The Anatomy of a Label

Three key elements make up a label: face stock, release liner, and adhesive.

Face Stock:
Face stock is the material of the label that carries the imprint. The print can be applied by several methods from desktop printers to industrial printing presses. Face stock materials are typically paper-coated or uncoated films that include polyester, polypropylene, vinyl, and Tyvek®. The type of face stock chosen depends on the intended use of the label.

Release Liner:
A release liner is a film, paper, or coated paper material that is coated with silicone. The coated side of a release liner has pressure sensitive adhesive applied to it. The face stock is then laminated to the adhesive. The release liner protects the adhesive until the label is applied. The silicone coating ensures clean removal of the face stock and adhesive from the release liner.

Adhesive:
A pressure sensitive adhesive is applied to a release liner and then affixed to a face stock. To stick the label to an item, the adhesive requires pressure either by hand or by application equipment.

Ink Imprint Process

Enhanced Images ink labels and tags are produced through a flexographic ink printing process. This process involves the use of water-based inks and flexible plates made of rubber, soft plastic, or a UV-sensitive polymer. This flexibility allows the plates to be wrapped around and affixed to a cylinder on the printing press for ink application. These plates carry the raised image of the label design. When printed, only the raised image comes in contact with the ink to imprint the label or tag.

Ink printing is advantageous due to the sharpness of its print and its capacity for color modification. Ink printing plates are capable of making precise prints of small text and finely detailed artwork. Also, ink printing enables color matching, custom coloring, and color shading. Water-based inks can be mixed to create any pantone color necessary and the process of ink printing allows a great deal of control over the imprinting of labels or tags.

However, ink printing also has its limitations. The ink substrate used in flexographic printing is opaque and changes according to the color of the label face stock. Using a white face stock will produce the truest imprint colors, but using any other color stock will produce an altered imprint shade. Another disadvantage of the ink process is the imperfection of shade creation. To create a shade, dots are engraved on the plate instead of solid images. The plate picks up less ink, creating a lighter shade. However, if the artwork is not created correctly, the dots may become visible and negatively affect the image quality of the label or tag.

Contact Enhanced Images, 678-985-3016 if you are unsure which imprint process is best suited for your label and tag needs. Our experienced sales team will answer any questions about the printing processes and will personally assist you in artwork submission, designing, and ordering.

Digital Imprint Process

The four color digital imprint process is referred to by many names, including CMYK, process color, full color, and four color. Enhanced Images digital four color imprint process utilizes four ink colors: cyan, magenta, yellow, and key (black). These four imprint colors are combined in different measurements to create a wide variety of colors. Enhanced Images employs a digital application of the four inks, eliminating the need for printing plates. With no printing plates, copy can be changed easily and short runs can be produced at a low cost.

The digital application process used by Enhanced Images enables us to print labels and tags with that are individually unique. This type of variable data printing which was once nearly impossible to accomplish is made easy by the plate free digital printing process. Digital printing also allows for short runs of labels and tags to be printed. With minimal set up time and no expensive plate fees, digital labels can be produced in small quantities at affordable prices.

Another advantage of four color process printing is the potential for multiple imprint colors. While many ink labels are confined to a maximum of two colors, digital labels can accommodate even photographic images with many colors. The limitation of the four color digital process however is the inability to color match. Although imprint colors can be combined to create many different colors and shades, not all colors of the spectrum can be produced with cyan, magenta, yellow, and key.

Contact Enhanced Images to place an order four color digital custom printed labels or tags. Our sales representatives will answer any questions and will guide you through designing and ordering your custom printed products. If your project requires variable data printing, contact us and let us know your specific needs.

Hot Stamp Imprint Process

Enhanced Images hot stamp imprint process utilizes pressure and heat to create decorative metallic labels and tags. An essential element of hot stamp printing is the use of an engraved plate with raised images. The ink used in hot stamping is a roll of dry ink. To print a label or tag with a hot stamp, the engraved plate is heated and then forced down against the label or tag material with the dry ink sandwiched in between. The heated, raised images of the plate are pressed against the dry ink and onto the label material. Only the dry ink that has come in contact with the raised images is applied to the label or tag.

Hot stamp printing is unique in its ability to apply a shiny metallic foil imprint to a label or tag, a style that cannot be duplicated by water-based ink imprint processes. Labels and tags printed with hot stamp stand out among other labels and tags as elegant, sophisticated, and impressive. One limitation to hot stamp printing, however, is the inability to control imprint colors. The colors of dry ink used in hot stamping are predetermined by the manufacturer and cannot be altered to any other colors or shades.

To create a decorative metallic hot stamp label or tag, contact us at 678-985-3016. Our sales staff will answer any questions and help you through the designing and ordering process.

Choosing an Adhesive

When designing and ordering a custom label, it is important to choose an adhesive that is well suited for the tasks that your labels will perform. There are three key components to consider when choosing the proper label adhesive: time, texture, and temperature.

Time refers to the duration that the label needs to remain adhered to a surface. Enhanced Images can provide varying levels of adhesives from removable to permanent. Consider how long your label needs to stick before deciding upon an adhesive.

Another important factor to consider in selecting a label adhesive is the texture of the surface on which the label will be applied. If the surface is rough and uneven, the label will need an aggressive adhesive in order to adhere. If the surface is smooth and even, a less aggressive adhesive is required.

Finally, consider the temperature of the item that you need to label at application and during use. If a label will be used in high heat, select an adhesive that with a high working temperature range. If the label will be adhered to a room temperature product that will be stored in a freezer, choose an adhesive that will adhere at room temperature and remain on the package when frozen.

Enhanced Images can provide adhesives to suit all temperatures, surfaces, and degrees of permanence. Consider your specific needs and call us at 678-985-3016. We'll help you choose the right adhesive for your labeling needs.

Label Protection

Depending on the intended use of the label, protecting the printing may be necessary. If the label is being applied to an item that will be used outdoors, exposed to chemicals, or used in wet or humid environments, a laminated label will ensure that the imprint stays legible and the label stays intact.

A varnish or lamination can be added to a label to protect its imprint. A varnish is a liquid that coats the face stock of the print label. Most varnishes used for print protection are UV cured to provide additional abrasion and chemical resistance. A varnish can also be used to enhance imprinting on the label stock.

Lamination is a clear material that covers the printed face stock. Because this is an actual material protecting the imprint, lamination provides more protection than a varnish. Lamination is available in different finishes such as gloss or matte depending on the look desired. Varnish and lamination applications are applied last in the printing process.