

DIGITAL-COLOUR MANAGEMENT FOR PRINT WORKFLOW

There are many advantages to digital-colour management. Scott Harig, of X-rite, details these benefits and explains what they mean for the smooth running of the printing process



Scott Harig is Applications Engineer – Printing and Imaging at X-Rite Pantone

Colour management is a process that identifies and characterises each device in the imaging workflow to ensure consistency across the board. As defined by the ICC (International Colour Consortium), a colour-managed workflow is predictable, uniform and repeatable from capture to final output.

Digital-colour management closes the gap between brand expectations and design, ink room, pre-press and press operators to guarantee good quality. At the design stage colours can be accurately specified for reproduction of the end product. Calibrated monitors help to understand achievability. In the ink room the right colour can be formulated quickly. At the pre-press stage, all devices can be fine-tuned to

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ensure colour is viewed accurately and is clearly communicated. In the press room, measurements can be secured directly from the press, adjusting ink keys as required. The results can then be measured and reported on the results of adjustments. To achieve accurate communication throughout the entire workflow, processes such as G7 and standards like CxF and M-Factors can be put in place.

Even if you are dealing with multiple operators, jobs, machines and sites, effectively linking your colour workflow is easy if you have the right tools. These digital-



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colour management tools can help keep colour on track in a busy press room.

DESIGN ADVANTAGES

For design and brands, PantoneLIVE Production – Print and Packaging can ensure the specified colour is reproducible and successfully communicated. It also enables brands to clearly specify colour and designers to create a new product – with the substrate in mind – to set clear expectations. Using a spectrophotometer, printers can capture spectral values for print samples and verify them against the digital standard throughout production. This ensures that colour is within tolerance.

PRE-PRESS CONSISTENCY

With many colour-management systems, it is possible to calibrate devices and create an ICC profile for each device. This includes output devices such as monitors, presses and printers. i1Publish Pro 3 helps imaging and pre-press professionals to form custom profiles for RGB, CMYK and CMYK+4 printers. It also reads onscreen colour patches to adjust and match multiple displays for consistent colour viewing.

HELP IN THE INK ROOM

The ink room is one area of the workflow that is often overlooked. However, if there are problems with the ink, colour will suffer



The X-Rite link dashboard offers excellent performance and streamlining



With X-Rite's new eXact 2, colour data can be accurately communicated to printers and converters

in the press room. Ink formulation does not need to be overly complex or time consuming. With ink-formulation software, even novice users can formulate fast, accurate, consistent recipes with the use of digital-colour specifications.

“From novice to professional, X-Rite’s range of colour-management solutions are easy to set up and offer excellent results”

A spectrophotometer is another useful tool in the press room. With X-Rite's new eXact 2, formulators can clearly communicate colour data to printers and converters. This enables operators to formulate fast, accurate recipes for a wide variety of substrates, including flexible film. Since it measures without contact, eXact 2 prevents wet ink contamination and the need to remeasure.

AN EFFICIENT PRESS ROOM

The eXact 2 portable spectrophotometer is also valuable in the press room. It can measure both paper and flexible film substrates to understand, control, manage and communicate colour from anywhere on the press room floor in less time, with less wasted substrate and ink.

With an onboard, high-resolution camera to power Mantis video targeting technology and a unique Digital Loupe feature, eXact 2 can zoom in on the measurement area to inspect patches, analyse dot gain, read plates and save an image of a colour measurement for compliance. It also connects with ink-formulation software and ColorCert to quickly evaluate colour quality right from eXact 2's colour screen.

MANAGEMENT THROUGHOUT

Even if colour management is employed during each stage of production, it is

important to effectively communicate what is happening between stakeholders, to ensure colour remains consistent. Instead of looking at each step in the printing workflow as an island, the key to accuracy and consistency is to look at colour holistically – from specification to delivery of the final product. Here are some tools to help:

1. Print specification, quality control and assurance

ColorCert Suite is a combination of desktop modules that enables everyone in the workflow to communicate colour and print expectations, colour standards, tolerances, press setup information and on-press performance. This includes the pre-press, ink room and press room.

2. Device performance and certification

NetProfiler, a cloud-based blend of software and colour standards from X-Rite, allows the printer to verify and optimise the performance of colour-measurement

instruments. It can reduce variances among measurement devices and correct issues caused by age, wear or environmental conditions.

3. Device visibility

The new X-Rite Link dashboard provides real-time insight into the entire fleet of devices to reduce manual management, ensure optimal device performance and streamline

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the service process. It is ideal for printers with multiple sites to monitor and control colour-measurement devices without manual tracking. With this dashboard, it is possible to get up-to-date device status, including certification, NetProfiler, warranty, and service care plans. It can also assign locations for active asset management and customise parameters to fit workflow.

START SMALL AND BUILD ON

With the right tools, digital-colour management creates a reliable, end-to-end process. But this can be done in stages. From novice to professional, X-Rite's range of colour-management solutions are easy to set up and offer excellent results, even for those with less colour knowledge. ■

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