PRINTING AND FINISHING TIPS FOR HEAVY COVERS

mohawk

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Nothing adds impact and substance to your project like a thick, sturdy cover. With careful planning, the end-results can be spectacular and well worth the extra time and money. The following guidelines should be followed for 120 lb. covers and up-- what we consider as a "heavy cover." Many times, these covers are "double-thick" or "cover bristol" meaning two sheets of lighter weight papers have been laminated together. This method provides the cover with the best printing surface and finishing properties.

Communication, planning and testing are essential when using a heavyweight cover. Please review the following guidelines and discuss them with your printer and/or bindery to understand any technique and equipment conflicts before you print your project.

SEPARATIONS

Good, well planned separations are crucial for successful printing on uncoated heavy covers. Because inks soak into the paper, precise halftone dots spread and deform—a feature called dot gain. By opening the separation, the actual dot size is decreased and the space surrounding the dot is increased. Opening the separation allows the press operator to print to normal ink densities. This results in truer color fidelity, image brightness and detail. Opening the separation also allows the use of finer line screens—175, 200, even 300 or more.

It has been our experience in working with a wide range of printers that printers using Mohawk Options, with the benefit of Inxwell, may open the midtones from 9-15%. For other traditional uncoated papers, the midtones can be opened slightly more, from 16-20%. Please note, these are **targets** only.

CUTTING

There are three fundamental factors to remember when cutting heavy weight covers. The first is lift size, which should be adjusted according to the size of your cutter. The second is clamp pressure, which in most cases needs to be decreased according to the precision pressure scale on your cutter. Lastly, a blade angle of 24°-25° is preferred, but you can compensate for a lesser angle by adjusting clamp pressure and lift size.

FOLDING AND SCORING

In order for heavy covers to fold properly, there must be a proper crease or "score." It is highly recommended to score and fold with the paper grain. Use a rounded rule and channel matrix for best results.

To make a score that will fold cleanly, you must establish the correct relationship between the paper's caliper, the rule thickness and height, and the width of the creasing channel (matrix). A quick test is recommended to prevent any bursting or cracking on the final piece. As a general rule of thumb, the correct creasing channel is determined by multiplying the paper's caliper by two and then adding the width of the creasing rule. (Note each 1 pt. of rule equals .014 inch).

continued

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Mohawk recommends a minimum 2 pt. rule for all scores both with and against the grain. Sometimes a wider score must be added--but too much width can be worse than too little, causing the sheet to fold unevenly on one side of the score rather than the center. A double, parallel score can be used to keep it straight.

We recommend that all scoring and die-cutting be performed on a platen (flatbed) die-cutter to help minimize the potential for cracking. Cylinder letterpress scoring can be difficult with heavyweight covers. If possible, run the score to the end of the press sheet, ensuring that the piece has a complete score.

Also, be sure to decrease pressure points that are caused by folding. If the paper breaks near a folded corner, try sanding or shaving down the ends of the creasing matrix where the miter joint occurs and leave a little space between the ends by slightly backing off the miters.

PERFORATION

A perforation with the grain will tear easier than against the grain. A perforation placed in a glued area on a heavily calendered paper will add porosity for increased glue adhesion.

EMBOSSING

Embossing heavy covers requires an increase in pressure and a deeper embossing die. It's necessary to review your artwork, paper selection, and deadline with the embosser and/or die maker before the die is made. The embosser will plan accordingly and approve the relative placement of the emboss to folds or gluing on the piece.

A broad area can be embossed much deeper than fine lines. A brass die will improve depth and is used for fine type. Test various heights with your embossing die supplier for the best results.

MOISTURE RETENTION

As with all printing papers, maintaining the paper's physical properties is critical. Proper local atmospheric conditions are important to ensure a trouble-free run. Temperature and humidity should be maintained at 70-75 degrees with a relative humidity of 40-50%.

Avoid the use of infrared heat on press, especially if a score and fold will run through an area with heavy ink coverage. Wrap the paper with plastic in between operations to help maintain the original moisture content. This is essential if the paper is transported to an outside bindery for finishing.

SET-OFF

Because of their weight, heavy covers have a greater potential for set-off issues on press. Spray powder, with a large particle size, must be used. Powders should run at a minimum of 45 microns, which will separate the sheets for greater air circulation and better ink drying. Judiciously determine the lift size by the amount of ink on the form.

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

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