

# **Packaging Design and Innovative Process Help Brands to apply the Dopamine Color Effect**

Christoph Thommessen  
Managing Director of CGS ORIS





## CGS ORIS and myself....

- CGS ORIS is in the market for more than 35 years
- All related to
- Myself....





## What are Dopamine Colors?

- Bright, bold colours such as **red, yellow and orange** are known to be particularly effective at stimulating dopamine release. These colours are associated with positive emotions such as joy, excitement and happiness, and they can help to boost our mood and motivation.
- The simplest explanation of dopamine is that it is “a chemical released in the brain that makes you feel good”. Having the right amount of dopamine is important both for your body and your brain. Dopamine helps nerve cells to send messages to each other. It’s produced by a group of nerve cells in the middle of the brain and sends out messages to other parts of the brain.

Source: <https://www.healthdirect.gov.au/dopamine#>



# Do you like Dopamine and Dopamine Colors?

- I am sure you like dopamine!







# Brand owners like to use dopamine colors

- Many brand owners know that consumers like dopamine colors and take advantage...

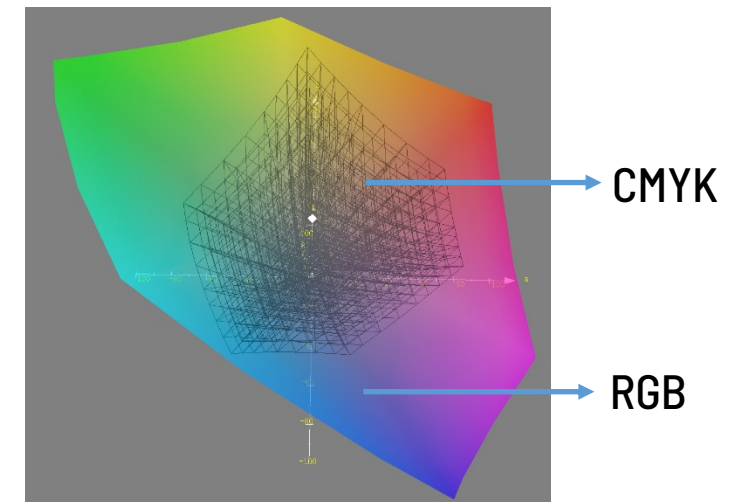


- Stimulate consumers with color and emotion



# Print easily or not?

- Can you print these packages easily as a printing provider?
  - Every job is only 500 pieces
  - Several different designs for 1 product
  - Every design has different spot colors
- Work hard but can't make money!





# ECG Printing

## ■ ECG Printing: Extended Color Gamut Printing

### Traditional (CMYK + Spots)



#### Process Plates

- Process Cyan
- Process Magenta
- Process Yellow
- Process Black

#### Spot Plates

- PANTONE Cool Gray 5
- PANTONE 269
- PANTONE 130
- PANTONE 294
- PANTONE 320

### ECG (CMYKOGV)

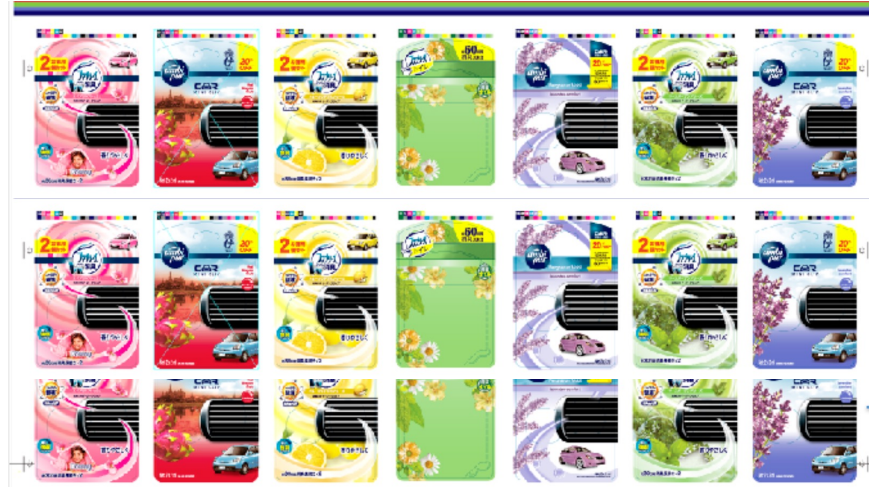


#### Process Plates

- Process Cyan
- Process Magenta
- Process Yellow
- Process Black
- Green
- Violet
- Orange



Image source: vecteezy.com



- Jobs: 7 different designs, each with 2 spot colors.

- Traditional (CMYK+spots)

- Plates: 42 pieces
- Downtime: 7
- IFS spot colors: 14 pieces
- Wash and change ink: 14
- Working time: Long
- Labor cost: high

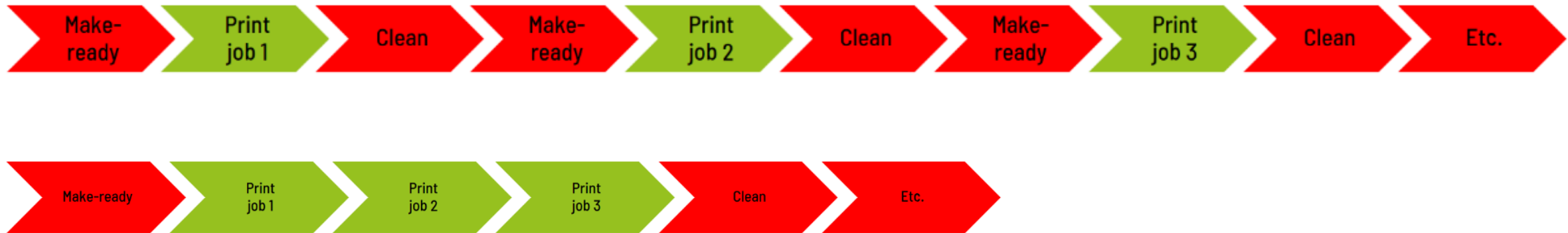
- ECG (CMYKOGV)

- Plates: 7 pieces
  - Downtime: 1
  - IFS spot colors: 0
  - Wash and change ink: 0
  - Working time: short
  - Labor cost: low
- Faster delivery
  - Make more money!





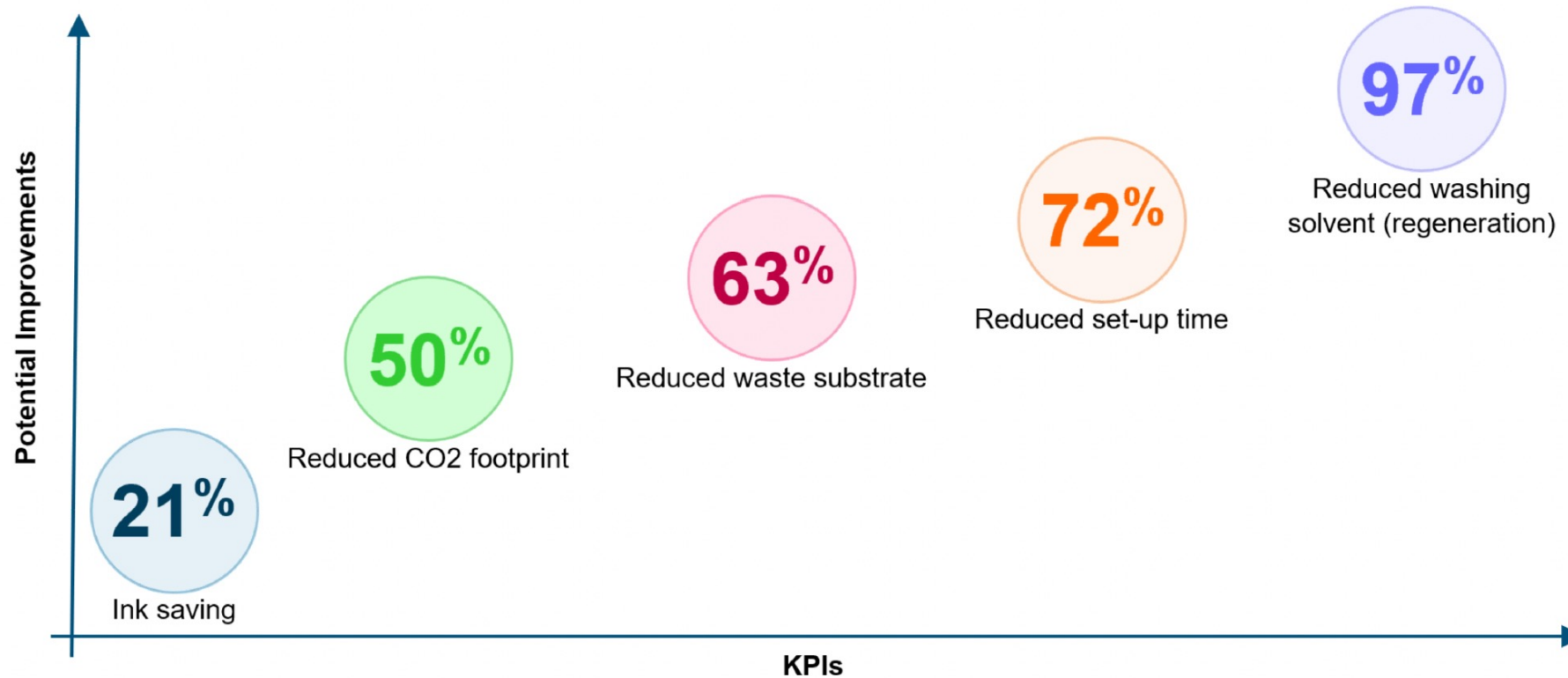
# ECG Printing





# Benefits of ECG Printing

- Compare of ECG 7 color printing and CMYK + 3 spot colors printing



Source: Evaluation of Expanded Gamut Printing in Flexography)

For a wide-web flexographic process with assumption of 50 million meters annual production (3,333 print-jobs), material width of 100cm



# ECG Printing

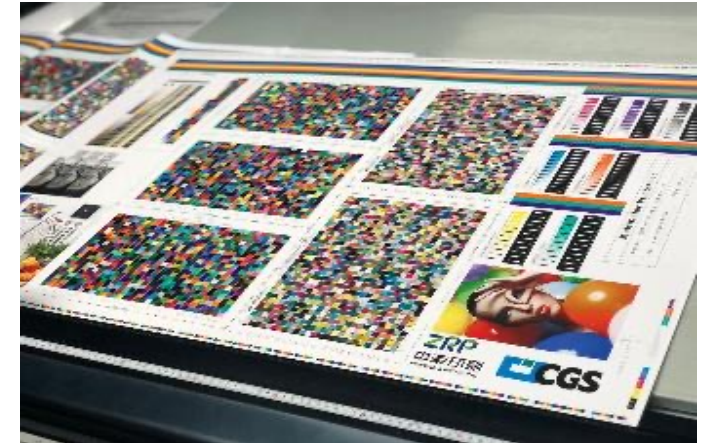
- And the printing quality will be much better on images





# ECG printing case in China by CGS ORIS X GAMUT

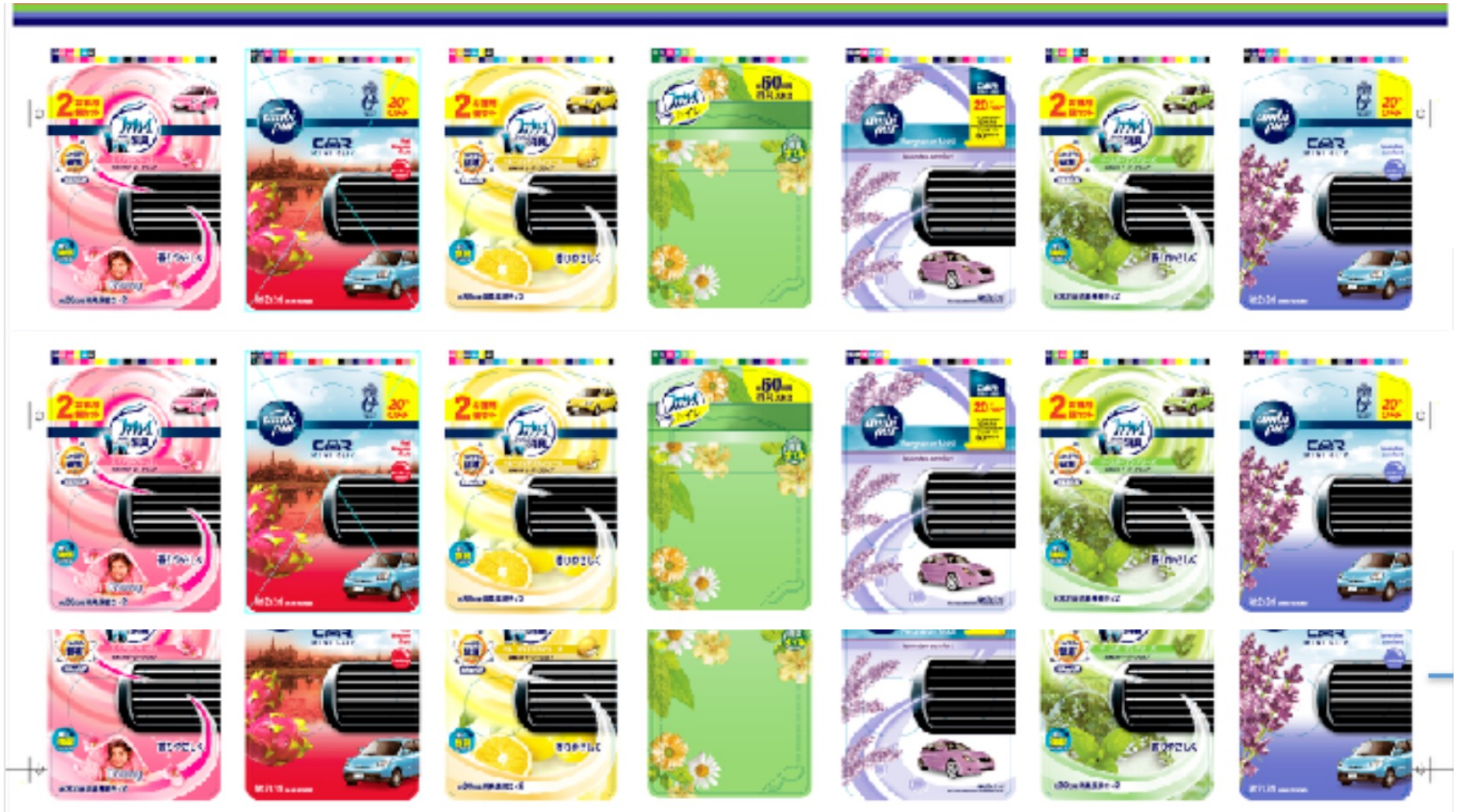
- ZRP GROUP (Zhongshan)







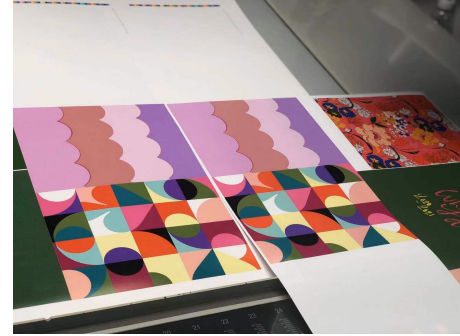
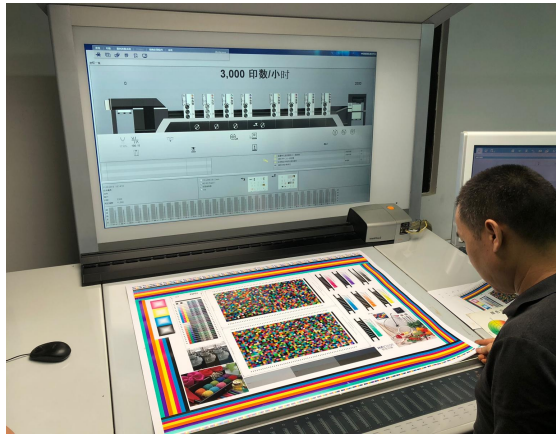
# ECG printing case in China by CGS ORIS X GAMUT





# ECG printing case in China by CGS ORIS X GAMUT

- Dongguan Yinxin - Many spot colors in one job
- They have 8-color press but spot colors are usually more than 8 !







# ECG printing case in China by CGS ORIS X GAMUT

- 94% spot colors in Pantone Coated V4 (except fluorescent and metallic colors) are in the gamut of CMYKOGV (Dongguan Yinxin's ECG printing gamut)

Pantone solid coated V4-M1 色库覆盖情况				
dE2000<1	1<dE2000<2.5	2.5<dE2000<5	dE2000>5	总计
1753	264	121	8	2147
81.7%	12.3%	5.6%	0.4%	



# ECG printing case in China by CGS ORIS X GAMUT

- RGB images got much better quality

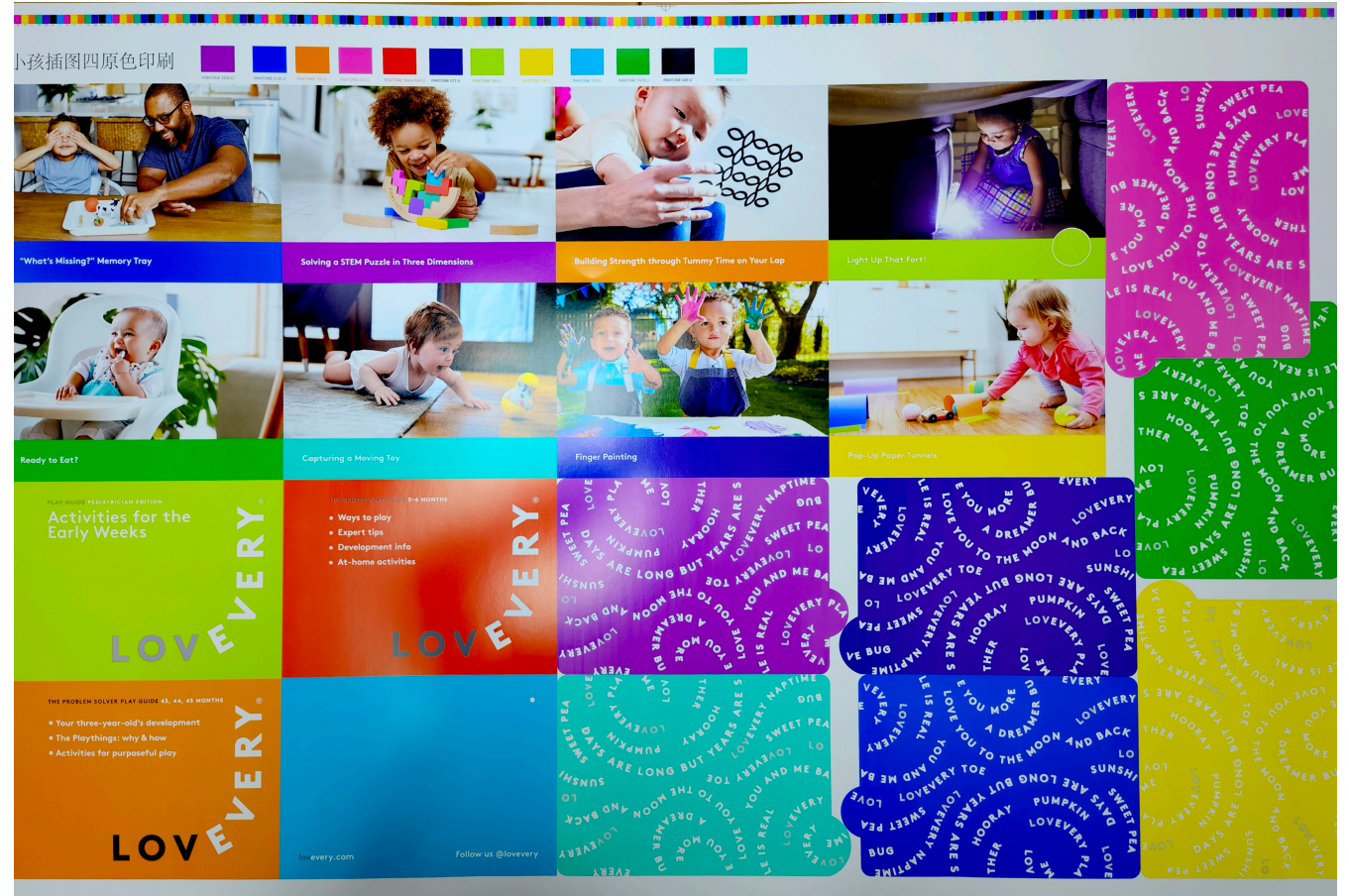






# ECG printing case in China by CGS ORIS X GAMUT

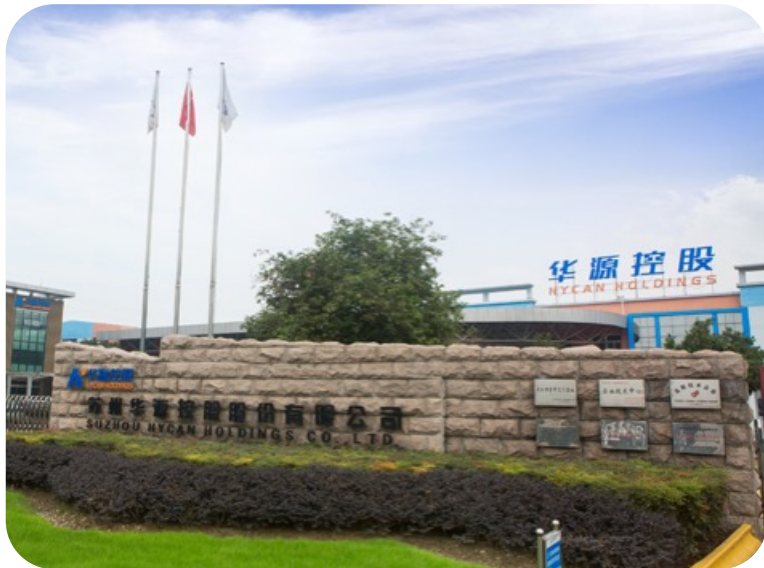
- RGB images - better quality
- 12 spot colors - ONE print on Heidelberg XL105 8P





# ECG printing case in China by CGS ORIS X GAMUT

- HYCAN Holdings
- Offset, metal printing - KBA 7-color press
- Challenge: small orders, variety of packaging design







# ECG printing case in China by CGS ORIS X GAMUT

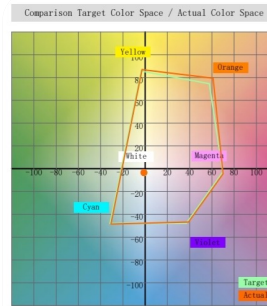
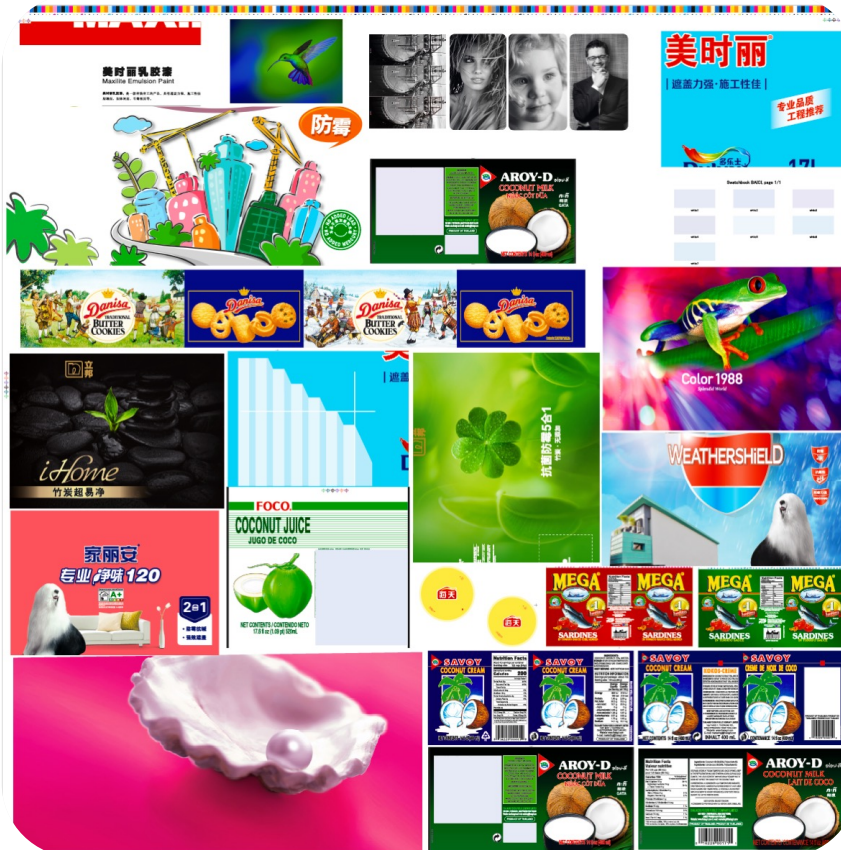
- Put different layouts on one press sheet
- ECG Printing: CMYKOV+White





# ECG printing case in China by CGS ORIS X GAMUT

- One Print: 17 spot colors and RGB images
- keep color consistent between digital proofing (by CGS + Epson S80600) and press



Identification: ID 6 19/08/2021 19:00:32  
 Measurement device: Eye-One i0 33541 Eye-One 1092957  
 Measurement conditions: 2° Observer, Illuminant: D50, Mode: M0, Filter  
 Print target: CMYKX-baici  
 Supplier:  
 User:  
 Job:  
 Proofer:  
 Info text:  
 Target values: CMYKX-prism-huayuan-baici-25-25-25.icc

	Patch	dE2000	Tol.	OK
Paper white	A1	0.57	3	OK
Average		1.27	3	OK
Maximum	C2	4.11	6	OK
Primary colors	M1	1.66	5	OK
dH max. primaries	E1	2.12	2.5	OK
dH 0 CMY gray		1.41	1.5	OK







# ECG printing case in China by CGS ORIS X GAMUT

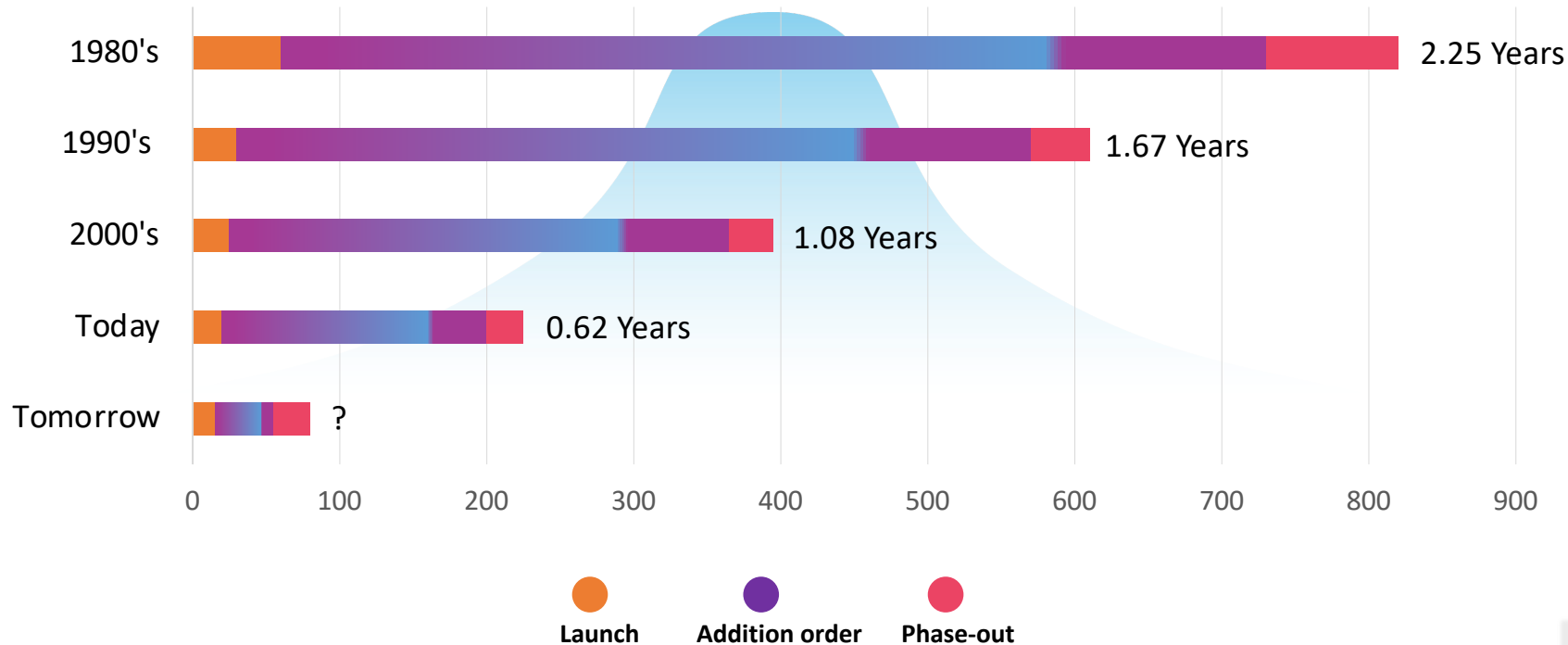
- ECG Printing by the 1<sup>st</sup> KBA Metal Star 3 (10 Colors)
- 3-piece Can, main product is milk powder can.
- They convert RGB to CMYKOGV. Multichannel printing is the main competency against the competition.





# Shorter PLC

- PLC (product life cycle) is changing...



• Source: Colgate-Palmolive business analysis



# Proofing and Prototyping cost is much higher!

- SKU's (stock keeping units)
- Short run
- Shorter PLC
- More and more proofing and communication
- **Many printers spent millions on proofing (on press)**

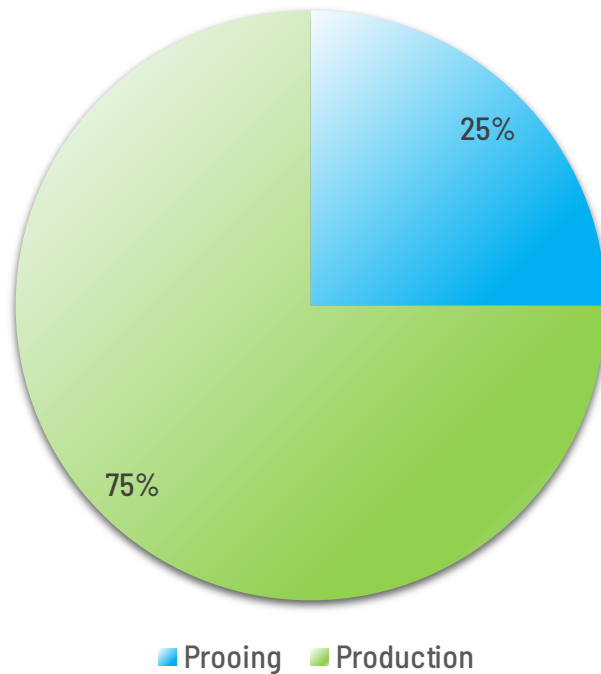




# Status of industry

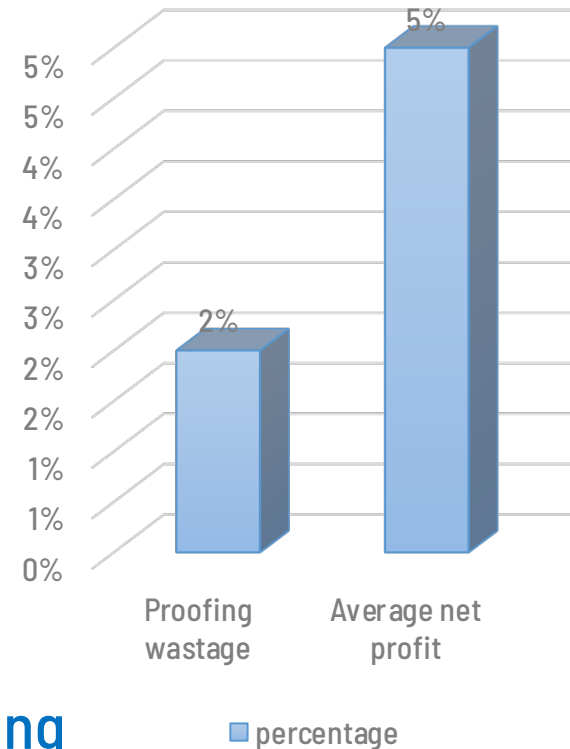
- Heidelberg did the industry statistics:

Printing Press capacity



**25% press capacity wasted on proofing**

Net profit and wastage







# You can use digital prototyping solutions

- Direct printing on real materials
- Match colors by FlexPack
- Printing by Mutoh or Roland printers





# Why not?

- Almost the same with the proofing on press

**Proofing on press**

- Real materials
- Color consistent
- Same finishing
- mock up

**CGS proofing solution**

- Real materials
- Color consistent
- Similar finishing
- mock up

**Spend much time and cost**

- Delivery Time: 5-7 days
- Proofing time: average 3 hours
- Cost: average 400+ Euro every time

**Save time and cost**

- Delivery time: 1 day
- Time: minutes or 1 hour
- Cost: several Euro

Why not?





Many printers save millions money every year!





# Even metal printing enterprises







# Even more: Fashion, sports & home decoration







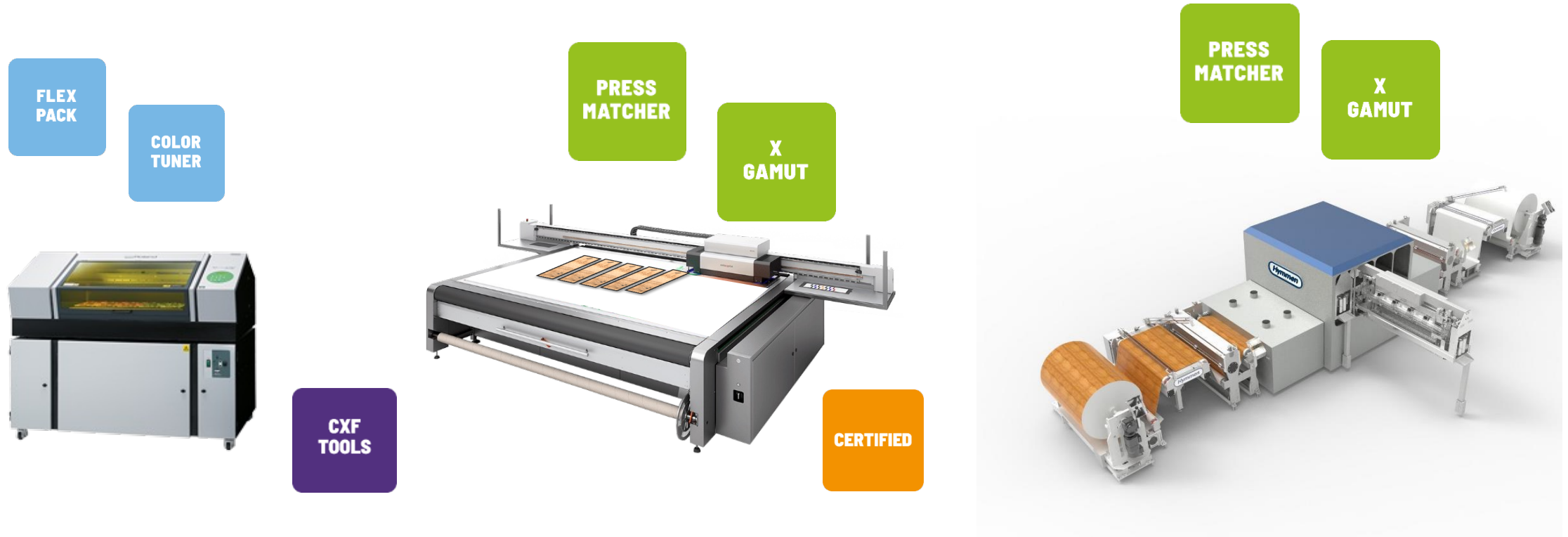
# Décor Proof





# Predictable, accurate and repeatable color across the entire production fleet...

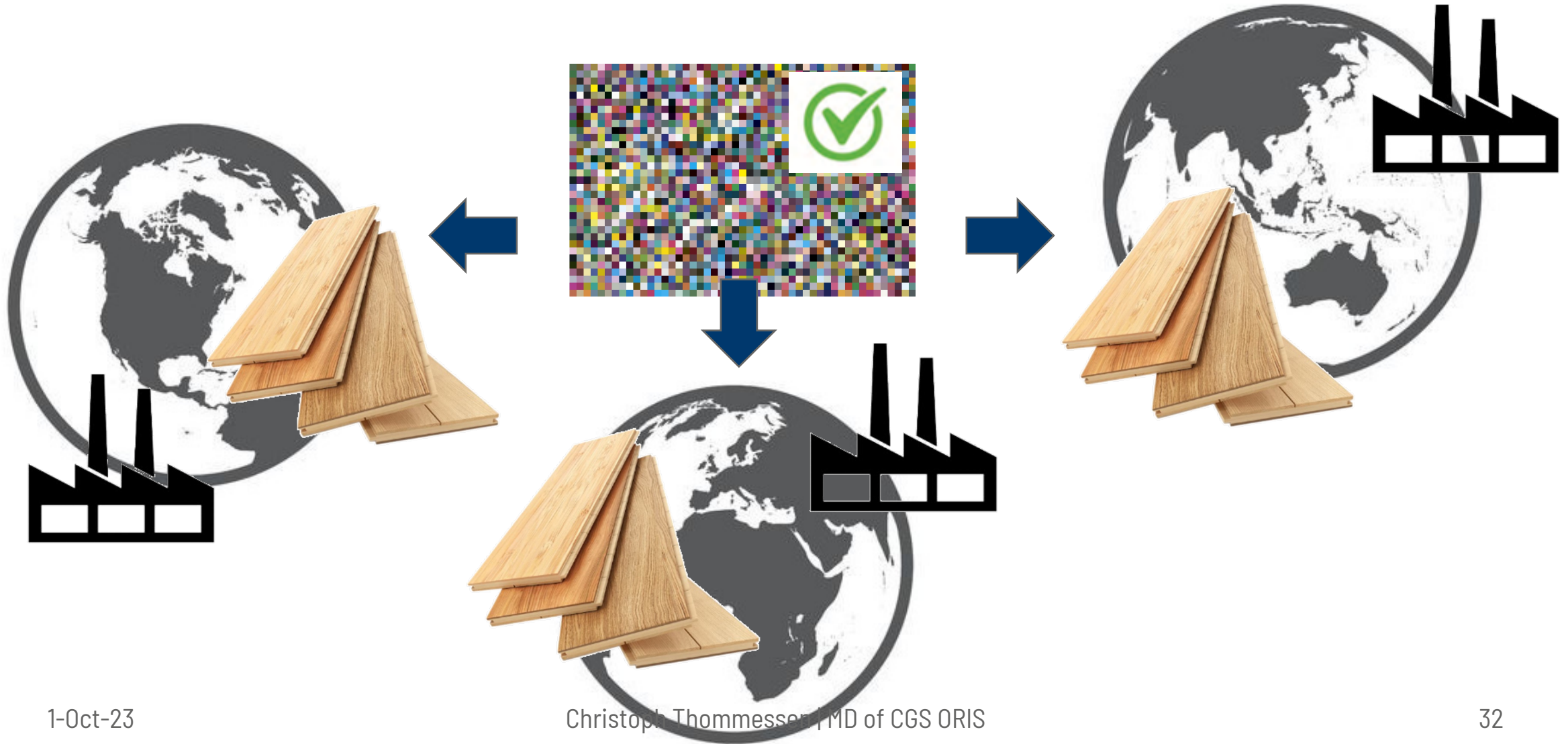
- Color consistent on different machines







... over time and location



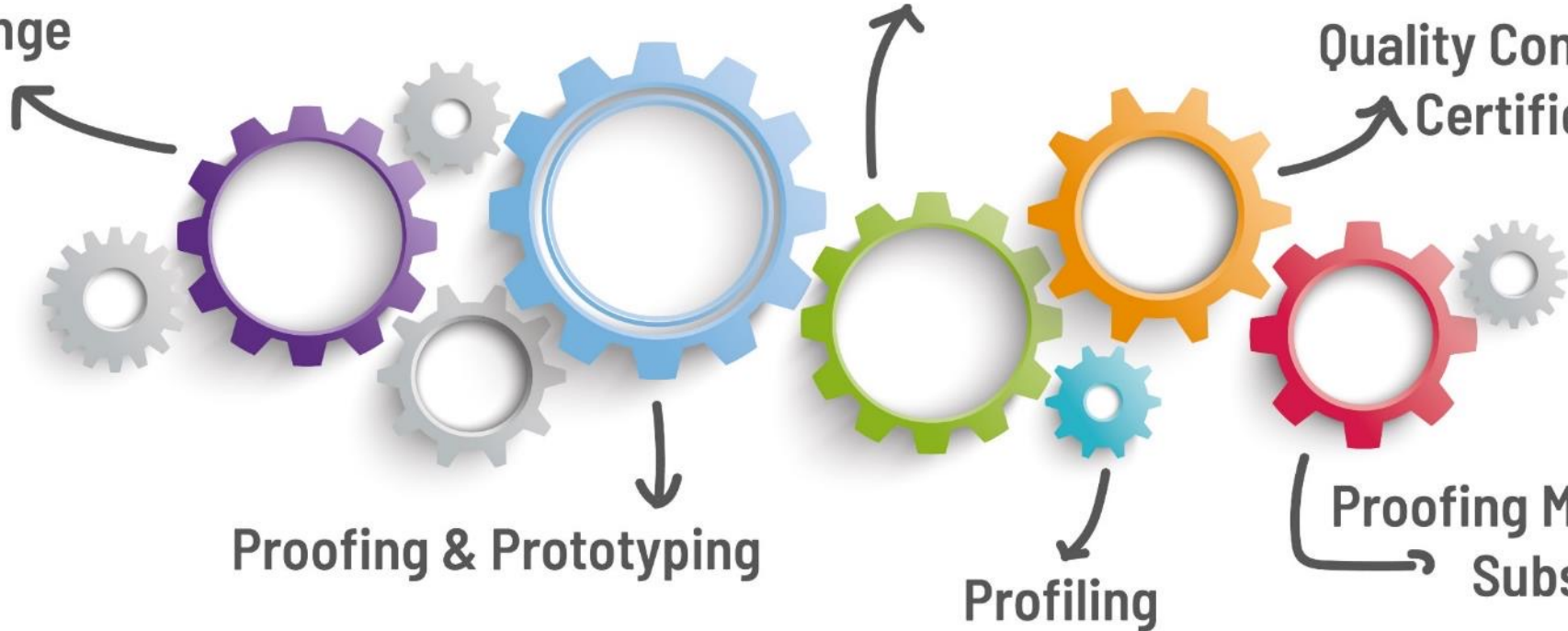


# CGS Solutions – Release your Dopamine!!

Color Communication & Exchange

Color Management & Optimization

Quality Control & Certification



Proofing & Prototyping

Profiling

Proofing Media & Substrates



color your process

Thanks