

1997 NAICS

Sector 31-33--Manufacturing

The Sector as a Whole

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership.

The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are

classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS:

Milk bottling and pasteurizing;
Water bottling and processing;
Fresh fish packaging (oyster shucking, fish filleting);
Apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others;
Printing and related activities;
Ready-mixed concrete production;
Leather converting;
Grinding of lenses to prescription;
Wood preserving;
Electroplating, plating, metal heat treating, and polishing for the trade;
Lapidary work for the trade;
Fabricating signs and advertising displays;
Rebuilding or remanufacturing machinery (i.e., automotive parts);
Ship repair and renovation;
Machine shops; and
Tire retreading.

Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing). They include:

1. Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting is considered a harvesting operation;
2. The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining;
3. The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction;
4. Establishments engaged in breaking of bulk and redistribution in smaller lots,

including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and

5. Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 Food Manufacturing

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 Animal Food Manufacturing

31111 Animal Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

Cross-References. Establishments primarily engaged in--

- Slaughtering animals for feed--are classified in Industry 31161, Animal Slaughtering and Processing; and
- Manufacturing vitamins and minerals for animals--are classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

311111 Dog and Cat Food Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing dog

and cat food from ingredients, such as grains, oilseed mill products, and meat products.

Cross-References. Establishments primarily engaged in--

- Manufacturing food for animals (except dog and cat)--are classified in U.S. Industry 311119, Other Animal Food Manufacturing;
- Slaughtering animals for feed--are classified in Industry 31161, Animal Slaughtering and Processing; and
- Manufacturing vitamins and minerals for dogs and cats--are classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

311119 Other Animal Food Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

Cross-References. Establishments primarily engaged in--

- Manufacturing dog and cat foods--are classified in U.S. Industry 311111, Dog and Cat Food Manufacturing;
- Slaughtering animals for feed--are classified in Industry 31161, Animal Slaughtering and Processing; and
- Manufacturing vitamins and minerals for animals--are classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

3112 Grain and Oilseed Milling

31121 Flour Milling and Malt Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) milling flour or meal from grains or vegetables; (2) preparing flour mixes or doughs from flour milled in the same establishment; (3) milling, cleaning, and polishing rice; and (4) manufacturing malt from barley, rye, or other grains.

Cross-References. Establishments primarily engaged in--

- Preparing breakfast cereals from flour milled in the same establishment--are classified in Industry 31123, Breakfast Cereal Manufacturing;
- Crushing soybeans or wet milling corn and vegetables--are classified in Industry 31122, Starch and Vegetable Fats and Oils Manufacturing;
- Manufacturing prepared flour mixes or doughs from flour ground elsewhere--are classified in Industry 31182, Cookie, Cracker, and Pasta Manufacturing;
- Brewing malt beverages--are classified in Industry 31212, Breweries;
- Mixing purchased dried and dehydrated ingredients with purchased rice--are

classified in Industry 31199, All Other Food Manufacturing;

- Drying and/or dehydrating ingredients and packaging them with purchased rice--are classified in Industry 31142, Fruit and Vegetable Canning, Pickling and Drying; and
- Manufacturing malt extract and syrups--are classified in Industry 31194, Seasoning and Dressing Manufacturing.

311211 Flour Milling^{CAN}

This U.S. industry comprises establishments primarily engaged in (1) milling flour or meal from grains (except rice) or vegetables and/or (2) milling flour and preparing flour mixes or doughs.

Cross-References. Establishments primarily engaged in--

- Preparing breakfast cereals from flour milled in the same establishment--are classified in Industry 311230, Breakfast Cereal Manufacturing;
- Manufacturing prepared flour mixes or doughs from flour ground elsewhere--are classified in U.S. Industry 311822, Flour Mixes and Dough Manufacturing from Purchased Flour;
- Milling rice or cleaning and polishing rice--are classified in U.S. Industry 311212, Rice Milling;
- Wet milling corn and vegetables--are classified in U.S. Industry, 311221, Wet Corn Milling; and
- Crushing soybean and extracting soybean oil--are classified in U.S. Industry 311222, Soybean Processing.

311212 Rice Milling^{US}

This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.

Cross-References. Establishments primarily engaged in--

- Drying and/or dehydrating ingredients and packaging them with purchased rice--are classified in U.S. Industry 311423, Dried and Dehydrated Food Manufacturing; and
- Mixing purchased dried and/or dehydrated ingredients with purchased rice--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing.

311213 Malt Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

Cross-References. Establishments primarily engaged in--

- Brewing malt beverages--are classified in Industry 312120, Breweries; and
- Manufacturing malt extract and syrups--are classified in U.S. Industry 311942, Spice and Extract Manufacturing.

31122 Starch and Vegetable Fats and Oils Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) wet milling corn and vegetables; (2) crushing oilseeds and tree nuts; (3) refining and/or blending vegetable oils; (4) manufacturing shortening and margarine; and (5) blending purchased animal fats with vegetable fats.

Cross-References. Establishments primarily engaged in--

- Manufacturing table syrups from corn syrup and starch base dessert powders--are classified in Industry 31199, All Other Food Manufacturing;
- Reducing maple sap to maple syrup--are classified in Industry 11199, All Other Crop Farming;
- Milling flour or meal from grains and vegetables--are classified in Industry 31121, Flour Milling and Malt Manufacturing;
- Wet milling corn to produce nonpotable ethyl alcohol--are classified in Industry 32519, Other Basic Organic Chemical Manufacturing;
- Rendering or refining animal fats and oils--are classified in Industry 31161, Animal Slaughtering and Processing; and
- Manufacturing laundry starches--are classified in Industry 32561, Soap and Cleaning Compound Manufacturing.

311221 Wet Corn Milling^{CAN}

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

Cross-References. Establishments primarily engaged in--

- Refining and/or blending corn oil from purchased oils--are classified in U.S. Industry 311225, Fats and Oils Refining and Blending;
- Manufacturing sweetening syrups from corn syrup and starch base dessert powders--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing;
- Reducing maple sap to maple syrup--are classified in U.S. Industry 111998, All

Other Miscellaneous Crop Farming;

- Milling corn--are classified in U.S. Industry 311211, Flour Milling;
- Wet milling corn to produce nonpotable ethyl alcohol--are classified in U.S. Industry 325193, Ethyl Alcohol Manufacturing; and
- Manufacturing laundry starches--are classified in U.S. Industry 325612, Polish and Other Sanitation Good Manufacturing.

311222 Soybean Processing^{US}

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

Cross-References. Establishments primarily engaged in--

- Refining and/or blending soybean oil from purchased oil--are classified in U.S. Industry 311225, Fats and Oils Refining and Blending;
- Wet milling corn and other vegetables--are classified in U.S. Industry 311221, Wet Corn Milling; and
- Crushing oilseeds (except soybeans) and tree nuts--are classified in U.S. Industry 311223, Other Oilseed Processing.

311223 Other Oilseed Processing^{US}

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

Cross-References. Establishments primarily engaged in--

- Wet milling corn and other vegetables--are classified in U.S. Industry 311221, Wet Corn Milling;
- Crushing soybeans--are classified in U.S. Industry 311222, Soybean Processing; and
- Refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils--are classified in U.S. Industry 311225, Fats and Oils Refining and Blending.

311225 Fats and Oils Refining and Blending^{CAN}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing shortening and margarine from purchased fats and oils; (2) refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and (3) blending purchased animal fats with purchased vegetable fats.

Cross-References. Establishments primarily engaged in--

- Refining and/or blending soybean oil in soybean crushing mills--are classified in U.S. Industry 311222, Soybean Processing;
- Refining and/or blending corn oil made by wet corn milling--are classified in U.S. Industry 311221, Wet Corn Milling;
- Refining and/or blending oilseeds (except soybeans) and tree nuts in crushing mills--are classified in U.S. Industry 311223, Other Oilseed Processing; and
- Rendering or refining animal fats and oils--are classified in Industry 31161, Animal Slaughtering and Processing.

31123 Breakfast Cereal Manufacturing

See industry description for 311230 below.

311230 Breakfast Cereal Manufacturing

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

Cross-References. Establishments primarily engaged in--

- Manufacturing nonchocolate-coated granola bars and other types of breakfast bars--are classified in Industry 311340, Nonchocolate Confectionery Manufacturing;
- Manufacturing chocolate-coated granola bars from purchased chocolate--are classified in Industry 311330, Confectionery Manufacturing from Purchased Chocolate;
- Manufacturing chocolate-coated granola bars from cacao beans--are classified in Industry 311320, Chocolate and Confectionery Manufacturing from Cacao Beans; and
- Manufacturing coffee substitutes from grain--are classified in Industry 311920, Coffee and Tea Manufacturing.

3113 Sugar and Confectionery Product Manufacturing

This industry group comprises (1) establishments that process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate) and (2) those that begin with sugar and chocolate and process these further.

31131 Sugar Manufacturing

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

Cross-References. Establishments primarily engaged in--

- Manufacturing corn sweeteners by wet milling corn--are classified in Industry 31122, Starch and Vegetable Fats and Oils Manufacturing;
- Manufacturing table syrups from corn syrup and starch base dessert powders--are classified in Industry 31199, All Other Food Manufacturing;
- Reducing maple sap to maple syrup--are classified in Industry 11199, All Other Crop Farming; and
- Manufacturing synthetic sweeteners (i.e., sweetening agents), such as saccharin and sugar substitutes (i.e., synthetic sweetener blended with other ingredients),--are classified in Subsector 325, Chemical Manufacturing.

311311 Sugarcane Mills^{US}

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

Cross-References. Establishments primarily engaged in--

- Manufacturing refined cane sugar from raw cane sugar--are classified in U.S. Industry 311312, Cane Sugar Refining;
- Manufacturing beet sugar--are classified in U.S. Industry 311313, Beet Sugar Manufacturing;
- Manufacturing corn sweetener by wet milling corn--are classified in U.S. Industry 311221, Wet Corn Milling;
- Manufacturing table syrups from corn syrup--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing; and
- Manufacturing synthetic sweeteners (i.e., sweetening agents), such as saccharin and sugar substitutes (i.e., synthetic sweetener blended with other ingredients),--are classified in Subsector 325, Chemical Manufacturing.

311312 Cane Sugar Refining^{US}

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

Cross-References. Establishments primarily engaged in--

- Processing and refining sugarcane--are classified in U.S. Industry 311311, Sugarcane Mills;
- Manufacturing beet sugar--are classified in U.S. Industry 311313, Beet Sugar Manufacturing;
- Manufacturing corn sweetener by wet milling corn--are classified in U.S. Industry 311221, Wet Corn Milling;
- Reducing maple sap to maple syrup--are classified in U.S. Industry 111998, All

Other Miscellaneous Crop Farming;

- Manufacturing table syrups from corn syrup--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing; and
- Manufacturing synthetic sweeteners (i.e., sweetening agents), such as saccharin and sugar substitutes (i.e., synthetic sweetener blended with other ingredients),--are classified in Subsector 325, Chemical Manufacturing.

311313 Beet Sugar Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

Cross-References. Establishments primarily engaged in--

- Manufacturing raw cane sugar and/or refined cane sugar from sugarcane--are classified in U.S. Industry 311311, Sugarcane Mills;
- Manufacturing refined cane sugar from raw cane sugar--are classified in U.S. Industry 311312, Cane Sugar Refining;
- Manufacturing corn sweeteners by wet milling corn--are classified in U.S. Industry 311221, Wet Corn Milling;
- Manufacturing table syrups from corn syrup--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing;
- Reducing maple sap to maple syrup--are classified in U.S. Industry 111998, All Other Miscellaneous Crop Farming; and
- Manufacturing synthetic sweeteners (i.e., sweetening agents), such as saccharin and sugar substitutes (i.e., synthetic sweetener blended with other ingredients),--are classified in Subsector 325, Chemical Manufacturing.

31132 Chocolate and Confectionery Manufacturing from Cacao Beans

See industry description for 311320 below.

311320 Chocolate and Confectionery Manufacturing from Cacao Beans

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

Cross-References. Establishments primarily engaged in--

- Manufacturing, not for immediate consumption, chocolate confectioneries from chocolate made elsewhere--are classified in Industry 311330, Confectionery Manufacturing from Purchased Chocolate;
- Manufacturing, not for immediate consumption, nonchocolate candies--are classified in Industry 311340, Nonchocolate Confectionery Manufacturing;

- Preparing and selling confectioneries for immediate consumption--are classified in U.S. Industry 722213, Snack and Nonalcoholic Beverage Bars; and
- Retailing confectioneries not for immediate consumption made elsewhere--are classified in U.S. Industry 445292, Confectionery and Nut Stores.

31133 Confectionery Manufacturing from Purchased Chocolate

See industry description for 311330 below.

311330 Confectionery Manufacturing from Purchased Chocolate

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

Cross-References. Establishments primarily engaged in--

- Manufacturing chocolate confectioneries from cacao beans--are classified in Industry 311320, Chocolate and Confectionery Manufacturing from Cacao Beans;
- Manufacturing nonchocolate confectioneries--are classified in Industry 311340, Nonchocolate Confectionery Manufacturing;
- Retailing confectioneries not for immediate consumption made elsewhere--are classified in U.S. Industry 445292, Confectionery and Nut Stores; and
- Preparing and selling confectioneries for immediate consumption--are classified in U.S. Industry 722213, Snack and Nonalcoholic Beverage Bars.

31134 Nonchocolate Confectionery Manufacturing

See industry description for 311340 below.

311340 Nonchocolate Confectionery Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

Cross-References. Establishments primarily engaged in--

- Manufacturing chocolate confectioneries from cacao beans--are classified in Industry 311320, Chocolate and Confectionery Manufacturing from Cacao Beans;
- Manufacturing chocolate confectioneries from chocolate made elsewhere--are

classified in Industry 311330, Confectionery Manufacturing from Purchased Chocolate;

- Retailing confectioneries not for immediate consumption made elsewhere--are classified in U.S. Industry 445292, Confectionery and Nut Stores;
- Preparing and selling confectioneries for immediate consumption--are classified in U.S. Industry 722213, Snack and Nonalcoholic Beverage Bars; and
- Roasting, salting, drying, cooking, or canning nuts and seeds--are classified in U.S. Industry 311911, Roasted Nuts and Peanut Butter Manufacturing.

3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing

This industry group includes (1) establishments that freeze food and (2) those that use preservation processes, such as pickling, canning, and dehydrating. Both types begin their production process with inputs of vegetable or animal origin.

31141 Frozen Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

Cross-References. Establishments primarily engaged in--

- Manufacturing frozen dairy specialties--are classified in Industry 31152, Ice Cream and Frozen Dessert Manufacturing;
- Manufacturing frozen bakery products--are classified in Industry 31181, Bread and Bakery Product Manufacturing;
- Manufacturing frozen seafood products--are classified in Industry 31171, Seafood Product Preparation and Packaging; and
- Manufacturing frozen meat products--are classified in Industry 31161, Animal Slaughtering and Processing.

311411 Frozen Fruit, Juice, and Vegetable Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, -ades, drinks, cocktail mixes and concentrates.

Cross-References.

Establishments primarily engaged in manufacturing frozen specialty foods are classified in U.S. Industry 311412, Frozen Specialty Food Manufacturing.

311412 Frozen Specialty Food Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

Cross-References. Establishments primarily engaged in--

- Manufacturing frozen dairy specialties--are classified in Industry 311520, Ice Cream and Frozen Dessert Manufacturing;
- Manufacturing frozen bakery products--are classified in U.S. Industry 311813, Frozen Cakes, Pies, and Other Pastries Manufacturing;
- Manufacturing frozen fruits, frozen fruit juices, and frozen vegetables--are classified in U.S. Industry 311411, Frozen Fruit, Juice, and Vegetable Manufacturing;
- Manufacturing frozen meat products--are classified in Industry 31161, Animal Slaughtering and Processing; and
- Manufacturing frozen seafood products--are classified in U.S. Industry 311712, Fresh and Frozen Seafood Processing.

31142 Fruit and Vegetable Canning, Pickling, and Drying

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

Cross-References. Establishments primarily engaged in--

- Manufacturing canned dairy products--are classified in Industry 31151, Dairy Product (except Frozen) Manufacturing;
- Manufacturing canned seafood soups and seafood products--are classified in Industry 31171, Seafood Product Preparation and Packaging;
- Manufacturing canned meat products--are classified in Industry 31161, Animal Slaughtering and Processing;
- Milling rice and packaging it with other ingredients or manufacturing vegetable flours and meals--are classified in Industry 31121, Flour Milling and Malt Manufacturing;
- Manufacturing dry pasta and packaging it with other ingredients--are classified in Industry 31182, Cookie, Cracker, and Pasta Manufacturing;
- Mixing purchased dried and/or dehydrated potatoes, rice, and pasta and

packaging them with other purchased ingredients; mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon; and manufacturing canned puddings--are classified in Industry 31199, All Other Food Manufacturing;

- Manufacturing dry salad dressing and dry sauce mixes--are classified in Industry 31194, Seasoning and Dressing Manufacturing; and
- Manufacturing canned fruit and vegetable drinks, cocktails, and -ades--are classified in Industry 31211, Soft Drink and Ice Manufacturing.

311421 Fruit and Vegetable Canning^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

Cross-References. Establishments primarily engaged in--

- Manufacturing canned baby foods, canned soups (except seafood), and canned specialty foods (except seafood)--are classified in U.S. Industry 311422, Specialty Canning;
- Manufacturing canned seafood soups and canned seafood products--are classified in U.S. Industry 311711, Seafood Canning;
- Manufacturing canned meat products--are classified in Industry 31161, Animal Slaughtering and Processing; and
- Manufacturing canned fruit and canned vegetable drinks, "ades", and cocktails--are classified in U.S. Industry 31211, Soft Drink Manufacturing.

311422 Specialty Canning^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

Cross-References. Establishments primarily engaged in--

- Manufacturing canned dairy products--are classified in U.S. Industry 311514, Dry, Condensed, and Evaporated Dairy Product Manufacturing;
- Manufacturing canned fruits, canned vegetables, and canned juices--are classified in U.S. Industry 311421, Fruit and Vegetable Canning;
- Manufacturing canned seafood soups and canned seafood products--are classified in U.S. Industry 311711, Seafood Canning;
- Manufacturing canned meat products--are classified in Industry 31161, Animal Slaughtering and Processing; and

- Manufacturing canned puddings--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing.

311423 Dried and Dehydrated Food Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or (2) drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

Cross-References. Establishments primarily engaged in--

- Milling rice and packaging it with other ingredients--are classified in U.S. Industry 311212, Rice Milling;
- Manufacturing dry pasta and packaging it with other ingredients--are classified in U.S. Industry 311823, Dry Pasta Manufacturing;
- Manufacturing vegetable flours and meals--are classified in U.S. Industry 311211, Flour Milling;
- Mixing purchased dried and/or dehydrated potatoes, rice, and dry pasta, and packaging them with other purchased ingredients, and mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing; and
- Manufacturing dry salad dressing and dry sauce mixes--are classified in U.S. Industry 311942, Spice and Extract Manufacturing.

3115 Dairy Product Manufacturing

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 Dairy Product (except Frozen) Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dairy products (except frozen) from raw milk and/or processed milk products; (2) manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and (3) manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

Cross-References. Establishments primarily engaged in--

- Manufacturing cheese-based salad dressings--are classified in Industry 31194, Seasoning and Dressing Manufacturing;
- Manufacturing margarine or margarine-butter blends--are classified in Industry 31122, Starch and Vegetable Fats and Oils Manufacturing;
- Manufacturing frozen whipped toppings--are classified in Industry 31141,

- Frozen Food Manufacturing; and
- Manufacturing ice cream, frozen yogurt, and other frozen dairy desserts--are classified in Industry 31152, Ice Cream and Frozen Dessert Manufacturing.

311511 Fluid Milk Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

Cross-References. Establishments primarily engaged in--

- Manufacturing dry mix whipped toppings, canned milk, and ultra high temperature milk--are classified in U.S. Industry 311514, Dry, Condensed, and Evaporated Dairy Product Manufacturing;
- Manufacturing frozen whipped toppings--are classified in U.S. Industry 311412, Frozen Specialty Food Manufacturing; and
- Manufacturing ice cream and frozen yogurt and other frozen desserts--are classified in Industry 311520, Ice Cream and Frozen Dessert Manufacturing.

311512 Creamery Butter Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

Cross-References.

Establishments primarily engaged in manufacturing margarine or margarine-butter blends are classified in U.S. Industry 311225, Fats and Oils Refining and Blending.

311513 Cheese Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or (2) manufacturing cheese substitutes from soybean and other nondairy substances.

Cross-References. Establishments primarily engaged in--

- Manufacturing cheese-based salad dressings--are classified in U.S. Industry 311941, Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing; and
- Manufacturing cottage cheese--are classified in U.S. Industry 311511, Fluid Milk Manufacturing.

311514 Dry, Condensed, and Evaporated Dairy Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

Cross-References. Establishments primarily engaged in--

- Manufacturing fluid milk products--are classified in U.S. Industry 311511, Fluid Milk Manufacturing;
- Manufacturing creamery butter--are classified in U.S. Industry 311512, Creamery Butter Manufacturing; and
- Manufacturing cheese products--are classified in U.S. Industry 311513, Cheese Manufacturing.

31152 Ice Cream and Frozen Dessert Manufacturing

See industry description for 311520 below.

311520 Ice Cream and Frozen Dessert Manufacturing

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

Cross-References. Establishments primarily engaged in--

- Manufacturing frozen bakery products--are classified in U.S. Industry 311813, Frozen Cakes, Pies, and Other Pastries Manufacturing; and
- Manufacturing ice cream and ice milk mixes--are classified in U.S. Industry 311514, Dry, Condensed, and Evaporated Dairy Product Manufacturing.

3116 Animal Slaughtering and Processing

31161 Animal Slaughtering and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) slaughtering animals; (2) preparing processed meats and meat byproducts; and (3) rendering and/or refining animal fat, bones, and meat scraps. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

Cross-References. Establishments primarily engaged in--

- Manufacturing canned meat for baby food--are classified in Industry 31142,

- Fruit and Vegetable Canning, Pickling and Drying;
- Manufacturing meat-based animal feeds from carcasses--are classified in Industry 31111, Animal Food Manufacturing;
- Blending purchased animal fats with vegetable fats--are classified in Industry 31122, Starch and Vegetable Fats and Oils Manufacturing;
- Manufacturing canned and frozen specialty foods containing meat, such as nationality foods (e.g., enchiladas, pizza, egg rolls) and frozen dinners,--are classified in Industry Group 3114, Fruit and Vegetable Preserving and Specialty Food Manufacturing;
- Drying, freezing, or breaking eggs--are classified in Industry 31199, All Other Food Manufacturing; and
- Cutting meat (except box meat)--are classified in Industry 42247, Meat and Meat Product Wholesalers.

311611 Animal (except Poultry) Slaughtering^{CAN}

This U.S. industry comprises establishments primarily engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

Cross-References. Establishments primarily engaged in--

- Processing meat and meat byproducts (except poultry and small game) from purchased meats--are classified in U.S. Industry 311612, Meat Processed from Carcasses;
- Slaughtering and/or processing poultry and small game--are classified in U.S. Industry 311615, Poultry Processing;
- Rendering lard and other animal fats and oils, animal fat, bones, and meat scraps--are classified in U.S. Industry 3116133, Rendering and Meat By-product Processing; and
- Manufacturing canned and frozen specialty foods containing meat, such as nationality foods (e.g., enchiladas, egg rolls, pizza) and frozen dinners,--are classified in Industry Group 3114, Fruit and Vegetable Preserving and Specialty Food Manufacturing.

311612 Meat Processed from Carcasses^{US}

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

Cross-References. Establishments primarily engaged in--

- Slaughtering animals (except poultry and small game)--are classified in U.S. Industry 311611, Animal (except Poultry) Slaughtering;

- Slaughtering poultry and small game--are classified in U.S. Industry 311615, Poultry Processing;
- Rendering animal fat, bones, and meat scraps--are classified in U.S. Industry 311613, Rendering and Meat Byproduct Processing;
- Manufacturing canned meats for baby food--are classified in U.S. Industry 311422, Specialty Canning;
- Manufacturing meat-based animal feeds from carcasses--are classified in Industry 31111, Animal Food Manufacturing;
- Manufacturing canned and frozen specialty foods containing meat, such as nationality foods (e.g., enchiladas, egg rolls, pizza) and frozen dinners,--are classified in Industry Group 3114, Fruit and Vegetable Preserving and Specialty Food Manufacturing; and
- Cutting meat (except boxed meat)--are classified in U.S. Industry 422470, Meat and Meat Product Wholesalers.

311613 Rendering and Meat Byproduct Processing^{US}

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

Cross-References.

Establishments primarily engaged in blending purchased animal fats with vegetable fats are classified in U.S. Industry 311225, Fats and Oils Refining and Blending.

311615 Poultry Processing^{CAN}

This U.S. industry comprises establishments primarily engaged in (1) slaughtering poultry and small game and/or (2) preparing processed poultry and small game meat and meat byproducts.

Cross-References. Establishments primarily engaged in--

- Slaughtering animals (except poultry and small game) and/or preparing meats--are classified in U.S. Industry 311611, Animal (except Poultry) Slaughtering;
- Preparing meat and meat by products (except poultry and small game) from purchased meats--are classified in U.S. Industry 311612, Meat Processed from Carcasses;
- Rendering animal fat, bones, and meat scraps--are classified in U.S. Industry 311613, Rendering and Meat Byproduct Processing;
- Canning poultry and small game for baby food--are classified in U.S. Industry 311422, Specialty Canning;
- Producing meat-based animal feeds from carcasses--are classified in Industry 31111, Animal Food Manufacturing;
- Manufacturing canned and frozen meat products, such as nationality foods (e.g., enchiladas, egg rolls, pizza) and frozen dinners,--are classified in Industry

Group 3114, Fruit and Vegetable Preserving and Specialty Food Manufacturing; and

- Drying, freezing, and breaking eggs--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing.

3117 Seafood Product Preparation and Packaging

31171 Seafood Product Preparation and Packaging

This industry comprises establishments primarily engaged in one or more of the following: (1) canning seafood (including soup); (2) smoking, salting, and drying seafoods; (3) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (4) shucking and packing fresh shellfish; (5) processing marine fats and oils; and (6) freezing seafood. Establishments known as "floating factory ships" that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

311711 Seafood Canning^{US}

This U.S. industry comprises establishments primarily engaged in (1) canning seafood (including soup) and marine fats and oils and/or (2) smoking, salting, and drying seafoods. Establishments known as "floating factory ships" that are engaged in the gathering and processing of seafood into canned seafood products are included in this industry.

Cross-References.

Establishments primarily engaged in preparing fresh and frozen seafood and marine fats and oils are classified in U.S. Industry 311712, Fresh and Frozen Seafood Processing.

311712 Fresh and Frozen Seafood Processing^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) eviscerating fresh fish by removing heads, fins, scales, bones, and entrails; (2) shucking and packing fresh shellfish; (3) manufacturing frozen seafood; and (4) processing fresh and frozen marine fats and oils.

Cross-References.

Establishments primarily engaged in canning and curing seafood are classified in U.S. Industry 311711, Seafood Canning.

3118 Bakeries and Tortilla Manufacturing

31181 Bread and Bakery Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

Cross-References. Establishments primarily engaged in--

- Manufacturing cookies and crackers--are classified in Industry 31182, Cookie, Cracker, and Pasta Manufacturing;
- Preparing and selling bakery products (e.g., cookies, pretzels) for immediate consumption--are classified in Industry 72221, Limited-Service Eating Places;
- Retailing bakery products not for immediate consumption made elsewhere--are classified in Industry 44529, Other Specialty Food Stores; and
- Manufacturing pretzels (except soft)--are classified in Industry 31191, Snack Food Manufacturing.

311811 Retail Bakeries^{CAN}

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

Cross-References. Establishments primarily engaged in--

- Retailing bakery products not for immediate consumption made elsewhere--are classified in U.S. Industry 445291, Baked Goods Stores;
- Preparing and selling bakery products (e.g., cookies, pretzels) for immediate consumption--are classified in U.S. Industry 722213, Snack and Nonalcoholic Beverage Bars;
- Manufacturing fresh or frozen breads and other fresh bakery (except cookies and crackers) products--are classified in U.S. Industry 311812, Commercial Bakeries; and
- Manufacturing cookies and crackers--are classified in U.S. Industry 311821, Cookie and Cracker Manufacturing.

311812 Commercial Bakeries^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

Cross-References. Establishments primarily engaged in--

- Retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough--are classified in

U.S. Industry 311811, Retail Bakeries;

- Manufacturing frozen bakery products (except bread)--are classified in U.S. Industry 311813, Frozen Cakes, Pies, and Other Pastries Manufacturing;
- Preparing and selling bakery products (e.g., cookies, pretzels) for immediate consumption--are classified in U.S. Industry 722213, Snack and Nonalcoholic Beverage Bars;
- Retailing bakery products not for immediate consumption made elsewhere--are classified in U.S. Industry 445291, Baked Goods Stores;
- Manufacturing cookies and crackers--are classified in U.S. Industry 311821, Cookie and Cracker Manufacturing; and
- Manufacturing pretzels (except soft)--are classified in U.S. Industry 311919, Other Snack Food Manufacturing.

311813 Frozen Cakes, Pies, and Other Pastries Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

Cross-References. Establishments primarily engaged in--

- Manufacturing frozen breads--are classified in U.S. Industry 311812, Commercial Bakeries;
- Retailing bakery products not for immediate consumption made on the premises from flour, not from prepared dough--are classified in U.S. Industry 311811, Retail Bakeries;
- Preparing and selling bakery products (e.g., cookies, pretzels) for immediate consumption--are classified in U.S. Industry 722213, Snack and Nonalcoholic Beverage Bars;
- Manufacturing cookies and crackers--are classified in U.S. Industry 311821, Cookie and Cracker Manufacturing; and
- Retailing bakery products not for immediate consumption made elsewhere--are classified in U.S. Industry 445291, Baked Goods Stores.

31182 Cookie, Cracker, and Pasta Manufacturing

This industry comprises establishments primarily engaged in one of the following: (1) manufacturing cookies and crackers; (2) preparing flour and dough mixes and dough from flour ground elsewhere; and (3) manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

Cross-References. Establishments primarily engaged in--

- Preparing and selling bakery products (e.g., cookies, pretzels) for immediate consumption--are classified in Industry 72221, Limited-Service Eating Places;
- Retailing bakery products not for immediate consumption made elsewhere--are classified in Industry 44529, Other Specialty Food Stores;

- Manufacturing bakery products (e.g., bread, cookies, pies)--are classified in Industry 31181, Bread and Bakery Product Manufacturing;
- Milling flour and preparing flour mixes or doughs--are classified in Industry 31121, Flour Milling and Malt Manufacturing;
- Manufacturing canned pasta specialties--are classified in Industry 31142, Fruit and Vegetable Canning, Pickling and Drying;
- Manufacturing fresh pasta--are classified in Industry 31199, All Other Food Manufacturing;
- Manufacturing pretzels (except soft)--are classified in Industry 31191, Snack Food Manufacturing;
- Mixing purchased dried and/or dehydrated ingredients with purchased dry pasta--are classified in Industry 31199, All Other Food Manufacturing; and
- Drying and/or dehydrating ingredients and packaging them with purchased dry pasta--are classified in Industry 31142, Fruit and Vegetable Canning, Pickling and Drying.

311821 Cookie and Cracker Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

Cross-References. Establishments primarily engaged in--

- Preparing and selling bakery products (e.g., cookies, pretzels) for immediate consumption--are classified in U.S. Industry 722213, Snack and Nonalcoholic Beverage Bars;
- Retailing bakery products not for immediate consumption made elsewhere--are classified in U.S. Industry 445291, Baked Goods Stores;
- Manufacturing bakery products (e.g., breads, cookies, pies)--are classified in Industry 31181, Bread and Bakery Product Manufacturing; and
- Manufacturing pretzels (except soft)--are classified in U.S. Industry 31191, Other Snack Food Manufacturing.

311822 Flour Mixes and Dough Manufacturing from Purchased Flour^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

Cross-References.

Establishments primarily engaged in milling flour and preparing flour mixes or doughs are classified in U.S. Industry 311211, Flour Milling.

311823 Dry Pasta Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

Cross-References. Establishments primarily engaged in--

- Manufacturing fresh pasta--are classified in U.S. Industry 311991, Perishable Prepared Food Manufacturing;
- Manufacturing pasta specialties--are classified in Industry Group 3114, Fruit and Vegetable Preserving and Specialty Food Manufacturing;
- Mixing purchased dried and/or dehydrated ingredients with purchased dry pasta--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing; and
- Drying and/or dehydrating ingredients packaged with purchased dry pasta--are classified in U.S. Industry 311423, Dried and Dehydrated Food Manufacturing.

31183 Tortilla Manufacturing

See industry description for 311830 below.

311830 Tortilla Manufacturing

This industry comprises establishments primarily engaged in manufacturing tortillas.

Cross-References. Establishments primarily engaged in--

- Manufacturing canned nationality foods using tortillas--are classified in U.S. Industry 311422, Specialty Canning;
- Manufacturing frozen nationality foods using tortillas--are classified in U.S. Industry 311412, Frozen Specialty Food Manufacturing; and
- Manufacturing tortilla chips--are classified in U.S. Industry 311919, Other Snack Food Manufacturing.

3119 Other Food Manufacturing

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 Snack Food Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; (3) manufacturing peanut butter; and (4) manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

Cross-References. Establishments primarily engaged in--

- Manufacturing crackers--are classified in Industry 31182, Cookie, Cracker, and Pasta Manufacturing;
- Manufacturing unpopped popcorn--are classified in Industry 31199, All Other Food Manufacturing;
- Manufacturing chocolate or candy-coated nuts and candy-covered popcorn--are classified in Industry Group 3113, Sugar and Confectionery Product Manufacturing; and
- Manufacturing soft pretzels--are classified in Industry 31181, Bread and Bakery Product Manufacturing.

311911 Roasted Nuts and Peanut Butter Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) salting, roasting, drying, cooking, or canning nuts; (2) processing grains or seeds into snacks; and (3) manufacturing peanut butter.

Cross-References.

Establishments primarily engaged in manufacturing chocolate or candy-coated nuts and candy-covered popcorn are classified in Industry Group 3113, Sugar and Confectionery Product Manufacturing.

311919 Other Snack Food Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

Illustrative Examples:

Corn chips and related corn snacks manufacturing
Popped popcorn (except candy-covered) manufacturing
Pork rinds manufacturing
Potato chips manufacturing
Pretzels (except soft) manufacturing
Tortilla chips manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing cookies and crackers--are classified in U.S. Industry 311821, Cookie and Cracker Manufacturing;
- Manufacturing candy covered popcorn and nonchocolate granola bars--are classified in Industry 311340, Nonchocolate Confectionery Manufacturing;
- Salting, roasting, drying, cooking, or canning nuts and seeds--are classified in U.S. Industry 311911, Roasted Nuts and Peanut Butter Manufacturing;
- Manufacturing unpopped popcorn--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing; and
- Manufacturing soft pretzels--are classified in U.S. Industry 311812, Commercial Bakeries.

31192 Coffee and Tea Manufacturing

See industry description for 311920 below.

311920 Coffee and Tea Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) roasting coffee; (2) manufacturing coffee and tea concentrates (including instant and freeze-dried); (3) blending tea; (4) manufacturing herbal tea; and (5) manufacturing coffee extracts, flavorings, and syrups.

Cross-References.

Establishments primarily engaged in bottling and canning ice tea are classified in U.S. Industry 312111, Soft Drink Manufacturing.

31193 Flavoring Syrup and Concentrate Manufacturing

See industry description for 311930 below.

311930 Flavoring Syrup and Concentrate Manufacturing

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

Cross-References. Establishments primarily engaged in--

- Manufacturing chocolate syrup--are classified in Industry 311320, Chocolate and Confectionery Manufacturing from Cacao Beans;
- Manufacturing flavoring extracts (except coffee and meat) and natural food

colorings--are classified in U.S. Industry 311942, Spice and Extract Manufacturing;

- Manufacturing coffee extracts--are classified in Industry 311920, Coffee and Tea Manufacturing;
- Manufacturing meat extracts--are classified in Industry 31161, Animal Slaughtering and Processing;
- Manufacturing powdered drink mixes (except coffee, tea, chocolate, or milk-based) and table syrup from corn syrup--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing;
- Reducing maple sap to maple syrup--are classified in U.S. Industry 111998, All Other Miscellaneous Crop Farming; and
- Manufacturing natural nonfood colorings--are classified in U.S. Industry 325199, All Other Basic Organic Chemical Manufacturing.

31194 Seasoning and Dressing Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies); (2) manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and (3) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

Cross-References. Establishments primarily engaged in--

- Manufacturing catsup and other tomato-based sauces--are classified in Industry 31142, Fruit and Vegetable Canning, Pickling and Drying;
- Mixing purchased dried and/or dehydrated potato, rice, and pasta and packaging them with other purchased ingredients, and manufacturing prepared frosting--are classified in Industry 31199, All Other Food Manufacturing;
- Drying and/or dehydrating ingredients for dry soup mixes and bouillon--are classified in Industry 31142, Fruit and Vegetable Canning, Pickling and Drying;
- Mixing purchased dried and/or dehydrated ingredients for dry soup mixes and bouillon--are classified in Industry 31199, All Other Food Manufacturing;
- Manufacturing industrial salts--are classified in Industry 32599, Other Chemical Product and Preparation Manufacturing;
- Manufacturing flavoring syrups (except coffee)--are classified in Industry 31193, Flavoring Syrup and Concentrate Manufacturing;
- Manufacturing synthetic food colorings--are classified in Industry 32513, Synthetic Dye and Pigment Manufacturing;
- Manufacturing natural organic colorings for nonfood uses--are classified in Industry 32519, Other Basic Organic Chemical Manufacturing;
- Manufacturing coffee extracts--are classified in Industry 31192, Coffee and Tea Manufacturing;

- Manufacturing meat extracts--are classified in Industry 31161, Animal Slaughtering and Processing; and
- Manufacturing gravies--are classified in Industry 31199, All Other Food Manufacturing.

311941 Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

Cross-References. Establishments primarily engaged in--

- Manufacturing catsup and similar tomato-based sauces--are classified in U.S. Industry 311421, Fruit and Vegetable Canning;
- Manufacturing dry salad dressing and dry sauce mixes--are classified in U.S. Industry 311942, Spice and Extract Manufacturing; and
- Manufacturing gravies--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing.

311942 Spice and Extract Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or (2) manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

Cross-References. Establishments primarily engaged in--

- Manufacturing catsup and other tomato-based sauces--are classified in U.S. Industry 311421, Fruit and Vegetable Canning;
- Manufacturing mayonnaise, dressings, and prepared nontomato-based sauces--are classified in U.S. Industry 311941, Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing;
- Manufacturing industrial salts--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing;
- Drying and/or dehydrating ingredients for dry soup mixes and bouillon--are classified in U.S. Industry 311423, Dried and Dehydrated Food Manufacturing;
- Mixing purchased dried and/or dehydrated ingredients for dry soup mixes and bouillon--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing;
- Manufacturing flavoring syrups--are classified in Industry 311930, Flavoring Syrup and Concentrate Manufacturing;
- Manufacturing dried and dehydrated potato, rice, or dry pasta packaged with

other ingredients, and prepared frostings--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing;

- Manufacturing coffee extracts--are classified in Industry 311920, Coffee and Tea Manufacturing;
- Manufacturing meat extracts--are classified in Industry 31161, Animal Slaughtering and Processing;
- Manufacturing synthetic food colorings--are classified in U.S. Industry 325132, Synthetic Organic Dye and Pigment Manufacturing; and
- Manufacturing natural organic colorings for nonfood uses--are classified in U.S. Industry 325199, All Other Basic Organic Chemical Manufacturing.

31199 All Other Food Manufacturing

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

Illustrative Examples:

Baking powder manufacturing
Cut or peeled fresh vegetables manufacturing
Dessert puddings manufacturing
Egg substitutes manufacturing
Fresh pasta manufacturing
Fresh pizza manufacturing
Honey processing
Popcorn (except popped) manufacturing
Powdered drink mixes (except chocolate, coffee, tea, or milk based) manufacturing
Sweetening syrups (except pure maple) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing animal foods--are classified in Industry Group 3111, Animal Food Manufacturing;
- Milling grain and oilseed--are classified in Industry Group 3112, Grain and Oilseed Milling;
- Manufacturing sugar and confectionery products--are classified in Industry Group 3113, Sugar and Confectionery Product Manufacturing;
- Preserving fruit, vegetables, and specialty foods--are classified in Industry Group 3114, Fruit and Vegetable Preserving and Specialty Food Manufacturing;

- Manufacturing dairy products--are classified in Industry Group 3115, Dairy Product Manufacturing;
- Manufacturing meat products--are classified in Industry Group 3116, Animal Slaughtering and Processing;
- Manufacturing seafood products--are classified in Industry Group 3117, Seafood Product Preparation and Packaging;
- Manufacturing bakery and tortilla products--are classified in Industry Group 3118, Bakeries and Tortilla Manufacturing;
- Manufacturing snack foods--are classified in Industry 31191, Snack Food Manufacturing;
- Manufacturing coffee and tea--are classified in Industry 31192, Coffee and Tea Manufacturing;
- Manufacturing flavoring syrups and concentrates--are classified in Industry 31193, Flavoring Syrup and Concentrate Manufacturing;
- Manufacturing seasonings and dressings--are classified in Industry 31194, Seasoning and Dressing Manufacturing;
- Milling rice and packaging it with other ingredients--are classified in Industry 31121, Flour Milling and Malt Manufacturing;
- Manufacturing dry pasta and packaging it with other ingredients--are classified in Industry 31182, Cookie, Cracker, and Pasta Manufacturing; and
- Drying and/or dehydrating ingredients and packaging them with other purchased ingredients--are classified in Industry 31142, Fruit and Vegetable Canning, Pickling and Drying.

311991 Perishable Prepared Food Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

311999 All Other Miscellaneous Food Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

Illustrative Examples:

Baking powder manufacturing
 Cake frosting manufacturing
 Dessert puddings manufacturing

Egg substitutes manufacturing
Gelatin dessert preparations manufacturing
Honey processing
Popcorn (except popped) manufacturing
Powdered drink mixes (except chocolate, coffee, tea, or milk based) manufacturing
Sweetening syrups (except pure maple) manufacturing
Yeast manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing animal foods--are classified in Industry Group 3111, Animal Food Manufacturing;
- Milling grain and oilseed--are classified in Industry Group 3112, Grain and Oilseed Milling;
- Manufacturing sugar and confectionery products--are classified in Industry Group 3113, Sugar and Confectionery Product Manufacturing;
- Preserving fruit, vegetable, and specialty foods--are classified in Industry Group 3114, Fruit and Vegetable Preserving and Specialty Food Manufacturing;
- Manufacturing dairy products--are classified in Industry Group 3115, Dairy Product Manufacturing;
- Manufacturing meat products--are classified in Industry Group 3116, Meat Product Manufacturing;
- Manufacturing seafood products--are classified in Industry Group 3117, Seafood Product Preparation and Packaging;
- Manufacturing bakery and tortilla products--are classified in Industry Group 3118, Bakeries and Tortilla Manufacturing;
- Manufacturing snack foods--are classified in Industry 31191, Snack Food Manufacturing;
- Manufacturing coffee and tea--are classified in Industry 31192, Coffee and Tea Manufacturing;
- Manufacturing flavoring syrups and concentrates--are classified in Industry 31193, Flavoring Syrup and Concentrate Manufacturing;
- Manufacturing seasonings and dressings--are classified in Industry 31194, Seasoning and Dressing Manufacturing;
- Manufacturing perishable prepared foods--are classified in U.S. Industry 311991, Perishable Prepared Food Manufacturing;
- Milling rice and packaging it with other ingredients--are classified in U.S. Industry 311212, Rice Milling;
- Manufacturing dry pasta and packaging it with ingredients--are classified in U.S. Industry 311823, Dry Pasta Manufacturing; and
- Drying and/or dehydrating ingredients and packaging them with other purchased ingredients--are classified in U.S. Industry 311423, Dried and Dehydrated Food Manufacturing.

312 Beverage and Tobacco Product Manufacturing

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments: (1) those that manufacture nonalcoholic beverages; (2) those that manufacture alcoholic beverages through the fermentation process; and (3) those that produce distilled alcoholic beverages. Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments: (1) those engaged in redrying and stemming tobacco and (2) those that manufacture tobacco products, such as cigarettes and cigars.

3121 Beverage Manufacturing

31211 Soft Drink and Ice Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing soft drinks; (2) manufacturing ice; and (3) purifying and bottling water.

Cross-References. Establishments primarily engaged in--

- Canning fruit and vegetable juices--are classified in Industry 31142, Fruit and Vegetable Canning, Pickling and Drying;
- Manufacturing soft drink bases--are classified in Industry 31193, Flavoring Syrup and Concentrate Manufacturing;
- Manufacturing nonalcoholic cider--are classified in Industry 31199, All Other Food Manufacturing;
- Manufacturing dry ice--are classified in Industry 32512, Industrial Gas Manufacturing;
- Manufacturing milk-based drinks--are classified in Industry 31151, Dairy Product (except Frozen) Manufacturing;
- Manufacturing nonalcoholic beers--are classified in Industry 31212, Breweries;
- Manufacturing nonalcoholic wines--are classified in Industry 31213, Wineries; and
- Bottling purchased purified water--are classified in Industry 42249, Other

Grocery and Related Products Wholesalers.

312111 Soft Drink Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

Cross-References. Establishments primarily engaged in--

- Canning fruit and vegetable juices--are classified in U.S. Industry 311421, Fruit and Vegetable Canning;
- Manufacturing fruit syrups for flavoring--are classified in Industry 31193, Flavoring Syrup and Concentrate Manufacturing;
- Manufacturing nonalcoholic cider--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing;
- Purifying and bottling water (except artificially carbonated and flavored water)--are classified in U.S. Industry 312112, Bottled Water Manufacturing;
- Manufacturing milk-based drinks--are classified in U.S. Industry 11511, Fluid Milk Manufacturing;
- Manufacturing nonalcoholic beers--are classified in Industry 312120, Breweries; and
- Manufacturing nonalcoholic wines--are classified in Industry 312130, Wineries.

312112 Bottled Water Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

Cross-References. Establishments primarily engaged in--

- Manufacturing artificially carbonated waters--are classified in U.S. Industry 312111, Soft Drink Manufacturing; and
- Bottling purchased purified water--are classified in Industry 422490, Other Grocery and Related Products Wholesalers.

312113 Ice Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

Cross-References.

Establishments primarily engaged in manufacturing dry ice are classified in Industry 325120, Industrial Gas Manufacturing.

31212 Breweries

See industry description for 312120 below.

312120 Breweries

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

Cross-References. Establishments primarily engaged in--

- Bottling purchased malt beverages--are classified in Industry 422810, Beer and Ale Wholesalers; and
- Manufacturing malt--are classified in U.S. Industry 311213, Malt Manufacturing.

31213 Wineries

See industry description for 312130 below.

312130 Wineries

This industry comprises establishments primarily engaged in one or more of the following: (1) growing grapes and manufacturing wine and brandies; (2) manufacturing wine and brandies from grapes and other fruits grown elsewhere; and (3) blending wines and brandies.

Cross-References.

Establishments primarily engaged in bottling wines made elsewhere are classified in Industry 422820, Wine and Distilled Alcoholic Beverage Wholesalers.

31214 Distilleries

See industry description for 312140 below.

312140 Distilleries

This industry comprises establishments primarily engaged in one or more of the following: (1) distilling potable liquors (except brandies); (2) distilling and blending liquors; and (3) blending and mixing liquors and other ingredients.

Cross-References. Establishments primarily engaged in--

- Manufacturing nonpotable ethyl alcohol--are classified in U.S. Industry

325193, Ethyl Alcohol Manufacturing;

- Bottling liquors made elsewhere--are classified in Industry 422820, Wine and Distilled Alcoholic Beverage Wholesalers; and
- Manufacturing brandies--are classified in Industry 312130, Wineries.

3122 Tobacco Manufacturing

31221 Tobacco Stemming and Redrying

See industry description for 312210 below.

312210 Tobacco Stemming and Redrying

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

Cross-References. Establishments primarily engaged in--

- Reconstituting tobacco--are classified in U.S. Industry 312229, Other Tobacco Product Manufacturing; and
- Selling leaf tobacco as merchant wholesalers, agents, or brokers, and that also engage in stemming tobacco--are classified in Industry 422940, Tobacco and Tobacco Product Wholesalers.

31222 Tobacco Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

Cross-References.

Establishments primarily engaged in stemming and redrying tobacco are classified in Industry 31221, Tobacco Stemming and Redrying.

312221 Cigarette Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

Cross-References.

Establishments primarily engaged in manufacturing cigars, smoking tobacco, chewing tobacco, and reconstituted tobacco are classified in U.S. Industry 312229, Other Tobacco Product Manufacturing.

312229 Other Tobacco Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

Illustrative Examples:

Chewing tobacco manufacturing
Cigar manufacturing
Reconstituting tobacco
Prepared pipe tobacco manufacturing
Snuff manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing cigarettes--are classified in U.S. Industry 312221, Cigarette Manufacturing; and
- Stemming and redrying tobacco--are classified in Industry 312210, Tobacco Stemming and Redrying.

313 Textile Mills

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fiber.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 Fiber, Yarn, and Thread Mills

31311 Fiber, Yarn, and Thread Mills

This industry comprises establishments primarily engaged in one or more of the following: (1) spinning yarn; (2) manufacturing thread of any fiber; (3) texturizing, throwing, twisting, and winding purchase yarn or manmade fiber filaments; and (4) producing hemp yarn and further processing into rope or bags.

Cross-References.

Establishments primarily engaged in manufacturing artificial and synthetic fibers and filaments and texturizing these filaments are classified in Industry 32522, Artificial and Synthetic Fibers and Filaments Manufacturing.

313111 Yarn Spinning Mills^{US}

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

313112 Yarn Texturizing, Throwing, and Twisting Mills^{US}

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

Cross-References.

Establishments primarily engaged in manufacturing artificial and synthetic fiber and filament and texturizing these fibers and filaments are classified in Industry 32522, Artificial and Synthetic Fibers and Filament Manufacturing.

313113 Thread Mills^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

3132 Fabric Mills

31321 Broadwoven Fabric Mills

See industry description for 313210 below.

313210 Broadwoven Fabric Mills

This industry comprises establishments primarily engaged in weaving broadwoven

fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

Cross-References. Establishments primarily engaged in--

- Weaving widths specifically constructed for cutting to narrow widths--are classified in U.S. Industry 313221, Narrow Fabric Mills;
- Weaving or tufting carpet and rugs--are classified in Industry 314110, Carpet and Rug Mills; and
- Making tire cord and fabrics--are classified in Industry 31499, All Other Textile Product Mills.

31322 Narrow Fabric Mills and Schiffli Machine Embroidery

This industry comprises establishments primarily engaged in one or more of the following: (1) weaving or braiding narrow fabrics; (2) manufacturing Schiffli machine embroideries; and (3) making fabric-covered elastic yarn and thread.

313221 Narrow Fabric Mills^{US}

This U.S. industry comprises establishments primarily engaged in (1) weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or (2) making fabric-covered elastic yarn and thread. Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products.

313222 Schiffli Machine Embroidery^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

31323 Nonwoven Fabric Mills

See industry description for 313230 below.

313230 Nonwoven Fabric Mills

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

31324 Knit Fabric Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting weft (i.e., circular) and warp (i.e., flat) fabric; (2) knitting and finishing weft

and warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

Cross-References.

Establishments primarily engaged in knitting apparel as classified in Industry Group 3151, Apparel Knitting Mills.

313241 Weft Knit Fabric Mills^{US}

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

Cross-References.

Establishments primarily engaged in knitting apparel as classified in Industry Group 3151, Apparel Knitting Mills.

313249 Other Knit Fabric and Lace Mills^{US}

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting warp (i.e., flat) fabric; (2) knitting and finishing warp fabric; (3) manufacturing lace; or (4) manufacturing, dyeing, or finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

Cross-References.

Establishments primarily engaged in knitting apparel as classified in Industry Group 3151, Apparel Knitting Mills.

3133 Textile and Fabric Finishing and Fabric Coating Mills

31331 Textile and Fabric Finishing Mills

This industry comprises (1) establishments primarily engaged in finishing of textiles, fabrics, and apparel, and (2) establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include: bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendaring, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural

fibers and raw stock.

Cross-References. Establishments primarily engaged in--

- Coating or impregnating fabrics--are classified in Industry 31332, Fabric Coating Mills;
- Knitting or knitting and finishing fabric--are classified in Industry 31324, Knit Fabric Mills;
- Manufacturing and finishing apparel--are classified in Subsector 315, Apparel Manufacturing;
- Weaving and finishing fabrics--are classified in Industry Group 3132, Fabric Mills;
- Manufacturing and finishing rugs and carpets--are classified in Industry 31411, Carpet and Rug Mills; and
- Printing on apparel--are classified in Industry 32311, Printing.

313311 Broadwoven Fabric Finishing Mills^{US}

This U.S. industry comprises (1) establishments primarily engaged in finishing broadwoven fabrics and (2) establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (roller, screen, flock, plisse), and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping.

Cross-References. Establishments primarily engaged in--

- Coating or impregnating fabrics--are classified in Industry 313320, Fabric Coating Mills; and
- Weaving and finishing broadwoven fabrics--are classified in Industry 313210, Broadwoven Fabric Mills.

313312 Textile and Fabric Finishing (except Broadwoven Fabric) Mills^{US}

This U.S. industry comprises (1) establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven) and (2) establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

Cross-References. Establishments primarily engaged in--

- Knitting and finishing fabric--are classified in Industry 31324, Knit Fabric

Mills;

- Finishing broadwoven fabric--are classified in U.S. Industry 313311, Broadwoven Fabric Finishing Mills;
- Weaving and finishing narrow woven fabric--are classified in U.S. Industry 313221, Narrow Fabric Mills;
- Manufacturing and finishing apparel--are classified in Subsector 315, Apparel Manufacturing;
- Coating or impregnating fabrics--are classified in Industry 313320, Fabric Coating Mills; and
- Printing on apparel--are classified in Industry 32311, Printing.

31332 Fabric Coating Mills

See industry description for 313320 below.

313320 Fabric Coating Mills

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

Cross-References.

Establishments primarily engaged in dyeing and finishing textiles are classified in Industry 31331, Textile and Fabric Finishing Mills.

314 Textile Product Mills

Industries in the Textile Product Mills subsector group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 Textile Furnishings Mills

31411 Carpet and Rug Mills

See industry description for 314110 below.

314110 Carpet and Rug Mills

This industry comprises establishments primarily engaged in (1) manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or (2) finishing carpets and rugs.

31412 Curtain and Linen Mills

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

Cross-References. Establishments primarily engaged in--

- Weaving fabrics--are classified in Industry 31321, Broadwoven Fabric Mills;
- Manufacturing lace curtains on lace machines--are classified in Industry 31324, Knit Fabric Mills;
- Manufacturing textile blanket, wardrobe, and laundry bags--are classified in Industry 31491, Textile Bag and Canvas Mills; and
- Manufacturing mops--are classified in Industry 33999, All Other Miscellaneous Manufacturing.

314121 Curtain and Drapery Mills^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

Cross-References.

Establishments primarily engaged in manufacturing lace curtains on lace machines are classified in Industry 313249, Other Knit Fabric and Lace Mills.

314129 Other Household Textile Product Mills^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

Cross-References. Establishments primarily engaged in--

- Weaving fabrics--are classified in Industry 313210, Broadwoven Fabric Mills;
- Manufacturing blanket, laundry, and wardrobe bags--are classified in U.S. Industry 314911, Textile Bag Mills;
- Manufacturing mops--are classified in U.S. Industry 339994, Broom, Brush, and Mop Manufacturing; and
- Manufacturing window curtains and draperies--are classified in U.S. Industry 314121, Curtain and Drapery Mills.

3149 Other Textile Product Mills

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 Textile Bag and Canvas Mills

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

Cross-References. Establishments primarily engaged in--

- Manufacturing plastic bags--are classified in Industry 32611, Unsupported Plastics Film, Sheet, and Bag Manufacturing;
- Manufacturing canvas blinds and shades--are classified in Industry 33792, Blind and Shade Manufacturing;
- Manufacturing luggage--are classified in Industry 31699, Other Leather and Allied Product Manufacturing; and
- Manufacturing women's handbags and purses of leather or other material (except precious metal)--are classified in Industry 31699, Other Leather and Allied Product Manufacturing.

314911 Textile Bag Mills^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

Illustrative Examples:

Canvas bags manufacturing

Laundry bags made from purchased woven or knitted materials

Seed bags made from purchased woven or knitted materials

Textile bags made from purchased woven or knitted materials

Cross-References. Establishments primarily engaged in--

- Manufacturing plastics bags--are classified in U.S. Industry 326111, Unsupported Plastics Bag Manufacturing;
- Manufacturing luggage--are classified in U.S. Industry 316991, Luggage Manufacturing; and
- Manufacturing women's handbags and purses of leather or other material, except precious metal--are classified in U.S. Industry 316992, Women's Handbag and Purse Manufacturing.

314912 Canvas and Related Product Mills^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

Cross-References. Establishments primarily engaged in--

- Manufacturing canvas blinds and shades--are classified in Industry 337920, Blind and Shade Manufacturing; and
- Manufacturing canvas bags--are classified in U.S. Industry 314911, Textile Bag Mills.

31499 All Other Textile Product Mills

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

Illustrative Examples:

Batts and batting (except nonwoven fabrics) manufacturing
Carpet cutting and binding
Diapers (except disposable) made from purchased fabric
Dust cloths made from purchased fabric
Embroidering on textile products (except apparel) for the trade
Fishing nets made from purchased materials
Sleeping bags manufacturing
Textile fire hoses made from purchased materials
Weatherstripping made from purchased textiles

Cross-References. Establishments primarily engaged in--

- Manufacturing yarns and thread--are classified in Industry 31311, Fiber, Yarn, and Thread Mills;
- Manufacturing carpets and rugs--are classified in Industry 31411, Carpet and Rug Mills;
- Manufacturing apparel--are classified in Subsector 315, Apparel Manufacturing;
- Manufacturing curtains and linens--are classified in Industry 31412, Curtain and Linen Mills; and
- Manufacturing textile bags and canvas products--are classified in Industry 31491, Textile Bag and Canvas Mills.

314991 Rope, Cordage, and Twine Mills^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

Cross-References.

Establishments primarily engaged in manufacturing yarns and filaments are classified in U.S. Industry 313111, Yarn Spinning Mills.

314992 Tire Cord and Tire Fabric Mills^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

314999 All Other Miscellaneous Textile Product Mills^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cords and tire fabrics) from purchased materials.

Illustrative Examples:

Batts and batting (except nonwoven fabrics) manufacturing
Carpet cutting and binding
Diapers (except disposable) made from purchased fabric
Dust cloths made from purchased fabric
Embroidering on textile products (except apparel) for the trade
Sleeping bags manufacturing
Textile fire hose made from purchased materials

Cross-References. Establishments primarily engaged in--

- Manufacturing yarns and thread--are classified in Industry 31311, Fiber, Yarn, and Thread Mills;
- Manufacturing carpets and rugs--are classified in Industry 314110, Carpet and Rug Mills;
- Manufacturing curtains and linens--are classified in Industry 31412, Curtain and Linen Mills;
- Manufacturing textile bags and canvas products--are classified in Industry 31491, Textile Bag and Canvas Mills;
- Manufacturing rope, cordage, and twine--are classified in U.S. Industry

- 314991, Rope, Cordage, and Twine Mills; and
- Manufacturing tire cords and tire fabrics--are classified in U.S. Industry 314992, Tire Cord and Tire Fabric Mills.

315 Apparel Manufacturing

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 Apparel Knitting Mills

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 Hosiery and Sock Mills

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

Cross-References. Establishments primarily engaged in--

- Manufacturing orthopedic hosiery--are classified in Industry 33911, Medical Equipment and Supplies Manufacturing;
- Manufacturing slipper socks from purchased socks--are classified in Industry 31621, Footwear Manufacturing; and
- Finishing apparel products only--are classified in Industry 31331, Textile and Fabric Finishing Mills.

315111 Sheer Hosiery Mills^{US}

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery

(except socks).

Cross-References. Establishments primarily engaged in--

- Knitting or knitting and finishing socks--are classified in U.S. Industry 315119, Other Hosiery and Sock Mills;
- Finishing apparel products only--are classified in U.S. Industry 313312, Textile and Fabric Finishing (except Broadwoven Fabric) Mills; and
- Manufacturing orthopedic hosiery--are classified in U.S. Industry 339113, Surgical Appliance and Supplies Manufacturing.

315119 Other Hosiery and Sock Mills^{US}

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

Cross-References. Establishments primarily engaged in--

- Knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery--are classified in U.S. Industry 315111, Sheer Hosiery Mills;
- Manufacturing orthopedic hosiery--are classified in U.S. Industry 339113, Surgical Appliance and Supplies Manufacturing;
- Finishing apparel products only--are classified in U.S. Industry 313312, Textile and Fabric Finishing (except Broadwoven Fabric) Mills; and
- Manufacturing slipper socks from purchased socks--are classified in U.S. Industry 316212, House Slipper Manufacturing.

31519 Other Apparel Knitting Mills

This industry comprises establishments primarily engaged in one of the following: (1) knitting underwear, outerwear, and/or nightwear; (2) knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or (3) knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

Cross-References. Establishments primarily engaged in--

- Manufacturing outerwear, underwear, and nightwear from purchased fabric--are classified in Industry Group 3152, Cut and Sew Apparel Manufacturing; and
- Finishing apparel products only--are classified in Industry 31331, Textile and Fabric Finishing Mills.

315191 Outerwear Knitting Mills^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) knitting outerwear; (2) knitting fabric and manufacturing outerwear; and (3) knitting, manufacturing, and finishing knit outerwear. Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

Cross-References. Establishments primarily engaged in--

- Manufacturing outerwear from purchased fabric--are classified in Industry Group 3152, Cut and Sew Apparel Manufacturing;
- Finishing apparel products only--are classified in U.S. Industry 313312, Textile and Fabric Finishing (except Broadwoven Fabric) Mills; and
- Knitting underwear and nightwear, knitting fabric and manufacturing underwear and nightwear, or knitting, manufacturing, and finishing knit underwear and nightwear--are classified in U.S. Industry 315192, Underwear and Nightwear Knitting Mills.

315192 Underwear and Nightwear Knitting Mills^{US}

This U.S. industry comprises establishments primarily engaged in one of the following: (1) knitting underwear and nightwear; (2) knitting fabric and manufacturing underwear and nightwear; or (3) knitting, manufacturing, and finishing knit underwear and nightwear. Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

Cross-References. Establishments primarily engaged in--

- Manufacturing underwear and nightwear from purchased fabric--are classified in Industry Group 3152, Cut and Sew Apparel Manufacturing; and
- Finishing apparel products only--are classified in U.S. Industry 313312, Textile and Fabric Finishing (except Broadwoven Fabric) Mills.

3152 Cut and Sew Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 Cut and Sew Apparel Contractors^{CAN}

This industry comprises establishments commonly referred to as contractors primarily

engaged in (1) cutting materials owned by others for apparel and accessories and/or (2) sewing materials owned by others for apparel and accessories.

Cross-References. Establishments primarily engaged in--

- Manufacturing men's and boys' apparel from purchased fabric--are classified in Industry 31522, Men's and Boys' Cut and Sew Apparel Manufacturing;
- Manufacturing women's and girls' apparel from purchased fabric--are classified in Industry 31523, Women's and Girls' Cut and Sew Apparel Manufacturing;
- Manufacturing infants' apparel and all other cut and sew apparel from purchased fabric--are classified in Industry 31529, Other Cut and Sew Apparel Manufacturing; and
- Manufacturing apparel accessories from purchased fabric--are classified in Industry 31599, Apparel Accessories and Other Apparel Manufacturing.

315211 Men's and Boys' Cut and Sew Apparel Contractors^{US}

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for men's and boys' apparel and/or (2) sewing materials owned by others for men's and boys' apparel.

Cross-References. Establishments primarily engaged in--

- Manufacturing men's and boys' apparel from purchased fabric--are classified in Industry 31522, Men's and Boys' Cut and Sew Apparel Manufacturing;
- Manufacturing infants' apparel from purchased fabric--are classified in U.S. Industry 315291, Infants' Cut and Sew Apparel Manufacturing; and
- Manufacturing men's and boys' apparel accessories from purchased fabric--are classified in Industry 31599, Apparel Accessories and Other Apparel Manufacturing.

315212 Women's, Girls', and Infants' Cut and Sew Apparel Contractors^{US}

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in (1) cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or (2) sewing materials owned by others for women's, girls', and infants' apparel and accessories.

Cross-References. Establishments primarily engaged in--

- Manufacturing women's and girls' apparel from purchased fabric--are classified in Industry 31523, Women's and Girls' Cut and Sew Apparel Manufacturing;
- Manufacturing infants' apparel from purchased fabric--are classified in U.S. Industry 315291, Infants' Cut and Sew Apparel Manufacturing; and

- Manufacturing women's, girls', and infants' apparel accessories from purchased fabric--are classified in Industry 31599, Apparel Accessories and Other Apparel Manufacturing.

31522 Men's and Boys' Cut and Sew Apparel Manufacturing^{CAN}

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

Cross-References. Establishments primarily engaged in--

- Cutting and/or sewing materials owned by others for men's and boys' apparel--are classified in Industry 31521, Cut and Sew Apparel Contractors;
- Knitting men's and boys' apparel or knitting fabric and manufacturing men's and boys' apparel--are classified in Industry Group 3151, Apparel Knitting Mills; and
- Manufacturing fur or leather apparel and team athletic uniforms--are classified in Industry 31529, Other Cut and Sew Apparel Manufacturing.

315221 Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

Cross-References. Establishments primarily engaged in--

- Knitting men's and boys' underwear and nightwear and/or knitting and manufacturing men's and boys' underwear and nightwear--are classified in U.S. Industry 315192, Underwear and Nightwear Knitting Mills; and
- Cutting and/or sewing materials owned by others for men's and boys' underwear and nightwear--are classified in U.S. Industry 315211, Men's and Boys' Cut and Sew Apparel Contractors.

315222 Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

Cross-References. Establishments primarily engaged in--

- Manufacturing men's and boys' nontailored coats and jackets such as down coats and windbreakers made from purchased fabric--are classified in U.S. Industry 315228, Men's and Boys' Cut and Sew Other Outerwear Manufacturing;
- Manufacturing fur and leather apparel--are classified in U.S. Industry 315292, Fur and Leather Apparel Manufacturing;
- Manufacturing men's and boys' washable service apparel from purchased fabric--are classified in U.S. Industry 315225, Men's and Boys' Cut and Sew Work Clothing Manufacturing;
- Manufacturing men's and boys' team athletic uniforms from purchased fabric--are classified in U.S. Industry 315299, All Other Cut and Sew Apparel Manufacturing; and
- Cutting and/or sewing materials owned by others for men's and boys' suits, coats, and overcoats--are classified in U.S. Industry 315211, Men's and Boys' Cut and Sew Apparel Contractors.

315223 Men's and Boys' Cut and Sew Shirt (except Work Shirt) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

Cross-References. Establishments primarily engaged in--

- Manufacturing men's and boys' work shirts from purchased fabric--are classified in U.S. Industry 315225, Men's and Boys' Cut and Sew Work Clothing Manufacturing;
- Manufacturing men's and boys' underwear T-shirts and underwear tank tops from purchased fabric--are classified in U.S. Industry 315221, Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing;
- Cutting and/or sewing materials owned by others for men's and boys' shirts--are

classified in U.S. Industry 315211, Men's and Boys' Cut and Sew Apparel Contractors; and

- Knitting men's and boys' outerwear shirts or knitting fabric and manufacturing men's and boys' outerwear shirts--are classified in U.S. Industry 315191, Outerwear Knitting Mills.

315224 Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be included.

Cross-References. Establishments primarily engaged in--

- Manufacturing men's and boys' work pants from purchased fabric--are classified in U.S. Industry 315225, Men's and Boys' Cut and Sew Work Clothing Manufacturing;
- Manufacturing fur and leather apparel--are classified in U.S. Industry 315292, Fur and Leather Apparel Manufacturing;
- Manufacturing men's and boys' sweatpants and shorts from purchased fabric--are classified in U.S. Industry 315228, Men's and Boys' Cut and Sew Other Outerwear Manufacturing; and
- Cutting and/or sewing materials owned by others for men's and boys' separate trousers, slacks, and jeans--are classified in U.S. Industry 315211, Men's and Boys' Cut and Sew Apparel Contractors.

315225 Men's and Boys' Cut and Sew Work Clothing Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

Cross-References. Establishments primarily engaged in--

- Manufacturing men's and boys' separate trousers, slacks, and pants, including jeans and dungarees from purchased fabric--are classified in U.S. Industry

315224, Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing; and

- Cutting and/or sewing materials owned by others for men's and boys' work clothing--are classified in U.S. Industry 315211, Men's and Boys' Cut and Sew Apparel Contractors.

315228 Men's and Boys' Cut and Sew Other Outerwear Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweatpants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

Cross-References. Establishments primarily engaged in--

- Manufacturing men's and boys' athletic uniforms from purchased fabric--are classified in U.S. Industry 315299, All Other Cut and Sew Apparel Manufacturing;
- Manufacturing leather and fur apparel--are classified in U.S. Industry 315292, Fur and Leather Apparel Manufacturing;
- Knitting men's and boys' apparel or knitting fabric and manufacturing men's and boys' apparel--are classified in Industry Group 3151, Apparel Knitting Mills;
- Cutting and/or sewing materials owned by others for men's and boys' apparel--are classified in U.S. Industry 315211, Men's and Boys' Cut and Sew Apparel Contractors;
- Manufacturing men's and boys' underwear and nightwear from purchased fabric--are classified in U.S. Industry 315221, Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing;
- Manufacturing men's and boys' tailored suits, coats, and overcoats from purchased fabric--are classified in U.S. Industry 315222, Men's and Boys' Cut and Sew Suit, Coat and Overcoat Manufacturing;
- Manufacturing men's and boys' outerwear shirts (except work shirts) from purchased fabric--are classified in U.S. Industry 315223, Men's and Boys' Cut and Sew Shirt (except Work Shirt) Manufacturing;
- Manufacturing men's and boys' separate pants, trousers, and slacks from purchased fabric--are classified in U.S. Industry 315224, Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing; and

- Manufacturing men's and boys' work clothing from purchased fabric--are classified in U.S. Industry 315225, Men's and Boys' Cut and Sew Work Clothing Manufacturing.

31523 Women's and Girls' Cut and Sew Apparel Manufacturing^{CAN}

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

Cross-References. Establishments primarily engaged in--

- Knitting women's and girls' apparel or knitting fabric and manufacturing women's and girls' apparel--are classified in Industry Group 3151, Apparel Knitting Mills;
- Manufacturing unisex outerwear garments, such as T-shirts, sweatshirts, and sweatpants that are sized without reference to specific gender (i.e., adult S, M, L, XL),--are classified in Industry 31522, Men's and Boys' Cut and Sew Apparel Manufacturing;
- Cutting and/or sewing materials owned by others for women's and girls' apparel--are classified in Industry 31521, Cut and Sew Apparel Contractors; and
- Manufacturing fur or leather apparel and team athletic uniforms--are classified in Industry 31529, Other Cut and Sew Apparel Manufacturing.

315231 Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

Cross-References. Establishments primarily engaged in--

- Knitting women's and girls' underwear, nightwear, and lingerie or knitting fabric and manufacturing women's and girls' underwear, nightwear, and lingerie--are classified in U.S. Industry 315192, Underwear and Nightwear Knitting Mills; and

- Cutting and/or sewing materials owned by others for women's and girls' underwear, nightwear, and lingerie--are classified in U.S. Industry 315212, Women's, Girls', and Infants' Cut and Sew Apparel Contractors.

315232 Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

Cross-References. Establishments primarily engaged in--

- Knitting women's and girls' blouses, shirts, and tops or knitting fabric and manufacturing women's and girls' blouses, shirts, and tops--are classified in U.S. Industry 315191, Outerwear Knitting Mills;
- Manufacturing unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL),--are classified in U.S. Industry 315223, Men's and Boys' Cut and Sew Shirt (except Work Shirt) Manufacturing; and
- Cutting and/or sewing materials owned by others for women's and girls' shirts and blouses--are classified in U.S. Industry 315212, Women's, Girls', and Infants' Cut and Sew Apparel Contractors.

315233 Women's and Girls' Cut and Sew Dress Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

Cross-References. Establishments primarily engaged in--

- Knitting women's and girls' dresses or knitting fabric and manufacturing women's and girls' dresses--are classified in U.S. Industry 315191, Outerwear Knitting Mills; and
- Cutting and/or sewing materials owned by others for women's and girls' dresses--are classified in U.S. Industry 315212, Women's, Girls', and Infants' Cut and Sew Apparel Contractors.

315234 Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket,

and Skirt Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

Cross-References. Establishments primarily engaged in--

- Manufacturing women's and girls' team athletic uniforms from purchased fabric--are classified in U.S. Industry 315299, All Other Cut and Sew Apparel Manufacturing;
- Manufacturing women's and girls' separate slacks, jeans, pants, and nontailored coats and jackets, such as down coats and windbreakers from purchased fabric,--are classified in U.S. Industry 315239, Women's and Girls' Cut and Sew Other Outerwear Manufacturing;
- Manufacturing fur and leather apparel--are classified in U.S. Industry 315292, Fur and Leather Apparel Manufacturing;
- Knitting women's and girls' tailored skirts, suits, vests, and coats or knitting fabric and manufacturing women's and girls' tailored skirts, suits, vests, and coats--are classified in U.S. Industry 315191, Outerwear Knitting Mills; and
- Cutting and/or sewing materials owned by others for women's and girls' suits, coats, tailored jackets, and skirts--are classified in U.S. Industry 315212, Women's, Girls', and Infants' Cut and Sew Apparel Contractors.

315239 Women's and Girls' Cut and Sew Other Outerwear Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

Cross-References. Establishments primarily engaged in--

- Manufacturing women's and girls' team athletic uniforms from purchased fabric--are classified in U.S. Industry 315299, All Other Cut and Sew Apparel

Manufacturing;

- Knitting women's and girls' apparel or knitting fabric and manufacturing women's and girls' apparel--are classified in U.S. Industry 315191, Outerwear Knitting Mills;
- Manufacturing women's and girls' fur and leather apparel--are classified in U.S. Industry 315292, Fur and Leather Apparel Manufacturing;
- Cutting and/or sewing materials owned by others for women's and girls' apparel--are classified in U.S. Industry 315212, Women's, Girls', and Infants' Cut and Sew Apparel Contractors;
- Manufacturing women's and girls' lingerie, loungewear, and nightwear from purchased fabric--are classified in U.S. Industry 315231, Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing;
- Manufacturing women's and girls' blouses and outerwear shirts from purchased fabric--are classified in U.S. Industry 315232, Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing;
- Manufacturing unisex sweatpants and similar outerwear garments that are sized without specific reference to gender (i.e., adult S, M, L, XL)--are classified in U.S. Industry 315228, Men's and Boys' Cut and Sew Other Outerwear Manufacturing;
- Manufacturing women's and girls' dresses from purchased fabric--are classified in U.S. Industry 315233, Women's and Girls' Cut and Sew Dress Manufacturing; and
- Manufacturing women's and girls' suits, skirts, and tailored coats and jackets from purchased fabric--are classified in U.S. Industry 315234, Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing.

31529 Other Cut and Sew Apparel Manufacturing^{CAN}

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

Cross-References. Establishments primarily engaged in--

- Manufacturing men's and boys' apparel from purchased fabric--are classified in Industry 31522, Men's and Boys' Cut and Sew Apparel Manufacturing;
- Manufacturing women's and girls' apparel from purchased fabric--are classified in Industry 31523, Women's and Girls' Cut and Sew Apparel Manufacturing;
- Knitting apparel or knitting fabric and manufacturing apparel--are classified in Industry Group 3151, Apparel Knitting Mills;
- Cutting and/or sewing materials owned by others for apparel--are classified in Industry 31521, Cut and Sew Apparel Contractors;
- Manufacturing fur and leather mittens and gloves--are classified in Industry 31599, Apparel Accessories and Other Apparel Manufacturing; and
- Dyeing and dressing furs--are classified in Industry 31611, Leather and Hide

Tanning and Finishing.

315291 Infants' Cut and Sew Apparel Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

Cross-References. Establishments primarily engaged in--

- Knitting infants' apparel or knitting fabric and manufacturing infants' apparel--are classified in U.S. Industry 315191, Outerwear Knitting Mills; and
- Cutting and/or sewing materials owned by others for infants' apparel--are classified in U.S. Industry 315212, Women's, Girls', and Infants' Cut and Sew Apparel Contractors.

315292 Fur and Leather Apparel Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

Cross-References. Establishments primarily engaged in--

- Cutting and/or sewing materials owned by others for apparel--are classified in Industry 31521, Cut and Sew Apparel Contractors;
- Dyeing and dressing furs--are classified in Industry 316110, Leather and Hide Tanning and Finishing; and
- Manufacturing fur and leather mittens and gloves--are classified in U.S. Industry 315992, Glove and Mitten Manufacturing.

315299 All Other Cut and Sew Apparel Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in

apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

Cross-References. Establishments primarily engaged in--

- Cutting and/or sewing materials owned by others for apparel--are classified in Industry 31521, Cut and Sew Apparel Contractors;
- Knitting apparel or knitting fabric and manufacturing apparel--are classified in Industry Group 3151, Apparel Knitting Mills;
- Manufacturing men's and boys' underwear and nightwear from purchased fabric--are classified in U.S. Industry 315221, Men's and Boys' Cut and Sew Underwear and Nightwear Manufacturing;
- Manufacturing men's and boys' suits, coats, and overcoats from purchased fabric--are classified in U.S. Industry 315222, Men's and Boys' Cut and Sew Suit, Coat and Overcoat Manufacturing;
- Manufacturing men's and boys' shirts (except work shirts) from purchased fabric--are classified in U.S. Industry 315223, Men's and Boys' Cut and Sew Shirt (except Work Shirt) Manufacturing;
- Manufacturing men's and boys' pants, slacks, trousers, and jeans from purchased fabric--are classified in U.S. Industry 315224, Men's and Boys' Cut and Sew Trouser, Slack, and Jean Manufacturing;
- Manufacturing men's and boys' work clothing from purchased fabric--are classified in U.S. Industry 315225, Men's and Boys' Cut and Sew Work Clothing Manufacturing;
- Manufacturing other men's and boys' outerwear from purchased fabric--are classified in U.S. Industry 315228, Men's and Boys' Cut and Sew Other Outerwear Manufacturing;
- Manufacturing women's and girls' lingerie and nightwear from purchased fabric--are classified in U.S. Industry 315231, Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing;
- Manufacturing women's and girls' blouses and shirts from purchased fabric--are classified in U.S. Industry 315232, Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing;
- Manufacturing women's and girls' dresses from purchased fabric--are classified in U.S. Industry 315233, Women's and Girls' Cut and Sew Dress Manufacturing;
- Manufacturing women's and girls' suits, tailored coats and jackets, and skirts from purchased fabric--are classified in U.S. Industry 315234, Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing;
- Manufacturing other women's and girls' outerwear from purchased fabric--are classified in U.S. Industry 315239, Women's and Girls' Cut and Sew Other Outerwear Manufacturing;
- Manufacturing infants' apparel from purchased fabric--are classified in U.S.

- Industry 315291, Infants' Cut and Sew Apparel Manufacturing; and
- Manufacturing fur and leather apparel--are classified in U.S. Industry 315292, Fur and Leather Apparel Manufacturing.

3159 Apparel Accessories and Other Apparel Manufacturing

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 Apparel Accessories and Other Apparel Manufacturing

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

Cross-References. Establishments primarily engaged in--

- Cutting and/or sewing materials owned by others for apparel accessories--are classified in Industry 31521, Cut and Sew Apparel Contractors;
- Manufacturing paper hats and caps--are classified in Industry 32229, Other Converted Paper Product Manufacturing;
- Manufacturing plastics or rubber hats and caps (except bathing caps)--are classified in Subsector 326, Plastics and Rubber Products Manufacturing;
- Manufacturing athletic gloves, such as boxing gloves, baseball gloves, golf gloves, batting gloves, and racquetball gloves,--are classified in Industry 33992, Sporting and Athletic Goods Manufacturing;
- Manufacturing metal fabric, metal mesh, or rubber gloves--are classified in Industry 33911, Medical Equipment and Supplies Manufacturing;
- Knitting apparel, mittens, gloves, hats, and caps or knitting fabric and manufacturing apparel, mittens, gloves, hats, and caps--are classified in Industry Group 3151, Apparel Knitting Mills;
- Cutting and/or sewing materials owned by others for apparel--are classified in Industry 31521, Cut and Sew Apparel Contractors;
- Manufacturing men's and boys' underwear and outerwear from purchased fabric--are classified in Industry 31522, Men's and Boys' Cut and Sew Apparel Manufacturing;

- Manufacturing women's and girls' underwear and outerwear from purchased fabric--are classified in Industry 31523, Women's and Girls' Cut and Sew Apparel Manufacturing; and
- Manufacturing other apparel from purchased fabric and manufacturing fur and leather apparel, hats, and caps--are classified in Industry 31529, Other Cut and Sew Apparel Manufacturing.

315991 Hat, Cap, and Millinery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

Cross-References. Establishments primarily engaged in--

- Cutting and/or sewing materials owned by others for hats, caps, and millinery--are classified in Industry 31521, Cut and Sew Apparel Contractors;
- Manufacturing paper hats and caps--are classified in U.S. Industry 322299, All Other Converted Paper Product Manufacturing;
- Manufacturing plastics or rubber hats and caps (except bathing caps)--are classified in Subsector 326, Plastics and Rubber Products Manufacturing; and
- Manufacturing fur and leather hats and caps--are classified in U.S. Industry 315292, Fur and Leather Apparel Manufacturing.

315992 Glove and Mitten Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

Cross-References. Establishments primarily engaged in--

- Cutting and/or sewing materials owned by others for gloves and mittens--are classified in Industry 31521, Cut and Sew Apparel Contractors;
- Knitting mittens and gloves or knitting fabric and manufacturing mittens and gloves--are classified in U.S. Industry 315191, Outerwear Knitting Mills;
- Manufacturing athletic gloves, such as boxing gloves, baseball gloves, golf gloves, batting gloves, and racquetball gloves--are classified in Industry 339920, Sporting and Athletic Goods Manufacturing; and

- Manufacturing metal fabric, metal mesh, or rubber gloves--are classified in U.S. Industry 339113, Surgical Appliance and Supplies Manufacturing.

315993 Men's and Boys' Neckwear Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

Cross-References.

Establishments primarily engaged in cutting and/or sewing materials owned by others for men's and boys' neckwear are classified in U.S. Industry 315211, Men's and Boys' Cut and Sew Apparel Contractors.

315999 Other Apparel Accessories and Other Apparel Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, suspenders, and waterproof outerwear.

Cross-References. Establishments primarily engaged in--

- Knitting apparel or knitting fabric and manufacturing apparel--are classified in Industry Group 3151, Apparel Knitting Mills;
- Cutting and/or sewing materials owned by others for apparel--are classified in Industry 31521, Cut and Sew Apparel Contractors;
- Manufacturing men's and boys' cut and sew underwear and outerwear from purchased fabric--are classified in Industry 31522, Men's and Boys' Cut and Sew Apparel Manufacturing;
- Manufacturing women's and girls' cut and sew underwear and outerwear from purchased fabric--are classified in Industry 31523, Women's and Girls' Cut and Sew Apparel Manufacturing;
- Manufacturing infants' cut and sew apparel from purchased fabric--are classified in U.S. Industry 315291, Infants' Cut and Sew Apparel Manufacturing;
- Manufacturing fur and leather apparel--are classified in U.S. Industry 315292,

- Fur and Leather Apparel Manufacturing;
- Manufacturing hats, caps, and millinery--are classified in U.S. Industry 315991, Hat, Cap, and Millinery Manufacturing;
 - Manufacturing gloves and mittens--are classified in U.S. Industry 315992, Glove and Mitten Manufacturing; and
 - Manufacturing men's and boys' neckwear--are classified in U.S. Industry 315993, Men's and Boys' Neckwear Manufacturing.

316 Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

3161 Leather and Hide Tanning and Finishing

31611 Leather and Hide Tanning and Finishing

See industry description for 316110 below

316110 Leather and Hide Tanning and Finishing

This industry comprises establishments primarily engaged in one or more of the following: (1) tanning, currying, and finishing hides and skins; (2) having others process hides and skins on a contract basis; and (3) dyeing or dressing furs.

3162 Footwear Manufacturing

31621 Footwear Manufacturing

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

Cross-References.

Establishments primarily engaged in manufacturing orthopedic extension footwear are classified in Industry 33911, Medical Equipment and Supplies Manufacturing.

316211 Rubber and Plastics Footwear Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

Cross-References. Establishments primarily engaged in--

- Manufacturing house slippers with fabric uppers and rubber or plastics soles--are classified in U.S. Industry 316212, House Slipper Manufacturing;
- Manufacturing men's footwear (except athletic) with leather or vinyl uppers, regardless of sole material--are classified in U.S. Industry 316213, Men's Footwear (except Athletic) Manufacturing;
- Manufacturing women's footwear (except athletic) with leather or vinyl uppers, regardless of sole material--are classified in U.S. Industry 316214, Women's Footwear (except Athletic) Manufacturing; and
- Manufacturing youths' children's and infants' footwear and athletic footwear with leather or vinyl uppers, regardless of sole material--are classified in U.S. Industry 316219, Other Footwear Manufacturing.

316212 House Slipper Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

316213 Men's Footwear (except Athletic) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

Cross-References. Establishments primarily engaged in--

- Manufacturing men's footwear with fabric uppers and rubber or plastics soles--are classified in U.S. Industry 316211, Rubber and Plastics Footwear Manufacturing;
- Manufacturing orthopedic extension footwear--are classified in U.S. Industry 339113, Surgical Appliance and Supplies Manufacturing; and
- Manufacturing men's leather or vinyl upper athletic footwear and youths' and

boys' footwear--are classified in U.S. Industry 316219, Other Footwear Manufacturing.

316214 Women's Footwear (except Athletic) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

Cross-References. Establishments primarily engaged in--

- Manufacturing women's footwear with fabric uppers and rubber or plastics soles and rubber or plastics sandals--are classified in U.S. Industry 316211, Rubber and Plastics Footwear Manufacturing;
- Manufacturing orthopedic extension footwear--are classified in U.S. Industry 339113, Surgical Appliance and Supplies Manufacturing; and
- Manufacturing women's leather or vinyl upper athletic footwear and youths' and girls' footwear--are classified in U.S. Industry 316219, Other Footwear Manufacturing.

316219 Other Footwear Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

Illustrative Examples:

Athletic shoes (except rubber-soled, fabric upper) manufacturing

Ballet slippers manufacturing

Children's shoes (except plastics and rubber footwear and orthopedic extension shoes) manufacturing

Cleated athletic shoes manufacturing

Infants' shoes (except plastics and rubber footwear) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing rubber and plastics footwear with fabric uppers--are classified in U.S. Industry 316211, Rubber and Plastics Footwear Manufacturing;
- Manufacturing house slippers--are classified in U.S. Industry 316212, House Slipper Manufacturing;
- Manufacturing men's footwear (except athletic)--are classified in U.S. Industry 316213, Men's Footwear (except Athletic) Manufacturing;
- Manufacturing orthopedic extension footwear--are classified in Industry 339113, Surgical Appliance and Supplies Manufacturing; and
- Manufacturing women's footwear (except athletic)--are classified in U.S.

Industry 316214, Women's Footwear (except Athletic) Manufacturing.

3169 Other Leather and Allied Product Manufacturing

31699 Other Leather and Allied Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

Illustrative Examples:

Billfolds, all materials, manufacturing
Boot and shoe cut stock and findings, leather, manufacturing
Dog furnishings (e.g., collars, leashes, harnesses, muzzles), manufacturing
Luggage, all materials, manufacturing
Purses, women's, all materials (except metal), manufacturing
Shoe soles, leather, manufacturing
Toilet kits and cases (except metal) manufacturing
Watchbands (except metal) manufacturing
Welders' jackets, leggings, and sleeves, leather, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing leather apparel--are classified in Industry 31529, Other Cut and Sew Apparel Manufacturing;
- Manufacturing leather gloves, mittens, belts, and apparel accessories--are classified in Industry 31599, Apparel Accessories and Other Apparel Manufacturing;
- Manufacturing footwear--are classified in Industry 31621, Footwear Manufacturing;
- Manufacturing nonleather soles--are classified elsewhere based on the primary input material;
- Manufacturing small articles made of metal carried on or about the person made of metal--are classified in Industry 33991, Jewelry and Silverware Manufacturing; and
- Manufacturing leather gaskets--are classified in Industry 33999, All Other Miscellaneous Manufacturing.

316991 Luggage Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

316992 Women's Handbag and Purse Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing women's handbags and purses of any material (except precious metal).

Cross-References.

Establishments primarily engaged in manufacturing precious metal handbags and purses are classified in U.S. Industry 339911, Jewelry (except Costume) Manufacturing.

316993 Personal Leather Good (except Women's Handbag and Purse) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

Cross-References. Establishments primarily engaged in--

- Manufacturing personal goods of precious metal--are classified in U.S. Industry 339911, Jewelry (except Costume) Manufacturing; and
- Manufacturing personal goods of metal (except precious)--are classified in U.S. Industry 339914, Costume Jewelry and Novelty Manufacturing.

316999 All Other Leather Good Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

Illustrative Examples:

Boot and shoe cut stock and findings, leather, manufacturing
Dog furnishings (e.g., collars, leashes, harnesses, muzzles) manufacturing
Leather belting for machinery (e.g., flat, solid, twisted, built-up) manufacturing
Shoe soles, leather, manufacturing
Welders' jackets, leggings, and sleeves, leather, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing leather gloves or mittens--are classified in U.S. Industry 315992, Glove and Mitten Manufacturing;

- Manufacturing leather apparel belts--are classified in U.S. Industry 315999, Other Apparel Accessories and Other Apparel Manufacturing;
- Manufacturing footwear--are classified in Industry 31621, Footwear Manufacturing;
- Manufacturing luggage of any material--are classified in U.S. Industry 316991, Luggage Manufacturing;
- Manufacturing handbags and purses--are classified in U.S. Industry 316992, Women's Handbag and Purse Manufacturing;
- Manufacturing personal leather goods, such as wallets and key cases, of all materials (except metal)--are classified in U.S. Industry 316993, Personal Leather Good (except Women's Handbag and Purse) Manufacturing;
- Manufacturing nonleather soles--are classified elsewhere based on the primary input material;
- Manufacturing leather apparel--are classified in U.S. Industry 315292, Fur and Leather Apparel Manufacturing; and
- Manufacturing leather gaskets--are classified in U.S. Industry 339991, Gasket, Packing, and Sealing Device Manufacturing.

321 Wood Product Manufacturing

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 Sawmills and Wood Preservation

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

32111 Sawmills and Wood Preservation

This industry comprises establishments primarily engaged in one or more of the following: (1) sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts; (2) sawing round wood poles, pilings, and posts and treating them with preservatives; and (3) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

Cross-References. Establishments primarily engaged in--

- Operating portable chipper mills in the field--are classified in Industry 11331, Logging;
- Manufacturing wood products (except round wood poles, pilings, and posts) and treating them with preservatives--are classified elsewhere in Subsector 321, Wood Product Manufacturing, based on the related production process;
- Manufacturing veneer from logs and bolts or manufacturing engineered lumber and structural members other than solid wood--are classified in Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing; and
- Planing purchased lumber or manufacturing cut stock or dimension stock (i.e., shapes) from logs or bolts--are classified in Industry 32191, Millwork.

321113 Sawmills^{US}

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

Cross-References. Establishments primarily engaged in--

- Planing purchased lumber or manufacturing cut stock or dimension stock (i.e., shapes) from logs or bolts--are classified in Industry 32191, Millwork;
- Manufacturing veneer from logs or bolts--are classified in Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing; and
- Operating portable chipper mills in the field--are classified in Industry 113310, Logging.

321114 Wood Preservation^{CAN}

This U.S. industry comprises establishments primarily engaged in (1) treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives, such as chromated copper arsenate, to prevent decay and to protect against fire and

insects and/or (2) sawing round wood poles, pilings, and posts and treating them with preservatives.

Cross-References.

Establishments primarily engaged in manufacturing wood products (except round wood poles, pilings, and posts) and treating them with preservatives are classified elsewhere in Subsector 321, Wood Product Manufacturing, based on the related production process.

3212 Veneer, Plywood, and Engineered Wood Product Manufacturing

32121 Veneer, Plywood, and Engineered Wood Product Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing veneer and/or plywood; (2) manufacturing engineered wood members; and (3) manufacturing reconstituted wood products. This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

Illustrative Examples:

Fabricated structural wood members manufacturing
Laminated structural wood members manufacturing
Medium density fiberboard (MDF) manufacturing
Oriented strandboard (OSB) manufacturing
Particleboard manufacturing
Plywood manufacturing
Reconstituted wood sheets and boards manufacturing
Roof trusses, wood, manufacturing
Veneer mills
Waferboard manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing veneer and further processing that veneer into wood containers or wood container parts in the same establishment--are classified in Industry 32192, Wood Container and Pallet Manufacturing;
- Manufacturing prefabricated wood buildings or wood sections, and panels for buildings--are classified in Industry 32199, All Other Wood Product Manufacturing; and
- Manufacturing solid wood structural members, such as dimension lumber and timber from logs or bolts in sawmills--are classified in Industry 32111, Sawmills and Wood Preservation.

321211 Hardwood Veneer and Plywood Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

Cross-References. Establishments primarily engaged in--

- Manufacturing veneer and further processing that veneer into wood containers or wood container parts--are classified in Industry 321920, Wood Container and Pallet Manufacturing;
- Manufacturing softwood veneer and softwood plywood--are classified in U.S. Industry 321212, Softwood Veneer and Plywood Manufacturing; and
- Manufacturing reconstituted wood sheets and boards--are classified in U.S. Industry 321219, Reconstituted Wood Product Manufacturing.

321212 Softwood Veneer and Plywood Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

Cross-References. Establishments primarily engaged in--

- Manufacturing veneer and further processing that veneer into wood containers or wood container parts--are classified in Industry 321920, Wood Container and Pallet Manufacturing;
- Manufacturing hardwood veneer and hardwood plywood--are classified in U.S. Industry 321211, Hardwood Veneer and Plywood Manufacturing; and
- Manufacturing reconstituted wood sheets and boards--are classified in U.S. Industry 321219, Reconstituted Wood Product Manufacturing.

321213 Engineered Wood Member (except Truss) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

Illustrative Examples:

Finger joint lumber manufacturing

I-joists, wood, fabricating

Laminated veneer lumber (LVL) manufacturing

Parallel strand lumber manufacturing

Timbers, structural, glue laminated or pre-engineered wood, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing prefabricated wood buildings, or wood sections, and panels for buildings--are classified in U.S. Industry 321992, Prefabricated Wood Building Manufacturing;
- Manufacturing wood trusses--are classified in U.S. Industry 321214, Truss Manufacturing; and
- Manufacturing solid wood structural members, such as dimension lumber and timber from logs or bolts,--are classified in U.S. Industry 321113, Sawmills.

321214 Truss Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

Cross-References.

Establishments primarily engaged in manufacturing wood I-joists are classified in U.S. Industry 321213, Engineered Wood Member (except Truss) Manufacturing.

321219 Reconstituted Wood Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

Illustrative Examples:

Medium density fiberboard (MDF) manufacturing
Oriented strandboard (OSB) manufacturing
Particleboard manufacturing
Reconstituted wood sheets and boards manufacturing
Waferboard manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing softwood plywood--are classified in U.S. Industry 321212, Softwood Veneer and Plywood Manufacturing; and
- Manufacturing hardwood plywood--are classified in U.S. Industry 321211, Hardwood Veneer and Plywood Manufacturing.

3219 Other Wood Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation

facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 Millwork

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

Cross-References. Establishments primarily engaged in--

- Manufacturing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs and bolts--are classified in Industry 32111, Sawmills and Wood Preservation;
- Fabricating millwork at the construction site--are classified in Sector 23, Construction; and
- Manufacturing wood furniture frames and finished wood furniture parts--are classified in Industry 33721, Office Furniture (including Fixtures) Manufacturing.

321911 Wood Window and Door Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

Cross-References.

Establishments primarily engaged in fabricating wood windows or wood doors at the construction site are classified in Sector 23, Construction.

321912 Cut Stock, Resawing Lumber, and Planing^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing dimension lumber from purchased lumber; (2) manufacturing dimension stock (i.e., shapes) or cut stock; (3) resawing the output of sawmills; and (4) planing purchased lumber. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

Cross-References. Establishments primarily engaged in--

- Manufacturing dimension lumber, boards, beams, timbers, poles, ties, shingles,

shakes, siding, and wood chips from logs or bolts--are classified in U.S. Industry 321113, Sawmills;

- Manufacturing wood stairwork, wood molding, wood trim, and other millwork--are classified in U.S. Industry 321918, Other Millwork (including Flooring); and
- Manufacturing wood furniture frames and finished wood furniture parts--are classified in U.S. Industry 337215, Showcase, Partition, Shelving, and Locker Manufacturing.

321918 Other Millwork (including Flooring)^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

Illustrative Examples:

Clear and finger joint wood moldings manufacturing
Decorative wood moldings (e.g., base, chair rail, crown, shoe) manufacturing
Ornamental woodwork (e.g., cornices, mantel) manufacturing
Planing mills, millwork
Stairwork (e.g., panel posts, railings, stairs, showcases), wood, manufacturing
Wood flooring manufacturing
Wood shutters manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing wood windows and doors--are classified in U.S. Industry 321911, Wood Window and Door Manufacturing; and
- Manufacturing cut stock, resawing lumber, and/or planing purchased lumber--are classified in U.S. Industry 321912, Cut Stock, Resawing Lumber, and Planing.

32192 Wood Container and Pallet Manufacturing

See industry description for 321920 below

321920 Wood Container and Pallet Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shoo, wood boxes, other wood containers, and wood parts for pallets and containers.

Cross-References.

Establishments primarily engaged in manufacturing wood burial caskets are classified

in U.S. Industry 339995, Burial Casket Manufacturing.

32199 All Other Wood Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

Illustrative Examples:

Mobile home manufacturing
Panels, prefabricated wood building, manufacturing
Prefabricated wood buildings
Sections, prefabricated wood building, manufacturing
Wood dowels manufacturing
Wood handles (e.g., broom, handtool, mop), manufacturing

Cross-References. Establishments primarily engaged in--

- Operating sawmills or preserving wood--are classified in Industry 32111, Sawmills and Wood Preservation;
- Manufacturing veneer, plywood, and engineered wood products--are classified in Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing;
- Manufacturing millwork--are classified in Industry 32191, Millwork;
- Manufacturing wood containers, pallets, and wood container parts--are classified in Industry 32192, Wood Container and Pallet Manufacturing;
- Manufacturing travel trailers with self-contained facilities for storage of water and waste--are classified in Industry 33621, Motor Vehicle Body and Trailer Manufacturing; and
- Fabricating of wood buildings or wood sections and panels for buildings at the construction site--are classified in Sector 23, Construction.

321991 Manufactured Home (Mobile Home) Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

Cross-References. Establishments primarily engaged in--

- Manufacturing prefabricated wood buildings not equipped with wheels--are classified in U.S. Industry 321992, Prefabricated Wood Building

Manufacturing; and

- Manufacturing travel trailers with self-contained facilities for storage of water and waste--are classified in U.S. Industry 336214, Travel Trailer and Camper Manufacturing.

321992 Prefabricated Wood Building Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

Cross-References. Establishments primarily engaged in--

- Fabricating wood buildings or wood sections and panels for buildings at the construction site--are classified in Sector 23, Construction; and
- Making manufactured homes (i.e., mobile homes)--are classified in U.S. Industry 321991, Manufactured Home (Mobile Home) Manufacturing.

321999 All Other Miscellaneous Wood Product Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

Illustrative Examples:

Cork products (except gaskets) manufacturing

Kiln drying lumber

Shoe trees manufacturing

Wood dowels manufacturing

Wood extension ladders manufacturing

Wood handles (e.g., broom, handtool, mop), manufacturing

Wood kitchenware manufacturing

Wood stepladders manufacturing

Wood toilet seats manufacturing

Wood toothpicks manufacturing

Cross-References. Establishments primarily engaged in--

- Operating sawmills and preserving wood--are classified in Industry 32111, Sawmills and Wood Preservation;
- Manufacturing veneer and engineered wood products--are classified in Industry 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing;
- Manufacturing millwork--are classified in Industry 32191, Millwork;

- Manufacturing boxes, box shooks, wood containers, pallets, and wood parts for containers--are classified in Industry 321920, Wood Container and Pallet Manufacturing;
- Making manufactured homes (i.e., mobile homes)--are classified in U.S. Industry 321991, Manufactured Home (Mobile Home) Manufacturing; and
- Manufacturing prefabricated wood buildings or wood sections and panels for buildings--are classified in U.S. Industry 321992, Prefabricated Wood Building Manufacturing.

322 Paper Manufacturing

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and

Rubber Products Manufacturing, because establishments that do this often first make the film.

The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 Pulp, Paper, and Paperboard Mills

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 Pulp Mills

See industry description for 322110 below.

322110 Pulp Mills

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

Cross-References. Establishments primarily engaged in--

- Manufacturing both pulp and paper--are classified in Industry 32212, Paper Mills; and
- Manufacturing both pulp and paperboard--are classified in Industry 322130, Paperboard Mills.

32212 Paper Mills

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

Cross-References. Establishments primarily engaged in--

- Manufacturing pulp without manufacturing paper--are classified in Industry 32211, Pulp Mills;

- Manufacturing paperboard--are classified in Industry 32213, Paperboard Mills;
- Converting paper without manufacturing paper--are classified in Industry Group 3222, Converted Paper Product Manufacturing; and
- Manufacturing photographic sensitized paper--are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

322121 Paper (except Newsprint) Mills^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

Cross-References. Establishments primarily engaged in--

- Manufacturing newsprint and uncoated groundwood paper--are classified in U.S. Industry 322122, Newsprint Mills;
- Converting paper without manufacturing paper--are classified in Industry Group 3222, Converted Paper Product Manufacturing;
- Manufacturing paperboard--are classified in Industry 322130, Paperboard Mills;
- Manufacturing pulp without manufacturing paper--are classified in Industry 322110, Pulp Mills; and
- Manufacturing photographic sensitized paper from purchased paper--are classified in U.S. Industry 325992, Photographic Film, Paper, Plate, and Chemical Manufacturing.

322122 Newsprint Mills^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

Cross-References. Establishments primarily engaged in--

- Manufacturing paper (except newsprint and uncoated groundwood)--are classified in U.S. Industry 322121, Paper (except Newsprint) Mills;
- Converting paper without manufacturing paper--are classified in Industry Group 3222, Converted Paper Product Manufacturing;
- Manufacturing paperboard--are classified in Industry 322130, Paperboard Mills; and
- Manufacturing pulp without manufacturing paper--are classified in Industry 322110, Pulp Mills.

32213 Paperboard Mills

See industry description for 322130 below.

322130 Paperboard Mills

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

Cross-References. Establishments primarily engaged in--

- Manufacturing pulp without manufacturing paperboard--are classified in Industry 322110, Pulp Mills;
- Converting paperboard without manufacturing paperboard--are classified in Industry Group 3222, Converted Paper Product Manufacturing; and
- Manufacturing insulation board and other reconstituted wood fiberboard--are classified in U.S. Industry 321219, Reconstituted Wood Product Manufacturing.

3222 Converted Paper Product Manufacturing

This industry group comprises establishments primarily engaged in converting paper or paperboard without manufacturing paper or paperboard.

32221 Paperboard Container Manufacturing

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

Cross-References. Establishments primarily engaged in--

- Manufacturing similar items of plastics materials--are classified in Industry Group 3261, Plastics Product Manufacturing;
- Manufacturing paperboard and converting paperboard into containers--are classified in Industry 32213, Paperboard Mills;
- Manufacturing egg cartons, food trays, and other food containers from molded pulp--are classified in Industry 32229, Other Converted Paper Product Manufacturing;
- Manufacturing paper and converting paper into containers--are classified in Industry 32212, Paper Mills; and
- Manufacturing paperbags without manufacturing paper--are classified in

Industry 32222, Paper Bag and Coated and Treated Paper Manufacturing.

322211 Corrugated and Solid Fiber Box Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

Cross-References. Establishments primarily engaged in--

- Manufacturing setup paperboard boxes (except corrugated or laminated solid fiber boxes)--are classified in U.S. Industry 322213, Setup Paperboard Box Manufacturing;
- Manufacturing folding paperboard boxes (except corrugated or laminated solid fiber boxes)--are classified in U.S. Industry 322212, Folding Paperboard Box Manufacturing; and
- Manufacturing paperboard and converting paperboard into boxes--are classified in Industry 322130, Paperboard Mills.

322212 Folding Paperboard Box Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

Cross-References. Establishments primarily engaged in--

- Manufacturing setup paperboard boxes (except corrugated)--are classified in U.S. Industry 322213, Setup Paperboard Box Manufacturing;
- Manufacturing corrugated and solid fiber boxes--are classified in U.S. Industry 322211, Corrugated and Solid Fiber Box Manufacturing;
- Manufacturing paperboard and converting paperboard into containers--are classified in Industry 322130, Paperboard Mills;
- Manufacturing paper and converting paper into containers--are classified in Industry 32212, Paper Mills;
- Manufacturing milk cartons--are classified in U.S. Industry 322215, Nonfolding Sanitary Food Container Manufacturing; and
- Manufacturing paper bags--are classified in Industry 32222, Paper Bag and Coated and Treated Paper Manufacturing.

322213 Setup Paperboard Box Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat)

without manufacturing paperboard.

Cross-References. Establishments primarily engaged in--

- Manufacturing folding paperboard boxes (except corrugated)--are classified in U.S. Industry 322212, Folding Paperboard Box Manufacturing;
- Manufacturing corrugated and solid fiber boxes--are classified in U.S. Industry 322211, Corrugated and Solid Fiber Box Manufacturing; and
- Manufacturing paperboard and converting paperboard into containers--are classified in Industry 322130, Paperboard Mills.

322214 Fiber Can, Tube, Drum, and Similar Products Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

Cross-References.

Establishments engaged in manufacturing paperboard and converting paperboard into containers are classified in Industry 322130, Paperboard Mills.

322215 Nonfolding Sanitary Food Container Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

Cross-References. Establishments primarily engaged in--

- Manufacturing sanitary food containers of solely plastics materials--are classified in Industry Group 3261, Plastics Product Manufacturing;
- Manufacturing egg cartons, food trays, and other food containers from molded pulp--are classified in U.S. Industry 322299, All Other Converted Paper Product Manufacturing; and
- Manufacturing folding sanitary cartons--are classified in U.S. Industry 322212, Folding Paperboard Box Manufacturing.

32222 Paper Bag and Coated and Treated Paper Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) cutting and coating paper and paperboard; (2) cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film); (3) manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film; (4) manufacturing laminated aluminum and other converted metal foils from purchased

foils; and (5) surface coating paper or paperboard.

Cross-References. Establishments primarily engaged in--

- Manufacturing paper from pulp--are classified in Industry 32212, Paper Mills;
- Manufacturing photographic sensitized paper--are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing;
- Manufacturing textile bags--are classified in Industry 31491, Textile Bag and Canvas Mills;
- Manufacturing single and multiwall plastics bags or plastics laminated bags--are classified in Industry 32611, Unsupported Plastics Film, Sheet, and Bag Manufacturing;
- Making aluminum and aluminum foil--are classified in Industry 33131, Alumina and Aluminum Production and Processing; and
- Cutting purchased aluminum foil into smaller lengths and widths--are classified in Industry 33299, All Other Fabricated Metal Product Manufacturing.

32221 Coated and Laminated Packaging Paper and Plastics Film Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with the manufacturing of packaging materials: (1) cutting and coating paper; and (2) cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates). The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

Cross-References. Establishments primarily engaged in--

- Manufacturing coated or laminated paper for nonpackaging purposes--are classified in U.S. Industry 32222, Coated and Laminated Paper Manufacturing;
- Manufacturing unsupported plastics film--are classified in U.S. Industry 32611, Unsupported Plastics Film and Sheet (except Packaging) Manufacturing;
- Manufacturing laminated aluminum foil for flexible packaging uses--are classified in U.S. Industry 32225, Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses;
- Making aluminum and aluminum foil--are classified in Industry 33131, Alumina and Aluminum Production and Processing;
- Cutting purchased aluminum foil into smaller lengths and widths--are classified in U.S. Industry 33299, All Other Miscellaneous Fabricated Metal Product Manufacturing; and
- Manufacturing paper from pulp--are classified in Industry 32212, Paper Mills.

322222 Coated and Laminated Paper Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging: (1) cutting and coating paper; (2) cutting and laminating paper and other flexible materials (except plastics film to plastics film); and (3) manufacturing converted aluminum and other metal foils for nonpackaging uses from purchased foils. The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

Illustrative Examples:

Book paper made by coating purchased paper

Gift wrap paper (except laminated foil) made from purchased paper

Gummed paper products (e.g., labels sheets, tapes) made from purchased paper

Tapes, gummed (e.g., cellophane, masking, pressure sensitive) made from purchased paper or other structures

Wallpaper made from purchased papers or other materials

Cross-References. Establishments primarily engaged in--

- Manufacturing coated and laminated paper for packaging uses--are classified in U.S. Industry 322221, Coated and Laminated Packaging Paper and Plastics Film Manufacturing;
- Manufacturing photographic sensitized paper--are classified in U.S. Industry 325992, Photographic Film, Paper, Plate, and Chemical Manufacturing;
- Making aluminum and aluminum foil--are classified in Industry 33131, Alumina and Aluminum Production and Processing;
- Cutting purchased aluminum foil into smaller lengths and widths--are classified in U.S. Industry 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing; and
- Manufacturing laminated aluminum foil for flexible packaging uses--are classified in U.S. Industry 322225, Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses.

322223 Plastics, Foil, and Coated Paper Bag Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

Cross-References. Establishments primarily engaged in--

- Manufacturing uncoated paper bags and multiwall bags and sacks--are classified in U.S. Industry 322224, Uncoated Paper and Multiwall Bag Manufacturing;

- Manufacturing textile bags--are classified in U.S. Industry 314911, Textile Bag Mills; and
- Manufacturing single and multiwall plastics bags--are classified in U.S. Industry 326111, Unsupported Plastics Bag Manufacturing.

322224 Uncoated Paper and Multiwall Bag Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

Cross-References. Establishments primarily engaged in--

- Manufacturing single wall and multiwall bags from plastics unsupported film--are classified in U.S. Industry 326111, Unsupported Plastics Bag Manufacturing;
- Manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper bags--are classified in U.S. Industry 322223, Plastics, Foil, and Coated Paper Bag Manufacturing; and
- Manufacturing textile bags--are classified in U.S. Industry 314911, Textile Bag Mills.

322225 Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses^{US}

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

Cross-References. Establishments primarily engaged in--

- Manufacturing plain aluminum foil--are classified in U.S. Industry 331315, Aluminum Sheet, Plate, and Foil Manufacturing;
- Manufacturing laminated aluminum bags and liners--are classified in U.S. Industry 322223, Plastics, Foil, and Coated Paper Bag Manufacturing;
- Manufacturing converted aluminum and other metal foils for nonpackaging uses from purchased foils--are classified in U.S. Industry 322222, Coated and Laminated Paper Manufacturing; and
- Manufacturing cookware, dinnerware, and other semirigid metal containers--are classified in U.S. Industry 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing.

322226 Surface-Coated Paperboard Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in laminating, lining,

or surface coating purchased paperboard to make other paperboard products.

32223 Stationery Product Manufacturing

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

Illustrative Examples:

Die-cut paper products for office use made from purchased paper or paperboard
Envelopes (i.e., mailing, stationery) made from any material
Tapes (e.g., adding machines, calculator, cash register) made from purchased paper
Stationery made from purchased paper
Tablets (e.g., memo, note, writing) made from purchased paper

Cross-References.

Establishments primarily engaged in manufacturing die-cut paper and paperboard products other than office supplies are classified in U.S. Industry 322299, All Other Converted Paper Product Manufacturing.

322231 Die-Cut Paper and Paperboard Office Supplies Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

Cross-References. Establishments primarily engaged in--

- Manufacturing die-cut paper and paperboard products (except office supplies)--are classified in U.S. Industry 322299, All Other Converted Paper Product Manufacturing; and
- Manufacturing paper and paperboard products used for writing and similar applications (e.g., looseleaf fillers, notebooks, pads, stationery, tablets)--are classified in U.S. Industry 322233, Stationery, Tablet, and Related Product Manufacturing.

322232 Envelope Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

Cross-References.

Establishments primarily engaged in manufacturing stationery are classified in U.S. Industry 322233, Stationery, Tablet, and Related Product Manufacturing.

322233 Stationery, Tablet, and Related Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in converting paper and paperboard into products used for writing and similar applications (e.g., looseleaf fillers, notebooks, pads, stationery, tablets).

Cross-References. Establishments primarily engaged in--

- Manufacturing envelopes--are classified in U.S. Industry 322232, Envelope Manufacturing; and
- Manufacturing die-cut paper and paperboard office supplies--are classified in U.S. Industry 322231, Die-Cut Paper and Paperboard Office Supplies Manufacturing.

32229 Other Converted Paper Product Manufacturing

This industry comprises establishments primarily engaged in (1) converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or (2) converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes. Processes used include laminating or lining purchased paper or paperboard.

Illustrative Examples:

Crepe paper made from purchased paper

Die-cut paper products (except for office use) made from purchased paper or paperboard

Molded pulp products (e.g., egg cartons, food containers, food trays) manufacturing

Paper novelties made from purchased paper

Sanitary products made from purchased sanitary paper stock

Cross-References. Establishments primarily engaged in--

- Manufacturing pulp from wood or from other materials--are classified in Industry 32211, Pulp Mills;
- Manufacturing paper from pulp or making pulp and manufacturing paper--are classified in Industry 32212, Paper Mills;
- Manufacturing paperboard from pulp or making pulp and manufacturing paperboard--are classified in Industry 32213, Paperboard Mills;
- Manufacturing paperboard containers--are classified in Industry 32221,

Paperboard Container Manufacturing;

- Manufacturing bags of coated, laminated, or uncoated paper, of metal foil, or combinations thereof--are classified in Industry 32222, Paper Bag and Coated and Treated Paper Manufacturing; and
- Manufacturing stationery and other related office supplies--are classified in Industry 32223, Stationery Product Manufacturing.

322291 Sanitary Paper Product Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

322299 All Other Converted Paper Product Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

Illustrative Examples:

Crepe paper made from purchased paper

Die-cut paper products (except for office use) made from purchased paper or paperboard

Molded pulp products (e.g., egg cartons, food containers, food trays) manufacturing

Paper novelties made from purchased paper

Cross-References. Establishments primarily engaged in--

- Manufacturing pulp from wood or from other materials--are classified in Industry 322110, Pulp Mills;
- Manufacturing paper from pulp or making pulp and manufacturing paper--are classified in Industry 32212, Paper Mills;
- Manufacturing paperboard from pulp or making pulp and manufacturing paperboard--are classified in Industry 322130, Paperboard Mills;
- Manufacturing paperboard containers--are classified in Industry 32221, Paperboard Container Manufacturing;
- Manufacturing bags of coated, laminated, or uncoated paper, of metal foil, or combinations thereof--are classified in Industry 32222, Paper Bag and Coated and Treated Paper Manufacturing; and
- Manufacturing stationery and other related office supplies--are classified in Industry 32223, Stationery Product Manufacturing.

323 Printing and Related Support Activities

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and perform support activities, such as bookbinding, platemaking services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly "drive" the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries. Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 Printing and Related Support Activities

32311 Printing

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as bending, cutting, or laminating the materials they print, and mailing.

Cross-References. Establishments primarily engaged in--

- Providing photocopying service on nondigital photocopy equipment without performing traditional printing activities--are classified in Industry 56143, Business Service Centers;
- Printing on grey goods--are classified in Industry 31331, Textile and Fabric Finishing Mills;
- Printing and publishing, known as publishers,--are classified in Subsector 511, Publishing Industries; and
- Performing prepress or postpress services without performing traditional printing activities--are classified in Industry 32312, Support Services for Printing.

323110 Commercial Lithographic Printing^{US}

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

Cross-References. Establishments primarily engaged in--

- Quick printing--are classified in U.S. Industry 323114, Quick Printing;
- Printing on grey goods--are classified in Industry 31331, Textile and Fabric Finishing Mills;
- Printing books and pamphlets--are classified in U.S. Industry 323117, Books Printing;
- Printing manifold business forms including checkbooks--are classified in U.S. Industry 323116, Manifold Business Forms Printing;
- Manufacturing printed stationery, invitations, labels, and similar items--are classified in Subsector 322, Paper Manufacturing; and
- Printing and publishing, known as publishers,--are classified in Subsector 511, Publishing Industries.

323111 Commercial Gravure Printing^{US}

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

Cross-References. Establishments primarily engaged in--

- Printing on grey goods--are classified in Industry 31331, Textile and Fabric Finishing Mills;
- Printing books and pamphlets--are classified in U.S. Industry 323117, Book Printing;
- Printing manifold business forms including checkbooks--are classified in U.S. Industry 323116, Manifold Business Form Printing;
- Manufacturing printed stationery, invitations, labels, and similar items--are classified in Subsector 322, Paper Manufacturing; and
- Printing and publishing, known as publishers,--are classified in Subsector 511, Publishing Industries.

323112 Commercial Flexographic Printing^{US}

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

Cross-References. Establishments primarily engaged in--

- Printing on grey goods--are classified in Industry 31331, Textile and Fabric Finishing Mills;
- Printing books and pamphlets--are classified in U.S. Industry 323117, Books Printing;
- Printing manifold business forms including checkbooks--are classified in U.S. Industry 323116, Manifold Business Forms Printing;
- Manufacturing printed stationery, invitations, labels, and similar items--are classified elsewhere in Subsector 322, Manufacturing; and
- Printing and publishing, known as publishers,--are classified in Subsector 511, Publishing Industries.

323113 Commercial Screen Printing^{CAN}

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

Cross-References. Establishments primarily engaged in--

- Printing on grey goods--are classified in Industry 31331, Textile and Fabric Finishing Mills;
- Printing books and pamphlets--are classified in U.S. Industry 323117, Books

Printing;

- Printing manifold business forms including checkbooks--are classified in U.S. Industry 323116, Manifold Business Forms Printing;
- Manufacturing printed stationery, invitations, labels, and similar items--are classified in Subsector 322, Paper Manufacturing; and
- Printing and publishing, known as publishers,--are classified in Subsector 511, Publishing Industries.

323114 Quick Printing^{CAN}

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

Cross-References. Establishments primarily engaged in--

- Providing photocopying service on nondigital photocopy equipment without performing traditional printing activities--are classified in U.S. Industry 561439, Other Business Service Centers (including Copy Shops);
- Printing on lithographic equipment known as commercial lithographic printers--are classified in U.S. Industry 323110, Commercial Lithographic Printing; and
- Digital printing on graphical material--are classified in U.S. Industry 323115, Digital Printing.

323115 Digital Printing^{CAN}

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

Cross-References.

Establishments primarily engaged in printing with "up front" computer files on conventional-type printing equipment are classified based on the type of printing equipment (e.g., lithographic, flexographic, screen) being used.

323116 Manifold Business Forms Printing^{CAN}

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be

in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

Cross-References.

Establishments primarily engaged in manufacturing single layered continuous computer paper and similar products are classified in U.S. Industry 322231, Die-Cut Paper and Paperboard Office Supplies Manufacturing.

323117 Books Printing^{US}

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

Cross-References. Establishments primarily engaged in--

- Printing and publishing, known as book publishers,--are classified in Subsector 511, Publishing Industries; and
- Binding books without printing in the same establishment--are classified in U.S. Industry 323121, Tradebinding and Related Work.

323118 Blankbook, Looseleaf Binders, and Devices Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

Cross-References. Establishments primarily engaged in--

- Checkbook printing--are classified in U.S. Industry 323116, Manifold Business Form Printing; and
- Binding books without printing in the same establishment--are classified in U.S. Industry 323121, Tradebinding and Related Work.

323119 Other Commercial Printing^{US}

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

Cross-References. Establishments primarily engaged in--

- Lithographic, gravure, screen, or flexographic printing on purchased stock materials (except books, grey goods, and manifold business forms)--are classified in Industry 32311, Printing, by printing process employed;
- Printing on grey goods--are classified in Industry 31331, Textile and Fabric Finishing Mills;
- Quick printing--are classified in U.S. Industry 323114, Quick Printing;
- Digital printing on graphical materials--are classified in U.S. Industry 323115, Digital Printing;
- Printing books and pamphlets--are classified in U.S. Industry 323117, Books Printing;
- Printing manifold business forms including checkbooks--are classified in U.S. Industry 323116, Manifold Business Forms Printing;
- Manufacturing printed stationery, invitations, labels, and similar items--are classified in Subsector 322, Paper Manufacturing; and
- Printing and publishing, known as book publishers,--are classified in Subsector 511, Publishing Industries.

32312 Support Activities for Printing

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

Cross-References. Establishments primarily engaged in--

- Engraving of the type done on metal--are classified in Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities;
- Manufacturing photosensitive plates for printing--are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing;
- Manufacturing blank plates for printing--are classified in Industry 33329, Other Industrial Machinery Manufacturing; and
- Printing books or printing and binding books--are classified in Industry 32311, Printing.

323121 Tradebinding and Related Work^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) tradebinding; (2) sample mounting; and (3) postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

Cross-References.

Establishments primarily engaged in printing books or printing and binding books are classified in U.S. Industry 323117, Books Printing.

323122 Prepress Services^{US}

This U.S. industry comprises (1) establishments primarily engaged in prepress services, such as imagesetting or typesetting, for printers and (2) establishments primarily engaged in preparing film or plates for printing purposes.

Cross-References. Establishments primarily engaged in--

- Engraving of the type done on metal--are classified in U.S. Industry 332812, Metal Coating, Engraving (except jewelry and silverware), and Allied Services to Manufacturers;
- Manufacturing blank plates (except photosensitive plates) for printing--are classified in U.S. Industry 333293, Printing Machinery and Equipment Manufacturing; and
- Manufacturing photosensitive plates for printing--are classified in U.S. Industry 325992, Photographic Film, Paper, Plate, and Chemical Manufacturing.

324 Petroleum and Coal Products Manufacturing

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 Petroleum and Coal Products Manufacturing

32411 Petroleum Refineries

See industry description for 324110 below.

324110 Petroleum Refineries

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities: (1) fractionation; (2) straight distillation of crude oil; and (3) cracking.

Cross-References. Establishments primarily engaged in--

- Manufacturing asphalt paving, roofing, and saturated materials from refined

petroleum--are classified in Industry 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing;

- Manufacturing paper mats and felts and saturating them with asphalt or tar into rolls and sheets--are classified in U.S. Industry 322121, Paper (except Newsprint) Mills;
- Blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils--are classified in U.S. Industry 324191, Petroleum Lubricating Oil and Grease Manufacturing;
- Manufacturing synthetic lubricating oils and greases--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing;
- Recovering natural gasoline and/or liquid hydrocarbons from oil and gas field gases--are classified in Industry 21111, Oil and Gas Extraction;
- Manufacturing acyclic and cyclic aromatic hydrocarbons (i.e., petrochemicals) from refined petroleum or liquid hydrocarbons--are classified in Industry 325110, Petrochemical Manufacturing;
- Manufacturing cyclic and acyclic chemicals (except petrochemicals)--are classified in Industry 32519, Other Basic Organic Chemical Manufacturing;
- Manufacturing coke oven products in steel mills--are classified in U.S. Industry 331111, Iron and Steel Mills; and
- Manufacturing coke oven products in coke oven establishments--are classified in U.S. Industry 324199, All Other Petroleum and Coal Products Manufacturing.

32412 Asphalt Paving, Roofing, and Saturated Materials Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or (2) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

Cross-References. Establishments primarily engaged in--

- Refining crude petroleum and manufacturing asphalt and tar paving, roofing, and saturated materials--are classified in Industry 324110, Petroleum Refineries; and
- Manufacturing paper mats and felts and saturating them with asphalt or tar--are classified in Industry 32212, Paper Mills.

324121 Asphalt Paving Mixture and Block Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

Cross-References.

Establishments primarily engaged in refining crude petroleum and manufacturing asphalt and tar paving mixtures and blocks are classified in Industry 324110, Petroleum Refineries.

324122 Asphalt Shingle and Coating Materials Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in (1) saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials and (2) manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

Cross-References. Establishments primarily engaged in--

- Refining crude petroleum and saturating purchased mats and felts with asphalt or tar into rolls and sheets and/or refining crude petroleum and manufacturing asphalt and tar roofing cements and coatings--are classified in Industry 324110, Petroleum Refineries; and
- Manufacturing paper mats and felts and saturating them with asphalt or tar into rolls and sheets--are classified in U.S. Industry 322121, Paper (except Newsprint) Mills.

32419 Other Petroleum and Coal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

Illustrative Examples:

Coke oven products (e.g., coke, gases, tars) made in coke oven establishments
Petroleum brake fluids made from refined petroleum
Petroleum briquettes made from refined petroleum
Petroleum jelly made from refined petroleum
Petroleum lubricating oils and greases made from refined petroleum
Petroleum waxes made from refined petroleum
Re-refined used petroleum lubricating oils

Cross-References. Establishments primarily engaged in--

- Manufacturing petroleum products by refining crude petroleum--are classified in Industry 32411, Petroleum Refineries;
- Manufacturing asphalt and tar paving, roofing, and saturated materials from refined petroleum--are classified in Industry 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing;
- Manufacturing coke oven products in steel mills--are classified in Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing;

- Manufacturing acyclic and cyclic aromatic hydrocarbons (i.e., petrochemicals) from refined petroleum or liquid hydrocarbons--are classified in Industry 32511, Petrochemical Manufacturing;
- Manufacturing cyclic and acyclic organic chemicals (except petrochemicals)--are classified in Industry 32519, Other Basic Organic Chemical Manufacturing; and
- Manufacturing synthetic lubricating oils and greases--are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

324191 Petroleum Lubricating Oil and Grease Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

Cross-References. Establishments primarily engaged in--

- Refining crude petroleum and manufacturing lubricating oils and greases--are classified in Industry 324110, Petroleum Refineries; and
- Manufacturing synthetic lubricating oils and greases--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing.

324199 All Other Petroleum and Coal Products Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

Illustrative Examples:

Coke oven products (e.g., coke, gases, tars) made in coke oven establishments
 Petroleum briquettes made from refined petroleum
 Petroleum jelly made from refined petroleum
 Petroleum waxes made from refined petroleum

Cross-References. Establishments primarily engaged in--

- Manufacturing petroleum products by refining crude petroleum--are classified in Industry 324110, Petroleum Refining;
- Manufacturing asphalt paving and roofing materials from refined petroleum--are classified in Industry 32412, Asphalt Paving, Roofing, and Saturated Materials Manufacturing;
- Blending and compounding petroleum lubricating oils and greases and/or re-refining used petroleum lubrication oils and greases--are classified in U.S.

- Industry 324191, Petroleum Lubricating Oil and Grease Manufacturing;
- Manufacturing coke oven products in steel mills--are classified in U.S. Industry 331111, Iron and Steel Mills;
 - Manufacturing acyclic and cyclic aromatic hydrocarbons (i.e., petrochemicals) from refined petroleum or liquid hydrocarbons--are classified in Industry 325110, Petrochemical Manufacturing; and
 - Manufacturing cyclic and acyclic organic chemicals (except petrochemicals)--are classified in Industry 32519, Other Basic Organic Chemical Manufacturing.

325 Chemical Manufacturing

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 Petrochemical Manufacturing

See industry description for 325110 below.

325110 Petrochemical Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or (2) manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene

made from refined petroleum or liquid hydrocarbons.

Cross-References. Establishments primarily engaged in--

- Manufacturing petrochemicals by refining crude petroleum--are classified in Industry 324110, Petroleum Refineries;
- Manufacturing acetylene--are classified in Industry 325120, Industrial Gas Manufacturing;
- Manufacturing basic organic chemicals (except petrochemicals)--are classified in Industry 325190, Other Basic Organic Chemical Manufacturing; and
- Recovering liquid hydrocarbons from oil and gas field gases--are classified in Industry 211110, Oil and Gas Extraction.

32512 Industrial Gas Manufacturing

See industry description for 325120 below.

325120 Industrial Gas Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

Cross-References. Establishments primarily engaged in--

- Manufacturing chlorine gas--are classified in U.S. Industry 325181, Alkalies and Chlorine Manufacturing; and
- Manufacturing ethane and butane gases made from refined petroleum or liquid hydrocarbons--are classified in Industry 325110, Petrochemical Manufacturing.

32513 Synthetic Dye and Pigment Manufacturing

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

Cross-References. Establishments primarily engaged in--

- Manufacturing wood byproducts used as dyeing materials--are classified in Industry 32519, Other Basic Organic Chemical Manufacturing;
- Manufacturing carbon, bone, and lamp black--are classified in Industry 32518, Other Basic Inorganic Chemical Manufacturing;
- Manufacturing electrostatic and photographic toners--are classified in Industry 32599, All Other Chemical Product Manufacturing;
- Manufacturing natural food colorings--are classified in Industry 31193, Flavoring Syrup and Concentrate Manufacturing; and

- Manufacturing natural organic colorings for nonfood uses--are classified in Industry 32519, Other Basic Organic Chemical Manufacturing.

325131 Inorganic Dye and Pigment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

Cross-References. Establishments primarily engaged in--

- Manufacturing wood byproducts used as dyeing materials--are classified in U.S. Industry 325191, Gum and Wood Chemical Manufacturing;
- Manufacturing organic synthetic dyes and pigments--are classified in U.S. Industry 325132, Organic Dye and Pigment Manufacturing;
- Manufacturing carbon, bone, and lamp black--are classified in U.S. Industry 325182, Carbon Black Manufacturing; and
- Manufacturing natural food colorings--are classified in Industry 311930, Flavoring Syrup and Concentrate Manufacturing.

325132 Synthetic Organic Dye and Pigment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

Cross-References. Establishments primarily engaged in--

- Manufacturing wood byproducts used as dyeing materials--are classified in U.S. Industry 325191, Gum and Wood Chemical Manufacturing;
- Manufacturing inorganic dyes and pigments--are classified in U.S. Industry 325131, Inorganic Dye and Pigment Manufacturing;
- Manufacturing electrostatic and photographic toners--are classified in U.S. Industry 325992, Photographic Film, Paper, Plate, and Chemical Manufacturing;
- Manufacturing natural food colorings--are classified in Industry 311930, Flavoring Syrup and Concentrate Manufacturing; and
- Manufacturing natural organic colorings for nonfood uses (except wood byproducts)--are classified in U.S. Industry 325199, All Other Basic Organic Chemical Manufacturing.

32518 Other Basic Inorganic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

Illustrative Examples:

Alkalies manufacturing
Aluminum compounds, not specified elsewhere by process, manufacturing
Carbides (e.g., baron, calcium, silium, tungsten) manufacturing
Carbon black manufacturing
Chlorine manufacturing
Hydrochloric acid manufacturing
Potassium inorganic compounds, not specified elsewhere by process, manufacturing
Radioactive isotopes manufacturing
Sulfides and sulfites manufacturing
Sulfuric acid manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing industrial gases--are classified in Industry 32512, Industrial Gas Manufacturing;
- Manufacturing inorganic dyes and pigments--are classified in Industry 32513, Dye and Pigment Manufacturing;
- Manufacturing household bleaches--are classified in Industry 32561, Soap and Cleaning Compound Manufacturing;
- Mining and/or beneficiating alkalies--are classified in Industry 21239, Other Nonmetallic Mineral Mining and Quarrying;
- Manufacturing chlorine preparations (e.g., for swimming pools)--are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing;
- Manufacturing nitrogenous and phosphoric fertilizers and fertilizer materials--are classified in Industry 32531, Fertilizer Manufacturing;
- Manufacturing aluminum oxide (alumina)--are classified in Industry 33131, Alumina and Aluminum Production and Processing;
- Manufacturing inorganic insecticidal, herbicidal, fungicidal and pesticidal preparations--are classified in Industry 32532, Pesticide and Other Agricultural Chemical Manufacturing; and
- Manufacturing photographic chemicals--are classified in Industry 32599, All Other Chemical Product Manufacturing.

325181 Alkalies and Chlorine Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

Cross-References. Establishments primarily engaged in--

- Mining and beneficiating alkalies--are classified in U.S. Industry 212391, Potash, Soda, and Borate Mineral Mining;
- Manufacturing chlorine preparations (e.g., for swimming pools)--are classified

in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing;

- Manufacturing industrial bleaches--are classified in U.S. Industry 325188, All Other Basic Inorganic Chemical Manufacturing; and
- Manufacturing household bleaches--are classified in U.S. Industry 325611, Soap and Other Detergent Manufacturing.

325182 Carbon Black Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

Cross-References.

Establishments primarily engaged in manufacturing pigments are classified in Industry 32513, Synthetic Dye and Pigment Manufacturing.

325188 All Other Basic Inorganic Chemical Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

Illustrative Examples:

Aluminum compounds, not specified elsewhere by process, manufacturing

Carbides (e.g., baron, calcium, silicon, tungsten) manufacturing

Fluorine manufacturing

Hydrochloric acid manufacturing

Potassium inorganic compounds, not specified elsewhere by process, manufacturing

Sodium inorganic compounds, not specified elsewhere by process, manufacturing

Sulfides and sulfites manufacturing

Sulfuric acid manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing industrial gases--are classified in Industry 325120, Industrial Gas Manufacturing;
- Manufacturing inorganic dyes and pigments--are classified in U.S. Industry 325131, Inorganic Dye and Pigment Manufacturing;
- Manufacturing alkalies and chlorine--are classified in U.S. Industry 325181, Alkalies and Chlorine Manufacturing;
- Manufacturing carbon black--are classified in U.S. Industry 325182, Carbon Black Manufacturing;
- Manufacturing household bleaches--are classified in U.S. Industry 325612, Polish and Other Sanitation Good Manufacturing;

- Manufacturing nitrogenous and phosphoric fertilizers and fertilizer material--are classified in Industry 32531, Fertilizer Manufacturing;
- Manufacturing aluminum oxide (i.e., alumina)--are classified in U.S. Industry 331311, Alumina Refining;
- Manufacturing inorganic insecticidal, herbicidal, fungicidal, and pesticidal preparations--are classified in Industry 325320, Pesticide and Other Agriculture Chemical Manufacturing; and
- Manufacturing photographic chemicals--are classified in U.S. Industry 325992, Photographic Film, Paper, Plate, and Chemical Manufacturing.

32519 Other Basic Organic Chemical Manufacturing

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

Illustrative Examples:

Carbon organic compounds, not specified elsewhere by process, manufacturing
 Cyclic intermediates made from refined petroleum or natural gas
 Enzyme proteins (i.e., basic synthetic chemicals) (except pharmaceutical use) manufacturing
 Fatty acids (e.g., margaric, oleic, stearic) manufacturing
 Gum and wood chemicals manufacturing
 Organo-inorganic compound manufacturing
 Plasticizers (i.e., basic synthetic chemical) manufacturing
 Silicone (except resins) manufacturing
 Synthetic sweeteners (i.e., sweetening agents) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing petrochemicals from refined petroleum or liquid hydrocarbons--are classified in Industry 32511, Petrochemical Manufacturing;
- Manufacturing petrochemicals by refining crude petroleum--are classified in Industry 32411, Petroleum Refineries;
- Manufacturing organic industrial gases--are classified in Industry 32512, Industrial Gas Manufacturing;
- Manufacturing synthetic organic dyes and pigments--are classified in Industry 32513, Synthetic Dye and Pigment Manufacturing;
- Manufacturing natural glycerin--are classified in Industry 32561, Soap and Cleaning Compound Manufacturing;
- Manufacturing activated charcoal--are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing;
- Manufacturing organic insecticidal, herbicidal, fungicidal, and pesticidal preparations--are classified in Industry 32532, Pesticide and Other Agriculture Chemical Manufacturing;

- Manufacturing elastomers--are classified in Industry 32521, Resin and Synthetic Rubber Manufacturing;
- Manufacturing urea--are classified in Industry 32531, Fertilizer Manufacturing;
- Manufacturing coal tar crudes in integrated steel mills with coke ovens--are classified in Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing;
- Manufacturing coal tar crudes in coke ovens not integrated with steel mills and fuel briquettes from refined petroleum--are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing; and
- Manufacturing natural food colorings--are classified in Industry 31194, Seasoning and Dressing Manufacturing.

325191 Gum and Wood Chemical Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

Cross-References. Establishments primarily engaged in--

- Manufacturing activated charcoal--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing; and
- Manufacturing fuel briquettes from refined petroleum--are classified in U.S. Industry 324199, All Other Petroleum and Coal Products Manufacturing.

325192 Cyclic Crude and Intermediate Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or, cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

Cross-References. Establishments primarily engaged in--

- Manufacturing cyclic chemicals (except aromatic and intermediates)--are classified in U.S. Industry 325199, All Other Basic Organic Chemical Manufacturing;
- Manufacturing aromatic petrochemicals from refined petroleum or natural gas--are classified in Industry 325110, Petrochemical Manufacturing;
- Manufacturing aromatic petrochemicals by refining crude petroleum--are classified in Industry 324110, Petroleum Refineries;
- Distilling wood products--are classified in U.S. Industry 325191, Gum and Wood Chemical Manufacturing;
- Manufacturing coal tar crudes in steel mills with coke ovens--are classified in U.S. Industry 331111, Iron and Steel Mills; and
- Manufacturing coal tar crudes in coke oven establishments and fuel briquettes

from refined petroleum--are classified in U.S. Industry 324199, All Other Petroleum and Coal Products Manufacturing.

325193 Ethyl Alcohol Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

Cross-References. Establishments primarily engaged in--

- Distilling liquors (except brandy)--are classified in Industry 312140, Distilleries; and
- Manufacturing brandies--are classified in Industry 312130, Wineries.

325199 All Other Basic Organic Chemical Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

Illustrative Examples:

Calcium organic compounds, not specified elsewhere by process, manufacturing
Carbon organic compounds, not specified elsewhere by process, manufacturing
Enzyme proteins (i.e., basic synthetic chemicals) (except pharmaceutical use) manufacturing
Fatty acids (e.g., margaric, oleic, stearic) manufacturing
Organo-inorganic compound manufacturing
Plasticizers (i.e., basic synthetic chemical) manufacturing
Silicone (except resins) manufacturing
Synthetic sweeteners (i.e., sweetening agents) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing aromatic petrochemicals from refined petroleum or natural gas--are classified in Industry 325110, Petrochemical Manufacturing;
- Manufacturing aromatic petrochemicals by refining crude petroleum--are classified in Industry 324110, Petroleum Refineries;
- Manufacturing organic industrial gases--are classified in Industry 325120, Industrial Gas Manufacturing;
- Manufacturing synthetic organic dyes and pigments--are classified in U.S. Industry 325132, Synthetic Organic Dye and Pigment Manufacturing;
- Manufacturing ethyl alcohol--are classified in U.S. Industry 325193, Ethyl Alcohol Manufacturing;
- Manufacturing organic insecticidal, herbicidal, fungicidal, and pesticidal

preparations--are classified in Industry 325320, Pesticide and Other Agriculture Chemical Manufacturing;

- Manufacturing elastomers--are classified in Industry 325210, Resin and Synthetic Rubber Manufacturing;
- Manufacturing urea--are classified in U.S. Industry 325311, Nitrogenous Fertilizer Manufacturing;
- Manufacturing natural glycerin--are classified in U.S. Industry 325611, Soap and Other Detergent Manufacturing; and
- Manufacturing natural food colorings--are classified in U.S. Industry 311942, Spice and Extract Manufacturing.

3252 Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing

32521 Resin and Synthetic Rubber Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing noncustomized synthetic resins; and (3) manufacturing synthetic rubber.

Cross-References. Establishments primarily engaged in--

- Manufacturing plastics resins and converting resins into plastics products--are classified in Industry Group 3261, Plastics Product Manufacturing;
- Processing natural, synthetic, or reclaimed rubber into intermediate or final products--are classified in Industry Group 3262, Rubber Product Manufacturing;
- Custom compounding resins made elsewhere--are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing; and
- Manufacturing resin adhesives--are classified in Industry 32552, Adhesive Manufacturing.

325211 Plastics Material and Resin Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or (2) manufacturing noncustomized synthetic resins.

Cross-References. Establishments primarily engaged in--

- Manufacturing plastics resins and converting the resins into plastics products--are classified in 3261, Plastics Product Manufacturing;
- Custom compounding resins made elsewhere--are classified in U.S. Industry

- 325991, Custom Compounding of Purchased Resin; and
- Manufacturing plastics adhesives--are classified in Industry 325520, Adhesive Manufacturing.

325212 Synthetic Rubber Manufacturing^{US}

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

Cross-References. Establishments primarily engaged in--

- Processing natural, synthetic, or reclaimed rubber into intermediate or final products (except adhesives)--are classified in Industry Group 3262, Rubber Product Manufacturing; and
- Manufacturing rubber adhesives--are classified Industry 325520, Adhesive Manufacturing.

32522 Artificial and Synthetic Fibers and Filaments Manufacturing^{US}

This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

Cross-References. Establishments primarily engaged in--

- Texturizing cellulosic and noncellulosic fiber and filament made elsewhere--are classified in Industry 31311, Fiber, Yarn, and Thread Mills; and
- Manufacturing textile glass fibers--are classified in Industry 32721, Glass and Glass Product Manufacturing.

325221 Cellulosic Organic Fiber Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturizing cellulosic fibers and filaments.

Cross-References. Establishments primarily engaged in--

- Texturizing cellulosic fibers and filaments made elsewhere--are classified in U.S. Industry 313112, Yarn Texturing, Throwing, and Twisting Mills; and
- Manufacturing noncellulosic fibers and filaments--are classified in U.S.

Industry 325222, Noncellulosic Organic Fiber Manufacturing.

325222 Noncellulosic Organic Fiber Manufacturing^{US}

This U.S. industry consists of establishments primarily engaged in (1) manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturizing noncellulosic fibers and filaments.

Cross-References. Establishments primarily engaged in--

- Texturizing noncellulosic fibers--are classified in U.S. Industry 313112, Yarn Texturing, Throwing, and Twisting Mills;
- Manufacturing cellulose fibers--are classified in U.S. Industry 325221, Cellulosic Organic Fiber Manufacturing; and
- Manufacturing textile glass fibers--are classified in U.S. Industry 327212, Other Pressed and Blown Glass and Glassware Manufacturing.

3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

32531 Fertilizer Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers.

325311 Nitrogenous Fertilizer Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous fertilizer materials and mixing ingredients into fertilizers; (2) manufacturing fertilizers from sewage or animal waste; and (3) manufacturing nitrogenous materials and mixing them into fertilizers.

Cross-References.

Establishments primarily engaged in mixing ingredients made elsewhere into nitrogenous fertilizers are classified in U.S. Industry 325314, Fertilizer (Mixing Only) Manufacturing.

325312 Phosphatic Fertilizer Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing

phosphatic fertilizer materials or (2) manufacturing phosphatic materials and mixing them into fertilizers.

Cross-References.

Establishments primarily engaged in mixing ingredients made elsewhere into phosphatic fertilizers are classified in U.S. Industry 325314, Fertilizer (Mixing Only) Manufacturing.

325314 Fertilizer (Mixing Only) Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

Cross-References. Establishments primarily engaged in--

- Manufacturing nitrogenous fertilizer materials or fertilizer materials from sewage or animal waste and mixing these ingredients into nitrogenous fertilizers--are classified in U.S. Industry 325311, Nitrogenous Fertilizer Manufacturing; and
- Manufacturing phosphatic fertilizer materials and mixing ingredients into fertilizers--are classified in U.S. Industry 325312, Phosphatic Fertilizer Manufacturing.

32532 Pesticide and Other Agricultural Chemical Manufacturing

See industry description for 325320 below.

325320 Pesticide and Other Agricultural Chemical Manufacturing

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

Cross-References. Establishments primarily engaged in--

- Manufacturing basic chemicals requiring further processing before use as agriculture chemicals--are classified in Industry Group 3251, Basic Chemical Manufacturing;
- Manufacturing fertilizers--are classified in Industry 325310, Fertilizer Manufacturing; and
- Manufacturing agricultural lime products--are classified in Industry 327410, Lime Manufacturing.

3254 Pharmaceutical and Medicine Manufacturing

32541 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 Medicinal and Botanical Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

Cross-References. Establishments primarily engaged in--

- Manufacturing packaged compounded medicinals and botanicals--are classified in U.S. Industry 325412, Pharmaceutical Preparation Manufacturing; and
- Manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except for diagnostic use)--are classified in U.S. Industry 325414, Biological Product (except Diagnostic) Manufacturing.

325412 Pharmaceutical Preparation Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

Cross-References. Establishments primarily engaged in--

- Manufacturing uncompounded medicinal chemicals and their derivatives--are classified in U.S. Industry 325411, Medicinal and Botanical Manufacturing;
- Manufacturing in-vitro diagnostic substances--are classified in U.S. Industry 325413; In-Vitro Diagnostic Substance Manufacturing; and
- Manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except for diagnostic use)--are classified in U.S. Industry 325414, Biological Product (except Diagnostic) Manufacturing.

325413 In-Vitro Diagnostic Substance Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or

radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

Cross-References.

Establishments primarily engaged in manufacturing in-vivo diagnostic substances are classified in U.S. Industry 325412, Pharmaceutical Preparation Manufacturing.

325414 Biological Product (except Diagnostic) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

Cross-References. Establishments primarily engaged in--

- Manufacturing in-vitro diagnostic substances--are classified in U.S. Industry 325413, In-Vitro Diagnostic Substance Manufacturing; and
- Manufacturing pharmaceutical preparations, (except biological and in-vivo diagnostic substances)--are classified in U.S. Industry 325412, Pharmaceutical Preparation Manufacturing.

3255 Paint, Coating, and Adhesive Manufacturing

32551 Paint and Coating Manufacturing

See industry description for 325510 below.

325510 Paint and Coating Manufacturing

This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

Cross-References. Establishments primarily engaged in--

- Manufacturing creosote--are classified in Industry 32519, Other Basic Organic Chemical Manufacturing;
- Manufacturing caulking compounds and sealants--are classified in Industry 325520, Adhesive Manufacturing;
- Manufacturing artists' paints--are classified in U.S. Industry 339942, Lead Pencil and Art Good Manufacturing; and
- Manufacturing turpentine--are classified in U.S. Industry 325191, Gum and

Wood Chemical Manufacturing.

32552 Adhesive Manufacturing

See industry description for 325520 below.

325520 Adhesive Manufacturing

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

Cross-References. Establishments primarily engaged in--

- Manufacturing asphalt and tar roofing cements from purchased asphaltic materials--are classified in Industry 324122, Asphalt Shingle and Coating Materials Manufacturing; and
- Manufacturing gypsum based caulking compounds--are classified in Industry 327420, Gypsum and Gypsum Product Manufacturing.

3256 Soap, Cleaning Compound, and Toilet Preparation Manufacturing

32561 Soap and Cleaning Compound Manufacturing

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

Cross-References. Establishments primarily engaged in--

- Manufacturing synthetic glycerin--are classified in Industry 32519, Other Basic Organic Chemical Manufacturing;
- Manufacturing industrial bleaches--are classified in Industry 32518 Other Basic Inorganic Chemical Manufacturing; and
- Manufacturing shampoos and shaving preparations--are classified in Industry 32562, Toilet Preparation Manufacturing.

325611 Soap and Other Detergent Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels, and tooth powders; and natural glycerin.

Cross-References. Establishments primarily engaged in--

- Manufacturing synthetic glycerin--are classified in U.S. Industry 325199, All

- Other Basic Organic Chemical Manufacturing; and
- Manufacturing shampoos and shaving preparations--are classified in Industry 325620, Toilet Preparation Manufacturing.

325612 Polish and Other Sanitation Good Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

Cross-References.

Establishments primarily engaged in manufacturing chlorine dioxide (i.e., industrial bleaching agent) are classified in U.S. Industry 325188, All Other Basic Inorganic Chemical Manufacturing.

325613 Surface Active Agent Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or (2) manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

32562 Toilet Preparation Manufacturing

See industry description for 325620 below.

325620 Toilet Preparation Manufacturing

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

Cross-References.

Establishments primarily engaged in manufacturing toothpaste are classified in U.S. Industry 325611, Soap and Other Detergent Manufacturing.

3259 Other Chemical Product and Preparation Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and

cleaning compounds; and toilet preparations).

32591 Printing Ink Manufacturing

See industry description for 325910 below.

325910 Printing Ink Manufacturing

This industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

Cross-References. Establishments primarily engaged in--

- Recycling inkjet cartridges--are classified in U.S. Industry 811212, Computer and Office Machine Repair and Maintenance;
- Manufacturing writing, drawing, and stamping ink--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing;
- Manufacturing toners and toner cartridges for photocopiers, fax machines, computer printers and similar office machines--are classified in U.S. Industry 325992, Photographic Film, Paper, Plate, and Chemical Manufacturing; and
- Manufacturing inkjet cartridges--are classified in U.S. Industry 334119, Other Computer Peripheral Equipment Manufacturing.

32592 Explosives Manufacturing

See industry description for 325920 below.

325920 Explosives Manufacturing

This industry comprises establishments primarily engaged in manufacturing explosives.

Cross-References. Establishments primarily engaged in--

- Manufacturing ammunition, ammunition detonators, and percussion caps--are classified in U.S. Industry 332992, Small Arms Ammunition Manufacturing; and
- Manufacturing pyrotechnics--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing.

32599 All Other Chemical Product and Preparation Manufacturing

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and

noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

Illustrative Examples:

Activated carbon and charcoal manufacturing
Antifreeze preparations manufacturing
Custom compounding (i.e., blending and mixing) of purchased plastics resins
Industrial salt manufacturing
Matches and matchbook manufacturing
Photographic chemicals manufacturing
Pyrotechnics (e.g., flares, flashlight bombs, signals) manufacturing
Sugar substitutes (i.e., synthetic sweeteners blended with other ingredients) made from purchased synthetic sweeteners
Swimming pool chemical preparations manufacturing
Writing inks and fluids manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing basic chemicals--are classified in Industry Group 3251, Basic Chemical Manufacturing;
- Manufacturing resins, synthetic rubber, and artificial synthetic fibers and filaments--are classified in Industry Group 3252, Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing;
- Manufacturing pesticides, fertilizers, and other agricultural chemicals--are classified in Industry Group 3253, Pesticide, Fertilizer, and Other Agriculture Chemical Manufacturing;
- Manufacturing pharmaceuticals and medicine including medicinal vegetable gelatin (i.e., agar-agar)--are classified in Industry Group 3254, Pharmaceutical and Medicine Manufacturing;
- Manufacturing paints, coatings, and adhesives--are classified in Industry Group 3255, Paint, Coating, and Adhesive Manufacturing;
- Manufacturing soaps and cleaning compounds--are classified in Industry Group 3256, Soap, Cleaning Compound, and Toilet Preparation Manufacturing;
- Manufacturing printing and inkjet inks--are classified in Industry 32591, Printing Ink Manufacturing;
- Manufacturing explosives--are classified in Industry 32592, Explosives Manufacturing;
- Manufacturing photographic toner cartridges--are classified in Industry 33331, Commercial and Service Industry Machinery Manufacturing;
- Manufacturing computer printer toner cartridges--are classified in Industry 33411, Computer and Peripheral Equipment Manufacturing;
- Manufacturing facsimile toner cartridges--are classified in Industry 33429, Other Communications Equipment Manufacturing;
- Manufacturing photographic paper stock (i.e., unsensitized) and paper mats,

mounts, easels, and folders for photographic use--are classified in Subsector 322, Paper Manufacturing;

- Manufacturing dessert gelatins--are classified in Industry 31199, All Other Miscellaneous Food Manufacturing; and
- Manufacturing medicinal gelatins--are classified in Industry 32541, Pharmaceutical and Medicine Manufacturing.

325991 Custom Compounding of Purchased Resins^{CAN}

This industry comprises establishments primarily engaged in (1) custom mixing and blending plastics resins made elsewhere or (2) reformulating plastics resins from recycled plastics products.

Cross-References.

Establishments primarily engaged in manufacturing synthetic resins and custom mixing and blending resins are classified in U.S. Industry 325211, Plastics Material and Resin Manufacturing.

325992 Photographic Film, Paper, Plate, and Chemical Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

Cross-References.

Establishments primarily engaged in manufacturing photographic paper stock (i.e., unsensitized) and paper mats, mounts, easels, and folders for photographic use--are classified in Subsector 322, Paper Manufacturing.

325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

Illustrative Examples:

Activated carbon and charcoal manufacturing
Antifreeze preparations manufacturing
Industrial salt manufacturing
Lighter fluids (e.g., charcoal, cigarette)
Matches and matchbook manufacturing
Pyrotechnics (e.g., flares, flashlight bombs, signals) manufacturing
Sugar substitutes (i.e., synthetic sweeteners blended with other ingredients) made from purchased synthetic sweeteners
Swimming pool chemical preparations manufacturing
Writing inks manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing basic chemicals--are classified in Industry Group 3251, Basic Chemical Manufacturing;
- Manufacturing resins, synthetic rubber, and artificial synthetic fibers and filaments--are classified in Industry Group 3252, Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing;
- Manufacturing pesticides, fertilizers, and other agricultural chemicals--are classified in Industry Group 3253, Pesticide, Fertilizer, and Other Agriculture Chemical Manufacturing;
- Manufacturing pharmaceuticals and medicines including medicinal vegetable gelatin (i.e., agar-agar)--are classified in Industry Group 3254, Pharmaceutical and Medicine Manufacturing;
- Manufacturing paints, coatings, and adhesives--are classified in Industry Group 3255, Paint, Coating, and Adhesive Manufacturing;
- Manufacturing soaps and cleaning compounds--are classified in Industry Group 3256, Soap, Cleaning Compound, and Toilet Preparation Manufacturing;
- Manufacturing printing and inkjet inks--are classified in Industry 325910, Printing Ink Manufacturing;
- Manufacturing explosives--are classified in Industry 325920, Explosives Manufacturing;
- Custom compounding purchased plastics resins--are classified in U.S. Industry 325991, Custom Compounding of Purchased Resin;
- Manufacturing photographic films, papers, plates, and chemicals--are classified in U.S. Industry 325992, Photographic Film, Paper, Plate, and Chemical Manufacturing; and
- Manufacturing dessert gelatin--are classified in U.S. Industry 311999, All Other Miscellaneous Food Manufacturing.

326 Plastics and Rubber Products Manufacturing

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being

used as a substitute for rubber; however the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hose and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing

This industry comprises establishments primarily engaged in (1) converting plastics resins into unsupported plastics film and sheet and/or (2) forming, coating or laminating plastics film and sheet into plastics bags.

Cross-References. Establishments primarily engaged in--

- Laminating plastics sheet (except for packaging)--are classified in Industry 32613, Laminated Plastics Plate, Sheet, and Shapes Manufacturing;
- Manufacturing plastics blister and bubble packaging--are classified in Industry 32619, Other Plastics Product Manufacturing; and
- Coating or laminating combinations of plastics, foils and paper (except plastics film to plastics film) into film, sheet or bags--are classified in Industry 32222,

Paper Bag and Coated and Treated Paper Manufacturing.

326111 Unsupported Plastics Bag Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in (1) converting plastics resins into plastics bags or (2) forming, coating or laminating plastics film and sheet into single wall or multiwall plastics bags. Establishments in this industry may print on the bags they manufacture.

Cross-References. Establishments primarily engaged in--

- Manufacturing laminated or coated combinations of plastics, foils and paper (except plastics film to plastics film) materials into single wall bags--are classified in U.S. Industry 322223, Plastics, Foil, and Coated Paper Bag Manufacturing; and
- Manufacturing laminated or coated combinations of plastics, foils and paper (except plastics film to plastics film) into multiwalled bags--are classified in U.S. Industry 322224, Uncoated Paper and Multiwall Bag Manufacturing.

326112 Unsupported Plastics Packaging Film and Sheet Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

Cross-References. Establishments primarily engaged in--

- Converting plastics resins into plastics film and unlaminated sheet (except packaging)--are classified in U.S. Industry 326113, Unsupported Plastics Film and Sheet (except Packaging) Manufacturing;
- Laminating or coating packaging combinations of plastics, foils and paper (except plastics film to plastics film) film and sheet--are classified in U.S. Industry 322221, Coated and Laminated Packaging Paper and Plastics Film Manufacturing;
- Laminating or coating combinations of plastics, foils, and paper (except plastics film to plastics film) nonpackaging film and sheet--are classified in U.S. Industry 322222, Coated and Laminated Paper Manufacturing;
- Laminating plastics sheet (except for packaging)--are classified in Industry 326130, Laminated Plastics Plate, Sheet, and Shapes Manufacturing; and
- Manufacturing plastics bags--are classified in U.S. Industry 326111, Unsupported Plastics Bag Manufacturing.

326113 Unsupported Plastics Film and Sheet (except Packaging) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

Cross-References. Establishments primarily engaged in--

- Converting plastics resins into plastics packaging film and unlaminated packaging sheet--are classified in U.S. Industry 326112, Unsupported Plastics Packaging Film and Sheet Manufacturing;
- Laminating plastics sheet (except for packaging)--are classified in Industry 326130, Laminated Plastics Plate, Sheet, and Shapes Manufacturing;
- Laminating or coating a combination of plastics, foils, and paper (except plastics film to plastics film) nonpackaging film and sheet--are classified in U.S. Industry 322222, Coated and Laminated Paper Manufacturing; and
- Manufacturing plastics bags--are classified in U.S. Industry 326111, Unsupported Plastics Bag Manufacturing.

32612 Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

Cross-References. Establishments primarily engaged in--

- Manufacturing plastics hose--are classified in Industry 32622, Rubber and Plastics Hoses and Belting Manufacturing;
- Manufacturing noncurrent carrying plastics conduit--are classified in Industry 33593, Wiring Device Manufacturing;
- Manufacturing plastics plumbing fixtures--are classified in Industry 32619, Other Plastics Product Manufacturing; and
- Manufacturing plastics film, plastics unlaminated sheet, and plastics bags--are classified in Industry 32611, Unsupported Plastics Film, Sheet, and Bag Manufacturing.

326121 Unsupported Plastics Profile Shapes Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet and bags), such as rod, tube, and sausage casings.

Cross-References. Establishments primarily engaged in--

- Manufacturing plastics film, plastics unlaminated sheet, and plastics bags--are classified in Industry 32611, Unsupported Plastics Film, Sheet, and Bag

- Manufacturing; and
- Manufacturing plastics hoses--are classified in Industry 326220, Rubber and Plastics Hoses and Belting Manufacturing.

326122 Plastics Pipe and Pipe Fitting Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

Cross-References. Establishments primarily engaged in--

- Manufacturing plastics hose--are classified in Industry 326220, Rubber and Plastics Hoses and Belting Manufacturing;
- Manufacturing noncurrent-carrying plastics conduit--are classified in U.S. Industry 335932, Noncurrent-Carrying Wiring Device Manufacturing; and
- Manufacturing plastics plumbing fixtures--are classified in U.S. Industry 326191, Plastics Plumbing Fixture Manufacturing.

32613 Laminated Plastics Plate, Sheet, and Shape Manufacturing

See industry description for 326130 below.

326130 Laminated Plastics Plate, Sheet, and Shape Manufacturing

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

Cross-References. Establishments primarily engaged in--

- Manufacturing plastics film, plastics un laminated sheet, and plastics bags--are classified in Industry 32611, Unsupported Plastics Film, Sheet, and Bag Manufacturing;
- Coating or laminating nonplastics film, sheet, or bags with plastics--are classified in Industry 32222, Paper Bag and Coated and Treated Paper Manufacturing; and
- Manufacturing plastics bags--are classified in U.S. Industry 326111, Unsupported Plastics Bag Manufacturing.

32614 Polystyrene Foam Product Manufacturing

See industry description for 326140 below.

326140 Polystyrene Foam Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

Cross-References.

Establishments primarily engaged in manufacturing plastics foam products (except polystyrene) are classified in Industry 326150, Urethane and Other Foam Product (except Polystyrene) Manufacturing.

32615 Urethane and Other Foam Product (except Polystyrene) Manufacturing

See industry description for 326150 below.

326150 Urethane and Other Foam Product (except Polystyrene) Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

Cross-References.

Establishments primarily engaged in manufacturing polystyrene foam products are classified in Industry 326140, Polystyrene Foam Product Manufacturing.

32616 Plastics Bottle Manufacturing

See industry description for 326160 below.

326160 Plastics Bottle Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

Cross-References.

Establishments primarily engaged in manufacturing plastics containers (except bottles) are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing.

32619 Other Plastics Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes,

pipes, pipe fittings, laminates, foam products, and bottles).

Illustrative Examples:

Inflatable plastics boats manufacturing
Plastics bowls and bowl covers manufacturing
Plastics cups (except foam) manufacturing
Plastics dinnerware (except foam) manufacturing
Plastics gloves manufacturing
Plastics hardware manufacturing
Plastics or fiberglass plumbing fixtures (e.g., toilets, shower stalls, urinals) manufacturing
Plastics siding manufacturing
Plastics trash containers manufacturing
Resilient floor coverings (e.g., sheet, tiles) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing plastics film, plastics unlaminated sheet, and plastics bags--are classified in Industry 32611, Unsupported Plastics Film, Sheet, and Bag Manufacturing;
- Manufacturing plastics pipes, pipe fittings and plastics profile shapes (except films, sheet, bags)--are classified in Industry 32612, Plastic Pipe, Pipe Fitting, and Unsupported Profile Shapes Manufacturing;
- Laminating plastics profile shapes, such as plate, sheet and rod,--are classified in Industry 32613, Laminated Plastics Plate, Sheets and Shapes Manufacturing;
- Manufacturing polystyrene foam products--are classified in Industry 32614, Polystyrene Foam Product Manufacturing;
- Manufacturing foam products (except polystyrene)--are classified in Industry 32615 Urethane and Other Foam Product (except Polystyrene) Manufacturing;
- Manufacturing plastics bottles--are classified in Industry 32616, Plastics Bottle Manufacturing;
- Manufacturing plastics furniture parts--are classified in Industry 33721, Office Furniture (including Fixtures) Manufacturing;
- Assembling plastics components into plumbing fixture fittings, such as faucets,--are classified in Industry 33291, Metal Valve Manufacturing; and
- Manufacturing rubber floor mats and rubber treads--are classified in Industry 32629, Office Rubber Product Manufacturing.

326191 Plastics Plumbing Fixture Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiberglass plumbing fixtures. Examples of products made by these establishments are plastics or fiberglass bathtubs, hot tubs, portable toilets, and shower stalls.

Cross-References. Establishments primarily engaged in--

- Assembling plastics components into plumbing fixture fittings, such as faucets,--are classified in U.S. Industry 332913, Plumbing Fixture Fitting and Trim Manufacturing; and
- Manufacturing plastics pipe and pipe fittings--are classified in U.S. Industry 326122, Plastics Pipe and Pipe Fitting Manufacturing.

326192 Resilient Floor Covering Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

Cross-References.

Establishments primarily engaged in manufacturing rubber floor mats and rubber treads are classified in U.S. Industry 326299, All Other Rubber Product Manufacturing.

326199 All Other Plastics Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

Illustrative Examples:

Inflatable plastics boats manufacturing
Plastics air mattress manufacturing
Plastics bowls and bowl covers manufacturing
Plastics clothes hangers manufacturing
Plastics cups (except foam) manufacturing
Plastics dinnerware (except foam) manufacturing
Plastics gloves manufacturing
Plastics hardware manufacturing
Plastics siding manufacturing
Plastics trash containers manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing plastics film, plastics unlaminated sheet, and plastics bags--are classified in Industry 32611 Unsupported Plastics Film, Sheet, and Bag Manufacturing;
- Manufacturing plastics pipes, pipe fittings, and plastics profile shapes (except film, sheet, bags)--are classified in Industry 32612, Plastics Pipe, Pipe Fittings,

- and Unsupported Plastics Profile Shapes Manufacturing;
- Manufacturing plastic pipes and pipe fittings--are classified in U.S. Industry 326122, Plastics Pipe and Pipe Fitting Manufacturing;
 - Laminating plastics profile shapes, such as plate, sheet, and rod,--are classified in Industry 326130, Laminated Plastics Plate, Sheet, and Shapes Manufacturing;
 - Manufacturing polystyrene foam products--are classified in Industry 326140, Polystyrene Foam Product Manufacturing;
 - Manufacturing foam (except polystyrene) products--are classified in Industry 326150, Urethane and Other Foam Product (except Polystyrene) Manufacturing;
 - Manufacturing plastics bottles--are classified in Industry 326160, Plastics Bottle Manufacturing;
 - Manufacturing plastics furniture parts and components--are classified in U.S. Industry 337215, Showcase, Partition, Shelving, and Locker Manufacturing;
 - Manufacturing plastics plumbing fixtures--are classified in U.S. Industry 326191, Plastics Plumbing Fixture Manufacturing;
 - Manufacturing resilient floor coverings--are classified in U.S. Industry 326192, Resilient Floor Covering Manufacturing; and
 - Assembling plastics components into plumbing fixtures fittings such as faucets--are classified in U.S. Industry 332913, Plumbing Fixture Fitting and Trim Manufacturing.

3262 Rubber Product Manufacturing

This industry group comprises establishments primarily engaged in processing natural, and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 Tire Manufacturing

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

Cross-References. Establishments primarily engaged in--

- Repairing tires, such as plugging,--are classified in Industry 81119, Other Automotive Repair and Maintenance; and
- Retailing tires--are classified in the Industry 44132, Tire Dealers.

326211 Tire Manufacturing (except Retreading)^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

Cross-References.

Establishments primarily engaged in retreading or rebuilding tires are classified in U.S. Industry 326212, Tire Retreading.

326212 Tire Retreading^{US}

This U.S. industry comprises establishments primarily engaged in retreading, or rebuilding tires.

Cross-References. Establishments primarily engaged in--

- Repairing tires, such as pluggings--are classified in U.S. Industry 811198, All Other Automotive Repair and Maintenance;
- Retailing tires--are classified in Industry 441320, Tire Dealers; and
- Manufacturing tires and inner tubes from natural and synthetic rubber--are classified in U.S. Industry 326211, Tire Manufacturing (except Retreading).

32622 Rubber and Plastics Hoses and Belting Manufacturing

See industry description for 326220 below.

326220 Rubber and Plastics Hoses and Belting Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

Cross-References. Establishments primarily engaged in--

- Manufacturing rubber tubing--are classified in U.S. Industry 326299, All Other Rubber Product Manufacturing;
- Manufacturing plastics tubing--are classified in U.S. Industry 326121, Unsupported Plastics Profile Shapes Manufacturing; and
- Manufacturing fluid power hose assemblies--are classified in U.S. Industry 332912, Fluid Power Valve and Hose Fitting Manufacturing.

32629 Other Rubber Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

Illustrative Examples:

Birth control devices (e.g., diaphragms, prophylactics) manufacturing
Latex foam rubber manufacturing
Mechanical rubber goods (i.e., molded, extruded, lathe-cut) manufacturing
Reclaiming rubber from waste and scrap
Rubber balloons manufacturing
Rubberbands manufacturing
Rubber floor mats (e.g., door, bath) manufacturing
Rubber hair care products (e.g., combs, curlers) manufacturing
Rubber tubing (except extruded, lathe-cut, molded) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing tires and inner tubes--are classified in Industry 32621, Tire Manufacturing;
- Manufacturing rubber hoses and belting--are classified in Industry 32622, Rubber and Plastics Hoses and Belting Manufacturing;
- Rubberizing fabric--are classified in Industry 31332, Fabric Coating Mills;
- Manufacturing rubber gaskets, packing and sealing devices--are classified in Industry 33999, All Other Miscellaneous Manufacturing;
- Manufacturing rubber gloves--are classified in Industry 33911, Medical Equipment and Supplies Manufacturing;
- Manufacturing rubber clothing accessories (e.g., bathing caps)--are classified in Industry 31599, Apparel Accessories and Other Apparel Manufacturing; and
- Manufacturing rubber toys--are classified in Industry 33993, Doll, Toy, and Game Manufacturing.

326291 Rubber Product Manufacturing for Mechanical Use^{US}

This U.S. industry comprises establishments primarily engaged in molding, extruding or lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

Cross-References.

Establishments primarily engaged in manufacturing rubber tubing from natural and synthetic rubber and manufacturing rubber products for mechanical applications using a process other than molding, extruding or lathe-cutting are classified in U.S. Industry 326299, All Other Rubber Product Manufacturing.

326299 All Other Rubber Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

Illustrative Examples:

Birth control devices (i.e., diaphragms, prophylactics) manufacturing
Inflatable rubber life rafts manufacturing
Latex foam rubber manufacturing
Reclaiming rubber from waste and scrap
Rubber balloons manufacturing
Rubberbands manufacturing
Rubber floor mats (e.g., door, bath) manufacturing
Rubber hair care products (e.g., combs, curlers) manufacturing
Rubber tubing (except extruded, lathe-cut, molded) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing tires and inner tubes and tire rebuilding--are classified in Industry 32621, Tire Manufacturing;
- Manufacturing rubber hoses and belting--are classified in Industry 326220, Rubber and Plastics Hoses and Belting Manufacturing;
- Molding, extruding, and lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications--are classified in Industry 326291, Rubber Product Manufacturing for Mechanical Use;
- Rubberizing fabrics--are classified in Industry 313320, Fabric Coating Mills;
- Manufacturing rubber gaskets, packing and sealing devices--are classified in U.S. Industry 339991, Gasket, Packing, and Sealing Device Manufacturing;
- Manufacturing rubber toys--are classified in Industry 33993, Doll, Toy, and Game Manufacturing;
- Manufacturing rubber gloves--are classified in U.S. Industry 339113, Surgical Appliance and Supplies Manufacturing; and
- Manufacturing rubber clothing accessories (e.g., bathing caps)--are classified in U.S. Industry 315999, Other Apparel Accessories and Other Apparel Manufacturing.

327 Nonmetallic Mineral Product Manufacturing

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications.

The Nonmetallic Mineral Product Manufacturing subsector includes establishments

that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily beneficiate mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 Clay Product and Refractory Manufacturing

32711 Pottery, Ceramics, and Plumbing Fixture Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

Cross-References. Establishments primarily engaged in--

- Manufacturing ferrite microwave devices and electronic components--are classified in Subsector 334, Computer and Electronic Product Manufacturing;
- Manufacturing enameled iron and steel plumbing fixtures--are classified in Industry 33299, All Other Fabricated Metal Product Manufacturing;
- Manufacturing metal bathroom accessories--are classified in Subsector 332, Fabricated Metal Product Manufacturing;
- Manufacturing plastic bathroom accessories, cultured marble, and other plastic plumbing fixtures--are classified in Industry 32619, Other Plastics Product Manufacturing; and
- Manufacturing clay building materials, such as ceramic tile, bricks, and clay roofing tiles, and refractories--are classified in Industry 32712, Clay Building Material and Refractories Manufacturing.

327111 Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

Cross-References. Establishments primarily engaged in--

- Manufacturing enameled iron and steel plumbing fixtures--are classified in U.S. Industry 332998, Enameled Iron and Metal Sanitary Ware Manufacturing;
- Manufacturing metal bathroom accessories--are classified in Subsector 332, Fabricated Metal Product Manufacturing;
- Manufacturing plastic bathroom accessories--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing;
- Manufacturing cultured marble and other plastic plumbing fixtures--are classified in U.S. Industry 326191, Plastics Plumbing Fixture Manufacturing; and
- Manufacturing china and earthenware products (except bathroom fixtures and accessories)--are classified in U.S. Industry 327112, Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing.

327112 Vitreous China, Fine Earthenware, and Other Pottery Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

Illustrative Examples:

Chemical stoneware (i.e., pottery products) manufacturing
Clay and ceramic statuary manufacturing
Cooking ware (e.g., stoneware, coarse earthenware, pottery) manufacturing
Earthenware table and kitchen articles, coarse, manufacturing
Florists' articles, red earthenware, manufacturing
Vases, pottery (e.g., china, earthenware, stoneware), manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing vitreous china plumbing fixtures--are classified in U.S. Industry 327111, Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing;
- Manufacturing porcelain and ceramic electrical products, such as insulators,--are classified in U.S. Industry 327113, Porcelain Electrical Supply

Manufacturing; and

- Manufacturing clay building materials, such as ceramic tile, bricks, and clay roofing tiles, and refractories,--are classified in Industry 32712, Clay Building Material and Refractories Manufacturing.

327113 Porcelain Electrical Supply Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

Cross-References.

Establishments primarily engaged in manufacturing ferrite microwave devices and electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing.

32712 Clay Building Material and Refractories Manufacturing

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

Cross-References. Establishments primarily engaged in--

- Manufacturing glass blocks--are classified in Industry 32721, Glass and Glass Product Manufacturing;
- Manufacturing concrete brick and block--are classified in Industry 32733, Concrete Pipe, Brick, and Block Manufacturing; and
- Manufacturing resilient flooring--are classified in Industry 32619, Other Plastics Product Manufacturing.

327121 Brick and Structural Clay Tile Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

Cross-References. Establishments primarily engaged in--

- Manufacturing clay fire brick (i.e., refractories)--are classified in U.S. Industry 327124, Clay Refractory Manufacturing;
- Manufacturing nonclay fire brick (i.e., refractories)--are classified in U.S. Industry 327125, Nonclay Refractory Manufacturing;
- Manufacturing glass brick--are classified in Industry 32721, Glass and Glass

Product Manufacturing;

- Manufacturing concrete bricks--are classified in U.S. Industry 327331, Concrete Block and Brick Manufacturing; and
- Manufacturing adobe bricks or clay roofing tiles--are classified in U.S. Industry 327123, Other Structural Clay Product Manufacturing.

327122 Ceramic Wall and Floor Tile Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

Cross-References. Establishments primarily engaged in--

- Manufacturing structural clay tiles--are classified in U.S. Industry 327121, Brick and Structural Clay Tile Manufacturing;
- Manufacturing clay drain tiles--are classified in U.S. Industry 327123, Other Structural Clay Product Manufacturing; and
- Manufacturing resilient flooring and asphalt floor tiles--are classified in U.S. Industry 326192, Resilient Floor Covering Manufacturing.

327123 Other Structural Clay Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

Cross-References. Establishments primarily engaged in--

- Manufacturing bricks and structural clay tiles--are classified in U.S. Industry 327121, Brick and Structural Clay Tile Manufacturing;
- Manufacturing ceramic floor and wall tiles--are classified in U.S. Industry 327122, Ceramic Wall and Floor Tile Manufacturing;
- Manufacturing clay refractories--are classified in U.S. Industry 327124, Clay Refractory Manufacturing; and
- Manufacturing nonclay refractories--are classified in U.S. Industry 327125, Nonclay Refractory Manufacturing.

327124 Clay Refractory Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

Cross-References.

Establishments primarily engaged in manufacturing nonclay refractories are classified in U.S. Industry 327125, Nonclay Refractory Manufacturing.

327125 Nonclay Refractory Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

Cross-References.

Establishments primarily engaged in manufacturing clay refractories are classified in U.S. Industry 327124, Clay Refractory Manufacturing.

3272 Glass and Glass Product Manufacturing

32721 Glass and Glass Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

Cross-References. Establishments primarily engaged in--

- Manufacturing glass wool (i.e., fiberglass) insulation products--are classified in Industry 32799, All Other Nonmetallic Mineral Product Manufacturing;
- Manufacturing optical lenses (except ophthalmic), such as magnifying, photographic, and projection lenses,--are classified in Industry 33331, Commercial and Service Industry Machinery Manufacturing;
- Grinding ophthalmic (i.e., eyeglass) lenses for the trade--are classified in Industry 33911, Medical Equipment and Supplies Manufacturing; and
- Manufacturing fiber optic cable from purchased fiber optic strand--are classified in Industry 33592, Communication and Energy Wire and Cable Manufacturing.

327211 Flat Glass Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing flat glass by melting silica sand or cullet or (2) manufacturing both flat glass and laminated glass by melting silica sand or cullet.

Cross-References.

Establishments primarily engaged in manufacturing laminated glass from purchased flat glass are classified in U.S. Industry 327215, Glass Product Manufacturing Made of Purchased Glass.

327212 Other Pressed and Blown Glass and Glassware Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

Cross-References. Establishments primarily engaged in--

- Manufacturing flat glass--are classified in U.S. Industry 327211, Flat Glass Manufacturing;
- Manufacturing glass packaging containers in glassmaking operations--are classified in U.S. Industry 327213, Glass Container Manufacturing;
- Manufacturing glass wool (i.e., fiberglass) insulation--are classified in U.S. Industry 327993, Mineral Wool Manufacturing;
- Manufacturing glassware from purchased glass--are classified in U.S. Industry 327215, Glass Product Manufacturing Made of Purchased Glass; and
- Manufacturing fiber optic cable--are classified in U.S. Industry 335921, Fiber Optic Cable Manufacturing.

327213 Glass Container Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

327215 Glass Product Manufacturing Made Of Purchased Glass^{CAN}

This U.S. industry comprises establishments primarily engaged in remelting, pressing, blowing, or shaping purchased glass.

Cross-References. Establishments primarily engaged in--

- Manufacturing optical lenses (except ophthalmic), such as magnifying, photographic and projection lenses,--are classified in U.S. Industry 333314, Optical Instrument and Lens Manufacturing;
- Manufacturing ophthalmic (i.e., eyeglass) lenses--are classified in U.S. Industry 339115, Ophthalmic Goods Manufacturing; and
- Manufacturing fiber optic cable from purchased fiber optic strand--are classified in U.S. Industry 335921, Fiber Optic Cable Manufacturing.

3273 Cement and Concrete Product Manufacturing

32731 Cement Manufacturing

See industry description for 327310 below.

327310 Cement Manufacturing

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

Cross-References. Establishments primarily engaged in--

- Mining or quarrying limestone--are classified in U.S. Industry 212312, Crushed and Broken Limestone Mining and Quarrying;
- Manufacturing lime--are classified in Industry 327410, Lime Manufacturing;
- Manufacturing ready-mix concrete--are classified in Industry 327320, Ready-Mix Concrete Manufacturing; and
- Manufacturing dry mix concrete--are classified in U.S. Industry 327999, All Other Miscellaneous Nonmetallic Mineral Product Manufacturing.

32732 Ready-Mix Concrete Manufacturing

See industry description for 327320 below.

327320 Ready-Mix Concrete Manufacturing

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

Cross-References. Establishments primarily engaged in--

- Operating sand or gravel pits--are classified in U.S. Industry 212321, Construction Sand and Gravel Mining; and
- Manufacturing dry mix concrete--are classified in U.S. Industry 327999, All Other Miscellaneous Nonmetallic Mineral Product Manufacturing.

32733 Concrete Pipe, Brick, and Block Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block.

Cross-References.

Establishments primarily engaged in manufacturing concrete products (except brick, block, and pipe) are classified in Industry 32739, Other Concrete Product Manufacturing.

327331 Concrete Block and Brick Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

327332 Concrete Pipe Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

32739 Other Concrete Product Manufacturing

See industry description for 327390 below.

327390 Other Concrete Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

Cross-References. Establishments primarily engaged in--

- Manufacturing concrete brick and block--are classified in U.S. Industry 327331, Concrete Block and Brick Manufacturing; and
- Manufacturing concrete pipe--are classified in U.S. Industry 327332, Concrete Pipe Manufacturing.

3274 Lime and Gypsum Product Manufacturing

32741 Lime Manufacturing

See industry description for 327410 below.

327410 Lime Manufacturing

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

Cross-References.

Establishments primarily engaged in manufacturing dolomite refractories are classified in U.S. Industry 327125, Nonclay Refractory Manufacturing.

32742 Gypsum Product Manufacturing

See industry description for 327420 below.

327420 Gypsum Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wallboard, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

Cross-References.

Establishments primarily engaged in operating gypsum mines or quarries are classified in U.S. Industry 212399, All Other Nonmetallic Mineral Mining.

3279 Other Nonmetallic Mineral Product Manufacturing

The Other Nonmetallic Mineral Product Manufacturing industry group comprises establishments manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 Abrasive Product Manufacturing

See industry description for 327910 below.

327910 Abrasive Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

Illustrative Examples:

Aluminum oxide (fused) abrasives manufacturing
Buffing and polishing wheels, abrasive and nonabrasive, manufacturing
Diamond dressing wheels manufacturing
Sandpaper manufacturing
Silicon carbide abrasives manufacturing

Whetstones manufacturing

Cross-References. Establishments primarily engaged in--

- Mining and cutting grindstones, pulpstones, and whetstones--are classified in U.S. Industry 212399, All Other Nonmetallic Mineral Mining;
- Manufacturing plastic scouring pads--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing; and
- Manufacturing metallic scouring sponges and soap impregnated scouring pads--are classified in U.S. Industry 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing.

32799 All Other Nonmetallic Mineral Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

Cross-References. Establishments primarily engaged in--

- Manufacturing pottery, ceramics, and plumbing fixtures--are classified in Industry 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing;
- Mining or quarrying stone, earth, or other nonmetallic minerals--are classified in Industry Group 2123, Nonmetallic Mineral Mining and Quarrying;
- Buying and selling semifinished monuments and tombstones with no work other than polishing, lettering, or shaping to custom order--are classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade;
- Manufacturing clay building materials and refractories--are classified in Industry 32712, Clay Building Material and Refractories Manufacturing;
- Manufacturing glass and glass products--are classified in Industry 32721, Glass and Glass Product Manufacturing;
- Manufacturing cement--are classified in Industry 32731, Cement Manufacturing;
- Mixing and delivering ready-mix concrete--are classified in Industry 32732, Ready-Mix Concrete Manufacturing;
- Manufacturing concrete pipe, brick, and block--are classified in Industry 32733, Concrete Pipe, Brick, and Block Manufacturing;
- Manufacturing concrete products (except pipe, brick, and block)--are classified in Industry 32739, Other Concrete Product Manufacturing;
- Manufacturing lime--are classified in Industry 32741, Lime Manufacturing;
- Manufacturing gypsum products--are classified in Industry 32742, Gypsum Product Manufacturing;
- Manufacturing abrasive products--are classified in Industry 32791, Abrasive Product Manufacturing; and
- Manufacturing metallic scouring pads and steel wool--are classified in Industry

33299, All Other Fabricated Metal Product Manufacturing.

327991 Cut Stone and Stone Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

Cross-References. Establishments primarily engaged in--

- Mining or quarrying stone--are classified in Industry Group 2123, Nonmetallic Mineral Mining and Quarrying; and
- Buying and selling semifinished monuments and tombstones with no work other than polishing, lettering, or shaping to custom order--are classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade.

327992 Ground or Treated Mineral and Earth Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

Cross-References.

Establishments primarily engaged in crushing, grinding, pulverizing, washing, screening, sizing, or otherwise beneficiating mined clays, ceramics and refractory, and other miscellaneous nonmetallic minerals are classified in Industry Group 2123, Nonmetallic Mineral Mining and Quarrying.

327993 Mineral Wool Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e. fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

Cross-References.

Establishments primarily engaged in manufacturing metallic scouring pads and steel wool are classified in U.S. Industry 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing.

327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

Illustrative Examples:

Dry mix concrete manufacturing
Mica products manufacturing
Synthetic stones, for gem stones and industrial use, manufacturing
Stucco and stucco products manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing pottery, ceramics, and plumbing fixtures--are classified in Industry 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing;
- Manufacturing clay building materials and refractories--are classified in Industry 32712, Clay Building Material and Refractories Manufacturing;
- Manufacturing glass and glass products--are classified in Industry 32721, Glass and Glass Product Manufacturing;
- Manufacturing cement--are classified in Industry 327310, Cement Manufacturing;
- Mixing and delivering ready-mix concrete--are classified in Industry 327320, Ready-Mix Concrete Manufacturing;
- Manufacturing concrete pipe, brick, and block--are classified in Industry 32733, Concrete Pipe, Brick, and Block Manufacturing;
- Manufacturing concrete products (except pipe, brick, and block)--are classified in Industry 327390, Other Concrete Product Manufacturing;
- Manufacturing lime--are classified in Industry 327410, Lime Manufacturing;
- Manufacturing gypsum products--are classified in Industry 327420, Gypsum Product Manufacturing;
- Manufacturing abrasives and abrasive products--are classified in Industry 327910, Abrasive Product Manufacturing;
- Manufacturing cut stone and stone products--are classified in U.S. Industry 327991, Cut Stone and Stone Product Manufacturing;
- Manufacturing ground and treated minerals and earth (i.e., not at the mine site)--are classified in U.S. Industry 327992, Ground or Treated Mineral and Earth Manufacturing; and
- Manufacturing mineral wool and fiberglass insulation products--are classified in U.S. Industry 327993, Mineral Wool Manufacturing.

331 Primary Metal Manufacturing

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other

process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill, industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 Iron and Steel Mills and Ferroalloy Manufacturing

33111 Iron and Steel Mills and Ferroalloy Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) manufacturing ferroalloys; (5) making steel; (6) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (7) making steel and forming pipe and tube.

Cross-References. Establishments primarily engaged in--

- Manufacturing nonferrous superalloys, such as cobalt or nickel-based superalloys,--are classified in Industry 33149, Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying; and
- Operating coke ovens--are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

331111 Iron and Steel Mills^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) direct reduction of iron ore; (2) manufacturing pig iron in molten or solid form; (3) converting pig iron into steel; (4) making steel; (5) making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and (6) making steel and forming tube and pipe.

Cross-References. Establishments primarily engaged in--

- Manufacturing ferroalloys (i.e., alloying elements used to improve, strengthen, or otherwise alter the characteristics of steel)--are classified in U.S. Industry 331112, Electrometallurgical Ferroalloy Product Manufacturing; and
- Operating coke ovens--are classified in U.S. Industry 324199, All Other Petroleum and Coal Products Manufacturing.

331112 Electrometallurgical Ferroalloy Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

Cross-References. Establishments primarily engaged in--

- Manufacturing electrometallurgical steel and iron-based superalloys--are classified in U.S. Industry 331111, Iron and Steel Mills; and
- Manufacturing nonferrous superalloys, such as cobalt or nickel-based superalloys,--are classified in U.S. Industry 331492, Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum).

3312 Steel Product Manufacturing from Purchased Steel

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe, drawing steel wire, and rolling or drawing shapes from purchased iron or steel.

33121 Iron and Steel Pipe and Tube Manufacturing from Purchased Steel

See industry description for 331210 below.

331210 Iron and Steel Pipe and Tube Manufacturing from Purchased Steel

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

Cross-References.

Establishments primarily engaged in making steel and further processing the steel into steel pipe and tube are classified in U.S. Industry 331111, Iron and Steel Mills.

33122 Rolling and Drawing of Purchased Steel

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

Cross-References. Establishments primarily engaged in--

- Making steel and rolling and/or drawing steel--are classified in Industry 33111, Iron and Steel Mills and Ferroalloy Manufacturing; and
- Manufacturing wire products from purchased wire--are classified in Industry 33261, Spring and Wire Product Manufacturing.

331221 Rolled Steel Shape Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

Cross-References. Establishments primarily engaged in--

- Making steel and rolling or drawing steel shapes--are classified in U.S. Industry 331111, Iron and Steel Mills; and
- Drawing wire from purchased steel--are classified in U.S. Industry 331222, Steel Wire Drawing.

331222 Steel Wire Drawing^{CAN}

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

Cross-References. Establishments primarily engaged in--

- Making steel and drawing steel wire--are classified in U.S. Industry 331111, Iron and Steel Mills; and
- Manufacturing wire products, such as nails, spikes, and paper clips, from purchased steel wire--are classified in Industry 33261, Spring and Wire Product Manufacturing.

3313 Alumina and Aluminum Production and Processing

33131 Alumina and Aluminum Production and Processing

This industry comprises establishments primarily engaged in one or more of the following: (1) refining alumina; (2) making (i.e., the primary production) aluminum from alumina; (3) recovering aluminum from scrap or dross; (4) alloying purchased aluminum; and (5) manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, wire).

Cross-References. Establishments primarily engaged in--

- Manufacturing aluminum oxide abrasives and refractories--are classified in Subsector 327, Nonmetallic Mineral Product Manufacturing;
- Sorting and breaking up scrap aluminum metal without also smelting or refining--are classified in Sector 42, Wholesale Trade; and
- Operating facilities where commingled recyclable materials, such as paper, plastics, used beverage cans, and metals are sorted into distinct categories without also smelting or refining--are classified in Industry 56292, Materials Recovery Facilities.

331311 Alumina Refining^{US}

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

Cross-References. Establishments primarily engaged in--

- Manufacturing aluminum oxide abrasives and refractories--are classified in Subsector 327, Nonmetallic Mineral Product Manufacturing; and
- Making aluminum from alumina--are classified in U.S. Industry 331312, Primary Aluminum Production.

331312 Primary Aluminum Production^{US}

This U.S. industry comprises establishments primarily engaged in (1) making aluminum from alumina and/or (2) making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, strip). Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

Cross-References. Establishments primarily engaged in--

- Refining alumina--are classified in U.S. Industry 331311, Alumina Refining; and

- Recovering aluminum from scrap or alloying purchased aluminum--are classified in U.S. Industry 331314, Secondary Smelting and Alloying of Aluminum.

331314 Secondary Smelting and Alloying of Aluminum^{US}

This U.S. industry comprises establishments primarily engaged in (1) recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or (2) manufacturing alloys, powder, paste, or flake from purchased aluminum.

Cross-References. Establishments primarily engaged in--

- Making aluminum and/or aluminum alloys from alumina--are classified in U.S. Industry 331312, Primary Aluminum Production;
- Refining alumina--are classified in U.S. Industry 331311, Alumina Refining;
- Manufacturing aluminum sheet, plate, and foil from purchased aluminum or by recovering aluminum from scrap and flat rolling or continuous casting--are classified in U.S. Industry 331315, Aluminum Sheet, Plate, and Foil Manufacturing;
- Manufacturing aluminum extruded products from purchased aluminum or by recovering aluminum from scrap and extruding--are classified in U.S. Industry 331316, Aluminum Extruded Product Manufacturing;
- Manufacturing rolled ingot, billet from purchased aluminum or by recovering aluminum from scrap and rolling or drawing--are classified in U.S. Industry 331319, Other Aluminum Rolling and Drawing;
- Sorting and breaking up scrap metal without also smelting or refining--are classified in Industry 421930, Recyclable Material Wholesalers; and
- Operating facilities where commingled recyclable materials, such as paper, plastics, used beverage cans, and metals, are sorted into distinct categories without also smelting or refining--are classified in Industry 562920, Materials Recovery Facilities.

331315 Aluminum Sheet, Plate, and Foil Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) flat rolling or continuous casting sheet, plate, foil and welded tube from purchased aluminum and/or (2) recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

Cross-References.

Establishments primarily engaged in making aluminum from alumina and flat rolling or continuous casting aluminum sheet, plate, foil, and welded tube are classified in U.S. Industry 331312, Primary Aluminum Production.

331316 Aluminum Extruded Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum; and/or (2) recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

Cross-References.

Establishments primarily engaged in making aluminum from alumina and extruding aluminum bar, pipe, tube or tube blooms are classified in U.S. Industry 331312, Primary Aluminum Production.

331319 Other Aluminum Rolling and Drawing^{US}

This U.S. Industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or (2) recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

Cross-References. Establishments primarily engaged in--

- Flat rolling sheet, plate, foil, and welded tube from either purchased aluminum or by recovering aluminum from scrap and flat rolling or continuous casting--are classified in U.S. Industry 331315, Aluminum Sheet, Plate, and Foil Manufacturing;
- Extruding rod, bar, pipe, tube and tube blooms or drawing tube from purchased aluminum or by recovering aluminum from scrap and extruding--are classified in U.S. Industry 331316, Aluminum Extruded Product Manufacturing; and
- Making aluminum from alumina and making aluminum shapes--are classified in U.S. Industry 331312, Primary Aluminum Production.

3314 Nonferrous Metal (except Aluminum) Production and Processing

33141 Nonferrous Metal (except Aluminum) Smelting and Refining

This industry comprises establishments primarily engaged in (1) smelting ores into nonferrous metals and/or (2) the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

Cross-References. Establishments primarily engaged in--

- Making aluminum from alumina or recovery of aluminum from scrap--are

classified in Industry 33131, Alumina and Aluminum Production and Processing;

- Recovering copper or copper alloys from scrap or dross and/or alloying, rolling, drawing, and extruding purchased copper--are classified in Industry 33142, Copper Rolling, Drawing, Extruding, and Alloying;
- Recovering nonferrous metals (except copper and aluminum) from scrap and/or alloying, rolling, drawing, and extruding purchased nonferrous metals (except copper and aluminum)--are classified in Industry 33149, Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying;
- Mining and making copper and other nonferrous concentrates (including gold and silver bullion) using processes, such as solvent extraction or electrowinning,--are classified in Industry Group 2122, Metal Ore Mining;
- Sorting and breaking up scrap metal without also smelting or refining--are classified in Sector 42, Wholesale Trade; and
- Operating facilities where commingled recyclable materials, such as paper, plastics, used beverage cans, and metals, are sorted into distinct categories without also smelting or refining--are classified in Industry 56292, Materials Recovery Facilities.

331411 Primary Smelting and Refining of Copper^{US}

This U.S. industry comprises establishments primarily engaged in (1) smelting copper ore and/or (2) the primary refining of copper by electrolytic methods or other processes. Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

Cross-References. Establishments primarily engaged in--

- Recovering copper or copper alloys from scrap and making primary forms; and/or alloying purchased copper--are classified in U.S. Industry 331423, Secondary Smelting, Refining, and Alloying of Copper;
- Mining and making copper concentrates by processes, such as solvent extraction or electrowinning,--are classified in U.S. Industry 212234, Copper Ore and Nickel Ore Mining;
- Drawing copper wire (except mechanical) from purchased copper or recovering copper from scrap and drawing wire (except mechanical)--are classified in U.S. Industry 331422, Copper Wire (except Mechanical) Drawing; and
- Rolling, drawing, or extruding copper shapes (except communication and energy wire) from purchased copper or recovering copper from scrap and rolling, drawing, and extruding copper shapes--are classified in U.S. Industry 331421, Copper Rolling, Drawing, and Extruding.

331419 Primary Smelting and Refining of Nonferrous Metal (except Copper and Aluminum)^{US}

This U.S. industry comprises establishments primarily engaged in (1) making (i.e., the primary production) nonferrous metals by smelting ore and/or (2) the primary refining of nonferrous metals by electrolytic methods or other processes.

Cross-References. Establishments primarily engaged in--

- Recovering nonferrous metals (except copper and aluminum) from scrap and making primary forms and/or alloying purchased nonferrous metals (except copper and aluminum)--are classified in U.S. Industry 331492, Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum);
- Making aluminum from alumina--are classified in U.S. Industry 331312, Primary Aluminum Production;
- Primary smelting and primary refining of copper--are classified in U.S. Industry 331411, Primary Smelting and Refining of Copper;
- Mining and making copper and other nonferrous concentrates (including gold and silver bullion), by processes, such as solvent extraction or electrowinning,--are classified in Industry Group 2122, Metal Ore Mining; and
- Rolling, drawing, and/or extruding nonferrous metal shapes (except copper and aluminum) from purchased nonferrous metals (except copper and aluminum) or by recovering nonferrous metals (except copper and aluminum) and rolling, drawing, or extruding--are classified in U.S. Industry 331491, Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding.

33142 Copper Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering copper or copper alloys from scraps; (2) alloying purchased copper; (3) rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, and wire) from purchased copper; and (4) recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, and wire).

Cross-References. Establishments primarily engaged in--

- Smelting copper ore, primary copper refining, and/or rolling, drawing or extruding primary copper made in the same establishment--are classified in Industry 33141, Nonferrous Metal (except Aluminum) Smelting and Refining;
- Manufacturing wire products from purchased wire--are classified in Industry 33261, Spring and Wire Product Manufacturing;
- Insulating purchased copper wire--are classified in Industry 33592, Communication and Energy Wire and Cable Manufacturing;
- Sorting and breaking up scrap metal without also smelting or refining--are classified in Sector 42, Wholesale Trade;
- Operating facilities where commingled recyclable materials, such as paper, plastics, used beverage cans, and metals, are sorted into distinct categories without also smelting or refining--are classified in Industry 56292, Materials

Recovery Facilities;

- Die-casting purchased copper--are classified in Industry 33152, Nonferrous Metal Foundries; and
- Recovering nonferrous metals (except copper and aluminum) from scrap, and/or rolling, drawing, extruding, or alloying purchased nonferrous metals (except copper and aluminum)--are classified in Industry 33149, Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying.

331421 Copper Rolling, Drawing, and Extruding^{US}

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire) from purchased copper; and/or (2) recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube (except bare or insulated copper communication or energy wire in integrated mills)).

Cross-References. Establishments primarily engaged in--

- Recovering copper or copper alloys from scrap and making primary forms and/or alloying purchased copper--are classified in U.S. Industry 331423, Secondary Smelting, Refining, and Alloying of Copper;
- Drawing copper wire (except mechanical) from purchased copper or recovering copper from scrap and drawing copper wire (except mechanical)--are classified in U.S. Industry 331422, Copper Wire (except Mechanical) Drawing;
- Die-casting purchased copper--are classified in U.S. Industry 331522, Nonferrous (except Aluminum) Die-Casting Foundries;
- Making primary copper and rolling, drawing, and/or extruding copper shapes (e.g., bar, plate, rod, sheet, strip)--are classified in U.S. Industry 331411, Primary Smelting and Refining of Copper; and
- Rolling, drawing, or extruding shapes from purchased nonferrous metal (except copper and aluminum) or recovering nonferrous metals from scrap and rolling, drawing or extruding--are classified in U.S. Industry 331491, Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding.

331422 Copper Wire (except Mechanical) Drawing^{US}

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

Cross-References. Establishments primarily engaged in--

- Manufacturing copper mechanical wire from purchased copper or by recovering copper from scrap and drawing or extruding--are classified in U.S.

- Industry 331421, Copper Rolling, Drawing, and Extruding;
- Insulating purchased copper wire--are classified in U.S. Industry 335929, Other Communication and Energy Wire Manufacturing;
- Making primary copper and drawing copper wire--are classified in U.S. Industry 331411, Primary Smelting and Refining of Copper; and
- Manufacturing wire products from purchased copper wire--are classified in Industry 33261, Spring and Wire Product Manufacturing.

331423 Secondary Smelting, Refining, and Alloying of Copper^{US}

This U.S. industry comprises establishments primarily engaged in (1) recovering copper and copper alloys from scrap and/or (2) alloying purchased copper. Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

Cross-References. Establishments primarily engaged in--

- Sorting and breaking up scrap metal without also smelting or refining--are classified in Industry 421930, Recyclable Material Wholesalers;
- Operating facilities where commingled recyclable materials, such as paper, plastics, used beverage cans, and metals, are sorted into distinct categories without also smelting or refining--are classified in Industry 562920, Materials Recovery Facilities;
- Smelting copper ore and/or the primary refining of copper--are classified in U.S. Industry 331411, Primary Smelting and Refining of Copper;
- Recovering copper and copper alloys from scrap and rolling, drawing, or extruding shapes--are classified in U.S. Industry 331421, Copper Rolling, Drawing, and Extruding;
- Recovering copper and copper alloys from scrap and drawing wire (except mechanical)--are classified in U.S. Industry 331422, Copper Wire (except Mechanical) Drawing; and
- Recovering nonferrous metals (except copper, aluminum) from scrap and making primary forms and/or alloying purchased nonferrous metals (except copper and aluminum)--are classified in U.S. Industry 331492, Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum).

33149 Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, Extruding, and Alloying

This industry comprises establishments primarily engaged in one or more of the following: (1) recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap; (2) alloying purchased nonferrous metals (except copper and aluminum); (3) rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and (4) recovering nonferrous

metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

Cross-References. Establishments primarily engaged in--

- Rolling, drawing, and/or extruding aluminum or secondary smelting and alloying of aluminum--are classified in Industry 33131, Alumina and Aluminum Production and Processing;
- Recovering copper and copper alloys from scrap, alloying purchased copper, rolling, drawing, or extruding shapes from purchased copper, and recovering copper or copper alloys from scrap and rolling, drawing, or extruding shapes in integrated mills--are classified in Industry 33142, Copper Rolling, Drawing, Extruding, and Alloying;
- Insulating purchased nonferrous wire--are classified in Industry 33592, Communication and Energy Wire and Cable Manufacturing;
- Making primary nonferrous metals and rolling, drawing, or extruding nonferrous metal shapes--are classified in Industry 33141, Nonferrous Metal (except Aluminum) Smelting and Refining;
- Manufacturing products from purchased wire--are classified in Industry 33261, Spring and Wire Product Manufacturing;
- Sorting and breaking up scrap metal without also smelting or refining--are classified in Sector 42, Wholesale Trade; and
- Operating facilities where commingled recyclable materials, such as paper, plastics, used beverage cans, and metals, are sorted into distinct categories without also smelting or refining--are classified in Industry 56292, Materials Recovery Facilities.

331491 Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding^{US}

This U.S. industry comprises establishments primarily engaged in (1) rolling, drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube) from purchased nonferrous metals) and/or (2) recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, tube) in integrated mills.

Cross-References. Establishments primarily engaged in--

- Rolling, drawing, and/or extruding shapes from purchased copper or recovering copper from scrap and rolling, drawing, or extruding shapes--are classified in U.S. Industry 331421, Copper Rolling, Drawing, and Extruding;
- Recovering nonferrous metals (except copper and aluminum) from scrap and making primary forms and/or alloying purchased nonferrous metals--are classified in U.S. Industry 331492, Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum);
- Rolling, drawing, and/or extruding aluminum--are classified in Industry 33131, Alumina and Aluminum Production and Processing;

- Making primary nonferrous metals and rolling, drawing, or extruding nonferrous metal shapes--are classified in U.S. Industry 331419, Primary Smelting and Refining of Nonferrous Metal (except Copper and Aluminum); and
- Insulating purchased nonferrous wire--are classified in U.S. Industry 335929, Other Communication and Energy Wire Manufacturing.

331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)^{US}

This U.S. industry comprises establishments primarily engaged in (1) alloying purchased nonferrous metals and/or (2) recovering nonferrous metals from scrap. Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, wire) using smelting or refining processes.

Cross-References. Establishments primarily engaged in--

- Recovering aluminum and aluminum alloys from scrap and/or alloying purchased aluminum--are classified in U.S. Industry 331314, Secondary Smelting and Alloying of Aluminum;
- Sorting and breaking up scrap metal without also smelting or refining--are classified in Industry 421930, Recyclable Material Wholesalers;
- Recovering nonferrous metals from scrap and rolling, drawing, or extruding shapes in integrated facilities--are classified in U.S. Industry 331491, Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding;
- Operating facilities where commingled recyclable materials, such as paper, plastics, used beverage cans, and metals, are sorted into distinct categories without also smelting or refining--are classified in Industry 562920, Materials Recovery Facilities; and
- Recovering copper and copper alloys from scrap and making primary forms; and/or alloying purchased copper--are classified in U.S. Industry 331423, Secondary Smelting, Refining, and Alloying of Copper.

3315 Foundries

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping, threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 Ferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to make castings. Establishments in this industry purchase iron and steel made in other establishments.

Cross-References.

Establishments primarily engaged in manufacturing iron or steel castings and further manufacturing them into finished products are classified based on the specific finished product.

331511 Iron Foundries^{CAN}

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings, (e.g., cast iron man-hole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

Cross-References.

Establishments primarily engaged in manufacturing iron castings and further manufacturing them into finished products are classified based on the specific finished product.

331512 Steel Investment Foundries^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

Cross-References. Establishments primarily engaged in--

- Manufacturing steel castings (except steel investment castings)--are classified in U.S. Industry 331513, Steel Foundries (except Investment); and
- Manufacturing steel investment castings and further manufacturing them into finished products--are classified based on the specific finished product.

331513 Steel Foundries (except Investment)^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

Cross-References. Establishments primarily engaged in--

- Manufacturing steel investment castings--are classified in U.S. Industry 331512, Steel Investment Foundries; and
- Manufacturing steel castings and further manufacturing them into finished products--are classified based on the specific finished product.

33152 Nonferrous Metal Foundries

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

Cross-References. Establishments primarily engaged in--

- Manufacturing iron or steel castings--are classified in Industry 33151, Ferrous Metal Foundries; and
- Manufacturing nonferrous metal castings and further manufacturing them into finished products--are classified based on the specific finished product.

331521 Aluminum Die-Casting Foundries^{US}

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

Cross-References. Establishments primarily engaged in--

- Pouring molten aluminum into molds to manufacture aluminum castings--are classified in U.S. Industry 331524, Aluminum Foundries (except Die-Casting); and
- Manufacturing aluminum die-castings and further manufacturing them into finished products--are classified based on the specific finished product.

331522 Nonferrous (except Aluminum) Die-Casting Foundries^{US}

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make

nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

Cross-References. Establishments primarily engaged in--

- Manufacturing aluminum die-castings--are classified in U.S. Industry 331521, Aluminum Die-Casting Foundries;
- Pouring molten aluminum into molds to manufacture aluminum castings--are classified in U.S. Industry 331524, Aluminum Foundries (except Die-Casting);
- Pouring molten copper into molds to manufacture copper castings--are classified in U.S. Industry 331525, Copper Foundries (except Die-Casting);
- Pouring molten nonferrous metal (except copper and aluminum) into molds to manufacture nonferrous (except copper and aluminum) castings--are classified in U.S. Industry 331528, Other Nonferrous Foundries (except Die-Casting); and
- Manufacturing nonferrous die-castings and further manufacturing them into finished products--are classified based on the specific finished product.

331524 Aluminum Foundries (except Die-Casting)^{US}

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

Cross-References. Establishments primarily engaged in--

- Manufacturing aluminum die-castings--are classified in U.S. Industry 331521, Aluminum Die-Casting Foundries; and
- Manufacturing aluminum or aluminum alloy castings and further manufacturing them into finished products--are classified based on the specific finished product.

331525 Copper Foundries (except Die-Casting)^{US}

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

Cross-References. Establishments primarily engaged in--

- Manufacturing copper die-castings--are classified in U.S. Industry 331522, Nonferrous (except Aluminum) Die-Casting Foundries; and
- Manufacturing copper castings and further manufacturing them into finished products--are classified based on the specific finished product.

331528 Other Nonferrous Foundries (except Die-Casting)^{US}

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous (except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

Cross-References. Establishments primarily engaged in--

- Manufacturing aluminum die-castings--are classified in U.S. Industry 331521, Aluminum Die-Casting Foundries;
- Manufacturing nonferrous (except aluminum) die-castings--are classified in U.S. Industry 331522, Nonferrous (except Aluminum) Die-Casting Foundries;
- Pouring molten aluminum into molds to manufacture aluminum castings--are classified in U.S. Industry 331524, Aluminum Foundries (except Die-Casting);
- Manufacturing copper castings--are classified in U.S. Industry 331525, Copper Foundries (except Die-Casting); and
- Manufacturing nonferrous castings and further manufacturing them into finished products--are classified based on the specific finished product.

332 Fabricated Metal Product Manufacturing

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal

Manufacturing subsector.

3321 Forging and Stamping

33211 Forging and Stamping

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing forgings from purchased metals; (2) manufacturing metal custom roll forming products; (3) manufacturing metal stamped and spun products (except automotive, cans, coins); and (4) manufacturing powder metallurgy products. Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

Cross-References. Establishments primarily engaged in--

- Manufacturing metal forgings in integrated primary metal establishments--are classified in Subsector 331, Primary Metal Manufacturing;
- Stamping automotive stampings--are classified in Industry 33637, Motor Vehicle Metal Stamping;
- Manufacturing and installing rolled formed seamless gutters at construction sites--are classified in Industry 23561, Roofing, Siding, and Sheet Metal Contractors; and
- Stamping coins--are classified in Industry 33991, Jewelry and Silverware Manufacturing.

332111 Iron and Steel Forging^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

Cross-References. Establishments primarily engaged in--

- Manufacturing iron and steel forgings in integrated iron and steel mills--are classified in U.S. Industry 331111, Iron and Steel Mills; and
- Manufacturing nonferrous forgings--are classified in U.S. Industry 332112, Nonferrous Forging.

332112 Nonferrous Forging^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

Cross-References. Establishments primarily engaged in--

- Manufacturing iron and steel forgings--are classified in U.S. Industry 332111, Iron and Steel Forging; and
- Manufacturing nonferrous forgings in integrated primary or secondary nonferrous metal production facilities--are classified in Subsector 331, Primary Metal Manufacturing.

332114 Custom Roll Forming^{US}

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

Cross-References.

Establishments primarily engaged in manufacturing and installing rolled formed seamless gutters at construction sites are classified in Industry 235610, Roofing, Siding, and Sheet Metal Contractors.

332115 Crown and Closure Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

332116 Metal Stamping^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

Cross-References. Establishments primarily engaged in--

- Stamping automotive stampings--are classified in Industry 336370, Motor Vehicle Metal Stamping;
- Stamping metal crowns and closures--are classified in U.S. Industry 332115, Crown and Closure Manufacturing;
- Manufacturing metal cans--are classified in U.S. Industry 332431, Metal Can Manufacturing; and
- Stamping coins--are classified in U.S. Industry 339911, Jewelry (except Costume) Manufacturing.

332117 Powder Metallurgy Part Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

3322 Cutlery and Handtool Manufacturing

33221 Cutlery and Handtool Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nonprecious and precious plated metal cutlery and flatware; (2) manufacturing nonpowered hand and edge tools, (3) manufacturing nonpowered handsaws; (4) manufacturing saw blades, all types (including those for sawing machines); and (5) manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

Cross-References. Establishments primarily engaged in--

- Manufacturing precious (except precious plated) metal cutlery and flatware--are classified in Industry 33991, Jewelry and Silverware Manufacturing;
- Manufacturing electric razors and hair clippers for use on humans--are classified in Industry 33521, Small Electrical Appliance Manufacturing;
- Manufacturing power hedge shears and trimmers and electric hair clippers for use on animals--are classified in Industry 33311, Agricultural Implement Manufacturing;
- Manufacturing metal cutting dies, attachments, and accessories for machine tools--are classified in Industry 33351, Metalworking Machinery Manufacturing;
- Manufacturing handheld power-driven handtools--are classified in Industry 33399, All Other General Purpose Machinery Manufacturing; and
- Manufacturing finished cast iron kitchen utensils (i.e., cast iron skillets) and

castings for kitchen utensils, pots, and pans--are classified in Industry Group 3315, Foundries.

332211 Cutlery and Flatware (except Precious) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

Cross-References. Establishments primarily engaged in--

- Manufacturing precious (except precious plated) metal cutlery and flatware--are classified in U.S. Industry 339912, Silverware and Hollowware Manufacturing;
- Manufacturing electric razors and hair clippers for use on humans and housewares--are classified in U.S. Industry 335211, Electric Housewares and Household Fan Manufacturing;
- Manufacturing power hedge shears and trimmers and electric hair clippers for animal use--are classified in U.S. Industry 333112, Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing; and
- Manufacturing nonelectric hair clippers for use on animals--are classified in U.S. Industry 332212, Hand and Edge Tool Manufacturing.

332212 Hand and Edge Tool Manufacturing^{US}

This industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

Cross-References. Establishments primarily engaged in--

- Manufacturing saw blades and handsaws--are classified in U.S. Industry 332213, Saw Blade and Handsaw Manufacturing;
- Manufacturing metal cutting dies, attachments, and accessories for machine tools--are classified in Industry 33351, Metalworking Machinery Manufacturing;
- Manufacturing handheld power-driven handtools--are classified in U.S. Industry 333991, Power-Driven Handtool Manufacturing;
- Manufacturing electric razors and hair clippers for use on humans--are classified in U.S. Industry 335211, Electric Housewares and Household Fan Manufacturing;
- Manufacturing electric hair clippers for use on animals--are classified in U.S. Industry 333111, Farm Machinery and Equipment Manufacturing; and
- Manufacturing nonelectric household-type scissors and shears--are classified in U.S. Industry 332211, Cutlery and Flatware (except Precious) Manufacturing.

332213 Saw Blade and Handsaw Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing nonpowered handsaws and/or (2) manufacturing saw blades, all types (including those for power sawing machines).

Cross-References.

Establishments primarily engaged in manufacturing handheld powered saws are classified in U.S. Industry 333991, Power-Driven Handtool Manufacturing.

332214 Kitchen Utensil, Pot, and Pan Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

Cross-References. Establishments primarily engaged in--

- Manufacturing finished cast metal kitchen utensils or castings for kitchen utensils--are classified in Industry Group 3315, Foundries;
- Manufacturing stampings for kitchen utensils, pots, and pans--are classified in U.S. Industry 332116, Metal Stamping; and
- Manufacturing metal cutting-type kitchen utensils--are classified in U.S. Industry 332211, Cutlery and Flatware (except Precious) Manufacturing.

3323 Architectural and Structural Metals Manufacturing

33231 Plate Work and Fabricated Structural Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) prefabricated metal buildings, panels and sections; (2) structural metal products; and (3) metal plate work products.

Cross-References. Establishments primarily engaged in--

- Making manufactured homes (i.e., mobile homes) and prefabricated wood buildings--are classified in Industry 32199, All Other Wood Product Manufacturing;
- Constructing buildings, bridges, and other heavy construction projects on site--are classified in Sector 23, Construction;
- Building ships, boats and barges--are classified in Industry 33661, Ship and Boat Building;
- Manufacturing power boilers and heat exchangers--are classified in Industry 33241, Power Boiler and Heat Exchanger Manufacturing;

- Manufacturing heavy gauge tanks--are classified in Industry 33242, Metal Tank (Heavy Gauge) Manufacturing;
- Manufacturing metal plate cooling towers--are classified in Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; and
- Manufacturing metal windows, doors and studs--are classified in Industry 33232, Ornamental and Architectural Metal Products Manufacturing.

332311 Prefabricated Metal Building and Component Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels and sections.

Cross-References. Establishments primarily engaged in--

- Making manufactured homes (i.e., mobile homes) and prefabricated wood buildings--are classified in Industry 32199, All Other Wood Product Manufacturing;
- Constructing prefabricated buildings on site--are classified in Industry Group 233, Building, Developing, and General Contracting; and
- Manufacturing metal windows and doors--are classified in U.S. Industry 332321, Metal Window and Door Manufacturing.

332312 Fabricated Structural Metal Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

Cross-References. Establishments primarily engaged in--

- Manufacturing metal windows and doors--are classified in U.S. Industry 332321, Metal Window and Door Manufacturing;
- Manufacturing metal studs--are classified in U.S. Industry 332322, Sheet Metal Work Manufacturing;
- Constructing buildings, bridges and other heavy construction projects on site--are classified in Sector 23, Construction;
- Building ships, boats and barges--are classified in Industry 33661, Ship and Boat Building; and
- Prefabricating metal buildings, panels and sections--are classified in U.S. Industry 332311, Prefabricated Metal Building and Component Manufacturing.

332313 Plate Work Manufacturing^{US}

This industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal

plate.

Cross-References. Establishments primarily engaged in--

- Manufacturing power boilers and heat exchangers--are classified in Industry 332410, Power Boiler and Heat Exchanger Manufacturing;
- Manufacturing heavy gauge tanks--are classified in Industry 332420, Metal Tank (Heavy Gauge) Manufacturing; and
- Manufacturing metal plate cooling towers--are classified in U.S. Industry 333415, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing.

33232 Ornamental and Architectural Metal Products Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: (1) metal framed windows (i.e., typically using purchased glass) and metal doors; (2) sheet metal work; and (3) ornamental and architectural metal products.

Cross-References. Establishments primarily engaged in--

- Manufacturing metal covered (i.e., clad) wood windows and doors--are classified in Industry 32191, Millwork;
- Manufacturing bins, cans, vats, and light tanks of sheet metal--are classified in Industry 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing;
- Manufacturing prefabricated metal buildings, panels, and sections--are classified in Industry 33231, Plate Work and Fabricated Structural Product Manufacturing;
- Fabricating sheet metal work on site--are classified in Sector 23, Construction;
- Manufacturing metal stampings (except automotive, coins) and custom roll forming products--are classified in Industry 33211, Forging and Stamping;
- Manufacturing automotive stampings--are classified in Industry 33637, Motor Vehicle Metal Stamping; and
- Stamping coins--are classified in Industry 33991, Jewelry and Silverware Manufacturing.

332321 Metal Window and Door Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (i.e., typically using purchased glass) and metal doors. Examples of products made by these establishments are metal door frames; metal framed window and door screens; metal molding and trim (except automotive); and metal curtain walls.

Cross-References. Establishments primarily engaged in--

- Manufacturing wood or metal covered (i.e., clad) wood framed windows and doors--are classified in U.S. Industry 321911, Wood Window and Door Manufacturing; and
- Manufacturing metal automotive molding and trim--are classified in Industry 336370, Motor Vehicle Metal Stamping.

332322 Sheet Metal Work Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

Cross-References. Establishments primarily engaged in--

- Manufacturing sheet metal bins, vats and light tanks of sheet metal--are classified in U.S. Industry 332439, Other Metal Container Manufacturing;
- Manufacturing metal cans, lids, and ends--are classified in U.S. Industry 332431, Metal Can Manufacturing;
- Fabricating sheet metal work on site--are classified in Sector 23, Construction;
- Manufacturing metal stampings (except automotive, coins) and custom roll forming products--are classified in Industry 33211, Forging and Stamping;
- Manufacturing automotive stampings--are classified in Industry 336370, Motor Vehicle Metal Stamping; and
- Stamping coins--are classified in U.S. Industry 339911, Jewelry (except Costume) Manufacturing.

332323 Ornamental and Architectural Metal Work Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

Cross-References.

Establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections are classified in U.S. Industry 332311, Prefabricated Metal Building and Component Manufacturing.

3324 Boiler, Tank, and Shipping Container Manufacturing

33241 Power Boiler and Heat Exchanger Manufacturing

See industry description for 332410 below.

332410 Power Boiler and Heat Exchanger Manufacturing

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

Cross-References. Establishments primarily engaged in--

- Manufacturing heavy gauge metal tanks--are classified in Industry 332420, Metal Tank (Heavy Gauge) Manufacturing;
- Manufacturing steam or hot water low pressure heating boilers--are classified in U.S. Industry 333414, Heating Equipment (except Warm Air Furnaces) Manufacturing; and
- Installing power boilers and heat exchanges without manufacturing--are classified in Industry 235110, Plumbing, Heating, and Air-Conditioning Contractors.

33242 Metal Tank (Heavy Gauge) Manufacturing

See industry description for 332420 below.

332420 Metal Tank (Heavy Gauge) Manufacturing

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

Cross-References. Establishments primarily engaged in--

- Manufacturing power boilers--are classified in Industry 332410, Power Boiler and Heat Exchanger Manufacturing;
- Manufacturing light gauge metal containers--are classified in Industry 33243, Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing; and
- Installing heavy gauge metal tanks without manufacturing--are classified in Sector 23, Construction.

33243 Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing

This industry comprises establishments primarily engaged in forming light gauge metal containers.

Cross-References. Establishments primarily engaged in--

- Manufacturing foil containers--are classified in Industry 33299, All Other Fabricated Metal Product Manufacturing;
- Reconditioning barrels and drums--are classified in Industry 81131, Commercial and Industrial Machinery and Equipment (except Automotive and

- Electronic) Repair and Maintenance; and
- Manufacturing heavy gauge metal containers--are classified in Industry 33242, Metal Tank (Heavy Gauge) Manufacturing.

332431 Metal Can Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

Cross-References. Establishments primarily engaged in--

- Manufacturing foil containers--are classified in U.S. Industry 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing; and
- Manufacturing light gauge metal containers (except cans)--are classified in U.S. Industry 332439, Other Metal Container Manufacturing.

332439 Other Metal Container Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

Illustrative Examples:

Light gauge metal bins manufacturing
Light gauge metal drums manufacturing
Light gauge metal garbage cans manufacturing
Light gauge metal lunch boxes manufacturing
Light gauge metal mailboxes manufacturing
Light gauge metal tool boxes manufacturing
Light gauge metal vats manufacturing
Metal air cargo containers manufacturing
Metal barrels manufacturing
Vacuum bottles and jugs manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing foil containers--are classified in U.S. Industry 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing;
- Manufacturing metal cans--are classified in U.S. Industry 332431, Metal Can Manufacturing;
- Reconditioning barrels and drums--are classified in Industry 811310, Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance; and
- Manufacturing heavy gauge metal containers--are classified in Industry 332420, Metal Tank (Heavy Gauge) Manufacturing.

3325 Hardware Manufacturing

33251 Hardware Manufacturing

See industry description for 332510 below.

332510 Hardware Manufacturing

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated, time locks).

Cross-References. Establishments primarily engaged in--

- Manufacturing bolts, nuts, screws, rivets, washers, hose clamps, and turn buckles--are classified in U.S. Industry 332722, Bolt, Nut, Screw, Rivet, and Washer Manufacturing;
- Manufacturing nails and spikes from wire drawn elsewhere--are classified in U.S. Industry 332618, Other Fabricated Wire Product Manufacturing;
- Manufacturing metal furniture parts (except hardware)--are classified in U.S. Industry 337215, Showcase, Partition, Shelving, and Locker Manufacturing;
- Drawing wire and manufacturing nails and spikes--are classified in Subsector 331, Primary Metal Manufacturing;
- Manufacturing pole line and transmission hardware--are classified in U.S. Industry 335932, Noncurrent-Carrying Wiring Device Manufacturing;
- Manufacturing coin-operated locking mechanisms--are classified in U.S. Industry 333311, Automatic Vending Machine Manufacturing;
- Manufacturing time locks--are classified in U.S. Industry 334518, Watch, Clock, and Part Manufacturing;
- Manufacturing fireplace fixtures and equipment, traps, handcuffs and leg irons, ladder jacks, and other like metal products--are classified in U.S. Industry 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing;
- Manufacturing fire hose nozzles and couplings--are classified in U.S. Industry 332919, Other Metal Valve and Pipe Fitting Manufacturing; and
- Manufacturing luggage and utility racks--are classified in U.S. Industry 336399, All Other Motor Vehicle Parts Manufacturing.

3326 Spring and Wire Product Manufacturing

33261 Spring and Wire Product Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing steel springs by forming, such as cutting, bending, and heat winding metal rod or strip stock and/or (2) manufacturing wire springs and fabricated wire products from wire drawn

elsewhere (except watch and clock springs).

Cross-References. Establishments primarily engaged in--

- Manufacturing watch and clock springs from purchased wire--are classified in Industry 33451, Navigational, Measuring, Electromedical, and Control Instruments Manufacturing;
- Drawing wire and manufacturing wire products--are classified in Subsector 331, Primary Metal Manufacturing; and
- Manufacturing nonferrous insulated wire from wire drawn elsewhere--are classified in Industry 33592, Communication and Energy Wire and Cable Manufacturing.

332611 Spring (Heavy Gauge) Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding rod or strip stock.

Cross-References. Establishments primarily engaged in--

- Manufacturing light gauge springs from purchased wire or strip--are classified in U.S. Industry 332612, Spring (Light Gauge) Manufacturing; and
- Drawing wire and manufacturing wire spring--are classified in Subsector 331, Primary Metal Manufacturing.

332612 Spring (Light Gauge) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

Cross-References. Establishments primarily engaged in--

- Manufacturing watch and clock springs--are classified in U.S. Industry 334518, Watch, Clock, and Part Manufacturing;
- Manufacturing heavy gauge springs--are classified in U.S. Industry 332611, Spring (Heavy Gauge) Manufacturing; and
- Drawing wire and manufacturing wire spring--are classified in Subsector 331, Primary Metal Manufacturing.

332618 Other Fabricated Wire Product Manufacturing^{US}

This industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

Illustrative Examples:

Barbed wire made from purchased wire
Chain link fencing and fence gates made from purchased wire
Metal baskets made from purchased wire
Nails, brads, and staples made from purchased wire
Noninsulated wire cable made from purchased wire
Paper clips made from purchased wire
Woven wire cloth made from purchased wire

Cross-References. Establishments primarily engaged in--

- Drawing wire and manufacturing wire products--are classified in Sector 331, Primary Metal Manufacturing;
- Manufacturing heavy gauge springs--are classified in U.S. Industry 332611, Spring (Heavy Gauge) Manufacturing;
- Manufacturing light gauge springs from purchased wire or strip--are classified in U.S. Industry 332612, Spring (Light Gauge) Manufacturing; and
- Insulating nonferrous wire from wire drawn elsewhere--are classified in Industry 33592, Communication and Energy Wire and Cable Manufacturing.

3327 Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing

33271 Machine Shops

See industry description for 332710 below.

332710 Machine Shops

This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

Cross-References. Establishments primarily engaged in--

- Repairing industrial machinery and equipment--are classified in Industry 81131, Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance; and
- Manufacturing parts (except on a job or order basis) for machinery and equipment--are generally classified in the same manufacturing industry that makes complete machinery and equipment.

33272 Turned Product and Screw, Nut, and Bolt Manufacturing

This industry comprises establishments primarily engaged in (1) machining precision turned products or (2) manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners. Included in this industry are establishments primarily engaged manufacturing parts for machinery and equipment on a customized basis.

Cross-References.

Establishments primarily engaged in manufacturing plastics fasteners are classified in Industry 32619, Other Plastics Product Manufacturing.

332721 Precision Turned Product Manufacturing^{US}

This U.S. industry comprises establishments known as precision turned manufacturers primarily engaged in machining precision products of all materials on a job or order basis. Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

Cross-References.

Establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, washers, and other industrial fasteners on machines, such as headers, threaders, and nut forming machines, are classified in U.S. Industry 332722, Bolt, Nut, Screw, Rivet, and Washer Manufacturing.

332722 Bolt, Nut, Screw, Rivet, and Washer Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, and washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

Cross-References. Establishments primarily engaged in--

- Manufacturing precision turned products--are classified in U.S. Industry 332721, Precision Turned Product Manufacturing; and
- Plastics fasteners--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing.

3328 Coating, Engraving, Heat Treating, and Allied Activities

33281 Coating, Engraving, Heat Treating, and Allied Activities

This industry comprises establishments primarily engaged in one or more of the

following: (1) heat treating metals and metal products; (2) enameling, lacquering, varnishing metals and metal products; (3) hot dip galvanizing metals and metal products; (4) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (5) powder coating metals and metal products; (6) electroplating, plating, anodizing, coloring, and finishing metals and metal products; and (7) providing other metal surfacing services for the trade. Establishments in this industry coat engravings and heat treat metals and metal formed products fabricated elsewhere.

Cross-References. Establishments primarily engaged in--

- Engraving, chasing or etching jewelry, metal personal goods, or precious (except precious plated) metal flatware and other plated ware--are classified in Industry 33991, Jewelry and Silverware Manufacturing;
- Engraving, chasing or etching printing plates--are classified in Industry 32312, Support Activities for Printing; and
- Both fabricating and coating, engraving, and heat treating metals and metal products--are classified in manufacturing according to the product made.

332811 Metal Heat Treating^{US}

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing, metals and metal products for the trade.

Cross-References.

Establishments primarily engaged in both fabricating and heat treating metal products are classified in the Manufacturing sector according to the product made.

332812 Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) enameling, lacquering, and varnishing metals and metal products; (2) hot dip galvanizing metals and metal products; (3) engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates); (4) powder coating metals and metal products; and (5) providing other metal surfacing services for the trade.

Cross-References. Establishments primarily engaged in--

- Both fabricating and coating and engraving products--are classified in the Manufacturing sector according to the product made;

- Engraving, chasing or etching jewelry, metal personal goods, or precious metal products (except precious plated metal flatware and other plated ware)--are classified in Industry 33991, Jewelry and Silverware Manufacturing; and
- Engraving, chasing or etching printing plates--are classified in U.S. Industry 323122, Prepress Services.

332813 Electroplating, Plating, Polishing, Anodizing, and Coloring^{US}

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

Cross-References.

Establishments primarily engaged in both fabricating and electroplating, plating, polishing, anodizing, and coloring products are classified in the Manufacturing sector according to the product made.

3329 Other Fabricated Metal Product Manufacturing

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 Metal Valve Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves: (1) industrial valves; (2) fluid power valves and hose fittings; (3) plumbing fixture fittings and trim; and (4) other metal valves and pipe fittings.

Cross-References. Establishments primarily engaged in--

- Manufacturing fluid power cylinder and pumps--are classified in Industry 33399, All Other General Purpose Machinery Manufacturing;
- Manufacturing intake and exhaust valves for internal combustion engines--are classified in Industry 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing;
- Manufacturing metal shower rods and metal couplings from purchased metal pipe--are classified in Industry 33299, All Other Fabricated Metal Product Manufacturing;
- Manufacturing plastics aerosol spray nozzles--are classified in Industry 32619, Other Plastics Product Manufacturing;

- Casting iron pipe fittings and couplings without machining--are classified in Industry 33151, Ferrous Metal Foundries; and
- Manufacturing plastics pipe fittings and couplings--are classified in Industry 32612, Plastics Pipe, Pipe Fitting, and Unsupported Profile Shape Manufacturing.

332911 Industrial Valve Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

Illustrative Examples:

Complete fire hydrants manufacturing
 Industrial-type ball valves manufacturing
 Industrial-type butterfly valves manufacturing
 Industrial-type check valves manufacturing
 Industrial-type gate valves manufacturing
 Industrial-type globe valves manufacturing
 Industrial-type plug valves manufacturing
 Industrial-type solenoid valves (except fluid power) manufacturing
 Industrial-type steam traps manufacturing
 Valves for nuclear applications manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing fluid power valves--are classified in U.S. Industry 332912, Fluid Power Valve and Hose Fitting Manufacturing; and
- Manufacturing plumbing and heating valves--are classified in U.S. Industry 332919, Other Metal Valve and Pipe Fitting Manufacturing.

332912 Fluid Power Valve and Hose Fitting Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

Illustrative Examples:

Fluid power aircraft subassemblies
 Hose assemblies for fluid power systems
 Hydraulic and pneumatic hose and tube fittings
 Hydraulic and pneumatic valves

Cross-References. Establishments primarily engaged in--

- Manufacturing fluid power cylinders--are classified in U.S. Industry 333995, Fluid Power Cylinder and Actuator Manufacturing;
- Manufacturing fluid power pumps--are classified in U.S. Industry 333996, Fluid Power Pump and Motor Manufacturing;
- Manufacturing intake and exhaust valves for internal combustion engines--are classified in U.S. Industry 336311, Carburetor, Piston, Piston Ring, and Valve Manufacturing;
- Manufacturing industrial-type valves--are classified in U.S. Industry 332911, Industrial Valve Manufacturing; and
- Manufacturing plumbing and heating valves--are classified in U.S. Industry 332919, Other Metal Valve and Pipe Fitting Manufacturing.

332913 Plumbing Fixture Fitting and Trim Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

Cross-References. Establishments primarily engaged in--

- Manufacturing metal shower rods--are classified in U.S. Industry 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing; and
- Manufacturing fire hose nozzles, lawn hose nozzles, water traps, and couplings--are classified in U.S. Industry 332919, Other Metal Valve and Pipe Fitting Manufacturing.

332919 Other Metal Valve and Pipe Fitting Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

Illustrative Examples:

Aerosol valves manufacturing
 Firefighting nozzles manufacturing
 Lawn hose nozzles manufacturing
 Lawn sprinklers manufacturing
 Metal hose couplings (except fluid power) manufacturing
 Metal pipe flanges and flange unions manufacturing
 Plumbing and heating in-line valves (e.g., check, cutoff, stop) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing fluid power valves and hose fittings--are classified in U.S. Industry 332912, Fluid Power Valve and Hose Fitting Manufacturing;

- Manufacturing industrial valves--are classified in U.S. Industry 332911, Industrial Valve Manufacturing;
- Manufacturing plastics aerosol spray nozzles--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing;
- Casting iron pipe fittings and couplings without machining--are classified in U.S. Industry 331511, Iron Foundries;
- Manufacturing metal couplings from purchased metal pipe--are classified in U.S. Industry 332996, Fabricated Pipe and Pipe Fitting Manufacturing; and
- Manufacturing plastics pipe fittings and couplings--are classified in U.S. Industry 326122, Plastics Pipe and Pipe Fitting Manufacturing.

33299 All Other Fabricated Metal Product Manufacturing

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

Illustrative Examples:

Ammunition manufacturing
 Ball and roller bearing manufacturing
 Enameled iron and metal sanitary ware manufacturing
 Fabricated pipe and pipe fittings made from purchased metal pipe
 Foil container (except bags) manufacturing
 Industrial pattern manufacturing
 Metal safes manufacturing
 Portable metal ladder manufacturing
 Small arms and other ordnance manufacturing
 Steel wool manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing forging and stamping and powder metallurgy parts--are classified in Industry 33211, Forging and Stamping;
- Manufacturing cutlery and handtools--are classified in Industry 33221, Cutlery and Handtool Manufacturing;
- Manufacturing architectural and structural metals--are classified in Industry Group 3323, Architectural and Structural Metals Manufacturing;
- Manufacturing boilers, tanks, and shipping containers--are classified in Industry Group 3324, Boiler, Tank, and Shipping Container Manufacturing;
- Manufacturing hardware and safe and vault locks--are classified in Industry 33251, Hardware Manufacturing;
- Manufacturing spring and wire products--are classified in Industry 33261, Spring and Wire Product Manufacturing;

- Manufacturing machine shop products, turned products, screws, and nuts and bolts--are classified in Industry Group 3327, Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing;
- Coating, engraving, heat treating and allied activities--are classified in Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities;
- Manufacturing plain bearings--are classified in Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing;
- Manufacturing military tanks--are classified in Industry 33699, Other Transportation Equipment Manufacturing;
- Manufacturing guided missiles--are classified in Industry 33641, Aerospace Product and Parts Manufacturing;
- Manufacturing cast iron pipe and fittings--are classified in Industry 33151, Ferrous Metal Foundries;
- Manufacturing pipe system fittings (except cast iron couplings and couplings made from purchased pipe) and metal aerosol spray nozzles--are classified in Industry 33291, Metal Valve Manufacturing;
- Manufacturing welded and seamless steel pipes from purchased steel--are classified in Industry 33121, Iron and Steel Pipe and Tube Manufacturing from Purchased Steel;
- Manufacturing plastics plumbing fixtures and plastics portable chemical toilets--are classified in Industry 32619, Other Plastics Product Manufacturing;
- Manufacturing vitreous and semivitreous pottery sanitary ware--are classified in Industry 32711, Pottery, Ceramics, and Plumbing Fixture Manufacturing;
- Manufacturing blasting caps, detonating caps, and safety fuses--are classified in Industry 32592, Explosives Manufacturing;
- Manufacturing fireworks--are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing;
- Manufacturing metal furniture frames--are classified in Industry 33721, Office Furniture (including Fixtures) Manufacturing;
- Manufacturing nonprecious metal trophies--are classified in Industry 33991, Jewelry and Silverware Manufacturing;
- Manufacturing metal mechanically refrigerated drinking fountains--are classified in Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing;
- Manufacturing metal foil bags--are classified in Industry 32222, Paper Bag and Coated and Treated Paper Manufacturing;
- Manufacturing aluminum foil--are classified in Industry 33131, Alumina and Aluminum Production and Processing;
- Manufacturing metal foil (except aluminum)--are classified in Industry Group 3314, Nonferrous Metal (except Aluminum) Production and Process; and
- Manufacturing metal burial vaults--are classified in Industry 33999, All Other Miscellaneous Manufacturing.

332991 Ball and Roller Bearing Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing ball

and roller bearings of all materials.

Cross-References.

Establishments primarily engaged in manufacturing plain bearings are classified in U.S. Industry 333613, Mechanical Power Transmission Equipment Manufacturing.

332992 Small Arms Ammunition Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

Cross-References. Establishments primarily engaged in--

- Manufacturing ammunition (except small arms)--are classified in U.S. Industry 332993, Ammunition (except Small Arms) Manufacturing;
- Manufacturing blasting and detonating caps and safety fuses--are classified in Industry 325920, Explosives Manufacturing; and
- Manufacturing fireworks--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing.

332993 Ammunition (except Small Arms) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

Cross-References. Establishments primarily engaged in--

- Manufacturing small arms ammunition--are classified in U.S. Industry 332992, Small Arms Ammunition Manufacturing;
- Manufacturing blasting and detonating caps and safety fuses--are classified in Industry 325920, Explosives Manufacturing;
- Manufacturing fireworks--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing; and
- Manufacturing guided missiles--are classified in U.S. Industry 336414, Guided Missile and Space Vehicle Manufacturing.

332994 Small Arms Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

Cross-References.

Establishments primarily engaged in manufacturing firearms (except small) are classified in U.S. Industry 332995, Other Ordnance and Accessories Manufacturing.

332995 Other Ordnance and Accessories Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

Cross-References. Establishments primarily engaged in--

- Manufacturing small arms--are classified in U.S. Industry 332994, Small Arms Manufacturing;
- Manufacturing military tanks--are classified in U.S. Industry 336992, Military Armored Vehicle, Tank, and Tank Component Manufacturing; and
- Manufacturing guided missiles--are classified in U.S. Industry 336414, Guided Missile and Space Vehicle Manufacturing.

332996 Fabricated Pipe and Pipe Fitting Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in fabricating (such as cutting, threading and bending) metal pipes and pipe fittings made from purchased metal pipe.

Cross-References. Establishments primarily engaged in--

- Manufacturing cast iron pipe and fittings--are classified in U.S. Industry 331511, Iron Foundries;
- Manufacturing pipe system fittings (except cast iron couplings)--are classified in U.S. Industry 332919, Other Metal Valve and Pipe Fitting Manufacturing; and
- Manufacturing welded and seamless steel pipes from purchased steel--are classified in Industry 331210, Iron and Steel Pipe and Tube Manufacturing from Purchased Steel.

332997 Industrial Pattern Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

332998 Enameled Iron and Metal Sanitary Ware Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing

enameled iron and metal sanitary ware.

Cross-References. Establishments primarily engaged in--

- Manufacturing plastics plumbing fixtures--are classified in U.S. Industry 326191, Plastics Plumbing Fixture Manufacturing;
- Manufacturing vitreous and semivitreous pottery sanitary ware--are classified in U.S. Industry 327111, Vitreous China Plumbing Fixture and China and Earthenware Bathroom Accessories Manufacturing;
- Manufacturing plastics portable chemical toilets--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing; and
- Manufacturing metal mechanically refrigerated drinking fountains--are classified in U.S. Industry 333415, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing.

332999 All Other Miscellaneous Fabricated Metal Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

Illustrative Examples:

Foil containers (except bags) manufacturing
Metal hair curlers manufacturing
Metal ironing boards manufacturing
Metal pipe hangers and supports manufacturing
Metal pallets manufacturing
Metal safes manufacturing
Metal vaults (except burial) manufacturing
Permanent metallic magnets manufacturing
Portable metal ladders manufacturing
Steel wool manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing forgings and stampings--are classified in Industry 33211, Forgings and Stampings;
- Manufacturing cutlery and handtools--are classified in Industry 33221, Cutlery and Handtool Manufacturing;

- Manufacturing architectural and structural metals--are classified in Industry Group 3323, Architectural and Structural Metals Manufacturing;
- Manufacturing boilers, tanks, and shipping containers--are classified in Industry Group 3324, Boiler, Tank, and Shipping Container Manufacturing;
- Manufacturing hardware and safe and vault locks--are classified in Industry 332510, Hardware Manufacturing;
- Manufacturing spring and wire products--are classified in Industry 33261, Spring and Wire Product Manufacturing;
- Manufacturing machine shop products, turned products, screws, and nut and bolt--are classified in Industry Group 3327, Machine Shops; Turned Product; and Screw Nut, and Bolt Manufacturing;
- Coating, engraving, heat treating and allied activities--are classified in Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities;
- Manufacturing ball and roller bearings--are classified in U.S. Industry 332991, Ball and Roller Bearing Manufacturing;
- Manufacturing small arms ammunition--are classified in U.S. Industry 332992, Small Arms Ammunition Manufacturing;
- Manufacturing ammunition (except small arms)--are classified in U.S. Industry 332993, Ammunition (except Small Arms) Manufacturing;
- Manufacturing small firearms that are carried and fired by the individual--are classified in U.S. Industry 332994, Small Arms Manufacturing;
- Manufacturing ordnances (except small) and accessories--are classified in U.S. Industry 332995, Other Ordnance and Accessories Manufacturing;
- Manufacturing metal pipes and pipe fittings from metal pipe produced elsewhere--are classified in U.S. Industry 332996, Fabricated Pipe and Pipe Fitting Manufacturing;
- Manufacturing cast iron pipe and fittings--are classified in U.S. Industry 331511, Iron Foundries;
- Manufacturing welded and seamless steel pipes from purchased steel--are classified in Industry 331210, Iron and Steel Pipe and Tube Manufacturing form Purchased Steel;
- Manufacturing metal furniture frames--are classified in U.S. 337215, Showcase, Partition, Shelving, and Locker Manufacturing;
- Manufacturing powder metallurgy parts--are classified in U.S. Industry 332117, Powder Metallurgy Part Manufacturing;
- Manufacturing metal boxes--are classified in U.S. Industry 332439, Other Metal Container Manufacturing;
- Manufacturing metal nozzles, hose couplings, and aerosol valves--are classified in U.S. Industry 332919, Other Metal Valve and Pipe Fitting Manufacturing;
- Manufacturing nonprecious metal trophies--are classified in U.S. Industry 339914, Costume Jewelry and Novelty Manufacturing;
- Manufacturing metal foil bags--are classified in U.S Industry 322223, Plastics, Foil, and Coated Paper Bag Manufacturing;
- Manufacturing aluminum foil--are classified in Industry 33131, Alumina and Aluminum Production and Processing;
- Manufacturing metal foil (except aluminum)--are classified in Industry Group

- 3314, Nonferrous Metal (except Aluminum) Production and Processing; and Manufacturing metal burial vaults--are classified in U.S. Industry 339995, Burial Casket Manufacturing.

333 Machinery Manufacturing

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special purpose machinery). Three industry groups consist of special purpose machinery--Agriculture, Construction, and Mining Machinery Manufacturing; Industrial Machinery Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General Purpose Machinery Manufacturing.

3331 Agriculture, Construction, and Mining Machinery Manufacturing

33311 Agricultural Implement Manufacturing

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment and other powered home lawn and garden equipment.

Illustrative Examples:

Combines (i.e., harvester-threshers) manufacturing
Cotton ginning machinery manufacturing
Farm tractors and attachments manufacturing

Farm-type fertilizing machinery manufacturing
Haying machines manufacturing
Milking machines manufacturing
Powered lawnmowers manufacturing
Planting machines, farm-type, manufacturing
Poultry brooders, feeders, and waterers manufacturing
Residential-type snowblowers and throwers manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing agricultural handtools and nonpowered lawnmowers--are classified in Industry 33221, Cutlery and Handtool Manufacturing;
- Manufacturing farm conveyors--are classified in Industry 33392, Material Handling Equipment Manufacturing; and
- Manufacturing forestry machinery and equipment such as brush, limb and log chippers; log splitters; and equipment--are classified in Industry 33312, Construction Machinery Manufacturing.

333111 Farm Machinery and Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

Illustrative Examples:

Combines (i.e., harvester-threshers) manufacturing
Cotton ginning machinery manufacturing
Farm-type feed processing equipment manufacturing
Farm-type fertilizing machinery manufacturing
Farm-type planting machines manufacturing
Farm-type plows manufacturing
Farm-type tractors and attachments manufacturing
Haying machines manufacturing
Milking machines manufacturing
Poultry brooders, feeders, and waterers manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing farm conveyors--are classified in U.S. Industry 333922, Conveyor and Conveying Equipment Manufacturing;
- Manufacturing tractors and lawnmowers for home lawn and garden care--are classified in U.S. Industry 333112, Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing; and
- Manufacturing construction-type tractors--are classified in Industry 333120,

Construction Machinery Manufacturing.

333112 Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawnmowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

Cross-References. Establishments primarily engaged in--

- Manufacturing commercial mowing and other turf and grounds care equipment--are classified in U.S. Industry 333111, Farm Machinery and Equipment Manufacturing; and
- Manufacturing nonpowered lawn and garden shears, edgers, pruners, and lawnmowers--are classified in Industry 33221, Cutlery and Handtool Manufacturing.

33312 Construction Machinery Manufacturing

See industry description for 333120 below.

333120 Construction Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

Illustrative Examples:

Backhoes manufacturing
Bulldozers manufacturing
Construction and surface mining-type rock drill bits manufacturing
Construction-type tractors and attachments manufacturing
Off-highway trucks manufacturing
Pile-driving equipment manufacturing
Portable crushing, pulverizing, and screening machinery manufacturing
Powered post hole diggers manufacturing
Road graders manufacturing
Surface mining machinery (except drilling) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing drilling and underground mining machinery and equipment--are classified in Industry 33313, Mining and Oil and Gas Field Machinery Manufacturing;

- Manufacturing industrial plant overhead traveling cranes, hoists, truck-type cranes and hoists, winches, aerial work platforms, and automotive wrecker hoists--are classified in Industry 33392, Material Handling Equipment Manufacturing; and
- Manufacturing rail layers, ballast distributors and other railroad track-laying equipment--are classified in Industry 336510, Railroad Rolling Stock Manufacturing.

33313 Mining and Oil and Gas Field Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

Illustrative Examples:

Coal breakers, cutters, and pulverizers manufacturing
 Core drills, underground mining-type, manufacturing
 Mineral processing and beneficiating machinery manufacturing
 Mining cars manufacturing
 Oil and gas field-type derricks manufacturing
 Oil and gas field-type drilling machinery and equipment (except offshore floating platforms) manufacturing
 Stationary rock crushing machinery manufacturing
 Water well drilling machinery manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing offshore oil and gas well drilling and production floating platforms--are classified in Industry 33661, Ship and Boat Building;
- Manufacturing surface mining machinery and equipment--are classified in Industry 33312, Construction Machinery Manufacturing;
- Manufacturing coal and ore conveyors--are classified in Industry 33392, Material Handling Equipment Manufacturing;
- Manufacturing underground mining locomotives--are classified in Industry 33651, Railroad Rolling Stock Manufacturing; and
- Manufacturing pumps and pumping equipment--are classified in Industry 33391, Pump and Compressor Manufacturing.

333131 Mining Machinery and Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, rock drills and (2) manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

Cross-References. Establishments primarily engaged in--

- Manufacturing surface mining machinery and equipment--are classified in Industry 333120, Construction Machinery Manufacturing;
- Manufacturing well-drilling machinery--are classified in U.S. Industry 333132, Oil and Gas Field Machinery and Equipment Manufacturing;
- Manufacturing coal and ore conveyors--are classified in U.S. Industry 333922, Conveyor and Conveying Equipment Manufacturing; and
- Manufacturing underground mining locomotives--are classified in Industry 336510, Railroad Rolling Stock Manufacturing.

333132 Oil and Gas Field Machinery and Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks and (2) manufacturing water well drilling machinery.

Cross-References. Establishments primarily engaged in--

- Manufacturing offshore oil and gas well drilling and production floating platforms--are classified in U.S. Industry 336611, Ship Building and Repairing;
- Manufacturing underground mining drills--are classified in U.S. Industry 333131, Mining Machinery and Equipment Manufacturing; and
- Manufacturing pumps and pumping equipment--are classified in U.S. Industry 333911, Pump and Pumping Equipment Manufacturing.

3332 Industrial Machinery Manufacturing

33321 Sawmill and Woodworking Machinery Manufacturing

See industry description for 333210 below.

333210 Sawmill and Woodworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing sawmill and wood-working machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

Cross-References. Establishments primarily engaged in--

- Manufacturing planes, axes, drawknives, and handsaws--are classified in Industry 33221, Cutlery and Handtool Manufacturing; and
- Manufacturing power-driven handtools--are classified in U.S. Industry 333991,

Power-Driven Handtool Manufacturing.

33322 Plastics and Rubber Industry Machinery Manufacturing

See industry description for 333220 below.

333220 Plastics and Rubber Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

Cross-References.

Establishments primarily engaged in manufacturing industrial metal molds for plastics and rubber products making machinery are classified in U.S. Industry 333511, Industrial Mold Manufacturing.

33329 Other Industrial Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

Illustrative Examples:

Bakery ovens manufacturing
Chemical processing machinery and equipment manufacturing
Glass making machinery (e.g., blowing, forming, molding) manufacturing
Paper making machinery manufacturing
Petroleum refinery machinery manufacturing
Printing presses (except textile) manufacturing
Semiconductor making machinery manufacturing
Sewing machines (including household-type) manufacturing
Tannery machinery manufacturing
Textile making machinery (except sewing machines) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing agricultural and farm-type, construction, and mining machinery--are classified in Industry Group 3331, Agriculture, Construction, and Mining Machinery Manufacturing;
- Manufacturing sawmill and woodworking machinery--are classified in Industry 33321, Sawmill and Woodworking Machinery Manufacturing;

- Manufacturing plastics and rubber products making machinery--are classified in Industry 33322, Plastics and Rubber Industry Machinery Manufacturing;
- Manufacturing food and beverage packaging machinery--are classified in Industry 33399, All Other General Purpose Machinery Manufacturing;
- Manufacturing commercial and industrial refrigeration and freezer equipment--are classified in Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing;
- Manufacturing commercial-type cooking and food warming equipment, automotive maintenance equipment (except mechanics' handtools) and photocopiers--are classified in Industry 33331, Commercial and Service Industry Machinery Manufacturing; and
- Manufacturing mechanics' handtools--are classified in Industry 33221, Cutlery and Handtool Manufacturing.

333291 Paper Industry Machinery Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

Cross-References.

Establishments primarily engaged in manufacturing printing machinery are classified in U.S. Industry 333293, Printing Machinery and Equipment Manufacturing.

333292 Textile Machinery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

Illustrative Examples:

Drawing machinery for textiles manufacturing
 Extruding machinery for yarn manufacturing
 Finishing machinery for textiles manufacturing
 Knitting machinery manufacturing
 Spinning machinery for textiles manufacturing
 Texturizing machinery for textiles manufacturing
 Weaving machinery manufacturing

Cross-References.

Establishments primarily engaged in manufacturing sewing machines are classified in U.S. Industry 333298, All Other Industrial Machinery Manufacturing.

333293 Printing Machinery and Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, typesetting machinery, and bindery machinery.

Cross-References. Establishments primarily engaged in--

- Manufacturing textile printing machinery--are classified in U.S. Industry 333292, Textile Machinery Manufacturing; and
- Manufacturing photocopiers--are classified in U.S. Industry 333315, Photographic and Photocopying Equipment Manufacturing.

333294 Food Product Machinery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

Cross-References. Establishments primarily engaged in--

- Manufacturing food and beverage packaging machinery--are classified in U.S. Industry 333993, Packaging Machinery Manufacturing;
- Manufacturing commercial and industrial refrigeration and freezer equipment--are classified in U.S. Industry 333415, Air Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing; and
- Manufacturing commercial-type cooking and food warming equipment--are classified in U.S. Industry 333319, Other Commercial and Service Industry Machinery Manufacturing.

333295 Semiconductor Machinery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

Cross-References. Establishments primarily engaged in--

- Manufacturing printed circuit board manufacturing machinery--are classified in U.S. Industry 333298, All Other Industrial Machinery Manufacturing; and
- Manufacturing semiconductor testing instruments--are classified in U.S.

Industry 334515, Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals.

333298 All Other Industrial Machinery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

Illustrative Examples:

Chemical processing machinery and equipment manufacturing
Cigarette making machinery manufacturing
Circuit board making machinery manufacturing
Glass making machinery (e.g., blowing, forming, molding) manufacturing
Light bulb and tube (i.e., electric lamp) machinery manufacturing
Petroleum refining machinery manufacturing
Sewing machines (including household-type) manufacturing
Shoe making and repairing machinery manufacturing
Tannery machinery manufacturing
Wire and cable insulating machinery manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing agricultural and farm-type, construction, and mining machinery--are classified in Industry Group 3331, Agriculture, Construction, and Mining Machinery Manufacturing;
- Manufacturing sawmill and woodworking machinery--are classified in Industry 333210, Sawmill and Woodworking Machinery Manufacturing;
- Manufacturing plastics and rubber products making machinery--are classified in Industry 333220, Plastics and Rubber Industry Machinery Manufacturing;
- Manufacturing paper and paperboard making machinery--are classified in U.S. Industry 333291, Paper Industry Machinery Manufacturing;
- Manufacturing textile machinery--are classified in U.S. Industry 333292, Textile Machinery Manufacturing;
- Manufacturing printing and bookbinding machinery and equipment--are classified in U.S. Industry 333293, Printing Machinery and Equipment Manufacturing;
- Manufacturing food and beverage manufacturing-type machinery--are classified in U.S. Industry 333294, Food Product Machinery Manufacturing;
- Manufacturing semiconductor making machinery--are classified in U.S. Industry 333295, Semiconductor Machinery Manufacturing;
- Manufacturing automotive maintenance equipment (except mechanics'

handtools)--are classified in U.S. Industry 333319, Other Commercial and Service Industry Machinery Manufacturing; and

- Manufacturing mechanics' handtools--are classified in U.S. Industry 332212, Hand and Edge Tool Manufacturing.

3333 Commercial and Service Industry Machinery Manufacturing

33331 Commercial and Service Industry Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and dry-cleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

Cross-References. Establishments primarily engaged in--

- Manufacturing household-type appliances--are classified in Industry Group 3352, Household Appliance Manufacturing;
- Manufacturing computer and peripheral equipment (including point-of-sale terminals and funds transfer devices (ATMs))--are classified in Industry 33411, Computer and Peripheral Equipment Manufacturing;
- Manufacturing facsimile equipment--are classified in Industry 33421, Telephone Apparatus Manufacturing;
- Manufacturing timeclocks, timestamps, and electron and proton microscopes--are classified in Industry 33451, Navigational, Measuring, Electromedical, and Control Instruments Manufacturing;
- Manufacturing pencil sharpeners and staplers--are classified in Industry 33994, Office Supplies (except Paper) Manufacturing;
- Manufacturing sensitized film, paper, cloth, and plates, and prepared photographic chemicals--are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing;
- Manufacturing ophthalmic focus lenses--are classified in Industry 33911, Medical Equipment and Supplies Manufacturing;
- Manufacturing television, video, and digital cameras--are classified in Subsector 334, Computer and Electronic Product Manufacturing;
- Manufacturing coin-operated arcade games--are classified in Industry 33999, All Other Miscellaneous Manufacturing;
- Manufacturing mechanics' handtools--are classified in Industry 33221, Cutlery and Handtool Manufacturing;
- Manufacturing molded plastics lens blanks--are classified in Industry 32619, Other Plastics Product Manufacturing; and
- Manufacturing molded glass lens blanks--are classified in Industry 32721, Glass and Glass Product Manufacturing.

333311 Automatic Vending Machine Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing coin, token, currency or magnetic card operated vending machines and/or (2) manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

Cross-References.

Establishments primarily engaged in manufacturing coin-operated arcade games are classified in U.S. Industry 339999, All Other Miscellaneous Manufacturing.

333312 Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

Cross-References.

Establishments primarily engaged in manufacturing household-type laundry equipment are classified in U.S. Industry 335224, Household Laundry Equipment Manufacturing.

333313 Office Machinery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mailhandling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

Cross-References. Establishments primarily engaged in--

- Manufacturing computers and peripheral (including point-of-sale terminals and automatic teller machines (ATMs)) equipment--are classified in Industry 33411, Computer and Peripheral Equipment Manufacturing;
- Manufacturing photocopy equipment--are classified in U.S. Industry 333315, Photographic and Photocopying Equipment Manufacturing;
- Manufacturing facsimile equipment--are classified in Industry 334210, Telephone Apparatus Manufacturing;
- Manufacturing timeclocks and timestamps--are classified in U.S. Industry 334518, Watch, Clock, and Part Manufacturing; and
- Manufacturing pencil sharpeners, staplers, staple removers, hand paper punches, cutters, trimmers, and other hand office equipment--are classified in U.S. Industry 339942, Lead Pencil and Art Good Manufacturing.

333314 Optical Instrument and Lens Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

Cross-References. Establishments primarily engaged in--

- Manufacturing ophthalmic focus lenses--are classified in U.S. Industry 339115, Ophthalmic Goods Manufacturing;
- Manufacturing electron and proton microscopes--are classified in U.S. Industry 334516, Analytical Laboratory Instrument Manufacturing;
- Manufacturing molded plastics lens blanks--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing; and
- Manufacturing molded glass lens blanks--are classified in U.S. Industry 327212, Other Pressed and Blown Glass and Glassware Manufacturing.

333315 Photographic and Photocopying Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, digital projectors, film developing equipment, photocopying equipment, and microfilm equipment).

Cross-References. Establishments primarily engaged in--

- Manufacturing sensitized film, paper, cloth, and plates, and prepared photographic chemicals--are classified in U.S. Industry 325992, Photographic Film, Paper, Plate, and Chemical Manufacturing;
- Manufacturing photographic lenses--are classified in U.S. Industry 333314, Optical Instrument and Lens Manufacturing; and
- Manufacturing television, video, and digital cameras--are classified in Subsector 334, Computer and Electronic Product Manufacturing.

333319 Other Commercial and Service Industry Machinery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

Illustrative Examples:

Carnival and amusement park rides manufacturing
Carwashing machinery manufacturing
Commercial-type coffee makers and urns manufacturing
Commercial-type cooking equipment (i.e., fryers, microwave ovens, ovens, ranges) manufacturing
Industrial and commercial-type vacuum cleaners manufacturing
Mechanical carpet sweepers manufacturing
Motor vehicle alignment equipment manufacturing
Power washer cleaning equipment manufacturing
Teaching machines (e.g., flight simulators) manufacturing
Water treatment equipment manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing automatic vending machines--are classified in U.S. Industry 333311, Automatic Vending Machine Manufacturing;
- Manufacturing commercial laundry drycleaning and pressing machines--are classified in U.S. Industry 333312, Commercial Laundry, Drycleaning, and Pressing Machine Manufacturing;
- Manufacturing office machinery--are classified in U.S. Industry 333313, Office Machinery Manufacturing;
- Manufacturing optical instruments and lenses--are classified in U.S. Industry 333314, Optical Instrument and Lens Manufacturing;
- Manufacturing photographic and photocopying equipment--are classified in U.S. Industry 333315, Photographic and Photocopying Equipment Manufacturing;
- Manufacturing household-type appliances--are classified in Industry Group 3352, Household Appliance Manufacturing; and
- Manufacturing mechanics' handtools--are classified in U.S. Industry 332212, Hand and Edge Tool Manufacturing.

3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

33341 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing ventilating, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

Illustrative Examples:

Air-conditioning and warm air heating combination units manufacturing
Air-conditioner filters manufacturing
Attic fans manufacturing
Dust and fume collecting equipment manufacturing
Gas fireplaces manufacturing
Heating boilers manufacturing
Industrial and commercial-type fans manufacturing
Refrigerated counter and display cases manufacturing
Refrigerated drinking fountains manufacturing
Space heaters (except portable electric) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing household-type fans (except attic), portable electric space heaters, humidifiers, dehumidifiers, and air purification equipment--are classified in Industry 33521, Small Electrical Appliance Manufacturing;
- Manufacturing household-type appliances, such as cooking stoves, ranges, refrigerators, and freezers--are classified in Industry 33522, Major Appliance Manufacturing;
- Manufacturing commercial-type cooking equipment--are classified in Industry 33329, Other Industrial Machinery Manufacturing;
- Manufacturing industrial, power, and marine boilers--are classified in Industry 33241, Power Boiler and Heat Exchanger Manufacturing;
- Manufacturing industrial process furnaces and ovens--are classified in Industry 33399, All Other General Purpose Machinery Manufacturing; and
- Manufacturing motor vehicle air-conditioning systems and compressors--are classified in Industry 33639, Other Motor Vehicle Parts Manufacturing.

333411 Air Purification Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

Cross-References. Establishments primarily engaged in--

- Manufacturing air-conditioning units (except motor vehicle)--are classified in U.S. Industry 333415, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing;
- Manufacturing motor vehicle air-conditioning systems and compressors--are classified in U.S. Industry 336391, Motor Vehicle Air-Conditioning Manufacturing;
- Manufacturing household-type fans (except attic) and portable air purification equipment--are classified in U.S. Industry 335211, Electric Housewares and Household Fan Manufacturing; and

- Manufacturing industrial and commercial blowers, industrial and commercial exhaust and ventilating fans, and attic fans--are classified in U.S. Industry 333412, Industrial and Commercial Fan and Blower Manufacturing.

333412 Industrial and Commercial Fan and Blower Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

Cross-References. Establishments primarily engaged in--

- Manufacturing air-conditioning units (except motor vehicle)--are classified in U.S. Industry 333415, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing;
- Manufacturing motor vehicle air-conditioning systems and compressors--are classified in U.S. Industry 336391, Motor Vehicle Air-Conditioning Manufacturing;
- Manufacturing household-type fans (except attic) and portable air purification equipment--are classified in U.S. Industry 335211, Electric Housewares and Household Fan Manufacturing; and
- Manufacturing stationary air purification equipment--are classified in U.S. Industry 333411, Air Purification Equipment Manufacturing.

333414 Heating Equipment (except Warm Air Furnaces) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

Cross-References. Establishments primarily engaged in--

- Manufacturing warm air furnaces--are classified in U.S. Industry 333415, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing;
- Manufacturing electric space heaters--are classified in U.S. Industry 335211, Electric Housewares and Household Fan Manufacturing;
- Manufacturing household-type cooking stoves and ranges--are classified in U.S. Industry 335221, Household Cooking Appliance Manufacturing;
- Manufacturing industrial, power, and marine boilers--are classified in Industry 332410, Power Boiler and Heat Exchanger Manufacturing;
- Manufacturing industrial process furnaces and ovens--are classified in U.S. Industry 333994, Industrial Process Furnace and Oven Manufacturing; and
- Manufacturing commercial-type cooking equipment--are classified in U.S.

Industry 333319, Other Commercial and Service Industry Machinery Manufacturing.

333415 Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or (2) manufacturing commercial and industrial refrigeration and freezer equipment.

Illustrative Examples:

Air-conditioning and warm air heating combination units manufacturing
Air-conditioning compressors (except motor vehicle) manufacturing
Air-conditioning condensers and condensing units manufacturing
Dehumidifiers (except portable electric) manufacturing
Heat pumps manufacturing
Humidifying equipment (except portable) manufacturing
Refrigerated counter and display cases manufacturing
Refrigerated drinking fountains manufacturing
Soda fountain cooling and dispensing equipment manufacturing
Snow making machinery manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing motor vehicle air-conditioning systems and compressors--are classified in U.S. Industry 336391, Motor Vehicle Air-Conditioning Manufacturing;
- Manufacturing household-type refrigerators and freezers--are classified in U.S. Industry 335222, Household Refrigerator and Home Freezer Manufacturing;
- Manufacturing portable electric space heaters, humidifiers, and dehumidifiers--are classified in U.S. Industry 335211, Electric Housewares and Household Fan Manufacturing;
- Manufacturing heating boilers, heating stoves, floor and wall mount furnaces, and electric wall and baseboard heating units--are classified in U.S. Industry 333414, Heating Equipment (except Warm Air Furnaces) Manufacturing; and
- Manufacturing furnace air filters--are classified in U.S. Industry 333411, Air Purification Equipment Manufacturing.

3335 Metalworking Machinery Manufacturing

33351 Metalworking Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools;

cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

Cross-References. Establishments primarily engaged in--

- Manufacturing handtools (except power-driven), cutting dies (except metal cutting), sawblades, and handsaws--are classified in Industry 33221, Cutlery and Handtool Manufacturing;
- Manufacturing casting molds for heavy steel ingots--are classified in Industry 33151, Ferrous Metal Foundries; and
- Manufacturing power-driven handtools and welding and soldering equipment--are classified in Industry 33399, All Other General Purpose Machinery Manufacturing.

333511 Industrial Mold Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

Cross-References.

Establishments primarily engaged in manufacturing casting molds for steel ingots are classified in U.S. Industry 331511, Iron Foundries.

333512 Machine Tool (Metal Cutting Types) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

Illustrative Examples:

Home workshop metal cutting machine tools (except handtools, welding equipment) manufacturing

Metalworking boring machines manufacturing

Metalworking buffing and polishing machines manufacturing

Metalworking drilling machines manufacturing

Metalworking grinding machines manufacturing

Metalworking lathes manufacturing

Metalworking milling machines manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing welding and soldering equipment--are classified in U.S.

- Industry 333992, Welding and Soldering Equipment Manufacturing;
- Manufacturing metal-forming machine tools--are classified in U.S. Industry 333513, Machine Tool (Metal Forming Types) Manufacturing;
- Manufacturing power-driven metal cutting handtools--are classified in U.S. Industry 333991, Power-Driven Handtool Manufacturing; and
- Manufacturing accessories and attachments for metal cutting machine tools--are classified in U.S. Industry 333515, Cutting Tool and Machine Tool Accessory Manufacturing.

333513 Machine Tool (Metal Forming Types) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging and die-casting machines.

Cross-References. Establishments primarily engaged in--

- Manufacturing welding and soldering equipment--are classified in U.S. Industry 333992, Welding and Soldering Equipment Manufacturing;
- Manufacturing metal-cutting machine tools--are classified in U.S. Industry 333512, Machine Tool (Metal Cutting Types) Manufacturing;
- Manufacturing power-driven handtools--are classified in U.S. Industry 333991, Power-Driven Handtool Manufacturing;
- Manufacturing rolling mill machinery and equipment--are classified in U.S. Industry 333516, Rolling Mill Machinery and Equipment Manufacturing; and
- Manufacturing accessories and attachments for metal forming machine tools--are classified in U.S. Industry 333515, Cutting Tool and Machine Tool Accessory Manufacturing.

333514 Special Die and Tool, Die Set, Jig, and Fixture Manufacturing^{US}

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

Cross-References. Establishments primarily engaged in--

- Manufacturing molds for die-casting and foundry casting; and metal molds for plaster working, rubber working, plastics working, and glass working machinery--are classified in U.S. Industry 333511, Industrial Mold Manufacturing;
- Manufacturing molds for heavy steel ingots--are classified in U.S. Industry 331511, Iron Foundries; and
- Manufacturing cutting dies for materials other than metal--are classified in U.S. Industry 332212, Hand and Edge Tool Manufacturing.

333515 Cutting Tool and Machine Tool Accessory Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

Illustrative Examples:

Knives and bits for metalworking lathes, planers, and shapers manufacturing
Measuring attachments (e.g., sine bars) for machine tool manufacturing
Metalworking drill bits
Taps and dies (i.e., machine tool accessories) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing accessories and attachments for cutting and forming machines (except metal cutting, metal forming machinery)--are classified in U.S. Industry 332212, Hand and Edge Tool Manufacturing; and
- Manufacturing saw blades and handsaws--are classified in U.S. Industry 332213, Saw Blade and Handsaw Manufacturing.

333516 Rolling Mill Machinery and Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

333518 Other Metalworking Machinery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

Illustrative Examples:

Assembly machines manufacturing
Cradle assemblies machinery (i.e., wire making equipment) manufacturing
Metalworking coil winding and cutting machinery machinery
Wiredrawing and fabricating machinery and equipment (except dies) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing industrial molds--are classified in U.S. Industry 333511, Industrial Mold Manufacturing;
- Manufacturing metal cutting machinery--are classified in U.S. Industry 333512, Machine Tool (Metal Cutting Types) Manufacturing;

- Manufacturing metal forming machinery--are classified in U.S. Industry 333513, Machine Tool (Metal Forming Types) Manufacturing;
- Manufacturing special dies and tools, die sets, jigs, and fixtures--are classified in U.S. Industry 333514, Special Die and Tool, Die Set, Jig, and Fixture Manufacturing;
- Manufacturing cutting tools and machine tool accessories--are classified in U.S. Industry 333515, Cutting Tool and Machine Tool Accessory Manufacturing; and
- Manufacturing rolling mill machinery--are classified in U.S. Industry 333516, Rolling Mill Machinery and Equipment Manufacturing.

3336 Engine, Turbine, and Power Transmission Equipment Manufacturing

33361 Engine, Turbine, and Power Transmission Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive gasoline and aircraft).

Illustrative Examples:

Clutches and brakes (except electromagnetic industrial controls, motor vehicle) manufacturing

Diesel and semidiesel engines manufacturing

Electric outboard motors manufacturing

Plain bearings (except internal combustion engine) manufacturing

Plain bushings (except internal combustion engine) manufacturing

Power transmission pulleys manufacturing

Speed changers (i.e., power transmission equipment) manufacturing

Speed reducers (i.e. power transmission equipment) manufacturing

Turbine generator set units manufacturing

Universal joints (except aircraft, motor vehicle) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing motor vehicle power transmission equipment--are classified in Industry 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing;
- Manufacturing aircraft engines and aircraft power transmission equipment--are classified in Industry 33641, Aerospace Product and Parts Manufacturing;
- Manufacturing ball and roller bearings--are classified in Industry 33299, All Other Fabricated Metal Product Manufacturing;
- Manufacturing automotive engines (except diesel)--are classified in Industry

- 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing; and
- Manufacturing electric power transmission, electric power distribution equipment, generators, or prime mover generator sets (except turbines)--are classified in Industry 33531, Electrical Equipment Manufacturing.

333611 Turbine and Turbine Generator Set Units Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft); and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

Cross-References. Establishments primarily engaged in--

- Manufacturing aircraft turbines--are classified in U.S. Industry 336412, Aircraft Engine and Engine Parts Manufacturing; and
- Manufacturing generators or prime mover generator sets (except turbines)--are classified in U.S. Industry 335312, Motor and Generator Manufacturing.

333612 Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

Cross-References. Establishments primarily engaged in--

- Manufacturing motor vehicle power transmission equipment--are classified in Industry 336350, Motor Vehicle Transmission and Power Train Parts Manufacturing;
- Manufacturing aircraft power transmission equipment--are classified in U.S. Industry 336413, Other Aircraft Parts and Auxiliary Equipment Manufacturing; and
- Manufacturing industrial hydrostatic transmissions--are classified in U.S. Industry 333613, Mechanical Power Transmission Equipment Manufacturing.

333613 Mechanical Power Transmission Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, brakes and clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

Cross-References. Establishments primarily engaged in--

- Manufacturing motor vehicle power transmission equipment--are classified in

Industry 336350, Motor Vehicle Transmission and Power Train Parts Manufacturing;

- Manufacturing aircraft power transmission equipment--are classified in U.S. Industry 336413, Other Aircraft Parts and Auxiliary Equipment Manufacturing;
- Manufacturing ball and roller bearings--are classified in U.S. Industry 332991, Ball and Roller Bearing Manufacturing; and
- Manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic)--are classified in U.S. Industry 333612, Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing.

333618 Other Engine Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

Cross-References. Establishments primarily engaged in--

- Manufacturing gasoline motor vehicle engines and motor vehicle transmissions--are classified in Industry Group 3363, Motor Vehicle Parts Manufacturing;
- Manufacturing gasoline aircraft engines and aircraft transmissions--are classified in Industry 33641, Aerospace Product and Parts Manufacturing;
- Manufacturing turbine and turbine generator sets units--are classified in U.S. Industry 333611, Turbine and Turbine Generator Set Units Manufacturing;
- Manufacturing speed changers and industrial high-speed drivers and gears--are classified in U.S. Industry 333612, Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing; and
- Manufacturing mechanical power transmission equipment (except motor vehicle and aircraft)--are classified in U.S. Industry 333613, Mechanical Power Transmission Equipment Manufacturing.

3339 Other General Purpose Machinery Manufacturing

33391 Pump and Compressor Manufacturing

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general purpose air and gas compressors, nonagricultural spraying and dusting equipment, general purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

Cross-References. Establishments primarily engaged in--

- Manufacturing fluid power pumps and motors and handheld pneumatic spray guns--are classified in Industry 33399, All Other General Purpose Machinery Manufacturing;

- Manufacturing agricultural spraying and dusting equipment--are classified in Industry 33311, Agricultural Implement Manufacturing;
- Manufacturing laboratory vacuum pumps--are classified in Industry 33911, Medical Equipment and Supplies Manufacturing;
- Manufacturing pumps and air-conditioning systems and compressors for motor vehicles--are classified in Industry Group 3363, Motor Vehicle Parts Manufacturing; and
- Manufacturing air-conditioning systems and compressors (except motor vehicle)--are classified in Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

333911 Pump and Pumping Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps and sump pumps.

Cross-References. Establishments primarily engaged in--

- Manufacturing fluid power pumps and motors--are classified in U.S. Industry 333996, Fluid Power Pump and Motor Manufacturing;
- Manufacturing measuring and dispensing pumps--are classified in U.S. Industry 333913, Measuring and Dispensing Pump Manufacturing;
- Manufacturing vacuum pumps (except laboratory)--are classified in U.S. Industry 333912, Air and Gas Compressor Manufacturing;
- Manufacturing laboratory vacuum pumps--are classified in U.S. Industry 339111, Laboratory Apparatus and Furniture Manufacturing; and
- Manufacturing fluid pumps for motor vehicles, such as oil pumps, water pumps, and power steering pumps,--are classified in Industry Group 3363, Motor Vehicle Parts Manufacturing.

333912 Air and Gas Compressor Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

Cross-References. Establishments primarily engaged in--

- Manufacturing refrigeration and air-conditioning (except motor vehicle) systems and compressors--are classified in U.S. Industry 333415, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing;

- Manufacturing motor vehicle air-conditioning systems and compressors--are classified in U.S. Industry 336391, Motor Vehicle Air-Conditioning Manufacturing;
- Manufacturing fluid power pumps and motors--are classified in U.S. Industry 333996, Fluid Power Pump and Motor Manufacturing;
- Manufacturing agricultural spraying and dusting equipment--are classified in U.S. Industry 333111, Farm Machinery and Equipment Manufacturing;
- Manufacturing laboratory vacuum pumps--are classified in U.S. Industry 339111, Laboratory Apparatus and Furniture Manufacturing; and
- Manufacturing handheld pneumatic spray guns--are classified in U.S. Industry 333991, Power-Driven Handtool Manufacturing

333913 Measuring and Dispensing Pump Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

Cross-References.

Establishments primarily engaged in manufacturing pumps and pumping equipment for general industrial use are classified in U.S. Industry 333911, Pump and Pumping Equipment Manufacturing.

33392 Material Handling Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

Cross-References. Establishments primarily engaged in--

- Manufacturing motor vehicle-type trailers--are classified in Industry 33621, Motor Vehicle Body and Trailer Manufacturing;
- Manufacturing farm-type tractors--are classified in Industry 33311, Agricultural Implement Manufacturing;
- Manufacturing construction-type tractors and cranes--are classified in Industry 33312, Construction Machinery Manufacturing; and
- Manufacturing power transmission pulleys--are classified in Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

333921 Elevator and Moving Stairway Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing

elevators and moving stairways.

Illustrative Examples:

Automobile lifts (i.e., garage-type, service station) manufacturing
Escalators manufacturing
Moving walkways manufacturing
Passenger and freight elevators manufacturing

Cross-References.

Establishments primarily engaged in manufacturing commercial conveyor systems and equipment are classified in U.S. Industry 333922, Conveyor and Conveying Equipment Manufacturing.

333922 Conveyor and Conveying Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

Cross-References. Establishments primarily engaged in--

- Manufacturing passenger or freight elevators, dumbwaiters, and moving stairways--are classified in U.S. Industry 333921, Elevator and Moving Stairway Manufacturing; and
- Manufacturing overhead traveling cranes and monorail systems--are classified in U.S. Industry 333923, Overhead Traveling Crane, Hoist, and Monorail System Manufacturing.

333923 Overhead Traveling Crane, Hoist, and Monorail System Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

Illustrative Examples:

Aerial work platforms manufacturing
Automobile wrecker (i.e., tow truck) hoists manufacturing
Block and tackle manufacturing
Metal pulleys (except power transmission) manufacturing
Winches manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing construction-type cranes--are classified in Industry 333120, Construction Machinery Manufacturing;
- Manufacturing aircraft loading hoists--are classified in U.S. Industry 333924, Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing; and
- Manufacturing power transmission pulleys--are classified in U.S. Industry 333613, Mechanical Power Transmission Equipment Manufacturing.

333924 Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type) such as forklifts, pallet loaders and unloaders, and portable loading docks.

Cross-References. Establishments primarily engaged in--

- Manufacturing motor vehicle-type trailers--are classified in U.S. Industry 336212, Truck Trailer Manufacturing;
- Manufacturing farm-type tractors--are classified in U.S. Industry 333111, Farm Machinery and Equipment Manufacturing; and
- Manufacturing construction-type tractors--are classified in Industry 333120, Construction Machinery Manufacturing.

33399 All Other General Purpose Machinery Manufacturing

This industry comprises establishments primarily engaged in manufacturing general purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

Illustrative Examples:

Automatic fire sprinkler systems manufacturing
Bridge and gate lifting machinery manufacturing
Fluid power cylinders manufacturing
Fluid power pumps manufacturing
Hydraulic and pneumatic jacks manufacturing
Industrial-type furnaces manufacturing
Packaging machinery manufacturing
Power-driven handtools manufacturing
Scales (except laboratory-type) manufacturing
Welding equipment manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing ventilating, heating, air-conditioning (except motor vehicle), commercial refrigeration, and furnace filters--are classified in Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing;
- Manufacturing metalworking machinery--are classified in Industry Group 3335, Metalworking Machinery Manufacturing;
- Manufacturing engine, turbine and power transmission equipment--are classified in Industry Group 3336, Engine, Turbine, and Power Transmission Equipment Manufacturing;
- Manufacturing pumps and compressors--are classified in Industry 33391, Pump and Compressor Manufacturing;
- Manufacturing material handling equipment--are classified in Industry 33392, Material Handling Equipment Manufacturing;
- Manufacturing motor vehicle air-conditioning systems and compressors, engine filters, and pumps--are classified in Industry Group 3363, Motor Vehicle Parts Manufacturing;
- Manufacturing laboratory scales, balances, ovens, and furnaces--are classified in Industry 33911, Medical Equipment and Supplies Manufacturing;
- Manufacturing metal cutting and metal forming machinery--are classified in Industry 33351, Metalworking Machinery Manufacturing;
- Manufacturing power driven heavy construction and mining hand operated tools, such as tampers and augers,--are classified in Industries 33312, Construction Machinery Manufacturing and 33313, Mining and Oil and Gas Field Machinery Manufacturing;
- Manufacturing bakery ovens and industrial kilns, such as cement, wood, and chemical,--are classified in Industry 33329, Other Industrial Machinery Manufacturing;
- Manufacturing mechanical jacks, handheld soldering irons, countersink bits, drill bits, router bits, milling cutters, and other machine tools for woodcutting--are classified in Industry 33221, Cutlery and Handtool Manufacturing;
- Manufacturing carnival amusement park equipment, automotive maintenance equipment, and coin-operated vending machines--are classified in Industry 33331, Commercial and Service Industry Machinery Manufacturing; and
- Manufacturing transformers for arc-welding--are classified in Industry 33531, Electrical Equipment Manufacturing.

333991 Power-Driven Handtool Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

Cross-References. Establishments primarily engaged in--

- Manufacturing metal cutting-type and metal forming-type machines (including home workshop)--are classified in Industry 33351, Metalworking Machinery Manufacturing;
- Manufacturing countersink bits, drill bits, router bits, milling cutters, and other machine tools for woodcutting--are classified in U.S. Industry 332212, Hand and Edge Tool Manufacturing;
- Manufacturing power-driven heavy construction or mining hand operated tools, such as tampers, jackhammers, and augers,--are classified in Industries 333120, Construction Machinery Manufacturing and 333130, Mining and Oil and Gas Field Machinery Manufacturing; and
- Manufacturing powered home lawn and garden equipment--are classified in U.S. Industry 333112, Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing.

333992 Welding and Soldering Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

Cross-References. Establishments primarily engaged in--

- Manufacturing handheld soldering irons--are classified in U.S. Industry 332212, Hand and Edge Tool Manufacturing; and
- Manufacturing transformers for arc-welding--are classified in U.S. Industry 335311, Power, Distribution, and Specialty Transformer Manufacturing.

333993 Packaging Machinery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

333994 Industrial Process Furnace and Oven Manufacturing^{US}

This U.S. Industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, wood).

Cross-References. Establishments primarily engaged in--

- Manufacturing bakery ovens--are classified in U.S. Industry 333294, Food

Product Machinery Manufacturing;

- Manufacturing cement, wood, and chemical kilns--are classified in U.S. Industry 333298, All Other Industrial Machinery Manufacturing;
- Manufacturing cremating ovens--are classified in U.S. Industry 333999, All Other Miscellaneous General Purpose Machinery Manufacturing; and
- Manufacturing laboratory furnaces and ovens--are classified in U.S. Industry 339111, Laboratory Apparatus and Furniture Manufacturing.

333995 Fluid Power Cylinder and Actuator Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

333996 Fluid Power Pump and Motor Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

Cross-References. Establishments primarily engaged in--

- Manufacturing fluid pumps for motor vehicles, such as oil pumps, water pumps, and power steering pumps--are classified in Industry Group 3363, Motor Vehicle Parts Manufacturing;
- Manufacturing general purpose pumps (except fluid power)--are classified in U.S. Industry 333911, Pump and Pumping Equipment Manufacturing; and
- Manufacturing air compressors--are classified in U.S. Industry 333912, Air and Gas Compressor Manufacturing.

333997 Scale and Balance (except Laboratory) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

Cross-References.

Establishments primarily engaged in manufacturing laboratory scales and balances are classified in U.S. Industry 339111, Laboratory Apparatus and Furniture Manufacturing.

333999 All Other Miscellaneous General Purpose Machinery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and

power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

Illustrative Examples:

Automatic fire sprinkler systems manufacturing
Baling machinery (e.g., paper, scrap metal) manufacturing
Bridge and gate lifting machinery manufacturing
Cremating ovens manufacturing
General purpose-type sieves and screening equipment manufacturing
Hydraulic and pneumatic jacks manufacturing
Industrial and general line filters (except internal combustion engine, warm air furnace) manufacturing
Industrial-type centrifuges manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing ventilating, heating, air-conditioning (except motor vehicle), and commercial refrigeration--are classified in Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Manufacturing;
- Manufacturing motor vehicle air-conditioning systems and compressors--are classified in U.S. Industry 336391, Motor Vehicle Air-Conditioning Manufacturing;
- Manufacturing metalworking machinery--are classified in Industry Group 3335, Metalworking Machinery Manufacturing;
- Manufacturing engine, turbine, and power transmission equipment--are classified in Industry Group 3336, Engine, Turbine, and Power Transmission Equipment Manufacturing;
- Manufacturing pumps and compressors--are classified in Industry 33391, Pump and Compressor Manufacturing;
- Manufacturing material handling equipment--are classified in Industry 33392, Material Handling Equipment Manufacturing;
- Manufacturing power-driven handtools--are classified in U.S. Industry 333991, Power-Driven Handtool Manufacturing;
- Manufacturing welding and soldering equipment (except handheld soldering irons)--are classified in U.S. Industry 333992, Welding and Soldering Equipment Manufacturing;
- Manufacturing packaging machinery--are classified in U.S. Industry 333993, Packaging Machinery Manufacturing;
- Manufacturing bakery ovens and cement, wood, and chemical kilns--are classified in U.S. Industry 333298, All Other Industrial Machinery Manufacturing;
- Manufacturing industrial process furnaces and ovens (except bakery)--are classified in U.S. Industry 333994, Industrial Process Furnace and Oven

Manufacturing;

- Manufacturing fluid power cylinders and actuators--are classified in U.S. Industry 333995, Fluid Power Cylinder and Actuator Manufacturing;
- Manufacturing fluid power pumps and motors--are classified in U.S. Industry 333996, Fluid Power Pump and Motor Manufacturing;
- Manufacturing scales and balances (except laboratory)--are classified in U.S. Industry 333997, Scale and Balance (except Laboratory) Manufacturing;
- Manufacturing carnival and amusement park equipment, automotive maintenance equipment and coin-operated vending machines--are classified in Industry 33331, Commercial and Service Industry Machinery Manufacturing;
- Manufacturing motor vehicle engine filters and pumps--are classified in Industry Group 3363, Motor Vehicle Parts Manufacturing; and
- Manufacturing mechanical jacks--are classified in U.S. Industry 332212, Hand and Edge Tool Manufacturing.

334 Computer and Electronic Product Manufacturing

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically-related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment are brought together. As new activities emerge, they are less likely therefore, to cross the subsector boundaries of the classification.

3341 Computer and Peripheral Equipment Manufacturing

33411 Computer and Peripheral Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

Cross-References. Establishments primarily engaged in--

- Manufacturing digital telecommunications switches, local area network and wide area network communications equipment, such as bridges, routers, and gateways,--are classified in Industry 33421, Telephone Apparatus Manufacturing;
- Manufacturing blank magnetic and optical recording media--are classified in Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media;
- Manufacturing machinery or equipment that incorporate electronic computers for operation or control purposes and embedded control applications--are classified in the Manufacturing sector based on the classification of the complete machinery or equipment;
- Manufacturing external audio speakers for computer use--are classified in Industry 33431, Audio and Video Equipment Manufacturing;
- Manufacturing internal loaded printed circuit board devices, such as sound, video, controller, and network interface cards; internal and external computer modems; and semiconductor storage devices,--are classified in Industry 33441, Semiconductor and Other Electronic Component Manufacturing; and
- Manufacturing other parts, such as casings, stampings, cable sets, and switches, for computers, storage devices and other peripheral equipment,--are classified in the Manufacturing sector based on their associated production processes.

334111 Electronic Computer Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in

accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

Cross-References. Establishments primarily engaged in--

- Manufacturing digital telecommunications switches, local area network and wide area network communication equipment, such as bridges, routers, and gateways,--are classified in Industry 334210, Telephone Apparatus Manufacturing;
- Manufacturing blank magnetic and optical recording media--are classified in U.S. Industry 334613, Magnetic and Optical Recording Media Manufacturing;
- Manufacturing machinery or equipment that incorporates electronic computers for operation or control purposes and embedded control applications--are classified in the Manufacturing sector based on the classification of the complete machinery or equipment;
- Manufacturing internal, loaded, printed circuit board devices, such as sound, video, controller, and network interface cards; internal and external computer modems; and solid state storage devices for computers,--are classified in Industry 33441, Semiconductor and Other Electronic Component Manufacturing; and
- Manufacturing other parts, such as casings, stampings, cable sets, and switches, for computers,--are classified in the Manufacturing sector based on their associated production processes.

334112 Computer Storage Device Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

Cross-References. Establishments primarily engaged in--

- Manufacturing blank magnetic and optical recording media--are classified in U.S. Industry 334613, Magnetic and Optical Recording Media Manufacturing;
- Manufacturing semiconductor storage devices, such as memory chips,--are classified in U.S. Industry 334413, Semiconductor and Related Device Manufacturing;
- Manufacturing drive controller cards, internal or external to the storage device--are classified in U.S. Industry 334418, Printed Circuit Assembly (Electronic

Assembly) Manufacturing; and

- Manufacturing other parts, such as casings, stampings, cable sets, and switches, for computer storage devices,--are classified in the Manufacturing sector based on their associated production processes.

334113 Computer Terminal Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

Cross-References. Establishments primarily engaged in--

- Manufacturing point-of-sale terminals, funds transfer, automatic teller machines, and monitors--are classified in U.S. Industry 334119, Other Computer Peripheral Equipment Manufacturing;
- Manufacturing internal loaded printed circuit board devices, such as sound, video, controller, and network interface cards for computer terminals,--are classified in U.S. Industry 334418, Printed Circuit Assembly (Electronic Assembly) Manufacturing; and
- Manufacturing other parts, such as casings, stampings, cable sets, and switches, for computer terminals,--are classified in the Manufacturing sector based on their associated production processes.

334119 Other Computer Peripheral Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

Illustrative Examples:

Automatic teller machines (ATM) manufacturing
Joystick devices manufacturing
Keyboards, computer peripheral equipment, manufacturing
Monitors, computer peripheral equipment, manufacturing
Mouse devices, computer peripheral equipment, manufacturing
Optical readers and scanners manufacturing
Plotters, computer, manufacturing
Point-of-sale terminals, manufacturing
Printers, computer, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing local area network and wide area network communications equipment, such as bridges, routers, and gateways,--are classified in Industry 334210, Telephone Apparatus Manufacturing;

- Manufacturing computer storage devices--are classified in U.S. Industry 334112, Computer Storage Device Manufacturing;
- Manufacturing computer terminals--are classified in U.S. Industry 334113, Computer Terminal Manufacturing;
- Manufacturing external audio speakers for computer use--are classified in Industry 334310, Audio and Video Equipment Manufacturing;
- Manufacturing internal, loaded, printed circuit board devices, such as sound, video, controller, and network interface cards; and internal and external computer modems used as computer peripherals,--are classified in U.S. Industry 334418, Printed Circuit Assembly (Electronic Assembly) Manufacturing; and
- Manufacturing other parts, such as casings, stampings, cable sets, and switches, for computer peripheral equipment,--are classified in the Manufacturing sector based on their associated production processes.

3342 Communications Equipment Manufacturing

33421 Telephone Apparatus Manufacturing

See industry description for 334210 below.

334210 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

Cross-References. Establishments primarily engaged in--

- Manufacturing internal and external computer modems, fax/modems and electronic components used in telephone apparatus--are classified in Industry 33441, Semiconductor and Other Electronic Component Manufacturing; and
- Manufacturing cellular telephones--are classified in Industry 334220, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.

33422 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

See industry description for 334220 below.

334220 Radio and Television Broadcasting and Wireless

Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

Cross-References. Establishments primarily engaged in--

- Manufacturing household-type audio and video equipment, such as televisions and radio sets,--are classified in Industry 334310, Audio and Video Equipment Manufacturing; and
- Manufacturing wired and nonwired intercommunications equipment (i.e., intercoms)--are classified in Industry 334290, Other Communications Equipment Manufacturing.

33429 Other Communications Equipment Manufacturing

See industry description for 334290 below.

334290 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

Illustrative Examples:

Fire detection and alarm systems manufacturing
Intercom systems and equipment manufacturing
Signals (e.g., highway, pedestrian, railway, traffic) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing telephone apparatus--are classified in Industry 334210, Telephone Apparatus Manufacturing;
- Manufacturing radio and television broadcast and wireless communication equipment--are classified in Industry 334220, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and
- Manufacturing automobile audio and related equipment--are classified in Industry 334310, Audio and Video Equipment Manufacturing.

3343 Audio and Video Equipment Manufacturing

33431 Audio and Video Equipment Manufacturing

See industry description for 334310 below.

334310 Audio and Video Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

Cross-References. Establishments primarily engaged in--

- Manufacturing telephone answering machines--are classified in Industry 334210, Telephone Apparatus Manufacturing;
- Manufacturing photographic (i.e., still and motion picture) equipment--are classified in U.S. Industry 333315, Photographic and Photocopying Equipment Manufacturing;
- Manufacturing phonograph needles and cartridges--are classified in Industry 33441, Semiconductor and Other Electronic Component Manufacturing;
- Manufacturing auto theft alarms--are classified in Industry 334290, Other Communications Equipment Manufacturing; and
- Manufacturing mobile radios, such as citizens band and FM transceivers for household or motor vehicle uses; studio and broadcast video cameras; and cable decoders and satellite television equipment,--are classified in Industry 334220, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.

3344 Semiconductor and Other Electronic Component Manufacturing

33441 Semiconductor and Other Electronic Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

Cross-References. Establishments primarily engaged in--

- Manufacturing X-ray tubes--are classified in Industry 33451, Navigational, Measuring, Electromedical, and Control Instruments Manufacturing;
- Manufacturing glass blanks for electron tubes--are classified in Industry 32721,

Glass and Glass Product Manufacturing;

- Manufacturing telephone system components or modules--are classified in Industry 33421, Telephone Apparatus Manufacturing;
- Manufacturing finished products that incorporate loaded printed circuit boards--are classified in the Manufacturing sector based on the production process of making the final product;
- Manufacturing communications antennas--are classified in Industry 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and
- Manufacturing coils, switches, transformers, connectors, capacitors, rheostats, and similar devices for electrical applications--are classified in Subsector 335, Electrical Equipment, Appliance, and Component Manufacturing.

334411 Electron Tube Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

Cross-References. Establishments primarily engaged in--

- Manufacturing X-ray tubes--are classified in U.S. Industry 334517, Irradiation Apparatus Manufacturing; and
- Manufacturing glass blanks for electron tubes--are classified in Industry 32721, Glass and Glass Product Manufacturing.

334412 Bare Printed Circuit Board Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

Cross-References. Establishments primarily engaged in--

- Loading components onto printed circuit boards, or whose output is loaded printed circuit boards--are classified in U.S. Industry 334418, Printed Circuit Assembly (Electronic Assembly) Manufacturing; and
- Manufacturing printed circuit laminates--are classified in U.S. Industry 334419, Other Electronic Component Manufacturing.

334413 Semiconductor and Related Device Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing

semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells and other optoelectronic devices.

334414 Electronic Capacitor Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

Cross-References.

Establishments primarily engaged in manufacturing electrical capacitors for power generation and distribution, heavy industrial equipment, induction heating and melting, and similar industrial applications are classified in U.S. Industry 335999, All Other Miscellaneous Electrical Equipment and Component Manufacturing.

334415 Electronic Resistor Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.

Cross-References.

Establishments primarily engaged in manufacturing electronic rheostats are classified in U.S. Industry 334419, Other Electronic Component Manufacturing.

334416 Electronic Coil, Transformer, and Other Inductor Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

Cross-References.

Establishments primarily engaged in manufacturing electrical transformers used in the generation, storage, transmission, transformation, distribution, and utilization of electrical energy are classified in U.S. Industry 335311, Power, Distribution, and Specialty Transformer Manufacturing.

334417 Electronic Connector Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve,

printed circuit and fiber optic.

Cross-References.

Establishments primarily engaged in manufacturing electrical connectors, such as plugs, bus bars, twist on wire connectors and terminals, are classified in U.S. Industry 335931, Current-Carrying Wiring Device Manufacturing.

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

Cross-References. Establishments primarily engaged in--

- Manufacturing printed circuit laminates--are classified in U.S. Industry 334419, Other Electronic Component Manufacturing;
- Manufacturing bare printed circuit boards--are classified in U.S. Industry 334412, Bare Printed Circuit Board Manufacturing;
- Manufacturing telephone system components or modules--are classified in Industry 334210, Telephone Apparatus Manufacturing; and
- Manufacturing finished products that incorporate loaded printed circuit boards--are classified in the Manufacturing sector based on the production process of making the final product.

334419 Other Electronic Component Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards).

Illustrative Examples:

Crystals and crystal assemblies, electronic, manufacturing
LCD (liquid crystal display) screen units manufacturing
Microwave components manufacturing
Piezoelectric devices manufacturing
Printed circuit laminates manufacturing
Switches for electronic applications manufacturing

Transducers (except pressure) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing electron tubes--are classified in U.S. Industry 334411, Electron Tube Manufacturing;
- Manufacturing bare printed circuit boards--are classified in U.S. Industry 334412, Bare Printed Circuit Board Manufacturing;
- Manufacturing semiconductors and related devices--are classified in U.S. Industry 334413, Semiconductor and Related Device Manufacturing;
- Manufacturing electronic capacitors--are classified in U.S. Industry 334414, Electronic Capacitor Manufacturing;
- Manufacturing electronic resistors--are classified in U.S. Industry 334415, Electronic Resistor Manufacturing;
- Manufacturing electronic inductors--are classified in U.S. Industry 334416, Electronic Coil, Transformer, and Other Inductor Manufacturing;
- Manufacturing electronic connectors--are classified in U.S. Industry 334417, Electronic Connector Manufacturing;
- Loading components onto printed circuit boards or whose output is loaded printed circuit boards--are classified in U.S. Industry 334418, Printed Circuit Assembly (Electronic Assembly) Manufacturing; and
- Manufacturing communications antennas--are classified in Industry 334220, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.

3345 Navigational, Measuring, Electromedical, and Control Instruments Manufacturing

33451 Navigational, Measuring, Electromedical, and Control Instruments Manufacturing

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

Cross-References. Establishments primarily engaged in--

- Manufacturing global positioning system (GPS) equipment--are classified in Industry 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing;
- Manufacturing motor control switches and relays (including timing relays)--are classified in Industry 33531, Electrical Equipment Manufacturing;
- Manufacturing switches for appliances--are classified in Industry 33593,

Wiring Device Manufacturing;

- Manufacturing optical instruments--are classified in Industry 33331, Commercial and Service Industry Machinery Manufacturing;
- Manufacturing equipment for measuring and testing communications signals--are classified in Industry Group 3342, Communications Equipment Manufacturing;
- Manufacturing glass watch and clock crystals--are classified in Industry 32721, Glass and Glass Product Manufacturing;
- Manufacturing plastics watch and clock crystals--are classified in Industry 32619, Other Plastics Product Manufacturing; and
- Manufacturing medical thermometers and other nonelectrical medical apparatus--are classified in Industry Group 3391, Medical Equipment and Supplies Manufacturing.

334510 Electromedical and Electrotherapeutic Apparatus Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

Cross-References. Establishments primarily engaged in--

- Manufacturing medical irradiation apparatus--are classified in U.S. Industry 334517, Irradiation Apparatus Manufacturing; and
- Manufacturing nonelectrical medical and therapeutic apparatus--are classified in Industry Group 3391, Medical Equipment and Supplies Manufacturing.

334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

Cross-References. Establishments primarily engaged in--

- Manufacturing global positioning system (GPS) equipment--are classified in Industry 334220, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and
- Manufacturing aircraft engine instruments and meteorological systems and equipment--are classified in U.S. Industry 334519, Other Measuring and

Controlling Device Manufacturing.

334512 Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances.

Cross-References. Establishments primarily engaged in--

- Manufacturing industrial process controls--are classified in U.S. Industry 334513, Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables;
- Manufacturing motor control switches and relays--are classified in U.S. Industry 335314, Relay and Industrial Control Manufacturing;
- Manufacturing switches for appliances--are classified in U.S. Industry 335931, Current-Carrying Wiring Device Manufacturing; and
- Manufacturing appliance timers--are classified in U.S. Industry 334518, Watch, Clock, and Part Manufacturing.

334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display or control (monitor, analyze, and so forth) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

Cross-References. Establishments primarily engaged in--

- Manufacturing instruments for measuring or testing of electricity and electrical signals--are classified in U.S. Industry 334515, Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals;
- Manufacturing medical thermometers--are classified in U.S. Industry 339112, Surgical and Medical Instruments Manufacturing;
- Manufacturing glass hydrometers and thermometers for other nonmedical uses--are classified in U.S. Industry 334519, Other Measuring and Controlling Device Manufacturing;
- Manufacturing instruments and instrumentation systems for laboratory analysis of samples--are classified in U.S. Industry 334516, Analytical Laboratory Instrument Manufacturing; and
- Manufacturing optical alignment and display instruments, optical comparators,

and optical test and inspection equipment--are classified in U.S. Industry 333314, Optical Instrument and Lens Manufacturing.

334514 Totalizing Fluid Meter and Counting Device Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

Cross-References. Establishments primarily engaged in--

- Manufacturing integrating meters and counters for measuring the characteristics of electricity and electrical signals--are classified in U.S. Industry 334515, Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals; and
- Manufacturing instruments and devices that measure, display, or control (i.e., monitor or analyze) related industrial process variables--are classified in U.S. Industry 334513, Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables.

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

Cross-References. Establishments primarily engaged in--

- Manufacturing electronic monitoring, evaluating, and other electronic support equipment for navigational, radar, and sonar systems--are classified in U.S. Industry 334511, Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing; and
- Manufacturing equipment for measuring and testing communications signals--are classified in Industry Group 3342, Communications Equipment Manufacturing.

334516 Analytical Laboratory Instrument Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite

material.

Cross-References. Establishments primarily engaged in--

- Manufacturing instruments for monitoring and analyzing continuous samples from medical patients--are classified in U.S. Industry 334510, Electromedical and Electrotherapeutic Apparatus Manufacturing; and
- Manufacturing instruments and related devices that measure, display, or control (i.e., monitor or analyze) industrial process variables--are classified in U.S. Industry 334513, Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables.

334517 Irradiation Apparatus Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

334518 Watch, Clock, and Part Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling: clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

Cross-References. Establishments primarily engaged in--

- Manufacturing glass watch and clock crystals--are classified in Industry 32721, Glass and Glass Product Manufacturing;
- Manufacturing plastics watch and clock crystals--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing; and
- Manufacturing timing relays--are classified in U.S. Industry 335314, Relay and Industrial Control Manufacturing.

334519 Other Measuring and Controlling Device Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

Illustrative Examples:

Aircraft engine instruments manufacturing
Automotive emissions testing equipment manufacturing
Meteorological instruments manufacturing
Physical properties testing and inspection equipment manufacturing
Polygraph machines manufacturing
Radiation detection and monitoring instruments manufacturing
Surveying instruments manufacturing
Thermometers liquid-in-glass and bimetal types (except medical), manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing medical thermometers--are classified in U.S. Industry 339112, Surgical and Medical Instrument Manufacturing;
- Manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments--are classified in U.S. Industry 334511, Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing;
- Manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances,--are classified in U.S. Industry 334512, Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use;
- Manufacturing instruments and related devices that measure, display, or control (i.e., monitor or analyze) industrial process variables--are classified in U.S. Industry 334513, Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables;
- Manufacturing totalizing (i.e., registering) fluid meters and counting devices, including motor vehicle gauges--are classified in U.S. Industry 334514, Totalizing Fluid Meter and Counting Device Manufacturing;
- Manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals--are classified in U.S. Industry 334515, Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals;
- Manufacturing instruments for laboratory analysis of the physical composition or concentration of samples of solid, fluid, gaseous, or composite materials--are classified in U.S. Industry 334516, Analytical Laboratory Instrument Manufacturing;
- Manufacturing and/or assembling watches, clocks, or parts--are classified in U.S. Industry 334518, Watch, Clock, and Part Manufacturing;
- Manufacturing X-ray apparatus, tubes, or related irradiation apparatus--are classified in U.S. Industry 334517, Irradiation Apparatus Manufacturing; and
- Manufacturing electromedical and electrotherapeutic apparatus--are classified in U.S. Industry 334510, Electromedical and Electrotherapeutic Apparatus Manufacturing.

3346 Manufacturing and Reproducing Magnetic and Optical Media

33461 Manufacturing and Reproducing Magnetic and Optical Media

This industry comprises establishments primarily engaged in (1) manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or (2) mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

Cross-References. Establishments primarily engaged in--

- Designing, developing, and publishing prepackaged software--are classified in Industry 51121, Software Publishers; and
- Audio, motion picture and/or video production and/or distribution--are classified in Subsector 512, Motion Picture and Sound Recording Industries.

334611 Software Reproducing^{US}

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software, they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

Cross-References.

Establishments primarily engaged in designing, developing, and publishing prepackaged software are classified in Industry 511210, Software Publishers.

334612 Prerecorded Compact Disc (except Software), Tape, and Record Reproducing^{US}

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

Cross-References. Establishments primarily engaged in--

- Designing, developing, and publishing prepackaged software--are classified in Industry 511210, Software Publishers;
- Audio, motion picture and/or video production and/or distribution--are classified in Subsector 512, Motion Picture and Sound Recording Industries; and
- Manufacturing blank audio and video tape, blank diskettes, and blank optical

discs--are classified in U.S. Industry 334613, Magnetic and Optical Recording Media Manufacturing.

334613 Magnetic and Optical Recording Media Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

Cross-References. Establishments primarily engaged in--

- Mass reproducing computer software--are classified in U.S. Industry 334611, Software Reproducing; and
- Mass reproducing audio and video material--are classified in U.S. Industry 334612, Prerecorded Compact Disc (Except Software), Tape, and Record Reproducing.

335 Electrical Equipment, Appliance, and Component Manufacturing

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric Lighting Equipment Manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household Appliance Manufacturing establishments make both small and major electrical appliances and parts. Electrical Equipment Manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other Electrical Equipment and Component Manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 Electric Lighting Equipment Manufacturing

33511 Electric Lamp Bulb and Part Manufacturing

See industry description for 335110 below.

335110 Electric Lamp Bulb and Part Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

Cross-References. Establishments primarily engaged in--

- Manufacturing glass blanks for electric light bulbs--are classified in U.S.

Industry 327212, Other Pressed and Blown Glass and Glassware Manufacturing;

- Manufacturing vehicular lighting fixtures--are classified in U.S. Industry 336321, Vehicular Lighting Equipment Manufacturing;
- Manufacturing light emitting diodes (LEDs)--are classified in U.S. Industry 334413, Semiconductor and Related Device Manufacturing; and
- Manufacturing other lighting fixtures (except vehicular)--are classified in Industry 33512, Lighting Fixture Manufacturing.

33512 Lighting Fixture Manufacturing

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics) and lighting fixture components (except current-carrying wiring devices).

Cross-References. Establishments primarily engaged in--

- Manufacturing vehicular lighting fixtures--are classified in Industry 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing;
- Manufacturing electric light bulbs, tubes, and parts--are classified in Industry 33511, Electric Lamp Bulb and Part Manufacturing;
- Manufacturing current-carrying wiring devices for lighting fixtures--are classified in Industry 33593, Wiring Devices Manufacturing;
- Manufacturing ceiling fans or bath fans with integrated lighting fixtures--are classified in Industry 33521, Small Electrical Appliance Manufacturing;
- Manufacturing plastics lamp shades--are classified in Industry 32619, Other Plastics Product Manufacturing;
- Manufacturing glassware and glass parts for lighting fixtures--are classified in Industry 32721, Glass and Glass Product Manufacturing; and
- Manufacturing signaling devices that incorporate electric light bulbs, such as traffic and railway signals,--are classified in Industry 33429, Other Communications Equipment Manufacturing.

335121 Residential Electric Lighting Fixture Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

Illustrative Examples:

Ceiling lighting fixtures, residential, manufacturing
Chandeliers, residential, manufacturing
Table lamps (i.e., lighting fixtures) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing glassware for residential lighting fixtures--are classified in Industry 32721, Glass and Glass Product Manufacturing;
- Manufacturing plastics lamp shades--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing;
- Manufacturing electric light bulbs, tubes, and parts--are classified in Industry 335110, Electric Lamp Bulb and Part Manufacturing;
- Manufacturing ceiling fans or bath fans with integrated lighting fixtures--are classified in U.S. Industry 335211, Electric Housewares and Household Fan Manufacturing;
- Manufacturing current-carrying wiring devices for lighting fixtures--are classified in U.S. Industry 335931, Current-Carrying Wiring Device Manufacturing;
- Manufacturing commercial, industrial, and institutional electric lighting fixtures--are classified in U.S. Industry 335122, Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing; and
- Manufacturing other lighting fixtures, such as street lights, flashlights, and nonelectric lighting fixtures,--are classified in U.S. Industry 335129, Other Lighting Equipment Manufacturing.

335122 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

Cross-References. Establishments primarily engaged in--

- Manufacturing glassware for commercial, industrial, and institutional electric lighting fixtures--are classified in Industry 32721, Glass and Glass Product Manufacturing;
- Manufacturing residential electric lighting fixtures--are classified in U.S. Industry 335121, Residential Electric Lighting Fixture Manufacturing;
- Manufacturing current-carrying wiring devices for lighting fixtures--are classified in U.S. Industry 335931, Current-Carrying Wiring Device Manufacturing;
- Manufacturing vehicular lighting fixtures--are classified in U.S. Industry 336321, Vehicular Lighting Equipment Manufacturing;
- Manufacturing electric light bulbs, tubes, and parts--are classified in Industry 335110, Electric Lamp Bulb and Part Manufacturing; and
- Manufacturing other lighting fixtures, such as street lights, flashlights, and nonelectric lighting equipment,--are classified in U.S. Industry 335129, Other Lighting Equipment Manufacturing.

335129 Other Lighting Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular electric lighting fixtures) and nonelectric lighting equipment.

Illustrative Examples:

Christmas tree lighting sets, electric, manufacturing
Fireplace logs, electric, manufacturing
Flashlights manufacturing
Insect lamps, electric, manufacturing
Lanterns (e.g., carbide, electric, gas, gasoline, kerosene) manufacturing
Spotlights (except vehicular) manufacturing
Street lighting fixtures (except traffic signals) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing glassware for lighting fixtures--are classified in Industry 32721, Glass and Glass Product Manufacturing;
- Manufacturing electric light bulbs, tubes, and parts--are classified in Industry 335110, Electric Lamp Bulb and Part Manufacturing;
- Manufacturing current-carrying wiring devices for lighting fixtures--are classified in U.S. Industry 335931, Current-Carrying Wiring Device Manufacturing;
- Manufacturing residential electric lighting fixtures--are classified in U.S. Industry 335121, Residential Electric Lighting Fixture Manufacturing;
- Manufacturing commercial, industrial, and institutional electric lighting fixtures--are classified in U.S. Industry 335122, Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing;
- Manufacturing vehicular lighting fixtures--are classified in U.S. Industry 336321, Vehicular Lighting Equipment Manufacturing; and
- Manufacturing signaling devices that incorporate electric light bulbs, such as traffic and railway signals,--are classified in Industry 334290, Other Communications Equipment Manufacturing.

3352 Household Appliance Manufacturing

33521 Small Electrical Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

Cross-References. Establishments primarily engaged in--

- Manufacturing room air-conditioners, attic fans, wall and baseboard heating units for permanent installation, and commercial ventilation and exhaust fans--are classified in Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing;
- Manufacturing commercial, industrial, and institutional vacuum cleaners, and mechanical carpet sweepers--are classified in Industry 33331, Commercial and Service Industry Machinery Manufacturing;
- Manufacturing major household-type appliances, such as washing machines, dryers, stoves, and hot water heaters,--are classified in Industry 33522, Major Appliance Manufacturing; and
- Installing central vacuum cleaning systems--are classified in Sector 23, Construction.

335211 Electric Housewares and Household Fan Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

Illustrative Examples:

Bath fans, residential, manufacturing
Ceiling fans, residential, manufacturing
Curling irons, household-type electric, manufacturing
Electronic blankets manufacturing
Portable cooking appliances (except microwave, convection ovens), household-type electric, manufacturing
Portable electric space heaters manufacturing
Portable hair dryers, electric, manufacturing
Portable humidifiers and dehumidifiers manufacturing
Scissors, electric, manufacturing
Ventilating and exhaust fans (except attic fans), household-type, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing attic fans--are classified in U.S. Industry 333412, Industrial and Commercial Fan and Blower Manufacturing;
- Manufacturing wall and baseboard heating units for permanent installation--are classified in U.S. Industry 333414, Heating Equipment (except Warm Air Furnaces) Manufacturing;
- Manufacturing room air-conditioners--are classified in U.S. Industry 333415, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing; and
- Manufacturing microwave and convection ovens--are classified in U.S.

Industry 335221, Household Cooking Appliance Manufacturing.

335212 Household Vacuum Cleaner Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

Cross-References. Establishments primarily engaged in--

- Manufacturing electric vacuum cleaners for commercial, industrial, and institutional uses, and mechanical carpet sweepers--are classified in U.S. Industry 333319, Other Commercial and Service Industry Machinery Manufacturing; and
- Installing central vacuum cleaning systems--are classified in Industry 235950, Building Equipment and Other Machinery Installation Contractors.

33522 Major Appliance Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

Cross-References. Establishments primarily engaged in--

- Manufacturing small electric appliances and electric housewares, such as hot plates, griddles, toasters, and electric irons,--are classified in Industry 33521, Small Electrical Appliance Manufacturing;
- Manufacturing commercial and industrial refrigerators and freezers--are classified in Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing;
- Manufacturing commercial-type cooking equipment and commercial-type laundry, drycleaning, and pressing equipment--are classified in Industry 33331, Commercial and Service Industry Machinery Manufacturing; and
- Manufacturing household-type sewing machines--are classified in Industry 33329, Other Industrial Machinery Manufacturing.

335221 Household Cooking Appliance Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

Cross-References. Establishments primarily engaged in--

- Manufacturing small electric appliances and electric housewares used for cooking, such as electric skillets, electric hot plates, electric griddles, toasters, and percolators,--are classified in U.S. Industry 335211, Electric Housewares and Household Fan Manufacturing; and
- Manufacturing commercial-type cooking equipment--are classified in U.S. Industry 333319, Other Commercial and Service Industry Machinery Manufacturing.

335222 Household Refrigerator and Home Freezer Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

Cross-References.

Establishments primarily engaged in manufacturing commercial and industrial refrigeration equipment, such as refrigerators and freezers, are classified in U.S. Industry 333415, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing.

335224 Household Laundry Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

Cross-References. Establishments primarily engaged in--

- Manufacturing portable electric irons--are classified in U.S. Industry 335211, Electric Housewares and Household Fan Manufacturing; and
- Manufacturing commercial-type laundry and drycleaning equipment--are classified in U.S. Industry 333312, Commercial Laundry, Dry Cleaning, and Pressing Machine Manufacturing.

335228 Other Major Household Appliance Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing electric and nonelectric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

Illustrative Examples:

Dishwashers, household-type, manufacturing
Garbage disposal units, household-type, manufacturing

Hot water heaters (including nonelectric), household-type, manufacturing
Trash and garbage compactors, household-type, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing household-type cooking equipment--are classified in U.S. Industry 335221, Household Cooking Appliance Manufacturing;
- Manufacturing household-type sewing machines--are classified in U.S. Industry 333298, All Other Industrial Machinery Manufacturing;
- Manufacturing household-type refrigerators and upright and chest freezers--are classified in U.S. Industry 335222, Household Refrigerator and Home Freezer Manufacturing; and
- Manufacturing small electric appliances--are classified in U.S. Industry 335211, Electric Housewares and Household Fan Manufacturing.

3353 Electrical Equipment Manufacturing

33531 Electrical Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

Cross-References. Establishments primarily engaged in--

- Manufacturing turbine generator set units and electric outboard motors--are classified in Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing;
- Manufacturing electronic component-type transformers and switches--are classified in Industry 33441, Semiconductor and Other Electronic Component Manufacturing;
- Manufacturing environmental controls and industrial process control instruments--are classified in Industry 33451, Navigational, Measuring, Electromedical, and Control Instruments Manufacturing;
- Manufacturing switches for electrical circuits, such as pushbutton and snap switches,--are classified in Industry 33593, Wiring Device Manufacturing;
- Manufacturing complete for welding and soldering equipment--are classified in Industry 33399, All Other General Purpose Machinery Manufacturing; and
- Manufacturing starting motors and generators for internal combustion engines--are classified in Industry 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing.

335311 Power, Distribution, and Specialty Transformer Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

Illustrative Examples:

Distribution transformers, electric, manufacturing
Fluorescent ballasts (i.e., transformers) manufacturing
Substation transformers, electric power distribution, manufacturing
Transmission and distribution voltage regulators manufacturing

Cross-References.

Establishments primarily engaged in manufacturing electronic component-type transformers are classified in U.S. Industry 334416, Electronic Coil, Transformers, and Other Inductor Manufacturing.

335312 Motor and Generator Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

Cross-References. Establishments primarily engaged in--

- Manufacturing electric outboard motors--are classified in U.S. Industry 333618, Other Engine Equipment Manufacturing;
- Manufacturing gas, steam, or hydraulic turbine generator set units--are classified in U.S. Industry 333611, Turbine and Turbine Generator Set Units Manufacturing;
- Manufacturing starting motors and battery charging alternators for internal combustion engines--are classified in U.S. Industry 336322, Other Motor Vehicle Electrical and Electronic Equipment Manufacturing;
- Rewinding armatures, not on a factory basis,--are classified in Industry 811310, Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance; and
- Manufacturing complete welding and soldering equipment--are classified in U.S. Industry 333992, Welding and Soldering Equipment Manufacturing.

335313 Switchgear and Switchboard Apparatus Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing

switchgear and switchboard apparatus.

Illustrative Examples:

Circuit breakers, power, manufacturing

Control panels, electric power distribution, manufacturing

Duct for electrical switchboard apparatus manufacturing

Fuses, electric, manufacturing

Power switching equipment manufacturing

Switches, electric power (except pushbutton, snap, solenoid, tumbler), manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing relays--are classified in U.S. Industry 335314, Relay and Industrial Control Manufacturing;
- Manufacturing switches for electronic applications--are classified in U.S. Industry 334419, Other Electronic Component Manufacturing; and
- Manufacturing snap, pushbutton, and similar switches for electrical circuits--are classified in U.S. Industry 335931, Current-Carrying Wiring Device Manufacturing.

335314 Relay and Industrial Control Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

Cross-References. Establishments primarily engaged in--

- Manufacturing environmental and appliance control equipment--are classified in U.S. Industry 334512, Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use; and
- Manufacturing instruments for controlling industrial process variables--are classified in U.S. Industry 334513, Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables.

3359 Other Electrical Equipment and Component Manufacturing

This industry group comprises establishments manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 Battery Manufacturing

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 Storage Battery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

Illustrative Examples:

Lead acid storage batteries manufacturing
Rechargeable nickel cadmium (NICAD) batteries manufacturing

Cross-References.

Establishments primarily engaged in manufacturing primary batteries are classified in U.S. Industry 335912, Primary Battery Manufacturing.

335912 Primary Battery Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

Illustrative Examples:

Disposable flashlight batteries manufacturing
Dry cells, primary (e.g., AAA, AA, C, D, 9V), manufacturing
Lithium batteries, primary, manufacturing
Watch batteries manufacturing

Cross-References.

Establishments primarily engaged in manufacturing storage batteries are classified in U.S. Industry 335911, Storage Battery Manufacturing.

33592 Communication and Energy Wire and Cable Manufacturing

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

Cross-References. Establishments primarily engaged in--

- Drawing nonferrous wire--are classified in Subsector 331, Primary Metal Manufacturing;

- Manufacturing cable sets consisting of insulated wire and various 33441, Semiconductor and Other Electronic Component Manufacturing;
- Manufacturing extension cords, appliance cords, and similar electrical cord sets from purchased, insulated wire or cable--are classified in Industry 33599, All Other Electrical Equipment and Component Manufacturing; and
- Manufacturing unsheathed fiber-optic materials--are classified in Industry 32721, Glass and Glass Product Manufacturing.

335921 Fiber Optic Cable Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiber-optic cable from purchased fiber-optic strand.

Cross-References. Establishments primarily engaged in--

- Manufacturing unsheathed fiber-optic materials--are classified in Industry 32721, Glass and Glass Product Manufacturing; and
- Manufacturing insulated nonferrous wire and cable from purchased wire--are classified in U.S. Industry 335929, Other Communication and Energy Wire Manufacturing.

335929 Other Communication and Energy Wire Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

Cross-References. Establishments primarily engaged in--

- Manufacturing cable sets consisting of insulated wire and various connectors for electronic applications--are classified in U.S. Industry 334419, Other Electronic Component Manufacturing;
- Manufacturing extension cords, appliance cords, and similar electrical cord sets from purchased insulated wire--are classified in U.S. Industry 335999, All Other Miscellaneous Electrical Equipment and Component Manufacturing;
- Drawing and insulating copper wire in the same establishment--are classified in U.S. Industry 331422, Copper Wire (except Mechanical) Drawing;
- Drawing and insulating aluminum wire in the same establishment--are classified in U.S. Industry 331319, Other Aluminum Rolling and Drawing; and
- Drawing nonferrous wire (except copper and aluminum)--are classified in U.S. Industry 331491, Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding.

33593 Wiring Device Manufacturing

This industry comprises establishments primarily engaged in manufacturing current-

carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

Cross-References. Establishments primarily engaged in--

- Manufacturing ceramic and glass insulators--are classified in Subsector 327, Nonmetallic Mineral Product Manufacturing; and
- Manufacturing electronic component-type connectors, sockets, and switches--are classified in Industry 33441, Semiconductor and Other Electronic Component Manufacturing.

335931 Current-Carrying Wiring Device Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

Illustrative Examples:

Bus bars, electrical conductors (except switchgear-type), manufacturing
GFCI (ground fault circuit interrupters) manufacturing
Lamp holders manufacturing
Lightning arrestors and coils manufacturing
Receptacles (i.e., outlets), electrical, manufacturing
Switches for electrical wiring (e.g., pressure, pushbutton, snap, tumbler) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing electronic component-type connectors--are classified in U.S. Industry 334417, Electronic Connector Manufacturing;
- Manufacturing noncurrent-carrying wiring devices--are classified in U.S. Industry 335932, Noncurrent-Carrying Wiring Device Manufacturing; and
- Manufacturing electronic component-type sockets and switches--are classified in U.S. Industry 334419, Other Electronic Component Manufacturing.

335932 Noncurrent-Carrying Wiring Device Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

Illustrative Examples:

Boxes, electrical wiring (e.g., junction, outlet, switch), manufacturing
Conduits and fittings, electrical, manufacturing
Face plates (i.e., outlet or switch covers) manufacturing
Transmission pole and line hardware manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing porcelain and ceramic insulators--are classified in U.S. Industry 327113, Porcelain Electrical Supply Manufacturing;
- Manufacturing current-carrying wiring devices--are classified in U.S. Industry 335931, Current-Carrying Wiring Device Manufacturing; and
- Manufacturing glass insulators--are classified in Industry 32721, Glass and Glass Product Manufacturing.

33599 All Other Electrical Equipment and Component Manufacturing

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

Illustrative Examples:

Carbon and graphite electrodes and brushes manufacturing
Extension cords made from purchased insulated wire
Surge suppressors manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing lighting equipment--are classified in Industry Group 3351, Electric Lighting Equipment Manufacturing;
- Manufacturing household-type appliances--are classified in Industry Group 3352, Household Appliance Manufacturing;
- Manufacturing transformers, motors, generators, switchgear, relays, and industrial controls--are classified in Industry 33531, Electrical Equipment Manufacturing;
- Manufacturing batteries--are classified in Industry 33591, Battery Manufacturing;
- Manufacturing communication and energy wire--are classified in Industry 33592, Communication and Energy Wire and Cable Manufacturing;
- Manufacturing current-carrying and noncurrent-carrying wiring devices--are classified in Industry 33593, Wiring Device Manufacturing;
- Manufacturing carbon or graphite gaskets--are classified in Industry 33999, All Other Miscellaneous Manufacturing;
- Manufacturing electronic component-type rectifiers, voltage regulating integrated circuits, power converting integrated circuits, electronic capacitors, electronic resistors, and similar devices--are classified in Industry 33441, Semiconductor and Other Electronic Component Manufacturing; and
- Manufacturing equipment incorporating lasers--are classified in various subsectors of manufacturing based on the associated production process of the

finished equipment.

335991 Carbon and Graphite Product Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

Cross-References.

Establishments primarily engaged in manufacturing carbon or graphite gaskets are classified in U.S. Industry 339991, Gasket, Packing, and Sealing Device Manufacturing.

335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

Illustrative Examples:

Appliance cords made from purchased insulated wire
Battery chargers, solid-state, manufacturing
Door opening and closing devices, electrical, manufacturing
Electric bells manufacturing
Extension cords made from purchased insulated wire
Inverters manufacturing
Surge suppressors manufacturing
Uninterruptible power supplies (UPS) manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing lighting equipment--are classified in Industry Group 3351, Electric Lighting Equipment Manufacturing;
- Manufacturing household-type appliances--are classified in Industry Group 3352, Household Appliance Manufacturing;
- Manufacturing transformers, motors, generators, switchgear, relays, and industrial controls--are classified in Industry 33531, Electrical Equipment

Manufacturing;

- Manufacturing primary and storage batteries--are classified in Industry 33591, Battery Manufacturing;
- Manufacturing communication and energy wire and cable from purchased wire--are classified in Industry 33592, Communication and Energy Wire and Cable Manufacturing;
- Manufacturing current-carrying and noncurrent-carrying wiring devices--are classified in Industry 33593, Wiring Device Manufacturing;
- Manufacturing electronic component-type rectifiers (except semiconductor)--are classified in U.S. Industry 334419, Other Electronic Component Manufacturing;
- Manufacturing semiconductor rectifiers, voltage regulating integrated circuits, power converting integrated circuits, and similar semiconductor devices--are classified in U.S. Industry 34413, Semiconductor and Related Device Manufacturing;
- Manufacturing electronic component-type capacitors and condensers--are classified in U.S. Industry 334414, Electronic Capacitor Manufacturing;
- Manufacturing carbon and graphite products--are classified in U.S. Industry 335991, Carbon and Graphite Product Manufacturing; and
- Manufacturing equipment incorporating lasers--are classified in various manufacturing subsectors based on the associated production process of the finished equipment.

336 Transportation Equipment Manufacturing

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the

equipment.

3361 Motor Vehicle Manufacturing

33611 Automobile and Light Duty Motor Vehicle Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or (2) manufacturing chassis only.

Cross-References.

Establishments primarily engaged in manufacturing car, truck, and bus bodies and assembling vehicles on a purchased chassis and manufacturing kit cars for highway use are classified in Industry 33621, Motor Vehicle Body and Trailer Manufacturing.

336111 Automobile Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

Cross-References.

Establishments primarily engaged in manufacturing car bodies and assembling vehicles on a purchased chassis and manufacturing kit cars for highway use are classified in U.S. Industry 336211, Motor Vehicle Body Manufacturing.

336112 Light Truck and Utility Vehicle Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or (2) manufacturing light truck and utility vehicle chassis only. Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

Cross-References.

Establishments primarily engaged in manufacturing truck and bus bodies and assembling vehicles on a purchased chassis are classified in U.S. Industry 336211, Motor Vehicle Body Manufacturing.

33612 Heavy Duty Truck Manufacturing

See industry description for 336120 below.

336120 Heavy Duty Truck Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special purpose heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only.

Cross-References. Establishments primarily engaged in--

- Manufacturing truck and bus bodies and assembling vehicles on a purchased chassis--are classified in U.S. Industry 336211, Motor Vehicle Body Manufacturing;
- Manufacturing motor homes on purchased chassis--are classified in U.S. Industry 336213, Motor Home Manufacturing;
- Manufacturing vans, minivans, and light trucks--are classified in Industry 336112, Light Truck and Utility Vehicle Manufacturing;
- Manufacturing military armored vehicles--are classified in U.S. Industry 336992, Military Armored Vehicle, Tank, and Tank Component Manufacturing; and
- Manufacturing off highway construction equipment--are classified in Industry 333120, Construction Machinery Manufacturing.

3362 Motor Vehicle Body and Trailer Manufacturing

33621 Motor Vehicle Body and Trailer Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing motor vehicle bodies and cabs or (2) manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies and detachable trailer chassis. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

Illustrative Examples:

Bodies and cabs, truck, manufacturing
Camper unit, slide-in, for pick-up trucks, manufacturing
Motor homes, self-contained, assembling on purchased chassis
Pickup canopies, caps, or covers manufacturing
Travel trailers, recreational, manufacturing
Semitrailer manufacturing

Cross-References. Establishments primarily engaged in--

- Making manufactured homes (i.e., mobile homes)--are classified in Industry 32199, All Other Wood Product Manufacturing;
- Customizing automotive vehicle and trailer interiors (i.e. van conversions) on an individual basis--are classified in Industry 81112, Automotive Body, Paint, Interior, and Glass Repair;
- Manufacturing light duty motor home chassis and assembling complete motor homes--are classified in Industry 33611, Automobile and Light Duty Motor Vehicle Manufacturing; and
- Manufacturing heavy duty truck chassis and assembling heavy duty trucks, buses, motor homes, and other special purpose heavy duty motor vehicles for highway use--are classified in Industry 33612, Heavy Duty Truck Manufacturing.

336211 Motor Vehicle Body Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Cross-References.

Establishments primarily engaged in manufacturing heavy duty chassis and assembling heavy duty trucks, buses, motor homes, and other special purpose heavy duty motor vehicles for highway use are classified in Industry 336120, Heavy Duty Truck Manufacturing.

336212 Truck Trailer Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

Cross-References.

Establishments primarily engaged in manufacturing utility trailers, light-truck trailers, and travel trailers are classified in U.S. Industry 336214, Travel Trailer and Camper Manufacturing.

336213 Motor Home Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing motor homes on purchased chassis and/or (2) manufacturing conversion vans on an

assembly line basis. Motor homes are units where the motor and the living quarters are integrated in the same unit.

Cross-References. Establishments primarily engaged in--

- Manufacturing light duty motor homes chassis and assembling complete motor homes--are classified in U.S. Industry 336112, Light Truck and Utility Vehicle Manufacturing;
- Customizing automotive vehicle and trailer interiors (i.e. van conversions) on an individual basis--are classified in U.S. Industry 811121, Automotive Body, Paint, and Interior Repair and Maintenance; and
- Producing manufactured homes (i.e., mobile homes)--are classified in U.S. Industry 321991, Manufactured Home (Mobile Home) Manufacturing.

336214 Travel Trailer and Camper Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing travel trailers and campers designed to attach to motor vehicles; (2) manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and (3) manufacturing automobile, utility and light-truck trailers. Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

Illustrative Examples:

Automobile transporter trailers, single car, manufacturing
Camping trailers and chassis manufacturing
Horse trailers (except fifth wheel type) manufacturing
Travel trailers, recreational, manufacturing
Utility trailers manufacturing

Cross-References.

Establishments primarily engaged in making manufactured homes (i.e., mobile homes) designed to accept permanent water, sewer, and utility connections and equipped with wheels, but not intended for regular highway use, are classified in U.S. Industry 321991, Manufactured Home (Mobile Home) Manufacturing.

3363 Motor Vehicle Parts Manufacturing

33631 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines, and engine parts, whether or not for vehicular use.

Illustrative Examples:

Carburetors, all types, manufacturing

Crankshaft assemblies, automotive and truck gasoline engine, manufacturing

Cylinder heads, automotive and truck gasoline engine, manufacturing

Fuel injection systems and parts, automotive and truck gasoline engine, manufacturing

Manifolds (i.e., intake and exhaust), automotive and truck gasoline engine, manufacturing

Pistons and piston rings manufacturing

Pumps (e.g., fuel, oil, water), mechanical automotive and truck gasoline engine (except power steering) manufacturing

Timing gears and chains, automotive and truck gasoline engine, manufacturing

Valves, engine, intake and exhaust, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing wiring harnesses and other vehicular electrical and electronic equipment--are classified in Industry 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing;
- Manufacturing transmission and power train equipment--are classified in Industry 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing;
- Manufacturing radiators--are classified in Industry 33639, Other Motor Vehicle Parts Manufacturing;
- Manufacturing steering and suspension components--are classified in Industry 33633, Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing;
- Manufacturing parts for machine repair and equipment parts (except electric) on a job or shop basis--are classified in Industry 33271, Machine Shops;
- Manufacturing rubber and plastic belts and hoses without fittings--are classified in Industry 32622, Rubber and Plastics Hoses and Belting Manufacturing; and
- Manufacturing stationary and diesel engines--are classified in Industry 33361, Engine, Turbine, and Power Transmission Equipment Manufacturing.

336311 Carburetor, Piston, Piston Ring, and Valve Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

Cross-References.

Establishments primarily engaged in manufacturing parts for machine repair and equipment parts (except electric) on a job or shop basis are classified in Industry 332710, Machine Shops.

336312 Gasoline Engine and Engine Parts Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

Illustrative Examples:

Crankshaft assemblies, automotive and truck gasoline engine, manufacturing
Flywheels and ring gears, automotive and truck gasoline engine, manufacturing
Fuel injection systems and parts, automotive and truck gasoline engine, manufacturing
Manifolds (i.e., intake and exhaust), automotive and truck gasoline engine, manufacturing

Positive crankcase ventilation (PCV) valves, engine, manufacturing

Pumps (e.g., fuel, oil, water), mechanical, automotive and truck gasoline engine (except power steering), manufacturing

Timing gears and chains, automotive and truck gasoline engine, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing carburetors, pistons, piston rings, and valves--are classified in U.S. Industry 336311, Carburetor, Piston, Piston Ring, and Valve Manufacturing;
- Manufacturing wiring harnesses and other vehicular electrical and electronic equipment--are classified in U.S. Industry 336322, Other Motor Vehicle Electrical and Electronic Equipment Manufacturing;
- Manufacturing transmission and power train equipment--are classified in Industry 336350, Motor Vehicle Transmission and Power Train Parts Manufacturing;
- Manufacturing radiators--are classified in U.S. Industry 336399, All Other Motor Vehicle Parts Manufacturing;
- Manufacturing steering and suspension components--are classified in Industry 336330, Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing;
- Manufacturing rubber and plastic belts and hoses without fittings--are classified in Industry 326220, Rubber and Plastics Hoses and Belting Manufacturing; and
- Manufacturing stationary and diesel engines--are classified in U.S. Industry 333618, Other Engine Equipment Manufacturing.

33632 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing vehicular lighting and/or (2) manufacturing and/or rebuilding motor vehicle electrical and electronic equipment. The products made can be used for all types of

transportation equipment (i.e., aircraft, automobiles, trains, ships).

Illustrative Examples:

Alternators and generators for internal combustion engines manufacturing
Automotive lighting fixtures manufacturing
Coils, ignition, internal combustion engines, manufacturing
Distributors for internal combustion engines manufacturing
Electrical ignition cable sets for internal combustion engines manufacturing
Generators for internal combustion engines manufacturing
Ignition wiring harness for internal combustion engines manufacturing
Instrument control panels (i.e., assembling purchased gauges), automotive, truck, and bus, manufacturing
Spark plugs for internal combustion engines manufacturing
Windshield washer pumps, automotive, truck, and bus, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing automotive lamps--are classified in Industry 33511, Electric Lamp Bulb and Part Manufacturing;
- Manufacturing batteries--are classified in Industry 33591, Battery Manufacturing;
- Manufacturing electric motors for motor vehicles (including electric vehicles)--are classified in Industry 33531, Electrical Equipment Manufacturing;
- Manufacturing railway traffic control signals and passenger car alarms--are classified in Industry 33429, Other Communications Equipment Manufacturing; and
- Manufacturing car stereos--are classified in Industry 33431, Audio and Video Equipment Manufacturing.

336321 Vehicular Lighting Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

Cross-References.

Establishments primarily engaged in manufacturing automotive lamps (i.e., bulbs) are classified in Industry 335110, Electric Lamp Bulb and Part Manufacturing.

336322 Other Motor Vehicle Electrical and Electronic Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal

combustion engines.

Illustrative Examples:

Alternators and generators for internal combustion engines manufacturing
Coils, ignition, internal combustion engines, manufacturing
Distributors for internal combustion engines manufacturing
Electrical ignition cable sets for internal combustion engines manufacturing
Generators for internal combustion engines manufacturing
Ignition wiring harness for internal combustion engines manufacturing
Instrument control panel (i.e., assembling purchased gauges), automotive, truck, and bus, manufacturing
Spark plugs for internal combustion engines manufacturing
Windshield washer pumps, automotive, truck, and bus, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing vehicular lighting equipment--are classified in U.S. Industry 336321, Vehicular Lighting Equipment Manufacturing;
- Manufacturing automotive lamps--are classified in Industry 335110, Electric Lamp Bulb and Part Manufacturing;
- Manufacturing batteries--are classified in U.S. Industry 335911, Storage Battery Manufacturing;
- Manufacturing electric motors for electric vehicles--are classified in U.S. Industry 335312, Motor and Generator Manufacturing;
- Manufacturing railway traffic control signals and passenger car alarms--are classified in Industry 334290, Other Communications Equipment Manufacturing; and
- Manufacturing car stereos--are classified in Industry 334310, Audio and Video Equipment Manufacturing.

33633 Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing

See industry description for 336330 below.

336330 Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

Illustrative Examples:

Rack and pinion steering assemblies manufacturing

Shock absorbers, automotive, truck, and bus, manufacturing
Steering columns, automotive, truck, and bus, manufacturing
Steering wheels, automotive, truck, and bus, manufacturing
Struts, automotive, truck, and bus, manufacturing

Cross-References.

Establishments primarily engaged in manufacturing springs are classified in Industry 33261, Spring and Wire Product Manufacturing.

33634 Motor Vehicle Brake System Manufacturing

See industry description for 336340 below.

336340 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

Illustrative Examples:

Brake cylinders, master and wheel, automotive, truck, and bus, manufacturing
Brake drums, automotive, truck, and bus, manufacturing
Brake hose assemblies manufacturing
Brake pads and shoes, automotive, truck, and bus, manufacturing
Calipers, brake, automotive, truck, and bus, manufacturing

Cross-References.

Establishments primarily engaged in manufacturing rubber and plastics belts and hoses without fittings are classified in Industry 326220, Rubber and Plastics Hoses and Belting Manufacturing.

33635 Motor Vehicle Transmission and Power Train Parts Manufacturing

See industry description for 336350 below.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

Illustrative Examples:

Automatic transmissions, automotive, truck, and bus, manufacturing
Axle bearings, automotive, truck, and bus, manufacturing
Constant velocity joints, automotive, truck, and bus, manufacturing
Differential and rear axle assemblies, automotive, truck, and bus, manufacturing
Torque converters, automotive, truck, and bus, manufacturing
Universal joints, automotive, truck, and bus, manufacturing

33636 Motor Vehicle Seating and Interior Trim Manufacturing

See industry description for 336360 below.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

Cross-References.

Establishments primarily engaged in manufacturing convertible tops for vehicles and those manufacturing air bags are classified in U.S. Industry 336399, All Other Motor Vehicle Parts Manufacturing.

33637 Motor Vehicle Metal Stamping

See industry description for 336370 below.

336370 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

Cross-References. Establishments primarily engaged in--

- Manufacturing stampings and further processing the stampings--are classified according to the process of the specific product made; and
- Manufacturing stampings (except motor vehicle)--are classified in U.S. Industry 332116 Metal Stamping.

33639 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle

steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

Illustrative Examples:

Air bag assemblies manufacturing

Air-conditioners, motor vehicle, manufacturing

Catalytic converters, engine exhaust, automotive, truck, and bus, manufacturing

Mufflers and resonators, motor vehicle, manufacturing

Radiators and cores, manufacturing

Wheels (i.e., rims), automotive, truck, and bus, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing motor vehicle gasoline engines and engine parts--are classified in Industry 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing;
- Manufacturing motor vehicle electrical and electronic equipment--are classified in Industry 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing;
- Manufacturing motor vehicle steering and suspension components--are classified in Industry 33633, Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing;
- Manufacturing motor vehicle brake systems--are classified in Industry 33634, Motor Vehicle Brake System Manufacturing;
- Manufacturing motor vehicle transmission and power train parts--are classified in Industry 33635, Motor Vehicle Transmission and Power Train Parts Manufacturing;
- Manufacturing motor vehicle seating and interior trim--are classified in Industry 33636, Motor Vehicle Seating and Interior Trim Manufacturing;
- Manufacturing motor vehicle stampings--are classified in Industry 33637, Motor Vehicle Metal Stamping; and
- Manufacturing air-conditioning systems and compressors (except motor vehicle air-conditioning systems)--are classified in Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing.

336391 Motor Vehicle Air-Conditioning Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

Cross-References.

Establishments primarily engaged in manufacturing air-conditioning systems and compressors (except motor vehicle air-conditioning systems) are classified in U.S. Industry 333415, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing.

336399 All Other Motor Vehicle Parts Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

Illustrative Examples:

Air bag assemblies manufacturing
Air-filters, automotive, truck, and bus, manufacturing
Catalytic converters, engine exhaust, automotive, truck, and bus, manufacturing
Mufflers and resonators, motor vehicle, manufacturing
Radiators and cores, manufacturing
Wheels (i.e., rims), automotive, truck, and bus, manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing motor vehicle gasoline engines and engine parts--are classified in Industry 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing;
- Manufacturing motor vehicle electrical and electronic equipment--are classified in Industry 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing;
- Manufacturing motor vehicle steering and suspension components--are classified in Industry 336330, Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing;
- Manufacturing motor vehicle brake systems--are classified in Industry 336340, Motor Vehicle Brake System Manufacturing;
- Manufacturing motor vehicle transmission and power train parts--are classified in Industry 336350, Motor Vehicle Transmission and Power Train Parts Manufacturing;
- Manufacturing motor vehicle seating and interior trim--are classified in Industry 336360, Motor Vehicle Seating and Interior Trim Manufacturing;
- Manufacturing motor vehicle stampings--are classified in Industry 336370, Motor Vehicle Metal Stamping; and
- Manufacturing motor vehicle air-conditioning systems and compressors--are classified in U.S. Industry 336391, Motor Vehicle Air-Conditioning

Manufacturing.

3364 Aerospace Product and Parts Manufacturing

33641 Aerospace Product and Parts Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing complete aircraft, missiles, or space vehicles; (2) manufacturing aerospace engines, propulsion units, auxiliary equipment or parts; (3) developing and making prototypes of aerospace products; (4) aircraft conversion (i.e., major modifications to systems); and (5) complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

Cross-References.

- Establishments primarily engaged in manufacturing space satellites are classified in Industry 33422, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing;
- Establishments primarily engaged in the repair of aircraft or aircraft engines (except overhauling, conversion, and rebuilding) are classified in Industry 48819, Other Support Activities for Air Transportation;
- Research and development establishments primarily engaged in aerospace R&D (except prototype production) are classified in Industry 54171, Research and Development in the Physical, Engineering, and Life Sciences;
- Establishments primarily engaged in manufacturing aircraft engine intake and exhaust valves, pistons, or engine filters are classified in Industry 33631, Motor Vehicle Gasoline Engine and Engine Parts Manufacturing;
- Establishments primarily engaged in manufacturing of aircraft seating are classified in Industry 33636, Motor Vehicle Seating and Interior Trim Manufacturing;
- Establishments primarily engaged in manufacturing aeronautical, navigational, and guidance systems and instruments are classified in Industry 33451, Navigational, Measuring, Electromedical, and Control Instruments Manufacturing;
- Establishment primarily engaged in manufacturing aircraft engine electrical (aeronautical electrical) equipment or aircraft lighting fixtures are classified in Industry 33632, Motor Vehicle Electrical and Electronic Equipment Manufacturing; and
- Establishments primarily engaged in manufacturing of aircraft fluid power subassemblies are classified in Industry 33291, Metal Valve Manufacturing.

336411 Aircraft Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the

following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

Cross-References.

- Establishments primarily engaged in manufacturing guided missiles and space vehicles are classified in U.S. Industry 336414, Guided Missile and Space Vehicle Manufacturing;
- Establishments primarily engaged in the repair of aircraft (except overhauling, conversion, and rebuilding) are classified in Industry 488190, Other Support Activities for Air Transportation; and
- Research and development establishments primarily engaged in aircraft R&D (except prototype production) are classified in Industry 541710, Research and Development in the Physical, Engineering, and Life Sciences.

336412 Aircraft Engine and Engine Parts Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

Cross-References.

- Establishments primarily engaged in manufacturing guided missile and space vehicle propulsion units and parts are classified in U.S. Industry 336415, Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing;
- Establishments primarily engaged in manufacturing aircraft intake and exhaust valves and pistons are classified in U.S. Industry 336311, Carburetor, Piston, Piston Ring, and Valve Manufacturing;
- Establishments primarily engaged in manufacturing aircraft internal combustion engine filters are classified in U.S. Industry 336312, Gasoline Engine and Engine Parts Manufacturing;
- Establishments primarily engaged in the repair of aircraft engines (except overhauling, conversion, and rebuilding) are classified in Industry 488190, Other Support Activities for Air Transportation;
- Research and development establishments primarily engaged in aircraft engine and engine parts R&D (except prototype production) are classified in Industry 541710, Research and Development in the Physical, Engineering, and Life Sciences; and
- Establishments primarily engaged in manufacturing aeronautical instruments

are classified in U.S. Industry 334511, Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing.

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing^{US}

This U.S. industry comprises establishment primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

Cross-References.

- Establishments primarily engaged in manufacturing aircraft engines and engine parts are classified in U.S. Industry 336412, Aircraft Engine and Engine Parts Manufacturing;
- Establishments primarily engaged in manufacturing aeronautical instruments are classified in U.S. Industry 334511, Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing;
- Establishments primarily engaged in manufacturing aircraft lighting fixtures are classified in U.S. Industry 336321, Vehicular Lighting Equipment Manufacturing;
- Establishments primarily engaged in manufacturing aircraft engine electrical (aeronautical electrical) equipment are classified in U.S. Industry 336322, Other Motor Vehicle Electrical and Electronic Equipment Manufacturing;
- Establishments primarily engaged in manufacturing guided missile and space vehicle parts and auxiliary equipment are classified in U.S. Industry 336419, Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing;
- Establishments primarily engaged in manufacturing of aircraft fluid power subassemblies are classified in U.S. Industry 332912, Fluid Power Valve and Hose Fitting Manufacturing;
- Establishments primarily engaged in manufacturing of aircraft seating are classified in Industry 336360, Motor Vehicle Seating and Interior Trim Manufacturing; and
- Research and development establishments primarily engaged in aircraft parts and auxiliary equipment R&D (except prototype production) are classified in Industry 541710, Research and Development in the Physical, Engineering, and Life Sciences.

336414 Guided Missile and Space Vehicle Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missile or space vehicles.

Cross-References.

- Establishments primarily engaged in manufacturing space satellites are classified in Industry 334220, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing; and
- Research and development establishments primarily engaged in guided missile and space vehicle R&D (except prototype production) are classified in Industry 541710, Research and Development in the Physical, Engineering, and Life Sciences.

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

Cross-References.

Research and development establishments primarily engaged in guided missile and space propulsion unit and propulsion unit parts R&D (except prototype production) are classified in Industry 541710, Research and Development in the Physical, Engineering, and Life Sciences.

336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing^{US}

This U.S. Industry comprises establishments primarily engaged in (1) manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or (2) developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

Cross-References.

- Establishments primarily engaged in manufacturing navigational and guidance systems are classified in U.S. Industry 334511, Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing;
- Establishments primarily engaged in manufacturing guided missile and space vehicle propulsion units and propulsion unit parts are classified in U.S. Industry 336415, Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing; and
- Research and development establishments primarily engaged in guided missile and space vehicle parts and auxiliary equipment R&D (except prototype production) are classified in Industry 541710, Research and Development in the

Physical, Engineering, and Life Sciences.

3365 Railroad Rolling Stock Manufacturing

33651 Railroad Rolling Stock Manufacturing

See industry description for 336510 below.

336510 Railroad Rolling Stock Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing and/or rebuilding locomotives, locomotive frames and parts; (2) manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and (3) manufacturing rail layers, ballast distributors, rail tamping equipment and other railway track maintenance equipment.

Cross-References.

- Establishments primarily engaged in manufacturing mining rail cars are classified in U.S. Industry 333131, Mining Machinery and Equipment Manufacturing;
- Establishments primarily engaged in manufacturing locomotive fuel lubricating or cooling medium pumps are classified in U.S. Industry 333911, Pump and Pumping Equipment Manufacturing;
- Repair establishments of railroad and local transit companies primarily engaged in repairing railroad and transit cars are classified in Industry 488210, Support Activities for Rail Transportation; and
- Establishments not owned by railroad or local transit companies primarily engaged in repairing railroad cars and locomotive engines are classified in Industry 811310, Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance.

3366 Ship and Boat Building

33661 Ship and Boat Building

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized

services, such as ship scaling.

Illustrative Examples:

Barge building

Boat yards (i.e., boat manufacturing facilities)

Cargo ship building

Drilling and production platforms, floating, oil and gas, building

Passenger ship building

Rowboats manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing rubber boats--are classified in Industry 32629, Other Rubber Product Manufacturing;
- Manufacturing nonrigid (i.e., inflatable) plastics boats--are classified in Industry 32619, Other Plastics Product Manufacturing;
- Fabricating structural assemblies or components for ships, or subcontractors engaged in ship painting, joinery, carpentry work, and electrical wiring installation,--are classified based on the production process used; and
- Ship repairs performed in floating drydocks--are classified in Industry 48839, Other Support Activities for Water Transportation.

336611 Ship Building and Repairing^{CAN}

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

Illustrative Examples:

Barge building

Cargo ship building

Drilling and production platforms, floating, oil and gas, building

Passenger ship building

Submarine building

Cross-References. Establishments primarily engaged in--

- Fabricating structural assemblies or components for ships, or subcontractors engaged in ship painting, joinery, carpentry work, and electrical wiring installation--are classified based on the production process used; and
- Ship repairs performed in floating drydocks--are classified in Industry 488390,

Other Support Activities for Water Transportation.

336612 Boat Building^{CAN}

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

Illustrative Examples:

Dinghy (except inflatable rubber) manufacturing
Motorboats, inboard or outboard, building
Rowboats manufacturing
Sailboat building, not done in shipyards
Yacht building, not done in shipyards

Cross-References. Establishments primarily engaged in--

- Ship building or ship repairs performed in a shipyard--are classified in U.S. Industry 336611, Ship Building and Repairing;
- Manufacturing rubber boats and life rafts--are classified in U.S. Industry 326299, All Other Rubber Product Manufacturing; and
- Manufacturing nonrigid (i.e., inflatable) plastics boats--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing.

3369 Other Transportation Equipment Manufacturing

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 Other Transportation Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

Cross-References. Establishments primarily engaged in--

- Manufacturing ships and boats--are classified in Industry 33661, Ship and Boat Building;
- Manufacturing aerospace products and parts--are classified in Industry 33641, Aerospace Product and Parts Manufacturing;

- Manufacturing motor vehicle parts--are classified in Industry Group 3363, Motor Vehicle Parts Manufacturing;
- Manufacturing children's vehicles (except bicycles and metal tricycles)--are classified in Industry 33993, Doll, Toy, and Game Manufacturing;
- Manufacturing railroad rolling stock--are classified in Industry 33651, Railroad Rolling Stock Manufacturing; and
- Manufacturing motor vehicles--are classified in Industry Group 3361, Motor Vehicle Manufacturing.

336991 Motorcycle, Bicycle, and Parts Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment, and parts.

Cross-References. Establishments primarily engaged in--

- Manufacturing children's vehicles (except bicycles and metal tricycles)--are classified in U.S. Industry 339932, Game, Toy, and Children's Vehicle Manufacturing; and
- Manufacturing golf carts and other similar personnel carriers--are classified in U.S. Industry 336999, All Other Transportation Equipment Manufacturing.

336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

Cross-References.

Establishments primarily engaged in manufacturing nonarmored military universal carriers are classified in U.S. Industry 336112, Light Truck and Utility Vehicle Manufacturing.

336999 All Other Transportation Equipment Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles and tanks).

Illustrative Examples:

All-terrain vehicles (ATVs), wheeled or tracked, manufacturing

Animal-drawn vehicles and parts manufacturing
Gocarts (except children's) manufacturing
Golf carts and similar motorized passenger carriers manufacturing
Race cars manufacturing
Snowmobiles and parts manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing motorcycles, bicycles and parts--are classified in U.S. Industry 336991, Motorcycle, Bicycle, and Parts Manufacturing;
- Manufacturing military armored vehicles, tanks, and tank components--are classified in U.S. Industry 336992, Military Armored Vehicle, Tank, and Tank Component Manufacturing;
- Manufacturing ships and boats--are classified in Industry 33661, Ship and Boat Building;
- Manufacturing aerospace products and parts--are classified in Industry 33641, Aerospace Product and Parts Manufacturing;
- Manufacturing motor vehicle parts--are classified in Industry Group 3363, Motor Vehicle Parts Manufacturing;
- Manufacturing railroad rolling stock--are classified in Industry 336510, Railroad Rolling Stock Manufacturing; and
- Manufacturing motor vehicles--are classified in Industry Group 3361, Motor Vehicle Manufacturing.

337 Furniture and Related Product Manufacturing

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knockdown). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen and bedroom furniture and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 Wood Kitchen Cabinet and Countertop Manufacturing

See industry description for 337110 below.

337110 Wood Kitchen Cabinet and Countertop Manufacturing

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops

(except freestanding). The cabinets and counters may be made on a stock or custom basis.

Cross-References. Establishments primarily engaged in--

- Manufacturing metal kitchen and bathroom cabinets (except freestanding)--are classified in U.S. Industry 337124, Metal Household Furniture Manufacturing;
- Manufacturing plastics countertops--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing;
- Manufacturing stone countertops--are classified in U.S. Industry 327991, Cut Stone and Stone Product Manufacturing; and
- Manufacturing wood or plastics laminated on wood countertops (except kitchen and bathroom)--are classified in U.S. Industry 337215, Showcase, Partition, Shelving, and Locker Manufacturing.

33712 Household and Institutional Furniture Manufacturing

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

Cross-References. Establishments primarily engaged in--

- Manufacturing laboratory and hospital furniture--are classified in Industry 33911, Medical Equipment and Supplies Manufacturing;
- Manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding)--are classified in Industry 33711, Wood Kitchen Cabinet and Countertop Manufacturing;
- Manufacturing office-type furniture and/or office or store fixtures--are classified in Industry 33721, Office Furniture (including Fixtures) Manufacturing; and
- Repairing or refinishing furniture--are classified in Industry 81142, Reupholstery and Furniture Repair.

337121 Upholstered Household Furniture Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

Cross-References. Establishments primarily engaged in--

- Reupholstering furniture or upholstering frames to individual order--are classified in Industry 811420, Reupholstery and Furniture Repair;
- Wood kitchen and dining room chairs with upholstered seats or backs--are

classified in U. S. Industry 337122, Nonupholstered Wood Household Furniture Manufacturing;

- Metal kitchen and dining room chairs with upholstered seats or backs--are classified in U.S. Industry 337124, Metal Household Furniture Manufacturing; and
- Kitchen and dining room chairs (except wood and metal) with upholstered seats or backs-- are classified in U.S. Industry 337125, Household Furniture (except Wood and Metal) Manufacturing.

337122 Nonupholstered Wood Household Furniture Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

Cross-References. Establishments primarily engaged in--

- Manufacturing reed, rattan, plastics and similar furniture--are classified in U.S. Industry 337125, Household Furniture (except Wood and Metal) Manufacturing;
- Manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding)--are classified in Industry 337110, Wood Kitchen Cabinet and Countertop Manufacturing;
- Manufacturing wood television, stereo, loudspeaker, and sewing machine cabinets (i.e., housings)--are classified in U.S. Industry 337129, Wood Television, Radio, and Sewing Machine Cabinet Manufacturing; and
- Repairing or refinishing furniture--are classified in Industry 811420, Reupholstery and Furniture Repair.

337124 Metal Household Furniture Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

Cross-References.

Establishments primarily engaged in manufacturing metal laboratory and hospital furniture including beds are classified in Industry 33911, Medical Equipment and Supplies Manufacturing.

337125 Household Furniture (except Wood and Metal) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing

household-type furniture of materials other than wood or metal, such as plastics, reed, rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

Cross-References. Establishments primarily engaged in--

- Manufacturing concrete, ceramic, or stone furniture--are classified in Subsector 327, Nonmetallic Mineral Product Manufacturing, according to the materials used;
- Manufacturing upholstered household-type furniture--are classified in U.S. Industry 337121, Upholstered Household Furniture Manufacturing;
- Manufacturing metal household-type furniture--are classified in U.S. Industry 337124, Metal Household Furniture Manufacturing; and
- Manufacturing nonupholstered wood household-type furniture--are classified in U.S. Industry 337122, Nonupholstered Wood Household Furniture Manufacturing.

337127 Institutional Furniture Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

Cross-References. Establishments primarily engaged in--

- Manufacturing laboratory and hospital furniture--are classified in Industry 33911, Medical Equipment and Supplies Manufacturing;
- Manufacturing wood kitchen cabinets, wood bathroom vanities, and countertops designed for permanent installation--are classified in Industry 337110, Wood Kitchen Cabinet and Countertop Manufacturing;
- Manufacturing office-type furniture and/or office or store fixtures--are classified in Industry 33721, Office Furniture (including Fixtures) Manufacturing; and
- Repairing or refinishing furniture--are classified in Industry 811420, Reupholstery and Furniture Repair.

337129 Wood Television, Radio, and Sewing Machine Cabinet Manufacturing^{US}

This industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

Cross-References. Establishments primarily engaged in--

- Manufacturing plastics housings used by television, stereo, loudspeaker, and sewing machine manufacturers--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing;
- Manufacturing metal housings used by television, stereo, loudspeaker, and sewing machine manufacturers--are classified in U.S. Industry 332322, Sheet Metal Work Manufacturing;
- Manufacturing freestanding wood household-type cabinets (e.g., entertainment centers, stands) for consumer electronics--are classified in U.S. Industry 337122, Nonupholstered Wood Household Furniture Manufacturing;
- Manufacturing freestanding metal household-type cabinets (e.g., entertainment centers, stands) for consumer electronics--are classified in U.S. Industry 337124, Metal Household Furniture Manufacturing; and
- Manufacturing freestanding household-type cabinets (e.g., entertainment centers, stands)(except wood and metal) for consumer electronics--are classified in U.S. Industry 337125, Household Furniture (except Wood and Metal) Manufacturing.

3372 Office Furniture (including Fixtures) Manufacturing

33721 Office Furniture (including Fixtures) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

Cross-References. Establishments primarily engaged in--

- Manufacturing millwork on a factory basis--are classified in Industry 32191, Millwork;
- Manufacturing household-type and institutional-type furniture--are classified in Industry 33712, Household and Institutional Furniture Manufacturing;
- Manufacturing refrigerated cabinets, showcases, and display cases--are classified in Industry 33341, Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing; and
- Manufacturing metal safes and vaults--are classified in Industry 33299, All Other Fabricated Metal Product Manufacturing.

337211 Wood Office Furniture Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337212 Custom Architectural Woodwork and Millwork Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

Cross-References. Establishments primarily engaged in--

- Manufacturing millwork on a factory basis--are classified in U.S. Industry 321918, Other Millwork (including Flooring);
- Manufacturing wood office-type furniture on a stock or custom basis--are classified in U.S. Industry 337211, Wood Office Furniture Manufacturing; and
- Manufacturing wood office-type furniture and store fixtures on a stock basis--are classified in U.S. Industry 337215, Showcase, Partition, Shelving, and Locker Manufacturing.

337214 Office Furniture (except Wood) Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337215 Showcase, Partition, Shelving, and Locker Manufacturing^{CAN}

This U.S. industry comprises establishments primarily engaged in manufacturing wood and nonwood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

Cross-References. Establishments primarily engaged in--

- Manufacturing refrigerated cabinets, showcases, and display cases--are classified in U.S. Industry 333415, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing;
- Manufacturing metal safes and vaults--are classified in U.S. Industry 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing; and
- Manufacturing wood or plastics laminated kitchen and bathroom countertops--

are classified in Industry 337110, Wood Kitchen Cabinet and Countertop Manufacturing.

3379 Other Furniture Related Product Manufacturing

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 Mattress Manufacturing

See industry description for 337910 below.

337910 Mattress Manufacturing

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

Cross-References. Establishments primarily engaged in--

- Manufacturing individual wire springs--are classified in Industry 33261, Spring and Wire Product Manufacturing; and
- Manufacturing inflatable mattresses--are classified in Subsector 326, Plastics and Rubber Products Manufacturing.

33792 Blind and Shade Manufacturing

See industry description for 337920 below.

337920 Blind and Shade Manufacturing

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds, and shades may be made on a stock or custom basis and may be made of any material.

Cross-References. Establishments primarily engaged in--

- Manufacturing canvas awnings--are classified in U.S. Industry 314912, Canvas and Related Product Mills; and
- Manufacturing curtains and draperies--are classified in U.S. Industry 314121, Curtain and Drapery Mills.

339 Miscellaneous Manufacturing

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 Medical Equipment and Supplies Manufacturing

33911 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

Cross-References. Establishments primarily engaged in--

- Manufacturing laboratory instruments, X-ray apparatus, electromedical apparatus (including electronic hearing aids), and thermometers (except medical)--are classified in Industry 33451, Navigational, Measuring, Electromedical, and Control Instruments Manufacturing;
- Manufacturing molded glass lens blanks--are classified in Industry 32721, Glass and Glass Product Manufacturing;
- Manufacturing molded plastics lens blanks--are classified in Industry 32619, Other Plastics Product Manufacturing;
- Retailing and grinding prescription eyeglasses--are classified in Industry 44613, Optical Goods Stores; and
- Manufacturing sporting goods helmets and protective equipment--are classified in Industry, 33992 Sporting and Athletic Goods Manufacturing.

339111 Laboratory Apparatus and Furniture Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

Cross-References. Establishments primarily engaged in--

- Manufacturing dental laboratory apparatus and furniture--are classified in U.S. Industry 339114, Dental Equipment and Supplies Manufacturing; and
- Manufacturing laboratory instruments--are classified in U.S. Industry 334516, Analytical Laboratory Instrument Manufacturing.

339112 Surgical and Medical Instrument Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

Cross-References. Establishments primarily engaged in--

- Manufacturing electromedical and electrotherapeutic apparatus--are classified in U.S. Industry 334510, Electromedical and Electrotherapeutic Apparatus Manufacturing;
- Manufacturing irradiation apparatus--are classified in U.S. Industry 334517, Irradiation Apparatus Manufacturing;
- Manufacturing surgical and orthopedic appliances--are classified in U.S. Industry 339113 Surgical Appliance and Supplies Manufacturing;
- Manufacturing dental equipment, dental supplies, dental laboratory apparatus, and dental laboratory furniture--are classified in U.S. Industry 339114, Dental Equipment and Supplies Manufacturing;
- Manufacturing laboratory apparatus and laboratory and hospital furniture (except dental)--are classified in U.S. Industry 339111, Laboratory Apparatus and Furniture Manufacturing; and
- Manufacturing thermometers (except medical)--are classified in U.S. Industry 334519, Other Measuring and Controlling Device Manufacturing.

339113 Surgical Appliance and Supplies Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

Cross-References. Establishments primarily engaged in--

- Manufacturing dental equipment, dental supplies, dental laboratory apparatus, and dental laboratory furniture--are classified in U.S. Industry 339114, Dental Equipment and Supplies Manufacturing;
- Manufacturing laboratory apparatus and laboratory and hospital furniture (except dental)--are classified in U.S. Industry 339111, Laboratory Apparatus and Furniture Manufacturing;
- Manufacturing electronic hearing aids--are classified in U.S. Industry 334510, Electromedical and Electrotherapeutic Apparatus Manufacturing;
- Manufacturing industrial protective eyewear--are classified in U.S. Industry 339115, Ophthalmic Goods Manufacturing; and
- Manufacturing sporting goods helmets and protective equipment--are classified in Industry 339920, Sporting and Athletic Goods Manufacturing.

339114 Dental Equipment and Supplies Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material.

Cross-References. Establishments primarily engaged in--

- Manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application--are classified in U.S. Industry 339116, Dental Laboratories; and
- Manufacturing laboratory apparatus and laboratory and hospital furniture (except dental)--are classified in U.S. Industry 339111, Laboratory Apparatus and Furniture Manufacturing.

339115 Ophthalmic Goods Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers.

Cross-References. Establishments primarily engaged in--

- Manufacturing molded glass lens blanks--are classified in U.S. Industry 327212, Other Pressed and Blown Glass and Glassware Manufacturing;
- Manufacturing molded plastics lens blanks--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing; and
- Retailing and grinding prescription eyeglasses--are classified in Industry

446130, Optical Goods Stores.

339116 Dental Laboratories^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

Cross-References.

Establishments primarily engaged in manufacturing dental equipment and supplies are classified in U.S. Industry 339114, Dental Equipment and Supplies Manufacturing.

3399 Other Miscellaneous Manufacturing

33991 Jewelry and Silverware Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching jewelry; (2) manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (3) manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware; (4) manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases); (5) stamping coins; (6) manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing; (7) cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems; (8) recutting, repolishing, and setting gem stones; and (9) drilling, sawing, and peeling cultured and costume pearls.

Cross-References. Establishments primarily engaged in--

- Manufacturing nonprecious and precious plated metal cutlery and flatware--are classified in Industry 33221, Cutlery and Handtool Manufacturing;
- Manufacturing nonprecious plated ware (except cutlery, flatware)--are classified in Industry 33299, All Other Fabricated Metal Product Manufacturing;
- Engraving, chasing, or etching nonprecious and precious plated metal flatware and other plated ware and plated jewelry--are classified in Industry 33281, Coating, Engraving, Heat Treating, and Allied Activities;
- Manufacturing synthetic stones or gem stones--are classified in Industry 32799, All Other Nonmetallic Mineral Product Manufacturing; and
- Manufacturing personal goods (except metal) carried on or about the person, such as compacts and cigarette cases,--are classified in Industry 31699, Other Leather and Allied Product Manufacturing.

339911 Jewelry (except Costume) Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry; (2) manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and (3) stamping coins.

Cross-References. Establishments primarily engaged in--

- Manufacturing, engraving, chasing, or etching costume jewelry and nonprecious metal personal goods--are classified in U.S. Industry 339914, Costume Jewelry and Novelty Manufacturing;
- Manufacturing jewelers' materials or performing lapidary work--are classified in U.S. Industry 339913, Jewelers' Material and Lapidary Work Manufacturing; and
- Plating jewelry--are classified in U.S. Industry 332813, Electroplating, Plating, Polishing, Anodizing and Coloring.

339912 Silverware and Hollowware Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other plated ware.

Cross-References. Establishments primarily engaged in--

- Manufacturing nonprecious and precious plated metal cutlery and flatware--are classified in U.S. Industry 332211, Cutlery and Flatware (except Precious) Manufacturing;
- Manufacturing nonprecious metal plated ware (except cutlery and flatware)--are classified in U.S. Industry 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing;
- Engraving, chasing, or etching nonprecious and precious plated metal cutlery, flatware and other plated ware--are classified in U.S. Industry 332812, Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufactures; and
- Manufacturing, engraving, chasing, or etching precious (except precious plated) metal jewelry and personal goods--are classified in U.S. Industry 339911, Jewelry (excluding Costume) Manufacturing.

339913 Jewelers' Material and Lapidary Work Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing unassembled jewelry parts and stock shop products, such

as sheet, wire, and tubing; (2) cutting, slabbing, tumbling, carving, engraving, polishing or faceting precious or semiprecious stones and gems; (3) recutting, repolishing, and setting gem stones; and (4) drilling, sawing, and peeling cultured pearls.

Cross-References. Establishments primarily engaged in--

- Manufacturing synthetic stones--are classified in Industry U.S. 327999, All Other Miscellaneous Nonmetallic Mineral Product Manufacturing; and
- Manufacturing costume pearls--are classified in U.S. Industry 339914, Costume Jewelry and Novelty Manufacturing.

339914 Costume Jewelry and Novelty Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in (1) manufacturing, engraving, chasing, and etching costume jewelry; and/or (2) manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases). This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

Cross-References. Establishments primarily engaged in--

- Manufacturing, engraving, chasing, or etching precious (except precious plated) metal jewelry and novelties--are classified in U.S. Industry 339911, Jewelry (excluding Costume) Manufacturing;
- Manufacturing personal goods (except metal) carried on or about the person, such as compacts and cigarette cases,--are classified in U.S. Industry 316993, Personal Leather Goods (except Women's Handbag and Purse) Manufacturing; and
- Manufacturing synthetic stones--are classified in U.S. Industry 327999, All Other Miscellaneous Nonmetallic Mineral Product Manufacturing.

33992 Sporting and Athletic Goods Manufacturing

See industry description for 339920 below.

339920 Sporting and Athletic Goods Manufacturing

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

Cross-References. Establishments primarily engaged in--

- Manufacturing athletic apparel--are classified in Subsector 315, Apparel

Manufacturing;

- Manufacturing athletic footwear--are classified in U.S. Industry 316219, Other Footwear Manufacturing; and
- Manufacturing small arms and small arms ammunition--are classified in Industry 33299, All Other Fabricated Metal Product Manufacturing.

33993 Doll, Toy, and Game Manufacturing

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

Cross-References. Establishments primarily engaged in--

- Manufacturing bicycles and metal tricycles--are classified in Industry 33699, Other Transportation Equipment Manufacturing;
- Manufacturing sporting and athletic goods--are classified in Industry 33992, Sporting and Athletic Goods Manufacturing;
- Manufacturing coin-operated game machines--are classified in Industry 33999, All Other Miscellaneous Manufacturing; and
- Manufacturing electronic video game cartridges and reproducing video game software--are classified in Industry 33461, Manufacturing and Reproducing Magnetic and Optical Media.

339931 Doll and Stuffed Toy Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes, action figures, and stuffed toys.

Cross-References.

Establishments primarily engaged in manufacturing toys (except stuffed) are classified in U.S. Industry 339932, Game, Toy, and Children's Vehicle Manufacturing.

339932 Game, Toy, and Children's Vehicle Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

Cross-References. Establishments primarily engaged in--

- Manufacturing dolls and stuffed toys--are classified in U.S. Industry 339931, Doll and Stuffed Toy Manufacturing;

- Manufacturing metal tricycles and bicycles--are classified in U.S. Industry 336991, Motorcycle, Bicycle, and Parts Manufacturing;
- Manufacturing sporting and athletic goods--are classified in Industry 339920, Sporting and Athletic Goods Manufacturing;
- Manufacturing coin-operated game machines--are classified in U.S. Industry 339999, All Other Miscellaneous Manufacturing; and
- Mass reproducing electronic video game cartridges--are classified in U.S. Industry 334611, Software Reproducing.

33994 Office Supplies (except Paper) Manufacturing

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

Cross-References. Establishments primarily engaged in--

- Manufacturing writing, drawing, and india inks--are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing;
- Manufacturing drafting tables and boards--are classified in Industry 33712, Household and Institutional Furniture Manufacturing;
- Manufacturing rubber erasers--are classified in Industry 32629, Other Rubber Product Manufacturing;
- Manufacturing paper office supplies--are classified in Subsector 322, Paper Manufacturing;
- Manufacturing manifold business forms, blankbooks, and looseleaf binders--are classified in Industry 32311, Printing; and
- Manufacturing inkjet cartridges--are classified in Industry 32591, Printing Ink Manufacturing.

339941 Pen and Mechanical Pencil Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

Cross-References. Establishments primarily engaged in--

- Manufacturing nonmechanical pencils and pencil leads--are classified in U.S. Industry 339942, Lead Pencil and Art Good Manufacturing;
- Manufacturing writing, drawing, and india inks--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing; and
- Manufacturing rubber erasers—are classified in U.S. Industry 326299, All Other Rubber Product Manufacturing.

339942 Lead Pencil and Art Good Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils, and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

Cross-References. Establishments primarily engaged in--

- Manufacturing mechanical pencils--are classified in U.S. Industry 339941, Pen and Mechanical Pencil Manufacturing;
- Manufacturing writing, drawing, and india inks--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing;
- Manufacturing rubber erasers--are classified in U.S. Industry 326299, All Other Rubber Product Manufacturing;
- Manufacturing paper office supplies--are classified in Subsector 322, Paper Manufacturing;
- Printing manifold business forms and manufacturing blankbooks and looseleaf binders and devices--are classified in Industry 32311, Printing; and
- Manufacturing drafting tables and boards--are classified in U.S. Industry 337127, Institutional Furniture Manufacturing.

339943 Marking Device Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

Cross-References.

Establishments primarily engaged in manufacturing felt tipped markers are classified in U.S. Industry 339941, Pen and Mechanical Pencil Manufacturing.

339944 Carbon Paper and Inked Ribbon Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

Cross-References.

Establishments primarily engaged in manufacturing inkjet cartridges are classified in Industry 325910, Printing Ink Manufacturing.

33995 Sign Manufacturing

See industry description for 39950 below.

339950 Sign Manufacturing

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, displays).

Cross-References. Establishments primarily engaged in--

- Printing advertising specialties or printing paper and paperboard signs, notices, and displays--are classified in Industry 32311, Printing;
- Manufacturing and printing advertising specialties--are classified in the manufacturing sector according to products manufactured;
- Manufacturing die-cut paperboard displays--are classified in U.S. Industry 322299, All Other Converted Paper Product Manufacturing; and
- Sign lettering and painting--are classified in Industry 541890, Other Services Related to Advertising.

33999 All Other Miscellaneous Manufacturing.

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

Illustrative Examples:

Artificial Christmas trees manufacturing
Burial caskets and cases manufacturing
Candles manufacturing
Coin-operated amusement machines (except jukebox) manufacturing
Fasteners, buttons, needles, and pins (except precious metals or precious and semiprecious stones and gems) manufacturing
Floor and dust mops manufacturing
Gasket, packing, and sealing devices manufacturing
Musical instruments (except toy) manufacturing
Portable fire extinguishers manufacturing
Umbrellas manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing medical equipment and supplies--are classified in Industry Group 3391; Medical Equipment and Supplies Manufacturing

- Manufacturing jewelry and flatware--are classified in Industry 33991, Jewelry and Silverware Manufacturing;
- Manufacturing sporting and athletic goods--are classified in Industry 33992, Sporting and Athletic Goods Manufacturing;
- Manufacturing dolls, toys, and games--are classified in Industry 33993, Doll, Toy, and Game Manufacturing;
- Manufacturing office supplies (except paper)--are classified in Industry 39994, Office Supplies (except Paper) Manufacturing;
- Manufacturing signs--are classified in Industry 33995, Sign Manufacturing;
- Manufacturing concrete burial vaults--are classified in Industry 32739, Other Concrete Product Manufacturing;
- Manufacturing Christmas tree glass ornaments and glass lamp shades--are classified in Industry 32721, Glass and Glass Product Manufacturing;
- Manufacturing Christmas tree lighting sets--are classified in Industry 33512, Lighting Fixture Manufacturing;
- Manufacturing beauty and barber chairs--are classified in Industry 33712, Household and Institutional Furniture Manufacturing;
- Manufacturing burnt wood articles--are classified in Industry 32199, All Other Wood Product Manufacturing;
- Dressing and bleaching furs--are classified in Industry 31611, Leather and Hide Tanning and Finishing;
- Manufacturing paper, textile, and metal lamp shades--are classified in Industry 33512, Lighting Fixture Manufacturing;
- Manufacturing plastics lamp shades--are classified in Industry 32619, Other Plastics Product Manufacturing;
- Manufacturing matches--are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing;
- Manufacturing metal products, such as metal combs and hair curlers,--are classified in Industry 33299, All Other Fabricated Metal Product Manufacturing;
- Manufacturing plastics products, such as plastics combs and hair curlers,--are classified in Industry 32619, Other Plastics Product Manufacturing; and
- Manufacturing electric hair clippers for use on humans--are classified in Industry 33521, Small Electrical Appliance Manufacturing.

339991 Gasket, Packing, and Sealing Device Manufacturing^{US}

This industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

339992 Musical Instrument Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

Cross-References.

Establishments primarily engaged in manufacturing toy musical instruments are classified in U.S. Industry 339932, Game, Toy, and Children's Vehicle Manufacturing.

339993 Fastener, Button, Needle, and Pin Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

Cross-References. Establishments primarily engaged in--

- Manufacturing buttons, pins, and buckles made of precious metals or precious and semiprecious stones and gems--are classified in U.S. Industry 339911, Jewelry (except Costume) Manufacturing;
- Manufacturing hypodermic and suture needles--are classified in U.S. Industry 339112, Surgical and Medical Instrument Manufacturing; and
- Manufacturing phonograph and styli needles--are classified in U.S. Industry 334419, Other Electronic Component Manufacturing.

339994 Broom, Brush, and Mop Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

339995 Burial Casket Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

Cross-References.

Establishments primarily engaged in manufacturing concrete burial vaults are classified in Industry 327390, Other Concrete Product Manufacturing.

339999 All Other Miscellaneous Manufacturing^{US}

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

Illustrative Examples:

Artificial Christmas trees manufacturing
Candles manufacturing
Christmas tree ornaments (except glass and electric) manufacturing
Cigarette lighters (except precious metal) manufacturing
Coin-operated amusement machines (except jukebox) manufacturing
Hair pieces (e.g., wigs, toupees, wiglets) manufacturing
Portable fire extinguishers manufacturing
Potpourri manufacturing
Tobacco pipes manufacturing
Umbrellas manufacturing

Cross-References. Establishments primarily engaged in--

- Manufacturing medical equipment and supplies--are classified in Industry Group 3391, Medical Equipment and Supplies Manufacturing;
- Manufacturing jewelry and flatware--are classified in Industry 33991, Jewelry and Silverware Manufacturing;
- Manufacturing sporting and athletic goods--are classified in Industry 339920, Sporting and Athletic Goods Manufacturing;
- Manufacturing dolls, toys, and games--are classified in Industry 33993, Doll, Toy, and Game Manufacturing;
- Manufacturing office supplies (except paper)--are classified in Industry 39994, Office Supplies (except Paper) Manufacturing;
- Manufacturing signs--are classified in Industry 33995, Sign Manufacturing;
- Manufacturing gasket, packing, and sealing devices--are classified in U.S. Industry 339991, Gasket, Packing, and Sealing Device Manufacturing;
- Manufacturing musical instruments--are classified in U.S. Industry 339992, Musical Instrument Manufacturing;
- Manufacturing fasteners, buttons, needles, and pins--are classified in U.S. Industry 339993, Fastener, Button, Needle, and Pin Manufacturing;
- Manufacturing brooms, brushes, and mops--are classified in U.S. Industry 339994, Broom, Brush, and Mop Manufacturing;
- Manufacturing burial caskets--are classified in U.S. Industry 339995, Burial Casket Manufacturing;
- Manufacturing Christmas tree glass ornaments and glass lamp shades--are classified in U.S. Industry 327215, Glass Product Manufacturing Made of Purchased Glass;
- Manufacturing Christmas tree lighting sets--are classified in U.S. Industry 335129, Other Lighting Equipment Manufacturing;
- Manufacturing beauty and barber chairs--are classified in U.S. Industry 337127, Institutional Furniture Manufacturing;
- Manufacturing burnt wood articles--are classified in U.S. Industry 321999, All Other Miscellaneous Wood Product Manufacturing;
- Dressing and bleaching furs--are classified in Industry 316110, Leather and

Hide Tanning and Finishing;

- Manufacturing paper, textile, and metal lamp shades--are classified in U.S. Industry 335121, Residential Electric Lighting Fixture Manufacturing;
- Manufacturing plastics lamp shades--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing;
- Manufacturing matches--are classified in U.S. Industry 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing;
- Manufacturing metal products, such as metal combs and hair curlers,--are classified in U.S. Industry 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing;
- Manufacturing plastics products, such as plastics combs and hair curlers,--are classified in U.S. Industry 326199, All Other Plastics Product Manufacturing; and
- Manufacturing electric hair clippers for use on humans--are classified in U.S. Industry 335211, Electric Housewares and Household Fan Manufacturing.

US—United States industry only. CAN—United States and Canadian industries are comparable.

When neither US nor CAN appears, Canadian, Mexican, and United States industries are comparable.