WAC 296-17A-3513 Classification 3513.

3513-00 Rubber goods, N.O.C.: Manufacturing

Applies to:

• Businesses engaged in manufacturing rubber goods not covered by another classification (N.O.C.) from natural or synthetic rubber, which may be hard, soft, or liquid.

• Businesses that manufacture rubber tires; mix and compound rubber for sale to tire dealers that recap or retread tires; use heavy machinery to cut used tires into large pieces which are then formed into bumpers for boats, loading docks or similar items; or shred used tires or other rubber products.

Rubber goods manufactured in this classification include a wide variety of items such as, but not limited to:

- Belts;
- Floor mats;
- Floor tiles;
- Foam rubber cushions or pads;
- Gaskets;
- Hoses;
- Interior pieces for computer circuit boards;
- Latex rubber goods, such as gloves;
- O-rings;
- Rubber bands;
- Seals;
- Shoe parts;
- Sponge rubber novelties.

Shredding tires or other rubber products includes:

• Running used rubber through granulators or rotary shearers that shred it to small pieces.

• Shredded material can be used by customers as filler for asphalt for running tracks, for mixing with coal, for fuel in industrial plants, or for further processing into oil.

Manufacturing processes includes:

• Washing, mixing, rolling, extruding, calendaring, molding, and curing, all of which cause chemical reactions to the rubber until it reaches the desired property or state.

• Vulcanization, which improves the strength, resiliency and odor of rubber by combining it with sulfur or other additives in the presence of heat and pressure.

• Trimming flashing by hand with knives or smoothing with grinders.

• Businesses subject to this classification may also make some products by cutting and gluing premanufactured materials. If any rubber molding is performed, the entire operation is covered under this classification.

Machinery includes, but is not limited to:

• Shearer - Cuts bulk rubber into strips or chunks.

• Extruder - Mixes and heats pieces of rubber to high temperature, then forces the mixture out through dies, forming it into "ropes." O-rings are made with extruded ropes.

• Rubber mill - Has two heavy rollers (each about 1 foot diameter) that spin towards each other; the friction of the spinning rollers causes heat. Strips of raw rubber and dry chemicals are fed into the rollers where they are mashed and pressed, forming it into different grades or densities. The rubber emerges from the mill in flat, pliable strips, ready for further treatments.

• Calendar - Passes rubber through rollers which work it to a smooth, even, glossy finish.

• Hydraulic steam press - Placing strips of rubber into cast iron molds after they have been milled and rolled. The molds are inserted into a press where heat and pressure are applied until the rubber is molded to desired shape, then removed and cooled.

• Injection mold press - Rubber is shot into the cavity of molds. The press heats it to an almost liquid form, then it becomes stable. A vacuum pump sucks air from the molds to form the product.

• Deflasher machine - Resembles a clothes dryer with a basket inside and used to remove flashing (the excess rubber that has squeezed out of the mold during forming). Molded items are placed in the basket. Nylon pellets are added to the machine. As the machine spins, the pellets beat the flashing from the molded pieces.

• During oven - The final step for most processes which dries and sets the rubber.

Exclusions:

• Businesses manufacturing rubber goods without rubber molding, but only by cutting and gluing premanufactured rubber or composite sheets are classified in 3802;

• Tire dump operations are classified in 4305;

• Manufacturing synthetic rubber and the "advanced recycling" of shredded tires or rubber is classified in 3407.

[Statutory Authority: RCW 51.04.020 and 51.16.035. WSR 24-23-081, s 296-17A-3513, filed 11/19/24, effective 1/1/25. WSR 07-01-014, recodified as § 296-17A-3513, filed 12/8/06, effective 12/8/06. Statutory Authority: RCW 51.16.035. WSR 98-18-042, § 296-17-59205, filed 8/28/98, effective 10/1/98; WSR 96-12-039, § 296-17-59205, filed 5/31/96, effective 7/1/96.]