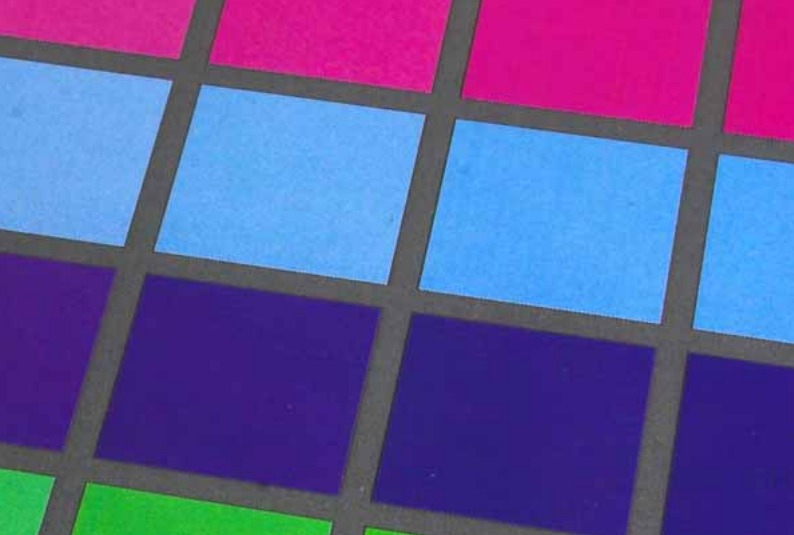
Printing process



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 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 a Wizard that enables users to easily calibrate and profile a wide variety of output devices, such as digital printing machines. The software offers presets for certain applications, and guides the user step-by-step through the process of creating individualized profiles. This ensures that you achieve maximum color accuracy and repeatability, and thus maximum production reliability, for any output system.



GMG ProofControl

With GMG ProofControl, you can measure and evaluate media wedges quickly and simply, in order to verify and control compliance with the defined color standard. As a result, you have an effective tool at your fingertips for performing meaningful quality control.





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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