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J5 Microscopic Comparison of Printed Matter From the Commonly Available Printing Devices in Document Examination

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This paper presents a comparative study of various printing devices and its document examination.

For a forensic document examiner the document examination of printed text matter plays an important role in giving an opinion on a questioned document. Use of image processing comparison microscope, as a tool to identify and compare the usual and unusual characteristics of the printed text matter, will help as an additional parameter in the examination of questioned documents. The present paper attempts to identify and compare the characteristic features observed in the printed text matter available from ten (10) different printing devices commonly used in office documentation and general use. The characteristic defects and unusual physical features of the texts from the ten devices, e.g. inkjet printers, laser printers, dot matrix printers, electronic typewriters, ordinary typewriters, facsimile copy printers, screen printing, offset printers, Photostat (heat type & inkjet type) machines, and Photostat (color) machines, were studied using the Leica digital image processing comparison microscope. Such study would also link the part of the document to that of the original and also for identifying the source of the printing devices of a questioned document.

Comparison Microscope, Documents, Printing Devices