

Athena Graphics: Optimizing images for flexo printing with GMG ColorPlugin in Adobe Photoshop



Project: Overcoming the challenges of layout and image processing in flexo prepress, **Company:** Athena Graphics, **GMG Solution:** GMG ColorPlugin



Athena Graphics is specialized on the refinement and optimization of print data.

Founded in 1991 with the vision to be one of the leading flexo prepress services for Belgium, Athena Graphics has grown quickly and has expanded to have offices now in Belgium, France and Netherlands.

The philosophy of founder Geert Cosaert and his son, Ignace Cosaert, is to employ a team of expertly trained operators and project managers who use the latest cutting edge technologies for flexo prepress. Athena Graphics is

known for their high standards and quality products and services, always ensuring that their packages are consistent in color and design.

Athena Graphics began using GMG solutions for proofing in January 2006. The Athena team was later asked in 2013 if they would be interested in being a beta tester for the new GMG OpenColor solution for proofing spot colors. GMG OpenColor uses a powerful spectral model of the printing

process, which allows to calculate the halftones as also the overprints of a spot color with other spot colors or process colors. The results with GMG OpenColor have been very successful, and the solution is now used for proofing of print processes with a broad range of substrates. This encompasses e.g. flexible packaging, cardboard and labels.

The challenge of layout and image optimization

Proofing is only one of several tasks during the transformation of a digital packaging design to perfect flexo plates for production. The necessary adjustments of layout and images to match the final printing process are generally very time consuming.

In the past, the different tools used by the operators for image and color adjustments, couldn't use the same color profiles and profiling technology for proofing and separation. Photoshop, the leading software for image manipulation offers only very basic tools to edit and simulate colors

in images with spot color channels. The color appearance of images in Photoshop can be quite different to the result on a proof.

Thus all steps in optimizing images for flexo printing require highly skilled operators to estimate the color result in Photoshop. Often they work several hours on optimizing the packaging design and need to create several proofs, before the job is ready for plate production.

The birth of the GMG ColorPlugin for Photoshop

GMG has intensive discussion with their user base in packaging, to better understand their needs concerning color management. Several users asked for a better connection between Adobe Photoshop and GMG solutions including GMG OpenColor with its spectral based MX profile technology. Athena Graphics is one of the companies, who are often involved in co-creative work and test beta versions of new products.



High-end color communication based on Epson and GMG OpenColor.

During the beta test of GMG ColorPlugin, Athena Graphics quickly realized how efficiently it helps to streamline their image adaptation workflow. Color conversions are not only possible on file level, but also for single or multiple layers and selections.

On average both the time and number of internal approval cycles was significantly reduced by half. Also, the quality improved and results better match when handled by different operators.



The GMG ColorPlugin offers a color accurate preview via GMG OpenColor and several tools for high-end color manipulations.

Workflow with GMG ColorPlugin

A mouse click softproofs an image including the spot colors. A good softproof in Photoshop based on GMG OpenColor technology matching the proof, provides the operator with much more safety to ensure his color corrections and meet the required level of quality. Typical tasks with the GMG ColorPlugin are e.g. converting from color spaces such as FOGRA39 to the flexo color space and changing the first printing dot in data including a color correction for the best possible match, while preserving the color appearance. A special feature of GMG ColorPlugin is the possibility of remove individual color channels or exchange them with other colors.

“After the beta test, buying and installing the GMG ColorPlugin on every computer of our Photoshop operators has been a no brainer. The image processing is now much smoother than before. Both time and the number of approval cycles has been significantly reduced. The investment has paid off in a very short time.”

Conclusion from Johan Heyrick, Proofing Manager at Athena Graphics



Inhouse flexo plate making with the latest technologies, as also offset plates and gravure cylinders with partners.