



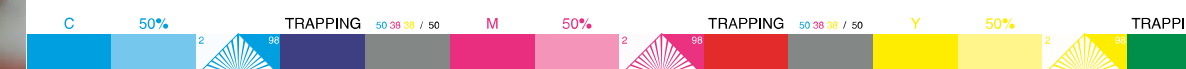
PRINT COLOUR MANAGEMENT

FINGERPRINTING MAKES
COLOURS CONSISTENT
AND ALLOWS
PERFECT REPRODUCTION



Deep green crowned with a red star, silver paired with blue, a strong, vibrant red – the iconic colours of leading global brands: Heineken, Red Bull, Coca-Cola. Colours are a major factor in consumer purchase decisions. Not surprisingly, the standards set for colour accuracy on packaging are very high.

Consistent brand presentation is the goal – every time and every place. When it comes to colour management, exact fingerprinting is the key to the reliable and coherent reproduction of a brand identity on all printed material. It also saves resources, time and money.



The experts use a 3-D microscope to check whether the cylinder has been produced in line with specifications. The microscope measures the geometry and volume of the cells.



Colours are no longer just a visual effect. Today they are measurable, defined values. And who knows this better than the experts at Janoschka? To get perfect printing results, they use their extensive know-how to coordinate the interaction of up to seventy variables. These include the various makes of printing ink with their different solvents, pigments and properties, the range of substrates (aluminium, a variety of plastics, paper etc.), the printing tools with their screens, angles and gradations; all the way to the printing presses themselves, with their varying parameters, such as counter-pressure, speed etc.

“Colour management is the unique and reliable method for producing contract proofs out of these complex interactions for which there are hardly any industry standards,” according to Dirk Jauch, Technical Print Consultant, Janoschka Holding.

“Everyone involved – from the manufacturers of print substrates, printing ink and doctor blades, all the way to us, the cylinder makers, of course, devote our entire know-how to this profiling process. Within a few hours, we can define a colour space that reflects all relevant parameters and further shortens the lead time for each new product.”

Janoschka’s professional colour management, which is continuously being tweaked, is where the company’s entire extensive prepress process know-how bears fruit. The reproduction is therefore not only based on the respective printing process, but is also tailored to the facilities of a specific printing plant. The prepress specialists then print suitable reference images, test charts and control elements on site using a test cylinder. This provides a snapshot of the individual printing conditions of a specific printing plant. ➤

The spectrophotometric scan of the print sheet measures density and colour levels.





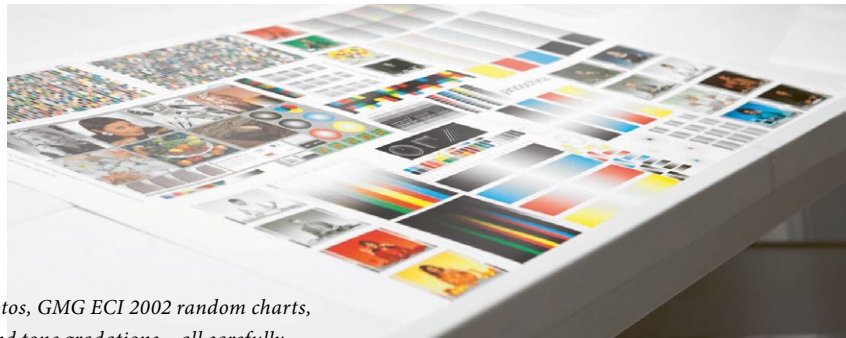
All cylinder parameters, the settings on the printing press, the respective substrate etc. are documented exactly. This forms the basis for later production. Using the fingerprint, we determine the so-called characterisation data that describe the colour space of precisely this specific print condition," adds Simon Schnaider, Technologist Imaging and Printing, Janoschka Deutschland. "The result is an individual colour profile to produce printer-specific colour separations."

To avoid any discrepancy, this colour profile is crucial for all later print runs. They must all correspond exactly with the characterisation data, which is the so-called fingerprint. From then on, the reproductions are no longer based on the printing technique, but instead are tailored to the specific printer's conditions.

"It used to be the case that you tried to compensate the variations in the printing result by adjusting the printing machine settings. You created a press proof and attempted to correct the colour results, by adding fresh ink, for example. That all took time and used up a lot of material, and even then the result was often unsatisfactory," remembers Jauch. "Thanks to colour management, the printer-specific conditions are already considered in the digital phase, allowing us to avoid costly failed runs during production." ➤



Meticulous measurement of the whole print sheet: a measuring instrument runs over each of these charts, known as "GMG ECI 2002 random", using the 1,504 different coloured measuring fields to create a profile.



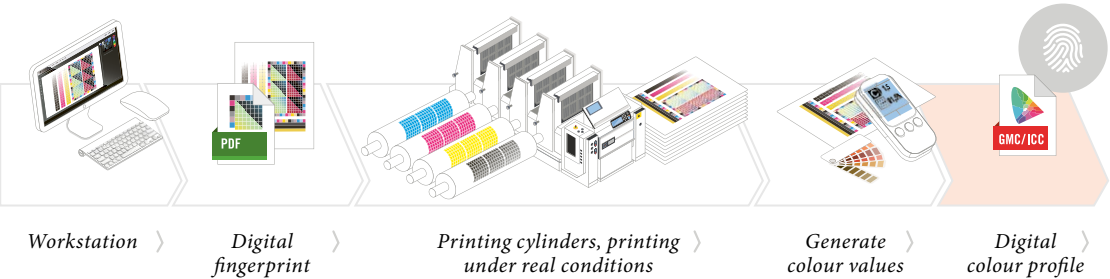
A fingerprint consists of photos, GMG ECI 2002 random charts, different sized fonts, lines and tone gradations – all carefully checked visually and using measuring instruments.

The print experts from Janoschka use their know-how to offer an extensive service package and help their customers achieve perfect colour matching with print support and consultancy. “The four to eight hours spent on fingerprinting pay off very quickly,” Jauch says, speaking from experience. “By avoiding failed runs and corrections on printing presses, the set-up times are shorter and our customers not only save thousands of metres of substrates and many kilograms of ink, but also valuable time.”

Advantages that make colour management a sustainable principle to boot.

When it comes to brand products, packaging is a marketing instrument, and highly accurate colours are essential. At the same time, both printers and brand owners face high cost and time pressure. Colour management using fingerprinting is the key to consistent, reliable, reproducible, plannable and more economic print production. ▶

1. GENERATE FINGERPRINT



2. APPLY FINGERPRINT

