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Glossary

Alloy a combination of two or more metals. Common alloys used in jewelry are: gold under 24 Kt (mixed with silver, copper, and/or other metals), sterling silver (92.5% silver, 7.5% copper), brass (roughly half copper, half zinc), bronze (at least 60% copper with tin and perhaps other metals), and pewter (tin, lead, antimony, and a bit of silver or copper).

Allum Dry crystals that are dissolved in hot water make a pickling solution that is suitable for home use. Also used to dissolve broken drill bits. Available from drug stores and pharmacies.

Annealing The process of heat-treating work-hardened metal in order to reorganize its grain structure and return the metal to a softer, more workable state.

Argentium Sterling Silver Sterling silver that is 92.5% pure silver, but has the addition of germanium, which allows it to be worked at a slightly lower heat and to resist tarnish.

Base Metal A nonprecious metal such as brass, nickel, or copper.

Bench Pin A wooden extension of a jeweler's bench against which filing, sawing, and forming are done.

Bezel Stone setting using a metal band encircling the girdle of the stone.

Binding Wire Iron wire used to secure seams while soldering. Available in a variety of thicknesses.

Bur Any of a variety of grinding bits that can be mounted in a flex shaft such as a cone bur, bud bur, setting bur, cylinder bur, and so on.

Burnishing Rubbing metal with a polished steel or stone tool to create a shiny finish.

Cabochon a style of stone cutting characterized by a domed top and a flat bottom.

Casting Pouring molten metal into a mold to obtain an object of a desired shape. See also Lost Wax Casting.

Chasing The technique of forming/tooling all metals from the front side using a hammer and steel punches and chisels. It is usually used in combination with repoussé.

Collet A collar or set of jaws used to hold a cylindrical object such as a bur, wire, rod, or tube. Pin vises, tube holders, and flex shaft hand pieces all employ collets for holding.

Cloisonné A process in which silver wire is soldered in a pattern to a metal body to create areas that are then filled with enamel, often in different colors.

Copper A reddish-orange metal that is the base metal for bronze and brass. Commonly used along with gold and silver as the metallic base for enameling.

Cross Peen A type of hammer with a wedge-shaped striking surface used to stretch metal in the direction perpendicular to the long axis of the face.

Dapping Also called doming. The act of forming a metal disk into a hemisphere by forcing it into a dapping block, with the use of dapping punches.

Depletion Gilding Raising the fine metal grains of either gold or silver to the top of a piece of metal by heating and cleaning it multiple times. This technique can be used in preparation for enameling and keum boo.

Die A metal block used for forming sheet metal and other materials.

Drawing The act of pulling wire, chain, or tubing through a draw plate in order to reduce its size.

Enameling A decorative technique in which glass is applied in a dry sift or wet paste to the surface of a metal, normally bronze, copper or gold. This glass composition adheres to the metal through fusion under very high temperatures.

Etching The process of using acids or strong chemicals to selectively corrode or eat away at a metal object.

Ferrous Metals Metals that contain iron. Examples include pure iron, cast iron, wrought iron, steel and steel alloys.

Firescale A purplish gray stain caused by the subsurface oxidation of copper in silver alloys. Also called firestain.

Flux A liquid, powder, or solid used to seal metal from the atmosphere and/or to guide solder's flow.

Forging. A process in which hammers are used to shape metal by changing its thickness or cross section.

Forming. Similar to forging, a technique in which the thickness remains constant but the shape of the metal is altered by embossing or bending.

Fold-Forming A method of forming sheet metal quickly into three-dimensional shapes and textures, most from single sheets of metal.

Fusing With heat, melding two metals to one another without losing shape or details.

Keum Boo An ancient Korean gilding technique used to apply thin sheets of gold to silver

Liver of Sulphur Potassium sulfide, a compound dissolved in water to create a patina on sterling silver and copper.

Lost Wax Casting The method of creating a metal form by first creating it in wax and placing that into plaster. The wax is burned away to leave a cavity and molten metal is poured into the cavity to create a metal version of the wax original.

Malleability The ability of metal to be forged, formed, bend, or thinned by rolling.

Mandrel A steel shape used for supporting metal while it is being hammered and formed. The most common variety is a ring mandrel, a round tapered rod that accommodates all the usual ring sizes along its length.

Mokume Gane From the Japanese: 'wood eye (burl) metal.' A technique in which layers of metals of contrasting colors are fused, distorted, and then revealed.

Needle File The smallest type of file, usually used without a wooden handle and available in a wide variety of cross-sections and grits.

Non-Ferrous Metals Metals that do not contain iron, such as silver, gold, copper.

Pickling The process of dissolving surface oxides and flux from metal after soldering, by submersion in a dilute acid solution called a pickle or pickle bath.

Piercing Perforating or cutting holes or patterns into metal with a saw or drill bit.

Raising A technique in which sheet metal is formed into a bowl or other hollow object by repeated sequences of hammering and annealing of the metal, thereby stretching it into the desired shape.

Repoussé The technique of hammering and/or punching ferrous or nonferrous metal from its backside to create a raised design on the front. See also chasing.

Resin Two-part epoxy which pigments can be added to.

Reticulation A process through which a metal sheet is induced to gather itself into ridges and valleys as heat is applied to the surface.

Rivet A pin or tube passing through two or more components and then expanded (upset) at the ends to connect them.

Roller Printing A process in which annealed metal is rolled through a press sandwiched with other materials (cloth, screen, other embossed metals) to imprint a pattern.

Soldering The process of joining metal components by heating and flowing an alloy with a lower melting temperature into the seam.

Stake Any of a wide variety of steel, wood, or plastic tools or anvils fixed in a vise or stake holder and against which metal is forged or formed with hammers.

Sterling Silver An alloy of silver containing 92.5% pure silver and 7.5% other metals, usually copper.

Work Hardening Hardening of soft/annealed metal caused by continually moving the metal by bending or hammering