



ASSOCIATED PRINTING PRODUCTIONS INC.

Printing University 101 Educational Series

Offset Printing Techniques

Associated Printing Productions Inc. (APPi) was built upon a legacy of exceptional quality and impeccable service. APi uses several techniques to ensure every print project achieves or exceeds the results that our clients are hoping for. Some of our most effective techniques are explained below.

Stochastic Printing: Also called frequency modulation (FM) screening is an innovative hybrid screening method that uses small (10,20, or 25 micron), same size dots in a random pattern and varies the density of the dot to create an image that is closer to continuous tone. In essence stochastic dot patterns make possible halftone printing without the use of conventional dots.

Stochastic printing eliminates moiré and broken lines and delivers print quality and detail comparable to that achieved with 300+ high-frequency screening. Stochastic printing is an excellent option when you want to have better reproduction of gray and black tones, as well as superior mid-tone color reproduction. Stochastic enables you to reproduce a wide range of vivid colors, and to show the most intricate details of your subject matter.

Strike Thru Varnish: A technique used to achieve a combination of dull and gloss finishes to your marketing communication. A strike thru varnish is achieved by first applying a spot dull varnish only to the areas that you wish to have a dull finish. Then an overall high gloss aqueous coating is applied to the entire area. When the high gloss aqueous coating goes over the areas that originally received the spot dull varnish those areas remain dulled, providing the contrast between a gloss and dull finish.

The benefits of this strike thru varnish technique are two-fold for a graphic designer. First, it can be produced in-line so you save on plates and press time making it an affordable design technique. Second, the aqueous coating instantly seals the sheet protecting it from offsetting and enabling you to achieve maximum contrast and detail.

Scented Printing: Transforming print into a multi-sensory medium through the use of scented printing techniques has proven to substantially increase the impact, recall, value, and effectiveness of your marketing efforts. Scented printing techniques have become incredibly versatile since the micro-encapsulation technology was discovered by 3M scientists in the early 1960s. The patented micro-encapsulation process was developed to make ink copies without carbon paper. A researcher at

National Cash Register came up with a similar micro-encapsulation process using gelatin. Both scientists were thinking only of carbonless paper, but the marketing department at 3M was given the task of finding alternate uses for the technology. It soon became clear that micro-encapsulation could be used for scented printing marketing purposes.

There are two commonly used scented methods used in the printing industry. Scratch 'N Sniff™ is the trade name for a special kind of perfume or scent saturated printing in which the scent is enclosed in tiny capsules, which can be broken open by friction. The scent does not leak out until the beads are deliberately broken. Because scratch and sniff patches keep a scent localized, it can be smelled only when someone deliberately scratches a specific area of the printed piece and can be used in combination with other scents without affecting each other.

The second method is commonly called Rub'nSmell and can be applied in-line as a separate color or coating. Rub'nSmell is transparent and non-obtrusive and is applied over graphics. The scent remains dormant until the printed surface is rubbed and lasts for years in printed form and can be rubbed multiple times. The rubbing action shears the capsules imbedded on the surface of the varnish releasing the fragrance oil. The net result is a pleasant release of scent, which after a short while dissipates until rubbed again. The amount of scent and its intensity is generally determined by size of the scented area. So a larger scented area will yield more scent and more rubs. And unlike traditional gelatin based encapsulation products Rub'nSmell lasts for many years, giving it a much longer shelf life than the products they are printed on.

Scented varnish/inks are approved for mailing by the United States Postal Service, as long as the scented surface is covered or contained within the mailed piece. Therefore on magazine ads or on inserts and blow-ins would be acceptable as long as the printed surface is contained within the magazine. Postcards or direct mailers printed with scented varnish/inks would need to either be a fold-over design with the scent area covered by the flap or over wrapped.

Please feel free to contact Associated Printing Productions Inc. at 305-623-7600 or for more information, visit our website www.appi1.com