

RECOMMENDED TOOLS AND EQUIPMENT FOR SCALE MODELING

Over the years I have acquired, tested and used many different types of tools, equipment and supplies for my scale modeling projects. I am always on the look out for tools and I have found them in places where I never thought they would be. The nail care section of drug stores is a great place to find sanding sticks. Arts and crafts stores have all kinds of stuff and jewelry craft stores carry lots of speciality tools. Your local hobby store is a great resource for tools, equipment and supplies for scale modeling. There are also two mail order suppliers that carry scale modeling supplies and they are Micro Mark and Model Expo. Both these companies advertise in FineScale Modeler magazine and I recommend that you get on their mailing list. Testors has a blue tube glue that is non-toxic and perfect for young modelers. Although I did not list this glue in this article, its perfect for kids.

All of the tools, equipment and supplies presented in this article can be found in all of my scale modeling books and in the articles that I have written over the past two decades.

HAPPY SCALE MODELING



Here are the basic hand tools for snipping, cutting, trimming and scraping. The small diameter X-Acto handle and associated blades is a stencil knife. I always keep a good supply number 11 X-Acto blades on hand as well as a box of single edge razor blades and other specialty blades. The stainless steel ruler, can be found in sewing supply stores. The Tweezers and the needle tool all have a thousand and one uses in scale modeling.



Miter boxes and razor saws are necessary for cutting plastic stock. These miter boxes are specifically designed for razor saws. Razor saws also come in various cutting grades.

Testors and K&S Engineering sell color coded sandpaper of various grades. You can also use automotive grade sandpaper. The "U" shaped tool and associated long, narrow sandpaper strips is a Flex-I-File, which works great around contoured surfaces and round shapes.

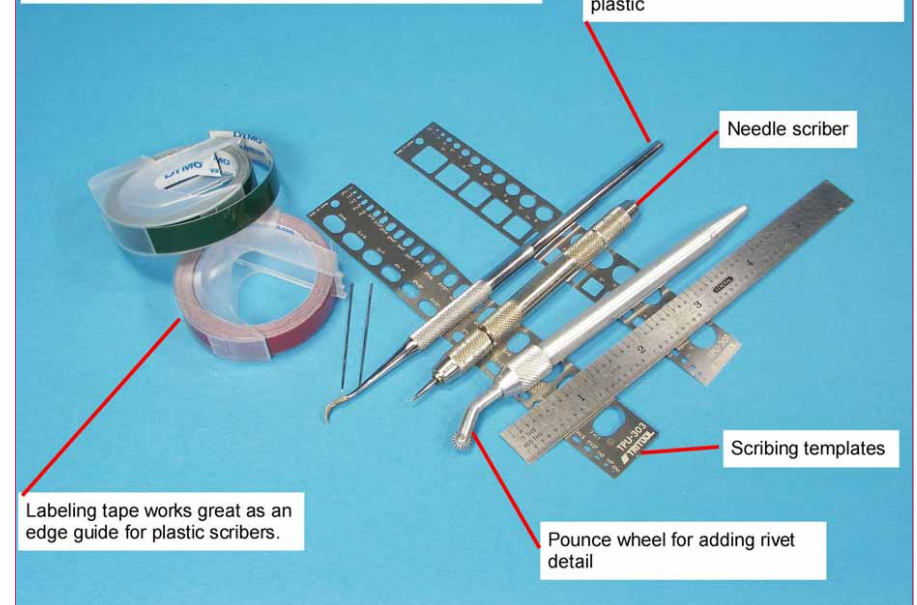


OOOO Steel wool works great for polishing plastic

Balsa strips make great sanding blocks.

Sanding sticks of various grades can be found in the nail care section in drug stores.

These are the basic tools for rescribing panel lines, creating scribed shapes and restoring or creating rivet detail.



The Bare Metal Foil plastic scribe is the best tool available for scribing plastic

Needle scribe

Scribing templates

Labeling tape works great as an edge guide for plastic scribes.

Pounce wheel for adding rivet detail

The Waldron Punch tool has a thousand uses in scale modeling. I keep a good supply of various diameters of drill bits and a drill bit gauge. The pin vise and the twist drill are good tools for drilling plastic. The caliper is an easy tool to use and a must have for checking the diameter of drill bits and dimensions of plastic stock.



A variable speed motor tool is nice to have when you need to do precise or repetitive drilling. The Dremel drill press stand and associated vice are perfect for precise drilling. To hold plastic parts in the vise, sandwich the part between two strips of balsa wood.

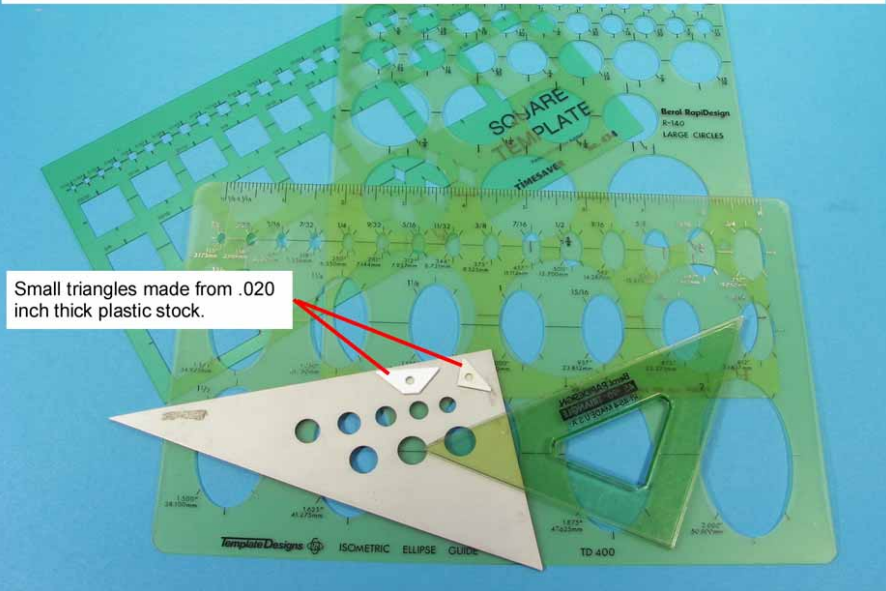
I found these two tools advertised in a Model Railroad magazine. The Northwest Shortline chopper works great for cutting plastic strips and duplicating parts with angled shapes. The true sander works great for achieving square corners and edges on plastic strip. Both tools are necessary for basic scratchbuilding.



These are the basic tools for shaping photoetch. Dowels work great to curve photoetch parts. To cut photoetch parts from their trees use single edge razors and do the cutting on a Plexiglas base. Flat faced needle nosed pliers are used to make sharp bends in photoetch. The pliers can be found in arts and crafts stores & jewelry craft stores.



These drafting templates and triangles are necessary tools for scratchbuilding even if you are only making a few simple parts. I also use very small triangles that I made for setting vertical lines on small parts.

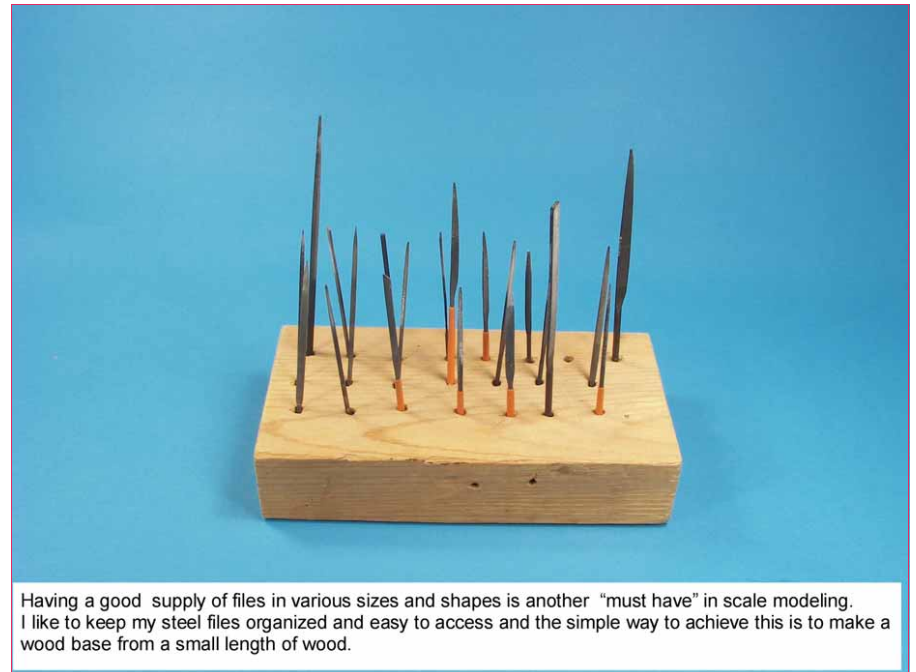


Small triangles made from .020 inch thick plastic stock.

I keep a good supply of various sizes and shapes of plastic for all my scale modeling needs. I use both Evergreen and Plastruct products.



I keep a good supply of various diameters of stiff brass wire. This wire has a thousand uses in scale modeling from antennas, to cockpit plumbing to ship masts.



Having a good supply of files in various sizes and shapes is another "must have" in scale modeling. I like to keep my steel files organized and easy to access and the simple way to achieve this is to make a wood base from a small length of wood.

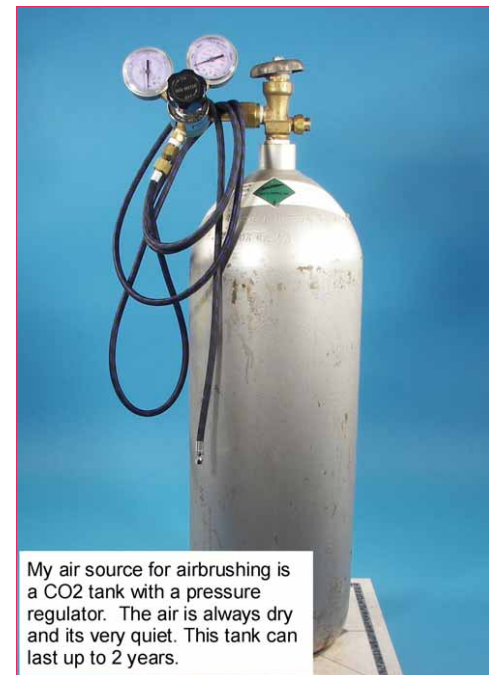
I use three different types of glues for all my scale modeling needs. Testors tube glue works great for applications where you need some working time to set a part in place. I use Super glue for all my gluing needs where two parts need to be glued together. The glue is strong and it is also a great seam filler. It can be scraped and sanded just like plastic. I also keep a bottle of super glue accelerator on hand for situations where I need the super glue to set quickly. Elmer's white glue can also be used as a void filler in specific situations and most importantly, white glue is perfect for attaching clear parts.



I like to have all my tools organized and in easy reach when I need them especially my airbrushing tools. Having multiple airbrush jars allows me to apply several colors in quick succession. I also keep a thin length of brass wire handy for clearing out clogs in the airbrush tip during painting. The droppers are used for the controlled application of thinner for paint mixing. I also use various diameters of pipe cleaners for airbrush cleaning which I recommend after each airbrush session.



Scale modelers usually stick to an airbrush type when they find one they feel comfortable with. I like a Badger 200 single action airbrush. The chrome and brass construction of this airbrush just feels comfortable in my hand. Whether you like to use enamels or water base paints keep an ample supply of thinner on hand. Always use the paint manufacturers recommended thinner. I also keep a supply of spare airbrush jars for mixing paint colors. The copper bee bees are dropped into the paint jar to agitate and mix the paint.



My air source for airbrushing is a CO2 tank with a pressure regulator. The air is always dry and its very quiet. This tank can last up to 2 years.

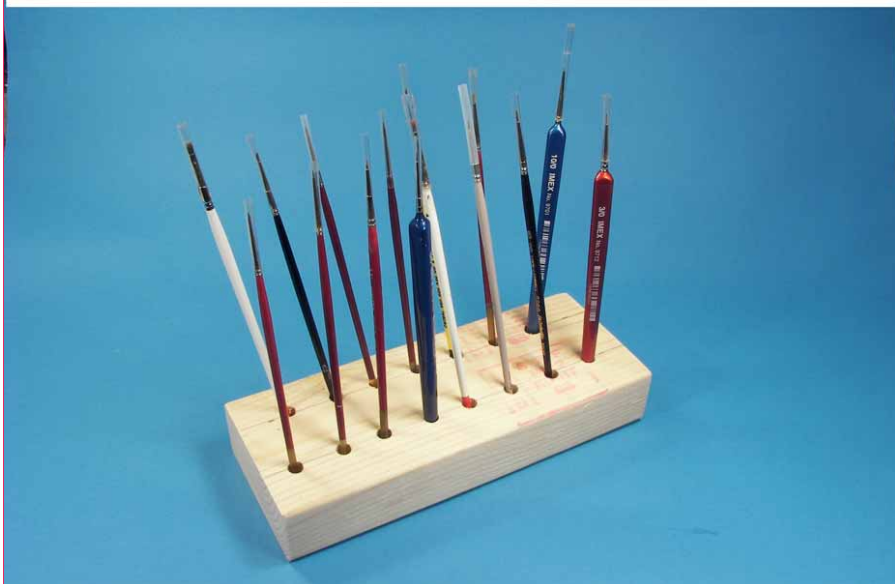
The pressure regulator allows you to adjust the pressure as well as providing you with a gauge for the amount of compressed air left in the tank.



If you have a stove vent that pushes the air outside you can make a spray booth from a large cardboard box. To protect the vents filters I tape an air-conditioning filter over it. Clip on lights provide all the extra light necessary. I do recommend draping towels over the stove and the surrounding cabinets to protect them from over spray.



I have a good supply of quality brushes for detail work and weathering. Good quality brushes are expensive and to keep them organized and to protect the bristles, I made a organizer from a length of wood. The brushes are all in easy reach and can be organized any way you like them.



These are the basic tools for decaling. I cut out decals on a plexiglas plate using a straight edge and a sharp number 11 X-Acto blade. The tweezers are for handling the decals and the clear glass jar is for dipping the decals in warm water. The cotton swabs are for applying decal setting solution and for positioning the decals on the surface of the model. The two part decal setting solutions are a must if you want decals that look like they are painted on. To prevent decals from "silvering" always apply them to a gloss surface.



I use a large self healing cutting board as my cutting surface on my work bench. I keep several boxes of tissues on hand as well as a box or two of Q-Tips. A set of safety glasses to protect your eyes is a must when you are doing any type of drilling work or where small parts may become airborne.



Soft lead pencils work great for marking locations on plastic. I use Sharpie indelible markers to mark parts, and to color thread and stretched plastic. I also use drafting pens that have very small tips to color canopies on tiny aircraft and windows and portholes on ships.



Craft bin organizers can be found in arts and crafts and sewing supply stores. These organizers are great for storing parts while you are building a model.

