

TOOL LIST

FOR BEGINNING METALSMITHS AND METAL ART JEWELRY

What does an aspiring silversmith, metalsmith or metal arts jeweler need to get started? I get asked this question a lot so I thought I'd put together a list of tools specifically for beginners, just the basics.

My list is categorized by skill or technique. I've included some suggestions for using household items that will work just fine until you can afford something better.

Depending on your level of commitment and your budget, try shopping at a local hardware store like Harbor Freight or Miller's Hardware first. The tools available there will most likely be sufficient to get you by your first year or more. I've made many a purchase at hardware stores to keep costs down until you can afford to upgrade.

Don't forget discounts. Many jewelry supply companies offer discounts for members of lapidary, craft or other groups. Ask them before you buy.

Where to buy?

to name a few... Rio Grande, Otto Frei, Contenti or FDJ (Sanford Florida and has a showroom).

Category	Basic Tools needed to get started -for fabrication of basic flat shapes, rings and applied textures for beginners	Consider...
Safety prevention is worth a pound of cure	<ul style="list-style-type: none"> • proper ventilation!!!! • eye protection!! • large box of baking soda (neutralize acids) • fire extinguisher • first aid kit 	<ul style="list-style-type: none"> • Neosporin, band aids • finger tape (usually green, for burns, cuts and helps with gripping too) • ear plugs • dust masks
Workbench/area	<ul style="list-style-type: none"> • any stable surface able to tolerate abuse • bench pin with V notch • if possible, raise the work surface to jeweler's bench height to relieve strain in neck and shoulders. 	<ul style="list-style-type: none"> • jewelers bench, solid wood top with skirt is best • stable chair • fireproof flooring
Pliers	<ul style="list-style-type: none"> • round nose pliers (box nose joints are best) • chain nose plier, non-serrated (box nose joints are best) 2 would be optimal 	<ul style="list-style-type: none"> • nylon coated flat pliers (love mine) • any plier of better quality that suites your needs
Cutting to cut sheet metal, tubing, wire, custom bezel settings and more	<ul style="list-style-type: none"> • Xuron Metal Shears - 9180NS (LOVE these!!) • jeweler's saw frame • saw blades (depends on the thickness of your material) • bur lube for blades (can use beeswax or crayon) • wire cutters (flush cutter is best) 	
Drilling / Piercing	<ul style="list-style-type: none"> • rotary tool like FlexShaft , Dremel or Micromoter (for drilling holes, finishing and polishing) • selection of drill bits ranging (.02mm - 2mm) • scrap wood (surface for drilling on) • piece of leather or eraser (to hold metal to prevent burns) • center punch (or use a nail) 	<ul style="list-style-type: none"> • steel disc cutter - cuts out discs quickly • steel hole punch - quickly punches through thinner metal... useful if you need a certain size hole often
Fabrication	<ul style="list-style-type: none"> • steel bench block • steel ball peen hammer (2" - 3" long head) • nylon hammer or other non-marring hammer • scribe (or large sewing needle) • mm ruler • black sharpie • blue painters tape 	<ul style="list-style-type: none"> • ring clamp (wood or metal) • small rotating bench vise • digital ruler • steel drafting compass/divider • other hammers as needed • brass hammer (use on steel dapping tools & disc cutter) • dapping block for making domes • steel ring mandrel, ungrooved w/ American sizes • metal ring sizer

<p>Soldering</p> <p>fire-proof surface, ventilation and eye protection is VERY important!</p>	<ul style="list-style-type: none"> • solder brick, kiln firebrick or solderite board • fireproof surface ie. tiles or metal cookie sheet • torch (handheld butane torch is super easy for beginners) • gas for torch • solder (medium works for most things, I teach using paste solder) • wood handled cross-locking bent nose solder tweezers • sharp metal tweezers • glass dish for quenching water • white-out (to protect older solder joints from opening) 	<ul style="list-style-type: none"> • solder turntable and annealing stones easy and hard solder (add flux if using sheet/wire solder) • an ignitor (if using a torch that does not self-ignite)
<p>Pickle</p> <p>used to clean metal after soldering</p>	<ul style="list-style-type: none"> • copper or wood tongs • pot for pickle (ceramic or glass, a used covered ceramic crock pot will work) • glass container for baking soda solution • Sparex or PhDown (sodium bisulfate) to make pickle • SOFT brass brush for cleaning after pickling • blue dawn dish soap • paper towels 	<ul style="list-style-type: none"> • pickle works best when warm, not boiling • stainless steel strainer for smaller items
<p>Finishing</p>	<ul style="list-style-type: none"> • one really nice 8" half-round file (this is not the tool to bargain shop for, get a really good one, medium cut) • one set tiny metal needle files • one set 6" metal files • sandpaper: grits 220, 400, 600 	<ul style="list-style-type: none"> • emory cloth • more large files (coarse to fine) • handles for your files (comfort) • 3M bristle discs (used on dremel or flexshaft) • rubberized abrasives (used on dremel or flexshaft)
<p>Buffing/Polishing</p> <p>(tripoli to remove very fine scratches and then rouge for a high-gloss finish)</p>	<ul style="list-style-type: none"> • This can all be accomplished with 3M Bristle discs and rubberized abrasives on a flex shaft OR use the following... • 2 soft cotton buffing wheels for rotary tool (about .75" diameter, one for each compound) • Jeweler's tripoli compound (contains abrasive) • Jeweler's rouge compound (contains no abrasive) • Clean with dish soap, ammonia and hot water (about 1 teaspoon per 500mL of water) 	<ul style="list-style-type: none"> • rotary tumbler with stainless steel shot (do not bargain shop for this either) • ultrasonic cleaner
<p>Misc</p>	<ul style="list-style-type: none"> • Tim McCreight's Complete Metalsmith: Professional Edition • wood dowels & sticks (for sanding sticks) • plastic shape templates 	<p>anything else you need, be safe and have FUN</p>