

WAC 296-17A-3503 Classification 3503.

3503-17 Pottery, earthenware, ceramics, porcelain or china: Manufacturing

Applies to establishments engaged in the manufacture of a wide variety of household or decorative items such as earthenware, pottery, ceramics, porcelain or china. Casting and throwing are the most common techniques. Other techniques include pressing, extrusion and sculpturing. Finished products include, but are not limited to, pots, bowls, dishes, plates, cups, cookie jars, vases, dolls, tobacco pipes, and novelty items. Materials include clay, sand, fluxing agents, paints, and glazing compounds. Machinery includes, but is not limited to, hand tools, potter's wheels, kilns, and plaster molds. In the casting method, clay is mixed with water and other additives until it is about the consistency of thick cream (called slip). The molds are closed shut and secured; then the slip is poured into them through a small hole at the top, and left in the mold to dry for a short time then poured out, leaving a hollow product to fire. In the throwing method, the clay mixture is placed on a potter's wheel and molded by hand as the wheel slowly turns. The pressing technique forces relatively dry clay into molds under substantial hydraulic pressure, which makes it hold its shape until fired. Extrusion forces a ribbon of clay through specially shaped dies, then it is cut with wire to create the final form. Sculpturing is hand carving wet clay to the desired dimensions. The resulting greenware from any method may be sanded, then further dried and fired in a small kiln. Most of the items will be glazed and refired several more times, depending on the desired end result. Prior to glazing, products may be decorated by hand painting designs on them. Most of the establishments in this classification are small shops that make the products they sell, either at their shop or occasionally at craft fairs. The teaching of classes and the incidental sale of ceramic and pottery making supplies or tools to home crafters is included within the scope of classification 3503-17. This classification includes establishments that only make molds by casting shapes in plaster, most of which they sell to ceramic shops for use in casting greenware.

This classification excludes the mining, digging or quarrying of raw materials which is to be reported separately in the applicable classification; manufacture of decorative tile which is to be reported separately in classification 3503-19; manufacture of brick or concrete products such as, but not limited to, brick or clay pipe and concrete tile which is to be reported separately in the classification applicable to the work being performed; and establishments whose primary business is the sale of supplies used for crafts or hobbies which are to be reported separately in classification 6406.

3503-19 Decorative tile: Manufacturing

Applies to establishments engaged in the manufacture of decorative tile from cement or various clay mixtures. Raw materials include clay, sawdust, straw, coal dust, sand, and glazing compounds. Machinery includes, but is not limited to, hand tools, hydraulic presses, automatic grinding and polishing machines, hand grinding and polishing stones and laps, batch mixers, molds, hand trucks, kiln ovens and steam curing rooms. Cement tiles are usually pressed on hydraulic presses, kept wet until cured, then ground to size with a diamond wheel and polished. To make cast clay tiles, clay is mixed with water and other ingredients, ground to desired fineness, screened, then poured into molds to dry. After drying, tiles are removed from molds

and fired in a kiln oven, then glazed. Tile glaziers apply designs to bisque tile by hand or with a silk screen process, then glaze and fire it in a kiln one or more times. This classification includes the manufacture of decorative artificial rock or brick used as trimming around fireplaces, stoves, or on walls. To make artificial rock or brick, coloring is added to a mixture of cement and aggregate; the mixture is poured into molds. After the mixture has set, the piece is removed from the mold and cured.

This classification excludes the mining, digging or quarrying of the raw materials which is to be reported separately in the applicable classification; the manufacture of pottery, earthenware, ceramics, porcelain or china which is to be reported separately in classification 3503-17; and the manufacture of brick or concrete products such as brick or clay pipe and concrete blocks or stepping stones, drain tile, beams which is to be reported separately in the classification applicable to the work being performed.

3503-20 Stained or leaded glassware, N.O.C.: Manufacturing

Applies to establishments engaged in the manufacture of stained or leaded glassware not covered by another classification (N.O.C.) including, but not limited to, windows, tiffany style or plain glass lamp shades, terrariums, or decorative items such as aquariums, shadow boxes, mirror picture frames or figurines. Much artistic hand labor is involved in making stained glass items. Pattern paper, masking tape, kerosene, wire solder, putty, and H-lead comes (slender, grooved bars) are received from others. Individual pieces of a design are cut to pattern out of stained glass; pieces may be ground for a precision fit on an emery or diamond wheel. Individual segments are pressed into the channels of the lead came; joints are fluxed, soldered and putty is pushed into any open spaces between the glass and the comes. The finished piece is smoothed and cleaned with kerosene. While lead comes are more widely used, copper foil may be used instead of lead. Manufacturers may also paint on glass and fire it in a kiln; this is most often done for stained glass window insets. Employers subject to this classification may repair items such as stained glass windows. If the repair requires bent or shaped glass, they make a mold and heat the replacement glass in a kiln oven until it "slumps" or bends to the shape of the mold. Most manufacturers in this state purchase their stained glass from others; however, the manufacture of stained glass is contemplated within the scope of this classification. Raw materials such as, but not limited to, sand, soda ash, and metal oxides are melted in a furnace and the molten glass is either rolled into sheets by machine or blown into long balloon shapes that are slit open and flattened by reheating. Color may be added to the surface while it is still molten. Some incidental manufacturing of insulated glass, such as sandwiching leaded glass between two sheets of clear glass, is included within the scope of this classification, but production line manufacturing of insulated glass is to be reported separately in classification 1108. Most of the establishments in this classification are small shops that make the products they sell, either at their shop or occasionally at craft fairs. The teaching of classes and the incidental sale of supplies or tools used to make glassware items to home crafters is included within the scope of this classification.

This classification excludes the mining, digging or quarrying of raw materials which is to be reported separately in the applicable classification; establishments that manufacture optical goods or telescopes, or perform precision grinding of blank or rough lenses, which

are to be reported separately in classification 6604; establishments engaged in etching, frosting, sandblasting, carving, grinding, and beveling glass which are to be reported separately in classification 1108; establishments engaged in melting or blowing glass which are to be reported separately in classification 3503-21; and establishments whose primary business is the sale of supplies used for crafts or hobbies which are to be reported separately in classification 6406.

3503-21 Glassware, N.O.C.: Manufacturing; Melting, blowing, and forming hot glass

Applies to establishments engaged in manufacturing housewares, decorative and specialty items not covered by another classification (N.O.C.) from hot glass using methods that include melting, blowing, or forming. Items include, but are not limited to, tableware, bakeware, perfume bottles, candlestick holders, kerosene lamp chimneys, auto headlight lenses, radio insulators, doorknobs, paperweights, and ashtrays. Machinery includes, but is not limited to, hand tools, glass melting furnaces, annealing ovens, mixing machines, ball mills, glass cutting diamond saws, glass grinding wheels and discs, glass polishing laps, drill presses, steel cutting saws, arc and gas welders, forklifts, overhead cranes or hoists. Some shops make their glass from raw materials including oxides, volcanic ash, soda ash, silica sand, lime, phosphate, or borax which are received from outside sources. Others will heat glass chips (frit) in a furnace, and work the molten glass into decorative or functional shapes by molding or blowing. The molten glass is poured into molds to make products such as, but not limited to, heavy glass for special purpose windows up to about eight inches thick. Molten glass may also be poured into cold water to make "frit" which is either sold or used for further processing. The molten glass can also be formed in a mouth-blowing process or by semiautomatic blowing machines. A glass blowing process will usually have a helper working with each glass blower. The helper's duties include preliminary glass gathering and blowing, adding colored glass "ribbons" to the item being blown as the glassblower turns it, shaping items being blown with wooden or metal tools, and placing the blown object in an annealing oven to be reheated and cooled slowly to relieve internal stress in the glass. When glass reaches room temperature, it is often cut on diamond wheels or ground down and polished on a series of wheels, stones, and laps. This work is normally done under a continuous water bath which may include grinding or polishing compounds.

This classification excludes the mining, digging or quarrying of raw materials which is to be reported separately in the applicable classification; establishments engaged in manufacturing stained or leaded glassware which are to be reported separately in classification 3503-20; establishments that manufacture optical goods or telescopes, or perform precision grinding of blank or rough lenses, which are to be reported separately in classification 6604; and establishments engaged in etching, frosting, sandblasting, carving, grinding, and beveling glass which are to be reported separately in classification 1108.

3503-23 Agate or enamel ware: Manufacturing

Applies to establishments engaged in enameling or porcelainizing products they have made or products made by others. Enamel is defined as a vitreous, usually opaque, protective or decorative coating baked on metal. Enameled products vary widely, including but not limited to, signs, cookware, items made from ceramics or clay, stove parts, or small parts for automobiles, to sewer pipe, automobile manifolds, or

irrigation water gauges. Machinery includes, but is not limited to, ball mills, silk screen equipment, blenders or mixers, scales, kilns, degreasing and acid etching tanks, spray guns, heaters, conveyors, and fork lifts. The enameling process is essentially the same regardless of the product. Ceramic balls and frit (small glass chips) are placed in the ball mill. (A ball mill is a metal drum lined with rubber.) As the drum rotates, the balls roll over the frit, gradually grinding it into powder. Some enameling shops purchase the powder ready-made. To obtain desired colors, various mixes of glaze powders are prepared and placed on 1" to 2" square metal chips and baked in a small kiln. When the formulas are ready for all colors required, the job goes to the production line. The object to be glazed is cleaned, degreased, and given an acid bath if necessary, then rinsed and dried. The enamel (or porcelain) glaze may be applied by hand, silk screened on, or sprayed on with a spray gun. After the coating has air-dried, the piece heated in a kiln to melt the ceramic powder and fuse it to the surface; then cooled. Items may require repeated coatings and firings.

This classification excludes the manufacture of enameled brick which is to be reported separately in classification 3501.

[Statutory Authority: RCW 51.04.020 and 51.16.035. WSR 18-11-113, § 296-17A-3503, filed 5/22/18, effective 7/1/18. WSR 07-01-014, recodified as § 296-17A-3503, filed 12/8/06, effective 12/8/06. Statutory Authority: RCW 51.16.035. WSR 98-18-042, § 296-17-587, filed 8/28/98, effective 10/1/98. Statutory Authority: RCW 51.04.020(1) and 51.16.035. WSR 89-24-051 (Order 89-22), § 296-17-587, filed 12/1/89, effective 1/1/90. Statutory Authority: RCW 51.16.035. WSR 85-24-032 (Order 85-33), § 296-17-587, filed 11/27/85, effective 1/1/86; WSR 83-24-017 (Order 83-36), § 296-17-587, filed 11/30/83, effective 1/1/84; WSR 82-24-047 (Order 82-38), § 296-17-587, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-587, filed 11/9/73, effective 1/1/74.]