



**GRAVOGRAPH**

# **ENGRAVING MATERIALS**

**VOL. 26**

innovative  
solutions

for

engraving  
& marking

**MACHINES**

**SERVICES**

**ACCESSORIES**

**SOFTWARE**

# THE GRAVOGRAPH TOTAL SOLUTION

Over 25 global subsidiaries serving customers worldwide...



## A Culture of *Excellence*

**Gravograph** is the world's leading manufacturer of rotary and laser engraving machines, materials, impact marking systems, accessories, and engraving software. For over 70 years, **Gravograph** has remained the industry benchmark. Our systems are the highest quality and the longest lasting. This success is built on three fundamentals: a primary focus on the needs of our customers, continually delivering state-of-the-art technology, combined with industry leading customer service from over 800 employees worldwide.

We pride ourselves on the fact that the majority of people you deal with are company employees. All **Gravograph** representatives receive engraving, software and materials training. Our technical support team has encountered most issues that you can possibly think of in our industry, and can therefore provide better solutions, faster. Our sales team is also trained to be solutions based, and are concerned with the real needs of the customer. The **Gravograph** name represents a worldwide network working around the clock (literally) to provide our customers with exceptional permanent marking solutions.

The **Gravograph difference** is founded on:

- **a complete solutions approach:** products that are designed to work individually or in harmony
- **a complete technology solution:** software, accessories, machines and consumables
- **a complete support solution:** field and telephone technical support, combined with internal and external sales consultants
- **a complete training solution:** on-site training, phone support, a website knowledgebase and our traveling Engravers Academy

As the leader in the global engraving and marking industry, we have tailored solutions for all applications including personalization, signage and traceability.

The **comprehensive Gravograph product line** includes:

- the world's largest and most innovative range of rotary engraving systems
- state-of-the-art laser engraving systems
- the world's leader in innovative engraving software designed in-house for use with **Gravograph** products
- the world's most comprehensive range of high quality engraving materials
- a 24/7 online storefront, the **Gravostore**, offering a wide range of engraving products
- versatile micro-percussion marking systems
- responsive in-house fabrication services



The total solution concept is completed by **Gravostyle**, a single solution software for both laser and rotary engravers. This new generation software enables users to switch engraving technologies, and transfer between engraving applications without changing to another software program.

**Gravograph** develops and markets the world's highest quality, durable marking solutions to our customers, and exceeds the industry standards for product and service performance. Our global quality management system ensures that our products and services are continuously improved, and that all of our team members are dedicated to ensuring an outstanding customer experience.

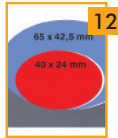
Please visit [www.gravograph.com](http://www.gravograph.com) for our latest catalog updates

# CONTENTS

## Fabrication and Custom Services 8



FABRICATION SERVICES



CUT TO SIZE



GRAVOPLY 1 ON DEMAND



GRAVOGLAS 2-PLEX ON DEMAND

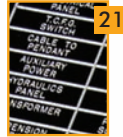
## Indoor Plastics 16



GRAVOPLY LASER



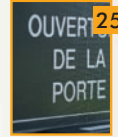
GRAVOLASE METALLICS



GRAVOPLY 1



GRAVOPLY 1 DESIGN



GRAVOPLY 2



GRAVOPLY 3C



METALLEX GLOSS



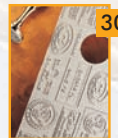
METALLEX



METALLEX 2



STICKLASE



RUBBALASE



GRAVOSTRAT

## Metals 32



GRAVOMETAL



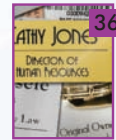
GRAVOBRASS EXTERIOR



GRAVOSTRAL



GRAVOXAL



ALUMAMARK



COLORLED AND MARBLED STEEL



COLORLED ALUMINUM AND TROPHY BRASS

## Outdoor Plastics 39



GRAVOTAC



BRILLE



GRAVOPLY ULTRA



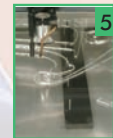
GRAVOGLAS 1



GRAVOGLAS 2-PLEX



GRAVOFOIL



ACRYLIC



VINYL

## Frames, Plaques, Accessories, Machines And Software 54



FRAMES



SIGN HOLDERS



DOORPLATES



AWARD PLAQUES



INDUSTRIAL SIGNS & LEGEND PLATES



BADGES



ENGRAVING SUPPLIES



ENGRAVING CUTTERS, JIGS, REGULATING NOSES



FABRICATION EQUIPMENT



MANUAL MACHINES



ROTARY MACHINES



MICRO-PERCUSION/VINYL MACHINES



LASER MACHINES

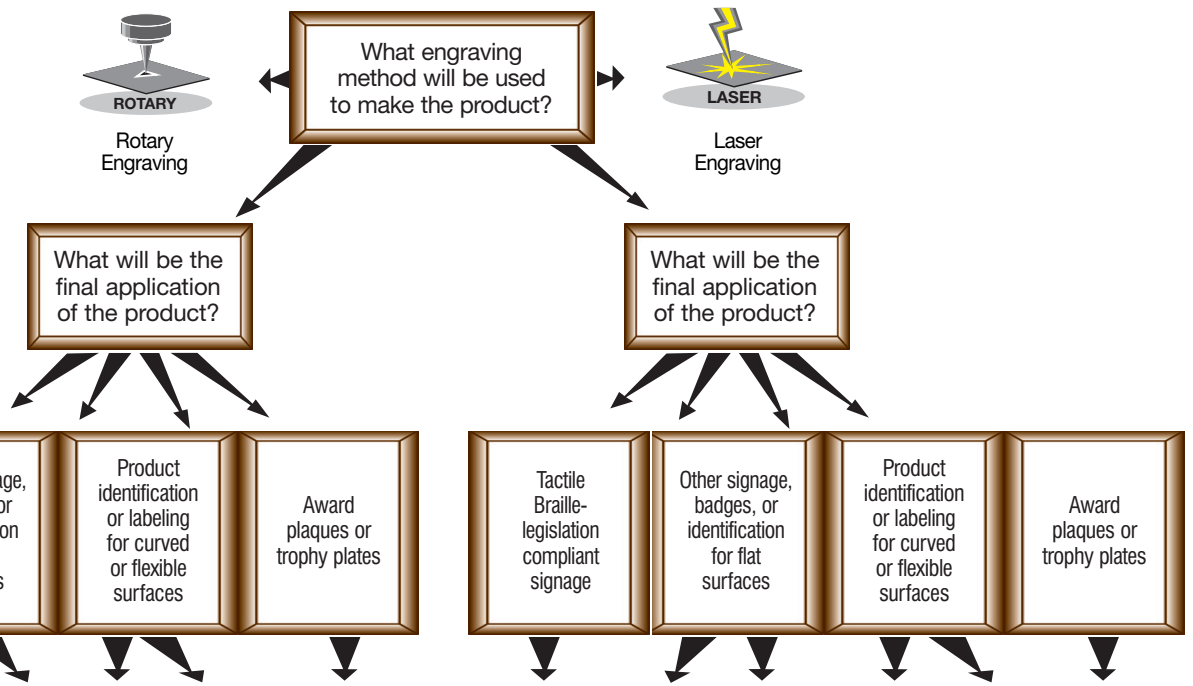
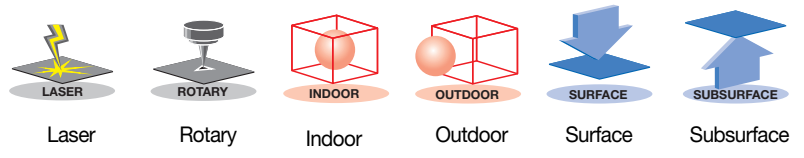


ACCESSORIES

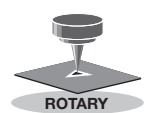


SOFTWARE

# MATERIALS SELECTION GUIDE



## INDOOR

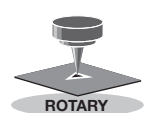


BRILLE	PLASTIC	METAL	PLASTIC	METAL	PLAQUES
GravoTac Gravoglas 2 (matte)	Gravoply 1 Metallex Gravoply Ultra Gravoply 2 Gravoply 3C Gravoglas 2 GravoTac Gravostrat Gravoply Laser Gravoglas 1	Gravometal Gravostrat Gravoxal	Gravoply Ultra Gravolase Gravofoil Gravoply Laser	Gravoxal	Gravoply Ultra Colored and Marbled Steel Colored Aluminum and Trophy Brass Gravostrat Gravoxal Gravolase Gravometal

BRILLE	PLASTIC	METAL	PLASTIC	METAL	PLAQUES
GravoTac (exterior)	Gravoply Ultra Gravoply Laser Gravolase Metallex	Gravoxal AlumaMark Gravometal (Black) Colored & Marbled Steel	Gravoply Ultra Gravolase Gravoply Laser Stickalase	AlumaMARK	Gravoply Ultra Colored and Marbled Steel Gravoxal Gravolase Gravometal (Black)



## OUTDOOR



BRILLE	PLASTIC	METAL	PLASTIC	PLAQUES
GravoTac Exterior	Gravoply Ultra Gravoglas 1		Gravoply Ultra	Gravoply Ultra

BRILLE	PLASTIC	METAL	PLASTIC	PLAQUES
GravoTac Exterior Gravoglas 2-Plex	Gravoply Ultra Gravoglas 1	Gravobrass Exterior	Gravoply Ultra Gravofoil	Gravoply Ultra Gravobrass Exterior

# WHAT MAKES OUR MATERIALS THE BEST

There are several reasons why Gravograph is the best source for engraving materials. We have the most experience in the industry, as well as the greatest number of resources to help you meet your material needs. Our educated Customer Solutions Center, 1-800 technical support line, special-order capabilities, and unparalleled QUALITY are the greatest reasons to buy your materials from us.

Quality is a somewhat vague word. Therefore, it is important that we highlight the unique characteristics which make our materials second to none.

**RAW MATERIALS** – All of our raw materials are 100% prime. This means that we do not use any regrinds. We only use virgin materials. This means consistent thickness and consistent color, which means consistent engraving performance.

**CAP CONSISTENCY** – Customers who have used both our material and competitive material continually applaud our cap consistency. This didn't happen by accident. We extrude the cap and core separately, then laminate the layers together days after each layer has cooled and solidified. Each layer is continually monitored with an advanced "gamma backscatter gauge" during the entire extrusion process. Final samples are manually "gauged" after extrusion. The cheaper way to produce the material is to marry the layers together while they are in the extrusion process. This is referred to as "co-extrusion". (See figure A). Problems with this method arise because the products are still in a molten state at this stage. While you can maintain a consistent overall thickness, the thickness of each individual layer cannot be accurately maintained.

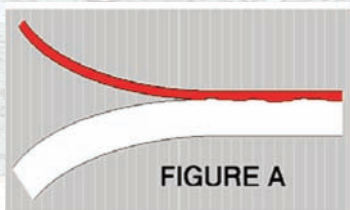


FIGURE A

**COLOR CONSISTENCY** – We only use color concentrates that are controlled to less than  $1\Delta E$  (a variance of  $2\Delta E$  qualifies as a commercial color match). A precise method of metering the color concentrate is also employed. During extrusion, the opacity is periodically tested with a calibrated densitometer, which gives a numerical value of opacity that is compared to the master value. Finally, the finished product is compared to color masters (which are classified by color and surface finish), under Macbeth color inspection lights.

**Indoor/outdoor - UV Stable** - Our versatile indoor/outdoor materials maintain their original color even in the toughest environments since they are UV stabilized. These materials can also be used for indoor facility signs where UV lighting can affect the color integrity, as well as properties of the plastic.

**SHEET FLATNESS** – Gravograph uses an in-line extrusion process, which means the material has never been in roll form. This process removes the inherent curling tendencies of rolled product. Then, the lamination process is controlled (through even temperature distribution) to produce a final flat sheet. More importantly, all our 2-ply indoor materials are actually 3-ply materials. The problem inherent with 2-ply indoor materials originates from the fact that the cap and core are made of different materials. This is true with all major engraving sheet-stock providers (not just Gravograph). What happens in this situation is that the materials are pressed completely flat during the heated lamination process, but since the two different materials have different expansion/contraction characteristics, the final product tends to curl a little as it cools. To overcome this problem, we actually put a cap on each side of the core. This layering technique balances the "pulling" from each cap, and the result is a sheet that lays perfectly flat. Therefore, when you purchase a sheet of red/white Gravoply, the sheet is actually constructed with a red cap, over a white core, over another white cap. (See Figure B) Our outdoor sheet stock (Gravoglas 2-Plex) does not require this triple layer effect, because the cap and the core are actually made of identical modified acrylic.

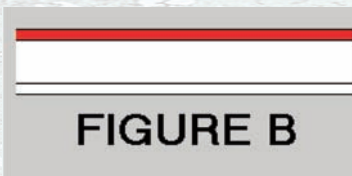


FIGURE B

## WHY DO YOU CARE?

We understand the importance of color consistency, but perhaps you've never considered cap consistency as a very important trait. Well, how many times have you had to re-run a job because half-way through completion, the cutter didn't reach all the way through the cap? It's especially frustrating after a large matrixed job runs for over an hour, and you return only to find out the job has to be re-run. Trying to engrave deeper to compensate can add wear to your cutter, reduce your productivity, and "bleed" characters together. How much time have you spent trying to make a "bowed" sheet lay flat? When creating raised letter signage, how many times when weeding the profile material from the base material has it snapped into numerous little pieces requiring extra time to clean? It all comes down to the old adage: **"time is money"**.

**It is worth the extra effort to provide a quality product which reduces problem engraving and maximizes your bottomline.**

# KNOW YOUR PLASTICS

**NEW**

## **GRAVOPLY LASER (p. 17)**

An indoor laserable product at a lower price. Construction of material is an acrylic core and a foil cap designed for detailed engraving. This product is offered in a wide range of colors which are laser and rotary engravable. Excellent for interior signage.

## **GRAVOLASE (p. 19)**

Similar in appearance to the Metallex product line, Grivolase uses many of the same foil cap layers. However, Grivolase uses a core of laserable solid DR plastic, instead of ABS plastic. DR is a special formulation of a modified acrylic known best for its laserability. Available in either a flexible .020" (0.5 mm) or a sturdy .062" (1.6 mm) overall thickness.

## **GRAVOPLY 1 (p. 21)**

Still our most popular product, GravoPLY 1 is constructed with a standard .010" (0.25 mm) cap layer and perfect for almost any indoor application.

## **GRAVOPLY 2 (p. 25)**

The microthin .001" (0.025 mm) foil cap of GravoPLY 2 allows for very fine detailed engraving. While this is perfect for small text and/or intricate logos required of many indoor applications, the thicker cap of GravoPLY 1 may be better for many industrial applications where long-term cap durability may be put to the test. GravoPLY 2 comes standard with a matte surface finish, but we now have GravoPLY 2 Gloss available which has a glossy clear protective cap layer.

## **GRAVOPLY 3C (p. 27)**

3-ply "double-faced" materials typically have a cap on either side of the core, so you can engrave on either side of the material. However, this 3-ply "double-faced" material is constructed with 3 layers to be engraved from one side. The unique composition allows you to create a 3-color interior sign with your engraver. Engrave to .004" (0.1 mm) to expose the first core, and to .012" (0.3 mm) to expose the second core.

## **METALLEX (p. 29)**

It's the plastic that looks like metal. Save weight and expense for all your indoor metallic applications! Most popular for creating badges. Available in a variety of colors and 3 surface styles. The original Metallex is constructed with a laminated metallic foil cap. Metallex 2 has a special surface treatment to add scratch resistance to the beautiful yet sensitive metallic foil cap. Metallex Gloss has an added glossy clear protective cap layer over the metallic foil – designed for the ultimate in scratch resistance.

## **METALLEX 2 (p. 29)**

See Metallex. Metallex 2 has an extra clear coating that is applied to add more protection to the surface.

## **STICKALASE (p. 30)**

Available in black/white or silver/black. This .004" (0.09 mm) thick, adhesive backed laserable plastic is perfect for bar-codes, cylindrical labeling, ID plates or trophy plates. Sold in 4.72" x 32.8' rolls (120 mm x 10 m rolls.)

## **RUBBALASE (p. 30)**

A natural rubber product sold in sheets is perfect for creating high quality rubber stamps with your laser machine.

## **GRAVOSTRAT (p. 31)**

Phenolic is a very rigid fibrous product that can be susceptible to humidity, but is usually chosen for its fire-retardant qualities.

## **GRAVOTAC (p. 40)**

The design of GravoTac provides the core (substrate) and cap (profile) layers separately. By outlining the desired images or text in the adhesive backed profile layer and peeling away the excess material, GravoTac creates raised letter signage compliant with Braille ADA regulations. The raised letter process is also a great way to create multi-colored signage with your engraving machine.

## **GRAVOPLY ULTRA (p. 45)**

Our most versatile product yet. This micro-cap product allows fine detailed engraving similar to a foil cap product (like GravoPLY 2,) but the non-foil solid plastic cap offers more overall durability. This cap is so durable, in fact, it can be used indoor or outdoor. Even better, this fully UV stable 2-ply product can be engraved with a rotary or laser engraver. This product is available in a variety of overall thicknesses .020", .062", .090" (0.5 mm, 1.6 mm, 2.4 mm) and offers many matte and satin surface finishes to choose from. Reduce your overall inventory value by stocking just one product line for all your 2-ply needs.

## **GRAVOGLAS 1 (p. 47)**

This acrylic 2-ply is designed exclusively for subsurface engraving, and is suitable for outdoor applications. GravoGlas 1 has a thin micro-cap on a very rigid clear solid acrylic core. The thin cap offers fine detailed engraving – and it is laserable too!

## **GRAVOGLAS 2-PLEX (p. 48)**

Designed with the same .01" (0.25 mm) cap thickness as our standard indoor plastic GravoPLY 1, the UV stability of GravoGlas 2-Plex makes it perfect for all outdoor applications. Available in matte, glossy or textured surface finishes for surface or subsurface engraving.

## **GRAVOFOIL (p. 51)**

Sold in sheet form, this .008" (0.2 mm) thick adhesive backed product is for use with a rotary engraver. It creates an industrial strength, permanently engraved sticker. The very flexible PVC construction allows it to conform to many product applications. This material is not suitable for laser engraving.

## **ACRYLIC (p. 52)**

Available in clear, white, and black. Colors are often used for back plating, where you take acrylic and glue and add another material to the surface. This thickness adds to the appearance. Clear acrylic can be subsurface engraved.

## **VINYL (p. 53)**

Used to create vinyl lettering that appears on banners, windows, autos, etc. Typically cut with a vinyl plotter machine, this single-ply adhesive backing material is perfect for almost any outdoor application. Available in .0032" (3.2 mil) thick calendared vinyl, or .0055" (5.5 mil) thick reflective vinyl. Sold in full rolls only.

# KNOW YOUR METALS

## GRAVOMETAL (p. 32)



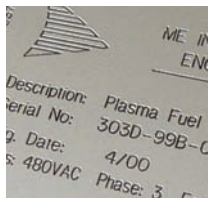
Now available for a variety of applications. Gravometal has a thin protective lacquer coating to protect the surface from oxidizing over time, but is only suitable for indoor environments.

## GRAVOBRASS EXTERIOR (p. 33)



Gravobrace Exterior is a solid raw brass typically used for office building exteriors, commonly called "Doctor Plates". If you do not want the appearance of aging or oxidizing brass, it will be necessary to coat the final engraved (and likely paint-filled) product with an exterior-grade clear lacquer before or soon after mounting.

## GRAVOSTRAL (p. 34)



The cap is metal, the core is Phenolic. Perfect for quality interior metal signage. The .010" (0.25 mm) aluminum caps cover a black Phenolic core. You will never need to paint fill this metal product after engraving. This product can save you time and money.

## GRAVOXAL (p. 35)



This solid sheet of aluminum has an anodized surface. The anodization colors the actual metal to a depth of .001" to .002" (0.025 mm to 0.05mm) and is typically more durable than a painted surface. For this reason, anodized aluminum is often used for industrial applications requiring a durable surface finish.

While anodized aluminum can be engraved with a laser engraver, an engraved contrast will only be realized with gold, black, or colored anodizing. The silver version has a clear anodization.

## ALUMAMARK (p. 36)



This special line of anodized aluminum produces black characters when lasered with any standard CO2 laser engraver. No oxidation or paint fill needed.

Available in matte silver, satin silver and satin gold in thicknesses .005" (0.127 mm) and .020" (0.508 mm). Also available with adhesive backing.

## COLORED STEEL (p. 37)



Colored Steel is actually a brass-plated steel product designed for use with a laser machine. This product returns a brilliant gold lettering when engraved with a laser engraver. The clear layer of lacquer under the polyester-based

top coat or paint protects the brass from oxidizing for years to come. The great appearance and low price have made Colored Steel a favorite of trophy shops using laser engravers. Since the top coating is painted with a polyester-based paint, the surface is sublimation-receptive for dye-sublimation transfers. The masking on this product is clear, so you can print your dyes directly through the masking for easier clean up. Sublimation images work best with white, silver or gold colors.

## MARbled STEEL (p. 37)



Built just like our Colored Steel (above), the final layer of paint on marbled steel is a faux marble pattern. All the other great properties of Colored Steel remain the same on this version of Colored Steel.

## COLORED ALUMINUM (p. 38)



This aluminum has been painted with a polyester-based paint. It is the preferred choice for economical trophy plates. Since top coating of Colored Aluminum is painted with a polyester-based paint, the surface is sublimation-receptive for dye-sublimation transfers. The masking on this product is clear, so you can

print your dyes directly through the masking for easier clean up. Sublimation images work best with white, silver or gold colors.

## TROPHY BRASS (p. 38)



An economical brass alternative for signs, trophy plates, awards and plaques designed for use with a rotary engraving machine. Trophy Brass can provide you the rich appeal of engraved brass without the associated cost.

# MATERIAL SPECIFICATIONS

- GRAVOPLY LASER
- GRAVOLASE METALLICS
- GRAVOPLY 1
- GRAVOPLY 2
- GRAVOPLY 3C
- METALLEX
- STICKALASE
- GRAVOSTRAT
- GRAVOTAC
- GRAVOMETAL
- GRAVOSTRAL
- GRAVOXAL
- ALUMAMARK
- COLORED STEEL
- MARBLED STEEL
- COLORED ALUMINUM
- TROPHY BRASS
- GRAVOTAC EXTERIOR
- METALLEX 2
- GRAVOBRASS EXTERIOR
- GRAVOPLY ULTRA
- GRAVOGLAS 1
- GRAVOGLAS 2-PLEX
- GRAVOFOIL
- ACRYLIC
- VINYL

Use	Material	Surface	Method of engraving	Engraving depth
Indoor	Modified Acrylic	Matte	Rotary/Laser	.002" / 0.01mm
Indoor	Modified Acrylic	Brushed/Glossy/Matte	Rotary/Laser	.002" / 0.01mm
Indoor	ABS	Satin/Matte/Textured	Rotary	.012" / 0.03mm
Indoor	ABS	Matte/Glossy	Rotary	.002" / 0.01mm
Indoor	ABS	Matte	Rotary	.002"/.014" 0.1mm/0.3mm
Indoor	ABS	Matte/Glossy	Rotary/Laser	.001" / 0.01mm
Indoor	Plastic	Matte	Laser	.001" / 0.025mm
Indoor	Phenolic	Low Glare	Rotary	.012" / 0.03mm
Indoor	Modified Acrylic	Matte	Rotary	.032"/.064" 0.1mm/1.63mm
Indoor	Brass	Matte/Satin/Glossy	Rotary/Burnish/Diamond/Laser	Rotary .003" 0.1mm
Indoor	Phenolic	Matte/Satin	Rotary	.011" / 0.03mm
Indoor	Aluminum	Matte/Glossy	Rotary/Diamond/Laser	Rotary .003" 0.1mm
Indoor	Aluminum	Matte/Satin	Laser	.001" / 0.025mm
Indoor	Steel	Satin/Glossy	Burnish/Diamond/Laser	Burnish .002" 0.1mm
Indoor	Steel	Glossy	Burnish/Diamond/Laser	Burnish .002" 0.1mm
Indoor	Aluminum	Satin/Glossy	Rotary/Diamond	Rotary .001" 0.1mm
Indoor	Brass	Satin/Glossy	Rotary/Burnish/Diamond	Rotary .006" 0.1mm
Indoor/ Outdoor	Modified Acrylic	Matte	Rotary/Laser	.032"/.064" 0.1mm/1.63mm
Indoor	ABS	Matte/Glossy	Rotary/Laser	.001" / 0.01mm
Indoor/ Outdoor	Brass	Glossy/Satin	Rotary	.003" / 0.01mm
Indoor/ Outdoor	Modified Acrylic	Matte	Rotary/Laser	.003" / 0.01mm
Indoor/ Outdoor	Acrylic	Glossy	Rotary/Laser	.008" / 0.02mm
Indoor/ Outdoor	Modified Acrylic	Matte/Glossy/Textured	Rotary	.012" / 0.03mm
Indoor/ Outdoor	PVC	Matte	Rotary	.001" / 0.025mm
Indoor/ Outdoor	Acrylic	Glossy	Rotary	Varies
Indoor/ Outdoor	Vinyl	Glossy/Reflective	Cutting	.005" / 0.01mm

Due to print variations, material colors represented in this catalog may vary slightly from actual colors.



Recommended cutter	Grinding angles clearance/cutting		Cutter type	Needs lubrication	Saw	Shear	Bend	Stamp	Screen
<b>34108-34117</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>					
<b>34108</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>	■	■	■	■	■
<b>34012-34022</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>	■	■	■	■	■
<b>34012-34022</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>	■	■	■	■	■
<b>34012-34022</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>	■	■	■	■	■
<b>34012-34022</b>	<b>38</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>	■	■	■	■	■
<b>Laser</b>	<b>Laser</b>		<b>Laser</b>	<b>N/A</b>		■		■	■
<b>33989-33998</b>	<b>38</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>	■				
<b>45704</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>	■	■	■	■	■
<b>34024-34033</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>Y</b>		■		■	■
<b>33989-33998</b>	<b>38</b>	<b>30</b>	<b>Carbide</b>	<b>Y</b>	■				
<b>34024-34033</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>Y</b>		■			■
<b>Laser</b>	<b>Laser</b>		<b>Laser</b>			■			■
<b>34024-34033</b>	<b>N/A</b>	<b>N/A</b>	<b>Carbide</b>	<b>N</b>		■			■
<b>34024-34033</b>	<b>N/A</b>	<b>N/A</b>	<b>Carbide</b>	<b>N</b>		■			■
<b>34024-34033</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>Y</b>		■			■
<b>34024-34033</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>		■			■
<b>45704</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>	■	■	■	■	■
<b>34012-34022</b>	<b>38</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>	■	■	■	■	■
<b>34024-34033</b>	<b>40</b>	<b>30</b>	<b>Carbide</b>	<b>Y</b>	■			■	■
<b>34108-34117</b>	<b>40</b>	<b>35</b>	<b>Steel</b>	<b>N</b>	■		■	■	■
<b>34108-34117</b>	<b>40</b>	<b>35</b>	<b>Steel</b>	<b>N*</b>	■		■	■	■
<b>34108-34117</b>	<b>40</b>	<b>35</b>	<b>Steel</b>	<b>N</b>	■		■	■	■
<b>33989-33998</b>	<b>38</b>	<b>30</b>	<b>Carbide</b>	<b>N</b>		■			■
<b>34036-34044</b>	<b>N/A</b>	<b>N/A</b>	<b>Steel</b>	<b>N</b>	■		■	■	■
<b>34036-34044</b>	<b>N/A</b>	<b>N/A</b>	<b>Vinyl Knife</b>	<b>N</b>		■			■

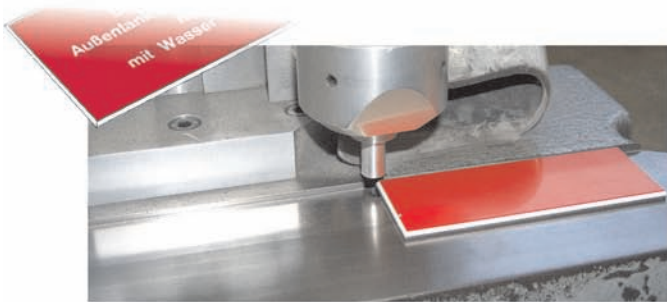


# FABRICATION SERVICES

## SAVE LABOR, TIME AND MONEY

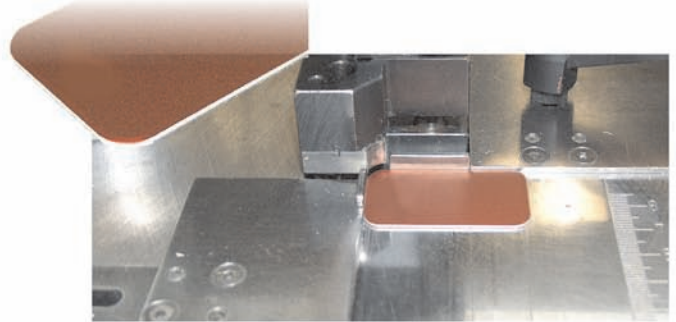
### Beveling

Beveling is the cutting of an attractive angular edge in order to create a border. Our standard bevel is at a 45 degree angle.



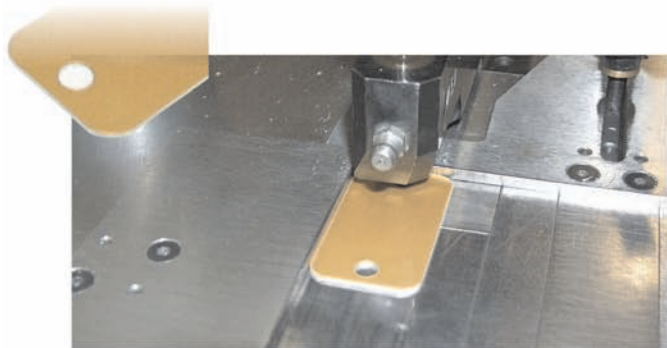
### Rounded corners

We offer a wide selection of different radii for rounded corners.

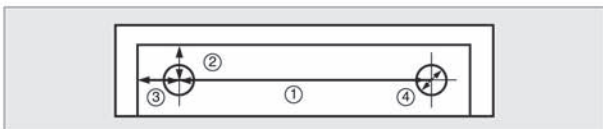
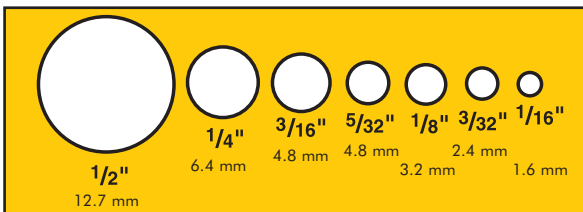


### Drilling holes

To accommodate your mounting needs in plastic and metal.



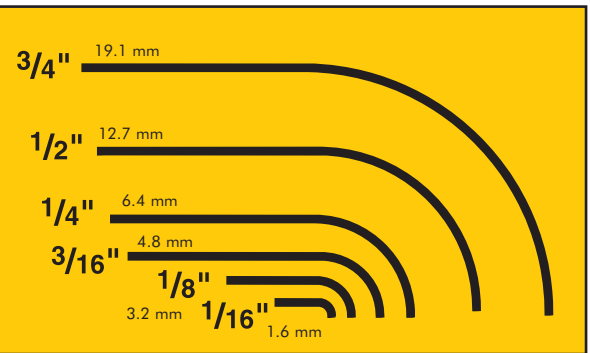
Holes are positioned per your specifications. When measuring holes, follow the illustrated example shown below.



### Supply these four measurements:

1. From the center of one hole to the center of the other hole.
2. From the center of the hole to the top edge of the material.
3. From the center of the hole to the side edge of the material.
4. Diameter of any counter-sunk holes to be drilled (for mounting materials and wall holders with flat head screws.) Please ask for a quotation.

Within the continental US call 1.800.843.7637



### Slotting

For acrylic material. Specify position, angle and width of slot.



### Bending

Plastic materials 1/16" (1.6 mm) or thicker (except Phenolic) can be bent into stand-up display signs, badges etc. Maximum length of the bend is 18" long (457.2 mm). Please ask for a quotation.

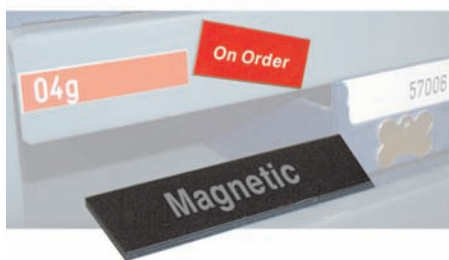


Outside the continental US call +1.770.623.0331

# FABRICATION SERVICES

## Adhesive backing

We can apply adhesive backing to badges, nameplates, strips and sheets. Adhesive backing is applied before cutting material. Please specify interior or exterior use.



## Magnetic backing

For temporary mounting of info tags on metal shelves, we can apply magnetic backing to plates, strips and sheets.



## Custom solutions

We also deliver cut to size self-adhesive signs in a matrix on a carrier material: • engrave it • take it off • stick it on. For more information, please contact us.



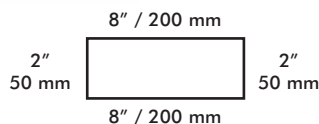
## Polishing

Acrylic cut edges can be polished into smooth lustrous finished edges.

Determining linear inch:

$$2'' + 8'' + 2'' + 8'' = 20 \text{ linear inches}$$

$$50 \text{ mm} + 200 \text{ mm} + 50 \text{ mm} + 200 \text{ mm} = 500 \text{ linear mm}$$



## Custom color plastic material

Gravograph provides exclusive color matching services!

Although we offer the largest selection of engraving materials, we understand our customers' special requirements. Gravograph is able to supply proprietary material based on your specifications: color, material, thickness and ply.

If a large job calls for a special color combination, please contact us.

## Lead-time

All fabrication orders are custom orders. Many orders ship within one business day. Custom orders may require additional time. Fabrication times are only an estimate, and may vary according to production load. Orders can be rushed for an additional fee.

## Return policy

All fabrication orders are non-returnable due to their custom nature. Please ensure that you provide accurate information when placing your fabrication order.

# FABRICATION SERVICES

...ready to engrave badges

Just like our other cut to size items, badges are available in most of our engraving materials. Our badges include fasteners. Just specify your requirements: size and material, fastener, fused, cemented or bonded hardware; rounded or square corners; with or without beveling.



## Types of fasteners

A. Safety pin



B. Clutches



C. Magnetic  
• Standard  
• Jumbo



D. Superclip

E. Snap clip, swivel



Please note:

1/16" (1.6 mm) badges are bonded

3/32" (2.4 mm) badges are fused

We can custom fabricate your plastic or brass sheet badge. Specify: size and material, fastener, fused, cemented or bonded hardware; rounded or square corners; bevel or no-bevel finished edges.

## Custom fabricated badges and signage



Please contact our Customer Service Department for a quotation.

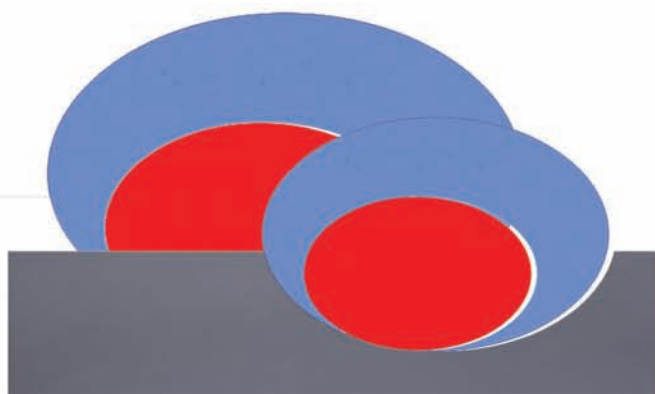
Dial +1-800-8-HERMES (+1.800.843.7637) +1.770.623.0331

FAX +1.800.533.7637 +1.770.495.3668

For information on ready-made badges, see pages 68-70

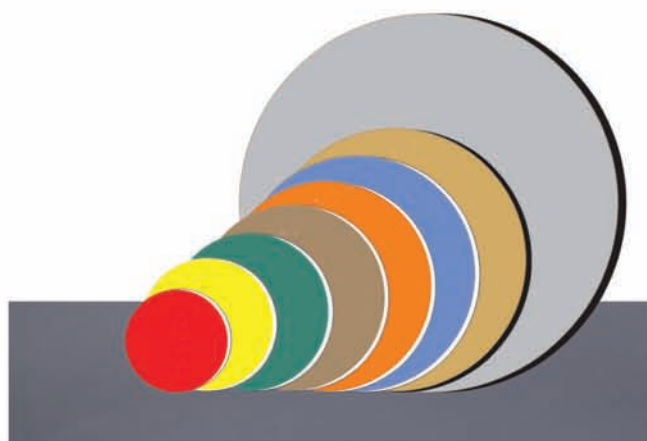
# CUT TO SIZE

Circular and oval blanks are available from our current range of engraving materials. Custom sizes are available.



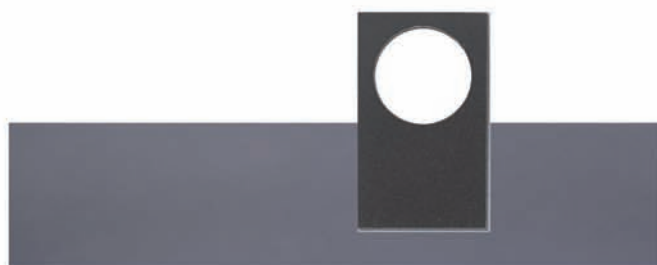
## OVAL BLANKS

Custom sizes are available with or without holes.



## CIRCULAR BLANKS

Custom sizes are available with or without holes.

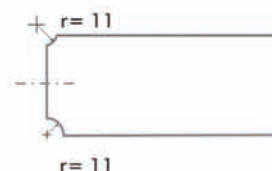


## CUTTING

Custom cutting is available for Gravoply 1, Gravoply 2, Gravoply Ultra, Gravoxal, Metallex, Gravoglas, Gravalase, Gravoply Laser and GravoTac.



Cutting of concave corners

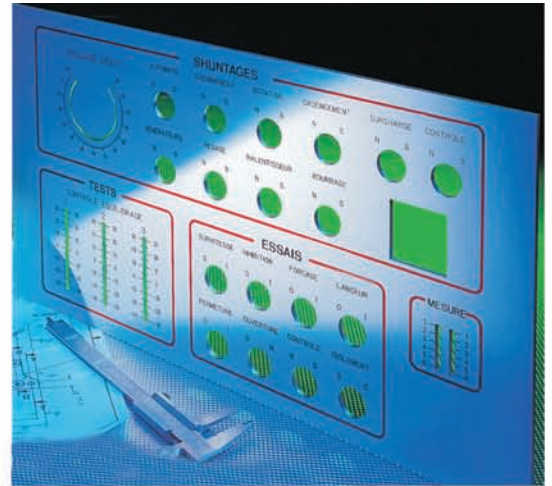


## Signs with concave corners

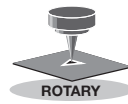
Available in cut to size pieces of Gravoply 1, Gravoply 2, Gravoply Ultra, Gravoxal, Metallex, Gravoglas, Gravalase and Gravoply Laser to label push-buttons, etc.

# CUT TO SIZE

With industrial applications come the most diverse needs. The Gravograph range of materials is the solution, offering both "standard" and "on demand" requests. Our engraving materials in plastic or aluminum are designed for harsh environments.



# ON DEMAND GRAVOPLY 1



- Choose over 1,100 color combinations
- Four surface finishes available
- Over 4,600 specific products

### Colors

Why follow the mainstream? Now you can choose engraving sheets in your own color combination! Just combine any of the cap colors with the core color of your choice. This great feature gives you over 1,100 color combinations of Gravoply 1 from which to choose.

### Surface finish

We don't want to limit your imagination. This is why we let you choose your final surface finish as well. Choose from our standard satin, matte, textured, or glossy surface finishes. Now, together with surface finishes you have over 4,600 specific products to choose from in the Gravoply 1 "On Demand" range.

### Delivery & pricing

"On Demand" products require 6-8 weeks\* for delivery, and have a nominal up charge over our standard stock products for orders of 5 sheets or more. Quantity breaks will also apply to our "On Demand" products. They may be shipped in full, half or quarter sheets, but must be ordered in full sheet equivalents. For example, half sheets must be ordered in pairs and quarter sheets must be ordered in sets of 4.

\* Large quantities may require more than 6-8 weeks for delivery. For delivery/pricing/minimum • Please call 1-800-843-7637 for information.

### Specifications

Surface	<b>Satin, glossy, matte, textured</b>
Profile engraving depth	<b>.012"/0.3 mm</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>XT/ABS</b>

### Capabilities

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■		UV resistant
Min. temp.		200°F/93°C	Max. temp.

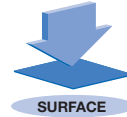
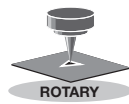
CAP "Background" COLORS
white
almond
ivory
yellow
orange
burnt orange
rust
red
pink
passion pink
mauve
burgundy
cocoa
bright white
new york white
brown
chocolate brown
apple green
grass
green
jacobi teal
pine green
maui blue
blue metallic
azure blue
air force blue
navy blue
purple
silver gray
metallic gray
light walnut
american walnut
glossy walnut
taupe
light yellow
light gray
black
evergreen
candlewick
fog
slate
meiger red

CAP "Text" COLORS
red
blue
apple green
navy
pine green
black
orange
burgundy
silver gray
chocolate brown
white
magenta
yellow
silver gray
brown
teal
almond
translucent white
translucent red
translucent green
slate
candlewick
evergreen
rust
new york white



# ON DEMAND

## GRAVOGLAS® 2-PLEX



- Choose your own color combination!
- Over 500 color combinations
- Four textures
- Over 2,000 total choices

### Colors

Why follow the mainstream? Now you can choose engraving sheets in your own color combination! Just combine any of the cap colors with the core color of your choice. This great feature gives you over 500 color combinations of Gravoglas 2-Plex to choose from!

### Surface finish

We don't want to limit your imagination at all. This is why we let you choose your final surface finish as well. Choose from our standard satin, matte, textured, or glossy surface finishes. Now together with surface finishes you have over 2,000 specific products to choose from in the Gravoglas 2-Plex "On Demand" range.

### Delivery & pricing

"On Demand" products require 6-8 weeks\* for delivery, and have a nominal upcharge over our standard stock products for orders of 5 sheets or more. Quantity breaks will also apply to our "On Demand" products. They may be shipped in full, half or quarter sheets, but must be ordered in full sheet equivalents. For example, half sheets must be ordered in pairs and quarter sheets must be ordered in sets of 4.

### Specifications

Surface	<b>Matte, glossy, textured, satin</b>
Engraving depth	<b>.012" (0.3 mm)</b>
Full sheet	<b>24" x 48" (610mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>DR</b>

### Capabilities

Interior	■	■	Exterior
Shear		■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■		Flexible
Break resistant		■	UV resistant
Min. temp.		180°F/80°C	Max. temp.

SURFACE COLORS
white
eggshell
cream
yellow
orange
red
passion pink
bordeaux
burgundy
taupe
chocolate brown
teal
seaform
grass
apple green
verde
metallic blue
azure blue
silver gray
black
gold
silver
copper
bronze
brown
pine green
royal blue
almond
ivory
american blue
midnight blue
maui blue
sky blue
gray
cocoa
coral
periwinkle
slate

CORE "Text" COLORS
teal
red
azure blue
black
verde
periwinkle
cream
white
eggshell
bordeaux
gold
clear
pine green
chocolate brown
brown

\*Large quantities may require more than 6-8 weeks for delivery. For delivery/pricing/minimum - Please call 1-800-843-7637 for information.

Within the continental US call 1.800.843.7637

Outside the continental US call +1.770.623.0331



Information: **F**undes und Eigene

1. Einkauten: Begrenztes Vergnügen

In **(DACH)** haben sich die Einkaufsgewohnh  
 Früher kaufte man Lebensmittel in den sogenann  
 Kleidung und andere Produkte in den verschied  
 individuell und persönlich. Seit Ende der siebzig  
 s rung immer mehr große Einkaufszentren außerh  
 Kunden mit vielseitigen und preisgünstigen Ware  
 das Einkaufen zu Fuß in autofreien Fußgängerzone  
 (zum Teil auch unter der Erde) und in modernen  
 geworden. Statistiken zeigen, dass mehr als 60 % d  
 10 kaufen wollen, sondern dass sie die Atmosphäre geni  
 ren oder in den vielen Straßencafés und Restaurants et



Gravo  
Style

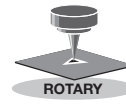
EATM

11.67.49

SALE : 2.000

08-Oct-07

# GRAVOPLY™ LASER



- Badges
- Identification plates
- Interior signage

- Laser and rotary engravable
- Microthin surface layer for detailed engraving
- All surface colors listed are matte finish
- Glossy and brushed surface colors are available through On Demand

## Specifications

Surface	<b>Matte, brushed, glossy</b>
Engraving depth	<b>.002" (0.01 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>Acrylic</b>

## Capabilities

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■*	Flexible
Break resistant			UV resistant
Min temp		200°F/60°C	Max. temp.

\*0.8 mm is flexible

### Did you know?

On Demand color combinations are available. Mix any cap colors with any core colors. Please call Customer Service at 1.800.843.7637 for more details.

		2-ply	
		0.8 mm	1.3 mm
	Surface color	Core color	
●	white	black	51017
●	white	red	■
●	white	blue	■
●	almond	black	■
●	red	white	■
●	red	yellow	■
●	burgundy	white	■
●	burgundy	gold	■
●	yellow	black	51018
●	yellow	blue	■
●	yellow	red	■
●	dark yellow	black	■
●	orange	black	■
●	orange	white	■
●	pine green	white	■
●	apple green	white	■
●	sky blue	black	■
●	sky blue	white	■
●	air force blue	white	■
●	blue	yellow	■
●	air force blue	gold	■
●	blue	white	■
●	brown	white	■
●	chocolate brown	white	■
●	black	gold	■
●	black	white	51033
●	black	yellow	■
●	gray	black	■
●	gray	white	■

Color combinations indicated by a ■ are available through On Demand.



CODE ID # 09523

**Parker Aerospace**

P/N 6835015M2  
S/N \_\_\_\_\_

	PSIG	FLOW PPH	ACTUAL
GAS TURBINE	100	415 - 425	_____
FUEL SYSTEM	300	735 - 750	_____

**Gravolase**

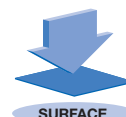
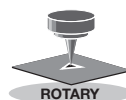
*New from Harman... gold aluminum that laser's black!*

Perfect for:

- Identification Plates
- Bar Codes
- Control Panel Switch Plates
- Mechanical Procedural Plates
- Recognition Plates
- Plaque Plates

1-800-843-7637

# GRAVOLASE<sup>®</sup> METALLICS AND NATURALS



- Badges
- Trophy plates
- Award plaques
- Identification plates

- Metallic finish
- Laser and rotary engravable
- .001" (0.025 mm) cap layer offers detailed engraving
- .020" (0.5 mm) thickness suitable for beveling

## Metallics

	Surface color	Core color	2-ply	
			0.5 mm	1.6 mm
			.020"	1/16"
●	brushed gold	black	18960	19002
●	brushed gold	forest green	29535	29550
●	brushed gold	burgundy	29536	29551
●	european gold	black	29542	29552
●	glossy gold	black	29543	29553
●	brushed bronze	black	29544	29554
●	brushed bronze	white	29545	29555
●	copper	black	29546	29556
●	copper	burgundy		29557
●	brushed silver	blue	18968	
●	brushed silver	black	18961	19003
●	glossy silver	black	29548	29558
●	glossy silver	burgundy	29549	29559

## Specifications

Surface	<b>Metallic</b>
Rotary engraving depth	<b>.002" (0.1 mm)</b>
Thickness	<b>.020" or 1/16" (0.5 mm x 1.6 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>DR</b>

## Naturals

●	red marble	gold	34370	29505
●	gray black marble	gold	47387	47393

## Capabilities

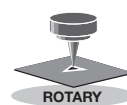
Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■		UV resistant
Min temp.		180°F /80°C	Max temp.

## Did you know?

We can fabricate any of our materials into small cut pieces – with or without beveled edges. Drilled holes are no problem either. Our Fabrication department is ready when you are! See pages 9-13.



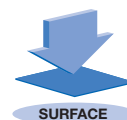
# GRAVOPLY® 1



ROTARY



INDOOR



SURFACE

- Interior signage
- Identification plates
- Key tags

- Satin finish for Gravoply 1
- Engraving depth .012" (0.3 mm)
- 2-ply or 3-ply
- Many colors and thicknesses
- Abrasion resistant

## Specifications

Surface	<b>Satin</b>
Profile engraving depth	<b>.012" (0.3 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>XT/ABS</b>

## Capabilities

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■		UV resistant
Min. temp.		200°F/93°C	Max. temp.

### DID YOU KNOW?

We can match any Gravoply cap with any Gravoply core. See page 14 for more details.

	Surface color	Core color	2-ply			3-ply	
			0.8 mm 1/32"	1.6 mm 1/16"	2.4 mm 3/32"	1.6 mm 1/16"	3.2 mm 1/8"
●	white	red		<b>17385</b>	17484		29699
●	white	burgundy		<b>29576</b>			
●	white	azure blue		<b>17396</b>	17489		
●	white	black	17263	<b>17331</b>	22030	29578	29700
●	white	navy blue	31258				
●	almond	black		<b>32293</b>			
●	red	white	17267	<b>17506</b>	17472	29580	29702
●	red	black		<b>17454</b>			
●	burgundy	white		<b>17463</b>			
●	yellow	azure blue		<b>17373</b>			
●	yellow	black	17273	<b>17366</b>	17478	29579	17525
●	pine green	white		<b>17410</b>	17495		
●	navy blue	white	31258	<b>29581</b>			29706
●	azure blue	white	17270	<b>17353</b>	17475	29603	29705
●	chocolate brown	white		<b>31641</b>	31645		29704
●	silver gray	white		<b>29584</b>			
●	silver gray	burgundy		<b>29587</b>			
●	silver gray	azure blue		<b>32157</b>			
●	silver gray	black		<b>17379</b>			
●	black	white	17250	<b>17319</b>	17467	29604	17521
●	black	red		<b>29601</b>			
●	white	magenta		29573	22030		
●	white	apple green		17313			
●	white	pine green		29561			
●	white	teal		29568			
●	white	brown		29575			
●	new york white	burgundy		29570			
●	new york white	brown		29571			
●	ivory	chocolate brown		17310			
●	almond	burgundy		29562			
●	almond	silver gray		32284			
●	rust	white		17448			
●	passion pink	white		45953			
●	pink	white		32725			
●	pink	magenta		29577			

**Bold items  
are value priced!**

# GRAVOPLY® 1



- Interior signage
- Identification plates

- Satin finish
- Engraving depth .012" (0.3 mm)
- 2-ply or 3-ply
- Many colors and thicknesses
- Durable .012" (0.3 mm) cap layer

## Specifications

Surface	<b>Satin</b>
Profile engraving depth	<b>.012" (0.3 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>XT/ABS</b>

## Capabilities

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■		UV resistant
Min. temp.		200°F/93°C	Max. temp.

### DID YOU KNOW?

Any cap/core combination can be custom manufactured to be 3-ply. See page 14 for more details.

		2-ply			3-ply		
		0.8 mm	1.6 mm	2.4 mm	1.6 mm	3.2 mm	
	Surface color	Core color	1/32"	1/16"	3/32"	1/16"	1/8"
●	red	yellow		17445			
●	burgundy	silver grey		17431			
●	orange	white		17407	17492		
●	orange	black		17404			
●	burnt orange	black	29560	29566			
●	yellow	white		29564			
●	yellow	magenta		29565			
●	teal	white		29569			
●	maui blue	white		45901			
●	pine green	almond		29574			
●	green	white		17393			
●	grass	white		45892			
●	apple green	white	17292	17442	17503	29602	
●	navy blue	silver grey		29582			
●	blue metallic	white		17363			
●	azure blue	yellow		17439			
●	air force blue	white		17428	17500		
●	purple	white		17436			
●	cocoa	white		17419			
●	cocoa	chocolate brown		17413			
●	brown	white		17388			29703
●	silver grey	almond		29586			
●	silver grey	navy		29585			
●	light gray	black		29583			
●	metallic gray	white		17376			
●	black	yellow		17399			
●	black	silver grey		29572			
●	light walnut	white		29598			
●	american walnut	white		29599			29707
●	glossy walnut	white		29600			

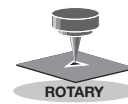
## Gravoply® .020" (0.5 mm) & .040" (1.0 mm)

This very flexible version of Gravoply is most often used for window signs and pipe and plaque messaging.

		2-ply		3-ply	
		0.5 mm	1.0 mm		
	Surface color	Core color	.020"	.040"	
●	white	black	31238		
●	white	black/white		31233	
●	black	white	31238		
●	black	white/black		31250	



# GRAVOPLY® 1 DESIGN



- Interior signage
- Identification plates

- Textured or matte finishes
- Textured finish provides extreme scratch resistance
- Matte finish offers a glare-free presentation

## Textured Specifications

Surface	<b>Textured</b>
Engraving depth	<b>.012" (0.3 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>XT/ABS</b>

## Decor Specifications

Surface	<b>Matte</b>
Engraving depth	<b>.012" (0.3 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>ABS</b>

## Capabilities

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■		UV resistant
Min. temp.		200°F/93°C	Max. temp.

### DID YOU KNOW?

Don't see the finish color combination you want? We can produce any color combination in any finish. See page 14 for details.

## Gravoply® 1 Textured

			2-ply
			1.6 mm
			1/16"
	Surface color	Core color	
●	white	black	29605
●	white	red	29606
●	white	blue	29607
●	almond	black	34404
●	yellow	black	29609
●	black	white	29610
●	passion pink	white	45954
●	red	white	29611
●	azure blue	white	29612
●	apple green	white	29613
●	grass	white	45893
●	maui blue	white	45950

## Gravoply® Matte Decor

			2-ply
			1.6 mm
			1/16"
	Surface color	Core color	
●	new york white	slate	29614
●	salmon	burgundy	17235
●	candlewick	evergreen	32743
●	candlewick	slate	29616
●	slate	new york white	29617

## \*Gravoply® Translucent (satin finish)

			2-ply			3-ply	
			0.8 mm	1.6 mm	2.4 mm	1.6 mm	3.2 mm
	Surface color	Core color	1/32"	1/16"	3/32"	1/16"	1/8"
●	black	translucent white		17295			
●	black	translucent red		17298			
●	red	translucent white		17301			
●	white	translucent red		29618			

**\*Excellent for backlit signs**

OUVERTURE  
DE LA  
PORTE



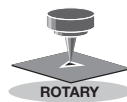
HORO QUARTZ  
GESTION DES TEMPS

GENERAL PRISES COURANT  
PROTECTION PRIMAIRE TRANSFO  
PROTECTION SECONDAIRE



Kitchen	Study	Plug 1 <sup>st</sup> floor	O
chen	Study	Plug 1 <sup>st</sup> floor	Oven

# GRAVOPLY® 2



- Badges
- Identification plates
- Interior signage

- Microthin surface layer
- Perfect for small characters and detailed logos
- Low glare matte finish
- 2-ply and 3-ply

## Specifications

Surface	<b>Matte</b>
Profile engraving depth	<b>.002" (0.1 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>ABS</b>

## Capabilities

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■		UV resistant
Min. temp.		200°F/93°C	Max. temp.

### DID YOU KNOW?

We can custom manufacture your badges and all you have to do is engrave. See page 11.

	Surface color	Core color	2-ply		3-ply
			0.8 mm 1/32"	1.6 mm 1/16"	3.2 mm 1/8"
●	white	red		<b>21928</b>	
●	white	azure blue		<b>21908</b>	
●	white	black	21850	<b>21919</b>	
●	red	white	21851	<b>21921</b>	22016
●	yellow	red		<b>21913</b>	
●	yellow	black		<b>21936</b>	
●	azure blue	white	31401	<b>21923</b>	
●	black	white	21849	<b>21917</b>	29732
●	white	burgundy		21874	
●	almond	burgundy		29709	
●	red	yellow		21910	
●	burgundy	white		21932	
●	yellow	blue		21896	
●	apple green	white		21905	
●	pine green	white		21938	
●	pine green	yellow		21916	
●	sky blue	white		21934	
●	sky blue	black		21895	
●	azure blue	yellow		21911	
●	royal blue	white		21907	
●	brown	white		21930	
●	chocolate brown	white		21876	
●	gray	white		21927	
●	gray	black		21915	
●	black	yellow		21940	



# GRAVOPLY® 2



- Badges
- Identification plates
- Interior signage

- Gravoply 2 Gloss has an extra durable scratch resistant glossy cap
- Microthin surface layer
- Perfect for small characters and detailed logos
- Low glare matte finish on woods, granites and tech patterns



**The ultimate in scratch and wear resistance!**

## Gravoply® 2

			2-ply
			1.6 mm
	Surface color	Core color	1/16"
●	white	black	23977
●	white	red	23981
●	yellow	black	23982
●	red	white	23978
●	emerald green	white	23983
●	blue	white	23979
●	grey	white	23980
●	black	white	23976

## Specifications

Surface	<b>Matte</b>
Profile engraving depth	<b>.002" (0.1 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>ABS</b>

## Capabilities

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■		UV resistant
Min. temp.		200°F/93°C	Max. temp.

## Gravoply® 2 Woods

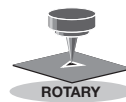
			2-ply
			1.6 mm
	Surface color	Core color	1/16"
●	satin light walnut	white	21885
●	matte american walnut	white	21880
●	satin colonial walnut	white	21879

## Gravoply® 2 Naturals

			2-ply
			1.6 mm
	Surface color	Core color	1/16"
●	green marble	almond	22026

## Gravoply® 2 Tech Patterns

			2-ply
			1.6 mm
	Surface color	Core color	1/16"
●	black pinstripe	white	22019
●	silver grid	black	22022



- Signage
- Plates with logos
- Badges

- This unique material offers 3 layers of color for surface engraving
- The color revealed depends on the depth of engraving
- Perfect for notification signs or logo signs

				1.6 mm	
		Surface color	Core color	Core color	1/16"
●	●	white	red	black	23957
●	●	yellow	red	black	23954
●	●	apple green	white	black	23953
●	●	blue	white	black	23956
●	●	red	white	black	23955
●	●	blue	red	white	23952
●	●	yellow	white	black	23949
●	●	black	red	white	23948
●	●	radiant gold	black	white	23950
●	●	brushed aluminum	black	white	23951



**“Plus” custom combinations**

Custom color combinations are available, with minimum quantities as low as 10 full sheets. Delivery time may vary. Please call our Customer Solutions Representatives at 1-800-843-7637 for more details.

**Specifications**

Surface	<b>Matte</b>
Engraving depth	<b>.002”/.012” (0.1 mm/0.3 mm)</b>
Full sheet	<b>24” x 48” (610 mm x 1220 mm)</b>
Half sheet	<b>24” x 24” (610 mm x 610 mm)</b>
Quarter sheet	<b>12” x 24” (305 mm x 610 mm)</b>
Composition	<b>ABS</b>

**Capabilities**

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■		UV resistant
Min. temp.		200°F/93°C	Max. temp.



**AFFINITI GOLF PARTNERS**



0300942  
PART NUMBER

<b>LEFT SIDE</b>	<b>70</b>
DESCRIPTION	HERTZ

3430 HIGHWAY NINE NORTH  
ALPHARETTA, GA 30004



The Executive Offices of  
**AFFINITI**  
 GOLF PARTNERS

---

**AFFINITI GOLF PARTNERS**

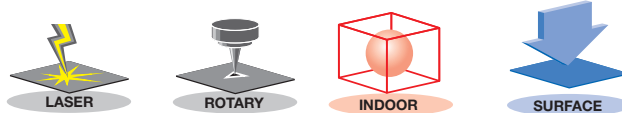
---

Monday      Friday  
 9-5              9-6  
[www.affinitigolf.com](http://www.affinitigolf.com)

**AFFINITI**  
 GOLF PARTNERS

**AFFINITI GOLF PARTNERS CHAMPIONSHIP**

# METALLEX®



**The ultimate in scratch and wear resistance!**

**Metallex®**

			2-ply	
			1.6 mm	
	Surface color	Core	1/16"	
●	glossy silver	black	23972	
●	brushed aluminum	black	23974	
●	european gold	black	23975	
●	glossy gold	black	23971	
●	brushed gold	black	23973	

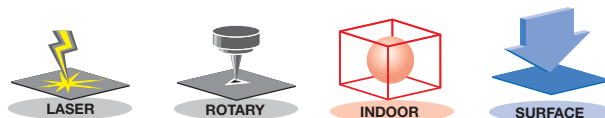
- Badges
- Identification plates
- Plaques

• *Metallex Gloss has an extra durable scratch resistant glossy cap*

• *2-ply silver and gold*

• *Available in glossy and matte finishes*

• *Microthin surface layer*



**Metallex® 2**

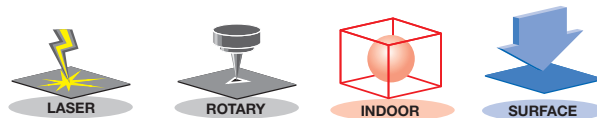
			2-ply	
			1.6 mm	1.6 mm
	Surface color	Core	Glossy 1/16"	Matte 1/16"
●	european gold	black	21884	
●	glossy gold	black	21881	
●	radiant gold	black	21891	
●	brushed aluminum	black		21883
●	glossy silver	black	21882	
●	radiant silver	black	21892	
●	frosted silver	black		32732

## Specifications

Surface	<b>Glossy, matte or brushed</b>	
Profile engraving depth	<b>.002" (0.1 mm)</b>	
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>	
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>	
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>	
Composition	<b>ABS</b>	

## Capabilities

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant <small>(only Metallex 2)</small>	■	■	Flexible
Break resistant	■		UV resistant
Min. temp.		200°F/93°C	Max. temp.



**Metallex®**

			2-ply		
			0.8 mm	1.6 mm	2.4 mm
	Surface color	Core	1/32"	1/16"	3/32"
○	brushed bronze	white		21890	
●	brushed bronze	black		21904	
●	european gold	black	21836	21903	
●	glossy gold	black	21822	21886	21954
●	radiant gold	black	21824	21888	21956
●	brushed aluminum	black		21898	
●	radiant silver	black	21825	21889	21957
●	glossy silver	black		21887	21955

### DID YOU KNOW?

Metallex® 2 has a protective surface treatment that provides improved surface durability and scratch resistance. Laserable, with limitations.



**Metallex products have a laserable foil cap. When engraving with a laser, please take care to not engrave deep into the ABS core.**

# STICKALASE®

## ADHESIVE MATERIAL FOR LABELS



- Labels
- Bar codes
- Trophy plates

Available in black/white or silver/black, this .004" (0.09 mm) thickness, adhesive backed, laserable plastic is perfect for barcodes, cylindrical labeling, ID plates, or trophy plates. Use your CO2 laser engraving machine to engrave and/or vector cut custom shapes from flexible and durable material.

### Specifications

Surface	Matte
Profile engraving depth	<b>.001" (0.03 mm)</b>
Thickness	<b>.004" (0.09 mm)</b>
Standard size (roll)	<b>4.75" x 32'</b> <b>(120.6 mm x 9.75 m)</b>



### Capabilities

Interior	■		Exterior
Shear	■		Saw
Silk screen	■		Hot stamp
Scratch resistant		■	Flexible
Break resistant	■		UV resistant
Min. temp.	32° F	140° F	Max. temp.

	Surface color	Core color	0.1 mm .004"
●	black	white	19871
●	silver	black	19872

# RUBBALASE

- Rubber stamps

Natural rubber sold in sheets, exclusively for lasering with CO2 laser engraving machines to create inking stamps. Gray in color. .087" (2.2mm) in thickness.

Size of sheet: 27.75" x 47.875" or 704.85 mm x 1219.20 mm.

**Natural Rubbalase Sheet**

**19897**

### Specifications

Color	Gray
Thickness	<b>.087" (2.2mm)</b>
Standard size (roll)	<b>27.75" x 47.875"</b> <b>(704.85 mm x 1219.20 mm)</b>







# GRAVOSTRAT<sup>®</sup>



## Industrial identification

- Phenolic material
- Low glare finish
- 3-ply
- Resistant to chemicals and solvents
- Non-flammable
- Conforms to USA military specifications ASTM D 709 ES-1, ES-2, ES-3
- Electrically non-conductive and abrasion resistant
- Saw cut
- Interior use

## Low glare

			3-ply	
			1.6 mm	3.2 mm
	Surface color	Core color	1/16"	1/8"
●	white	black	30635	30636
●	fire red	white	31117	31119
●	black	white	30647	30648
●	yellow	black	30755	30756

## Specifications

Surface	Low glare
Profile engraving depth	<b>.012" (0.3 mm)</b>
Full sheet	<b>36" x 48" (914 mm x 1220 mm)</b>
Half sheet	<b>18" x 48" (457 mm x 1220 mm)</b>
Quarter sheet	<b>18" x 24" (457 mm x 610 mm)</b>
Composition	<b>Rigid thermoset material</b>

## Capabilities

	Interior		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■		Flexible
Break resistant			UV resistant
Min. temp.	30°F/0°C	200°F/93°C	Max. temp.

Note: 18" x 48" (457mm x 1220mm) or smaller ships UPS. 36" x 48" (914 mm x 1220 mm) ships via truck.

This material can be engraved but not cut by a laser.

Within the continental US call 1.800.843.7637

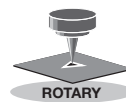
Outside the continental US call +1.770.623.0331



# GRAVOMETAL



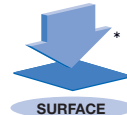
LASER  
(Black only)



ROTARY



INDOOR



SURFACE

- Professional plaques
- Interior signage
- Award plates

- Glossy, satin or matte finish
- Diamond, rotary, burnish and laser engraving
- Use Gravoxide or paint fill (see page 75) for contrasting letter color
- Pre-polished and lacquered
- Will tarnish. Use clear UV coat after engraving
- .050" (1.3 mm) and 1/16" (1.6 mm) suitable for beveling
- .020" (0.5 mm) and .025" (0.6 mm) not suitable for beveling

	Surface color	Core color	Glossy			Satin				Matte
			0.5 mm .020"	0.6 mm .025"	1.2 mm .050"	0.5 mm .020"	0.6 mm .025"	1.2 mm .050"	1.6 mm 1/16"	0.5 mm .020"
○	gold	gold		18417	18435		18423		18441	
●	bronze	gold				18411				
●	black	gold	18402							18414♦
●	silver	gold		18420			18429			

Gold, bronze and silver return black letters with the use of Gravoxide. Black returns gold letters. Black is laser engravable.

♦ Limited quantities available

## Specifications

Surface	<b>Glossy, satin or matte</b>
Engraving depth	<b>.006" (0.3 mm)</b>
Engraving depth diamond, burnish and paint fill	<b>.008" (0.3 mm)</b>
Full sheet	<b>12" x 48" (305 mm x 1220 mm)</b>
Half sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Quarter sheet	<b>12" x 12" (305 mm x 305 mm)</b>
Composition	<b>Brass</b>

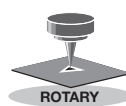
## Capabilities

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■		Hot stamp
Scratch resistant			Flexible
Break resistant	■		UV resistant
Min. temp.	30°F/0°C	212°F/100°C	Max. temp.



# GRAVOBRASS

## EXTERIOR PREMIUM BRASS



- High quality signage
- Ornamental plates
- Company name plates

	Surface color	Core color	1.0 mm .040"	1.6 mm 1/16"	3.2 mm 1/8"
○	shiny polish brass	brass	22032	22034	22038
○	solid brass	brass	22031	22033	22037

- Shiny polished or solid finish
- A solid watchmaker's quality brass
- Solid brass is unpolished and may contain surface defects
- Paint fill with engravers enamel (see page 75)
- Use of chemicals on this material is not recommended

### Specifications

Surface	<b>Solid or polished</b>
Engraving depth	<b>.010" (0.3 mm) for paint fill</b>
Full sheet	<b>26" x 52" (660 mm x 1321 mm)</b>
Half sheet	<b>26" x 26" (660 mm x 660 mm)</b>
Quarter sheet	<b>13" x 26" (330 mm x 660 mm)</b>
Composition	<b>Brass</b>
Coloring	<b>Engravers Enamel (see page 75)</b>

### Capabilities

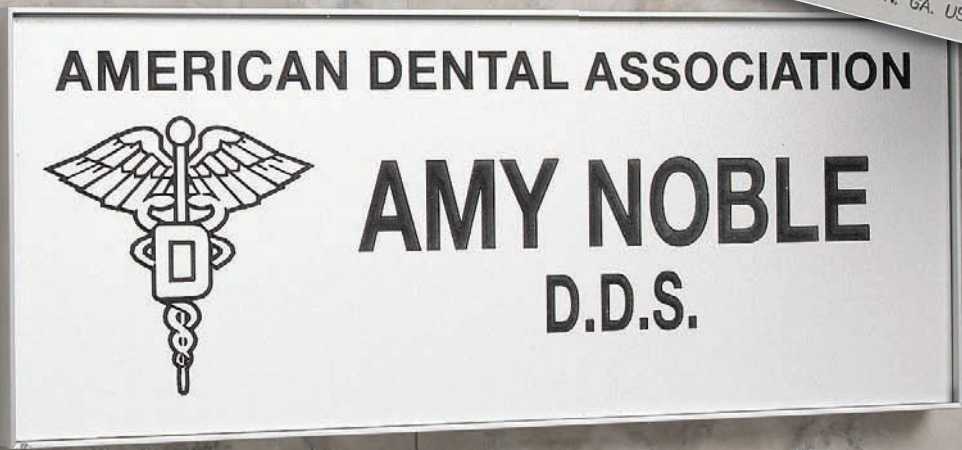
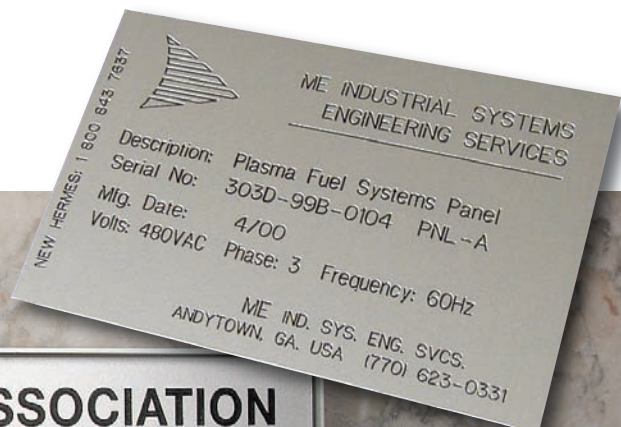
Interior	■	■	Exterior
Shear	■*	■	Saw
Silk screen	■		Hot stamp
Scratch resistant			Flexible
Break resistant	■	■	UV resistant
Min. temp.		212°F/100°C	Max. temp.

\* For .040" (1.0 mm) thickness only

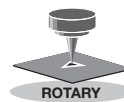
**Will tarnish. Use clear UV coat after engraving**

Within the continental US call 1.800.843.7637

Outside the continental US call +1.770.623.0331



# GRAVOSTRAL®



- Professional interior signage
- Award plaques
- Identification plates
- Signage

- One product with two finishes
- One side is matte silver and the other is brushed gold
- Aluminum caps with a black phenolic core
- Black core eliminates the need for a color fill
- Use of chemicals on this material is not recommended

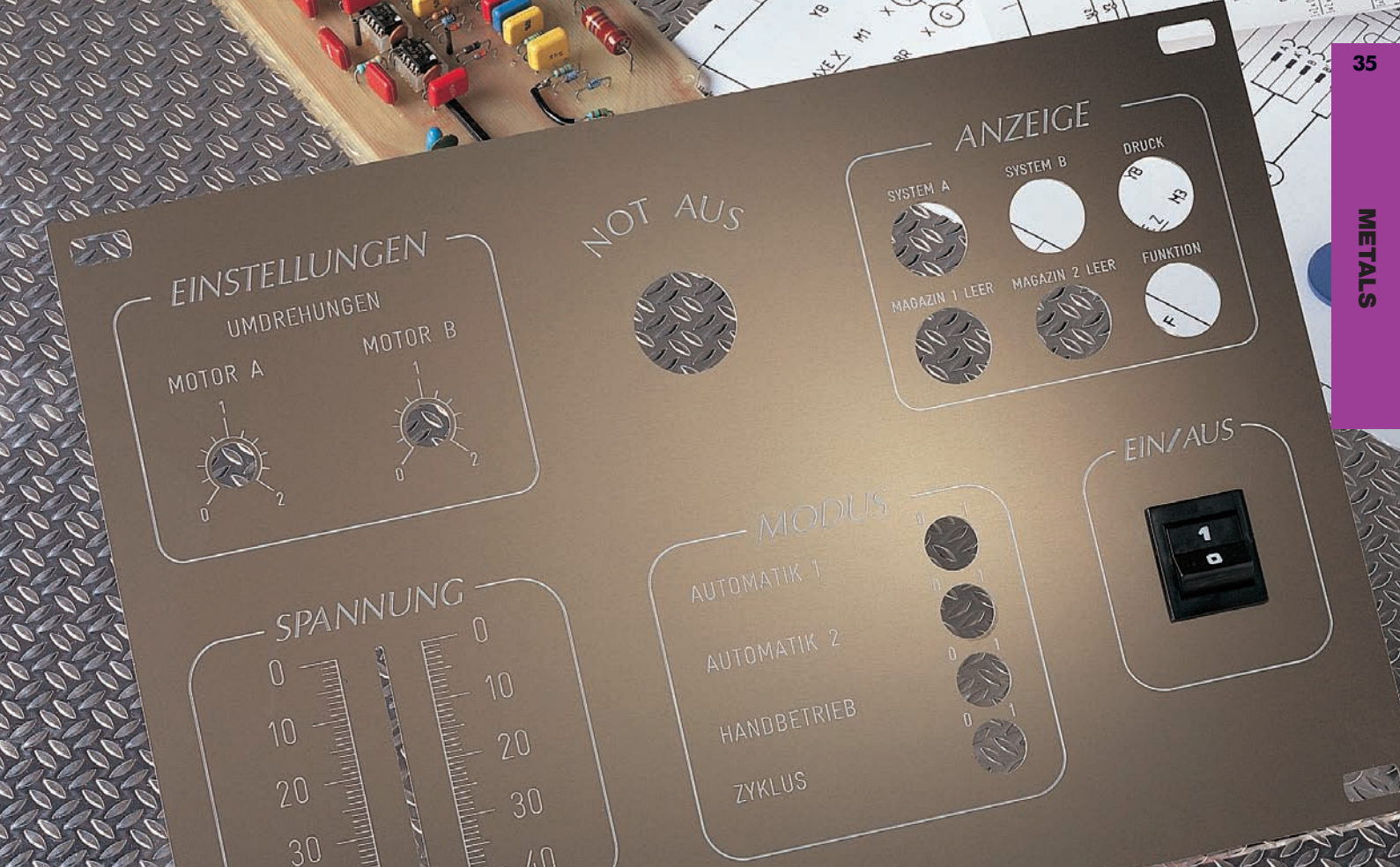
			1.6 mm	3.2 mm
	Surface color	Core	1/16"	1/8"
	gold/silver	black	18472	18482

## Specifications

Surface	<b>Satin or matte</b>	
Engraving depth	<b>.012" (0.3 mm)</b>	
Full sheet	<b>24" x 44" (610 mm x 1118 mm)</b>	
Half sheet	<b>22" x 24" (559 mm x 610 mm)</b>	
Quarter sheet	<b>22" x 12" (559 mm x 305 mm)</b>	
Composition	<b>Aluminum/Phenolic</b>	

## Capabilities

Interior	■		Exterior
Shear		■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■		Flexible
Break resistant	■		UV resistant
Min. temp.	30°F/0°C	212°F/100°C	Max. temp.

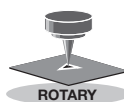


# GRAVOXAL

## ANODIZED ALUMINUM



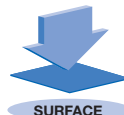
LASER



ROTARY



INDOOR



SURFACE

			0.5 mm	0.8 mm	1.6 mm
	Surface Color*	Core Color	.020"	1/32"	1/16"
○	satin silver	silver	34624	34617	34619
●	glossy gold	silver	34594	34592	34593
●	satin red	silver	34526	34519	
●	satin blue	silver	34496	34495	
●	satin black	silver	34454	34452	34453

\* With all anodized aluminum, slight color variance will appear

- Control panels
- Legend plates
- Award plaques
- Signage
- Awards

### Specifications

Surface	<b>Satin or glossy</b>
Profile engraving depth	<b>.004" (0.1 mm)</b>
Full sheet: .020"	<b>12" x 24" (305 mm x 610 mm)</b>
Half sheet	<b>12" x 12" (305 mm x 305 mm)</b>
Quarter sheet	<b>6" x 12" (152 mm x 305 mm)</b>
Full sheet: 1/32" 1/16"	<b>24" x 24" (610 mm x 610 mm)</b>
Half sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Quarter sheet	<b>12" x 12" (305 mm x 305 mm)</b>
Composition	<b>Aluminum</b>

### Capabilities

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■		Flexible
Break resistant	■	■	UV resistant
Min. temp.	30°F/0°C	212°F/100°C	Max. temp.

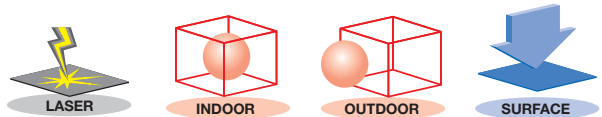
- Satin or glossy
- .020" (0.5 mm),  
1/32" (0.8 mm)  
and 1/16" (1.6 mm)
- For rotary or laser engraving

Within the continental US call 1.800.843.7637

Outside the continental US call +1.770.623.0331



# ALUMAMARK



- ID plates
- Bar codes
- Labels
- Control panels
- *Satin finish*

		Surface color	Core color	0.5 mm .020"
#1	●	satin silver	black	27417
#2	●	satin silver w/adhesive	black	27419
#3	●	satin gold	black	27415
#4	●	satin gold w/adhesive	black	27416
#5	●	satin bronze	black	45881
#6	●	satin bronze w/adhesive	black	45880
#7	●	satin brass	black	45879
#8	●	satin brass w/adhesive	black	45878

## Specifications #1-4

Surface	<b>Satin</b>
Laser power	<b>6-10 watts</b>
Composition	<b>Aluminum</b>
Full sheet	<b>20" x 24" (508 mm x 610 mm)</b>
Half sheet	<b>12" x 20" (305 mm x 508 mm)</b>
Quarter sheet	<b>10" x 12" (254 mm x 305 mm)</b>

## Specifications #5-8

Surface	<b>Satin</b>
Laser power	<b>6-10 watts</b>
Composition	<b>Aluminum</b>
Full sheet	<b>12" x 20" (305 mm x 610 mm)</b>
Half sheet	<b>10" x 12" (254 mm x 305 mm)</b>
Quarter sheet	<b>5" x 12" (127 mm x 254 mm)</b>

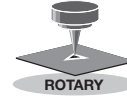
**\*May be used outside with a lacquer coat after engraving.**

This special line of gold and silver anodized aluminum returns black characters when lasered with any standard CO2 laser engraver. No oxidation or paint fill needed, and only requires 6-10 watts of power.

## Capabilities

Interior	■	■	Exterior
Shear	■		Saw
Silk screen	■		Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■	■	UV resistant
Min. temp.	30°F/ -1°C	212°F/100°C	Max. temp.

# COLORED AND MARBLED STEEL



- Trophies and award plaques
- Gold lettering

**Excellent for laser engraving trophy and award plaques**

- *Satin or glossy finish*
- *.015" (0.38 mm) overall thickness*
- *Laser and rotary engraving*
- *Brass-plated steel*

## Colored Steel ( Sublimatable )\*

	Surface color	Core color	0.38 mm
			.015"
○	satin gold	gold	27421
●	glossy black	gold	27422
●	glossy purple	gold	27423
●	glossy dark green	gold	27424
●	glossy blue	gold	27425
●	glossy red	gold	27426
●	glossy royal blue	gold	27427
●	glossy white	gold	27428

\* Our sublimatable metals feature clear protective masking.

## Marbled Steel

	Surface	Core color	0.38 mm
			.015"
●	blue marble	gold	27429
●	green marble	gold	27431
●	red marble	gold	27432
●	teal marble	gold	27433
●	black marble	gold	27434

## Specifications

Surface	<b>Satin or glossy</b>
Thickness	<b>.015" (0.4 mm)</b>
Full sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Half sheet	<b>12" x 12" (305 mm x 305 mm)</b>
Quarter sheet	<b>6" x 12" (152 mm x 305 mm)</b>
Composition	<b>Brass Plated Steel</b>
Burnishing depth	<b>.002" (0.5 mm)</b>

## Capabilities

Interior	■		Exterior
Shear	■		Saw
Silk screen	■		Hot stamp
Scratch resistant	■		Flexible
Break resistant	■		UV resistant
Min. temp.	212°F / 100°C		Max. temp.



# COLORED ALUMINUM AND TROPHY BRASS



- Trophies
- Award plaques
- Name plates

- *Satin or glossy finish*
- *Lightweight; easy to shear*
- *Use Carbide cutting tool*

## Colored Aluminum ( Sublimatable )\*

(produces silver lettering)

	Surface color	Core color	0.6 mm .025"
○	satin silver	silver	34625
●	satin gold	silver	34595
○	glossy silver	silver	34626
●	glossy gold	silver	34596
●	glossy red	silver	34528
●	glossy blue	silver	34497
●	glossy black	silver	34455
●	glossy white	silver	34426

\* Our sublimatable metals feature clear protective masking.

## Specifications - Colored Aluminum

Surface	<b>Satin or glossy</b>
Thickness	<b>.025" (0.6 mm)</b>
Rotary engraving depth	<b>.006" (0.2 mm)</b>
Burnishing depth	<b>.002" (0.1 mm)</b>
Full sheet	<b>12" x 48" (305 mm x 1220 mm)</b>
Half sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Quarter sheet	<b>12" x 12" (305 mm x 305 mm)</b>

## Specifications - Trophy Brass

Surface	<b>Satin or glossy</b>
Thickness	<b>.025" (0.5 mm)</b>
Rotary engraving depth	<b>.006" (0.2 mm)</b>
Burnishing depth	<b>.002" (0.1 mm)</b>
Full sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Half sheet	<b>12" x 12" (305 mm x 305 mm)</b>
Quarter sheet	<b>12" x 6" (305 mm x 152 mm)</b>

## Trophy Brass

(produces gold lettering)

	Surface color	Core color	0.5 mm .025"
●	satin gold	gold	34714
○	glossy gold	gold	34715
●	glossy red	gold	34692
●	glossy blue	gold	34679
●	glossy green	gold	34710
●	glossy brown	gold	34682
●	glossy black	gold	34677
●	burgundy	gold	34685
●	glossy royal blue	gold	34694
●	glossy white	gold	34645

This material can be lasered. For best results, use Colored Steel or Premium Brass.

## Capabilities

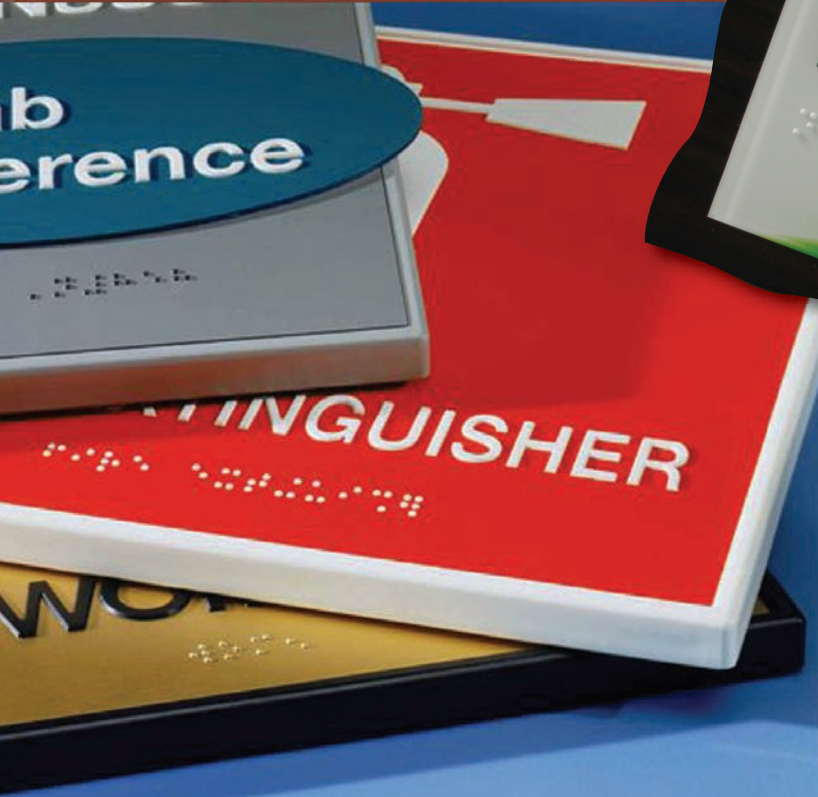
Interior	■		Exterior
Shear	■	■	(Trophy only) Saw
Silk screen	■		Hot stamp
Scratch resistant (Aluminum only)	■		Flexible
Break resistant	■		UV resistant
Min temp			Max. temp.





# Radiology 3

1614



# GRAVOTAC™



- ADA compliant and tactile signs

- 1/32" (0.8 mm) profile material available with or without adhesives
- 1/16" (1.6 mm) and 1/8" (3.2 mm) single-ply substrates for backplate material
- Depth of profiling for 1/32" (0.8 mm) material: .032-.035" (0.8 mm-0.9 mm)
- Carbide cutting tool:  
 11/64" (4.4 mm) shank 36389  
 1/4" (6.4 mm) shank 36398

Also available:

- Weeding tool kit 36409  
(to assist in profile removal)
- Brush (to clean shavings) 36411
- ADA signage manual 33642  
(a necessary how-to guide for ADA compliance)
- Interior adhesive 36222

Surface/Core color	1-ply			
	0.8 mm 1/32" profile	0.8 mm 1/32" profile/adhesive	1.6 mm 1/16" substrate/backplate	3.2 mm 1/8"
clear	32729	32729A		
bright white	37042	37042A	29879	31260
white	37033	37033A	29880	31236
translucent white			29881	
almond	37070	37070A	29882	32294
yellow	24998	24998A	29883	
rust	32291	32291A	29884	32292
red	25001	25001A	29885	31699
burgundy	28383	28383A	29888	31728
passion pink	45968	45968A	45966	
tan	32726	32726A	29889	32727
taupe	37047	37047A	29890	31261
brown	31631	31631A	29891	
chocolate brown	37058	37058A	29892	31646
apple green			29894	
pine green	37060	37060A	29895	31836
grass	45960	45960A	45958	
metallic blue	37032	37032A	29896	31392
azure blue	37048	37048A	29897	31404
maui blue	45964	45964A	45962	
navy blue	28363	28363A	29898	31360
candlewick	37050	37050A	29899	31410
silver gray	28364	28364A	29900	32185
slate	37065	37065A	29901	32276
black	37037	37037A	29902	31256
silver	29931	29931A		
gold	29932	29932A		
teal	29933	29933A	29903	

## Specifications

Surface	<b>Matte</b>		
Engraving depth	<b>.032"/.064"/.125"</b> (0.8 mm/0.6 mm/3.2 mm)		
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>		
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>		
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>		
Composition	<b>ABS</b>		

## Capabilities

Interior	■		Exterior
Shear	■	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■		UV resistant
Min. temp.		200°F/93°C	Max. temp.

## The GravoTac process



Step 1

Adhere 1/32" (3.2 mm) profile material to 1/16" (1.6 mm) or 1/8" (3.2 mm) substrate. Engrave using outline font.



Step 2

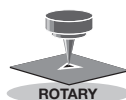
Weed (peel) 1/32" (3.2 mm) profile material off substrate.



Step 3

Results: A patented process for producing ADA compliant signage.

# GRAVOTAC™ EXTERIOR



- Exterior ADA compliant and tactile signs

## Specifications

Surface	<b>Matte</b>
Engraving depth	<b>.032"/.064"/.125"</b> (0.8 mm/1.6 mm/3.2 mm)
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>Impact modified acrylic</b>

## Capabilities

Interior	■	■	Exterior
Shear		■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■	■	UV resistant

Surface color	1-ply			
	0.8 mm 1/32" profile	0.8 mm 1/32" profile/adhesive	1.6 mm 1/16"	3.2 mm 1/8"
clear	29918	29918A	29935	18082
exterior white	29919	29919A	29936	31237
black	29920	29920A	29937	31257
almond	29921	29921A	29938	32295
red	29922	29922A	29939	31700
burgundy	29923	29923A	29940	31738
bordeaux	29924	29924A	29941	31801
passion pink	45967	45967A	45965	
taupe	29925	29925A	29942	
chocolate brown	29926	29926A	29943	31648
pine green	29927	29927A	29944	31837
grass	45959	45959A	45957	
azure blue	29928	29928A	29945	31406
maui blue	45963	45963A	45961	
silver gray	29929	29929A	29946	32187
slate	29930	29930A	29947	32277
silver	29931	29931A	-	-
gold	29932	29932A	-	-
teal	29933	29933A	29903	-
copper	29934	29934A	-	-

## Gravoply Ultraglow Photoluminescent



**NEW**

Matte 2-ply				
	Surface color	Core color	1/32" (0.8 mm)	1/32" (0.8 mm)/adhesive
○	glow	white	49884	49884A

Please note:  
This product allows for a white engraving in the photoluminescent surface. The thickness of 1/32" (0.8 mm) allows profile letters to cut for ADA signage applications.  
The glow times for this product meet the New York State requirements and conform to the following: ISO:10012-1  
Other thicknesses and core colors are available through our Custom Services/On Demand. See pages 14-15.

MIL-STD-45662A



### Raised letter profile cutters

Profile cutter 11/64" (4.36mm) (for raised text)	45704
Profile cutter 1/4" (6.35mm) (for raised text)	45705
Profile cutter 1/4" (6.35mm) - 2" bottom load (for raised text)	48509



### Raster Braille drill cutters

Carbide Raster Braille drill cutter 11/64" (4.36mm) diameter Carbide cutter/drill bit for creating holes for raster beads in Gravotac. Topload for plastic (not acrylic)	36396
--	-------

Carbide Raster Braille drill cutter 11/64" (4.36mm) (for acrylic only) adapter for engraving machines to use drill bit for metals. Installs in spindle like cutter and has hollow adjustable end (collet like). Topload for acrylic	48507
---	-------

1/8" Carbide Raster Braille drill	49239
-----------------------------------	-------

Carbide Raster Braille drill cutter 1/4" (6.35mm)	36408
---	-------

Carbide raster Braille drill cutter 1/4" (6.35mm) (2" bottom load) Adapter for engraving machines to use drill bit for metals. Installs in spindle like cutter and has hollow adjustable end (collet like)	48508
--	-------

Carbide drill bit for Raster™ in soft metals (brass, aluminum). Requires Collet drill assy	36423
--	-------

Square end Carbide Raster End Mill (1/8" (3.18mm) shank) for steel - 2" bottom load	47343
---	-------

### Collet drill assemblies

Installs in collet spindle like a cutter and has a hollow adjustable end to hold the bit. Combine with drill bit [36423] for soft metals or [48506] for acrylics.

Carbide drill bit for Raster™ for 2" bottom load	48506
--	-------

11/64" (4.36mm) Collet drill assy for Raster Braille	34327
--	-------

1/8" Collet drill assy	49238
------------------------	-------

1/4" (6.35mm) Collet drill assy (topload)	48511
---	-------

1/4" (6.35mm) Collet drill assy (2" bottom load)	48512
--	-------

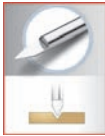
1/4" Carbide Raster drill - 2" bottom load	49240
--	-------



### Cutters for routed Braille

Dome cutter 11/64" (4.36mm) shaft for routed Braille	36394
--	-------

Dome cutter 1/4" (6.35mm) shaft for routed Braille	36406
--	-------



### Cutters for inlay tactile raised letters

Carbide .040 inlay cutter 11/64" (4.36mm)	36395
---	-------

Carbide .040 inlay cutter 1/4" (6.35mm)	36407
---	-------

### Braille kit/Raster insertion tools

Raster™ Braille kit - Includes Raster Pen and License, Book - <i>How to Create Great Looking Interior Signage</i> , 1000 clear raster beads, profile cutter, raster bead drill cutter, and weeding tool & cleaning brush.	41714
---	-------

Raster™ Pen - Semi-automatic hand held Braille insertion tool	36425
---	-------

Auto Raster Deluxe™ - Attaches directly to engraver to automatically insert raster beads	48008
--	-------

Auto Raster™ spring upgrade for pn 36421 (pre-2007 Auto-Raster)	48009
---	-------

ADA interior signage manual with CD-ROM	33642
---	-------

ADA interior signage manual with CD-ROM (upgrade)	48510
---	-------

### Raster beads

Clear Raster™ (10,000 beads)	35665
------------------------------	-------

White Raster™ (10,000 beads)	35666
------------------------------	-------

Black Raster™ (10,000 beads)	35664
------------------------------	-------

Brass Raster™ (1,000 beads)	35683
-----------------------------	-------

Stainless Steel Raster™ (1,000 beads)	35684
---------------------------------------	-------

### Tape

Low tac pre-mask R tape (1.25" x 100 yds) (31.75mm x 91.4m) - For Raster Braille adhesive assist method to insert Rasters into metal, corian, marble, wood, etc. This is a pre-mask tape applied to the sign prior to drilling raster holes. This narrow size is the preferred size.	48495
--	-------

Low tac doubleface table tape - For Raster Braille adhesive assist method in metal. Same use as 1.25" low tack tape.	48496
--	-------

Low tac adhesive pre-mask tape (4.25" x 100 yds) (107.95 mm x 91.4 m) - Glue on a liner for Raster Braille adhesive assist method on metal. Use with the adhesive assist method to insert Rasters into metal, corian, etc. Used in conjunction with the low tac tape.	35662
---	-------

926 adhesive tape	35663
-------------------	-------

Use with adhesive assist method to insert Rasters into metals, corian, etc. Used in conjunction with Low tac tape.

Double face cloth tape (roll)	32807
-------------------------------	-------

### Weeding tool kit

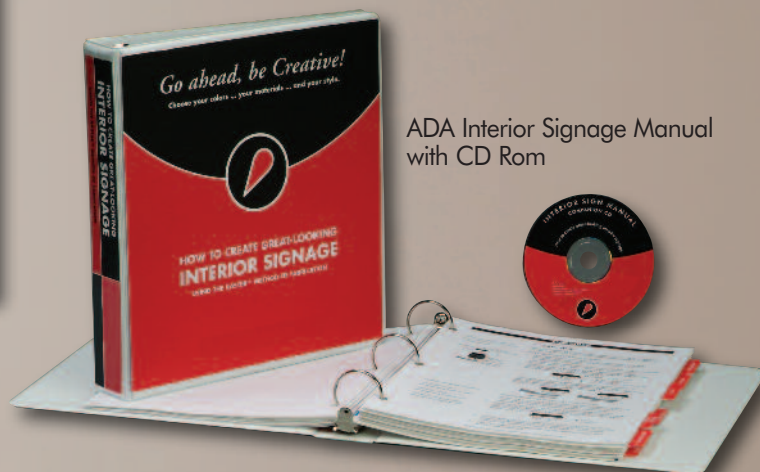
RLS weeding tool kit	36409
----------------------	-------

\*Includes scraping tool, wire clamp, brush, angled prong

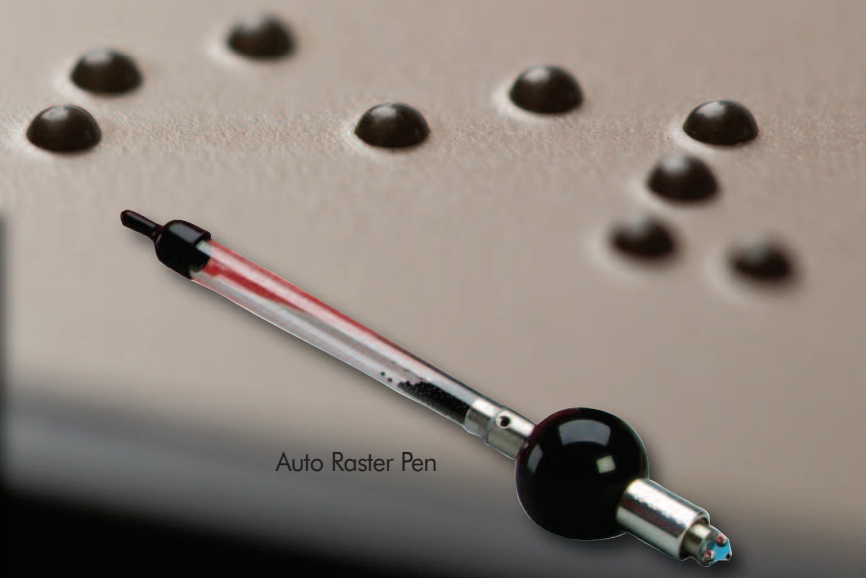
Cleaning brush to brush plastic chips off after profile cut complete	32801
--	-------



Auto Raster

ADA Interior Signage Manual  
with CD Rom

Braille Kit



Auto Raster Pen

### SETTING BRAILLE PROFILE CUTTERS TO ZERO

This procedure is a one-time operation performed before using a new Braille profile cutter. This is a best practice that will improve productivity. It will allow changing cutters without having to re-adjust the micrometer. The Braille Profile cutter is for cutting the raised shapes. The spindle spring tension should be adjusted to allow about 1/8" (3.18 mm) spring action.

1. Turn the micrometer gauge in the direction of increasing numbers until it stops
2. Back off 4 full turns to 0. Then back off an additional 10 ticks on the micrometer. Tighten the micrometer set screw.
3. Screw in the Braille Profiling tool (blue label) making sure cutter tip is not sticking out of the nose cone. You may need to adjust cutter offset with the yellow cutter wrench.
4. Using the arrows on control pendant, move spindle over flat table.
5. Press Z on the control pendant. (LCD reads Z=0.000 inch ↕ to change)
6. Press the down arrow on control pendant until the nose cone touches the table (& there is a slight separation between the snap ring and spindle assembly).
7. Then loosen the black set screw on the brass collar of the cutter (using yellow wrench) and carefully lower the cutter until it just touches the material. Tighten set screw.
8. Press check ✓ on the control pendant (spindle raises up). Press X to cancel the XY jog mode.
9. Remove tool.
10. Dial the micrometer back (decreasing numbers) 1 full turn + 10 ticks to read 0.

### SETTING BRAILLE DRILL CUTTERS TO ZERO

This procedure is a one-time operation performed before using a new Braille drill cutter. This is a best practice that will improve productivity. It will allow changing cutters without having to re-adjust the micrometer. The Braille drill cutter is for drilling holes for the Braille beads. The spindle spring tension should be adjusted to allow about 1/8" (3.18 mm) spring action.

1. Turn the micrometer gauge in the direction of increasing numbers until it stops
2. Back off 4 full turns to 0. Then back off an additional 18 ticks on the micrometer. Tighten the micrometer set screw.
3. Screw in the Braille drill tool (red label) making sure the cutter tip is not sticking out of the nose cone. You may need to adjust cutter offset with the yellow cutter wrench.
4. Using the arrows on control pendant, move spindle over flat table.
5. Press Z on the control pendant. (LCD reads Z=0.000 inch ↕ to change)
6. Press the down arrow on control pendant until the nose cone touches the table and there is slight separation between the snap ring and spindle assembly.
7. Then loosen the black set screw on the brass collar of the cutter (using yellow wrench) and carefully lower the cutter until it just touches the material. Tighten set screw.
8. Press check ✓ on the control pendant (spindle raises up). Press X to cancel the XY jog mode.
9. Remove tool.
10. Dial the micrometer back (decreasing numbers) 1 full turn + 18 ticks to 0.

Within the continental US call 1.800.843.7637

Outside the continental US call +1.770.623.0331



GRAVOGRAPH

# ENGRAVER'S

ACADEMY

*Award of Excellence*

presented to

*Adam Sch*

September 20

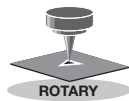


 Hongjin Xia League Champions	 Parth Narvekar League Champions
 Ethan Melamed League Champions	 Thomas Hsu League Champions
 Shabad Garg League Champions	 Vraj Shah League Champions
 Rohan Roy League Champions	 Vincent Lyau League Champions
 Savit Joshi League Champions	 Carl Davis League Champions
 Darshan Ayasingh League Champions	

# GRAVOPLY® ULTRA

- Badges
- Award plaques
- Interior and exterior signage

**Bold items are value priced!**



- Satin or matte finish
- Laser and rotary engravable
- Unique .002" (0.05 mm) cap layer offers detailed engraving
- UV stable
- Excellent for laser engraving photos in plastic
- Reduce inventory with one material for rotary, laser, indoor and outdoor needs

## Specifications

Surface	<b>Satin or matte</b>
Rotary engraving depth	<b>.003" (0.1mm)</b>
Thickness	<b>.020", 1/16", or 3/32" (0.5 mm, 1.6 mm, 2.4 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>DR</b>

## Capabilities

Interior	■	■	Exterior
Shear	■*	■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■	■*	Flexible
Break resistant		■	UV resistant
Min temp		180°F/82°C	Max

\* .020" (0.5 mm) thickness is shearable and flexible

	Surface color	Core color	Matte 2-ply		Satin 2-ply	
			0.5 mm	1.6 mm	1.6 mm	2.4 mm
			.020"	1/16"	1/16"	3/32"
○	white	clear	18965	<b>19009</b>		
●	white	black	18946	<b>18984</b>	<b>33821</b>	
●	red	white	18949	<b>18987</b>	<b>29512</b>	
●	red	black		<b>29498</b>	<b>29529</b>	
●	orange	white		<b>19000</b>	<b>29521</b>	
●	orange	black		<b>29499</b>	<b>29530</b>	
●	yellow	black	18955	<b>18993</b>	<b>29511</b>	
●	blue	white	18952	<b>18990</b>	<b>29510</b>	
●	black	clear	18962	<b>19006</b>		
●	black	white	18943	<b>18981</b>	<b>29507</b>	29687
●	white	taupe		29502	29533	
●	white	red		18997	29514	
●	white	blue		18996	29518	
●	taupe	white		29501	29532	
●	almond	black		29500	29531	
●	red	gold		29503		
●	burgundy	white		18980	29516	
●	burgundy	gold	18958	18999		
●	green apple	white	18970	19012	29513	
●	forest green	white		19001	29515	
●	forest green	eggshell		29497	29528	
●	forest green	gold		18998		
●	pine green	white		29491	29520	
●	air force blue	white		29492	29522	29688
●	navy blue	white		29494	29525	
●	navy blue	gold		29504		
●	royal blue	white		19015	29519	
●	royal blue	gold	18942	18979		
●	brown	white		29495	29526	
●	chocolate brown	white		29493	29523	
●	lt gray	black		29496	29527	
●	black	silvergray		19005	29517	
●	glossy black	gold	18973			
●	matte black	gold	18976	19004		

## Gravoply Ultraglow Photoluminescent



**NEW**

Matte 2-ply				
	Surface color	Core color	1/32" (0.8 mm)	1/32" (0.8 mm)/adhesive
○	glow	white	49884	49884A

Please note: This product allows for a white engraving in the photoluminescent surface. The thickness of 1/32" (0.8 mm) allows profile letters to cut for ADA signage applications. The glow times for this product meet the New York State requirements and conform to the following: ISO:10012-1. Other thicknesses and core colors are available through our Custom Services/On Demand. See pages 14-15. MIL-STD-45662A

Docteur Jean-Pierre SEMA

Diplômé de la faculté de médecine de

**MEDECINE GENERALE**

Consultations sans rendez-vous



**DANGER**

TANK :

2

PRODUCT :

Chloracetic Acid

CAPACITY :

5 litres

john kennedy u

ground

research department

laboratories 1-2-3-4

conference room

first floor

administration

secretary

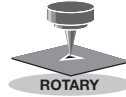
library



**AQUARIUM**







- Outdoor signage
- Professional name plates
- Interior and exterior signage

## Subsurface engrave

### Glossy

	Surface color	Core color	1.6 mm	3.2 mm
			1/16"	1/8"
●	black	clear	18138	18183
○	white	clear	18141	18193
●	red	clear	-	18201
●	blue	clear	-	18207
●	sky blue	clear	-	18214
●	yellow	clear	-	18217
●	green	clear	-	18223
●	burgundy	clear	-	18232
●	gold	clear	18168	18235
●	slate	clear	18171	18244
●	old gold	clear	18174	18252

- Glossy finish
- Excellent UV resistance
- A fine silk-screened layer
- Subsurface engraving
- Resistant to chemical agents
- A range of 11 colors
- Subsurface engraving allowing multiple color signage to be produced with paint fill (see page 75)
- Easy to keep clean surfaces

## Specifications

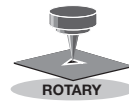
Surface	<b>Glossy</b>		
Rotary engraving depth	<b>.008" (0.2 mm)</b>		
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>		
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>		
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>		
Composition	<b>Acrylic</b>		
Coloration	<b>Engravers Enamel</b>		

## Capabilities

Interior	■	■	Exterior
Shear		■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■		Flexible
Break resistant		■	UV resistant
Min. temp.		176°F/80°C	Max. temp.



# GRAVOGLAS® 2-PLEX



ROTARY



INDOOR



OUTDOOR



SURFACE

- Interior and exterior signage
- Professional plates
- Indoor and outdoor directories

- 3 surface choices
- Indoor and outdoor
- UV stable
- Adhesive available
- 3-ply

## Specifications

Surface	<b>Matte, glossy, textured</b>
Engraving depth	<b>.012" (0.3 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>DR</b>

## Capabilities

Interior	■	■	Exterior
Shear		■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■		Flexible
Break resistant		■	UV resistant
Min. temp.		180°F/82°C	Max. temp.

### DID YOU KNOW?

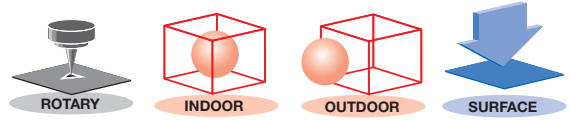
You can order any Gravoglas 2-Plex cap with any Gravoglas 2-Plex core. See page 15 for more details.

## Surface engrave

### Matte

	Surface color	Core color	2-ply		3-ply
			1.6 mm 1/16"	3.2 mm 1/8"	3.2 mm 1/8"
●	white	red	29627		
●	white	azure blue	29628		
●	white	black	17875	29904	29912
●	eggshell	verde	29630		
●	cream	verde	29632		
●	yellow	black	17881		
●	orange	black	29633		
●	orange	white	47230		
●	red	white	17877	29905	
●	bordeaux	cream	29634		
●	burgundy	white	17883	34367	
●	passion pink	white	45952		
●	taupe	eggshell	29635		
●	chocolate brown	white	29636		
●	teal	white	29637		
●	grass	white	45890		
●	apple green	white	17885	29906	
●	verde	eggshell	29639		
●	verde	cream	29640		
●	metallic blue	white	29641		
●	maui blue	white	45899		
●	azure blue	white	17879	29907	
●	silver gray	black	17887	29908	
●	gold	black	29642	29910	
●	black	white	17873	29911	29913
●	black	gold	29643		

# GRAVOGLAS® 2-PLEX



## Surface engrave

### Glossy

	Surface color	Core color	2-ply		3-ply
			1.6 mm 1/16"	3.2 mm 1/8"	3.2 mm 1/8"
●	white	red	17907	18063	
●	white	azure blue	17904		
●	white	black	17892	18051	29914
●	red	white	17895	18054	
●	passion pink	white	45951		
●	burgundy	white	17913		
●	brown	white	29644		
●	chocolate brown	white	29645	29650	
●	yellow	black	17901	18060	
●	grass	white	45889		
●	apple green	white	17910	18066	
●	pine green	white	17918	18072	
●	metallic blue	white	29646		
●	maui blue	whit	45898		
●	azure blue	white	17898	18057	
●	royal blue	white	29647		
●	gold	black	17927	18075	
●	silver	black	17930		
●	copper	cream	29648		
●	copper	black	17924		
●	black	white	17889	18048	29915
●	almond	blac	34403		

- Interior and exterior signage
- Professional plates
- Indoor and outdoor directories
- 3 surface choices
- Indoor and outdoor
- UV stable

## Specifications

Surface	<b>Matte, glossy, textured</b>
Engraving depth	<b>.012" (0.3 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>DR</b>

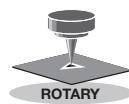
## Capabilities

Interior	■	■	Exterior
Shear		■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■		Flexible
Break resistant		■	UV resistant
Min. temp.		180°F/82°C	Max. temp.

### Textured

	Surface color	Core color	2-ply	
			1.6 mm 1/16"	3.2 mm 1/8"
●	white	black	18304	
●	white	red	18325	
●	white	pine green	18337	
●	almond	black	34404	
●	ivory	chocolate brown	18346	
●	yellow	black	18334	
●	red	white	18307	29916
●	brown	white	18328	
●	grass	white	45891	
●	apple green	white	29654	
●	pine green	white	18343	
●	azure blue	white	18310	
●	maui blue	white	45900	
●	american blue	white	18313	
●	silver gray	black	18322	
●	gray	white	18319	
●	black	white	18301	29917

# GRAVOGLAS® 2-PLEX



- Interior and exterior signage
- Professional plates
- Indoor and outdoor directories

• Indoor and outdoor

• UV stable

• Subsurface engraving allowing multiple color signage to be produced with paint fill (see page 75)

## Specifications

Surface	<b>Glossy, matte</b>		
Engraving depth	<b>.012" (0.3 mm)</b>		
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>		
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>		
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>		
Composition	<b>DR</b>		
Coloration	<b>Engravers Enamel (see page 75)</b>		

## Capabilities

Interior	■	■	Exterior
Shear		■	Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■		Flexible
Break resistant		■	UV resistant
Min. temp.		180°F/82°C	Max. temp.

## Subsurface engrave

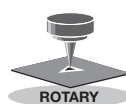
### Glossy

	Surface color	Core color	2-ply	
			1.6 mm 1/16"	3.2 mm 1/8"
○	clear	clear	29655	29657
○	white	clear	17988	18021
●	red	clear	17997	18030
●	burgundy	clear	18006	
●	azure blue	clear	18000	
●	maui blue	clear	46046	
●	silver gray	clear	29656	
●	silver	clear	17985	
●	gold	clear	17982	
●	copper	clear	17979	34409
●	black	clear	17991	18024

### Matte

	Surface color	Core color	2-ply	
			1.6 mm 1/16"	3.2 mm 1/8"
○	clear	clear	29935	18082
○	white	clear	17947	18086
○	eggshell	clear	33982	
○	almond	clear	33976	33977
○	cream	clear	29658	
●	yellow	clear	17956	
●	red	clear	17950	18088
●	passion pink	clear	46049	
●	bordeaux	clear	29659	
●	burgundy	clear	17976	18090
●	cocoa	clear	29660	
●	taupe	clear	29661	
●	chocolate brown	clear	17970	34363
●	grass	clear	46047	
●	apple green	clear	17973	
●	verde	clear	29662	34381
●	azure blue	clear	33961	33962
●	american blue	clear	29663	
●	sky blue	clear	29664	
●	royal blue	clear	29665	
●	metallic blue	clear	29666	
●	maui blue	clear	46048	
●	teal	clear	34416	
●	silver gray	clear	17961	34406
●	slate	clear	29667	
●	bronze	clear	29668	
●	silver	clear	29669	
●	gold	clear	29670	
●	black	clear	33953	33955

# GRAVOFOIL



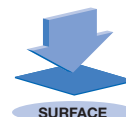
ROTARY



INDOOR



OUTDOOR



SURFACE

- Industrial signage
- Permanent labels

- *Matte finish*
- *Very flexible*
- *Interior and exterior*
- *Very resistant to acids and solvents*
- *An assortment of 13 colors*
- *Comes with adhesive back*

	Surface Color	Core Color	0.2 mm .008"
●	white	black	18448
●	black	white	18446
●	blue	white	18452
●	purple	white	18469
●	yellow	black	18456
●	brown	white	18458
●	red	white	18450
●	green	white	18460
●	gray	white	18454
●	orange	black	18462
●	gold	black	18464
●	silver	black	21811
●	copper	black	18467

## Specifications

Surface	<b>Matte</b>
Engraving depth	<b>.001" (0.025 mm)</b>
Full sheet	<b>18" x 25" (457 mm x 635 mm)</b>
Half sheet	<b>12.5" x 18" (317.5 mm x 457 mm)</b>
Quarter sheet	<b>9" x 12.5" (228.6 mm x 317.5 mm)</b>
Composition	<b>PVC</b>

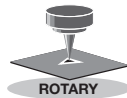
## Capabilities

Interior	■	■	Exterior
Shear	■		Saw
Silk screen	■		Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■	■	UV resistant
Min. temp.		160°F/70°C	Max. temp.

**Warning: This product should never be engraved or cut with a laser engraver. Toxic fumes result.**



# ACRYLIC



• Interior and exterior sign applications

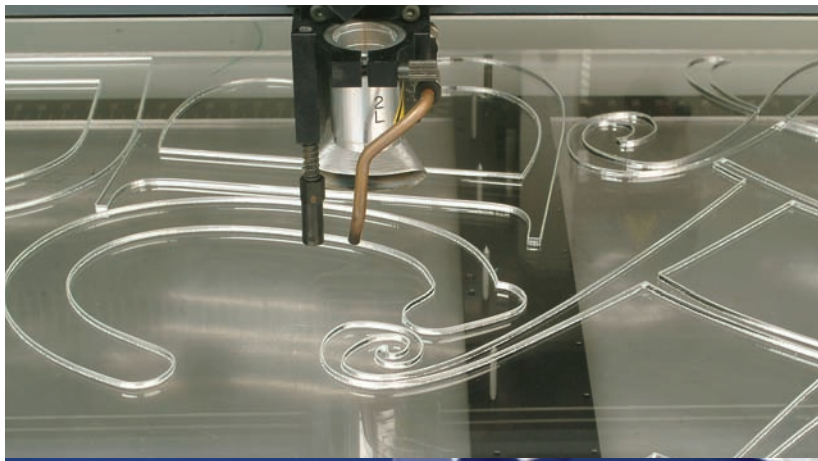
- Glossy finish
- Excellent for clear signage
- Laser and rotary engravable
- Indoor and outdoor

## Specifications

Surface	<b>Glossy</b>
Engraving depth	<b>.010" (0.25 mm)</b>
Full sheet	<b>24" x 48" (610 mm x 1220 mm)</b>
Half sheet	<b>24" x 24" (610 mm x 610 mm)</b>
Quarter sheet	<b>12" x 24" (305 mm x 610 mm)</b>
Composition	<b>Acrylic</b>

## Capabilities

Interior	■	■	Exterior
Shear			Saw
Silk screen	■	■	Hot stamp
Scratch resistant	■		Flexible
Break resistant	■		UV resistant
Min. temp.	-40°C/1°F	80°C/176°F	Max. temp.



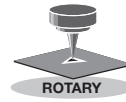
Use acrylic to add thickness to metal and plastic signs

	3.2 mm .125"	6.4 mm .250"
Color		
white	33971	33972
opaque black	34096	34098
clear	33971	33972

### Acrylic Sheets

Can be engraved, paint filled, or used for cut-outs. Another common use is to simply add thickness to an engraved sheet of metal or plastic. The added thickness has a stronger presence on the wall – especially helpful if the sign is not framed.

# CALENDERED AND REFLECTIVE VINYL



- Interior and exterior sign applications

- Semi-gloss finish
- Indoor and outdoor
- Resistant to most oils, alkalies and mild acids
- Great for banners and window signs

## Specifications

Surface	<b>Semi gloss</b>
Calendered thickness	<b>.0032" (3.2 mil/0.08 mm)</b>
Standard size	<b>15" x 50 yard roll Friction fed (381 mm x 45.72 m)</b>

## Specifications

Surface	<b>Semi gloss</b>
Reflective thickness	<b>.0055" (5.5 mil / 0.139 mm)</b>
Standard size	<b>14" x 10 yard roll (355.6 mm x 9.14 m)</b>

## Capabilities

Interior	■	■	Exterior
Shear	■		Saw
Silk screen	■		Hot stamp
Scratch resistant	■	■	Flexible
Break resistant	■	■	UV resistant
Min. temp.	-40°F	180°F	Max. temp.

## Accessories

15" (381mm) pounce paper - 250 yards (228.6 m)	36754
15" (381mm) pounce paper - 500 yards (457.2 m)	36755
2 1/4" (57.15mm) application tape - 100 yards (91.44 m)	36706
3 1/4" (82.55mm) application tape - 100 yards (91.44 m)	36707
4 1/4" (107.95mm) application tape - 100 yards (91.44 m)	36708
14" (355.6mm) application tape - 100 yards (91.44 m)	36709
24" (609.6mm) application tape - 100 yards (91.44 m)	36710
Squeegee	36752
Weeding tool kit	36409

## Part no.



**STORE HOURS**  
 Mon-Fri - 8:00am-5:00pm  
 Sat - 9:00am-6:00pm  
 Sun - 10:00am-3:00pm

## Calendered Vinyl

	Color	3.2 mil / 0.08 mm .0032"
	white	36714
	yellow	36721
	beige	36723
	orange	36729
	red	36724
	pink	36726
	burgundy	36725
	brown glossy	47653*
	apple green	36727
	verde	36728
	sky blue glossy	48397*
	azure blue	36717
	black	36715
	silver	36731
	gold	36730

\*Gloss finish

## Reflective Vinyl

	Color	5.5 mil / 0.139 mm .0055"
	white	36732
	yellow	36735
	blue	36734
	black	36733

## DID YOU KNOW?

**See page 99 for vinyl machines.**

**Warning: This product should never be engraved or cut with a laser. Toxic fumes result.**

# MODULAR FRAME SYSTEM

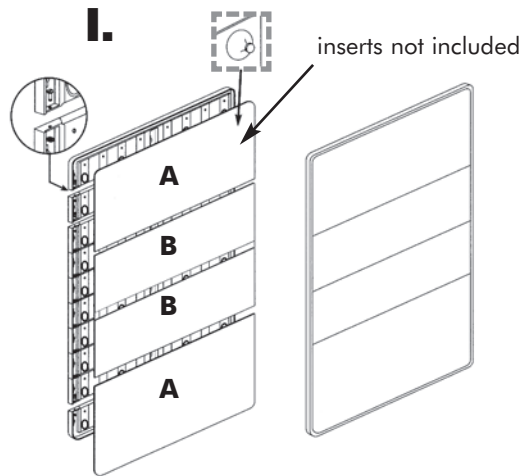


Designed for interior signage. Frame construction provides flexibility for installations and sign inserts. Signs change over easily. Sign inserts fit securely into frames with a snap lock mechanism. Frames and inserts are tamper-resistant.

## I. Modular frame directory

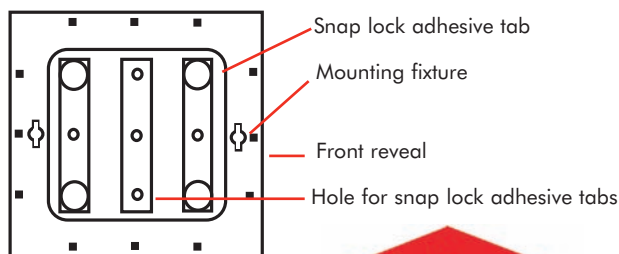
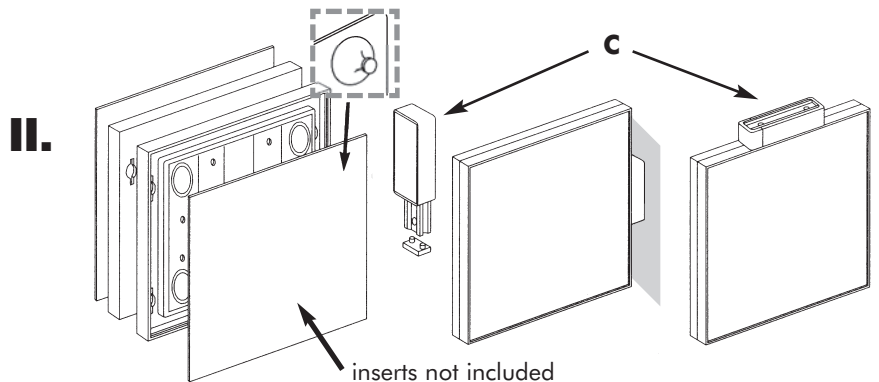
- A.** The header and base are 3" x 18", sold as a set. Insert panels are 2" x 18", sold separately.
- B.** Use as many insert panels as necessary to create the desired directory size. Snap locks and hardware included.

See chart at bottom of page 55 for part numbers.



## II. Ceiling/wall mount

- C.** Designed to mount modular frames perpendicular to walls and ceilings. Instructions included.



When fabricating sign inserts, allow .005" to .010" for expansion and contraction of integrated materials.

### Frame design

Features 2 reveals. The front reveal gives sign inserts a recessed look. The back reveal provides a projected appearance.

### Snap lock mechanism

Positive locking snap locks fit securely into the frame hole. Each snap lock has a pressure-sensitive adhesive tab to hold insert in place. The exclusive hole placement and snap lock system provides design flexibility for sign inserts.

### Mounting

Pre-grooved back reveal ensures tape concealment. Mounting

holes accommodate standard hardware for various types of wall installations.

### Frame format

All frames, directories and deskbars except white, navy, and taupe are available in round and square corners, and accommodate sign inserts which allow the maximum yields from our 24" x 48" standard sheet sign materials.

### Custom modular frames

We offer white, black, almond, navy, taupe, gray and brown. Custom colors and sizes are available. Subject to minimum order requirements.



## FRAME SYSTEM PART NUMBERS

Sizes	Insert (not included)	Square Corner Part Numbers							Round Corner Part Numbers			
		White	Black	Almond	Gray	Brown	Navy	Taupe	Black	Almond	Gray	Brown
2 x 4	1 59/64 x 3 59/64	34947	35017	35381	35120	35188			35000	35364	35103	35171
2 x 6	1 59/64 x 5 59/64	34948	35018	35382	35121	35189			35001	35365	35104	35172
2 x 8	1 59/64 x 7 59/64	34949	35019	35383	35122	35190	29675	29683	35002	35366	35105	35173
2 x 10 Desk Bar	1 59/64 x 9 59/64	34965	35035	35399	35139	35206						
2 x 10	1 59/64 x 9 59/64	34950	35020	35384	35123	35191	35322	35481	35003	35367	35106	35174
2 x 12	1 59/64 x 11 59/64	34952	35022	35386	35125	35193						
3 x 10	2 59/64 x 9 59/64	34953	35023	35387	35126	35194			35007	35371	35110	35178
4 x 4	3 59/64 x 3 59/64	34951	35021	35385	35124	35192	29671	29679	35004	35368	35107	35175
4 x 8	3 59/64 x 7 59/64	34954	35024	35388	35127	35195	29672	29680	35008	35372	35111	35179
4 x 10	3 59/64 x 9 59/64	34956	35026	35390	35129	35197			35010	35374	35113	35181
6 x 6	5 59/64 x 5 59/64	34955	35025	35389	35128	35196	29676	29684	35009	35373	35112	35180
6 x 8	5 59/64 x 7 59/64	34958	35028	35392	35131	35199	29677	29685	35012	35376	35115	35183
6 x 10	5 59/64 x 9 59/64	34959	35029	35393	35132	35200						
8 x 8	7 59/64 x 7 59/64	34960	35030	35394	35133	35201	29678	29686	35013	35377	35116	35184
8 1/2 x 11	8 59/64 x 10 59/64	34966	35036	35400	35140	35207						
6 x 12	5 59/64 x 11 59/64	34961	35031	35395	35134	35202			35014	35378	35117	35185
10 x 10	9 59/64 x 9 59/64	34946	35016	35380	35119	35187	29673	29681	34999	35363	35102	35170
12 x 12	11 59/64 x 11 59/64	34957	35027	35391	35130	35198	29674	29682	35011	35375	35114	35182

**Each modular frame comes with 4 snap locks.**

**\*Clear lens for 8 1/2" x 11" frame: 34819 (not included).**

**Suction cup - 1-3/4" diameter - 36351**

**Snap lock with adhesive - Set of 12 - 36352**

Sizes	Insert (not included)	Square Corner Part Numbers					Round Corner Part Numbers				Insert Panels Modulations	
		White	Black	Almond	Gray	Brown	Black	Almond	Gray	Brown		
<b>A</b>	3 x 18	2 59/64 x 17 59/64	34963	35033	35397	35136	35204	35005	35369	35108	35176	<b>A - Header &amp; base insert (top &amp; bottom)</b> <b>B - Middle insert panels</b> <b>C - Ceiling/wall mount</b>
<b>B</b>	2 x 18	2 x 17 59/64	34943	34997	35361	35100	35168	34997	35361	35100	35168	
<b>C</b>	3"		34962	35032	35396	35135	35203	35032	35396	35135	35203	

Items in **RED** are available by special order only. Delivery is 4-6 weeks.

Regularly stocked items have a lead time of 4 weeks. Special order items have a lead time of 4-6 weeks.

Recommend 1/16" inserts; round corners are 1/2" rounded corners.

(See page 54 for suction cups and snap locks)

Within the continental US call 1.800.843.7637

Outside the continental US call +1.770.623.0331

# ALUMINUM MODULAR FRAME SYSTEM



Aluminum frames incorporate "picture frame technology" for incredible flexibility with unlimited sizing. Pre-cut lengths are stocked in many sizes for quick assembly.

Custom sizes are available at no extra charge. Perfect for indoor or outdoor signage. Available in 2 edge designs and 3 colors. Frame legs are sold in pairs, complete with corner attaching hardware. You will need 2 pairs to complete a frame. This unique construction method will allow you to offer countless size combinations to your customers, with minimal inventory. The 17 sizes available will allow you to create over 150 different sign frame dimensions.

For example if you want a 4" x 10" frame, simply purchase one of part number 34717 (4" pair of silver 100 series) and one of part number 34723 (10" pair of silver 100 series). You will receive everything you need to construct a silver 4" x 10" thin edge frame. For only \$1 per frame, we will construct them for you.

## TWO EDGE STYLES

### SERIES 100

Features a thin edge with the sign insert recessed into the frame.

#### FEATURES:

- Custom sizing
- Lightweight and durable
- Frames can accept a variety of substrates; aluminum, plastics, etc.

### SERIES 200

Features a 3/16" radius edge design that matches our high-impact styrene frames and a front reveal that allows the sign insert to have a slightly recessed appearance

- Sign inserts are easily changeable and can be modular
- Concealed mounting
- Easy installation with either screws, tape, or velcro
- Easy sign removal for building maintenance such as painting walls



### SUPPORT BRACKETS

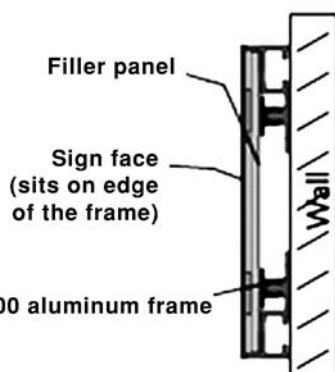
Support brackets are available for use with larger signs and when modular sign inserts are used. Support brackets are available in frame sizes.

### SNAP LOCK MECHANISM

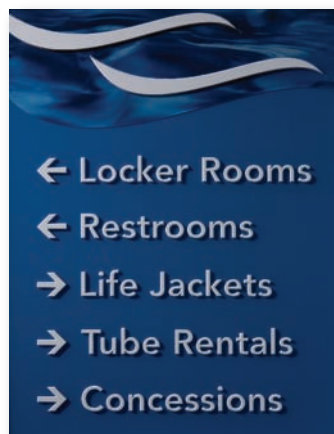
Each snap lock has a pressure sensitive adhesive tab to hold the sign face securely in place within frame and provide tamper-resistant signage. Snap locks allow for easy sign face insertion, removal, and replacement.

### MOUNTING

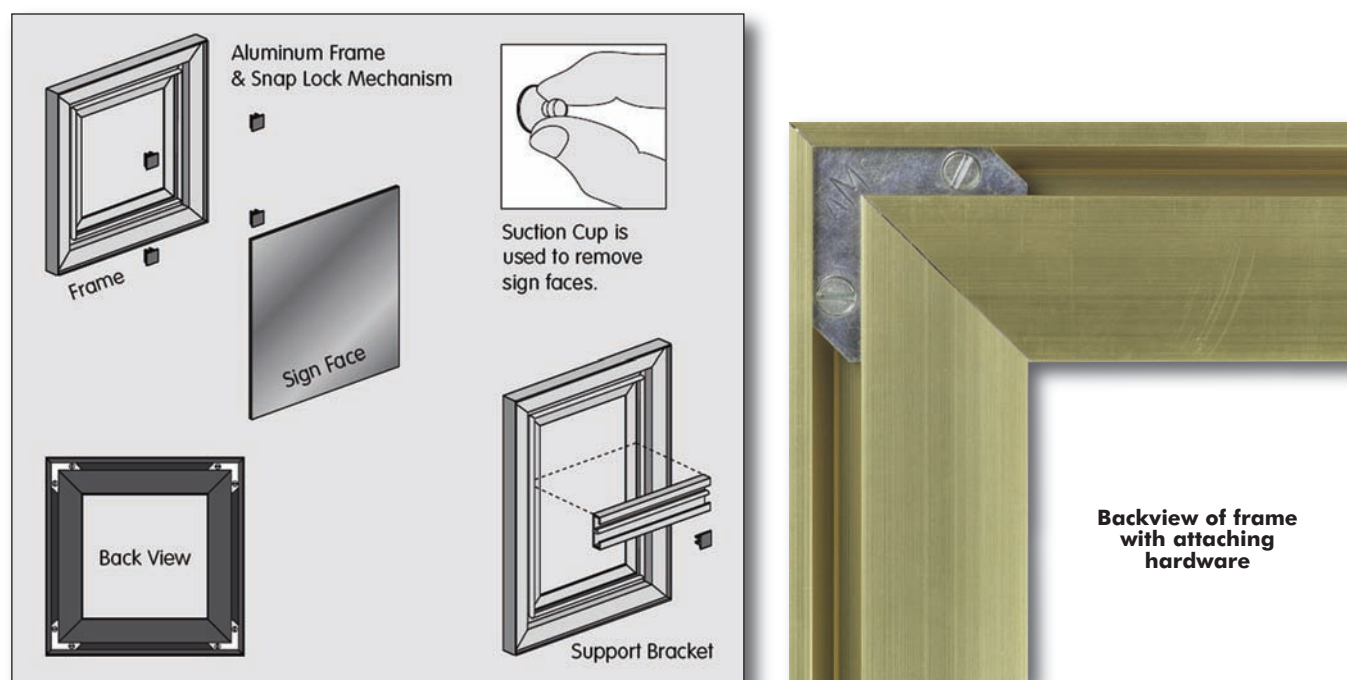
Frame back is designed for tape concealment. Mounting holes can be added to accommodate standard hardware for various types of installations.



Use the series 100 Framing System for "the frameless look." Cut filler piece of material to fit inside the frame - adhere larger shape to filler piece to hide edges of frame. Use snap locks on filler piece to hold into frame.



# ALUMINUM MODULAR FRAME SYSTEM



When fabricating sign faces, allow .005 - .010" clearance for expansion and contraction of materials.

Edge size	Series 100			Series 200			Support (Silver only)
	Silver	Black	Gold	Silver	Black	Gold	
3"	34716	34750	34784	34733	34767	34801	—
4"	34717	34751	34785	34734	34768	34802	35069
5"	34718	34752	34786	34735	34769	34803	35070
6"	34719	34753	34787	34736	34770	34804	35071
7"	34720	34754	34788	34737	34771	34805	35072
8"	34721	34755	34789	34738	34772	34806	35073
8.5"	34732	34766	34800	34749	34783	34817	35084
9"	34722	34756	34790	34739	34773	34807	35074
10"	34723	34757	34791	34740	34774	34808	35075
11"	34724	34758	34792	34741	34775	34809	35076
12"	34725	34759	34793	34742	34776	34810	35077
15"	34726	34760	34794	34743	34777	34811	35078
18"	34727	34761	34795	34744	34778	34812	35079
24"	34728	34762	34796	34745	34779	34813	35080
30"	34729	34763	34797	34746	34780	34814	35081
36"	34730	34764	34798	34747	34781	34815	35082
48"	34731	34765	34799	34748	34782	34816	35083

Each part number above includes a pair of frame legs in the length mentioned and a pair of corner attaching hardware. Therefore, two part numbers are needed to complete a frame. For only \$1 per frame, we will construct them for you.

**FOR ALUMINUM MODULAR FRAMES, ORDER SNAP LOCKS SEPARATELY.**

**Ready-made frames in the most popular sizes**

Frame size	Series 100			Series 200		
	Silver	Black	Gold	Silver	Black	Gold
4" x 8"	34851	34857	34863	34854	34860	34866
6" x 6"	34852	34858	34864	34855	34861	34867
8" x 8"	34853	34859	34865	34856	34862	34868

Each part number above includes the complete frame fabricated in the overall dimensions listed above. Recommend: 1/16" inserts; snap locks optional.

**36353** Snap lock with adhesive (set of 12)

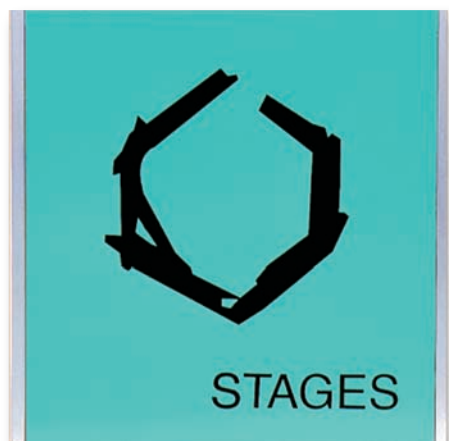
**36351** Suction cup (1-3/4" diameter)

**Insert sizes** The frame sizing is equivalent to our existing modular frame system, so the insert size should always be 5/64" less than the size of the frame leg purchased. For example, a 6" x 8" frame would need a 5-59/64" x 7-59/64" insert. This is because an insert should always have .005" - .010" clearance for expansion and contraction of materials.

Within the continental US call 1.800.843.7637

Outside the continental US call +1.770.623.0331

# ETERNITY FRAMES



## Picto Eternity

Wall mount frame. Available in a wide range of dimensions. Overall thickness .4" (10 mm).

Size	Part No.
2" x 8" (50.8 mm x 203.2 mm)	52740
3" x 10" (76.2 mm x 254 mm)	52741
4" x 8" (101.6 mm x 203.2 mm)	52742
6" x 6" (152.4 mm x 152.4 mm)	52743
6" x 8" (152.4 mm x 203.2 mm)	52744
8" x 8" (203.2 mm x 203.2 mm)	52745
8.5" x 11" (215.9 mm x 279.4 mm)	52746
10" x 10" (254 mm x 254 mm)	52747



## Modern Flag

Especially designed for wall-mounted signage. Overall thickness .6" (15 mm).

Size	Part No.
5.8" x 8" (148 mm x 203.2 mm)	52509



## Modern

Holds inserts of up to .06" (1.6 mm) thick. Overall thickness .6" (15 mm).

Size	Part No.
2" x 9" (50.8 mm x 230.0 mm)	52503
3" x 10" (76.2 mm x 258 mm)	52504
4" x 9" (101.6 mm x 230.0 mm)	52506
6" x 6" (152.4 mm x 152.4 mm)	52507
8.5" x 10.8" (215.9 mm x 274.0 mm)	52508



### Classic Flag

Especially designed for wall-mounted signage. Overall thickness .6" (15 mm).

Size	Part No.
5.8" x 8" (148 mm x 203.2 mm)	52517



### Classic

Wall frame with injected end caps for tamper-resistance. Overall thickness .6" (15 mm).

Size	Part No.
2" x 8" (50.8 mm x 203.2 mm)	52510
3" x 10" (76.2 mm x 254 mm)	52511
4" x 8" (101.6 mm x 203.2 mm)	52512
6" x 8" (152.4 mm x 203.2 mm)	52513
8" x 8" (203.2 mm x 203.2 mm)	52514
8.5" x 11" (215.9 mm x 279.4 mm)	52515
10" x 10" (254 mm x 254 mm)	52516



### Wall frame Eternity

Framing system especially designed for buildings with large numbers of visitors. Applications include menu boards, zone indication directories and directory signs. Overall thickness .4" (10 mm).



### Directory Slider

Size	Part No.
12.0" x 1.26" (304.8 mm x 32 mm)	52518
12.0" x 2.52" (304.8 mm x 64 mm)	52519
12.0" x 3.78" (304.8 mm x 96 mm)	52520
12.0" x 5.04" (304.8 mm x 128 mm)	52521

### Directory Frame

Size	Part No.
12.0" x 1.26" (304.8 mm x 32 mm)	52522
12.0" x 2.52" (304.8 mm x 64 mm)	52523
12.0" x 3.78" (304.8 mm x 96 mm)	52524
12.0" x 5.04" (304.8 mm x 128 mm)	52525

# SLATZ SIGN SYSTEMS

## Excellent for interior or exterior upscale signage

Our exclusive Engraver's Sign System combines silver and gold aluminum shapes and injection-molded plastics into a unique system of interchangeable components for single signs and directories. Some assembly required. Simply engrave the inserts, snap into place, and your interior sign system is ready for installation.

### A. Mini-directory

Overall dimensions: 9 5/8" x 10 9/16"  
 Gold Silver  
 Part no. **34845 34903**

### B. Standard directory

Overall dimensions: 9" x 15 7/16"  
 Gold Silver  
 Part no. **34846 34904**

### C. Multi-column

Overall dimensions: 15 7/16" x 18 15/16"  
 Gold Silver  
 Part no. **34847 34905**

### D. Horizontal title sign

Overall dimensions: 10 1/2" x 18 15/16"  
 Gold Silver  
 Part no. **34908 34909**

### E. Deskplate

Overall dimensions: 1 5/8" x 9 1/8"  
 Gold Silver  
 Part no. **34843 34901**

### F. Deskbar

Overall dimensions: 1 1/4" x 10 1/2"  
 Gold Silver  
 Part no. **34848 34906**

### G. Wallplate

Overall dimensions: 1 5/8" x 9 1/8"  
 Gold Silver  
 Part no. **34844 34902**

### H. 2-Line wallplate

Overall dimensions: 2 5/16" x 9 1/8"  
 Gold Silver  
 Part no. **34849 34907**

### I. Engravers Slatz dealer kit

Engraved multi-column, standard and multi-directories, plus wallplates featuring our newest sign materials. Kit also includes two velcro boards for display.

Part no. **36319**

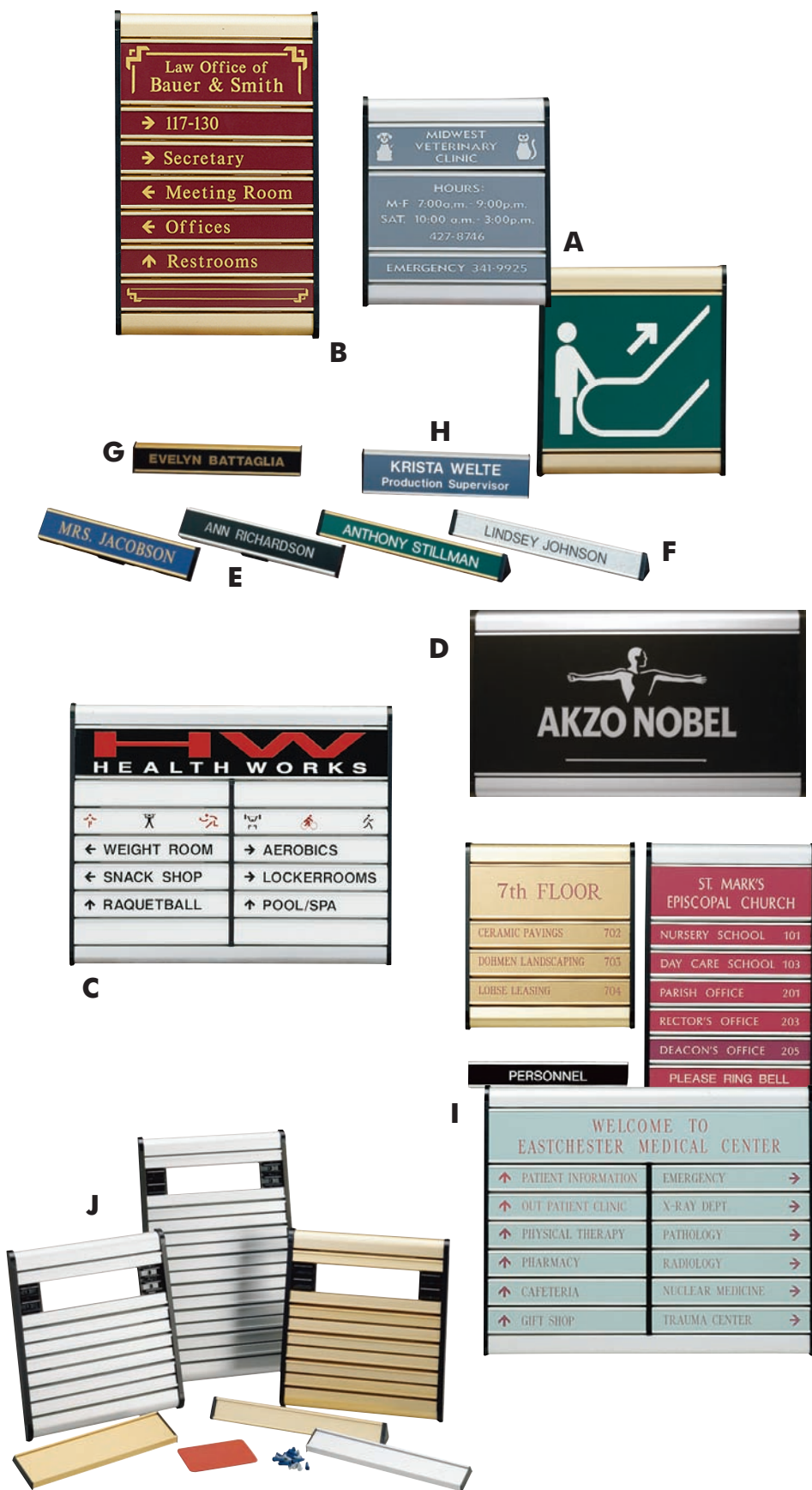
### J. Engravers Slatz sign introductory kit

Includes standard silver directory, one each gold and silver mini-directory, deskbar, wallplate and deskplate

Part no. **35485**

#### Recommendations

- 1/32" or 1/16" inserts
- Inserts should not be thicker than 1/16"



**A. Mini-Directory**

2 7/8" x 9"
1 17/64" x 9"
1 17/64" x 9"
1 17/64" x 9"

2 7/8" x 9"
2 1/16" x 9"
2 1/16" x 9"

2" x 9"
3 5/8" x 9"
1 1/2" x 9"

3 11/16" x 9"
3 11/16" x 9"

7 23/32" x 9"
---------------

**B. Standard Directory**

2 7/8" x 9"
1 17/64" x 9"
1 17/64" x 9"
1 17/64" x 9"
1 17/64" x 9"
1 17/64" x 9"
1 17/64" x 9"

4 1/2" x 9"
7 47/64" x 9"

9" x 12 19/32" Cut Cross Grain
---

9" x 12 19/32"
----------------

**C. Multi-Column**

2 7/8" x 18 11/32"	
1 17/64" x 9"	1 17/64" x 9"
1 17/64" x 9"	1 17/64" x 9"
1 17/64" x 9"	1 17/64" x 9"
1 17/64" x 9"	1 17/64" x 9"
1 17/64" x 9"	1 17/64" x 9"
1 17/64" x 9"	1 17/64" x 9"

2 7/8" x 18 11/32"	
4 1/2" x 9"	4 1/2" x 9"
4 1/2" x 9"	4 1/2" x 9"

2 7/8" x 18 11/32"	
9" x 9 11/32"	9" x 9 11/32"
Cut Cross Grain	Cut Cross Grain

**D. Title Sign**

7 3/4" x 18 11/32"
--------------------

**E. Deskplate**

1 19/64" x 9"
---------------

1 19/64" x 3" - 1 19/64" x 6"
-------------------------------

1 19/64" x 4 1/2" - 1 19/64" x 4 1/2"
---------------------------------------

**F. Deskbar**

1 19/64" x 9"
---------------

1 19/64" x 3" - 1 19/64" x 6"
-------------------------------

1 19/64" x 4 1/2" - 1 19/64" x 4 1/2"
---------------------------------------

**G. Wallplate**

1 19/64" x 9"
---------------

1 19/64" x 3" - 1 19/64" x 6"
-------------------------------

1 19/64" x 4 1/2" - 1 19/64" x 4 1/2"
---------------------------------------

**H. 2-Line Wallplate**

2 1/8" x 9"
-------------

2 1/8" x 3" - 2 1/8" x 6"
---------------------------

2 1/8" x 4 1/2" - 2 1/8" x 4 1/2"
-----------------------------------

Note: We will manufacture custom size directories to your specifications. Call for pricing.  
Recommend: 1/32" or 1/16" inserts, no thicker than 1/16"

**Components**

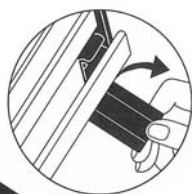
We chose the sizes most often specified by architects and facility managers. All directories can be rearranged to accommodate multiple insert formats. Simply arrange insert plates to accommodate your specified format.

All directions and signs feature molded plastic multi-clips inserted into their tracks. Backplates and trimplates then snap-fit onto the multi-clip ensuring accurate spacing, design flexibility and tamper-resistance.

**Removal key:**

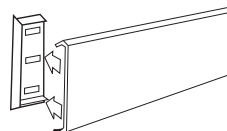
Individual insert plates of the directory may be removed from the front of a sign or directory without disturbing an entire group of insert plates.

**Part no.**  
**34870**

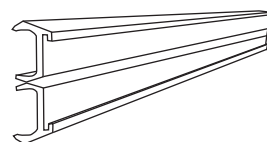
**End caps:**

Used for wallplate and deskbar, the black cap snap-fits into the back of the backplate, covering the exposed edges and concealing the preformed mounting hole.

**Part no.**  
**49008**

**Insert plate:**

Extruded aluminum which snap-fits into multi-clip system.



	Gold	Silver
<b>9" Part no.</b>	<b>34942</b>	<b>34869</b>
<b>18" Part no.</b>	<b>34850</b>	<b>34874</b>

**Trackcaps:**

Black mounted plastic caps that push into top and bottom of side tracks.

**Part no. 34871**



# SIGN HOLDERS AND PLATE BASES

## A. Standard plate holder

Single plate holder for 2" wide plates

With 1/16" slots

Size	Gold	Silver	Satin Silver
8"	<b>30077</b>	<b>30076</b>	<b>34882</b>
2" x 8"	<b>34821</b>	<b>19479</b>	

With 1/8" slots

8"	<b>34821</b>	<b>34875</b>
10"	<b>34822</b>	<b>34876</b>



## B. Slimline plate holder

1" x 7" holder designed for 1/16" insert

Part no.	Gold	Silver
	<b>30073</b>	<b>30072</b>



## C. Two-sided plate holder

1 1/4" x 6" holder designed for 1/4" insert

Part no.	Gold	Silver
	<b>30075</b>	<b>30074</b>



## D. Pedestal plate holder

A contoured base elevates the engraved 1/16" insert in this 1 1/2" x 9" holder. Insert not included.

Part no.	Gold	Silver	Black
	<b>34823</b>	<b>34877</b>	<b>34995</b>



## E. Plate stand

A slim base for 1/16" insert. Insert not included.

Length	Gold	Silver
8"	<b>19474</b>	<b>19480</b>
10"	<b>34825</b>	<b>34880</b>



## F. The Executive™

2" x 8" nameplate slides into 1/16" slotted front surface. Name plate not included. Rear compartment holds business cards. Features pencil through and two pen holders with pens. Gift boxed.

Part no.	Gold	Silver
	<b>34842</b>	<b>34900</b>



## G. Two-line plate holder

Two sections holds a 2" x 9" insert - bottom a 1 1/2" x 9" insert. Holder is designed for 1/16" inserts. Inserts not included.

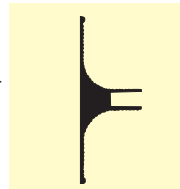
Part no.	Gold
	<b>34824</b>



## H. Wall bracket

Mount signs perpendicular to the wall. Slotted for 1/8" insert. Cap nuts and screws included. Insert material 1/2" into wall bracket.

Height	Gold	Silver
2"	<b>30070</b>	<b>19486</b>
3"	<b>34827</b>	<b>34883</b>
4"	<b>30071</b>	<b>19487</b>
5"	<b>34828</b>	<b>34884</b>



## J. Standard wall plate holder

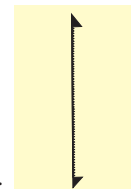
for 2" x 8" or 2" x 10" insert. 26" lengths have natural aluminum exposed edges which can be polished. 5/32" hole. No holes in 26" lengths. (Not shown)

With 1/16" slots

Size	Gold	Silver
8"	<b>19485</b>	<b>19476</b>
10"	<b>30069</b>	<b>30068</b>
26"	<b>34837</b>	<b>34891</b>

With 1/8" slots

8"	<b>34838</b>	<b>34892</b>
10"	<b>34839</b>	<b>34893</b>



## K. Utility wall plate holder

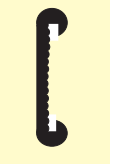
Available in several pre-cut lengths or 26" lengths to cut to specific sizes. Slotted for 1/16" insert. Natural aluminum, non-finished edges. For mounting use double-faced tape or drill holes. (Not shown)

For 3/4" wide Name Plates

Length	Gold	Silver
26"	<b>34829</b>	<b>34885</b>

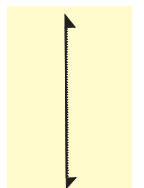
For 1" wide name plates

Length	Gold	Silver
4"	<b>19475</b>	<b>19482</b>
6"	<b>30067</b>	<b>30066</b>
8"	<b>34830</b>	<b>19483</b>
10"	<b>34831</b>	<b>34886</b>
26"	<b>34832</b>	<b>34887</b>



For 1 1/2" wide name plates

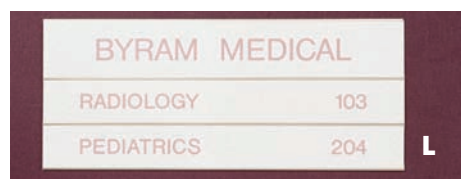
Length	Gold	Silver
8"	<b>34833</b>	<b>34888</b>
9"	<b>34834</b>	<b>34889</b>
10"	<b>34835</b>	
26"	<b>34836</b>	<b>34890</b>



\*Inserts not included

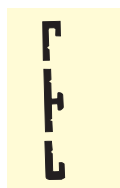


# SIGN HOLDERS AND PLATE BASES



## L. Multiple insert wall plate holder

25" length designed for 1/16" inserts of any width. Center strip holds plates between the outside frame strips. Attach to wall surface with double-faced tape. Natural aluminum, non-finished edges.



	Gold	Silver
Frame Strip	34840	34894
Center Strip	34841	34895

## M. Counter sign holder

Display instructions, menus or staff names with this 10" long holder designed for larger signs up to 12" high. Slotted for 1/8" materials. Available in gold and silver finish.

	Gold	Silver
Part no.	34826	34881

## N. Plate bases

Accommodate 1/16" insert. 1/8" slots can be special ordered. Insert not included.

Size	Walnut	Black Acrylic	Clear Acrylic
6"	35358	35065	35235
8"	35359	35066	35236
10"	35360	35067	35237

## P. Six-line plastic directory

Extruded white opaque plastic. Available in lengths up to 50" as a special order. For more than 6 lines, stack two or more units. Designed for 1/16" inserts. Mount with double-faced tape. Inserts not included. (See page 45 to order tape).

	1 x 7"	1 x 24"
Part no.	35482	35483

## Q. Deluxe directories

Anodized aluminum frames with satin silver finish. Removable holder is easily inserted into the backplate/frame and held with a set screw. Two concealed counter sunk holes in the backplate can be used to screw the holder to the wall or use double-faced tape. Inserts not included (see page 74 to order tape).

### Header plus one insert line

(Not shown)

Directory size: 2 3/16" x 7 3/16"

Plate sizes:

Header - 1 1/4" x 7" x 1/16"

Insert - 3/4" x 7" x 1/16"

Part no.	34910
----------	-------

### Header plus three insert lines

Directory size: 3 7/8" x 7 3/16"

Plate sizes:

Header - 1 1/4" x 7" x 1/16"

Inserts - 3/4" x 7" x 1/16"

Part no.	34911
----------	-------

## Directory extender

6-line addition can be used with any deluxe directory unit. Includes backplates and two three-lineholders. (Not shown)

Extender size: 5" x 7 3/16"

Plate sizes:

Inserts - 3/4" x 7" x 1/16"

Part no.	34913
----------	-------

## R. Lawn and garden stakes

Anodized aluminum stakes. We recommend 2-Plex material for exterior signage. Inserts on 9" x 1/2" must be at least 3" wide, top to bottom, since mounting holes in stakes are 2 3/4" center to center, 5/32" diameter. Nuts and screws included. Sign insert not included.

	9" x 1/2"	15" x 1"
Part no.	34896	34899

## S. Auto license plate holders

Car frame measures 6 1/4" x 12 1/4" overall, strip size" top - 11/16" x 6 1/4" bottom - 15/16" x 10 1/4." Inserts not included.

Color	
Chrome	36120
Matte black	35785
Gold	35971

\*Inserts not included

# DOOR PLATES

## Standard door plates

### A. Brass door plate

Hand polished brass. For interior use.  
Hardware included.

Oval 3 1/16" x 11" (imported) **36017**

### B. Brass door plate

Hand polished brass. For interior use only  
Hardware included. Lacquered.

Oval 1 3/8" x 2 9/16" (USA) **35958**

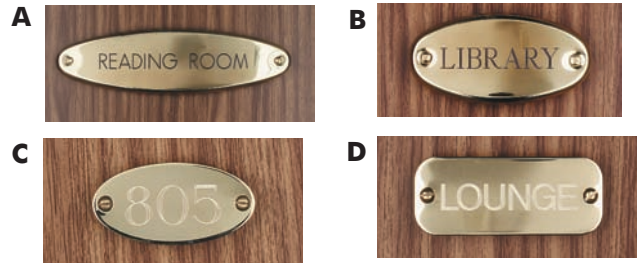
### C. Brass door plate

Hand polished brass. for interior or exterior  
use. Hardware included. (imported)

Oval 2 5/8" x 5 5/16" **36018**

### D. Brass door plate

Rectangle 1 1/4" x 3"  
Hardware included. Lacquered (imported)



## Premium solid brass door plates

### E. Rectangular with pearls

5 5/16" x 1 3/16" **22092**

### F. Rectangular with edge ribbon and cut corners

3 5/16" x 1 3/32" **22095**

### G. Oval with pearls

4 15/16" x 1 13/32" **22097**

### H. Rectangular, plain with cut corners

3 5/16" x 1 21/32" **21812**

### I. Fantasy, hammered

4 57/64" x 1 21/32" **22098**

### J. Oval, fantasy

1 57/64" x 3 15/16" **22090**

### K. Oval with twisted edging

3 15/16" x 1 37/64" **22089**

### L. Oval with edging ribbon

4 9/64" x 2 1/8" **22088**

### M. Oval plain

5 5/16" x 2 9/16" **22091**

### N. Rectangular plain

6 5/16" x 2 23/64" **22094**

### O. Fantasy, plain small

3 13/16" x 1 19/64" **22093**

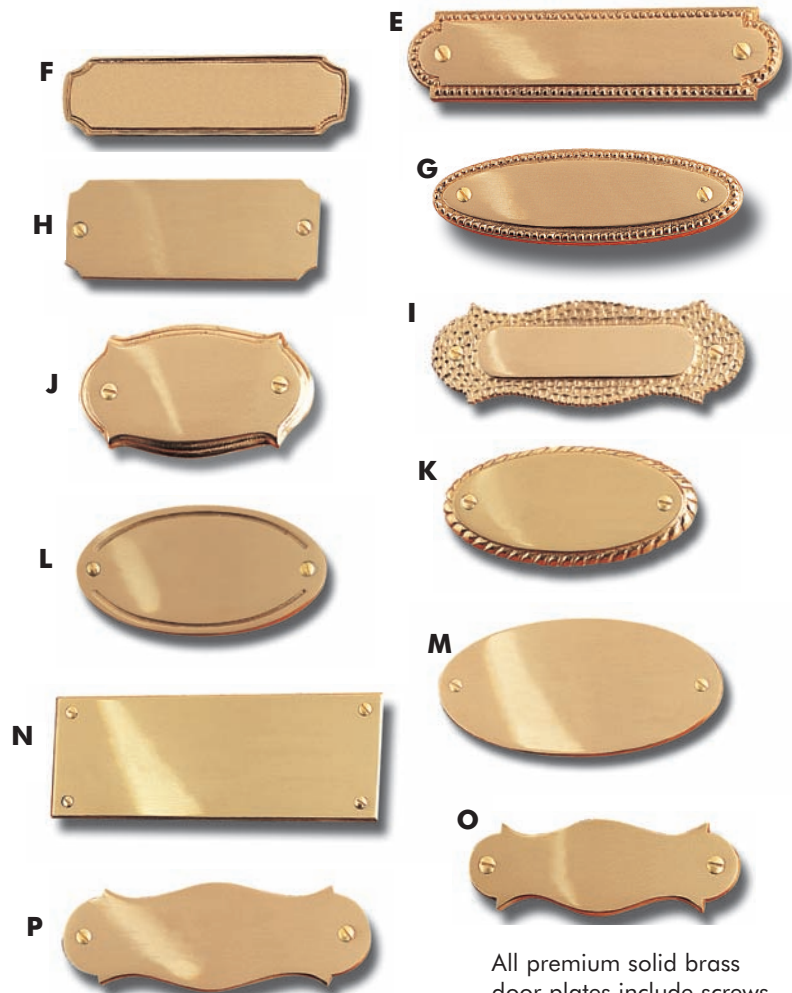
### P. Fantasy, plain large

4 13/16" x 1 21/32" **22096**

### Door Plate Display

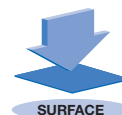
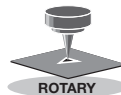
Display is designed to hold all 12 styles of  
the premium solid brass door plates.  
(not shown)

**22099**



All premium solid brass  
door plates include screws,  
except item I. (22095)

# AWARD PLAQUES



The engraving material leader now has the best wood plaques in the industry. Choose from wood-grain or marble finish. All are created with laserable foils (not laminated paper) for the greatest quality and durability. The laserable wood grain plaques simulate a solid walnut plaque with a deep cherry stain, and are available with or without a solid black edge border. The marble finish plaques are constructed with a concave edge, and available in black, white, red or deep blue. Each of the marble finish plaques is available with or without an attractive gold trim border.

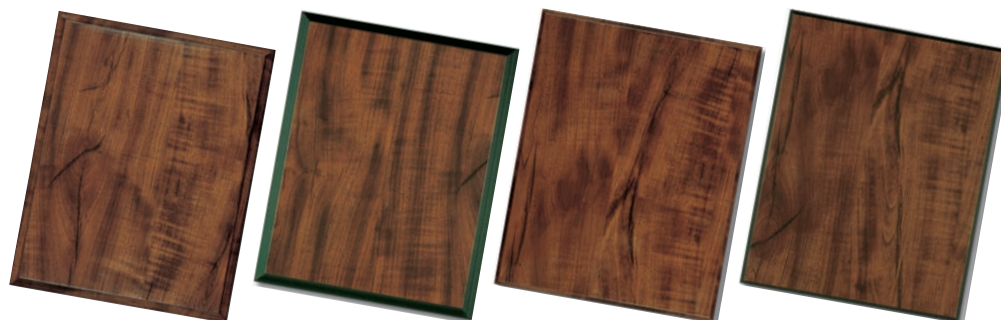
Thickness for all award plaques is 5/8".



Concave Edge

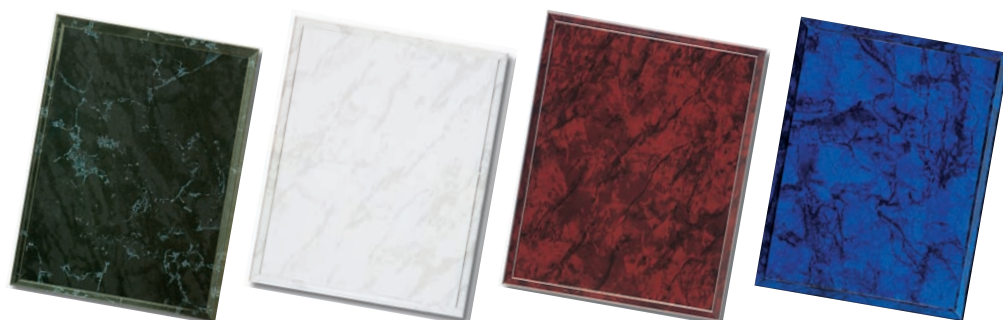


Bevel Edge

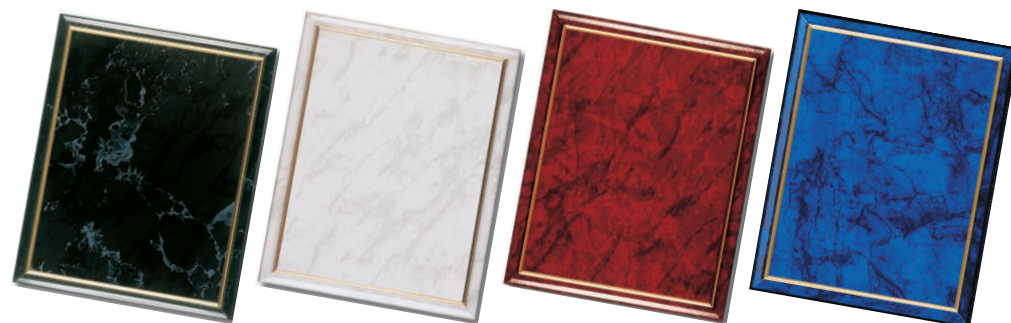


Walnut Woodgrain Concave Edge

Walnut Woodgrain Beveled Edge



Marble With Concave Edge



Marble With Gold And Concave Edge

Walnut w/ Concave Edge	Walnut w/ Black Concave Edge	Walnut w/ Bevel Edge	Walnut w/ Black Bevel Edge	Black Marble	White Marble	Red Marble	Deep Blue Marble	Size	Qty/Cs
36585	36593	36577	36561	36569	36641	36633	36625	4 1/4 x 6"	72
36586	36594	36578	36562	36570	36642	36634	36626	5 x 7"	50
36587	36595	36579	36563	36571	36643	36635	36627	6 x 8"	40
36588	36596	36580	36564	36572	36644	36636	36628	7 x 9"	30
36589	36597	36581	36565	36573	36645	36637	36629	8 x 10"	24
36590	36598	36582	36566	36574	36646	36638	36630	9 x 12"	16
36591	36599	36583	36567	36575	36647	36639	36631	10 1/2 x 13"	12
36592	36600	36584	36568	36576	36648	36640	36632	12 x 15"	12

Black Marble with Gold	White Marble with Gold	Red Marble with Gold	Deep Blue Marble with Gold	Size	Qty/Cs
36601	36613	36619	36607	6 x 8"	40
36602	36614	36620	36608	7 x 9"	30
36603	36615	36621	36609	8 x 10"	24
36604	36616	36622	36610	9 x 12"	16
36605	36617	36623	36611	10 1/2 x 13"	12
36606	36618	36624	36612	12 x 15"	12

Within the continental US call 1.800.843.7637

Outside the continental US call +1.770.623.0331

# INDUSTRIAL SIGNS

## Ready-to-engage OSHA Signs

Standard OSHA signal word signs are ready to engrave with your customer's specific message. Our seven signal word signs are silk-screened on 1/16" 2-ply Gravoply material. Recommended for interior use.

- A. Danger**      2 7/8" x 4"      **35641**  
                          7" x 10"      **35642**  
                          10" x 14"      **35643**
- B. Warning**    2 7/8" x 4"      **35928**  
                          7" x 10"      **35929**  
                          10 x 14"      **35930**
- C. Caution**    2 7/8" x 4"      **35825**  
                          7" x 10"      **35826**  
                          10" x 14"      **35827**
- D. Notice**      7" x 10"      **35647**  
                          10 x 14"      **35648**
- E. Safety first**   7" x 10"      **35904**  
                          10" x 14"      **35905**
- F. Arrow left**    7" x 10"      **35751**  
                          10 x 14"      **35752**
- G. Arrow right**   7" x 10"      **35749**  
                          10 x 14"      **35750**



A



B



C



D



E



F



G

## Lockout tags

Durable Gravoply® 3-ply lockout tags with area on both sides for engraving important messages. Both tags measure 3 1/4" x 5 4/3". Sold in packages of 5.

- H. Danger**      **35859**
- J. Danger equipment lockout** **35860**



H

Front

Back



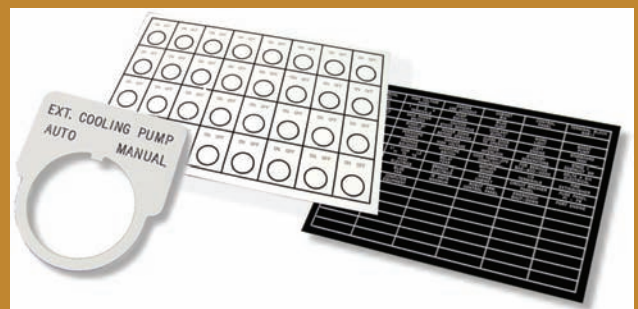
J

Front

Back

## DID YOU KNOW?

Did you know you could use your Gravograph engraving machine to make custom ID plates or legend plates from a standard sheet of engraving plastic? You can even order the plastic sheet stock with an adhesive back already applied, so after engraving you can just peel-n-stick the plates. The Gravostyle software can even allow you to import a file with a list of names, and have them automatically updated to a matrix of plates. Best of all, engraving your own ID plates can cut the cost of a typical \$1.00 plate down to pennies.



# LEGEND PLATES

The safe, effective way to label push-buttons, selector switches or indicator lights. All Gravoply legend plates are non-conductive. We're able to manufacture custom legend plates based on your specifications. Please request a quotation.

All Gravoply and Gravoply Ultra legend plates are non-conductive. Use our Gravoply legend plates for rotary engraving or our Gravoply Ultra legend plates for laser and rotary engraving.

**1 3/16" diameter holes.** Fits full-size pilot lights and push buttons of all U.S. manufacturers, as well as many of the foreign-made oiltite units.



Color	1 3/4" W x 2" H Universal	
	Gravoply For rotary	Gravoply Ultra For laser
White/Black	35634	46020
Black/White	35738	46000
Red/White	35845	46011
Yellow/Black	45991	46031



Color	1 3/4" W x 2" H Universal with lock tab	
	Gravoply For rotary	Gravoply Ultra For laser
White/Black	35632	46018
Black/White	35736	45998
Red/White	35843	46009
Yellow/Black	45989	46029

**7/8" diameter holes.** (.875) Fits miniature button and pilot lights.



Color	1 3/8" W x 1 5/8" H Universal	
	Gravoply For rotary	Gravoply Ultra For laser
White/Black	35640	46025
Black/White	35745	46007
Red/White	35850	46016
Yellow/Black	45996	46027

**1 7/32" diameter holes.** Fits full-size pilot lights and push buttons of all U.S. manufacturers and many of the foreign-made oiltite units.



Color	1 3/4" W x 2" H Universal	
	Gravoply For rotary	Gravoply Ultra For laser
White/Black	35636	46023
Black/White	35740	46003
Red/White	35847	46014
Yellow/Black	45994	46032



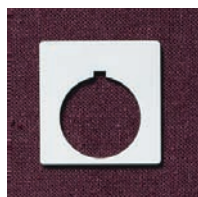
Color	1 3/4" W x 2" H Universal with lock tab	
	Gravoply For rotary	Gravoply Ultra For laser
White/Black	35637	46022
Black/White	35741	46002
Red/White	35848	46013
Yellow/Black	45993	46034



Color	1 3/4" W x 2" H Universal with lock tab	
	Gravoply For rotary	Gravoply Ultra For laser
White/Black	35638	46021
Black/White	35742	46001
Red/White	35849	46012
Yellow/Black	45992	46033



Color	1 3/4" W x 2" H Universal with lock tab	
	Gravoply For rotary	Gravoply Ultra For laser
White/Black	35633	46019
Black/White	35737	45999
Red/White	35844	46010
Yellow/Black	45990	46030



Color	1 13/16" W x 1 13/16" H Universal notched for lock ring	
	Gravoply For rotary	Gravoply Ultra For laser
White/Black	35635	46017
Black/White	35739	45997
Red/White	35846	46008
Yellow/Black	45988	46028



Color	1 3/4" W x 1 7/8" H Universal with lock tab	
	Gravoply For rotary	Gravoply Ultra For laser
White/Black	35631	46024
Black/White	35735	46005
Red/White	35842	46015
Yellow/Black	45995	46035

**11/16" diameter holes.**  
Fits major lines of miniature lights – electrical and electronic.



Color	1 3/8" W x 1 3/8" H Universal	
	Gravoply For rotary	Gravoply Ultra For laser
Black/White	35743	46006
Yellow/Black	45987	45969



Color	1 3/8" W x 1 3/8" H Universal	
	Gravoply For rotary	Gravoply Ultra For laser
Yellow/Black	45986	45985

**Anodized Aluminum Legend Plates 1 7/32" Universal**  
Manufactured to accommodate all standard oiltite lights and push buttons.



Color	1 3/4" W x 2" H	
	Part no.	
Red Anodized	35864	
Black Anodized	35778	

# READY-MADE BADGES

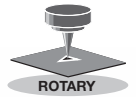
Meets Military Specifications

## MILITARY BADGES

### Plastic for rotary engraving

These badges have been created specifically to meet the requirements of each branch of the military, regulation colors and sizes. Each is made from 3/32" Gravoply I with feature clutch fasteners (included).

Color	Size	Branch	Part no.
Satin Black/White	1"x3"	Army	<b>35527</b>
Satin Black/White	3/4"x3"	Navy	<b>19393</b>
Satin Air Force Blue/White	5/8"x3-3/16"	Air Force	<b>35537</b>
Matte Black/White	5/8"x3"	Marine Corps	<b>35521</b>
Textured Black/White	1"x3"	Military	<b>35518</b>



### Metal for rotary engraving

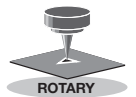
The new United States Air Force dress uniform badge. With overall dimensions of 3/4" x 3", this badge is constructed of a .025" silver nickel-plated brass shell that wraps around an attaching plastic insert, as specified by the US Air Force. The attaching hardware on the plastic insert is prong and clutch type. Each unit is sold with the adhesive-backed plastic back unattached to the brass shell to simplify the engraving process. Clutch hardware is included.

For this specific badge, the USAF requirements dictate the engraving be done with a .030" or .040" tip cutter. (We recommend a .030" tip cutter, sold below, engraved to a depth of .008" to .010".) The text must be all in capital letters, and be 1/4" in height. The font used must be standard block or SL513 Portuguese font. As specified by the USAF, the text on the badge is to be engraved and paint-filled with a specific blue engraving enamel, purchased separately (see below).

Description	Size	Part no.
USAF dress uniform name tag	3/4"x3"	<b>35604</b>
Brass cutter for 11/64" shank	.030" tip	<b>34028</b>
Blue engravers enamel	1/2 pint	<b>32814</b>
Paint-fill squeegee tool		<b>36226</b>



FRONT



BACK

### Plastic for laser engraving

Each of these 3/32" Gravoply Ultra badges also meet the requirements of the specified military branch, but are designed specifically for laser engraving. All badges feature prong and clutch attaching hardware.

Color	Size	Branch	Part no.
Satin Black/White	1"x3"	Army	<b>35528</b>
Satin Black/White	3/4"x3"	Navy	<b>35524</b>
Satin Air Force Blue/White	5/8"x3-3/16"	Air Force	<b>35538</b>
Matte Black/White	5/8"x3"	Marine Corps	<b>35522</b>



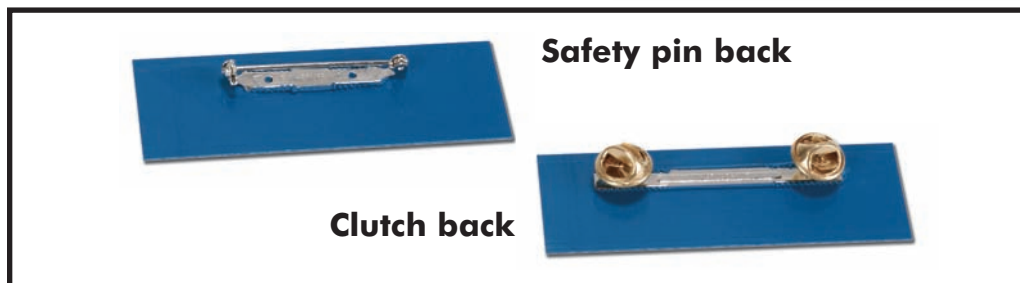
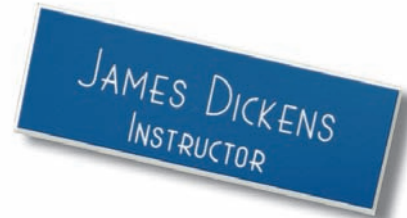
# READY-MADE BADGES

There's more than one way to buy a badge. Ready-made badges save you time and money. Custom badges keep all your customers satisfied, no matter how specialized their badge needs.

## Classic 3/32" Gravoply badges (satin finish)

Gravoply badges feature square corners and beveled edges. Metal fasteners come attached. All fasteners are nickel-plated brass, so they will not tarnish and discolor fabrics.

Color and Size	Safety pin	Clutch
	Part no.	Part no.
Black/White		
5/8" x 2 1/2"	<b>35520</b>	-
3/4" x 3"	<b>35523</b>	<b>19393</b>
1" x 3"	<b>35526</b>	<b>35527</b>
White/Black		
5/8" x 2 1/2"	<b>35487</b>	-
3/4" x 3"	<b>35488</b>	<b>35489</b>
1" x 3"	<b>35491</b>	<b>35492</b>
Red/White		
5/8" x 2 1/2"	<b>35553</b>	-
3/4" x 3"	<b>35554</b>	<b>35555</b>
1" x 3"	<b>35557</b>	<b>35558</b>
Azure Blue/White		
5/8" x 2 1/2"	<b>35540</b>	-
3/4" x 3"	<b>35541</b>	<b>35542</b>
1" x 3"	<b>35544</b>	<b>35545</b>
White/Blue		
5/8" x 2 1/2"	<b>35502</b>	-
3/4" x 3"	<b>35504</b>	-
1" x 3"	<b>35506</b>	<b>35507</b>
Apple Green/White		
3/4" x 3"	<b>35566</b>	-
1" x 3"	<b>35568</b>	-
White/Red		
3/4" x 3"	<b>35496</b>	-
1" x 3"	<b>35498</b>	-
Orange/White		
1" x 3"	<b>35576</b>	-
Walnut/White		
1" x 3"	<b>35614</b>	-
Silver Gray/Black		
1" x 3"	<b>35571</b>	-



Safety pin back

Clutch back

# READY-MADE BADGES



## Gravoply slip-on pocket badges

Designed to slip on over the top-edge of pockets and stay tightly in place. Bottom edge has rounded corners to protect clothing. Overall size: 3" x 2 1/2." Name plate area, 3" x 1 1/4." Not beveled.

Color	Part no.
Black/white	<b>35531</b>
White/black	<b>35494</b>
Red/white	<b>35560</b>
White/red	<b>35500</b>
Azure blue/white	<b>35548</b>
White/azure blue	<b>35509</b>
Radiant gold/black	<b>35581</b>

## Metallex badges

The look of metal, but not the cost. Metallex badges are 50% lighter than brass. 3/16" radius rounded corners.

Color and size	Safety pin clutch	
	Part no.	Part no.
Glossy gold/black 5/8" x 2 1/2" 1" x 3"	<b>35578</b>	—
	<b>35579</b>	<b>35580</b>
Radiant gold/black 1" x 3"	<b>35582</b>	—
Radiant silver/black 5/8" x 2 1/2" 1" x 3"	<b>35597</b>	—
	<b>35598</b>	—



## Brass

Top quality .050" solid brass badges. Made in USA.

Color and finish	Safety pin clutch	
	Part no.	Part no.
Sandblast finish (do not use Gravoxide)		
Gold 1/2" x 2 3/8"	<b>35593</b>	<b>35594</b>
Silver 1/2" x 2 3/8"	—	<b>35612</b>

## Classic oval

Satin gold 1 1/4" x 2" **35587**

## Classic rectangle

(1/16" radius rounded corners)

Gold	Safety pin clutch	
	Part no.	Part no.
Glossy 3/8" x 2 1/4"	<b>35588</b>	<b>35589</b>
Glossy 1/2" x 2 3/8"	<b>35590</b>	<b>35591</b>
Glossy 5/8" x 2 1/2"	—	<b>35592</b>
Satin 1/2" x 2 3/8"	<b>35585</b>	<b>35586</b>

## Silver

Glossy 3/8" x 2 1/4"	—	<b>35606</b>
Glossy 1/2" x 2 3/8"	<b>35607</b>	<b>35608</b>
Glossy 5/8" x 2 1/2"	—	<b>35609</b>
Satin 1/2" x 2 3/8"	<b>35600</b>	<b>35601</b>





# METAL BADGE FRAMES AND MAGNETS

## Deluxe metal badge frames

Similar to the above badge frames, but with slightly larger dimensions and upgraded finishes. The gold badges are actually 18K gold-plated, and the silver badges are plated with stainless steel. Since they both have a solid steel core, magnets adhere directly to the body of the badge, with no need for a pressure-sensitive steel plate. Sold with or without pin back fasteners. Both sizes offer round corners. Plain frames do not include fasteners, and can be used with the magnetic clips sold below. Insert material must be 1/32" thickness only.

### 3-line deluxe badge

Frame size: 1 5/8" x 2 15/16"

Insert size: 1 3/8" x 2 3/4"

1/8" radial corners

Plain gold (frame only)	<b>35617</b>
Pin back gold	<b>35624</b>
Plain silver (frame only)	<b>35619</b>
Pin back silver	<b>35625</b>



3-Line deluxe badge

### 2-line deluxe badge

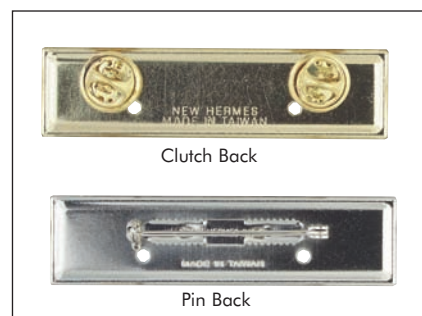
Frame size: 1 1/8" x 3 1/8"

Insert size: 29/32" x 2 29/32" x 1/32"

1/8" radial corners

Plain gold (frame only)	<b>35616</b>
Pin back gold	<b>35622</b>
Clutch back gold	<b>35623</b>
Plain silver (frame only)	<b>35618</b>
Pin back silver	<b>35628</b>
Clutch back silver	<b>35629</b>

2-Line deluxe badge



Clutch Back

Pin Back

## Metal badge frames

Engrave before mounting in frames. Materials not included; frame only. Material must be 1/32" thickness only.

### Square corners:

Frame size: 1 1/16" x 2 11/16"

Insert size: 1/2" x 2 1/2" x 1/32"

Goldtone w/pin back	<b>35620</b>
Silvertone w/pin back	<b>35626</b>
Goldtone w/clutch back	<b>35621</b>
Silvertone w/clutch back	<b>35627</b>

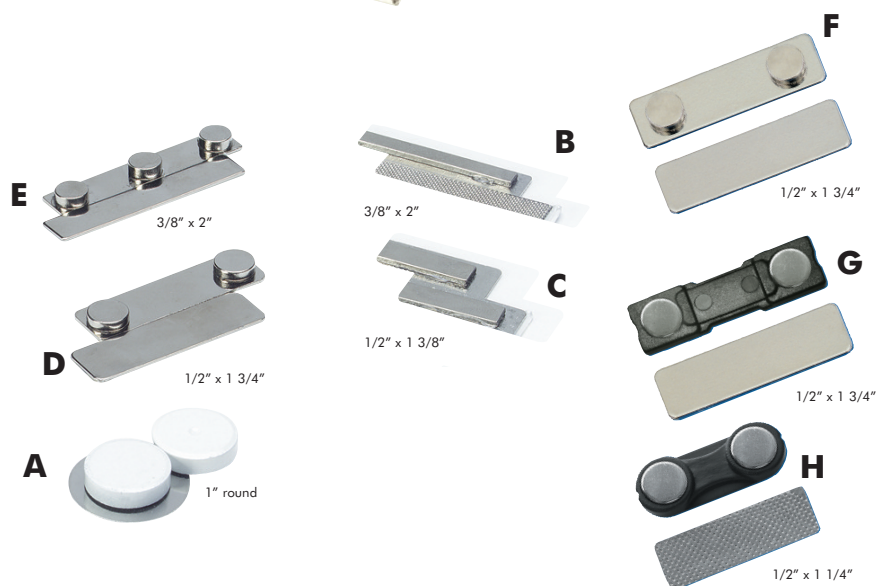


## Magnetic closures

The following items are listed in ascending order of magnetic strength.

Description	Part no.
A. Round magnetic closure	<b>36115</b>
B. Single magnetic clip	<b>36119</b>
C. Double magnetic clip	<b>36118</b>
D. Double post magnetic clip	<b>36112</b>
E. Triple post magnetic clip	<b>36113</b>
F. Economy badge magnet	<b>36109</b>
G. Poly badge magnet	<b>36110</b>
H. Mini poly badge magnet	<b>36111</b>

All magnetic closures come with the pressure-sensitive adhesive backing.

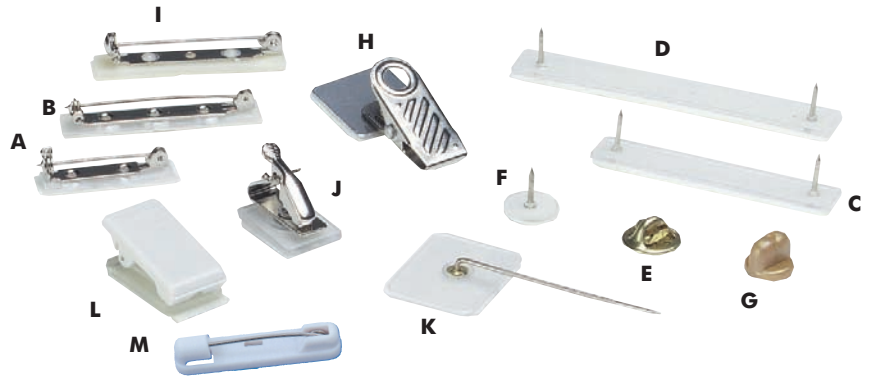


# BADGE HARDWARE

## Pressure-sensitive hardware

We offer our best-selling and new hardware with pressure-sensitive adhesive backing. Simply peel back the liner, and the adhesive bonds to the badge blank without chemical or heat fusing.

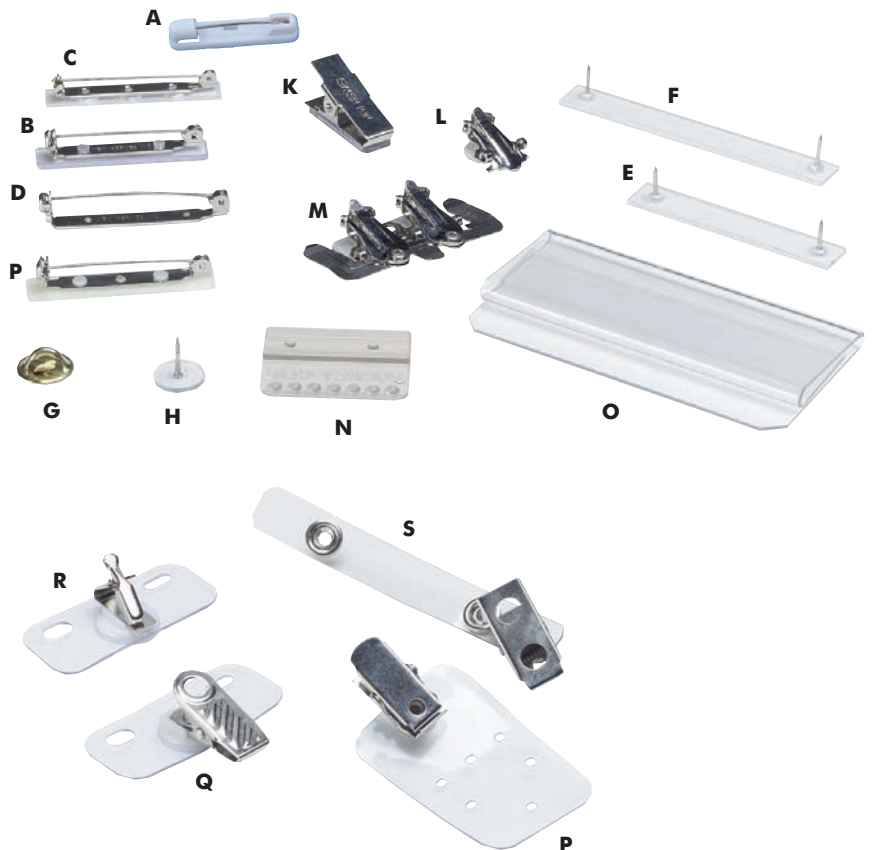
Description	Part no.
A. 1" safety pin (silver)	<b>36099</b>
B. 1 1/2" safety pin (silver)	<b>36104</b>
C. 2" ribbon bar	<b>35691</b>
D. 2 3/4" ribbon bar	<b>35689</b>
E. Brass clutches	<b>19351</b>
F. Badge tack	<b>35687</b>
G. Synthetic clutch	<b>35970</b>
H. Swivel metal bulldog clip	<b>36106</b>
I. 1 1/2" clear pin (steel) with ABS base	<b>36103</b>
J. 3/4" alligator clip swivel with ABS base (packs of 100)	<b>36108</b>
K. Drapery pin	<b>36102</b>
L. Super clip	<b>36117</b>
M. 1 1/2" white safety pin	<b>36091</b>



## Classic badge hardware

Hardware is nickel-plated brass. Features clear plastic backing to make bonding quick and easy without GravoBond (see page 73 for adhesives). Anti-tarnish finish protects fabric from discoloration. Choose the material color, ply and thickness for fabricating badge blanks.

Description	Part no.
A. 1 1/2" white safety pin	<b>36090</b>
B. Brass safety pin import (pack of 100)	<b>19345</b>
C. Metal safety pin USA (not shown)	<b>36089</b>
D. Safety pin for Phenolic only with no plastic backing (not shown)	<b>36071</b>
E. 2" plastic ribbon bar	<b>35690</b>
F. 2 3/4" plastic ribbon bar (not shown)	<b>35688</b>
G. Brass clutches	<b>19351</b>
H. Tacks	<b>35686</b>
J. Synthetic clutch (pack of 100)	<b>35970</b>
K. Metal bulldog clip for badge blanks 1" or higher	<b>36092</b>
L. Swivel clip w/plastic back	<b>19346</b>
M. Snap clip w/plastic back	<b>30361</b>
N. Pocket clip on	<b>35692</b>
O. Clear acrylic badge holder	<b>35693</b>
P. 1 1/2" clear pin (steel) with ABS base (packs of 100)	<b>36088</b>



## Badge Adapters

P Adapter w/pearlized snap and spring clip (packs of 100)	<b>36252</b>
Q Adapter w/spring clip	<b>36098</b>
R Badge adapter w/alligator clip	<b>36097</b>
S Spring clip with 3 1/2" Photo ID strap (packs of 100)	<b>36100</b>

# ENGRAVING SUPPLIES

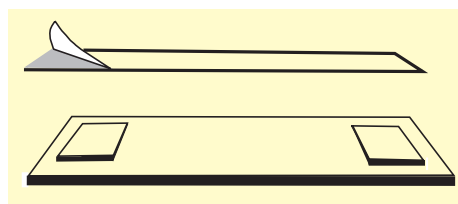
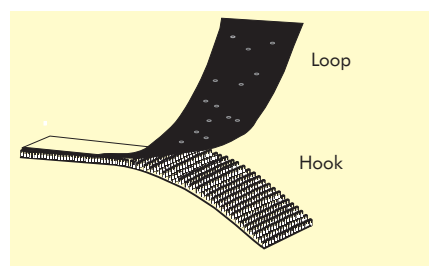
## Sign fasteners and adhesives



### Hook and loop tape fastener

Nylon hook and loop with rubber-based adhesive backing. Permits easy sign changeover.

Description	Part no.
1" x 3" (set of 12) - white	<b>36233</b>
1" x 3" (set of 12) - black	<b>35781</b>
3/4" x 5 yards (roll) - white	<b>36234</b>
3/4" x 5 yards (roll) - black	<b>35782</b>



### Magnetic strip

Flexible, permanently magnetized strip with premium quality, all-weather adhesive.

**.060 magnetic strip with pressure-sensitive adhesive**

Description	Part no.
1/2" x 100 ft.	<b>36203</b>
3/4" x 100 ft.	<b>36204</b>
1" x 100 ft.	<b>36205</b>
1" x 24" x 1/16"	<b>36227</b>

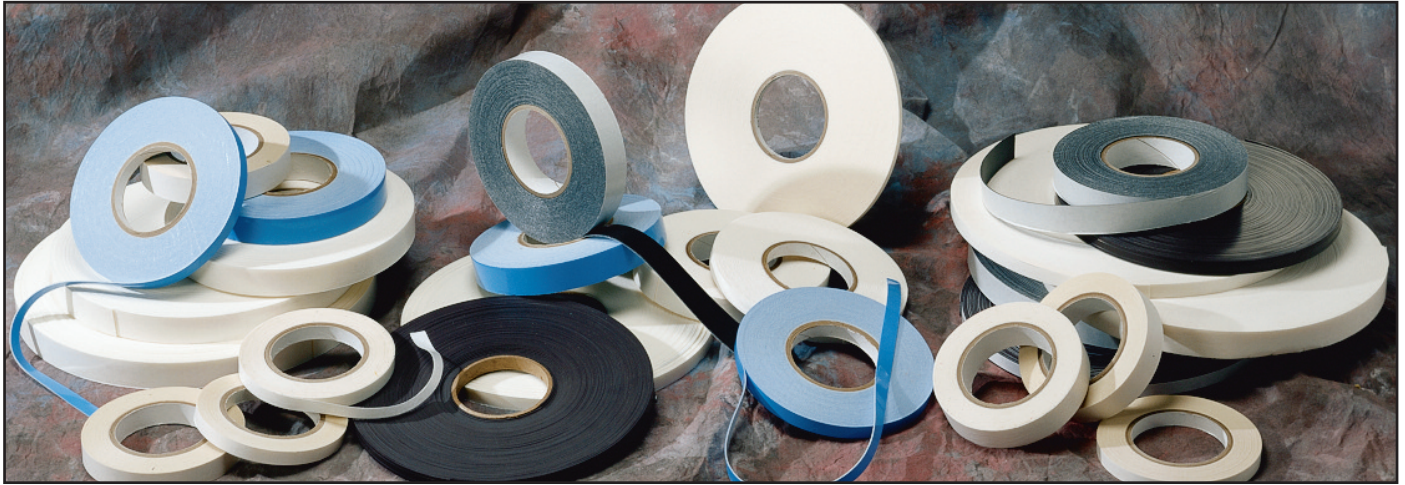
**.060 magnetic strip without adhesive**

Description	Part no.
1/2" x 100 ft.	<b>36206</b>
3/4" x 100 ft.	<b>36207</b>
1" x 100 ft.	<b>36208</b>

(Other sizes and thicknesses available by special quote.)

# ENGRAVING SUPPLIES

## Tapes and Adhesives

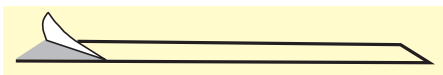


### Exterior double-coated foam tape

Cross-linked, closed cell white polyethylene foam coated with high tack, high shear acrylic adhesive system. Good chemical and fuel resistance. Adhesive performance is excellent for mounting applications. Use to attach signage to non-smooth exterior surfaces and to construct signage elements with insert windows.

#### Exterior foam tape - acrylic-based adhesive

Description	Part no.
1/32" x 1" x 72 yards - white	<b>36245</b>
1/32" x 1/2" x 72 yards - white	<b>36243</b>
1/16" x 2" x 36 yards - white	<b>36320</b>
1/16" x 1" x 36 yards - white	<b>36246</b>
1/16" x 1/2" x 36 yards - white	<b>36244</b>
1/32" x 3" x 36 yards - white	<b>36323</b>
1/32" x 2" x 36 yards - white	<b>36322</b>
1/32" x 1/4" x 36 yards - white	<b>36237</b>
1/32" x 1/4" x 36 yards - black	<b>36324</b>
1/32" x 1" x 18 yards - white	<b>36225</b>
1/32" x 1/2" x 18 yards - white	<b>36223</b>



### Exterior double-coated film tape

For applications where temperature extremes and environmental considerations are essential. Excellent bond to vinyls, dead-load acrylic adhesive coated on both sides of polyester files. Use to attach signage on smooth exterior surfaces and to assemble signage elements. This product is ideal for applying metal or plastic sheets to award plaques that will be placed in humid areas or areas that experience temperature changes.

#### Exterior film tape - acrylic-base adhesive

Description	Part no.
Acrylic film tape 3" x 36 yds.	<b>36326</b>
Acrylic film tape 2" x 36 yds.	<b>36325</b>
Acrylic film tape 1" x 36 yds.	<b>36220</b>
Acrylic film tape 1/2" x 36 yds.	<b>36232</b>
Acrylic film tape 6" x 18 yds.	<b>36327</b>
Acrylic film tape 12" x 18 yds.	<b>36328</b>

### Tape composition



### Interior double-coated foam tape

Cross-linked, closed cell polyethylene foam coated with high tack, high shear synthetic adhesive system. Good chemical and fuel resistance. Adhesive performance is excellent for mounting applications. Use to attach signage on rough interior surfaces and as spacer to assemble signage with insert windows.

#### Interior foam tape - rubber-base adhesive

Description	Part no.
1/32" x 1" x 72 yards - white	<b>36240</b>
1/32" x 1/2" x 72 yards - white	<b>36241</b>
1/32" x 1" x 72 yards - black	<b>35783</b>
1/32" x 1/2" x 72 yards - black	<b>35784</b>
1/16" x 1" x 36 yards - white	<b>36242</b>
1/32" x 1" x 18 yards - white	<b>36216</b>
1/32" x 1/2" x 18 yards - white	<b>36217</b>
1/32" x 1" x 18 yards - black	<b>35780</b>
1/16" x 1" x 18 yards - white	<b>36218</b>

### Interior double-coated film tape

Film coated on both sides with an aggressive rubber-based pressure-sensitive adhesive system. Use to attach signage on smooth interior surfaces and to assemble signage elements. This product is ideal for applying metal or plastic sheets to award plaques.

#### Interior film tape - rubber-base adhesive

Description	Part no.
1/2" x 36 yards	<b>36213</b>
1" x 36 yards	<b>36214</b>
2" x 36 yards	<b>36330</b>
3" x 36 yards	<b>36331</b>
6" x 18 yards	<b>36332</b>

### Interior paper tape

A 3.5 mm impregnated crepe paper coated on both sides with high quality synthetic adhesive system. For use in applications where tensile strength and additional thickness are needed for bonding and laminating or holding. Excellent for plate mounting. Economical adhesive tape for mounting metals and plastic plates to plaques and awards. Commonly used to stick sheets to the laser or engraving bed to reduce prevent material bowing or slippage during the engraving process.

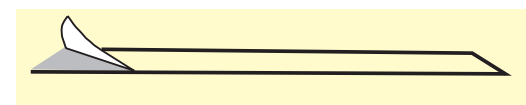
#### Interior paper tape - rubber-base adhesive

Description	Part no.
1/2" x 36 yards	<b>36210</b>
3/4" x 36 yards	<b>36211</b>
1" x 36 yards	<b>36212</b>

### Adhesive sheets

Lightweight paper stock coated on each side with aggressive rubber-based adhesive. Each adhesive layer is protected by a release-coated liner. Recommended for mounting on flat surfaces. Ideal for applying adhesive backing to engraving sheet stock.

Description	Part no.
Package of 10 12" x 12 1/2" sheets	<b>36219</b>



# ENGRAVING SUPPLIES

## Adhesives



### Gravo-Bond\*

Bonds plastic or metal to any surface. Use just a drop and it sets in 10 seconds. Gravo-Bond is a non-solvent based adhesive.

Description	Part no.
Gravo-Bond adhesive – 1 oz.	<b>36230</b>



### New Hermes cement\*\*

For bonding plastics or metal to any surface. Brown cement is specially formulated to use with phenolic.

Description	Part no.
Clear cement - 1 pint can	<b>48700</b>
Brown cement - 1 oz. tube	<b>47989</b>
Bond acrylic - 1 pint can	<b>36236</b>

## Oxidizing agents

### Aloxide and Gravoxide\*

Aloxide and Gravoxide induce a chemical reaction to blacken engraved areas for a contrasting effect. Apply to engraved area and wipe surface clean. 3 oz. bottle.



Description	Part no.
Aloxide 12pk	<b>32799</b>
Anodized aluminum	<b>32800</b>
Gravoxide 12pk	<b>32820</b>
Gravoxide for brass*	<b>32821</b>
Swab applicator	<b>32822</b>

*Edges of brass should not be exposed to Gravoxide. Not for use on gold-plated, hand-polished and/or lacquered items.*

## Paint/Color fills



### Engravocolor sticks

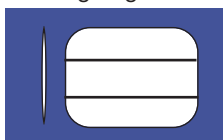
For brushless color filling of plastics and base metals. When ordering Engravocolor sticks separately, specify part number and quantity for each color. Sticks are .8 oz.

Color	Part no.
White	<b>32824</b>
Gold	<b>32825</b>
Silver	<b>32826</b>
Red	<b>32827</b>
Black	<b>32828</b>
Green	<b>32829</b>
Blue	<b>32830</b>
Yellow	<b>32831</b>
12 assorted (3 black, 3 white, 1 each of other colors)	<b>32823</b>

### Paint fill tool

For surface and subsurface paint fill applications. Engraved graphics and letters are color-filled with one pass. A must have tool for paint filling engraved work.

Part no. **36226**



### Laser colored foils

- Solid color 2 mm thick mylar tape for laser engraving
- Adds color and richness to your laser engraved pieces
- Permanent acrylic adhesive great for woods

Description	Part no.
Black 6" x 25" Roll	<b>45887</b>
Blue 6" x 25" Roll	<b>45888</b>
Green 6" x 25" Roll	<b>45894</b>
Red 6" x 25" Roll	<b>45955</b>
Bright gold 6" x 25" Roll	<b>46119</b>
Brushed gold 6" x 25" Roll	<b>46120</b>
Silver 6" x 25" Roll	<b>46123</b>

### Paint fill pen

Tool for use in engraving & paint filling. No outside source/compressed air needed. Comes with 4 different easy-to-change tip sizes. A must for engravers who color fill.

**51674**



### Engravers Enamel\*

For filling engraving in metal and plastic. Not recommended for use on Metallex. 1/2 pint cans.

Color	Part no.	Color	Part no.
White	<b>32808</b>	Blue	<b>32814</b>
Black	<b>32812</b>	Yellow	<b>32815</b>
Gold	<b>32809</b>	Gray	<b>32817</b>
Red	<b>32811</b>	Almond	<b>32816</b>
Green	<b>32813</b>	Orange	<b>32810</b>

### Rub N Buff

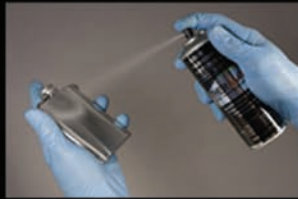
For rich looking fills on non-porous surfaces. Excellent engraving color fill for glass. Just dab on, rub in, and buff off excess.



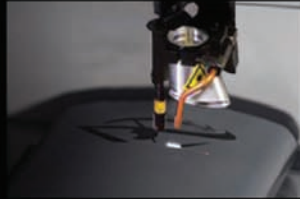
Color	Part no.
Grecian gold	<b>51675</b>
Silver	<b>51672</b>
Spanish copper	<b>51676</b>
Black	<b>51677</b>
White	<b>51678</b>

**\*These items are shipped via ground transportation only.**

# ENGRAVING SUPPLIES



Spray thin coat & let dry



Bond with a CO<sub>2</sub> laser



Wash to reveal mark

**All products work with most uncoded metals. Excellent for metal marking with a CO<sub>2</sub> laser. Read instructions carefully before use.**



## TherMark laser marking tape For efficient dry permanent marking

TherMark tape is an ideal product for expanding the range of materials that can be marked with a CO<sub>2</sub> laser engraver. Available in a 50ft roll in 3 standard widths (1", 2" & 3" wide), it can be used to create high contrast, permanent black marks on bare, plated and anodized metals. Cut the tape to the size of the mark, then simply apply by hand and engrave with a 30W and above laser. The excess tape is then peeled off to reveal the final mark. This product is suitable for outdoor use.

### Description

TherMark laserable tape 1" wide  
TherMark laserable tape 2" wide  
TherMark laserable tape 3" wide

### Part no.

48315  
48314  
46255



## TherMark laser marking spray and pastes Water-based for fast clean up

TherMark liquid pastes allow most metals to be quickly marked using a CO<sub>2</sub> laser engraver. A thin coat of material can be painted or sprayed onto the metal, then left to dry for less than 2 minutes. Engrave with your laser of 25W or greater to produce high contrast, permanent black marks. The excess water-based materials can be easily washed off to reveal the final mark.

### Description

TherMark LMM14 6 oz aerosol spray  
TherMark LMM14 50g liquid paste  
TherMark LMM14 250g liquid paste

### Part no.

47821\*  
47822  
47823



## CerMark laser marking spray and pastes Solvent-based for easy handling before marking

CerMark metal marking pastes also allow most metals to be marked using a CO<sub>2</sub> laser engraver. Similar to TherMark liquids, the CerMark products contain a hardener that allows the products to be easily handled prior to marking with your laser. The final result is the same permanent black marks on a range of bare metals. Good for CO<sub>2</sub> lasers, 25W and above.

### Description

CerMark LMM6000 12 oz aerosol spray  
CerMark LMM6000 50g liquid paste  
CerMark LMM6000 250g liquid paste  
CerMark LMM6000 500g liquid paste

### Part no.

31086\*  
45694\*  
31085\*  
50808\*



\*These items are shipped via ground transportation only.

# DEALER KITS

New accounts are the lifeline of any business. Branching out into new markets is one way to grow your business and maximize your engraving capabilities. Our sales kits will get you started without extensive product selection and inventory commitments. Here's how it works. Choose the sales kit of your choice. You save at least 25% off the regular individual selling price.

## Dealer kits

Includes all imprintable and New Hermes literature.

### A. Modular frame presentation kit

Engraved signs displayed on Velcro boards. Features our most popular materials and frame sizes. In a sturdy leather-look portfolio.

**Part no. 36318**



### B. Engravers Slatz sign presentation kit

Engraved multi-column, standard and multi-directories, plus wallplates. Kit also includes two Velcro® boards for display.

**Part no. 36319**



### F. Eternity kit demo case

#### Description

A variety of frames and sizes

**Part no. 51656**



### Introductory kits

### C. Modular frame starter kit

Seven most popular sizes in black, gray and brown. Total of 21 round and square corner frames combined. Includes wall mount, snap locks and suction cups.

**Part no. 35486**

### D. Engravers Slatz sign starter kit

Includes standard silver directory, one each of gold and silver mini-directory, deskbar, wallplate and deskplate.

**Part no. 35485**



### E. Swatch books

Actual sample chips show the surface and letter colors of all Gravograph materials. Each material is segregated by product line.

#### Description

Swatch book kit (including all plastics)

**Part no. 36279**

Vinyl swatch book

(not included in swatch book)

**36753**



### G. Raised letter signage system materials and frames

Pre-cut strips and plates of GravoTac 1/16" profiling material in black and white, equal to 8 full sheets. Plus, 38 black square corner modular frames in the most popular sizes.

**Part no. 36277**



### H. Raised letter signage systems-materials only

Pre-cut strips and plates of GravoTac 1/16" backplate and 1/32" profiling material in black, red and yellow, equal to 10 full sheets.



**Part no. 36291**

### I. Gravograph print and digital catalogs



#### Description

Materials catalog  
Materials catalog on CD  
Engravables catalog  
Engravables catalog on CD  
Laserable wood catalog  
Laserable wood catalog on CD  
Materials swatch book

**Part no.**

**51659**  
**51660**  
**51661**  
**51662**  
**51663**  
**51664**  
**51665**

Within the continental US call 1.800.843.7637

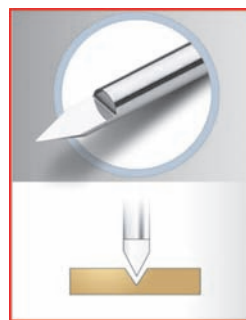
Outside the continental US call +1.770.623.0331

# ENGRAVING CUTTERS

HOW TO SELECT CUTTING WIDTH											
Height of character →	1/64"	1/32"	1/16"	1/8"	1/4"	5/16"	1/2"	3/4"	1"	1 1/4"	2"
<p>The width of the cut is directly related to the height of the engraved character. This chart is a useful guide to help you select cutter tip widths for various engraved letter heights.</p> <p>Width of cutter</p>	B	B	B	B	B	B	B	B	B	B	B
<b>Single line font</b>	.005	.010	.015	.020	.030	.040	.060	.090	.125	.171	.250
<b>Multi line font</b>	.005	.005	.010	.010	.015	.015	.030	.040	.060	.060	.090

## 1/8" ONECUT CUTTERS

**1/8" shank size** - compatible with M20 Jewel, M20 3 Axis, M20 4 Axis, IM4, IM3, ITM, ITL, and IF3 machines. Unless otherwise stated, cutter length is 4-5 inches (101.6 mm-127 mm)



### 1/8" Diamond Drag cutters for metal

Cutting width Part no.  
.020 33954

### 1/8" Rotating cutter for harder metals and glass

Cutting width Part no.  
.005 52163  
.010 52183  
.020 51089  
.030 52184

### 1/8" Diamond Drag Inserts for metal

IM4RM & M20 7/16" length Fixed Diamond  
Part no. 33825

Manual Inside Ring Engraver 5/16" length  
Part no. 28187

For Heavy Duty Diamond Spindle With insert (1" long for #22224 Spindle)  
Part no. 33827

### 1/8" Burnishing cutters for coated and polished metals

Trophy Brass, Colored and Marbled Steel, Gravaxal, and Gravometal

Cutting width Part no.  
.005 33855  
.010 33856  
.015 33857  
.020 33858  
.030 33860  
.040 33861  
.060 33862  
.090 33863

### 1/8" Carbide cutters for plastic

GPLY I & II, Ultra, Gravalase, Metallex & Metallex 2

Cutting width Part no.  
.005 33855  
.010 33856  
.015 33857  
.020 33858  
.030 33860  
.040 33861  
.060 33862  
.090 33863  
.125 33864

### 1/8" Carbide cutters for Gravostrat

Cutting width Part no.  
.010 33836  
.015 33837  
.020 33838  
.030 33839  
.040 33840  
.060 33841  
.090 33842  
.125 33843





# ENGRAVING CUTTERS

## 1/8" ONECUT CUTTERS

1/8" shank size - compatible with M20 Jewel, M20 3 Axis, M20 4 Axis, IM4, IM3, ITM, ITL, and IF3 machines



**1/8" Carbide cutters for Acrylic and all Gravoglas**  
110° cutting angle for letters over .5"

Cutting width	Part no.
0.005	33924
0.015	33926
0.020	33927
0.030	33928
0.040	33929
0.060	33930
0.090	33931
0.125	33932

**1/8" HSS cutters for Acrylic and all Gravoglas**  
70° cutting angle

Cutting width	Part no.
0.005	33910
0.010	33911
0.015	33912
0.020	33913
0.030	33914
0.040	33915
0.060	33916
0.090	33917
0.125	33918

**1/8" Carbide cutters for Acrylic and all Gravoglas**

Cutting width	Part no.
.010	33934
.015	33935
.020	33936
.030	33937
.040	33938
.060	33939
.090	33940
.125	33941

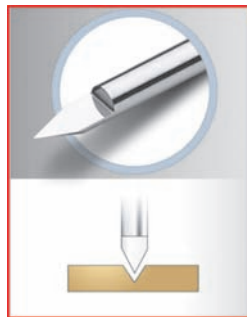
**1/8" Carbide cutters for deep engraving aluminum brass and soft metals**

Gravoxal, Gravometal, Gravostral, Colored Aluminum, Trophy Brass, Colored and Marbled Steel

Cutting width	Part no.
.005	33866
.010	33867
.015	33868
.020	33869
.030	33870
.040	33871
.060	33872

**1/8" Carbide cutters for ferrous metals for deep engraving in steel and ferrous metals**

Cutting width	Part no.
0.010	33847
0.015	33848
0.020	33849
0.030	33850
0.040	33851
0.060	33852
0.090	33853
0.125	33854



**1/8" HSS cutters for ferrous metals for deep engraving in steel and ferrous metals**

Cutting width	Part no.
0.005	33900
0.010	33901
0.015	33902
0.020	33903
0.030	33904
0.040	33905
0.060	33906
0.090	33907
0.125	33908

**1/8" Wide Angle cutters for painted, or coated aluminum, brass and soft metals**

Gravoxal, Colored Aluminum, Trophy Brass, Colored & Marbled Steel and Gravometal

Cutting width	Part no.
.010	33888
.015	33889
.020	33890
.030	33892
.040	33893
.060	33894
.090	33895
.125	33896

**1/8" Quarter Round cutters for stainless steel and other hard metals**

Cutting width	Part no.
.005	33943
.010	33944
.015	33945
.020	33946
.030	33948
.040	33949
.060	33950
.090	33951
.125	33952

**1/8" Parallel cutters for 90° cut outs**

Material type	Part no.
Gravoply	33865
Phenolic	33844
Ferrous Metals	33909

Please see page 83 "How To Choose Parallel Cutters"

**1/8" Radius Cutters for rounded cut**

Use reverse engraving on Gravoglass for neon tube look. Also used for gasket grooves & 3D milling

Material Type	Part no.
Gravoply	33865R
Phenolic	33844R
Ferrous Metals	33909R

Please see page 83 "How To Choose Parallel Cutters"

**FOR ADA CUTTERS, SEE PAGE 42**

# ENGRAVING CUTTERS

## 11/64" ONECUT CUTTERS

11/64" shank size - compatible with TXL, IS, M,  
and Vanguard series machines



### Diamond 11/64" for Drag and Rotating cutters for metal

Cutting width	Part no.
.020 (Diamond Drag)	34094
.020 (Rotating)	34095

### Glass Engraving Faceted Diamond Rotating cutters Max depth .003

(use Gravalube for best results)

Cutting width	Part no.
.010	34122
.015	34123
.030	34124

### Glass Engraving Sintered Diamond Rotating cutters Max Depth .003

(use Gravalube for best results)

Cutting width	Part no.
.030	34119
.060	34120
.090	43121

### 11/64" Burnishing cutters for coated and polished metals

Trophy Brass, Colored and Marbled Steel, Gravaxal, and Gravometal

Maximum depth .002  
(use light pressure setting for best results)

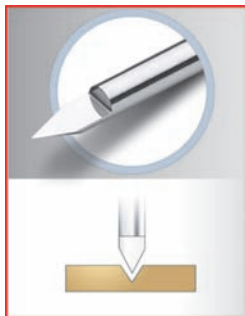
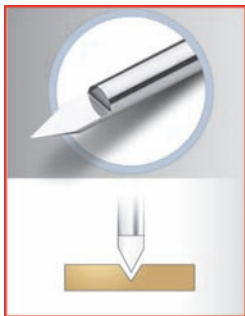
Cutting width	Part no.
.005	34036
.010	34037
.015	34038
.020	34039
.030	34041
.040	34042
.060	34043
.090	34044

### 11/64" Carbide cutters for plastic GPLY I & II, Ultra, Gravalase & Metallex, Metallex 2

Cutting width	Part no.
.005	34012
.010	34013
.015	34014
.020	34015
.030	34017
.040	34018
.060	34019
.090	34020
.125	34021
.171	34022

### 11/64" Carbide cutters for Gravostrat

Cutting width	Part no.
.005	33989
.010	33990
.015	33991
.020	33992
.030	33993
.040	33994
.060	33995
.090	33996
.125	33997
.171	33998



### 11/64" HSS cutters for Acrylic and all Gravoglas 70° cutting angle

Cutting width	Part no.
0.005	34075
0.010	34076
0.015	34077
0.020	34078
0.030	34079
0.040	34080
0.060	34081
0.090	34082
0.125	34083
0.171	34084

### 11/64" Carbide cutters for Acrylic All Gravoglas and Acrylic

Cutting width	Part no.
.005	34108
.010	34109
.015	34110
.020	34111
.030	34112
.040	34113
.060	34114
.090	34115
.125	34116
.171	34117

### 11/64" Carbide cutters for Acrylic for all Gravoglas 110° cutting angle for letters over .5"

Cutting width	Part no.
0.010	34099
0.015	34100
0.020	34101
0.030	34102
0.040	34103
0.060	34104
0.090	34105
0.125	34106
0.171	34107

### 11/64" Carbide cutters for deep engraving aluminum brass and soft metals

Gravaxal, Gravometal, Gravostrat, Colored Aluminum, Trophy Brass, Colored and Marbled Steel

Cutting width	Part no.
.005	34024
.010	34025
.015	34026
.020	34027
.030	34028
.040	34029
.060	34030
.090	34031
.125	34032
.171	34033

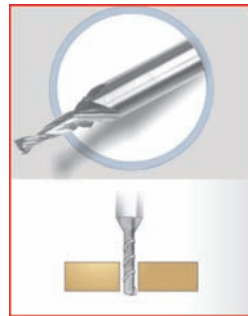
### 11/64" Carbide cutters for deep engraving steel and ferrous metals

Cutting width	Part no.
.005	34000
.010	34001
.015	34002
.020	34003
.030	34004
.040	34005
.060	34006
.090	34007
.125	34008
.171	34009

# ENGRAVING CUTTERS

## 11/64" ONECUT CUTTERS

11/64" shank size - compatible with TXL, IS, M, and Vanguard series machines



**11/64" HSS cutters for ferrous metals for deep engraving in steel and ferrous metals**

Cutting width	Part no.
0.005	34064
0.010	34065
0.015	34066
0.020	34067
0.030	34068
0.040	34069
0.060	34070
0.090	34071
0.125	34072
0.071	34073

**11/64" Wide Angle cutters for painted, or coated aluminum, brass and soft metals**

Gravoxal, Colored Aluminum, Trophy Brass, Colored & Marbled Steel, and Gravometal	
Cutting width	Part no.
.005	34049
.010	34050
.015	34051
.020	34052
.030	34054
.040	34055
.060	34056
.090	34057
.125	34058
.171	34059

**11/64" Quarter Round cutters for stainless steel and other hard metals**

Cutting width	Part no.
.005	34126
.010	34127
.015	34128
.020	34130
.030	34132
.040	34133
.060	34134
.090	34135
.125	34136
.171	34137

**11/64" End Mill cutters for deep routing in metal**

Cutting width	Part no.
.060	34146
.090	34147
.125	34148
.171	34149

**11/64" Parallel cutters for 90° cut outs**

Material Type	Part no.
Gravoply	34023
Phenolic	33999
Acrylic	34118
Ferrous Metals	34010
Aluminum	34034

Please see page 83 "How To Choose Parallel Cutters"



**11/64" Radius Cutters for rounded cut**

Use reverse engraving on Gravoglas for neon tube look. Also used for gasket grooves & 3D milling

Material Type	Part no.
Gravoply	34023R
Phenolic	33999R
Acrylic	34118R
Ferrous Metals	34010R
Aluminum	34034R

Please see page 83 "How To Choose Parallel Cutters"

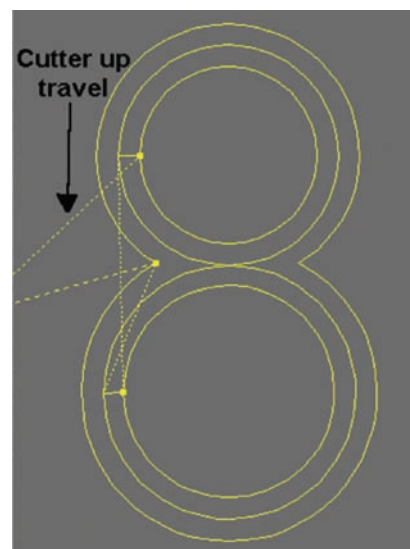
## FONT TYPES ARE CRITICAL TO ENGRAVING QUALITY AND TIME

There are 2 main types of fonts for engraving: TrueType (print fonts), and preengineered engraving fonts.

TrueType fonts are outline fonts. They can be filled for a solid, bold look. Filling requires the engraving program to calculate the tool paths.

Engraving fonts are pre-engineered fonts with optimized tool paths designed for reducing engraving time and optimizing engraving quality. Engraving fonts are optimized with reduced tool lifts, tool paths starting from the inside of a contour - so you don't lose the leading edge of a filled contour which causes "dimpling". Direction of tool path is predetermined for high quality engraving. The engraving path order is optimized as a time saving measure. Use single-line fonts to increase production speed.

When selecting cutters, please use the B chart on page 78 as a guideline for choosing the appropriate sized tip for engraving.



# ENGRAVING CUTTERS

## 1/4" ONECUT CUTTERS

1/4" shank size - compatible with 1/4" Collet spindles



### 1/4" Diamond Drag cutters for metal

Cutting width	Part no.
.020	34261

### 1/4" Diamond Rotating cutters for metal

Cutting width	Part no.
.020	34260

### 1/4" Burnishing cutters for coated and polished metals. Trophy Brass, Colored and Marbled Steel, Gravoxal, and Gravometal

Maximum depth .002 (use light pressure setting for best results)

Cutting width	Part no.
.010	34207
.015	34208
.020	34209
.030	34211
.040	34212
.060	34213
.090	34214

### 1/4" Carbide cutters for plastic GPLY I & II, Ultra, Gravolase, Metallex & Metallex 2

Cutting width	Part no.
.005	34184
.010	34185
.015	34186
.020	34187
.030	34189
.040	34190
.060	34191
.090	34192
.125	34193
.171	34194
.250	34196

### 1/4" Carbide cutters for Gravostrat and Gravoply 2-Plex

Cutting width	Part no.
.005	34158
.010	34159
.015	34160
.020	34161
.030	34162
.040	34163
.060	34164
.090	34165
.171	34167
.250	34169

### 1/4" Carbide cutters for Acrylic All Gravoglas and Acrylic 70° cutting angle for deep engraving

Cutting width	Part no.
.010	34273
.015	34274
.020	34275
.030	34276
.040	34277
.060	34278
.090	34279
.125	34280
.171	34281
.187	34282
.250	34283



### 1/4" Carbide cutters for Acrylic and all Gravoglas 110° cutting angle for letters over .5"

Cutting width	Part no.
0.030	34265
0.060	34267
0.171	34270
0.250	34272

### 1/4" HSS cutters for Acrylic and all Gravoglas 70° cutting angle

Cutting width	Part no.
0.010	34248
0.015	34249
0.020	34250
0.030	34251
0.040	34252
0.060	34253
0.090	34254
0.125	34255
0.171	34256
0.187	34257
0.250	34258

### 1/4" Carbide cutters for deep engraving aluminum, brass and soft metals

Gravoxal, Gravometal, Gravostrat, Colored Aluminum, Trophy Brass, Colored and Marbled Steel

Cutting width	Part no.
.005	34198
.010	34199
.015	34200
.020	34201
.030	34202
.040	34203
.060	34204

### 1/4" Wide Angle cutters for painted or coated aluminum, brass and soft metals

Gravoxal, Colored Aluminum, Trophy Brass, Colored & Marbled Steel, and Gravometal

Cutting width	Part no.
.010	34219
.015	34220
.020	34221
.030	34223
.040	34224
.060	34225
.090	34226
.125	34227
.171	34228
.190	34229
.250	34230

### 1/4" Carbide 18° cutters for deep engraving steel and ferrous metals

Cutting width	Part no.
.005	34309
.010	34310
.015	34311
.030	34312

# ENGRAVING CUTTERS

## 1/4" ONECUT CUTTERS

1/4" shank size - compatible with 1/4" Collet spindles



**1/4" HSS cutters for ferrous metals for deep engraving in steel and ferrous metals**

Cutting width	Part no.
0.005	34236
0.010	34237
0.015	34238
0.020	34239
0.030	34240
0.040	34241
0.060	34242
0.125	34244
0.250	34247

**1/4" Quarter Round cutters for stainless steel and other hard metals**

Cutting width	Part no.
.005	34285
.010	34286
.015	34287
.020	34288
.030	34290
.040	34291
.060	34292
.090	34293
.125	34294
.171	34295

**1/4" Carbide 20° cutters for deep engraving steel and ferrous metals**

Cutting width	Part no.
.005	34313
.010	34314
.015	34315

**1/4" End Mill cutters for deep routing in metal**

Cutting width	Part no.
.060	34303
.090	34304
.125	34305
.250	34306

**1/4" Parallel cutters for 90° cut outs**

Material Type	Part no.
Gravoply	34023
Phenolic	33999
Ferrous metals	34010

Please see page 83 "How To Choose Parallel Cutters"



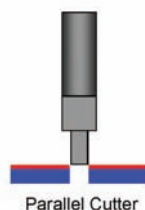
**1/4" Radius cutters for rounded cut**

Use reverse engraving on Gravoglas for neon tube look. Also used for gasket grooves & 3D milling

Material type	Part no.
Gravoply	34023R
Phenolic	33999R
Ferrous metals	34010R

Please see "How To Choose Parallel Cutters" to the right

## HOW TO CHOOSE PARALLEL CUTTERS



Parallel Cutter

**Typical applications** – Typical applications for Parallel cutters include cutting holes and routing flexible engraving plastic.

**Type of cut** – The main difference between Parallel cutters and standard engraving cutters is that the cut is vertical rather than beveled.

### How to order

- 1) Choose the cutter family by the material you are engraving or cutting, and the cutter composition. For soft plastic, choose either Carbide or High Speed Steel (HSS). Carbide lasts longer but costs more than High Speed Steel (HSS). For metal, carbide is recommended.
- 2) Specify the tip diameter size.
  - Tip sizes can be specified from .015" to the shank diameter.
- 3) Specify the cutting depth.
  - For best strength, specify tip length up to 1.5 times the tip diameter.
  - Tip lengths > 1.5 x tip size can be specified, but they will tend to break easier.
- 4) Call Customer Service at 1-800-843-7637 to place an order.

**Parallel cutters vs. engraving cutters where tip size equals shank diameter** – Standard conical cutters with tip size equal to shank size will also provide a vertical cut. The difference is that the cutting depth is fixed with engraving cutters, but can be specified with Parallel cutters.

Typically, the cutting depth of engraving cutters with tip size equal to shank diameter is in the range of .125" - .150". These are primarily for engraving applications, but can also be used for routing.

**Application tips** – Cutting or routing 1/8" acrylic is best performed with a 90 x 150 Parallel cutter (.090" tip and .150 length). The Carbide tool is part number 34118, and the HSS tool is part number 34085. Cutting in one pass can be accomplished with the 200 watt spindle motor. Cut in multiple passes when using the 80 watt spindle motor.

Cutting or routing 1/4" acrylic is best performed with a 171 x 275 Parallel cutter (.171" tip and .275 length). The Carbide tool is part number 34118 and the HSS tool is part number 34085. This should be cut in multiple passes.

**Radius cutters** – Radius cutters are similar to Parallel cutters except for having a rounded shape. These are specified the same. Available in HSS or Carbide for tip sizes at least .030". Applications include reverse engraving, 3D contouring & gasket grooves.

# SPECIALTY CUTTERS AND ACCESSORIES

## Gravoglyde attachment



Add the Gravoglyde attachment to your cutter to get a light pressure or soft touch for a great polished look for burnishing (not for M series machines).

For 1/8" cutters	34379
For 11/64" cutters	34384

## Yellow handle cutter wrench

To tighten and loosen set-screws in brass collar of 1/8", 11/64", and 1/4" cutters.

33015

## Black handle cutter wrench

To tighten and loosen set-screws in brass collar of M20 and M40 machine spindles (for cutter replacement).

10016

## Wrench for diamond inserts

To tighten and loosen set screws holding diamond inserts.

33009



## Ball Point Pen cutter

Used to verify engraving location on tape prior to engraving to prevent costly mistakes.

1/8" Ball Point Pen cutter for IM4 and M20 machines	47112
Ball point pen assy. (11/64" shaft) M40 only	21679
Ball point pen assy. (11/64" shaft) IS Series only	33568
Ball point pen cartridge replacement (medium) 2 per pack	33569
Paper and card holder - 8" to "pen-out" jobs	33571

## Diamond inserts

5/16" length, 1/8" shank for manual Inside ring engraver and IM4RM	28187
7/16" length, 1/8" shank for M20 Pix and M20 Fixed Diamond	33825
Heavy duty diamond spindle with insert, non-rotating	22224
1" replacement insert for 22224	33827

## Cutters for collet spindles

All 2" length unless specified



### Bottom Load Tools

Description		Part no.
1/8 Carbide Cutter 010 1.5in	Hf Spindle; 1.5in Len	52182
1/8 Carbide Cutter 020 1.5in	Hf Spindle; 1.5in Len	52181
1/8 Ball End Mill 1/32d	1.5in 4flute Tin Coat	48464
1/8 Ball End Mill 3/64d	1.5in 4flute Tin Coat	48465
1/4 Carbide Cutter 15° 0.002	For 1/4 Collet 2in	34307
1/4 Carbide Cutter 20° 0.005	For 1/4 Collet 2in	34313
1/4 Carbide Cutter 18° 0.010	For 1/4 Collet 2in	34310
1/4 Carbide Cutter 20° 0.010	For 1/4 Collet 2in	34314
1/4 Carbide Cutter 18° 0.015	For 1/4 Collet 2in	34311
1/4 Carbide Cutter 20° 0.015	For 1/4 Collet 2in	34315
1/4 Stencil Carbide Cutter 010	For 1/4 Collet 2in	52179
1/8 Stencil Carbide Cutter 010	For 1/8 Collet 2in	52180
1/4 End Mill 092d 2in 2flute	For 1/4 Collet 2in	34304
1/4 End Mill 250d 2in 2flute	For 1/4 Collet 2in	34306
1/4 End Mill 125d 2in 2flute	For 1/4 Collet 2in	34305
1/4 End Mill 062d 2in 2flute	For 1/4 Collet 2in	34303
1/4 End Mill 125d 2in 2flute	For Router	46360
1/4 Ball End Mill 125d 2in 2flute	For Router	46043
1/4 End Mill 250d 2in 2flute	For Router	46359
1/4 Ball End Mill 250d 2in 2flute	For Router	46044

### Top Load Tools

1/8 Stencil HSS Cutter 010	Top Load 18°	33898
1/4 Stencil Carbide Cutter 010	Top Load 18°	34155
1/4 Stencil HSS Cutter 010	Top Load 18°	34232
11/64 Stencil Carbide Cutter 010	Top Load 18°	33984
11/64 Stencil HSS Cutter 010	Top Load 18°	34061
11/64 Stencil HSS Cutter 040	Top Load 18°	34091
11/64 Stencil HSS Cutter 060	Top Load 18°	34092
11/64 Stencil HSS Cutter 080	Top Load 18°	34093
11/64 Engr.End Mill 060 Cutter	6-3/8 Lg.	34146
11/64 Engr.End Mill 090 Cutter	6-3/8 Lg.	34147
11/64 Engr.End Mill 125 Cutter	6-3/8 Lg.	34148
11/64 Engr.End Mill 171 Cutter	6-3/8 Lg.	34149



## Beveling cutter

45° angle for matrix beveling cutouts on computerized machine

Description	Part no.
1/8	33960
11/64	34048

## .015 Modified Faceted cutter for glass engraving

Use with nose cone 32777

Description	Part no.
11/64 Modified Faceted cutter 015 6" Long	49720



Custom cutter sizes are available upon request

## ONECUT Cutter Sharpening Service

Resharpen	Part number
Carbide tip	36671
Parallel cutter	36672
End mill	36669
Diamond cutter	36667
Diamond glass cutter	36666

### Note:

Diamond cutters missing diamond tips can't be resharpened.

Saw blades, shear blades and corner shaper cutters resharpening service available.

Please send cutters to:

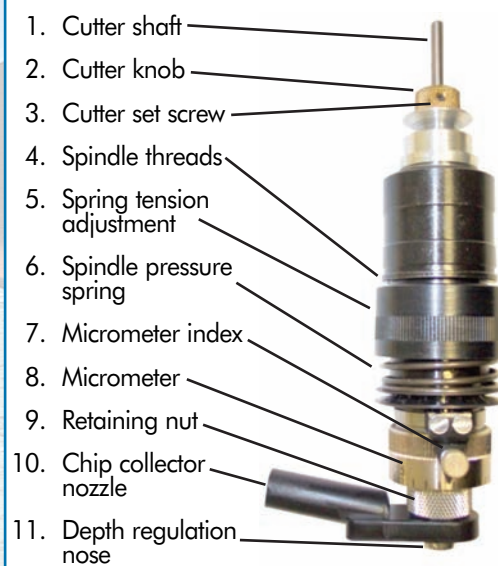
**Gravograph Cutter Sharpening Service**

**2144 Bridge Avenue • Point Pleasant, NJ 08742**

# SETTING YOUR CUTTERS TO ZERO FOR SURFACE & SUBSURFACE ENGRAVING

This procedure is a one-time operation performed before using a new engraving cutter. It is a best practice that will improve productivity. It will allow changing cutters without having to re-adjust the micrometer

1. Turn micrometer gauge in the direction of increasing numbers until it stops
2. Back off 3 full turns to 0. Tighten the micrometer set screw. This will allow up to .075"/1.90 mm engraving/cutting depth to be dialed in later. If you are cutting out 1/8"/3.18 mm material, back off 5 full turns.
3. Screw in desired cutter (reverse threads) making sure cutter tip is not sticking out of the nose cone. You may need to adjust cutter offset with yellow cutter wrench.
4. Using the arrows on control pendant, move spindle over flat table.
5. Press Z on the control pendant (LCD reads Z=0.000 inch  $\updownarrow$  to change).
6. Press the down arrow on control pendant until nose cone touches the table (& there is slight separation between the snap ring and spindle assembly).
7. Loosen the black set screw on the brass collar of the cutter (with yellow wrench) and carefully lower the cutter down until it just touches the material. Then tighten set screw.
8. Without moving the spindle, repeat the previous step on all the plastic cutters and place in cutter rack.
9. Press check  $\checkmark$  on the control pendant to raise the spindle back up. Press X to cancel the XY jog mode.

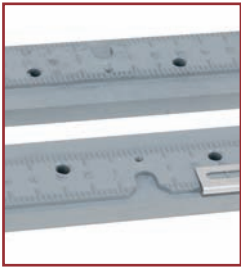


## MATERIAL ENGRAVING DEPTH & THICKNESS CHART

Micrometer Setting	Engraving Depth	Material Thickness				
		.020"	1/32"	1/16"	3/32"	1/8"
Gravoglas 1	.005"/0.127 mm			<input checked="" type="checkbox"/>	.	<input checked="" type="checkbox"/>
Gravoglas 2-Plex	.012"/0.304 mm			<input checked="" type="checkbox"/>	.	<input checked="" type="checkbox"/>
Gravolase	.003"/0.076 mm	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
Gravoply 1	.012"/0.304 mm		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Gravoply 2	.003"/0.076 mm		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	.	<input checked="" type="checkbox"/>
Gravoply 3C (bottom)	.012"/0.304 mm			<input checked="" type="checkbox"/>	.	<input checked="" type="checkbox"/>
Gravoply 3C (top)	.002"/0.050 mm			<input checked="" type="checkbox"/>	.	<input checked="" type="checkbox"/>
Gravoply Ultra	.004"/0.101 mm	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Gravostral	.012"/0.304 mm			<input checked="" type="checkbox"/>	.	<input checked="" type="checkbox"/>
Gravostrat	.008"/0.203 mm			<input checked="" type="checkbox"/>	.	<input checked="" type="checkbox"/>
GravoTac	profile only		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	.	<input checked="" type="checkbox"/>
Metallex	.003"/0.076 mm		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Cutting depth for cutouts	.020	.030	.058	.090	.120
	Cutting depth for ADA profiling		.035	.064*		

\*For ADA profile letters on inlay signs.

# JIGS AND HOLDING DEVICES



**NAMEPLATE JIG** with stop (6" long)  
32936 - for machines with 3/16" vise pins  
32937 - for all IS\* machines, or machines with 5 mm vise pins



**FLAT PLATE JIG** (5.5" long)  
31367 - for machines with 3/16" vise pins  
31368 - for all IS\* machines, or machines with 5 mm vise pins



**ALUMINUM JIG** (9.5" long)  
Holds name plates, or flat items.  
22872 - For use with machines\* with 5 mm vise pins



**JEWELRY NAME PLATE JIG**  
32922 - for machines with 3/16" vise pins  
32923 - for all IS\* machines, or machines with 5 mm vise pins



**WATCH JIG**  
32926 - for machines with 3/16" vise pins  
32927 - for all IS\* machines, or machines with 5 mm vise pins



**ID BRACELET JIG**  
Part no. 28192 for all M series and IS series machines



**SIGNET RING JIG**  
32908 - for machines with 3/16" vise pins  
32909 - for all IS\* machines, or machines with 5 mm vise pins



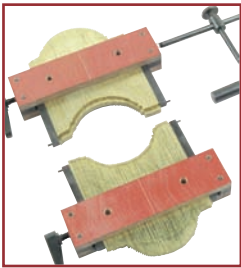
**CHARM AND BANGLE BRACELET JIG**  
32892 - for use with machines\* with 3/16" or 5mm vise pins



**JEWELRY VISE**  
Holds small jewelry items.  
22870 - For use with machines\* with 5 mm vise pins



**IRREGULAR SHAPE**  
Holds irregular shaped items - comes with 6 pins.  
32887 - for use with machines\* with 3/16" or 5mm vise pins.  
33089 - 6 extra pins



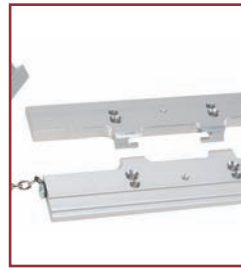
**MULTI-PURPOSE JIG**  
Holds items of many shapes and sizes. Sliding pins conform to the shape of the object to be held.  
20193 - for machines with 3/16" vise pins  
30628 - for all IS\* machines, or machines with 5 mm vise pins



**FLATWARE JIG**  
32875 - for machines with 3/16" vise pins  
32878 - for all IS\* machines, or machines with 5 mm vise pins



**RUBBER PEN JIGS**  
32882 - Jigs will not scratch parts. These are compliant yet firm enough to securely hold irregularly shaped objects



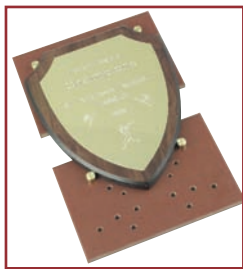
**CROSS PEN JIG**  
32897 - for use with machines with 3/16" or 5mm vise pins



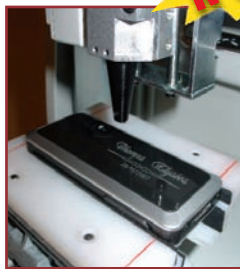
**PEN AND TUBULAR OBJECT JIG**  
32881 - for use with machines with 3/16" or 5mm vise pins



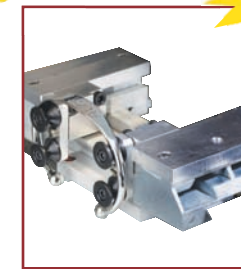
**GRAVOFOIL JIG**  
For use with thin material like Gravofoil.  
22868 - For use with all engraving machines that have a vise



**PLAQUE JIG**  
32893 - for use with machines with 3/16" vise pins  
32931 - for all IS\* machines, or machines with 5 mm vise pins



**CELL PHONE JIG**  
49510 - specially designed to hold cell phones and electronic devices such as ipods, PSP games, etc.  
For all M series and IS machines, or machines with 5 mm vise pins



**BANGLE BRACELET JIG**  
51729 - for outside engraving of bangle bracelets; Works in 90° engraving mode.  
For all M series and IS machines, or machines with 5 mm vise pins

**Gravograph provides an extremely wide selection of jigs, developed for and with customers.**

**\*All jigs with 5 mm vise pins can be used with IS and M series machines**



# ENGRAVING NOSE CONES

## FOR REGULATING ENGRAVING DEPTH

Depth noses are essential in ensuring perfect and constant engraving depth. We offer a wide variety of noses which are compatible with all our machines.



.040 Steel nose cone for 1/8" cutters. Uses up to .020 cutter widths  
Part no. 20130



.060 Steel nose cone for 11/64" cutters. Uses up to .040 cutter widths  
Part no. 32777



.092 Steel nose cone for 11/64" cutters. Uses up to .060 cutter widths  
Part no. 20486



.185 Steel nose cone for 11/64" cutters. Uses up to .171 cutter widths  
Part no. 12215



.093 Steel nose cone for 1/4" cutters. Uses up to .060 cutter widths  
Part no. 20936



Wide nose for filling larger text/logos - to maintain contact with the surface of the material to prevent "dimples or low spots" 16 mm .63 opening  
Part no. 20960



.250 Steel nose cone for 1/4" cutters. Uses up to .187 cutter widths  
Part no. 20491



5mm Steel Swivel nose cone for 11/64" cutters. For glass engraving and to control depth on uneven or curved surfaces  
Part no. 20459



3.5mm Teflon Swivel nose cone for 11/64" cutters. For glass engraving and to control depth on uneven or curved surfaces - prevents scratches.  
Part no. 22481



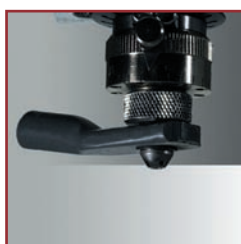
Prismatic Swiveling Steel nose cone for 11/64" cutters. Used for curved jewelry-bracelets such as ID or bangle bracelets  
Part no. 22885



8mm Delrin nose cone for 11/64" cutters. Prevents scratches on easily scratched surfaces  
Part no. 31373



Fixed Diamond nose cone 11/64". Provides better rigidity & accuracy than a non-rotating diamond cutter. Also good for picture engraving and jewelry  
Part no. 22884



3.3mm nose cone and nozzle assembly for collet spindle chip collector  
Part no. 32351  
3.3mm nose cone only for 11/64" or collet spindle chip collector  
Part no. 21665



1.5mm nose cone and nozzle assembly for collet spindle chip collector  
Part no. 32353  
1.5mm nose cone only for 11/64" or collet spindle chip collector  
Part no. 12718



8mm nose cone and nozzle assembly for 11/64" cutters using chip collector Uses up to .171 cutter widths  
Part no. 21667  
Standard nose cone for 11/64" chip collector  
Part no. 31372

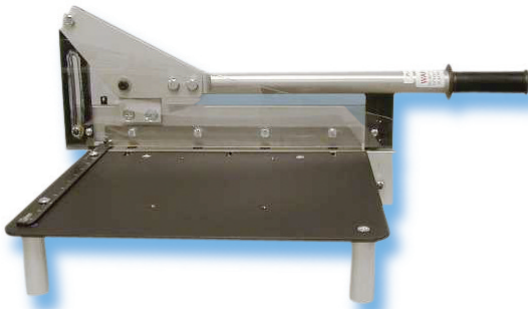


2" Delrin nose cones for 11/64 spindle  
Part no. 31377  
2" Delrin nose cones for collet spindle  
Part no. 31376  
Used for plastic cut outs to handle high chip loads

# SHEARS AND SAWS

## Shear cutting thickness specs:

	Metal	Plastic	Combo
Flexible plastics		1/16"	1/16"
Trophy brass	0.025"		0.020"
Aluminum	0.050"		0.030"
Steel	0.025"		0.015"



### Combination metal, and plastic shear

- The lower blade is easy to set and replace.
- The handle offers leverage for easier cutting.
- There is no flex on the upper blade.
- Three scale selections optimize the settings of blades.
- There is no need to adjust the upper blade.
- Improved angles on the upper blades result in smoother cutting.
- Parts are easy to replace because the shear is modular in design.

**Combo shear part number - 31711**

**Metal shear part number - 20199**

**Plastic shear part number - 20198**

### Shear Blade Sharpening Service

Lower shear blade (metal, plastic or combo)	36683
Upper plastic shear blade	36685
Upper metal shear blade	36684
Upper combo shear blade	36682

### Replacement Blades

Upper Blade			Lower Blade
Metal	Plastic	Combo	All
<b>Current model (shown above) - black table &amp; silver handle</b>			
<b>31723</b>	<b>31732</b>	<b>31716</b>	<b>31733</b>
<b>European model - white table &amp; black handle</b>			
<b>20201</b>	<b>10205</b>	<b>n/a</b>	<b>10204</b>
<b>Original model - gray or orange</b>			
<b>31714</b>	<b>31729</b>	<b>n/a</b>	<b>31730</b>

### VA-10 safety saw

- Maximum cutting thickness for plastics up to .250" thick.
- Maximum cutting thickness for non-ferrous metals (brass and aluminum) up to .157" thick.
- Safely cuts plastics and metals up to 24.5" wide.
- Accurate cutting ensured by a movable stop with automatic return and ruler.
- Integrated chip collector.
- Lubrication system, saw comes standard with .5 liter (16.9 oz) bottle of Vargol lubricant.
- Saw blade: 24 Tungsten Carbide.
- Motor: 350 watt, 60hz, 110 volt, 15,000 RPM.
- Dimensions: 32.7" x 21.7" x 9.8".

**Part number - 21771**

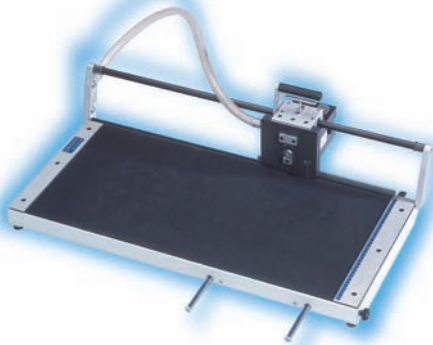
**Replacement blade, 24 teeth: 21773**

**Optional blade, 36 teeth: 21796**

**Vargol lubricant, 16.9 oz. bottle: 21780**

**Replacement on/off switch: 21784**

**Fuse - 10 amp pack of 5: 49898**



### VA21-15 safety saw

- Maximum cutting thickness for plastics up to .2725" thick.
- Maximum cutting thickness for non-ferrous metals (brass and aluminum) up to 0.197" thick.
- Safely cuts plastics and metals up to 40.55" wide.
- Integrated chip collector.
- Lubrication system, saw comes standard with .5 liter (16.9 oz) bottle of Vargol lubricant.
- Saw blade: 36 Tungsten Carbide.
- Motor: 500 watt, 60 Hz, 110 volt, 13,000-15,000 RPM.
- Dual stop on right hand side with spring-operated return and graduated ruler.
- Side stop on left hand side with adjustment and material support.
- Dimensions: 50.4" x 21.7" x 9.8".

**Part number - 21769**

**Replacement blade, 36 teeth: 21796**



# CORNER SHAPER

## CORNER SHAPES TOOLS

Part #	Description
32200	Manual cornermate (Base only)
32201	Decorative 3/8 cornermate unit
32202	Decorative 1/2 cornermate unit
32203	Decorative 5/8 cornermate unit
32204	Round 1/8 cornermate unit
32205	Round 1/4 cornermate unit
32206	Round 5/16 cornermate unit
32207	Round 3/8 cornermate unit
32208	Round 1/2 cornermate unit
32209	Scalloped 1/4 cornermate unit
32210	Scalloped 3/8 cornermate unit
32211	Scalloped 1/2 cornermate unit
32212	Notch 1/8 cornermate unit
32213	Notch 1/4 cornermate unit
32214	Notch 3/8 cornermate unit
32215	Notch 1/2 cornermate unit
32216	Hole punch 4 Position unit
32217	Step 1/4 cornermate unit
32218	Step 3/8 cornermate unit
32219	Slot cornermate unit
32220	Ornamental 3/8 cornermate unit
32221	Ornamental 1/2 cornermate unit
32222	Ornamental 5/8 cornermate unit

Resharps custom shapes available



### Capacity (corner only)

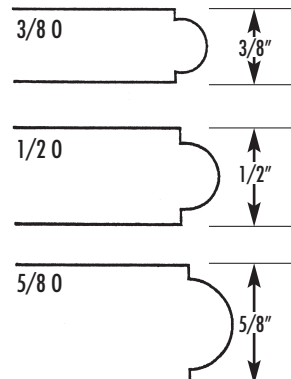
Brass	.030
Aluminum	.040
Steel	.015
Plastic	.160

- Channel aluminum cutting table
- Accepts cutting units 5/8" or smaller
- Portable 9 1/2" L x 6" W x 4 1/2" H x 3 lbs

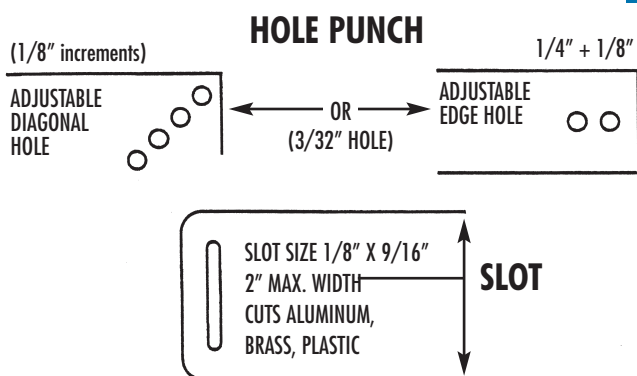
### Onecut Corner Shaper Sharpening Service

Resharpen Part number  
Corner shaper blade 36521

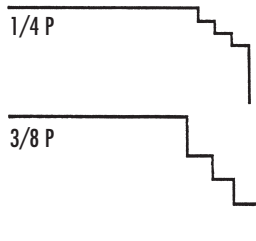
### ORNAMENTAL



### CORNER SHAPES

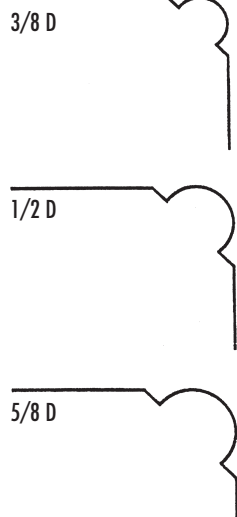


### STEP

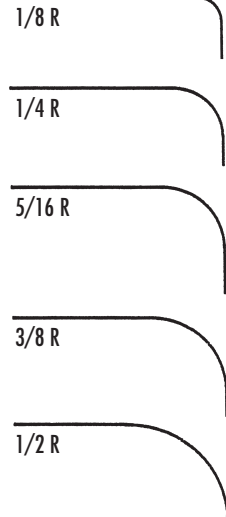


(SHAPES SHOWN ARE ACTUAL SIZE)

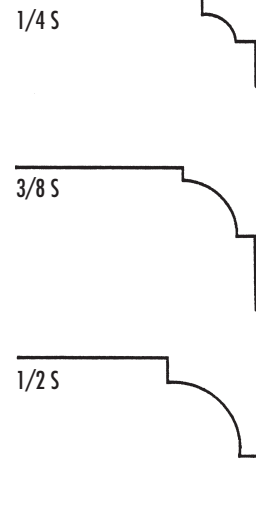
### DECORATIVE



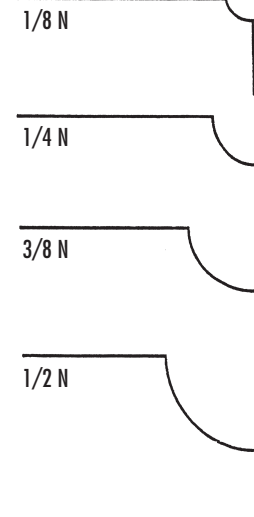
### ROUND



### SCALLOP



### NOTCH



# BEVELING AND GRINDING MACHINES



**B4**



- Simple beveling for plastic materials up to .125" thick.
- 3 types of beveling - 30 degree, 45 degree and 90 degree.
- 2 different types of tools - 1/8" diameter (steel and Tungsten Carbide) according to the materials to bevel.
- Order cutters separately, based on your application.
- Dimensions: 12.2" x 6.3" x 4.7"
- Weight: 15 lbs.

**Part number - 32274**

**1/8" cutters for B-4 Beveler:**

- For 30 degree angle - **33956**
- For 45 degree angle - **33958**
- For 90 degree angle - **33967**



**B6**



- For easy beveling on plastic and metal materials up to .250".
- Order cutters separately based on your application.
- Includes device to cut rounded corners with 3 different radii (0.2", 0.4", 0.6").
- Comes with an integrated chip extractor .
- Dual micrometers control depth, angle of beveling and corner rounding
- Dimensions: 19.7" x 13.4" x 11.8"
- Weight: 16 lbs

**Part Number - 32190**

**1/4" Cutters for B-6 Beveler:**

- For 30 degree angle - **34322**
- For 45 degree angle - **34323**
- For 90 degree angle - **34324**

**Rounding jig kit**

**24661** - B6 rounding jig kit for .2", .4" and .6"

**CG-30 CUTTER GRINDER**



- Reliability and quality. The CG 30 grinding machine benefits from Gravograph's high standards of manufacturing and knowledge.
- Compact, CG 30 requires minimal workspace.
- Easy to use. CG 30 enables the grinding of all cutters except diamond tip cutters.
- The cutter is automatically positioned, thanks to the guiding tool.
- The principal cutting angles are selected, thanks to the graduated index.
- A preset index automatically indicates the cutter position for the realization of the truncature, without disassembling the cutter holder.
- Absolute safety. CG 30 protection guard ensures optimum protection.
- Clean. The incorporated dust extractor allows collection of the dust particles.
- A series of collets for the grinding of cutter (1/8", 11/64", 3/64", 1/4", 5/16").

**Part Number - 34490** - CG-30 Cutter Grinder (includes 1 collet-specify from list below, 1 carborundum grinding wheel, 1 11/64" diamond dresser).

**Grinder Collets**

- 20890** - 1/8"
- 20891** - 11/64"
- 20892** - 1/4"
- 27836** - 5/16"

**Grinding Wheels**

**32760** - 2 1/4" diamond for sharpening all cutter types

**Dresser Stick**

**32766** - 1/4" dressing stick for resin bound diamond wheel. Used for smoothing diamond wheel.

# MANUAL MACHINES



## GTX-L/ITX-L Pantograph floor model engraving machines

A sturdy floor model designed to accommodate odd shape, cylindrical and flat items. Ideal for objects such as bowls, cups, trays, trophy plates, awards, control panels and signage. Holds plates up to 14.75" high by any length and up to 8" thick. Holds cylindrical objects up to 8" in diameter with optional adapter.

### Specifications

- 25 engraving ratios from 2:1 to 7:1
- 3.5" x 12" engraving area at 2:1 ratio
- 6" x 16" graduated copy slide table for holding multiple copy slides for multi-line engraving
- Order 11/64" diameter cutters to fit IM-3 rotating spindle
- Auto indexing system
- 4 work holding cones up to 6" diameter
- Machine stand included
- Dimensions: 30" x 22" (762 mm x 559 mm)
- Approximate weight: 100 lbs

**Model** Non-rotating spindle **GTX-L** **15-500-00**

**Model** Rotating spindle **ITX-L** **15-710-00**



## RV-II Inside Ring Engraver Part No. 34637

- Engraves inside of rings
- Automatically centers ring in clamping jigs
- Easy to use, synchronized, one step engraving and spacing
- Diamond insert for hand engraving effect

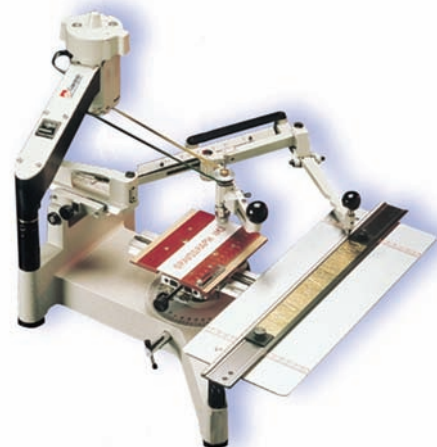
Tracing stylus 21190  
Holding jigs (Teach) 12500  
Diamond insert for RV-II 33825



## Computerized Ring Engraver Part No. 30750

The IM4RM is designed for efficient engraving on the inside of rings.

Capable of engraving multiple lines of text and logos, and handles ring diameters from .5" to .95" (13 mm to 24 mm)



## GM-3/IM-3 Pantograph engraving machines

A lightweight and compact engraving machine ideal for businesses with limited space. Its automatic centering capabilities make it simple to operate. Ideal for small objects such as nameplates, badges, ID plates, and small jewelry items. Holds plates up to 5.5" high by any length, and up to 3" thick.

### Specifications

- 25 engraving ratios from 2:1 to 7:1
- 4.5" x 9 7/8" engraving area at 2:1 ratio
- 6" x 16" graduated copy slide table for holding multiple copy slides for multi-line engraving
- Order 1/8" diameter cutters to fit IM-3 rotating spindle
- Dimensions: 16" x 17" (406 mm x 432 mm)
- Approximate weight: 25 lbs

**Model** Non-rotating spindle **GM-3** **10-500-00**

**Model** Rotating spindle **IM-3** **10-110-00**

### Check list to complete manual machine order

- Copy holding slides
- Copy type
- Cutters

[http://www.gravograph.com/usa/Engraving%20Machines/documents/Copy\\_Type.pdf](http://www.gravograph.com/usa/Engraving%20Machines/documents/Copy_Type.pdf)

### Copy holding slides

Copy type Blank size	Slide length	Part No.
5/8"	18"	33095
1 1/4"	26.5"	33096
2 3/4"	26"	20116
Double groove adjustable	36"	33123

### Depth control stop assembly Part No. 33353

For ease of operation in maintaining a constant depth of ring engraving.

### Copy dials for inside ring engraver

(Includes numbers and letters)

Extended gothic and tilted block 49138  
(Standard with RV-II)

Extra condensed block 49139

For 2-line engraving 47586

Connecting script dial 24766



# ROTARY MACHINES

## ENGRAVE ANYTHING FROM PLASTIC TO STAINLESS STEEL

### M20 DIAMOND



Designed for engraving on flat objects such as trophy plates, luggage tags, small gifts, badges, leather gifts, pet tags and jewelry.

### M20 3 AXIS



Designed for engraving on flat objects such as trophy plates, luggage tags, small gifts, badges, leather gifts, pet tags and jewelry.

### M20 4 AXIS



Quickly change over from engraving on flat objects to engraving on cylindrical objects. Designed for engraving pens, small gifts, flat, round and cylindrical objects, as well as jewelry.

### M20 JEWEL



The all-in-one jewelry engraving solution designed for engraving flat objects like watches, bracelets, necklaces and small gifts. **Efficiently engraves the inside and outside of rings.**

Upgrade with QuickPix software for the ability to engrave photos.

### M20 PIX



The photo engraver ideal for metallic gift items such as lighters, key chains and gift boxes.

Designed for metallic medals, pendants and jewelry items. Specially designed for picture and text engraving on gold, silver, copper, platinum, stainless steel, etc.

#### All M20 series machines

- Completely self-contained in a 12" x 13" x 12" unit — aesthetic, quiet & portable, weighing under 20 lbs.
- Everything you need — engraving machine, software, fonts, tools, accessories and tutorial.
- Self-centering vise — for easy clamping and positioning of objects.
- Depth nose — allowing for consistent engraving, particularly on uneven surfaces.
- Integrated red spotting beam — simulate your job before you engrave, for error-free engraving with no measuring required.
- Integrated auto-Z — easy cutter setup.

#### Specifications

- Size: 12.2" x 13.4" x 12.2" (310 mm x 340 mm x 310 mm)
- Weight: approx. 18 lbs. (8 kg)
- Engraving area: 3.9" x 3.9" (100 mm x 100 mm)
  - o In XL mode (no red spot beam – 4.9" x 3.9" (124 mm x 100 mm))
- Z stroke: 1.18" (30 mm)
- Brushless motor spindle
  - o 1/8-in. (3.2 mm) hollow shaft
  - o 19,200 rpm
  - o 20W DC
  - o Adjustable spindle pressure
- 800" diameter: 1/8" (3.17 mm)
  - o Spindle travel (z) 1.2" (30 mm)
- Self centering vise max. opening capacity: 4.7" (119 mm)
- Flatness: .004" (.1 mm)
- Repeatability: .002" (.05 mm)

#### Which M20 is right for you?

Member	Engraving Area	Software	Engraving					Product Shapes		
			Diamond Drag	Rotating	Impact	Flat	Curved	Pen Cylindrical	Rings Inside	Rings Outside
3-Axis D	3.9 x 3.9 in. 100 x 100 mm*	QuickClick**	♦			♦	♦			
3-Axis		QuickClick**	♦	♦		♦	♦			
4-Axis		QuickClick**	♦	♦		♦	♦	♦		○
Jewel		QuickClick**	♦	♦		♦	♦	○	♦	♦
Pix		QuickPix***	♦		♦	♦	♦			

# ROTARY MACHINES

ENGRAVE ANYTHING FROM PLASTIC TO STAINLESS STEEL



## M40 DEEPIECE

Economically engineered with a 8" x 12" engraving area. Includes red laser pointer for easy no measuring set-up and engraving verification.

Engraving area: 12" x 8.2" x 4.5" (305 mm x 210 mm x 114 mm)

Maximum holding capacity:

Vice: unlimited x 9.2" (234 mm) x 1.96" (50 mm)

Table: 13" (330 mm) x 10.2" (260 mm) x 1.4" (36 mm)

Machine dimensions: 22" W (550 mm) x 23.6" L (600 mm) x 12.6" H (320 mm)

Machine weight: 42 lb (19 kg)

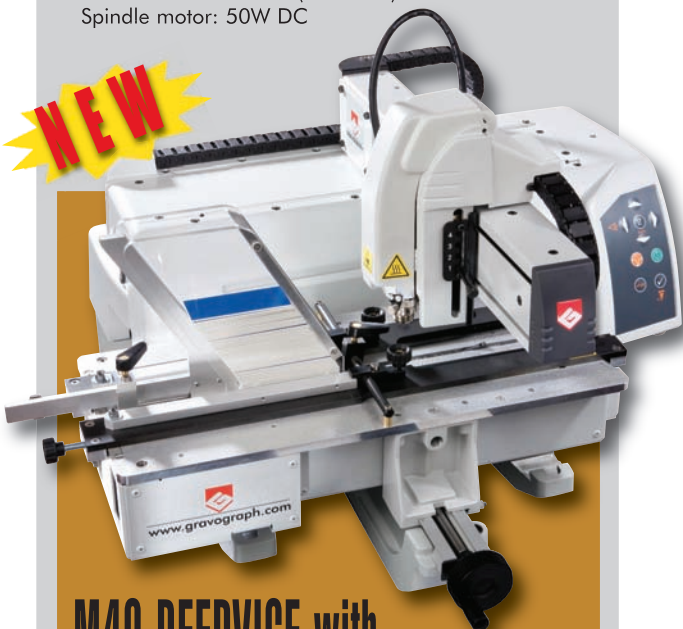
Max spindle travel: 1.6" (40 mm)

Spindle rotation speed: 20,000 rpm fixed

Tool diameter: 11/64" (4.36 mm)

Spindle motor: 50W DC

**NEW**



## M40 DEEPIECE with OPTIONAL AUTO PLATE FEEDER

**Machine:** M40DV or IS400

Auto Plate Feeder 48326

**Auto Plate Feeder** – Designed as an overhead saver. Produce large run plates unmanned. Just load the magazine with plates, and take care of other business while the Auto Plate Feeder automatically feeds a new plate after each engraved job. Each plate can have unique information by utilizing the variable list function in GravoStyle software.



## M40G

Versatile machine for quick change from flat to cylindrical work. 8" x 12" engraving area. Handles up to 6.7" diameters. Comes complete with coolant recirculation system, to prolong cutter life when engraving glass. Includes red laser pointer for easy no measuring set-up and engraving verification.

Engraving area: 12" x 8.2" x 6.5" (305 mm x 210 mm x 114 mm)

Maximum holding capacity:

Motorized vise: 17.7" (450 mm) x 9.4" (234 mm) x 7.5" (50mm)

Cylindrical diameter: min. .16" (4 mm) max. 6.7" (170 mm)

Maximum tilt: +/- 10°

Machine dimensions: 29.5" W (750 mm) x 21" L (540 mm) x 22" H (570 mm)

Machine weight: 77 lb (35 kg)

Max spindle travel: 1.6 in. (40 mm)

Spindle rotation speed: 20,000 rpm fixed

Tool diameter: 11/64 in. (4.36 mm)

Spindle motor: 50W DC



## GLASS & BOTTLE ENGRAVING TIP

**Suggested set-up for glass engraving:**

**Machine:** M40G, or any machine with cylindrical capabilities

**Accessories needed:**

- 20459 **Nose cone for regulating depth of cut**
- 34123 **11/64" Faceted Glass engraving cutter**
- 32819 **Engravolube**

Mount bottle on machine cylindrical device. Spread engravolube (to extend cutter life) on bottle where engraving is to take place. *Be careful not to get any on the label.* Adjust cutter depth to .002" using a nose cone to control the depth. Use a slower Z down feed rate of .4 ips and a slower XY feed rate of about .65 ips. Single line fonts work best. Once engraving is complete, use Rub N Buff to fill in the color. Just dab a little Rub N Buff onto the glass and rub into the engraved area. Then buff off excess with clean cotton cloth.

# ROTARY MACHINES

## ENGRAVE ANYTHING FROM PLASTIC TO STAINLESS STEEL



### IS200 / IS200TX

3" x 9" engraving area. Optional TX base available for engraving cylindrical and large objects.

Engraving area: 8.9" x 3.1" x 2.25"  
(225 mm x 80 mm x 56 mm)

Maximum holding capacity  
Machine dimensions: 19.7" W (500 mm) x  
17" L (455 mm) x 11.6" H (295 mm)

Machine weight: 44 lb (20 kg)  
Max spindle travel: 0.6" (15 mm)  
Spindle rotation speed: 17,000 rpm fixed  
Tool diameter: 11/64" (4.36 mm)  
Spindle motor: 20W DC

### IS400 / IS400 NO BASE

Industrial strength engraving machine designed to tackle your most difficult engraving applications. 8' x 12" engraving area.

Engraving area: 12" x 8.2" x 4.5"  
(305 mm x 210 mm x 114 mm)

Maximum holding capacity  
Vise: unlimited 9" (229 mm) x 4.4" (112 mm)  
Table: 13" (330 mm) x 10.2" (260) x 1.4" (36 mm)  
Machine dimensions: 17.1" W (550 mm) x 24" L  
(600 mm) x 35.1" H (320 mm)

Machine weight: 93 lb (19 kg)  
Max spindle travel: 1.6" (40 mm)  
Spindle rotation speed: 20,000 rpm variable  
Tool diameter: 11/64" (4.36 mm)  
Optional: 1/8" (3.17 mm) or 1/4" (6.35 mm)  
Collet spindle motor: 75W DC



### IS400 VOLUME

Most versatile machine in range. Cylindrical and flat. 8" x 12" engraving area. 13.8" maximum diameter for cylindrical objects. Vise holds objects up to 15" thick. Includes red laser pointer for easy no measuring set-up and engraving verification.



Engraving area: 12" x 8.2" x 4.5"  
(305 mm x 210 mm x 114 mm)

Maximum holding capacity  
Vise: unlimited x 9" (229 mm) x 15" (112 mm)  
Table: 13" (330 mm) x 10.2" (260 mm) x 1.4" (36 mm)  
Cylindrical: Min: .8" (20 mm) Max: 13.8" (350 mm)  
Max. object weight: 44lbs (20kg)  
Machine dimensions: 35.4" W (900 mm) x 24.2"  
L (615 mm) x 33 in. H (840 mm)

Machine weight: 198 lb (90 kg)  
Max spindle travel: 1.6" (40 mm)  
Spindle rotation speed: 20,000 rpm variable  
Tool diameter: 11/64" (4.36 mm)  
Optional: 1/8" (3.17 mm) or 1/4" (6.35 mm) Collet  
Spindle motor: 75W DC



### JEWELRY CUTOUT ENGRAVING TIPS

**Machine:** IS400 or IS400 Volume

**Accessories needed:**

- 47477 **Integrated 150W high frequency spindle** (60,000RPM) includes frequency converter, spindle, floating nose kit and 1/8" standard collet.
- 52180 **1/8" Carbide Stencil cutter** 2" shaft
- 32819 **Engravolube**
- 23520 **IS400 T-Slot table**
- 36213 **Double-sided film tape**
- 29768 **G55 Discovery to G55 Graphic upgrade**

When cutting 1 mm thick silver, you can cut through in 1 pass. With a Z down feed rate of .015 ips using a dwell of .2 ips, allowing the cutter to pierce the material before moving on the X,Y axis. The X,Y feed rate will be .015 ips. Use Engravolube as a lubricant to extend cutter life, and to achieve the cleanest cut possible. When cutting thicker or harder materials, the feed rate will need to be reduced or multiple tool passes and depths can be added to achieve a clean cut. Film tape placed under the material reduces vibration near the end of the cutout. A collet spindle is required for milling applications. The collet spindle grips the cutter near its tip, reducing tool chatter and vibration.



# ROTARY MACHINES

ENGRAVE ANYTHING FROM PLASTIC TO STAINLESS STEEL



## IS6000

Engraving area: 24" x 16.1" x 3.15"  
Machine dimensions: 43" W x 40" L x 29" H  
Machine weight: 370 lbs



## IS7000

Engraving area: 24" x 32"  
Machine dimensions: 43" W x 56" L x 29" H  
Machine weight: 485 lbs



## IS8000

Engraving area: 24" x 48" x 3.15"  
Machine dimensions: 43" W x 72" L x 29" H  
Machine weight: 584 lbs

NOTE: Numerous options available to meet the needs of professionals in the areas of engraving and cutting vise, table, cylindrical, maximum object weight, maximum spindle rotation speed, tool diameter, optional spindle motor and optional categories. Suitable for legend plates, part identification, control panels, ADA signage and large signage. Accessories include a complete range of spindles, cylindrical attachments and chip collectors.

## IS6000/7000/8000XP

A fast, accurate and powerful large table engraving system offering reliability and quality for engraving and milling. Direct current X, Y and Z axis motors. Accessories include a range of spindles, clamping accessories and tools.

### IS6000XP

Engraving area: 24" x 16.1" x 3.15"  
Machine dimensions: 43" W x 40" L x 29" H  
Machine weight: 396 lbs

### IS7000XP

Engraving area: 24" x 32" x 3.15"  
Machine dimensions: 43" W x 56" L x 29" H  
Machine weight: 507 lbs

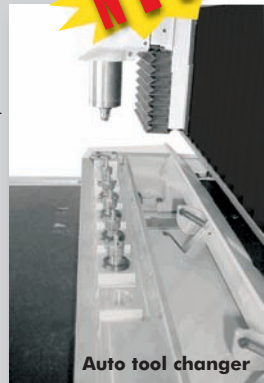
### IS8000XP

Engraving area: 24" x 48" x 3.15"  
Machine dimensions: 43" W x 72" L x 29" H  
Machine weight: 618 lbs

## IS6000/7000/8000XP MILLING



The XP milling system is a versatile CNC engraving/milling solution capable of producing a wide range of products from signage to front panels to 3D metal stamps. Now, both speed and accuracy are attainable due to direct current servo motors, pre-loaded ball bearing lead screws, solid cast construction and high frequency spindle. Both small and large parts can be machined quickly and efficiently with the GravoStyle 5 professional CAD/CAM engraving software provided.



Auto tool changer

A moderately priced solution, the XP milling system is a productive complement to a machine shop as a light-duty milling machine for machining smaller parts. The operating cost is lower than a full-size CNC machine.

Options include lubrication system, various size collets, brass tool collars, cylindrical attachment, ADA Braille system, high performance chip collector, self-centering vises (standard & heavy duty).

<b>IS6000 XP Milling</b>	<b>49288</b>
<b>IS7000 XP Milling</b>	<b>49289</b>
<b>IS8000 XP Milling</b>	<b>49290</b>

### XP milling machine package consists of:

- XP milling machine
- High freq spindle: 1KW, 60 KRPM
- 7-position automatic tool changer
- Auto Z-ref
- Auto tool height offset sensor
- GS5-Graphic Level full pack

### Features

- Factory integrated components for reliable operation
- Full ATC support in GS5
- Air-driven pneumatic collet for automatic tool changing
- Powerful 1KW 60,000 rpm precision spindle sub-system

### Applications

- 2D & 3D signs
- ADA signs
- Front panels
- Legend plates
- Metal dies & stamps

### Technical specs

HFS speed	5,000 – 60,000
Pneumatic unit air pressure	6 bar (90 psi)
HFS controller voltage	220-240 VAC, 4 A max

# LASER MACHINES



## LS100 (power ranges from 30 watts - 80 watts)

Engraving area: 12" x 18" x 5.7" (305 mm x 457 mm x 145 mm)

Maximum holding capacity:

Table: 20" (506 mm) x 13" (330 mm) x 5.25" (133 mm)  
Max object weight: 33 lbs (15 kg)

Cylindrical (optional): Min: 0.12" (3 mm) Max: 3.92" (100 mm)  
Max object weight: 11 lbs (5 kg)

Machine dimensions: 30" W x 28.5" L x 18" H  
(760 mm x 725 mm x 440 mm)

Machine weight: 95 lbs (43 kg)



## LS100Ex (power ranges from 30 watts - 80 watts)

Engraving area: 12" x 24" x 5.7" (305 mm x 610 mm x 145 mm)

Maximum holding capacity:

Table: 20" (506 mm) x 13" (330 mm) x 5.7" (145 mm)  
Max object weight: 33 lbs (15 kg)

Cylindrical (optional): Min: 0.12" (3mm) Max: 4.6" (117 mm)  
Max object weight: 11 lbs (5 kg)

Machine dimensions: 30" W x 28.5" L x 18" H  
(760 mm x 725 mm x 440 mm)

Machine weight: 154 lbs (70 kg)

**NEW**



## LS900 (power ranges from 30 watts - 80 watts)

Machine dimensions: 30" W x 28.5" L x 18" H  
(760 mm x 725 mm x 440 mm)

Machine weight: 400 lbs (180 kg)

Engraving area: 24" x 24" x 9.8" (610 mm x 610 mm x 250 mm)

Maximum holding capacity:

Table: 20" (506 mm) x 13" (330 mm) x 9.8" (250 mm)  
Max object weight: 33 lbs (15kg)

Cylindrical (optional): Min: 0.12" (3 mm) Max: 7.8" (200 mm)  
Max object weight: 14 lbs (6.5 kg)

## YAG200 Laser

**A compact UID compliant traceability solution for high speed marking on metal, plastics, coated materials and ceramics.**

Engraving area: 3.14" - 7.87"  
(80-200 mm) depending  
on F-theta lens selected

Maximum holding capacity:

Table: 16" W x 16" D x 10" tall  
(406.4 mm x 406.4 mm x 254 mm)

Cylindrical (optional): Max: 10"  
(250 mm)

Machine dimensions:  
23.2" W x 31.4" D x 32.2" H  
(590 mm x 800 mm x 820 mm)

Machine weight: 154 lbs (70 kg)



**NEW**

## Fiber200 Laser

**A compact solution for personalization and UID compliant traceability.**

Engraving areas:  
2.6" (65 mm) with an F100  
4.3" (110 mm) with an F160  
7.1" (180 mm) with an F254  
9.8" (250 mm) with an F330

Table dimension:  
13" (330 mm) with a F100  
3.9" (100 mm) with a F254

Maximum diameter: 9.8" (250 mm)

Weight of the machine : 165 lbs. (75 kg)

Dimension of the machine:  
23.2" (590 mm) W x 32.6" (827 mm)  
H x 31.7" (806 mm) D



**NEW**

- Our laser machines are easy to use, and suitable for the first time user with a limited budget, or the experienced user with mid to high volume requirements. Excellent for large applications and high volume.
- Suitable for applications such as name tags, key chains, paper products, plaques, rubber stamps, name plates, signage, wooden items, trophy plates, TherMark processing, glass and crystal, thick acrylic cutting, objects requiring rotation and more!

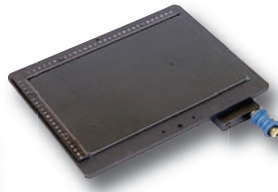
# ROTARY MACHINE ACCESSORIES



Gravogrip Mat



High performance chip collector



Vacuum tables



Compact chip collector



Large cone kit

## CHIP REMOVAL SYSTEMS

- Compact chip collector with auto on/off 47645
- High performance chip collector; 115V, nozzle, hose, 8 mm nose for top load 11/64 spindle 31370
- High performance chip collector system (115V) for collet spindle with nozzle, 8' hose, clamp & 8 mm nose 32348
- High performance chip collector system (115V) for collet spindle with nozzle, 8' hose, clamp & 3.3 mm nose 32350
- High performance chip collector system (115V) for collet spindle with nozzle, 8' hose, clamp & 1.5 mm nose 32352

## Replacement parts

- Filter 1: Pre-filter bags (white) 5-pack 47568
- Filter 2: HEPA filter option 49114
- Motor brush kit (Interrupter type) 2 brushes 49115
- Replacement blower motor kit (120VAC) + interrupter type brushes 49104
- Replacement on/off foot pedal 120/1/60 with North America power cord 49116
- Relay kit box for chip collector- turn on and off chip collector automatically 23518
- IS machine professional chip collector 49265

## OPTIONAL VISES

- Vise - IS700 self-centering 31429
- Vise - heavy duty LT self-centering vise 23649
- Vise - standard LT self-centering vise 23648

## CYLINDRICAL ATTACHMENTS

- M20 JEWEL pen holder cylindrical kit option 48691
- Cylindrical attachment: includes [47592] minDIN adaptor cable M40 pen attachment 48557
- Electronic board kit (not required with MEPB controller) 47765
- IS 200 TX cylindrical attachment for (includes electronic board - Pre-MEPB) 23554
- IS200 pen attachment (0.6" - 15 mm (also includes electronic board - Pre-MEPB) 22869
- IS200 pen attachment (0.6" - 15 mm (also includes electronic board - Pre-MEPB) 22865
- IS400 cylindrical attachment - MEPB 47770
- IS400 cylindrical attachment - Pre-MEPB (requires electronic board) 23514
- IS400 pen attachment - MEPB 47766
- IS400 pen attachment - Pre MEPB (requires electronic board) 23519
- IS400 precision ring engraving kit - pre-MEPB (requires electronic board) 23529
- Chuck 13.75 inches (IS400V) 23527
- Chuck 3-jaw outer adjustment ring (IS400) 27161
- Chuck - Otelo heavy duty precision chuck (IS400) 22625
- Cones - IS400V, 3"M, 3"F, 6"M, 6"F, 10"F 32254
- Cones - IS400V large cone kit, 6"M, 8.5"M, 11"M, 14"M 23570
- Cones - IS400V small cone kit, 2.5"F, 3"M, 4"F, 4"M, 4.7"M 23571
- IS400V glass engraving kit 32195
- LT + IS700 cylindrical attachment - Pre-MEPB (requires electronic board) 23522
- LT + IS700 cylindrical attachment - MEPB 47768
- LT pen attachment kit - Pre-MEPB (requires electronic board and standard vise) 32261
- LT pen attachment kit - MEPB not available
- XP cylindrical attachment for new systems, includes electronic board kit. (consult factory for part # for use with older XP systems) 27607

## ENGRAVING LUBRICANTS

- Lubricant (1 gal) - tri-cool 32868
- Lubrication kit (LT) 31703
- Engravalube, 8oz. (lubricant for machining metal and glass) 32819
- Case of twelve 8 oz. bottles 32818

## LARGE TABLE STANDS

- Stand for IS 6000 (& XP) engraver 23642
- Stand for IS 7000 (& XP) engraver 23643
- Stand for IS 8000 (& XP) engraver 23644
- Stand for IS400 Volume 23528

## ENGRAVING TABLE OPTIONS

- Table: IS400 T-Slot table 23520
- Strips - LT protective strips kit for IS6/7/8000. (For IS6000, order 1 kit; for IS7000, order 2 kits; for IS8000, order 3 kits). Requires left clamp 23762 23656
- Vacuum table for IS6000. Pump included 31633
- Vacuum table for IS7000. Pump included 31634
- Vacuum table fro IS8000. Pump included 31635

## SPINDLES

- Spindle - Heavy Duty Diamond spindle with insert, non-rotating 22224
- Diamond insert - 1" long (for 22224) 33827
- Diamond insert - 7/16" long (for IM4RM, M20 Diamond) 33825
- Diamond insert - 5/16" long (replacement for M20 fixed diamond) 28187
- Wrench for diamond insert 33009
- Spindle - collet spindle only (does not include collet) 14763
- Spindle - collet (1/4") 23694
- Spindle - collet (1/8") 14721
- Spindle - collet (11/64") 23698
- Spindle - standard top-load spindle (11/64") 20471
- Spindle - 150W high frequency spindle (60,000 rpm) for IS400/700/LT - includes freq converter + spindle, not integrated 46664
- Motor - 200W spindle motor kit for LT 23652
- Integrated 150W high frequency spindle (60,000 RPM) includes frequency converter, spindle, floating nose kit and 1/8" standard collet 47477
- High frequency spindle 1000W (cable optional)-call for availability
- External cable kit for IS400 [non-MEPB] (sold separately) 47741
- External cable kit for IS400 MEPB (sold separately) 47746
- External cable kit for ISx000 [non-MEPB] (sold separately) 47743
- External cable kit for ISx000 MEPB (sold separately) 47744
- External cable kit for ISx000XP (sold separately) 47745
- 3.17 mm [0.125"] collet (included standard) 47413
- 3.17 mm [0.125"] extended collet - necessary when using a chip collector nozzle (sold separately) 47452
- 2.00 mm [0.079"] collet (special order) 48050
- 3.00 mm [0.118"] collet (special order) 48065
- 4.00 mm [0.157"] collet (special order) 48066
- 1/8" carbide cutter for high speed applications: 0.030" tip, 1.5" length, 30° cutting angle. Other tip sizes & cutting angles are available by special order (sold separately) 33845
- Spindle motor bracket for large table (for retrofits; new LTs don't need) 48556

## VACUUM TABLES

- Specifically designed for IS computerized engraving systems, allows for highly accurate engraving for multiple materials (All part #'s include air pump)
- IS200 31838
- IS400 32239
- IS700 31436

## GRAVOGRIP MAT

- 'GRAVOGRIP' hold down sticky mat. Virtually eliminates the need for clamps when engraving flat pieces.
- 8" x 12" (with holes for M40 vise table) 46934
- 12" x 12" 32262
- 12" x 24" 32263
- 24" x 24" 32264
- 24" x 48" 26528

- Clear flexible 12" ruler 10184

Within the continental US call +1.800.843.7637

Outside the continental US call +1.770.623.0331

# ROTARY MACHINE ACCESSORIES CONTINUED



### AUTO PLATE FEEDER

MEPB style for IS400 and all M40s 48326  
 Non-MEPB style for IS400 48327  
 Fits on vise

### DIGITAL CALIPER

6"/150 mm range. Large and clear LCD readout. Power on/off. Zero setting at any position. Inch/mm switch. Data output. Stainless steel. Includes two 1.5V button batteries which are easy to replace 52174



### LARGE TABLE ROUTER ACCESSORY

The router motor is a 2.25 HP, 12A motor that cuts smoothly and quickly through acrylic, wood, MDF, PVC, Signform and other non-ferrous materials 42376



Machine travel case

### MACHINE TRAVEL CASES

M20 travel case: ATA approved, heavy-duty tote design, 2 catches, 1 handle, Lift off lid, 1" foam, retractable handle, recessed castors (2 - 3 wks ARO) 49268

M40DV travel case: ATA approved, heavy-duty tote design, 4 catches, 4 handle, Lift off lid, 1.5" foam, retractable handle, recessed castors (4 - 6 wks ARO) Stores accessories 49267

### MACHINE TRAVEL CASES

M40G travel case: ATA approved, heavy-duty tote design, 4 catches, 4 handle, lift off lid, 1.5" foam, retractable handle, recessed castors, 135 lbs gross wt (4 - 6 wks ARO). Stores accessories without laptop compartment 49266

M40G travel case: ATA approved, heavy-duty tote design, 4 catches, 4 handle, Lift off lid, 1.5" foam, retractable handle, recessed castors, 135.5 lbs gross wt (4-6 wks ARO). Stores accessories with laptop compartment. Dimensions: 34.5 x 28.5 x 26H 49768

# LASER MACHINE ACCESSORIES

### LS100 & LS100Ex Exhaust Units

LE120HP integrated exhaust for LS100 49276  
 LE140HP integrated exhaust for LS100 49272  
 LE150HP integrated exhaust for LS100Ex 50106  
 Prefilter for LE140 (6 pleats) 49286  
 Prefilter for LE120 (3 pleats) 49287  
 HEPA filter for LE120/140 49281  
 Carbon filter cartridge for LE140 (40 liter) 49282  
 Carbon filter cartridge for LE120 (20 liter) 49283  
 Carbon pad for LE120/140 49284  
 Active carbon bag for refillable cartridges LE120/140 (25 kg) 49285  
 Blower motor unfiltered exhaust unit for all lasers 45652

### Accessories

Air assist - LS100 integrated air compressor for air assist 47191  
 Cutting table - LS floating pin cutting table (all lasers) 27352  
 Cutting table - LS100 12 x 18 honeycomb 47081  
 Cutting table - LS100Ex 12 x 24 honeycomb 49704  
 Vacuum table LS100Ex 49705  
 Exhaust coupling 4" - 2" (100 mm - 50 mm) 29309  
 Exhaust coupling 4" - 4.9" (100 mm - 125 mm) 29311  
 Exhaust coupling 4" - 4" (100 mm - 100 mm) - (Incl. std with machine) 29310  
 Lens - 1.5" focal length (LS100) 47082  
 Lens - 2.0" focal length (LS100) incl std 47200  
 Lens - 2.5" focal length (LS100/900) 27379  
 Lens - 3.5" focal length (LS100/900) 27381  
 Lens - 4.0" focal length (LS100/900) 27382  
 LS air tube fitting adaptor (4 mm - 1/4" shop air fitting) 49500  
 Lens cleaning paper - 50 sheets / package 30859  
 Optical cleaning fluid - 1 3/4 oz bottle 30858  
 Rotary attachment w/tilt and cone kit (LS100) 47000

### LS900

#### Exhaust Systems

Blower motor unfiltered exhaust unit for all lasers 45652  
 Integrated exhaust 39145

#### Accessories

Base - floor mounted LS900 29255  
 Cutting table - LS900 24 x 24 honeycomb cutting table 23874  
 Cutting table - LS floating pin cutting table (all lasers) 27352  
 Exhaust coupling 4" - 2" (100 mm-50 mm) 29309  
 Exhaust coupling 4" - 4.9" (100 mm - 125 mm) 29311  
 Exhaust coupling 4" - 4" (100 mm-100 mm) - (Incl. std with machine) 29310  
 LS air tube fitting adaptor (4 mm - 1/4" shop air fitting) 49500  
 Lens - 1.5" focal length (LS900) 29257  
 Lens - 2.0" focal length (LS900) incl std 27377  
 Lens - 2.5" focal length (LS100/900) 27379  
 Lens - 3.5" focal length (LS100/900) 27381  
 Lens - 4.0" focal length (LS100/900) 27382  
 Lens cleaning paper - 50 sheets / package 30859  
 Optical cleaning fluid - 1 3/4 oz bottle 30858  
 Rotary attachment w/tilt for LS900 42062  
 Vacuum table LS900 **NEW** 49705  
 Air assist 29256

#### Yag and Fiber Options

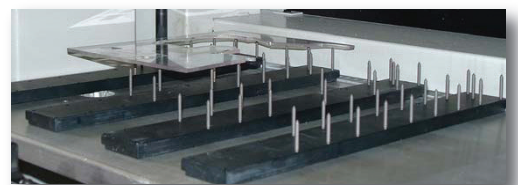
YAG200 cylindrical attachment 51696  
 Fiber200 cylindrical attachment (bench) 51695  
 Fiber200 cylindrical attachment (integrated) 51697



Honeycomb cutting table



LS100Ex with optional integrated exhaust



LS pin table

# MICRO PERCUSSION MACHINES



- **Solutions for automatic traceability on industrial parts**
- **Direct part marking machines for permanent identification of metal and plastic parts**
- **An easy to use, turn-key solution delivering productivity and quality marking at low cost. Ideal for industrial parts**
- **A complete range of integrated, in-line equipment with an optional 2D Data Matrix code reading system**

### PM3000 - Portable Marking Unit

Includes electromagnetic marking tool with tungsten carbide point, 105 AT PC keyboard included for composing files, belted battery pack with rapid charger, a technical operating manual on cd. **41906**

### PS5000 PN Pneumatic Marking Machine

Includes a PS5000 marking machine with a PO1 integrated marking program with Pneumatic PN12 marking tool. Also includes a keyboard with a function key information strip, a 110V power cable, a cd for set up and start. **50667**

### PS5000EM Electromagnetic Marking Machine

Includes a PS5000 marking machine with a PO1 integrated marking program with AM11 Electromagnetic marking tool. Also includes a keyboard with a function key information strip, a 110V power cable, a cd for set up. **50672**



### ACCESSORIES

PC3500 cylinder attachment for PS5000	<b>50674</b>
PC4500 cylinder attachment for PS5000 (larger chuck)	<b>50676</b>
APF 3500 - automatic plate feeder for PS5000	<b>50680</b>
Marking software under window for PS5000 (G5000W)	<b>50678</b>
Docking station M3000 (with crank)	<b>42194</b>
One tank air filter for dust filtering	<b>45449</b>
Marking tool PN22 (60°)	<b>45453</b>
Magnetic clamping	<b>45454</b>
Sound proof nameplate holder	<b>45455</b>
Standard footswitch PS3000	<b>45456</b>
Standard footswitch PS5000	<b>50684</b>
Industrial footswitch for PS5000	<b>50685</b>
500 inox plates credit card format with protection	<b>45462</b>
Chargeur rapide de batterie : battery charger: 110v	<b>46773</b>
1 battery on belt	<b>46775</b>
Transfer ribbon x 1 roll width 50mm white for PS3000	<b>47239</b>
Transfer ribbon x 1 roll width 50mm blue for PS3000	<b>47240</b>
Transfer ribbon x 1 roll width 50mm yellow for PS3000	<b>47241</b>
Transfer ribbon x 1 roll width 50mm black for PS3000	<b>47242</b>
Transfer ribbon x 1 roll width 50mm red for PS3000	<b>47243</b>
Control panel for PS5000	<b>50686</b>
Light for marking area	<b>50687</b>
Repair kit for marking tool pn12 (oring/spring)	<b>45450</b>
TIP RM12C 90° for stylus type EM11B/EM1C	<b>42196</b>
TIP RPN12-120° for marking tool PN12	<b>46401</b>
TIP RM12C 60° for stylus type EM11B/EM1C	<b>46771</b>
TIP RM12C 120° for stylus type EM11B/EM1C	<b>46772</b>

# VINYL MACHINE



See vinyl rolls on page 53

<b>Vinyl Plotter</b>	<b>PN</b>
VANGUARD VINYL System. 24" (Graphtec CE-5000-60) with floor stand. Does NOT include GravoStyle5 Discovery software or GS5 Tutorial	<b>49786</b>
VANGUARD VINYL System. 24" (Graphtec CE-5000-60) with floor stand. Includes GravoStyle5 Discovery software + GS5 Tutorial	<b>36747</b>
VANGUARD VINYL System. 48" (Graphtec CE-5000-120) with floor stand. Does NOT include GravoStyle5 Discovery software or GS5 Tutorial (non-stock 10-14 days)	<b>49788</b>
VANGUARD VINYL System. 48" (Graphtec CE-5000-120) with floor stand. Includes GravoStyle5 Discovery software + GS5 Tutorial (non-stock 10-14 days)	<b>49789</b>
<b>Vinyl Plotter Accessories PN</b>	
Cutting knives - 45 deg, 0.99 mm dia (set of 5) [CB09U] Blue tipped: Standard blade for cutting adhesive material. Suitable for cutting media up to 10 mil or .25mm thick. -- Materials: Vinyl, Rubylithe, Reflective	<b>36740</b>
Cutting knives - 60 deg, 1.5 mm dia (set of 5) [CB15-10U] Red tipped: For cutting sandblast rubber. The sharply angled point provides a longer cutting edge and the ability to cut harder materials. Suitable for cutting material up to 35 mil -- Materials: Sandblast rubber, High Intensity reflective	<b>36741</b>
Blade Holders for 0.9 mm knives (set of 2) [PPA31-CB-09]	<b>36742</b>
Blade Holders for 1.5 mm knives (set of 2) [PPA31-CB-15]	<b>36743</b>
Fiber-tip water base pens (set of 5) (2 black, 1 red, 1 green, 1 blue)	<b>36744</b>
Roller ball pens (set of 5) (2 black, 1 red, 1 green, 1 blue)	<b>36745</b>

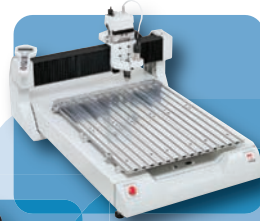
# GRAVOSTYLE 5 SOFTWARE

PROFESSIONAL CAD/CAM ENGRAVING SOFTWARE FOR ROTARY AND LASER ENGRAVERS



## GravoStyle Graphic

Advanced level for limitless creativity with rotary and laser machines



## LaserStyle Graphic

Advanced level for limitless creativity with laser machines



## GravoStyle Lite

Mid-level for rotary machines



## GravoStyle Discovery

First level for rotary machines



## GravoStyle Explorer

User-friendly basic engraving for rotary machines



## LaserStyle Discovery

First level dedicated to laser machines

GravoStyle 5 is the first **multi-technology software** in the engraving industry – engineered specifically for engravers. The synergy between GravoStyle 5 software and the machine enables you to realize your equipment's full engraving potential, whatever technology you use.

GravoStyle 5 professional engraving software is designed with the **capabilities to evolve as your needs grow**: it can rise to the challenge of your most complex designs. With multiple levels and options to improve your engraving productivity, you pay only for the functionality you need, when you need it. Pick and choose from a range of options such as photo editing and 2.5D engraving, to enable you to deal with custom requests.

GravoStyle 5 is also versatile – able to drive **mechanical and YAG or CO2 laser** engraving machines. No matter what material you are engraving now or in the future, Gravograph has the solution to meet your needs. Just one software for three perfectly integrated technologies: Rotary, CO2 Laser and YAG laser machines – no need for training on 3 different softwares.

## Explorer, Discovery, Graphic Lite and Graphic Levels

For use with all Gravograph engraving machines.

Gravostyle 5 engraving software is designed with the professional engraver in mind. Comprehensive text, graphics and layout capabilities designed for efficient operations of both rotary and laser machines – the industry's first! Complete with WYSIWIRE – What you see is what you really engrave, ensuring a proper cutter selection before running a job.

### Features of GravoStyle 5 Software

- Windows XP or Vista operating system
- Point-and-shoot: area, width, center, arc, curve, multi-rectangles
- Optimized for engraving productivity
- Proprietary, optimized engraving fonts
- Easier to use than general purpose software
- Manual and automatic composition modes
- Add graphics and logos to your jobs – powerful import and export all common file formats – DXF, EPS, BMP, GIF, HPGL, JPG, PNG, TIF, WMF
- Copy and paste clipboard between Corel and GS5 ( WMF, EMF – bitmap and vector)
- Compatible with most rotary and laser engravers currently manufactured by other companies
- CMX file compatibility with Corel

# GRAVOSTYLE 5 SOFTWARE



- Copy and paste between excel, word, and GravoStyle 5
- Add graphics and logos to your job
  - Symbol library – predefined or your own – save vector, bitmap, dials/scales or filled with tool path
  - Powerful tools for object manipulation
    - Adding/editing
    - Combining
    - Distorting
    - Aligning
    - Duplicating
    - Measuring
    - Rotating and stretching
    - Inside/outside offsets
- Scanning, vectorizing and cleanup
  - Interfaces directly with your scanner
  - Versatile vectorization capabilities
  - Powerful, easy to use cleanup tools
  - Point and node editing
- Matrix, variable list of names (international management), serialization
- Grade 2 ADA Compliant Braille
  - Raster Braille (drill and beads)
  - Routed Braille
  - Braille automation
    - Hole diameter and depth
    - Spacing
  - Lower cases management
- Comprehensive text capabilities
  - Automatic composition mode
  - Extensive font selection (True Type & GravoGraph Engineered Fonts)
  - Character and line sizing and spacing
  - Special text functions
    - Text in a box
    - Text on a line
    - Vertical text
    - Text on an arc
    - Spell check
    - Text in columns
    - Find and replace text / font / size
    - Predictive text input
    - Mirror text
- Filling Toolpath Generation & Visualization
  - Quick and easy with Toolpath by color
    - Simple & quick 2D filling
    - Colored areas define different toolpaths
  - Preview
    - WYSIWIRE – What you see is what you really engrave – preview final appearance
  - Full Function Tool Library
  - Advanced toolpath CAM module
- Special laser features
  - Laser color control manager
    - Pen and brush (hatching) for design effects
    - White color management
  - Lasering Dialog
    - Automatic plate size
- Saved profiles
- Multiplate jobs
- Calibration to find the right lasering parameters easily
- Integrated Driver
  - Job parameters saved with job
  - Define width of stroked fonts
  - Dynamic focal adjust in multi-pass
- Rubber Stamp Wizard
  - Based on list of variables
  - Automatic nesting
  - Cutting in cutting for dating stamps
  - Saves time, material and money
- Photolase Wizard
  - From picture to realization
  - Minimize trial and error
  - Save time and money
  - Add value to items marking significant events
- Tangential Entry / exit for perfect cutting
- Lasering preview
- Inlay wizard for easy marquetry
- Cylinder attachment quick positioning by symmetrical axis
- Job Templates
  - Set up standard jobs for your shop
  - Maintains all job parameters
  - Add custom notes
- Part Nesting
  - Optimizes usage of cut out material
  - Reduces wasted material and saves money
  - Fit parts to plate or object
- Favorites Toolbar
  - All your most used icons in one place
- Computip
  - A built-in utility to suggest the proper tool for your application
- Job Timer
  - Keeps track of job creation time
  - Displayed on edit screen & stored with job in notes/information
- Tool Simulation
  - Quickly determine if selected tool will fit into an area at a certain depth
  - Useful when using “Toolpath by color” 2D Fill
- Powerful Measurement Tools
  - Area
  - Perimeter
  - Dimensions
  - Angles
  - Bounding Box
    - Quickly determine limits and extents of selected objects
    - Useful for alignment of irregular objects
- Barcodes
  - Wizard driven
  - Quick and simple
  - Integrated into GS5 for rotary and laser engraving
  - Linear: EAN, UPC, Code39, Code128, 2 of 5, UPCA

Within the continental US call +1.800.843.7637

Outside the continental US call +1.770.623.0331

# GRAVOSTYLE 5 SOFTWARE

- 2D: Data matrix
- UID ("Unique Identification") is a marking program used by the Department of Defense in the US for the tracking of tangible assets through their useful life
- Help aids and ease-of-use features
  - F1 context sensitive help/manual
  - Many guided wizards
  - Animated help
  - Pop-up tool tips
  - Automatic tool tips
  - Automatic tool bars
  - Status bar
  - Shortcuts can be changed
  - Integrated spell checker in several languages
  - Display contour order and engraving direction arrows
  - Font selection shows selected text in font preview
  - Large descriptive fly-out for CAM toolpath
  - Mouse middle button programming
  - Post-it type note for each job
  - Calculates optimal number of plates that can be engraved based on plate orientation
  - Open file dialog shows thumbnail & notes
  - Shows important information about your job setup based on your settings
  - Floating origin saved with job
    - Saves floating center and floating corner origins
- Saves origins for all machines defined in job
- Provides increased automation when using custom fixtures
- Reduces errors since operator no longer needs to key in data once saved with job
- Detection of loop, duplicate objects and overlapping points
  - These geometry problems can create toolpath errors
  - Loop eraser
  - Great time saver
- Job quotation and costing module
- Computer aided machining (CAM) module
  - Easy to use
  - No limitations
  - New tool data base
  - Can define your own groups
  - Hierarchical structures
  - Quickly generate and confirm toolpaths
  - Powerful simulation
  - Reduces errors, saves material, and increases production
- Long plate (X or Y, depending on the machine)
- Shadowing effect to make 3D effect based on 2D engraving
- Script / macrolanguage for automation
- Vectorial textures for design effect on any shape

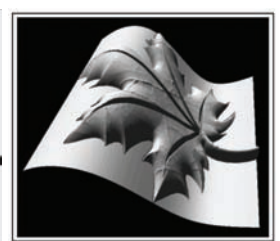
# type3 SOFTWARE



3D CAD/CAM solutions for sign making, woodworking, 3D-engraving and embossing.

Powerful, yet easy to use, type3 helps you convert your 2D artwork to 3-dimensions in no time. Packed with 2D features and 3D modeling tools, you will be able to win more business, thanks to type3's wide range of tools such as :

- Parametric technology (unique)
- Sweeping wizards
- 3D texturing
- Realistic rendering
- Tool tester
- 3D-clay sculpting
- Male/female
- Grayscale to 3D (& vice-versa)
- Bas-relief enhancement tool
- Sculpted 3D plaques
- Surface tools (for free-form designs)
- Wrapping on 3D
- Duplication & distortion
- Celtic-type design tool
- Roughing, semi-roughing & finishing strategies
- 3D tool sequences
- Cutting tool creation wizard
- 3D video simulation
- ... and lots more



Developed with the latest technology, type3 runs any CNC machine (milling centers, CNC routers, laser machines, waterjets) up to 4 axis. Its CAM module offers a wide range of machining strategies that addresses the challenges of the most exigent machinists.



# MANUFACTURER-DIRECT SERVICE

To complement our extensive product offerings, we offer manufacturer-direct service. This service is complete with equipment protection plans, training and customer support.

## Training

### Engravers Academy

**Basic Engraving** – Learn the basic tools of GravoStyle 98 and GravoStyle 5

**Advanced Engraving** – Learn the advanced tools of GravoStyle 98 and GravoStyle 5.

**Scan & Vectorize** – Expand your possibilities with the power of GravoStyle 98 and GravoStyle 5 scanning and vectorizing option.

**Laser Engraving** – Learn how to fully utilize your GravoStyle software to maximize the efficiency and productivity of your laser engraving machine.



### i Help

Through live interaction using the internet, our professional instructors will walk you through your favorite programs, covering tips and tools

necessary to increase your productivity, creativity and knowledge.

### On-site training

Receive one-on-one training on your premises by trained members of our staff.

### Customized Training

Spend a few days with us at our fully equipped Duluth, GA showroom, and obtain hands-on experience with one of our corporate trainers. We will create specific solutions suitable to your needs. With everything at arm's reach (machines, accessories, materials, etc.) you can often streamline training and problem-solving processes in a shorter time period.

## Customer Support

### Technical Support

Our toll free technical solution source is fully staffed 5 days per week, with extended hours to meet your needs.

### Online Knowledge Base

Explore our online customer support center for self-help instructions on a range of topics. View tutorials to assist you in gaining a better understanding of topics ranging from simple to complex.

## Equipment Protection Plans

### The Silver Plan

This plan covers travel, labor, all parts (excluding belts), and unlimited on-site visits including one preventive maintenance tune-up per year.

### Bronze Protection Plan

Also known as the "Handyman Plan," you can receive any parts required for self-installation. All parts excluding belts are included. Customers also receive a 30% discount on a preventive maintenance tune-up during the contract period. Labor and travel are billed at 20% off the list price.

### 50/50 Protection Plan

Offers full protection with less risk. This plan covers all parts, travel and labor. A 50% payment is required upon establishment of the contract. The additional 50% is required only if a part or on-site visit by a technician is required within the one year contract period.

For more information on any of the above, please call 1.800.843.7637 or visit [www.gravograph.com](http://www.gravograph.com)

**Just because the business day ends at 5  
doesn't mean that your workday is done.**

**Make your life easier. Order whenever, wherever...**

# THE GRAVOSTORE

**Our online storefront created to address  
the demands of your busy life...**

**Built by the industry's leading total engraving solutions provider.**



**In the Gravostore, you can  
browse and purchase:**

- Engravables
- Engraving materials
- Signage
- Cutters, characters and fonts
- Engraving accessories

**Have access to:**

- Ordering 24 hours a day,  
365 days a year
- Product photos and graphics
- Search by item number or keywords
- Order tracking
- Order history

**Visit us at [www.gravostore.com](http://www.gravostore.com) for more information**

## Global Reach

A global leader in the engraving and permanent marking industry, Gravograph's many subsidiaries and distributors/agents around the world offer a complete and worldwide engraving solution to their customers, coupled with unparalleled customer service and support.

## The Americas Region

- Territory Managers
- Field Techs



**GRAVOGRAPH**

Gravograph  
2200 Northmont Parkway  
Duluth, GA 30096-5895  
**Toll Free: 1.800.843.7637**  
Phone +1.770.623.0331  
Fax +1.770.495.3668  
[www.gravograph.com](http://www.gravograph.com)  
[www.gravostore.com](http://www.gravostore.com)

**SIGNAGE**

**PERSONALIZATION**

**TRACEABILITY**

**SERVICES &  
CUSTOMIZATION**



**GRAVOGRAPH**

**engraving solutions. here for life.**

Gravograph ■ 2200 Northmont Parkway ■ Duluth, GA 30096-5895 ■ 1.800.843.7637  
Phone +1.770.623.0331 ■ Fax +1.770.495.3668 ■ [www.gravograph.com](http://www.gravograph.com) ■ [www.gravostore.com](http://www.gravostore.com)