

# **Rowmark®**

*Great people. Great plastic.*

## **Engraving Methods**

There are three basic types of mechanical engraving: Diamond Drag (Scratch) engraving, Burnishing, and Rotary engraving. Each method has pros and cons based on your equipment and the substrate to be engraved. This document will take a look at all three to help you decide which method is best for each particular job.

### **Diamond Drag (Scratch) Engraving**

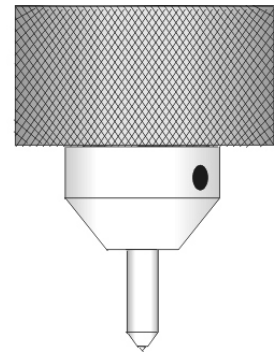
This type of engraving uses a non-rotating tool that has a “cone-shaped” diamond tip. The tip is pressed into the substrate and dragged across the surface, leaving an impression.

#### **Pluses:**

- This is the fastest form of engraving
- Allows for very fine, detailed engraving
- It is the least expensive form of engraving
- It is very quiet and does not require a motor
- It is the easiest form of engraving and is visually appealing
- Can engrave a wide-variety of objects

#### **Minuses:**

- Limited stroke width
- Cannot be used with soft material such as plastics or wood



*Diamond Engraving Tip*

This process is *not* recommended for *any Rowmark material*.

### **Burnishing**

This type of engraving uses a rotating tool with a limited amount of pressure. The tip can be either a carbide or diamond tip with varying widths. This removes the top layer of the substrate resulting in a smooth, polished finish.

#### **Pluses:**

- This method has a virtually unlimited stroke width
- You can achieve large letter heights
- Works extremely well with plaques and trophies

#### **Minuses:**

- Tools can range from \$30 to \$75
- Noisier than other methods due to engraving motor
- Also requires the addition of a burnishing adapter that can cost \$40 to \$75



*Burnishing Tip*

This process can be used on Rowmark's FlexiBrass® and FlexiColor® products.



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## **Engraving Methods**

### **Rotary Engraving**

This type of engraving uses a single or multiple fluted tool that rotates through the substrate to remove the top layer to reveal the core layer. Unlike drag engraving, rotary engraving can result in deep cuts or completely cutting out an object or letter

#### **Pluses:**

- Rotary engraving is the most permanent form of engraving
- Allows for the use of the widest range of substrates, such as plastic, wood, ferrous and non-ferrous metals, etc.
- Can engrave virtually any size letter
- With the proper technique, you can achieve both a two-dimensional and three-dimensional look

#### **Minuses:**

- You will need to have multiple cutting tools depending on the application and material
- Requires the purchase of a rotary spindle and engraving motor that can be \$130 - \$400 dollars
- Generally requires some clean up after engraving

This is the most common form of engraving and can be used on *all Rowmark products*.

For more information on types of cutters (bits) for rotary engraving, see Rowmark's technical help document titled "Learning About Engraving Cutters" available at [www.rowmark.com](http://www.rowmark.com).