INFLUENCE OF THE DIFFERENCE ELECTRIC CHARGE ENERGY TRANSFER INK TO PAPER IN DIGITAL PRINTING

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Abstract: The principle of electrophotography printing is realized by using light and static electricity to create a passive electrostatic image on an image unit coated with a light conductive material. and use powder ink called toner or liquid ink that has a charge on the image area and the non-image area of the recording unit. As well as being transferred to the printed material by static electricity. The appropriate level of power consumption affects the quality of the image transferred on the image receiving medium. Objectives of this study to investigated the difference electric charge energy of the digital press image affects the color value. By adjusting the electric charge energy 5 levels are -10, -5, 0, +5 and +10, and assessing the color value, total color difference and color gamut using the testform as ISO 12647-2 IT8.7/4, the results showed that the electric charge energy are 0, +5 and -5 lowerest total color difference (dE) consequenced. Which Black ink and Magenta ink could be used electric chart energy is 0 and Cyan ink and Yellow ink ink could be used electric chart energy is -5 to be better transfer color value according to HDMcoated profile.

Key words: electrophotography, electric charge energy, gamut

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