Pancake Die Instructions





<u>How to Use Pancake Dies</u>

- Designed for use in a 20-ton hydraulic press Use ONLY with full-hard, non-ferrous metal (do NOT anneal your metal) (not for use with red brass a.k.a. Nu-Gold/jeweler's brass/ jeweler's bronze/ Merlin's gold)
- Acceptable metal gauges: 16-22 gauge
- Cutting edges are straight, not at an angle
- Shipped pre-sprung
- Lifespan: Will cut hundreds of blanks and last many years under normal use (varies from die to die depending on gauge and type of metal being cut).

1. Insert full-hard metal into the pre-sprung die. (For old-style dies, don't insert past the two holes in the tab; you will damage the die and the metal will get stuck.)

2. Use spacers to reduce the distance the ram needs to be extended.

3. Center the pancake die in the press. Dies will work in one direction only; the etched words must be FACE DOWN. Make sure the entire cutting surface of the die will be covered when cutting; if not, place a platen on top of the die.

4. Raise the lower platen. The die has cut the metal when you hear a "pop" (may be loud or quiet).5. Carefully remove the excess metal from the exterior of the die.

6. Sometimes the blank falls out of the die (most common with simple shapes). If it doesn't, use your fingers to press the die together to release the blank. If that doesn't work, place the far edge of the die (tab-side up) on the edge of a work surface, and tap the tab with a RAWHIDE or PLASTIC mallet. Strike the tab straight down, not at an angle, as doing so may damage the die.

Troubleshooting

What kind of metal should I use? Our pancake dies only work with full-hard, non-ferrous metal; most jewelry supply houses do not sell full-hard metal (this is especially true when it comes to brass). Do NOT anneal your metal OR assume that your metal is hard from the supplier. We offer full-hard copper in a variety of gauges. If you don't purchase full-hard metal, you MUST start with thicker metal (16-gauge+) and use a rolling mill or hammer to thin it and sufficiently work-harden it (to 18-20 gauge).

Can I roll-print dead-soft metal to harden it before using a pancake die? Running metal through a rolling mill with a pattern plate will harden the metal, but will also thin it substantially. It may not seem like much, but if you start with 20-gauge metal, by the time it's roll-printed, it will have decreased a number of gauges, making it too thin to use with our pancake dies. Often, 20-gauge metal will end up with areas of 24-26 gauge in as little as one pass. If you need to anneal in order to texture your metal, be sure to start with a thick enough gauge, or texture it after cutting out a blank with a pancake die. If you do want to use softer metal and texture it before cutting it, you MUST start with thicker metal (16-gauge+) and use a rolling mill or hammer to thin it and sufficiently work-harden it (to 18-20 gauge).

My metal is stuck. What happened? Most-likely culprits: Metal is too soft. Metal is too thin. Metal was inserted to or past the two holes in the tab (old-style dies). Design is complex with lots of points/tight curves; use thicker/harder metal next time to avoid the metal being pulled into the die at these points.

Burrs: Are they normal? Burrs on the back of a blank cut with a pancake die are to be expected. Complex designs with lots of detail tend to leave the most; it's the nature of how the dies are made. To minimize burrs, use thicker and/or harder metal. Use flush cutters, a file, sandpaper, or small belt sander to remove any burrs.

Bracelet Pancake Dies: To use bracelet pancake dies, the entire cutting surface (top and bottom) of the die must be fully covered. After you place the die in the press, rest a large spacer on top of the die, completely covering it. This distributes the pressure across the length of the die.

Disclaimer: We back our products 100% and will replace a pancake die if it is truly defective. We will NOT replace it when the die has been used improperly (e.g. used with too thin of metal, with steel, soft metal [including brass], etc.). When used correctly, our dies will cut hundreds of blanks and last many years under normal use.



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