

**HYDRAULIC ASSIST DIE FORMING  
STUDENT  
TOOLS AND MATERIALS LIST**

**Val Link  
2008**

Basic jeweler's hand tools and materials:

- Jeweler's saw frame and blade
- Jeweler's pliers (flat nose)
- Jeweler's pliers (round nose)
- Jeweler's diagonal wire cutters
- Ring clamp and wedge
- Files- 8" or 6" flat file (fine)
- Files- 8" or 6" half round (0 cut)
- Bench Pin (to clamp on table)
- Small scissors/shears (for cutting thin metal etc.)
- \* Coping saw frame and fine wood cutting blades (for cutting masonite, micarta)
- Small riveting hammer
- Soldering tweezers 6 or 7"
- Soldering pick
- Silver solder \_ oz. coil 20 ga.(medium wire solder)
- Silver solder \_ oz. coil 20 ga. (easy flow wire solder)
- Drill bit assortment 1/8", 1/16", No. 50 and 55
- Sand paper (wet-or-dry, made for sanding metal)
  - 3 sheets of each #320, 400, and 600
- Small sketch pad or typing paper
- Rubber cement (small jar)

\*All of the above can be acquired through Rio Grande Jeweler's Supply (800-545-6566) or IJS Supply Co. (800-545-6540) with the exception of the coping saw frame and blades which is available at any hardware store. Any jewelry tools other than those mentioned above that you use frequently or think might apply to die forming please bring.

Die Forming Materials-

The materials that we will be using to make the metal forming dies range from Micarta to tempered masonite to plexiglass and aluminum sheet stock and will be either \_" to 1/8" thick. These are basically materials that are very dense and will withstand the kind of pressures generated in the press. Bring any of these materials that you can find with you to the workshop. Probably the average die will consume a 6"X 6" square of die material plus whatever the thickness might be. The best material to use for dies is micarta and sheet aluminum. We will have micarta, masonite and some plex available for sale during the workshop.

The metals that we will be using for the most part will be copper. If you want to do any of your designed projects in silver or any other non-ferrous metals you will need to bring your own. We will not have any silver for sale in the studio however, we will have copper available for sale and It will be priced according to current market prices. The metal that we will be using will include the following gauge sizes, 20 ga., 22 ga., 24 ga. and 26 ga. If you bring any of your own metal make sure that it is within the 20ga. to 26 ga. range.

Any of the vendors below can supply you with all of the tools and materials listed.

Rio Grande Jeweler's Supply  
800-545-6566

Otto Frei Tools & Equipment  
800-772-3456

Indian Jewelers Supply Co.  
800-545-6540

McMaster-Carr (micarta or garolite)  
404-629-6500

Rio handles a full spectrum of jewelry tools and metal-  
Otto Frei handles a full spectrum of jewelry tools-  
IJS handles a full spectrum of jewelry tools and metal-  
McMaster-Carr handles micarta under the name garolite-

I am looking forward to working with you in June. Val Link

Optional:

If you have a small bench vise that clamps in place please bring. In constructing your own dies, sawing, filing and sanding, the vise is a lifesaver and really adds to the degree of accuracy you are able to achieve. It also makes these tasks easier.