

## PRE-PRESS AND PRINTING TERMINOLOGY

## **Process Colors**

The most common method of achieving color in printing is referred to as CMYK, four-color process, 4/c process or even just process. To reproduce a color image, a file is separated into four different colors: Cyan (C), Magenta (M), Yellow (Y) and Black (K).



CYAN



MAGENTA



During separation, screen tints comprised of small dots, called halftone dots, are applied at different angles to each of the four colors. The screened separations are then transferred to four different printing plates, one for each color, and run on a printing press with one color overprinting the next. The composite image fools the naked eye with the illusion of continuous tone.

Process colors are represented as percentages of cyan, magenta, yellow and black. Varying the percentages offers thousands of color possibilities. Four-color process printing is used to reproduce photographs, but may also be used in graphic elements.

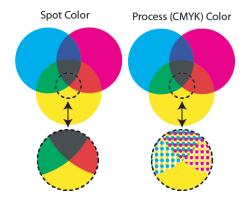
## Spot Colors (PMS colors)

Colors created without screens or dots, such as those found in the PANTONE MATCHING SYSTEM<sup>®</sup>, are referred to in the industry as spot or solid colors. Pantone has books that contain a sample of each color in the system. Each color in the book has a number.

Most decorated metal is printed in spot colors. Some will be printed with both process colors and spot colors. For instance, a photo will be printed in process colors and the supporting text and graphics will be printed in spot colors.

Resolution: a measure of image sharpness expressed in pixel per inch or ppi. High resolution of at least 300 ppi is usually required in order to avoid jaggy or pixelated images on the final printed piece.

Dieline: printing margins artwork must be kept in.



Native file: Digital file received in the original format artwork was created in, such as Adobe Illustrator. These files are not degraded and and are highly editable.

Linked files: Imported art used within a native file, such as a photo (.tif, .jpeg., .psd) placed in Adobe Illustrator. These are support files and will need to be provided separately or embedded in the native artwork file.

Soft Proof: Digital proof (PDF, 3D PDF)

Hard copy Proof: Physical proof printed on paper or other substrate.

Metal Proof: Printed on transfer sheet and laminated to metal.

Registration: The proper alignment or positioning of two or more colors with each other.

Trapping: Allows for registration variation which would appear as a gap between colors. Two adjacent colors butting each other must be compensated by spreading the lighter of the two adjacent colors under the dominant color.

Sheet Layout: CAD drawing provided by printer. Shows how artwork will be positioned on a printing plate. Needed for imposition.