

DIGITAL ELECTROPHOTOGRAPHY WITH IMPROVED PRINTED COLOR QUALITY

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ABSTRACT

Electro-photography is one of so called non-impact printing technologies, named as digital printing. It is master-less technology where there is not intermediate carrier of information. The great advantage of digital printing is possibilities to change printing information after cycle by cycle of process and to print variable data of information. The specific feature here is dry powder colorants - toners, which can be differentiated by dispersion size.

In this paper we take a close look at the color capabilities of a current high-speed electro-photographic digital press Nexpress2100 Plus, manufactured by Kodak. As a result we found a large color gamut for three different types of paper, reproducing pleasing color images in frequency modulated screening with process colors CMYK dry toners. Printed tests by digital printing platform are included. Thus we are able to assess the printed results visually to form our analyses regarding image quality of dry toner digital EP printing technology. Upon visual and quantitative analyses the paper concludes that digital Kodak Nexpress2100 Plus has shown the potential of approaching offset commercial printing.

KEYWORDS: Color, Digital, Electro-Photography, Gamut, Image, Quality