



Think Ink

The three main elements of any printing job are the design, the paper, and the ink. After they select a color, many people don't think about ink. But different inks have different qualities, so it's important to take ink into consideration when you plan a project. Certain inks are required to achieve certain color effects or to provide special qualities, such as scuff or fade resistance.

Formula follows function

Of course, because ink is printed on paper, the two are related. Although most printing inks are somewhat glossy when they dry, dark colors might look glossier than lighter ones. Additionally, uncoated paper absorbs ink more quickly than coated stock, which is why ink might appear duller on some uncoated papers. To create a dull or matte look on a coated paper, you might need to specify a particular coating (such as a varnish or aqueous coating). On uncoated stocks, a coating may also be specified, but will yield less striking results due to absorption.

Inks have different qualities, depending on their intended use. Ink manufacturers work with four basic elements in combination to achieve different results. Ink contains pigments to create the color, transfer agents, which are the solvents and resins that cause the ink to spread, varnishes that control glossiness and drying additives. The way ink manufacturers combine these elements affects how the ink performs. For example, some inks are formulated for special purposes, such as packaging. Boxes are often printed with "scuff-resistant" inks to withstand tough handling. It's always best to ask your account representative about ink options if you have a project with special requirements like these.

The standard inks used for offset printing are the consistency of molasses or thick honey. Like the inks in your desktop printer, offset inks are created in the four process colors: cyan (C), magenta (M), yellow (Y) and black (K). Tiny dots of these CMYK inks are mixed to create the visual impression of almost any color in the rainbow.

Find the right match

CMYK inks are great for most color printing, but there are some colors that they can't emulate—and in those cases, you may want to specify "spot" or "match" colors. For example, you can't simulate metal with CMYK inks; you need special metallic inks if you want a truly shiny look. Metallic inks are shiny because real metal is added to the ink base—silver ink includes aluminum, gold ink has bronze or copper alloy, etc. Not surprisingly, because metallic inks actually contain metal, they can tarnish. To prevent this problem, we mix this type of ink just before using it.

Fluorescent color also does not render well with process inks, so projects that require bright colors may work better if you specify fluorescent inks. Fluorescent inks display truer color when printed on white paper. It's also important to note that the brilliant color will fade, making it more suitable for

short-term projects. Like metallics, fluorescent inks must be applied thickly, which makes them more prone to scuffing.

The most well known library of spot colors is the Pantone Matching System, commonly referred to as "PMS colors." Like metallic and fluorescent inks, PMS colors are used primarily in offset printing, as opposed to digital printing. At **tanaseybert**, we are able to mix and reproduce many of the colors in the Pantone library on our digital presses, but for time-efficiency more often use CMYK process to simulate PMS colors.

Giving you greater control

Specially matched spot colors are also specified by some of our clients who require a unique brand color or desire a specific ink not formulated in the PMS library. One advantage of working with **tanaseybert** is that we mix our own inks on the premises, which means we manage our own color matching (both PMS and client-specified). When you request a special match color, we'll provide you with a sample of the ink run off on the specified paper—called a drawdown—so you'll know what your final results will be before printing. Mixing our own inks gives us greater flexibility when ink adjustments must be made—and this, in turn, offers clients a greater level of control over their final product. It's just another expression of our fierce dedication to customer service.