



Questioned Documents Section – 2005

J19 Pad Printing: A Forensic Analysis

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After attending this presentation, attendees will gain an understanding of the subtle, yet distinguishing print characteristics of pad printing.

Classifying a print process can be exceedingly difficult in such a fast paced industry. With the apparent popularity and widespread use of pad printing, this presentation will impact the forensic community and/or humanity by accentuating the necessity of the forensic document examiner to be thoroughly educated in its subtle distinguishing characteristics.

The 2004 East Pack packaging show in New York City showcased the latest trends and technology in the packaging and product printing industry. As the largest packaging event on the east coast, the event represented a reasonable indication of popular packaging and product printing methods and technologies. The dominant product in printing technology represented at the show was pad printing. Pad printing, like the name implies, employs an intermediary pad to transfer a positive (or right reading) image on to a substrate. The technique is especially designed to print information on non-flat surfaces, such as golf balls or pens (a technique that has historically been preceded by screen printing).

Print process characteristics are often forensically evaluated when attempting to determine the authenticity or origin of an item in question. Various print processes can sometimes resemble one another, even under microscopic examination. However, each process may exhibit subtle characteristics which may enable an examiner to distinguish them from one another. Factors to consider when distinguishing pad printing include the type of substrate, the detail and colors in the image, the apparent consistency of the ink, and the plate making process. Pad printing machines are capable of producing multicolor images in a manner that can appear similar to that of offset lithography and can leave a spattered edge comparable to the serrated edge characteristics of screen printing. This presentation will explain the pad printing process from plate creation to application of the final image on a product. Similarities and differences with respect to other commercial printing processes, which may assist in the examination and recognition of the pad printing process, will be addressed.

Pad Printing, Print Characteristics, Graphic Arts