Preprinting guidelines for digital applications

MOHAWK
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Most Mohawk papers are engineered for high-performance on both offset and digital printing equipment. Many applications, such as forms and letterheads, require you to have folio-size sheets preprinted with offset lithography and trimmed down for subsequent printing in digital equipment. We guarantee our folio papers for these applications, provided standard industry guidelines for preprinting are followed. Please note that heat-set web offset printing is **not** recommended for pre-printed shells.

Paper selection

Papers with good formation (an even distribution of fibers) and a smooth finish provide the best results in most digital equipment. Bright white paper will add to color brilliance, contrast and definition. Toner does not adhere well to uneven paper surfaces, so heavily textured or embossed papers are not recommended for traditional digital presses. Check the specifications of the digital printing equipment before running coated paper. The paper's basis weight should fit within the equipment's specifications. Some machines must run 20 to 24 lb. (70 to 90 gsm) paper; others have a much wider range. Plain paper samples for testing in digital printers are available. Paper merchants can provide samples of the specific paper grade, basis weight and size.

Although newer digital color production presses can run a wide range of substrates, HP Indigo presses have particular substrate limitations that have traditionally been solved by using sapphire-treated papers. Mohawk's i-Tone® process was developed to overcome these issues, improving both toner adhesion and blanket memory. It enhances print quality on the HP Indigo, the Kodak NexPress, and the Xerox iGen3™ Digital Production Press. Unlike Sapphire-treated papers, Mohawk i-Tone papers can be offset printed and then run through an HP Indigo press. Please consult your HP Indigo printer for specifications for the offset print run.

Printing and design

Stationery and forms preprinted with ordinary ink will smear under the extreme heat and pressure of fuser rollers in high-speed copiers. In addition, improper handling and storage may cause jams. It is important to follow these standard industry practices when printing jobs that will be run through copiers and laser printers.

Provide the copy/laser printing schedule to the offset printer, so that the job is planned correctly. Discuss options if it is a tight turnaround.

The ink manufacturer can provide inks for laser applications. The job will require oil-based heat- or thermal-resistant inks. Inks should withstand 400° Fahrenheit without smearing. Avoid metallic inks as the metallic flakes can build up on the fuser rollers. Fluorescent inks are also not recommended. Minimizing ink and water on press should help reduce the possibility of wavy paper.

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Anti-offset powder or spray residuals can interfere with toner application and build up in the system, causing problems.

Toner does not adhere well to heavily printed areas. The digital image should print directly onto the paper, avoiding an overlap of offset ink. If the job specifies an overprint of a preprinted solid area, use a halftone screen to achieve the desired color.

If planning to imprint just one side of the preprinted form, print and pack so that the top (felt) side is imaged. For two-sided copying, the bottom (wire) side should be imaged first. Note: Mohawk papers are packed felt side up in cartons and reams. Care should be given when specifying relief processes, such as thermography, engraving, foil-stamping, and embossing as they may damage your equipment and cause jams.

Paper must be trimmed precisely, square, and with clean cuts. Improperly trimmed paper can misfeed and cause performance problems.

Packing and storage
Prevent tight plastic shrink-wrapping as it will curl edges and corners, leading to jams. Packing with chipboard is preferable. After wrapping, store preprinted material for 10 days before using to ensure completely cured ink and acclimated paper. Store at 50% relative humidity, at 70° Fahrenheit.

A wide variety of papers available for use in HP Indigo presses are sapphire treated to yield consistent image quality and maximum ElectroInk adhesion. Papers that have been sapphire treated are sensitive to environmental conditions. Heat and humidity play a key role in maintaining the shelf life of such papers. Product shelf life is approximately 6 months from the treatment date when store at 70 degrees F (21 degrees C) and 50% relative humidity. We recommend keeping sapphire treated papers in the original shrink-wrapped packages until ready to print. Any unused paper should be rewrapped for protection and to ensure optimum performance on press.

Envelopes
Testing the runnability of envelopes is recommended. Because of multiple paper thickness and variable envelope construction, we cannot guarantee performance once papers are converted into envelopes. Paper merchants can provide specific envelope samples for testing.

Due to the large variety of equipment available for both offset and digital printing, we strongly recommend testing any paper before committing to a large program.

For more information and samples, please call your local merchant or Mohawk at 1 800 the mill. www.mohawkpaper.com