Characterization of nanographic technology as one of the newly developed digital printing techniques

Prof. Mona Moustafa Abo tabl

Professor of Control Systems and Quality Control - Department of Printing, Publishing and Packaging - Faculty of Applied Arts, Helwan University

monaabutabl@yahoo.com

Dr. Hanaa Abd Elfadeel Sarhan

Director of the Commercial Press Department at Akhbar Al Youm Foundation - Lecturer at Akhbar Al Youm Academy

hanaa.sarhan@yahoo.com

Assist. Lect. Sara Ebrahim Abd-Elrahman Ramadan

Assistant Lecturer, Department of Advertising, Printing and Publishing - Faculty of Applied Arts - Benha University

sara.printing@yahoo.com

Abstract:

The aim of research is clarifying the importance of modern digital printing systems, which represent the most important pillars of the modern printing industry.Therefore, knowledge of the elements and requirements of advanced digital printing techniques is a major demand. And continuous development

It is also clear that traditional printing techniques are no longer sufficient to achieve the required print quality compared to the digital methods that achieve the best quality and reduce the problems of print production compared to the traditional methods, as well as the printing methods are less expensive.

sometimes, especially in the case of printing operations of limited quantities.

In this research, the researcher will describe one of the techniques of digital printing, which has proved to be successful as a printing technique that achieves high quality in the printing press by the use of micro-micronuclear inks. The research will show nanographic technology in terms of ink quality, printing technology and components of nanographic printing machines for commercial applications Feeding machines Whether sheet fed machines or web fed machines.

The search problem is summarized in The difficulty of printing on different types of paper and materials with high printing quality due to the problems caused by the thickness of the ink film and the lack of suitable cover to receive it.

The research aims to Reduce the problems resulting from increasing the thickness of the ink film and including the long time required to dry the print Plus a set off problem. And The possibility of printing on different materials with a high quality. the research conducted the descriptive analytical method; By reviewing the following:

Nanographic Printing , The nanographic technique is summarized in jet billions of nanoparticles of water- base nano inks. To a hot rubber runs through an endless cycle (blanket) to form the print image. ; As a result of the hot blanket ,water evaporates from the ink and with the evaporation of water the ink becomes a film of ultra-thin dry polymers. , Less than half the thickness of the ink layer in offset printing , Installation of the printing unit, Describe the requirements and variables of nanographic technology and The installation of digital printing

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machines with nanographic technology has been reviewed in the both (sheet and web) fed digital printing machines .

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