

## What Die is Right for YOUR Needs?

Several important factors combine to determine whether **magnesium, copper or brass** is right for your application. Magnesium dies typically ship the same day your order is received (wood and magnesium mounted dies the next day), copper dies the next day and brass dies in 3-5 days. In addition, magnesium and copper dies are priced by the square inch, and brass dies are priced based on the degree of detail and die styles required.

### **MAGNESIUM**

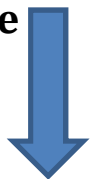
Choosing magnesium, when appropriate, can yield cost savings for your customers and speed up turnaround without sacrificing quality.

Magnesium is the most versatile of the three metals – its uses stretch far beyond what you typically think of in terms of dies. Letterpress plates, foil stamping & debossing dies, soap stamps, thermal kiss-cutting dies, and heat seal dies just to name a few.

We also offer magnesium in five different thicknesses: 16 gauge (.064"), 80 thousandths (.080"), 11 point (.153"), ¼ inch (.250"), or 3/8" (.375"); and etch depths up to .180" on the latter two.

Magnesium is the softest of the three metal choices but with proper care and storage the dies will continue to deliver a quality product. Magnesium expands approximately .25% at 290 degrees Fahrenheit and .50% at 350 degrees Fahrenheit. Higher temperatures will cause greater expansion. Our Heat Expansion Calculator can be found on the Tech Tips section of our website.

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## COPPER

Copper dies are generally used for foil stamping, single-level embossing and letterpress printing. With almost the same Rockwell hardness as that of engravers brass, copper is usually preferable for longer runs.

Copper is a good heat conductor and maintains heat very well which can be quit helpful when foil stamping on high speed presses. If you are using a textured or recycled stock, copper is an excellent choice.

Copper is offered in two thicknesses: 16 gauge (.064") or ¼ inch (.250"); ¼ inch copper can be etched to fifty thousandths (.050").

## BRASS

Brass dies are used if your die requires:

- any raised rounded effect
- requires multiple levels
- a die that foil stamps and embosses in one pass (combo die)

Brass dies include a range from simple flat stamping to multi-level sculpted designs. Brass is a superior material for both machine work and hand sculpting. Terms like raised round, raised roof, deboss, flat and many more are discussed before the die is started.

**We hope this guide helps when you're deciding on which type of die to order from OWOSSO. Still confused or have questions? Give us a call – we're here to help! 800.444.5552**