

NoMark® Plus Coating Details

About the NoMark Plus Coating

Rowmark's **NoMark Plus** or "hard-coat" finish is an ideal compliment to many of Rowmark's engraving products. When added to the Standard Metals line, it adds a measure of protection against marring and light abrasions usually caused by nose-rub during the engraving process. It may help to protect the



surface in applications where the product will be handled frequently such as name badges. It also brings out the natural luster of the metal foil used in the construction of the sheet. Consumers often ask about the features and benefits of this hard-coat surface and when it is appropriate to have it applied. This document will help you to determine when the addition of the NoMark Plus coating is appropriate for your application.

NoMark Plus Benefits:

The application of the NoMark Plus coating is done as a "secondary process" to the manufacture of the engraving sheet. The NoMark Plus film is applied in an off-line process much like regular hot-stamping foils. The NoMark Plus film is a thin (.0005") acrylic base coating designed to retard surface marring. The film is not scratch proof, but does add a measure of resistance and a barrier to light abrasion. When used on a metal surface such as Rowmark's metals products, it delays the natural oxidation of the metal foils. If the NoMark Plus film is intact and undisturbed by surface scratches that could penetrate through the coating, the under layer of foil will oxidize at a much slower rate. There are naturally occurring pinholes in the hard coat (which are a microscopically present), and oxidation will eventually occur. The benefit of the coating is that it provides a time-delay to the oxidation process thus prolonging the useful life of the product.

Originally, a hard-coat finish was applied to metal engraving stock to eliminate or minimize the marring caused by the pressure of a rotary engraving spindle nose cone on the material surface. Uncoated metals with very fine grain patterns exhibited a shadow corresponding to the engraved text or graphics. Even with the use of lubricated or plastic nose cones this problem will occur and the addition of a protective coating allowed for more surface contact and handling of the sheet during the engraving process.

The NoMark Plus coating has been tested with industry screen printing inks and the hot stamping process. It is advisable to have consumers pre-test the material for their particular inks and processes since new materials, solvents and equipment penetrate the market regularly.

A recently discovered advantage of the coating is protection of the sheet during lasering. Plastic laminates throw small amounts of residue while being laser engraved. Most commercially available lasers draw this residue and smoke across the engraving sheet surface and then exhaust it through filters. The residue passes across the sheets surface and can be "re-deposited" during this process. Adding the NoMark coating can help in the cleaning process of the sheet since it acts as a barrier. The residue is deposited on the NoMark Plus surface and it can easily be wiped clean. The addition of the NoMark Plus coating does not affect the laserability or performance of the material in these applications. The addition of the NoMark Plus coating does not make a product laserable.

NoMark Plus Coating Draw Backs:

The most significant drawback to the NoMark Plus coating is the added cost to consumers. Although not a significant percentage of the retail sheet price, it does add costs over Rowmark's Standard Metals or other sheet prices. Consumers must weigh the added benefits for their application versus the increased cost. Many engravers will appreciate the added benefits when they consider many of the historical problems they encountered with many older industry products.

If the consumer adds a secondary operation to the manufacture of a finished product such as screen-printing or hot stamping, the potential exist for additional scratches and microscopic lint to be introduced to the surface. Consumers must protect the surface against mishandling or excessive contact with equipment that could blemish an unprotected surface.

The most common misconception about the coating is that that it is impervious to scratches, adds UV stability to the sheet, or eliminates oxidation. Unfortunately, none of this is true. Any coating including solid acrylic or Plexiglas added, as a protective surface over a sheet of engraving material will scratch. Moreover, these "clear" materials will only delay the effects of Ultra Violet rays, not prevent the

harmful degradation of the sheet over time. When any engraving material, especially metals is used in a highly corrosive, caustic or salt air environment, there will be a break down of the surface. This is not unlike an automobile driven near a coastal city. Eventually the effects of moist salt air will break down even the most well protected surfaces.

NoMark Plus Applications:

NoMark Plus is best suited for applications requiring a modest protective coating against surface rub and short-term oxidation. The coating is best applied to products such as:

NoMark Plus Metals – Already Included

LaserMax Metals - Optional

The product is not practical or necessary for products with a heavy grain structure or uneven surface finish such as Satins, Textures or other UV stable products such as Ultra-Mattes.