

A SIMPLE PRIMER ON PRINTING & PRODUCTION

1. COLOR & INKS

4-COLOR PROCESS

- uses 4 ink colors—cyan (c), magenta (m), yellow (y), and black (k)—to produce full-color images. also called “cmyk.”
- some presses offer 6-color printing, using the above four ink colors plus two additional ones to get more accurate color reproduction.
- ink jet printers operate on this principle, although they use toner instead of ink.

SPOT COLOR

- uses pre-mixed ink colors, specified by their Pantone Matching System (PMS) numbers, to reproduce a color exactly.
- projects that call for 1-color, 2-color, or 3-color printing generally use only PMS colors.
- PMS colors are selected from swatchbooks sold by the Pantone company.

process colors may be used to mimic PMS colors, but the result ranges from excellent to awful, depending on the color.
Each additional color, whether or process or PMS, normally increases the overall cost of printing.

2. PAPER

COATED VS. UNCOATED

- coated paper comes in different finishes, ranging from glossy to matte.
- because it has less “dot gain,” photographs and other images generally appear sharper than on uncoated paper.
- uncoated paper comes in different textures, ranging from very smooth to very rough (more “tooth”).

WEIGHT & GRADE

- paper comes in different grade stocks, with the most common being writing, text, and cover stock.
- it is sold in different weights within each of these grades, ranging from 20 lb. to 120 lb. the pages of a paperback book may be 50# text stock, whereas the cover of a high-end annual report may be 100# cover stock.

paper typically comprises about one-third of the total cost of a printing job.
paper cost is determined by weight, grade, finish, texture, composition, and other variables.
coated paper is not necessarily more expensive than uncoated paper.

3. COATINGS

VARNISH

- varnish is applied on press as though it were another ink and may be glossy or matte, tinted or untinted.
- it may be applied over an entire surface, or only on particular areas (spot varnish) to achieve certain effects.

LAMINATE

- laminate may be glossy or dull, and comes in a variety of thicknesses. it is exceptionally strong and washable.

AQUEOUS

- aqueous coating is more durable than varnish, and twice as expensive.
- it may be glossy or dull depending on how thickly it is applied.

ULTRAVIOLET

- ultraviolet coating provides greater protection and is commonly used on books, record jackets, and table tents.

printed materials that have especially heavy ink coverage or will be handled heavily can be protected from scuffing and other marks by the application of a coating.

4. FINISHING

trims: straight cuts made by a guillotine-type cutter; trim size refers to the finished size of the printed item.

die-cuts: cut stock in irregular, custom shapes

scoring: creasing paper so it folds properly

folding: may be “letter,” “gate,” “accordian,” “french,” “roll,” or other, depending on the number of pages/panels.

BINDING

- saddle stitch binding is two staples on the spine
- perfect binding involves gluing first, trimming later, requires sufficient pages to work properly.
- case binding is for hard-bound books
- paste binding is like perfect binding for smaller documents

Printing is an art, a craft, and an enormous industry. The above information is far from comprehensive and is provided solely to help clients understand some of the most basic variables it involves.