

Profiling non-standardized printing conditions

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ICC Color Experts Day, Bressanone



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GMG Produkt Portfolio

Colormanagement by GMG



GMG ColorServer

Automatic color conversions ensuring consistent results across different substrates.



GMG InkOptimizer

Automatic reduction of chromatic inks resulting in better print stability and significant ink savings.



GMG SmartProfiler

Easy-to-use calibration and profiling wizard for digital and large format systems.



GMG ColorPlugin

The ingenious plugin for Photoshop turns complex retouching tasks into simple ones that anyone can master.



GMG ColorMaster

GMGs unique and outstanding RGB-Workflow, most efficient to highest color quality.



GMG OpenColor

Innovative profiler exactly predicting how your inks will interact on press.



GMG ColorProof.

Internationally renowned plug-and-proof solution for printing contract proofs unrivaled in terms of color accuracy and consistency.



GMG DotProof

Market leader for printing halftone proofs, this is the only software solution that genuinely simulates dot patterns in contract proof quality.



GMG FlexoProof

Contone and halftone proofing solutions with additional special effect features for the packaging market.



GMG ProofControl.

Proof verification tool for printing and measuring control strips and evaluating the measurements according to print or in-house standards.



GMG ProofMedia

GMG provides best-quality proof media with optimally matching profiles for all contract proofing requirements.



In-depth Expert Knowledge and Customized Services

GMG Academy

Gain valuable first-hand expert knowledge with training from GMG Academy.

GMG Services

Reliable expertise on all aspects of color management, installation, ongoing support and system maintenance

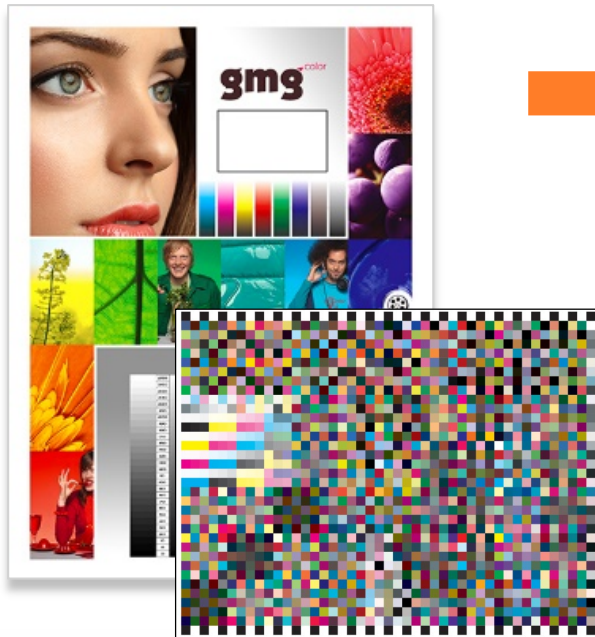
GMG Consulting

From creation and prepress to production, analyzing and optimizing the whole color management chain

Agenda

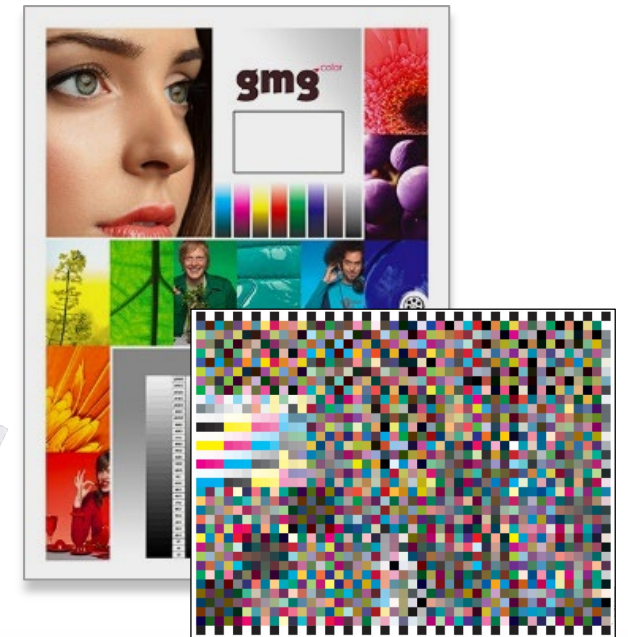
Input

characterization



Output

characterization / profiling/separation/optimization / process control



About standardized and non-standardized printing

- ▶ Standards for CMYK Offset-printing are defined for:
 - inks
 - media
 - color on media
 - process
 - ...
- ▶ Leaves only a reduced number of variables to be adjusted in production:
 - ink densities
 - plate curves
 - ...

About standardized and non-standardized printing

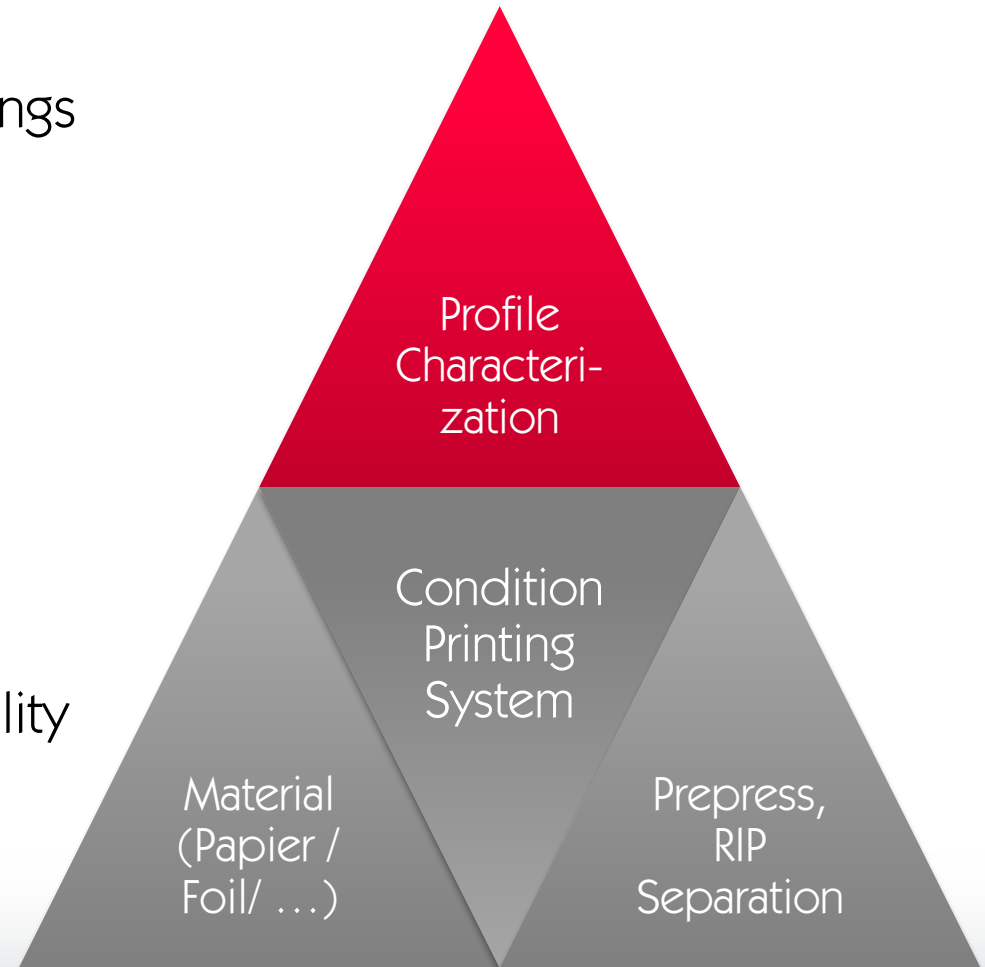
- Standardized printing is accompanied by tools for a universal and consistent data handling and color prediction

swop PSO CRPC 1-7
JapanColor FOGRA39

- Non-standardized printing setups are basically starting from scratch
 - no standard ink-set
 - no standard media
 - no reference for color on media
 - standard process description
 - ...

About standardized and non-standardized printing

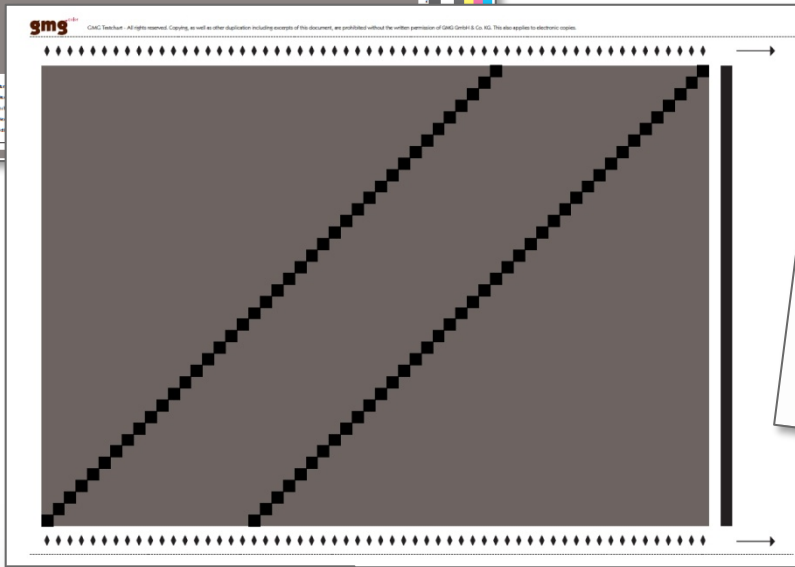
- ▶ evaluation and check of actual setup and settings
 - ▶ Everything clean and ready-to-go?
 - ▶ Ink-split, ink-cut, total ink-coverage, ...
 - ▶ Rip-settings?
 - ▶
-
- ▶ In a non-standardized setup, more responsibility shifts to the prepress departement



Characterization of a process



Visual Test Form

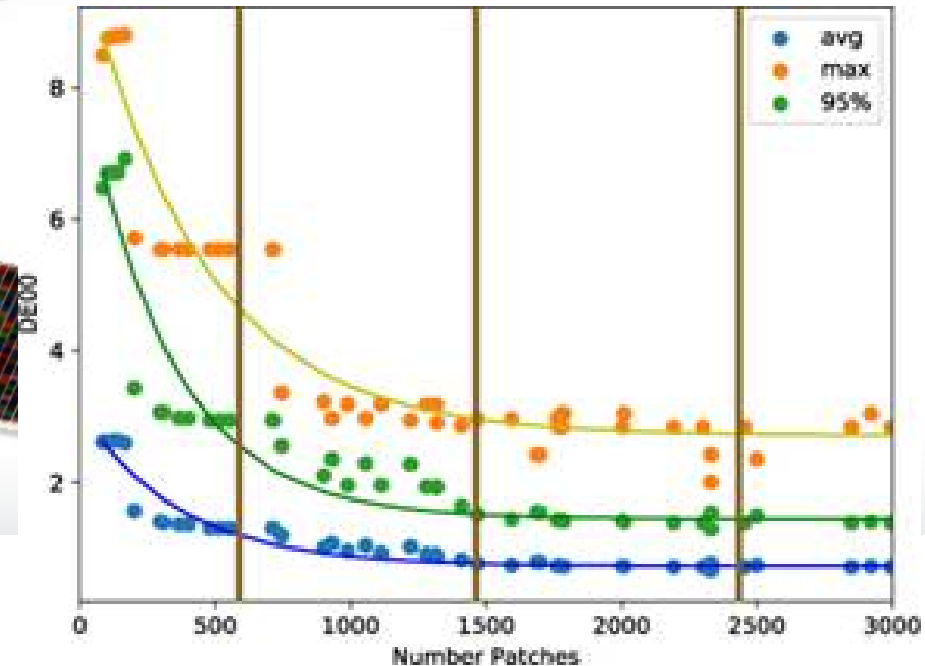
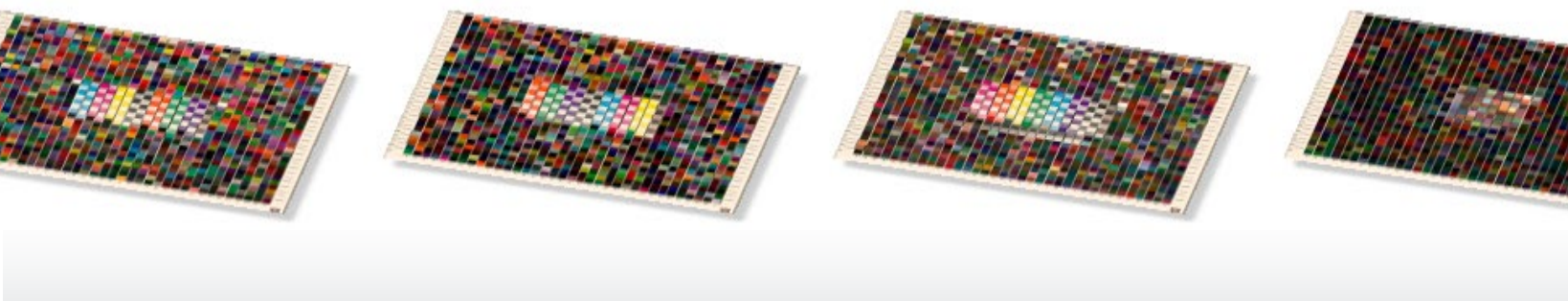


Homogeneity Test Form



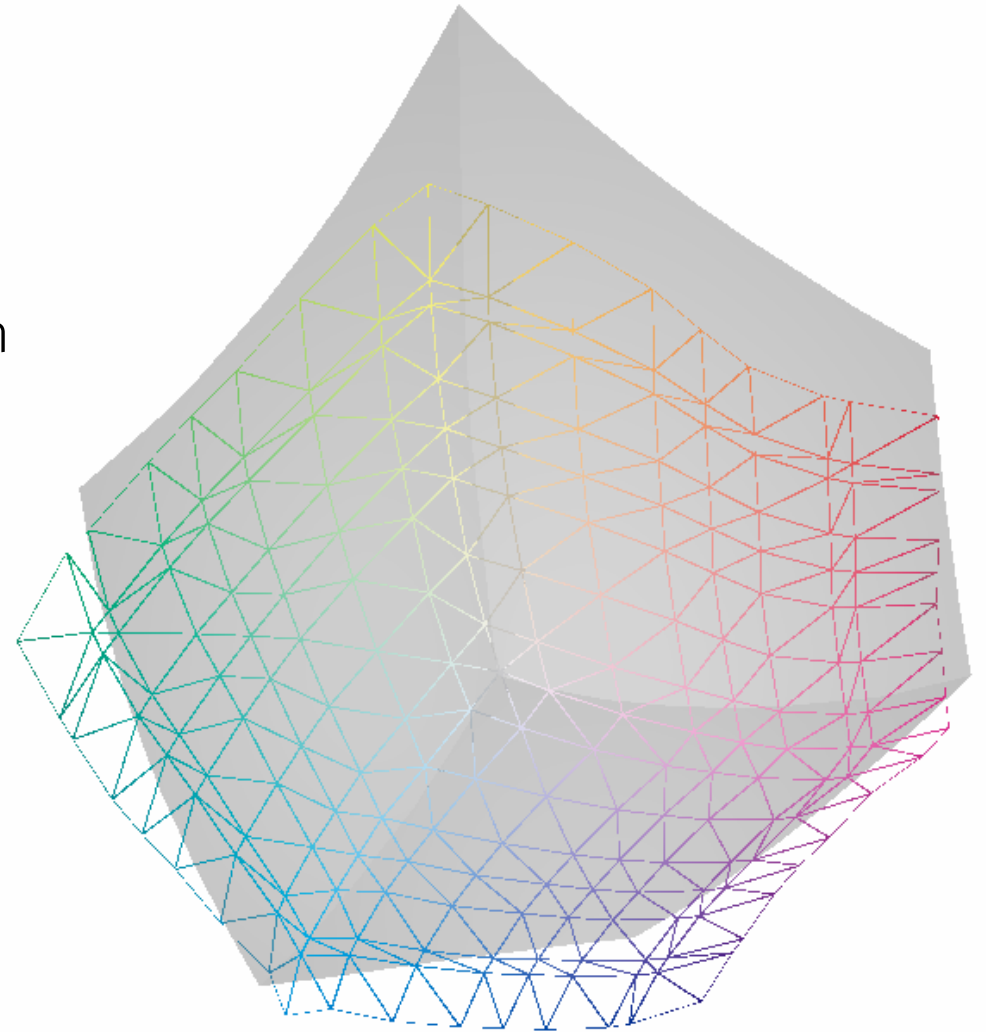
Characterization of a process

- ▶ The characterization of 4 color front-end systems may use standard testcharts (ISO 12642)
- ▶ Standard-Multicolor-Testcharts for 5, 6 or 7-c processes are just under development. Proprietary charts are most often used.
- ▶ The characterization is to be the representation of a defined output setup.



Profiling, Separation, Optimization

- ▶ Profiling is the process when your characterization is compared to another characterization. (e.g. input data is delivered in F39)
- ▶ Profiling quality comes from:
 - gamut mapping
 - separation
 - exceptions, where needed (e.g. pure black etc)
- ▶ Usecase dependent settings!
- ▶ Consistent color appearance.



Profiling, Separation, Optimization

reference



„my simulation“

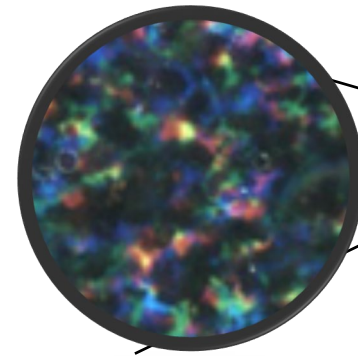


Profiling, Separation, Optimization

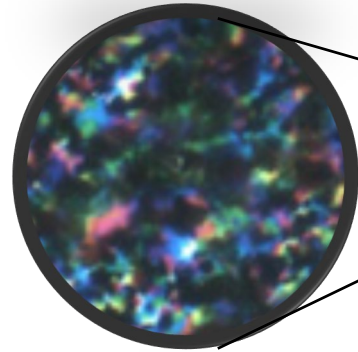
- ▶ Optimization stands for usecase-specific adjustments like:
 - ink saving
 - image enhancement
 - ...



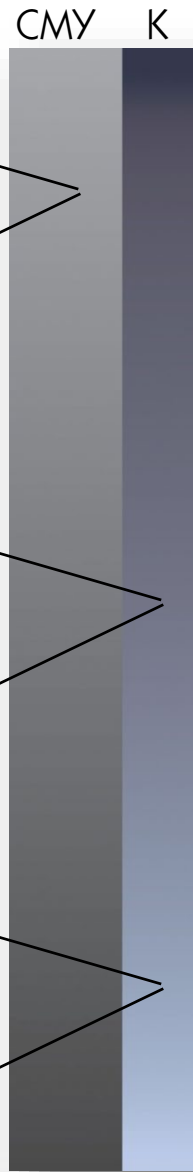
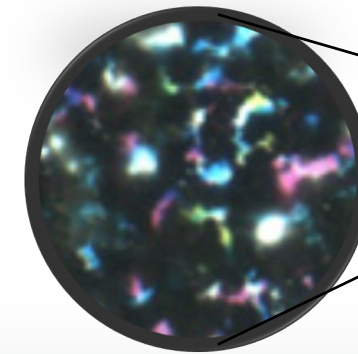
Light GCR
93/91/73/**42**



Medium GCR
67/60/44/**60**

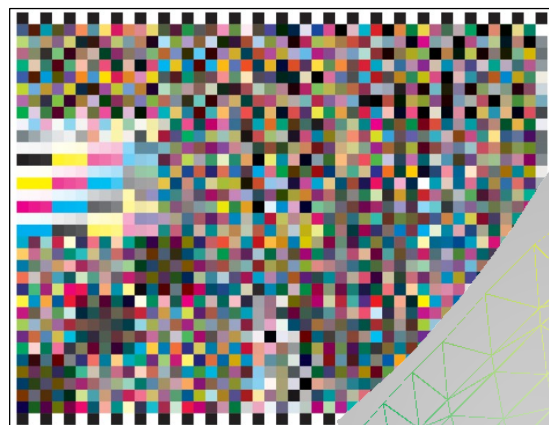


Strong GCR
31/19/5/**84**

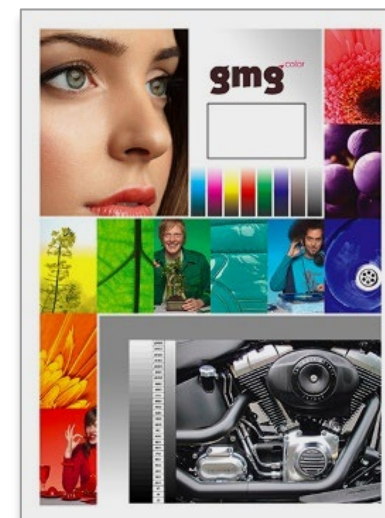


Process Control

reference



„my simulation“



Process Control

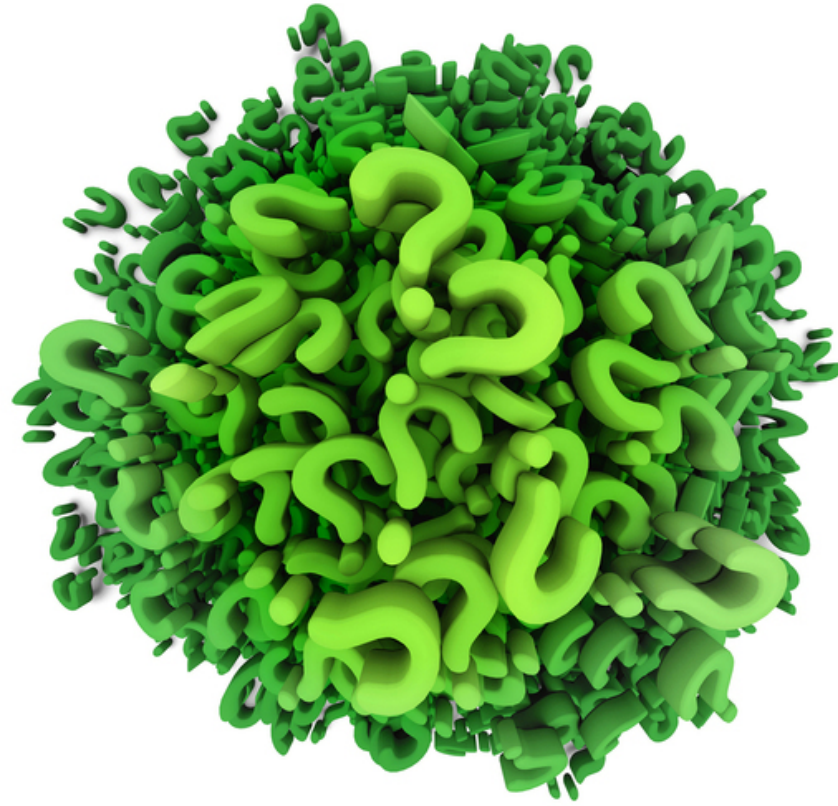
reference



„my simulation“



Fragen?



Wherever a color goes
it stays that color

