

IPA Digital Print Forum 2009

An independent technical evaluation of digital press technologies

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1. Executive Summary

10 press systems were studied – 8 digital toner based devices and 2 offset DI type technologies. The devices studied were

- Canon imagePRESS C7000VP
- HP Indigo 7000
- Kodak NexPress S3000
- Océ CS665 Pro
- Presstek 52DI
- Screen Truepress 344
- Toshiba e-STUDIO6530c
- Xeikon 3300
- Xeikon 8000
- Xerox iGen4.

The study covered three main test areas

Managing Color – matching GRACoL, SWOP #3, and SWOP #5, matching the new PANTONE GoeGuide colors, predicting Pantone colors that are within gamut, and determining the darkest black the device can achieve.

Properties of the Printed Sheet – in this section tests evaluated the variation of printing across a uniform tint, resolution, folding and cracking, Taber rub resistance, recycling and deinking using INGEDE Method 11, and light fastness.

Production and Productivity – is an area that relates to commercial practice. In these tests we examined variation over 1000 sheets, variation in printing from day 1 to day 2, duplex printing, and conducted a productivity survey of end users.

The tests show that digital presses are emerging from “adolescence” and are now “young adults”. Digital and short-run offset are challenging traditional offset in most areas. There is a need for standards in digital printing and this report provides data from which press tolerances can be determined. This report allows users and suppliers to evaluate their status in terms of international certification.

The 2009 IPA Digital Print Forum, is the second study, building on the success of the 2008 IPA Digital Print Forum. Print samples and test pages from each system are included within this publication. The test pages are printed on NewPage Futura Laser Gloss, 100 lb Text.

The tests reported here were conducted at the following laboratories – Fogra, Munich; Ryerson University, Toronto; RIT, Rochester; and Q-Lab Corporation, Cleveland.