

WAC 296-17A-3503 Classification 3503.

3503-17 Pottery, earthenware, ceramics, porcelain, china, decorative tile, or enamel ware: Manufacturing

Applies to:

- Businesses engaged in the manufacture of a wide variety of household or decorative items such as earthenware, pottery, ceramics, porcelain or china;
- Businesses engaged in the manufacture of decorative tile from cement or various clay mixtures;
- Businesses engaged in enameling or porcelainizing products they have made or products made by others;
- Businesses engaged in the manufacture of decorative artificial rock or brick used as trimming around fireplaces, stoves, or on walls;
- Businesses that only make molds by casting shapes in plaster, most of which they sell to ceramic shops for use in casting greenware;
- Incidental teaching of classes and the sale of ceramic and pottery making supplies or tools to home crafters is included.

Products manufactured include, but are not limited to:

- Artificial brick;
- Artificial rock;
- Bowls;
- Cookie jars;
- Cups;
- Decorative tiles;
- Dishes;
- Dolls;
- Enameled items such as, but not limited to, signs, cookware, items made from ceramics or clay, stove parts, small parts for automobiles, sewer pipe, automobile manifolds, or irrigation water gauges;
- Novelty items;
- Plates;
- Pots;
- Tobacco pipes;
- Vases.

Processes include, but are not limited to:

- Casting - 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.
- Extrusion - Extrusion forces a ribbon of clay through specially shaped dies, then it is cut with wire to create the final form.
- Pressing - The pressing technique forces relatively dry clay into molds under substantial hydraulic pressure, which makes it hold its shape until fired.
- Sculpturing - Sculpturing is hand carving wet clay to the desired dimensions.
- Throwing - In the throwing method, the clay mixture is placed on a potter's wheel and molded by hand as the wheel slowly turns.
- The resulting greenware from any pottery 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.

- 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.

- 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.

- Enameling - 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 that is used to create the enamel glaze. 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 is heated in a kiln to melt the ceramic powder and fuse it to the surface; then cooled. Items may require repeated coatings and firings.

Materials used include, but are not limited to:

- Clay;
- Coal dust;
- Fluxing agents;
- Frit;
- Glass powder;
- Glazing compounds;
- Paints;
- Sand;
- Sawdust;
- Straw.

Tools and machinery used include, but are not limited to:

- Automatic grinding and polishing machines;
- Ball mills;
- Batch mixers;
- Conveyors;
- Degreasing and acid etching tanks;
- Fork lifts;
- Hand grinding and polishing stones and laps;
- Hand tools;
- Hand trucks;
- Heaters;
- Hydraulic presses;
- Kilns;
- Plaster molds;
- Potter's wheels;
- Scales;
- Silk screen equipment;
- Spray guns;
- Steam curing rooms.

Exclusions:

- Worker hours mining, digging or quarrying raw materials are reported separately in the applicable classification;

- Worker hours manufacturing brick or concrete products such as, but not limited to, brick or clay pipe and concrete blocks or stepping stones, drain tile, beams, which are reported separately in the classification applicable to the work being performed;
- Businesses primarily engaged in the sale of supplies used for crafts or hobbies are classified in 6406;
- Manufacturing enameled brick is classified in 3501.

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

Applies to:

- Businesses engaged in manufacturing housewares, decorative, and specialty items from hot glass using methods that include melting, blowing, or forming not covered by another classification (N.O.C.);
- Businesses engaged in the manufacture or repair of stained or leaded glassware not covered by another classification (N.O.C.);
- Incidental teaching of classes and the sale of supplies or tools used to make glassware items to home crafters;
- Incidental manufacturing of insulated glass, such as sandwiching leaded glass between two sheets of clear glass.

Products manufactured include, but are not limited to:

- Ashtrays;
- Auto headlight lenses;
- Bakeware;
- Candlestick holders;
- Doorknobs;
- Kerosene lamp chimneys;
- Paperweights;
- Perfume bottles;
- Radio insulators;
- Stained glass items 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;
- Tableware.

Processes include, but are not limited to:

- Blowing - Heat glass chips (frit) in a furnace. 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.
- Molding - Heat glass chips (frit) in a furnace. 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.
- Stained glass making - 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.

- Making glass or stained glass - Raw materials such as, but not limited to, borax, lime, phosphate, sand, soda ash, volcanic 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.

Materials used include, but are not limited to:

- Copper foil;
- Glass making materials - Borax, lime, phosphate, silica sand, soda ash, volcanic ash, and oxides;
- Glass frit;
- H-lead comes (grooved, lead bars);
- Kerosene;
- Masking tape;
- Pattern paper;
- Putty;
- Stained glass sheets;
- Wire solder.

Tools and machinery used include, but are not limited to:

- Annealing ovens;
- Arc and gas welders;
- Ball mills;
- Drill presses;
- Forklifts;
- Glass cutting diamond saws;
- Glass grinding wheels and discs;
- Glass melting furnaces;
- Glass polishing laps;
- Hand tools;
- Mixing machines;
- Overhead cranes or hoists;
- Steel cutting saws.

Exclusions:

- Worker hours mining, digging or quarrying raw materials are reported separately in the applicable classification;
- Worker hours manufacturing optical goods or telescopes, or performing precision grinding of blank or rough lenses are reported separately in classification 6604;
- Etching, frosting, sandblasting, carving, grinding, and beveling glass is classified in 1108;
- Production line manufacturing of insulated glass is classified in 1108;
- Businesses primarily engaged in the sale of supplies used for crafts or hobbies are classified in 6406.

[Statutory Authority: RCW 51.04.020 and 51.16.035. WSR 22-21-117, § 296-17A-3503, filed 10/18/22, effective 1/1/23; 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.]