

Modern systems to control the quality of print produced by digital printing techniques

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Research Abstract:

The aim of the research is improving the quality of publications by applying the latest quality techniques to the digital print production lines. The digital printing machines include advanced means of controlling the quality of the printed material. They can be used to perform the time correction on the operating line, the study included a description of the latest systems that have proven successful in achieving the high quality in the typography. This paper includes a description and application of one of the systems used. To measure and control the quality of printed on digital printing machines. Hence the research problem which includes High percentage of paper waste due to the long time it takes to determine the the printing fault by means of measuring devices separate from the machine, and correct it on the machine controller to translate it into signals sent to the devices and units of the machine responsible for correcting the deviation. In addition to the special nature of some types of printing inks used in Modern printing techniques, which Imposed on owners of these presses to operate a very limited range of paper types. So it was the aim of the research is reducing the percentage of materials waste by applying the newly developed quality techniques designed to quickly detect and determine the deviation and modify it quickly. In addition, use a wide range of paper in the market even non-processed paper, which can be operated on the developed printing machines with the same quality of high-quality paper. The research followed the analytical descriptive method. By reviewing the above, it is possible to achieve the following results: -save a large percentage of paper waste as well as reduce the time required in the process of correction and modification of deviations and Improve and refine the surface of printed paper and the efficiency of surface properties by adding some materials to the substrate to be printed before printing so that the color remains on the surface fibers.

Keywords: Bonding Agent, Spectrophotometer, quality control.