Welcome!

We will start in some minutes
Proof ‘em all!

Color Consistency and Packaging Proofing

Stefan Vettel
25th April 2019
GMG Academy
GMG GmbH & Co. KG
Proofing and color management solutions

35 years of GMG

More than 12,000 installations

GMG systems are certified in any printing standard

Strong relationship to our clients

Continuous expansion & development

130 employees worldwide

Academy training centers
Your guide today...

Stefan Vettel
technical support engineer

- With GMG since 2012
  - In the industry since the 90’s
- Life before GMG:
  - Studies
  - Support engineer for several dealers
- Trainings, Support, Consulting
Agenda

- Proof
- Challenges
- Usecase: Proof
- Usecase: Mockup/Dummy
- Usecase: Prototype
- Devices
- Wrap-up
- What is OpenColor?
What is a proof?
What is a proof?

Color  Content  Designtool
Contract  Reference  Prototype
Proof

a simulation

appearance – and color – of the final product including cmyk and spot colors
A proof has to match the expected production result. Content of the design. Appearance of the product.

Color, noise, substrate in color and structure, typical production defects, … should all be displayed on a proof.
Proof

... a physical reference

... the tool in color communication (color contract)

- better than any photo-slide
- better than „my screen“ or „my offset-printout“
- more flexible than swatchbooks or fixed color palettes
Challenges

... there are many specialties in packaging printing

- High demands on quality
- Fast seasonal changes
- Different printing processes
- Different material and substrates
- Frequent usage of spot colors
Challenges

... a variety of printing processes

Offset  Gravure  Flexo  Digital
Challenges

... a variety of materials

- Paper and carton
- Corrugated board
- Metal
- Glass
- Foil
  - transparent, white, metallic
  - front- and reverse
Challenges

... usage of spotcolors
Challenges

What do we need to make good proofs in such a challenge?

- Printer
- Media
- Ink
- Software
- Sophisticated colormanagement capabilities
- … so if you have the proper printer, you only need media and profiling
Challenges

But: keep it smart and as simple as possible!
Usecase: Proof

Standardized proof-setups are most efficient for many jobs

- Pre-installed color libraries
- Standardized media
- Click-button solution
- Color and content
Usecase: Mockup

A mockup is a model/simulation of a design or product, used for demonstration, design evaluation, promotion, etc

• Special media?
• Additional procedures
• Color and content and look and feel
Usecase: Prototype

A prototype is an early sample of a product, used for testing a concept or process

• The real production media
• Procedures as close as possible to the final ones
• Color and content and look and feel and function
Devices

Water based ink - extended gamut
Epson SC-P7000

✓ Proof media
✓ Extended gamut
✓ Inline measuring (Spectroproofer)
  - Simulation of transparent and metallic film
Devices

Water based ink - white

Epson 7900WT

- Proof film
- White
- Extended gamut
  - Sensitive ink
  - White density
Devices

Solvent ink - white & metallic
Roland VS420i

- Solvent substrate/film
- White & metallic
- Maintenance
- Speed
- Small gamut
Devices

UV ink - white & varnish
Roland LEC330

✓ Production substrate
✓ White & varnish
  – Maintenance
  – Speed
  – Small gamut
Devices

Solvent ink - white / metallic
Epson SC-S80600

✓ Solvent substrate/film
✓ White & metallic
✓ Speed
✓ Big gamut
✓ Maintenance

Wrap-up

• With the printer drivers in GMG ColorProof and GMG profiling software the gap between proofing and mockup creation is closed
• Color accurate & repeatable mockups – extend the look & feel of your proofs
• Wide range of supported media
Wrap-up

- GMG allows quick and easy characterization and profiling of the simulation color space
- CMYK or spotcolors, we proof it.
- Onboard characterizations & spot colors
- GMG ministrip technology for highest profiling efficiency
- The best color prediction for overprints
- Best calibration technology
Questions?
What is OpenColor?
GMG OpenColor Value Proposition

- GMG's patented OpenColor technology is unique and specifically designed to meet the needs of the packaging industry.

- GMG OpenColor allows package designers to simulate different color combinations without going on press for approval.

- GMG OpenColor creates multicolor profiles out of spectral data in combination with printing process parameters without profile iteration.

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GMG OpenColor Capabilities

- **Proof & Separation Profiles at the Same Time**
  Generate a proof profile and separation profile with the same measurement in one application
Including spot colors?
How long do you need
to obtain a good profile?
GMG’s smart mini-strip replaces an entire ECI 2002 chart

The Custom Patch measurement enables Profiling **without** a Test chart

by using **ink patches** or **print control strips**
How does GMG OpenColor work?
GMG OpenColor Capabilities

- **How to feed GMG OpenColor**
  Use data from different sources to get to your result
GMG OpenColor predicts the overprint of spot colors based on the printing process

The overprints are achievable on the press
Let’s have a look at the GMG bTasty samples
You can use existing projects for new designs!

Example: Seasonal change of packaging
Spectral Data – The DNA of the Color
Every Color has a specific spectral curve.
Unique Spectral Prediction Model for Spot Color Overprints

- Patented spectral prediction model
- Precise simulation of spot color tints
- Best spot color overprint prediction on the market
Unique Spectral Prediction Model for Spot Color Overprints
Why is spectral data better than Lab values?

Spectral Data

XYZ Values

Lab Values

Data loss

Data loss
GMG OpenColor Capabilities

- **Accurate Spot Color Simulation** - Precise prediction of overprinting colors (e.g. CMYK and tints + Spot or Spot on Spot) using multicolor profiles
- **Profile Creation from Custom Test Charts** – No standard test charts needed. Customized and minimized test charts can be used
- **Re-calculate Profiles** – Profiles can be easily recalculated if process parameters change (e.g. new substrate, change in ink sequence etc.)
- **Customizable Spot Color Library** - Easy creation of custom spot color libraries
Do you want to know more?
Your contacts at GMG

- Your Dealer: wajahat@phoenixtecsol.com
- Sales-related questions: info@gmgcolor.com
- Technical questions: support@gmgcolor.com
- Technical Newsletter „GMG SupportNews“ available on support.gmgcolor.com
- Workshops and knowledge: academy@gmgcolor.com
Upcoming Academy Dates

**WORKSHOPS AT GMG HQ**

- Digital Printing – Process Control and Profiling  
  May 21st – May 23rd 2019
- Packaging – Proofing and Separation  
  November 5th – November 7th 2019

**NEXT WEBINAR**

- CxF and SCTV with GMG: Unscrambling your Spot Color Solution  
  June 11th 2019, 3.30 – 4.00 PM CET
Upcoming Events

**LABELEXPO 2019**

- Save the Date: 24th September – 27th September 2019 at Brussels Expo
Wherever a color goes it stays that color