

# **So, you want to make pretty metal things with fire?**

Samii's Guide to Tools and Materials for the  
Beginning SCA Redsmith and Whitesmith

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## Introduction

I promise we'll get to the "good stuff" soon, where you, dear reader, can start making your own jewelry. But, first, a short explanation of what "redsmithing" and "whitesmithing" is. I was introduced to the terms by my friend Tancorix inigena Bivaidonas during a conversation one night about the sort of metalwork that I do, and she basically explained that "redsmithing" is work with any copper-based, or "red", metal (usually copper or bronze) and that "whitesmithing" is work with silver or silver-tone ("white") metals.

Pretty much, unless you are being sponsored by an independently wealthy individual, you are going to be sourcing your materials and tools yourself. The entire purpose of this guide is to provide a relatively inexpensive guide for entry level work while bearing in mind that this hobby **IS** expensive. Much like the artisans I work alongside and learn from, as well as those who have come before, as your skill increases, so, too, will your quality of tools. Take your time building your kit and have fun with what you learn!

**Please note that this is what I wish I had when I first started. So, this list is essentially what I actively use currently and not what the full list of what I've bought along the way.**

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## Your First Kit

It has taken me roughly 4 years to figure out what should be part of a wholly inclusive "My First Hot Metalworking Kit", from PPE to torches to tools to polishing – which is coincidentally how long I've been doing metalwork. What I've done is created a list of tools that you'll want to pick up for your first kit. I have included links (if available) for each item. Many of the items, I will advise you to pick up locally if possible, both for safety concerns and / or cost savings.

\* Denotes consumable item class – you WILL have to replace this at some point.

These items are the bare minimums to get started outside of your metal:

Gloves – Protect your hands!

Fire Extinguisher – Just in case!

Bernzomatic Trigger Start Torch (TS 8000 Torch)

Bernzomatic Standard 14.1 OZ. Propane Hand Torch Cylinder

Vogelzang® Universal Firebrick (6-Pack)

Central Forge 15 Lb. Rugged Cast Iron Anvil

8 oz. Stubby Ball Peen Hammer

TEKTON 8 Inch Bolt Cutter | 3386, Black

CRAFTSMAN CMHT81645 8-in. Long Nose Pliers

Lightweight Paint Pail - 5 Quart

Kosher Salt

Regular Blue Dawn

White Vinegar

Baking Soda

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This is the full list of things I wish I'd known to get at the start and mostly what I use these days:

### **PPE\***

Get you some gloves. Preferably your choice of welder's gloves (I use these: <https://www.farmandfleet.com/products/g--5013-hobart-ultimate-fit-welding-gloves.html>). Don't make the mistake I did of accidentally touching hot fire brick; it hurts like crazy and healing is slow, meaning you can't play with metal while you're waiting for the wound to heal.

Fire Extinguisher – Your local hardware store will have this. A small kitchen / general use ABC extinguisher will suffice.

### **Torches**

Bernzomatic Trigger Start Torch (TS 8000 Torch) – <https://www.amazon.com/Bernzomatic-TS8000-Intensity-Trigger-Start/dp/B0019CQL60> - I use this one for annealing and rough fusing because of the broad flame. If you have to choose which torch to get first, it should be this one.

Bernzomatic FirePoint Creator Tool, Precision Flame Hand Torch for use with Bernzomatic MAP-Pro or Propane Fuel (Firepoint Tool) - <https://www.amazon.com/Bernzomatic-FirePoint-Creator-Precision-MAP-Pro/dp/B0BJH52913> - I use this one for fine work and for point-annealing because of the focused flame.

### **Gas\***

Bernzomatic Pre-Filled MAP-Pro Gas Torch Style Cylinder 14.1 oz - Use this for finish work and fusing. Pick this up locally. Yes, you can find it on Amazon, but it's easily found at your local big box hardware store.

Bernzomatic Standard 14.1 OZ. Propane Hand Torch Cylinder - Use this for annealing – it's cheaper than MAP gas, but doesn't get nearly as hot. Pick this up locally. Yes, you can find it on Amazon, but it's easily found at your local big box hardware store.

### **Fire Brick\***

GIRtech Insa-2 Lightweight & Thick Fire Bricks - 2600F Pack of 2 - Size 9" x 4.5" x 2.5" - <https://www.amazon.com/Girtech-Insa-2-Insulating-Fire-Bricks/dp/B09F98X2LT/> - This is not what I started using, but it's what I currently use in one of my normal workspaces. Invest in the heavier-duty stuff now instead of the stuff that's only half as thick.

Vogelzang® Universal Firebrick (6-Pack) - <https://www.menards.com/main/heating-cooling/fireplaces-stoves/fireplace-wood-stove-tools-accessories/wood-stove-accessories/vogelzang-universal-firebrick-6-pack/fbp6/p-1444445448340-c-6881.htm> - This is what I started using initially because it's both relatively cheap and easy to acquire. I still use this as part of my home and travel teaching kits.

## **Anvil / Vises**

Central Forge 15 Lb. Rugged Cast Iron Anvil - <https://www.harborfreight.com/15-lb-rugged-cast-iron-anvil-69425.html> - This is my home anvil. I've had mine for about a decade and have used it for both metalwork and minor armor repairs.

Central Machinery 2-1/2 in. Table Swivel Vise - <https://www.harborfreight.com/hand-tools/clamps-vises/vises-anvils/2-12-in-table-swivel-vise-59113.html> - Lacking a second person to help me make twists, I use this to hold one end while I use a pair of locking pliers to hold the other side.

## **Hammers**

8 oz. Stubby Ball Peen Hammer - <https://www.harborfreight.com/8-oz-stubby-ball-peen-hammer-95930.html> - If you get no other hammer, get this one. For the longest time, this was the only hammer I used to form my pieces.

Ball Peen Hammer Set, 5 Piece - <https://www.harborfreight.com/hand-tools/hammers-pry-bars/ball-peen-tack-hammers/5-piece-fiberglass-handle-ball-peen-hammer-set-39217.html> - This is a good set for the cost. I use an 8 oz for much of my work, but the heavier weights move metal more quickly when I'm doing production work.

Otto Frei Closeout Value Line Silversmiths Hammer Kit of 4 Hammers - <https://www.ottofrei.com/products/closeout-value-line-silversmiths-hammer-kit-of-4-hammers> - I use these for quite a bit of my finish work. A good set of hammers for the cost, especially for entry-level tools.

## **Tools**

TEKTON 8 Inch Bolt Cutter | 3386, Black - <https://www.amazon.com/TEKTON-8-Inch-Mini-Cutter-3386/dp/B000NQ4OYO> - These are my go-to bolt cutters for most gauges of metal (and for cutting rivets for armoring). They're well built, easy to use, and don't hurt your hands. So much so that I have 3 pairs – one for home, one for the armor repair kit, and one for my travel metalworking kit.

CRAFTSMAN CMHT81645 8-in. Long Nose Pliers - <https://www.amazon.com/CRAFTSMAN-CMHT81645-Long-Nose-Pliers/dp/B08PFK8YWQ> - These are my go-to pliers. They are heavy-duty and comfortable to work with.

TEKTON Curved Jaw Locking Pliers Set (3-Piece) | PLK90104 - <https://www.amazon.com/TEKTON-Curved-Locking-3-Piece-PLK90104/dp/B0CC69GD4B> - These are my go-to pliers for doing twists. They are heavy-duty and comfortable to work with.

PITTSBURGH 6 in. Safety Wire Twisting Pliers - <https://www.harborfreight.com/6-in-safety-wire-twisting-pliers-57397.html> - I use a set of these for twisting accent wires evenly. They help maintain an even twist throughout the length of the wire.

HEYMOUS Jewelry Making Kit - <https://www.amazon.com/gp/product/B07V6X5K32> - A set of 4 commonly used tools, including a ring sizer set. Good to have in your kit if making specifically sized rings.

Vouiu Bracelet Bending Pliers - <https://www.amazon.com/dp/B07GLHTYRF> - Helps with forming pieces with a “soft” curve.

Beadsmith Double Nylon Jaw Ring Bending Plier - <https://www.amazon.com/dp/B07FCV1YSL> - Helps with forming rings.

Lightweight Paint Pail - 5 Quart - <https://www.menards.com/main/paint/paint-sprayers-applicators/paint-trays-buckets/lightweight-paint-pail-5-quart/200996/p-1444429979103-c-13972.htm> - Bucket that I use for quenching. Get an additional 2 for pickling and neutralizing.

## **Polishing**

NATIONAL GEOGRAPHIC Rock Tumbler Kit - 3 Lb. Extra Large Capacity Barrel with 3-Speed Motor & 9-Day Timer - <https://www.amazon.com/NATIONAL-GEOGRAPHIC-Rock-Gemstones-Fastenings/dp/B08DL95CWL> - This is the tumbler I use most of the time to clean my pieces. More on that later.

2 LB 1/8" Stainless Steel Tumbling Media Shot Jewelers Mix 3 Shapes Tumbler Finishing - <https://www.amazon.com/gp/product/B00LLJY3OS/> - Seriously the best mix of tumbling media I've found for polishing your work.

Shinebrite Burnishing Compound, 8 Ounce\* - <https://www.amazon.com/gp/product/B00OV956EQ> - I add this whenever I polish my work in the tumbler and it ALWAYS comes out shiny.

## **Household Supplies You Probably Already Have\***

Kosher Salt  
Regular Blue Dawn  
White Vinegar  
Baking Soda

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## **Metal**

So, you've got all your tools. What about metal? I primarily work with phosphorous bronze, sterling and fine silver, and copper wire, though I'll sometimes cold work (no heat applied) brass.

When you order your metal, look for Dead Soft, which is the most pliable your metal can be.

Rio Grande Metals - <https://www.riogrande.com/>

Thunderbird Supply Company - <https://www.thunderbirdsupply.com/>

T.B. Hagstoz & Sons - <https://hagstoz.com/>

For ingots, I have ordered from the following:

APMEX - <https://www.apmex.com/>

JM Bullion - <https://www.jmbullion.com/>

DO NOT order ingots or coins from Wish or TEMU. They are copper core coated (maybe?) with the metal you think you're purchasing. Just save yourself the time and frustration.

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## **Technique**

Generally speaking, I'm not a fan of reinventing the wheel. I learned how to use a torch and fuse bronze wire by watching Dux Eikbrandr's tutorials on YouTube, then just practicing.

Dux Master Eik's Metal working tutorials -

<https://www.youtube.com/playlist?list=PLEYG861r52SL90GiFl9Yr-sH6Mj66Verk>

Anneal frequently. While you're forming your pieces, anneal them frequently so they remain mostly easy to work. The more experience you get working with your tools and materials, the easier it will be to know when they need to be annealed, as well as when they're done.

Another artisan I highly recommend for tutorial / inspiration videos is Strongford Arts:

<https://www.facebook.com/strongfordarts/videos>

I am also available as a reference – especially if I'm at an event where I can have a hot working station set up (ex. Warriors and Warlords or St. Radegund's Faire) – and invite people to come over and learn how to use the torch in a safe environment with hands-on learning.

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