# West Virginia: 2002

#### Issued September 2005

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## **2002 Economic Census** *Manufacturing* Geographic Area Series



Helping You Make Informed Decisions

U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU



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# Introduction to the Economic Census

#### PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in "2" and "7."

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the federal government use the data to monitor economic activity and to assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

#### **INDUSTRY CLASSIFICATIONS**

Data from the 2002 Economic Census are published primarily according to the 2002 North American Industry Classification System (NAICS). NAICS was first adopted in the United States, Canada, and Mexico in 1997. The 2002 Economic Census covers the following NAICS sectors:

21 22 23	Mining Utilities Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), largely covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 100 subsectors (three-digit codes), 317 industry groups (four-digit codes), and, as implemented in the United States, 1,179 industries (six-digit codes).

#### **RELATIONSHIP TO HISTORICAL INDUSTRY CLASSIFICATIONS**

Prior to the 1997 Economic Census, data were published according to the Standard Industrial Classification (SIC) system. While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The 1997 Economic Census *Bridge Between NAICS and SIC* demonstrates the relationships between NAICS and SIC industries. Where changes are significant, it may not be possible to construct time series that include data for points both before and after 1997.

Most industry classifications remained unchanged between 1997 and 2002, but NAICS 2002 includes substantial revisions within the construction and wholesale trade sectors, and a number of revisions for the retail trade and information sectors. These changes are noted in industry definitions and will be demonstrated in the *Bridge Between NAICS 2002 and NAICS 1997*.

For 2002, data for enterprise support establishments (those functioning primarily to support the activities of their company's operating establishments, such as a warehouse or a research and development laboratory) are included in the industry that reflects their activities (such as warehousing). For 1997, such establishments were termed auxiliaries and were excluded from industry totals.

#### **BASIS OF REPORTING**

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company. (For selected industries, only payroll, employment, and classification are collected for individual establishments, while other data are collected on a consolidated basis.)

## **GEOGRAPHIC AREA CODING**

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for states, metropolitan and micropolitan statistical areas, counties, and corporate municipalities (places) including cities, towns, townships, villages, and boroughs. Respondents were required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from administrative sources is used as a basis for coding.

#### AVAILABILITY OF ADDITIONAL DATA

All results of the 2002 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on digital versatile discs (DVD-ROMs) for sale by the Census Bureau. The American FactFinder system at the Internet site allows selective retrieval and downloading of the data. For more information, including a description of reports being issued, see the Internet site, write to the U.S. Census Bureau, Washington, DC 20233-6100, or call Customer Services at 301-763-4100.

#### HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart

from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some service trades in 1933. Censuses of construction, manufacturing, and the other business censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated, providing comparable census data across economic sectors and using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census report forms.

The range of industries covered in the economic census expanded between 1967 and 2002. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity. New for 2002 is coverage of four industries classified in the agriculture, forestry, and fishing sector under the SIC system: landscape architectural services, landscaping services, veterinary services, and pet care services.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. Reports for 1997 were published primarily on the Internet and copies of 1992 reports are also available there. CD-ROMs issued from the 1987, 1992, and 1997 Economic Censuses contain databases that include all or nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

## SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for the 2002 Economic Census and related surveys is published in the *Guide to the 2002 Economic Census* at www.census.gov/econ/census02/guide. More information on the methodology, procedures, and history of the census will be published in the *History of the 2002 Economic Census* at www.census.gov/econ/www/history.html.

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## Manufacturing

## SCOPE

The Manufacturing sector (sector 31-33) 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.

**Exclusions.** There are activities that are sometimes considered manufacturing, but for NAICS are classified in another sector. These activities include logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting is considered a harvesting operation; the beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining; the construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction; 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 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).

The tabulations for this sector do not include central administrative offices, warehouses, or other establishments that serve manufacturing establishments within the same organization. Data for such establishments are classified according to the nature of the service they provide. For example, separate headquarters establishments are reported in NAICS Sector 55, Management of Companies and Enterprises.

The reports described below exclude establishments of firms with no paid employees. These "nonemployers," typically self-employed individuals or partnerships operating businesses that they have not chosen to incorporate, are reported separately in Nonemployer Statistics. The contribution of nonemployers, relatively small for this sector, may be examined at www.census.gov/nonemployerimpact.

The reports described below cover all manufacturing establishments with one or more paid employees.

**Definitions.** Industry categories are defined in Appendix B, NAICS Codes, Titles, and Descriptions. Other terms are defined in Appendix A, Explanation of Terms.

#### REPORTS

The following reports provide statistics on this sector:

**Industry Series.** There are 473 reports, each covering a single NAICS industry (six-digit code). These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. The industry reports also include data for states with 100 employees or more in the industry. The data in industry reports are preliminary and subject to change in the following reports.

**Geographic Area Series.** There are 51 separate reports, one for each state and the District of Columbia. Each state report presents similar statistics at the "all manufacturing" level for each state and its metropolitan and micropolitan areas with 250 employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

#### **Subject Series:**

- Industry-Product Analysis Summary. This report presents value of shipments, value of product shipments, percentage of product shipments of the total value of shipments, and percentage of distribution of value of product shipments on the NAICS six-digit industry level and by the six- and seven-digit product code levels. It also includes miscellaneous receipts at the six- and seven-digit product code levels by NAICS six-digit industry levels.
- **General Summary.** This report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.
- **Product Summary.** This report summarizes the products data published in the industry reports. This report also includes a table with data for products that are primary to more than one industry, which are not in the industry reports.
- **Materials Summary.** This report summarizes the materials data published in the industry reports.
- **Concentration Ratio Summary.** This report publishes data on the percentage of value of shipments and value added accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Herfindahl-Herschmann indexes for each industry.
- Location of Manufacturing Plants Summary. This report contains statistics on the number of establishments for the three-and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

**ZIP Code Statistics.** This report contain statistics on the number of establishments for the threeand six-digit NAICS industry by employment-size of the establishment by ZIP Code.

**Other reports.** Data for this sector are also included in reports with multisector coverage, including Nonemployer Statistics, Comparative Statistics, Bridge Between 2002 NAICS and 1997 NAICS, Business Expenses, and the Survey of Business Owners reports.

#### **GEOGRAPHIC AREAS COVERED**

The level of geographic detail varies by report. Maps are available at www.census.gov/econ2002maps. Notes specific to areas in the state are included in Appendix D, Geographic Notes.

- 1. The United States as a whole.
- 2. States and the District of Columbia.
- 3. Metropolitan and micropolitan statistical areas with 250 employees or more. A core based statistical areas (CBSA) contains a core area with a substantial population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. CBSAs are differentiated into metropolitan and micropolitan statistical areas based on size criteria. Both metropolitan and micropolitan areas are defined in terms of entire counties, and are listed in Appendix E, Metropolitan and Micropolitan Statistical Areas.
  - a. Metropolitan Statistical Areas (metro areas). Metro areas have at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.
  - b. Micropolitan Statistical Areas (micro areas). Micro areas have at least one urban cluster of at least 10,000 but less than 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.
  - c. Metropolitan Divisions (metro divisions). If specified criteria are met, a metro area containing a single core with a population of 2.5 million or more may be subdivided to form smaller groupings of counties referred to as Metropolitan Divisions.

- d. Combined Statistical Areas (combined areas). If specified criteria are met, adjacent metro and micro areas, in various combinations, may become the components of a new set of areas called Combined Statistical Areas. The areas that combine retain their own designations as metro or micro areas within the larger combined area.
- 4. Counties and county equivalents defined as of January 1, 2002, with 500 employees or more. Counties are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs, census areas, and city and boroughs. Maryland, Missouri, Nevada, and Virginia have one place or more that is independent of any county organization and constitutes primary divisions of their states. These places are treated as counties and as places.
- 5. Economic places with 500 employees or more.
  - a. Municipalities of 2,500 inhabitants or more defined as of January 1, 2002. These are areas of significant population incorporated as cities, boroughs, villages, or towns according to the 2000 Census of Population. For the economic census, boroughs and census areas in Alaska and boroughs in New York are not included in this category.
  - b. Consolidated cities defined as of January 1, 2002. Consolidated cities are consolidated governments that consist of separately incorporated municipalities.
  - c. Townships in Michigan, New Jersey, and Pennsylvania, and towns in New York, Wisconsin, and the six New England states with 10,000 inhabitants or more (according to the 2000 Census of Population).
  - d. Balance of county. Areas outside the entities listed above, including incorporated municipalities with populations of fewer than 2,500, town and townships not qualifying as noted above, and the remainders of counties outside places are categorized as "Balance of county."

#### **DOLLAR VALUES**

All dollar values presented are expressed in current dollars; i.e., 2002 data are expressed in 2002 dollars, and 1997 data, in 1997 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

#### **COMPARABILITY OF THE 1997 AND 2002 ECONOMIC CENSUSES**

Both the 2002 Economic Census and the 1997 Economic Census present data based on the North American Industry Classification System (NAICS). While there were revisions to selected industries for 2002, this sector is not affected by those revisions.

For 2002, there have been several additional data tables added, which did not exist in 1997. These tables for 2002 include products primary to more than one industry, industry-product analysis, e-commerce value of shipments, and leased and nonleased detail employment statistics by subsectors.

#### **RELIABILITY OF DATA**

All data compiled for this sector are subject to nonsampling errors. Nonsampling errors can be attributed to many sources: inability to identify all cases in the actual universe; definition and classification difficulties; differences in the interpretation of questions; errors in recording or coding the data obtained; and other errors of collection, response, coverage, processing, and estimation for missing or misreported data. Selected data in tables titled "Detailed Statistics" are based on the Annual Survey of Manufactures and are subject to sampling errors as well as nonsampling errors.

No direct measurement of these effects has been obtained except for estimation for missing or misreported data, as by the percentages shown in the tables. Precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize the effects of nonsampling errors. More information on the reliability of the data is included in Appendix C, Methodology.

## DISCLOSURE

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

The disclosure analysis for "industry statistics" files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. Nonetheless, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures, which can be suppressed even though value of shipments data are published.

## AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 55,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data. In addition to the ASM, the Census Bureau conducts the Current Industrial Reports (CIR) program. The CIR program publishes selected detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) Program, which publishes detailed statistics for manufacturing industries at the U.S. level.

In addition, the County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county, and Statistics of U.S. Businesses provides annual statistics classified by the employment size of the enterprise, further classified by industry for the United States, and by broader categories for states and metropolitan areas.

## **CONTACTS FOR DATA USERS**

Questions about these data may be directed to the U.S. Census Bureau, Manufacturing & Construction Division, Information Services Center, 301-763-4673 or ask.census.gov.

#### **ABBREVIATIONS AND SYMBOLS**

The following abbreviations and symbols are used with these data:

- A Standard error of 100 percent or more
- D Withheld to avoid disclosing data of individual companies; data are included in higher level totals
- F Exceeds 100 percent because data include establishments with payroll exceeding revenue
- N Not available or not comparable
- S Withheld because estimates did not meet publication standards
- X Not applicable
- Z Less than half the unit shown
- a 0 to 19 employees
- b 20 to 99 employees
- c 100 to 249 employees

e f h i j k l m	250 to 499 employees 500 to 999 employees 1,000 to 2,499 employees 2,500 to 4,999 employees 5,000 to 9,999 employees 10,000 to 24,999 employees 25,000 to 49,999 employees 50,000 to 99,999 employees 100,000 employees or more
p	10 to 19 percent estimated
q	20 to 29 percent estimated
r	Revised
s	Sampling error exceeds 40 percent
nsk	Not specified by kind
–	Represents zero (page image/print only)
(CC)	Consolidated city
(IC)	Independent city

## Table 1. Industry Statistics for the State: 2002

[Includes data for industry groups and industries with 100 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

101113, 0	and geographical deminions, see note at					graphic areas	, ionowed by	oce Append					
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WEST VIRGINIA												
31-33	Manufacturing	-	r1 480	r489	'67 319	r2 586 956	<sup>r</sup> 50 443	r101 570	r1 695 796	r7 983 845	r10 965 884	<sup>18</sup> 911 332	r675 453
311	Food manufacturing	-	91	17	4 609	107 119	3 413	5 752	63 824	301 979	385 968	685 721	11 266
3114	Fruit and vegetable preserving and specialty food manufacturing	-	6	2	с	D	D	D	D	D	D	D	D
31142 311421	Fruit and vegetable canning, pickling, and drying Fruit and vegetable canning.	-	5	2	166 C	3 710 D	148 D	292 D	2 966 D	13 397 D	12 062 D	25 369 D	D D
3115	Dairy product manufacturing	_	4	2	198	7 231	121	277	3 236	24 474	33 017	57 171	923
31151	Dairy product (except frozen)					_	_	_	_		_	_	_
311511	manufacturing	=	2	1	C C	D D	D D	D D	D D	D D	D D	D D	D D
3116	Animal slaughtering and processing	-	25	4	3 106	52 947	2 622	4 241	42 416	153 380	241 646	394 464	4 305
31161	Animal slaughtering and processing	_	25	4	3 106	52 947	2 622	4 241	42 416	153 380	241 646	394 464	4 305
311615	Poultry processing	-	3	3	3 023	50 619	2 549	4 078	40 419	147 981	221 537	368 957	3 974
3118	Bakeries and tortilla manufacturing	1	40	4	895	36 669	368	696	12 556	96 278	24 947	121 213	D
31181	Bread and bakery product manufacturing	1	37	4	f	D	D	D	D	D	D	D	3 784
311811 311812	Retail bakeries Commercial bakeries	4	25 12	1 3	с 688	D 33 924	D 251	D 553	D 11 226	D 91 242	D 21 024	D 112 290	98 3 686
3119	Other food manufacturing	-	9	4	с	D	D	D	D	D	D	D	1 539
31199	All other food manufacturing Perishable prepared food	-	8	3	164	3 872	110	148	1 746	8 118	15 485	23 592	D
311991	manufacturing	-	4	3	156	3 660	106	141	1 634	7 739	15 089	22 819	D
312	Beverage and tobacco product manufacturing	-	10	6	f	D	D	D	D	D	D	D	D
3121	Beverage manufacturing	-	9	5	f	D	D	D	D	D	D	D	D
31211	Soft drink and ice manufacturing	_	8	5	f	D	D	D	D	D	D	D	D
312111	Soft drink manufacturing	-	3	3	f	D	D	D	D	D	D	D	D
3122	Tobacco manufacturing	-	1	1	с	D	D	D	D	D	D	D	D
31222 312229	Tobacco product manufacturing	-	1	1	с	D	D	D	D	D	D	D	D
312229	Other tobacco product manufacturing	-	1	1	с	D	D	D	D	D	D	D	D
313	Textile mills	7	9	4	е	D	D	D	D	D	D	D	794
3132	Fabric mills	5	3	2	с	D	D	D	D	D	D	D	D
31322	Narrow fabric mills and schiffli machine embroidery	9	2	1	с	D	D	D	D	D	D	D	D
313221	Narrow fabric mills	9		1	с	D	D	D	D	D	D	D	D
314	Textile product mills	1	15	2	с	D	D	D	D	D	D	D	D
315	Apparel manufacturing	3	19	8	587	13 215	509	975	10 614	48 804	41 446	89 474	D
3151 31511	Apparel knitting mills	_	2	1	c c	D	D	D		D	D	D	D
315119	Other hosiery and sock mills .	-	1	1	c	D	Ď	D	D D	D	D	D	D
3152	Cut and sew apparel manufacturing	9	15	6	е	D	D	D	D	D	D	D	D
31521	Cut and sew apparel contractors	7	10	2	с	D	D	D	D	D	D	D	26
31522	apparel manufacturing	9	3	3	177	3 382	152	270	2 826	9 472	10 134	19 606	D
315224	Men's and boys' cut and sew trouser, slack, and jean					_	_	_	_		_	_	_
	manufacturing	9	1	1	С	D	D	D	D	D	D	D	D
321 3211	Wood product manufacturing Sawmills and wood preservation .	1	259 138	100 51	8 947	227 888 75 314	7 913	15 995	185 821	612 146 210 896	1 012 162	1 620 031	38 557 12 465
3211	Sawmills and wood preservation .	1	138	51	2 894	75 314	2 547	5 253	61 892	210 696	378 801	596 912	12 400
321113	preservation	1	138 127	51 45	2 894 2 674	75 314 70 373	2 547 2 344	5 253 4 932	61 892 57 878	210 896 192 028	378 801 330 124	596 912 529 633	12 465 11 765
321114	Wood preservation	-	11	6	220	4 941	203	321	4 014	18 868	48 677	67 279	700
3212	Veneer, plywood, and engineered wood product manufacturing	-	19	11	1 532	47 550	1 285	2 931	35 876	165 050	251 824	410 072	4 173
32121	Veneer, plywood, and engineered wood product												
321211	manufacturing	-	19	11	1 532	47 550	1 285	2 931	35 876	165 050	251 824	410 072	4 173
321213	plywood manufacturing Engineered wood member	-	6	5	741	18 811	639	1 488	13 821	45 837	74 609	114 273	D
321214	(except truss) manufacturing Truss manufacturing	_ 4	2 8	1 2	e	D	D	D D	D	D	D	D	D D
321214	Reconstituted wood product manufacturing	4	3	2	с 383	16 732	315	729	12 974	60 165	91 911	152 306	D
		. –	. 3	. 3		10 / 32	5151	129	12 3/4	00 105	31 311	132 300	U

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			A establis	II hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WEST VIRGINIA-Con.												
321	Wood product manufacturing-Con.												
3219	Other wood product manufacturing	1	102	38	4 521	105 024	4 081	7 811	88 053	236 200	381 537	613 047	21 919
32191	Millwork	1	50	20	3 233	75 292	2 993	5 637	66 035	167 192	287 155	450 346	14 519
321911	Wood window and door manufacturing	_	6	2	520	12 148	474	907	10 495	21 303	45 206	65 149	D
321912	Cut stock, resawing lumber, and planing	2	23	13	1 398	33 384	1 293	2 411	28 882	55 772	148 068	201 654	D
321918	Other millwork (including flooring)	_	21	5	1 315	29 760	1 226	2 319	26 658	90 117	93 881	183 543	7 221
32192	Wood container and pallet manufacturing	2	18	5	500	9 946	419	801	7 391	16 656	26 216	43 523	972
321920	Wood container and pallet manufacturing	2	18	5	500	9 946	419	801	7 391	16 656	26 216	43 523	972
32199	All other wood product manufacturing	_	34	13	788	19 786	669	1 373	14 627	52 352	68 166	119 178	6 428
321992	Prefabricated wood building manufacturing	_	9	4	197	4 572	176	347	3 644	11 911	12 666	25 107	282
321999	All other miscellaneous wood product manufacturing	_	25	9	591	15 214	493	1 026	10 983	40 441	55 500	94 071	6 146
322	Paper manufacturing	1	12	10	846	27 363	673	1 437	19 902	80 304	119 149	200 374	2 413
3221	Pulp, paper, and paperboard mills	_	3	3	е	D	D	D	D	D	D	D	D
32211	Pulp mills	-	1	1	с	D	D	D	D	D	D	D	D
322110 32213	Pulp mills Paperboard mills	_	1 2	1 2 2	C C	D	D	DDD	DDD	D	D	D D D	DDD
322130 3222	Paperboard mills	_	2	2	С	D	D	D	D	D	D	D	D
	manufacturing	2	9	7	f	D	D	D	D	D	D	D	D
32221 322211	Paperboard container manufacturing	-	4	3	с	D	D	D	D	D	D	D	D
322211	Corrugated and solid fiber box manufacturing Paper bag and coated and	-	2	2	с	D	D	D	D	D	D	D	D
32222	treated paper manufacturing Uncoated paper and multiwall	3	3	3	с	D	D	D	D	D	D	D	D
322224	bag manufacturing	-	1	1	с	D	D	D	D	D	D	D	D
323	Printing and related support activities	-	r124	18	'2 636	'77 466	'2 200	r4 432	'60 377	'225 772	'190 562	'411 749	'97 825
3231	Printing and related support activities	_	r124	18	'2 636	'77 466	'2 200	r4 432	<sup>r</sup> 60 377	'225 772	'190 562	<sup>r</sup> 411 749	'97 825
32311	Printing Commercial lithographic	-	r114	17	r2 562	75 847	r2 142	r4 332	159 357	1222 781	r189 456	r407 637	<sup>r</sup> 97 668
323110	printing	1	59	8	685	20 824	554	927	15 952	41 308	24 646	65 003	D
323111 323113 323116	Commercial gravure printing . Commercial screen printing . Manifold business forms printing	- 1	1 13 4	1 2 3	r257 c	D 7 691 D	D r195 D	D r456 D	D r4 501 D	D r30 137 D	D r37 520 D	D r65 209 D	D D D
323117	Books printing	-	4	1	e	D	D	D	D	D	D	D	D
324	Petroleum and coal products manufacturing	2	17	8	902	47 321	680	1 410	33 488	249 186	647 025	892 130	58 490
3241	Petroleum and coal products manufacturing	2	17	8	902	47 321	680	1 410	33 488	249 186	647 025	892 130	58 490
32411 324110	Petroleum refineries	-	1	1	c c	D	D	D D	D	D	D	D D	D D
324110 32412	Petroleum refineries Asphalt paving, roofing, and saturated materials	_			C	U	U	D		U	U	D	U
324121	Manufacturing	-	9	2	с	D	D	D	D	D	D	D	D
32419	block manufacturing Other petroleum and coal	-	9	2	с	D	D	D	D	D	D	D	D
324191	products manufacturing Petroleum lubricating oil and	2	7	5	f	D	D	D	D	D	D	D	D
324199	grease manufacturing All other petroleum and coal	-	4	3	422	24 207	356	745	19 632	95 176	345 514	441 546	D
	products manufacturing	7	3	2	с	D	D	D	D	D	D	D	D
325 3251	Chemical manufacturing Basic chemical manufacturing	-	75 39	44 22	10 861 5 126	677 589 326 130	6 463 3 159	13 677 6 674	373 637 190 483	2 656 852 1 286 239	3 107 946 1 336 642	5 753 775 2 606 657	215 531 85 131
32512	Industrial gas manufacturing	_	14	22	133	6 633	65	139	3 460	68 245	28 805	78 894	4 289
325120 32513	Industrial gas manufacturing. Synthetic dye and pigment manufacturing	-	14	2	133 c	6 633 D	65 D	139 D	3 460 D	68 245 D	28 805 D	78 894 D	4 289 D
325132	Synthetic organic dye and pigment manufacturing	_	1	1	с	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical manufacturing	-	8	4	961	58 638	664	1 320	38 588	140 674	144 612	288 102	11 753
325181	Alkalies and chlorine manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
325182 325188	Carbon black manufacturing . All other basic inorganic	-	2	2	C 129	D	D	D	D	12 905	D	D	D
32519	chemical manufacturing Other basic organic chemical	_	5 15	1	138 h	7 802 D	83 D	178 D	4 067 D	13 805 D	12 263 D	27 051 D	D
325191	manufacturing Gum and wood chemical manufacturing		2	2	c	D	D	D	D	D	D	D	D
325192	Cyclic crude and intermediate manufacturing		1	1	f	D	D	D	D	D	D	D	D
325199	All other basic organic chemical manufacturing		12	12	3 032	196 944	1 830	3 898	112 499	814 358	913 518	1 722 218	45 266

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			A establisl	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WEST VIRGINIA-Con.												
325 3252	Chemical manufacturing—Con. Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	_	5	5	3 005	187 382	2 070	4 384	124 492	940 095	1 035 581	1 969 227	86 713
32521	Resin and synthetic rubber		_	_									
325211	manufacturing Plastics material and resin manufacturing	-	5 5	5 5	3 005 3 005	187 382 187 382	2 070 2 070	4 384 4 384	124 492 124 492	940 095 940 095	1 035 581 1 035 581	1 969 227 1 969 227	86 713 86 713
3254	Pharmaceutical and medicine manufacturing	-	5	4	g	D	D	D	D	D	D	D	D
32541 325412	Pharmaceutical and medicine manufacturing Pharmaceutical preparation manufacturing	-	5 3	4 3	g	D D	D D	D D	D D	D D	D D	D D	D D
3255	Paint, coating, and adhesive manufacturing	7	6	4	с	D	D	D	D	D	D	D	D
32551 325510	Paint and coating manufacturing Paint and coating	9	3	2	102	3 070	80	169	1 732	28 253	20 050	48 332	D
32552 325520	Adhesive manufacturing Adhesive manufacturing	9 3 3	3 3 3	2 2 2	102 c c	3 070 D D	80 D D	169 D D	1 732 D D	28 253 D D	20 050 D D	48 332 D D	D 401 401
3256	Soap, cleaning compound, and toilet preparation manufacturing.	-	6	3	392	16 889	271	585	9 160	87 227	36 656	128 169	D
32561 325611	Soap and cleaning compound manufacturing Soap and other detergent	-	6	3	392	16 889	271	585	9 160	87 227	36 656	128 169	D
325612	Soap and other detergent manufacturing Polish and other sanitation good manufacturing	-	3 3	1	c e	D	D	D	D	D	D	D D	D
3259	Other chemical product and preparation manufacturing	3	12	6	454	25 663	317	663	16 348	50 843	109 391	168 074	D
32599 325991	All other chemical product and preparation manufacturing Custom compounding of	3	11	6	е	D	D	D	D	D	D	D	D
325998	purchased resins All other miscellaneous chemical product and	1	4	3	278	16 572	188	392	9 794	35 516	86 497	123 078	D
326	Preparation manufacturing . Plastics and rubber products	5 2	5	2 26	с 3 973	D 117 537	D 3 044	D 6 024	D 73 383	D 290 612	D 277 078	D 576 360	D 24 948
3261	manufacturing	2	40	19	3 405	99 573	2 639	5 163	62 631	290 612	216 707	469 015	24 948 22 889
32611 326111	Plastics packaging materials and unlaminated film and sheet manufacturing Plastics bag manufacturing Unlaminated plastics film and	2	3	3	472 c	15 088	411 D	749 D	12 225	30 472 D	24 129 D	54 624 D	D
326113	sheet (except packaging) manufacturing	_	1	1	e	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, and unlaminated profile shape manufacturing	8	6	3	c	D	D	D	D	D	D	D	D
326122	Plastics pipe and pipe fitting manufacturing	8	5	2	214	6 133	173	346	4 567	18 001	28 418	46 848	1 182
32619	Other plastics product manufacturing	1	26	11	h	D	D	D	D	D	D	D	D
326192	Resilient floor covering manufacturing	9	1	1	е	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing	-	23	10	2 156	64 310	1 554	3 075	34 440	160 900	135 161	304 459	10 005
3262	Rubber product manufacturing	1	11	7	568	17 964	405	861	10 752	47 084	60 371	107 345	2 059
32629 326299	Other rubber product manufacturing All other rubber product	-	6 5	6 5	f 494	D 14 867	D 358	D 772	D 9 048	D 38 738	D 55 873	D 94 405	D
327	manufacturing Nonmetallic mineral product manufacturing	3	133	42	5 006	156 564	3 900	7 765	110 754	421 063	264 731	686 834	28 567
3271	Clay product and refractory manufacturing	_	13	7	1 465	41 694	1 187	2 343	29 367	91 113	43 588	136 899	D
32711	Pottery, ceramics, and plumbing fixture		-			04.055			00.00	50 105		00 50-	-
327112	manufacturing Vitreous china, fine earthenware, and other pottery product	-	8	4	1 202	31 253	992	1 949	23 291	56 483	29 741	86 505	D
327113	manufacturing Porcelain electrical supply	-	6	2	g	D	D	D	D	D	D	D	D
32712	manufacturing Clay building material and	-	2	2	c	D	D	D	D	D	D	D	D
327125	refractories manufacturing Nonclay refractory manufacturing	_	5 2	3 2	263 c	10 441 D	195 D	394 D	6 076 D	34 630 D	13 847 D	50 394 D	D

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			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WEST VIRGINIA-Con.												
327	Nonmetallic mineral product												
3272	manufacturing – Con. Glass and glass product												
	manufacturing	3	29	14	2 024	64 648	1 608	3 323	48 420	163 103	96 028	258 203	10 083
32721	Glass and glass product manufacturing	3	29	14	2 024	64 648	1 608	3 323	48 420	163 103	96 028	258 203	10 083
327211 327212	Flat glass manufacturing Other pressed and blown glass and glassware	-	2	2	e	D	D	D	D	D	D	D	D
327215	manufacturing Glass product manufacturing made of purchased glass	5 1	14 13	8 4	1 444 e	46 176 D	1 125 D	2 371 D	34 265 D	109 164 D	70 986 D	179 843 D	7 627 D
3273	Cement and concrete product	5	79	18	1 345	44 226	975	1 859	29 036	142 595	93 369	236 054	10 531
32731	manufacturing	8	2	2	1 345 C	44 220 D	975 D	1 659 D	29 030 D	142 595 D	93-369 D	230 034 D	10 531 D
327310 32732	Cement manufacturing Ready-mix concrete	8	2	2	c	Ď	D	Ď	D	D	Ď	Ď	Ď
327320	manufacturing Ready-mix concrete	3	49	9	617	18 231	456	835	12 417	47 533	46 908	94 274	6 377
	manufacturing	3	49	9	617	18 231	456	835	12 417	47 533	46 908	94 274	6 377
32733	Concrete pipe, brick, and block manufacturing	5	14	2	с	D	D	D	D	D	D	D	D
327331	Concrete block and brick manufacturing	5	14	2	с	D	D	D	D	D	D	D	D
32739	Other concrete product manufacturing	5	14	5	352	8 892	237	465	5 658	23 290	16 907	39 885	1 476
327390	Other concrete product manufacturing	5	14	5	352	8 892	237	465	5 658	23 290	16 907	39 885	1 476
3279	Other nonmetallic mineral product manufacturing	-	10	2	с	D	D	D	D	D	D	D	1 626
331	Primary metal manufacturing	_	34	24	8 987	435 322	6 853	14 558	309 910	1 042 130	1 836 023	2 882 426	65 186
3311	Iron and steel mills and ferroalloy manufacturing	-	9	7	4 645	241 281	3 655	8 143	185 256	526 325	812 150	1 319 955	17 127
33111	Iron and steel mills and ferroalloy manufacturing	_	9	7	4 645	241 281	3 655	8 143	185 256	526 325	812 150	1 319 955	17 127
331111	Iron and steel mills	-	9	7	4 645	241 281	3 655	8 143	185 256	526 325	812 150	1 319 955	17 127
3313	Alumina and aluminum production and processing	-	8	7	2 327	104 591	1 785	3 561	68 887	299 921	768 400	1 054 799	29 321
33131 331312	Alumina and aluminum production and processing	-	8	7	2 327	104 591	1 785	3 561	68 887	299 921	768 400	1 054 799	29 321
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, and foil manufacturing	-	4	4	1 524	70 652	1 125	2 246	43 474	222 350	573 616	780 599	22 591
3314	Nonferrous metal (except aluminum) production and processing	_	6	5	1 546	75 156	1 033	2 315	45 624	186 061	232 751	454 433	17 195
33141	Nonferrous metal (except												
331419	aluminum) smelting and refining Primary smelting and refining of nonferrous metal (except	-	2	2	e	D	D	D	D	D	D	D	D
22142	copper and aluminum) Copper rolling, drawing,	-	2	2	е	D	D	D	D	D	D	D	D
33142 331422	extruding, and alloying	-	1	1	с	D	D	D	D	D	D	D	D
331422 33149	Copper wire (except mechanical) drawing Nonferrous metal (except copper and aluminum) rolling,	-	1	1	с	D	D	D	D	D	D	D	D
331491	drawing, extruding, and alloying Nonferrous metal (except	-	3	2	g	D	D	D	D	D	D	D	D
	copper and aluminum) rolling, drawing, and												
	extruding	-	1	1	g	D	D	D	D	D	D	D	D
3315	Foundries	-	8	4	417	12 253	348	474	8 758	22 726	16 248	40 305	1 297
33151 33152 331522	Ferrous metal foundries Nonferrous metal foundries Nonferrous (except aluminum) die-casting	1	44	2	100 317	3 121 9 132	80 268	190 284	2 003 6 755	7 800 14 926	3 865 12 383	11 813 28 492	174 1 123
000		-	1	1	е	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	'271	'85	'7 072	'219 583	'5 347	'10 429	'149 135	'589 800	'782 918	'1 375 777	'27 493
3321	Forging and stamping	2	6	3	273	10 762	223	491	7 619	52 415	39 935	91 459	D
33211 332115	Forging and stamping	2	6	3	273	10 762	223	491	7 619	52 415	39 935	91 459	D
	manufacturing	-	2	2	с	D	D	D	D	D	D	D	D
3322	Cutlery and handtool manufacturing	-	6	3	746	26 046	512	1 027	20 568	76 081	33 608	116 562	900
33221	Cutlery and handtool manufacturing	-	6	3	746	26 046	512	1 027	20 568	76 081	33 608	116 562	900
332212	Hand and edge tool manufacturing	-	6	3	746	26 046	512	1 027	20 568	76 081	33 608	116 562	900

4 West Virginia

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		Cinu			ation on geo	graphic areas i	onowed by ,	see Append	IN D. TOT MEE	ining of abbrevia	allons and symbo		
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WEST VIRGINIA-Con.												
332	Fabricated metal product												
3323	manufacturing—Con. Architectural and structural metals												
33231	manufacturing Plate work and fabricated	1	<sup>r</sup> 64	'29	r1 696	'48 766	'1 269	'2 441	'29 636	'131 172	'100 679	<sup>r</sup> 229 910	r4 473
332311	structural product manufacturing Prefabricated metal building and component	3	38	14	729	24 943	500	987	13 846	57 268	48 766	105 530	D
332312	manufacturing Fabricated structural metal	-	4	2	с	D	D	D	D	D	D	D	D
33232	manufacturing Ornamental and architectural metal products	3	30	11	572	19 582	412	797	11 490	46 609	39 045	85 276	1 803
332321	manufacturing Metal window and door	-	<sup>r</sup> 26	r15	<sup>r</sup> 967	r23 823	r769	r1 454	r15 790	73 904	r51 913	r124 380	D
332322	manufacturing Sheet metal work	-	5	4	209	3 861	158	250	1 997	12 816	15 996	28 855	347
0004	manufacturing	r1	r16	r10	r725	r18 919	r590	r1 157	r13 192	<sup>r</sup> 59 255	r34 735	<sup>r</sup> 92 459	r2 172
3324 33242	Boiler, tank, and shipping container manufacturing Metal tank (heavy gauge)	5	12	7	499	17 920	397	816	12 008	48 521	96 225	144 938	4 984
332420	manufacturing Metal tank (heavy gauge)	7	3	2	119	4 652	75	174	2 506	13 960	1 961	15 914	178
33243	manufacturing Metal can, box, and other metal container (light gauge)	7	3	2	119	4 652	75	174	2 506	13 960	1 961	15 914	178
332431	manufacturing Metal can manufacturing	5 5	6 3	5 3	e 254	D 9 620	D 219	D 447	D 7 175	D 20 921	D 84 921	D 105 451	4 686 D
3325	Hardware manufacturing	6	3	2	с	D	D	D	D	D	D	D	D
33251 332510	Hardware manufacturing Hardware manufacturing	6 6	3 3	2 2	c c	D D	D D	D D	D D	D D	D D	D D	D D
3326	Spring and wire product manufacturing	_	7	4	242	9 588	191	395	6 106	26 110	16 705	43 585	587
33261	Spring and wire product		7	4	242	9 588	191	395	6 106	26 110	16 705	43 585	587
332618	manufacturing Other fabricated wire product manufacturing	-	7	4	242	9 588 9 588	191	395	6 106	26 110	16 705	43 585	587
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	3	128	23	1 751	51 160	1 369	2 542	36 162	102 735	48 094	149 842	7 539
33271 332710	Machine shops Machine shops	2 2	121 121	22 22	1 672 1 672	48 638 48 638	1 302 1 302	2 436 2 436	34 413 34 413	97 267 97 267	44 978 44 978	141 266 141 266	7 126 7 126
3328	Coating, engraving, heat treating, and allied activities	_	18	6	798	30 767	633	1 216	22 109	103 601	416 860	513 983	6 542
33281	Coating, engraving, heat treating, and allied activities	_	18	6	798	30 767	633	1 216	22 109	103 601	416 860	513 983	6 542
332812	Metal coating, engraving (except jewelry and silverware), and allied												
332813	services to manufacturers Electroplating, plating, polishing, anodizing, and coloring	_	8	3	450 e	20 756 D	344 D	723 D	14 421 D	82 514 D	411 183 D	487 024 D	D
3329	Other fabricated metal product manufacturing	2	27	8	f	D	D	D	D	D	D	D	D
33291	Metal valve manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
332911 33299	Industrial valve manufacturing All other fabricated metal	-	1	1	f	D	D	D	D	D	D	D	D
33299 332999	product manufacturing All other miscellaneous	2	26	7	е	D	D	D	D	D	D	D	D
002000	fabricated metal product manufacturing	1	14	3	308	9 012	228	464	5 621	19 644	13 072	33 092	319
333	Machinery manufacturing	5	108	31	3 201	116 814	2 315	4 511	70 636	312 122	287 356	573 894	30 152
3331	Agriculture, construction, and	-											
	mining machinery manufacturing	2	51	23	1 554	61 984	1 033	2 062	33 689	149 541	143 204	276 636	D
33312	Construction machinery manufacturing	-	1	1	с	D	D	D	D	D	D	D	D
333120	Construction machinery manufacturing Mining and oil and gas field	-	1	1	с	D	D	D	D	D	D	D	D
33313 333131	machinery manufacturing Mining machinery and	3	50	22	g	D	D	D	D	D	D	D	7 011
555151	equipment manufacturing	1	46	21	1 401	56 885	927	1 839	30 592	114 008	110 580	208 304	D
3333	Commercial and service industry machinery manufacturing	9	9	2	f	D	D	D	D	D	D	D	D
33331	Commercial and service industry machinery												
333311	manufacturing Automatic vending machine manufacturing	9 9	9 2	2 2	f f	D	D	D D	D D	D	D	D D	D

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			А			ployees		oduction worl			aions and symbol	is, see introduct	
NAICS code	Geographic area and industry		establisi	With 20 em-							Total	Total	Total capital
		E1	Total	ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	expendi- tures (\$1,000)
	WEST VIRGINIA-Con.												
333 3334	Machinery manufacturing – Con. Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	_	5	2	с	D	D	D	D	D	D	D	D
33341 333415	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing Air-conditioning and warm air	-	5	2	с	D	D	D	D	D	D	D	D
	heating equipment and commercial and industrial refrigeration equipment manufacturing	_	2	1	с	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	6	31	4	423	15 140	292	503	8 390	33 273	26 328	59 341	D
33391	Pump and compressor manufacturing	9	4	2	с	D	D	D	D	D	D	D	D
333911 33399	Pump and pumping equipment manufacturing All other general purpose	9	3	2	164	6 510	108	192	3 430	12 618	15 046	27 406	440
333999	machinery manufacturing All other miscellaneous	5	18	2	192	6 230	140	239	3 612	14 119	8 716	22 833	D
	general purpose machinery manufacturing	3	8	2	111	3 090	88	129	1 833	7 856	4 201	12 061	D
334	Computer and electronic product manufacturing	3	24	12	910	34 628	508	1 008	10 983	82 788	58 509	139 934	D
3341	Computer and peripheral equipment manufacturing	3	3	3	с	D	D	D	D	D	D	D	527
33411 334119	Computer and peripheral equipment manufacturing Other computer peripheral equipment manufacturing	3 3	3	3	c	D	D D	D D	D	D D	D	D	527 D
3344	Semiconductor and other electronic component manufacturing	5	7	4	e	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	5	7	4	е	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly)												
334419	manufacturing Other electronic component manufacturing	8 9	3	2	c c	D	D D	D D	D	D D	D D	D D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	2	12	5	e	D	D	D	D	D	D	D	D
33451 334513	Navigational, measuring, electromedical, and control instruments manufacturing Instruments and related	2	12	5	e	D	D	D	D	D	D	D	D
004010	products manufacturing for measuring, displaying, and controlling industrial process variables	2	3	2	294	13 919	153	311	3 697	34 732	15 911	49 970	D
335	Electrical equipment, appliance, and component manufacturing	1	22	8	781	29 663	576	1 186	18 228	71 613	48 226	124 089	D
3351	Electric lighting equipment manufacturing	_	1	1	с	D	D	D	D	D	D	D	D
33511	Electric lamp bulb and part manufacturing		1	1	с	D	D	D	D	D	D	D	D
335110	Electric lamp bulb and part manufacturing	_	1	1	c	D	D	D	D	D	D	D	D
3353	Electrical equipment manufacturing	2	14	5	372	12 857	248	514	6 767	29 440	24 427	54 577	683
33531	Electrical equipment manufacturing	2	14	5	372	12 857	248	514	6 767	29 440	24 427	54 577	683
335312 335314	Motor and generator manufacturing Relay and industrial control	2	6	3	с	D	D	D	D	D	D	D	D
000014	manufacturing	2	6	1	153	6 156	94	190	2 696	11 698	10 636	22 987	182
3359	Other electrical equipment and component manufacturing	-	7	2	e	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component manufacturing	_	3	1	с	D	D	D	D	D	D	D	D
335991	Carbon and graphite product manufacturing	_	1	1	с	D	D	D	D	D	D	D	D

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	i		1			9 I						,	
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry			With 20							Total	Total	Total
		E1	Total	em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	capital expendi- tures (\$1,000)
	WEST VIRGINIA-Con.												
336	Transportation equipment manufacturing	_	33	18	4 291	185 523	3 347	7 288	134 459	684 421	1 642 732	2 323 445	52 152
3362	Motor vehicle body and trailer	_	33	10	4 291	105 525	3 347	7 200	134 439	004 421		2 323 443	52 152
33621	manufacturing Motor vehicle body and trailer	1	6	4	е	D	D	D	D	D	D	D	D
336211	Motor vehicle body and trailer Motor vehicle body	1	6	4	е	D	D	D	D	D	D	D	D
336212	manufacturing	3	4	3 1	116 c	3 335 D	98 D	202 D	2 722 D	6 024 D	7 267 D	13 334 D	D D
3363	Motor vehicle parts manufacturing	_	14	6	2 291	100 207	1 973	4 346	83 658	465 742	1 414 472	1 873 877	D
33631	Motor vehicle gasoline engine and engine parts				2 201					100 7 12			5
336312	manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
33632	parts manufacturing Motor vehicle electrical and	-	2	1	f	D	D	D	D	D	D	D	D
	electronic equipment manufacturing	-	6	2	е	D	D	D	D	D	D	D	120
336322	Other motor vehicle electrical and electronic equipment manufacturing		6	2	е	D	D	D	D	D	D	D	120
33637 336370	Motor vehicle metal stamping Motor vehicle metal	-	3	2 2	f	D	D	D	D	D	D	D	D
	stamping	-	3	2	f	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	4	7	6	1 623	73 493	1 086	2 325	42 987	207 831	178 214	387 702	8 373
33641	Aerospace product and parts manufacturing	4	7	6	1 623	73 493	1 086	2 325	42 987	207 831	178 214	387 702	8 373
336411 336412	Aircraft manufacturing Aircraft engine and engine	4 9	2	2 1	c	D	D	D	D	D	D	D	D
336413	parts manufacturing Other aircraft parts and auxiliary equipment				e					_		_	
336415	manufacturing Guided missile and space	1	3	2	е	D	D	D	D	D	D	D	D
	vehicle propulsion unit and propulsion unit parts		1	1	f	D	D	D	D	D	D	D	D
3365	manufacturing Railroad rolling stock	-		-	1								
33651	manufacturing Railroad rolling stock	-	2	2	с	D	D	D	D	D	D	D	D
336510	manufacturing Railroad rolling stock	-	2	2	с	D	D	D	D	D	D	D	D
337	manufacturing Furniture and related product	-	2	2	с	D	D	D	D	D	D	D	D
3371	manufacturing	1	73	11	1 009	27 448	804	1 464	19 060	76 863	56 330	133 354	D
3371	furniture and kitchen cabinet manufacturing	1	58	6	613	16 659	484	789	11 584	47 521	27 853	75 271	D
33711	Wood kitchen cabinet and countertop manufacturing	5	37	2	208	5 477	170	341	3 909	13 061	5 656	18 645	D
337110	Wood kitchen cabinet and countertop manufacturing	5	37	2	208	5 477	170	341	3 909	13 061	5 656	18 645	D
33712	Household and institutional furniture manufacturing	-	21	4	405	11 182	314	448	7 675	34 460	22 197	56 626	D
337122	Nonupholstered wood household furniture												_
337124	manufacturing Metal household furniture manufacturing	-	11	2 1	215 c	4 414 D	165 D	265 D	3 061 D	13 607 D	4 355 D	18 001 D	D
3372	Office furniture (including fixtures)	_											
33721	manufacturing	5		3	С	D	D	D	D	D	D	D	D
3379	fixtures) manufacturing Other furniture related product	5	11	3	с	D	D	D	D	D	D	D	D
	manufacturing	-	4	2	c	D	D	D	D	D	D	D	D D
33791 337910	Mattress manufacturing Mattress manufacturing	-	3	2 2	c c	D	D D	D	D	D D	D D	D D	D
339 3391	Miscellaneous manufacturing Medical equipment and supplies	2	99	15	1 508	48 327	1 212	2 397	33 513	134 482	59 800	194 318	D
	manufacturing	1	38	5	710	25 128	620	1 278	20 344	93 356	24 833	117 832	D
33911	Medical equipment and supplies manufacturing	1	38	5	710	25 128	620	1 278	20 344	93 356	24 833	117 832	D
339113	Surgical appliance and supplies manufacturing	-	10	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	2	61	10	798	23 199	592	1 119	13 169	41 126	34 967	76 486	D
33995 339950	Sign manufacturing	-	24 24	2 2	235 235	8 240 8 240	163 163	330 330	4 774 4 774	16 324 16 324	11 800 11 800	28 124 28 124	D D
33999	All other miscellaneous manufacturing	3	27	8	526	13 761	401	738	7 761	21 330	20 830	42 553	835
339995 339999	Burial casket manufacturing . All other miscellaneous	-	2	2	с 001	D 7 000	D	D	D	D	D	D	D
	manufacturing	5	21	4	291	7 302	212	336	3 900	14 198	9 163	23 485	426

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more. <sup>2</sup>Includes establishments with payroll at any time during the year. <sup>3</sup>Industries with 100 employees shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 24 9employees; 6–250 to 99 employees; m–100,000 to 9,999 employees; j–1,000 to 24,999 employees; k–25,000 to 49,999 employees; l–50,000 to 99,999 employees; m–100,000 employees or more. <sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March. May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

			A	MI hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BECKLEY-OAK HILL, WV COMBINED STATISTICAL AREA					(11,100)		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(11,000)	(+ , )	(+1,)	(+,,)	(+ :;)
31-33	Manufacturing	1	94	24	1 722	65 577	1 282	2 624	43 424	158 932	206 163	366 336	20 281
321	Wood product manufacturing	-	10	6	е	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	2	1	е	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production and processing	-	1	1	e	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting and												
331419	Primary smelting and refining	-	1	1	е	D	D	D	D	D	D	D	D
	of nonferrous metal (except copper and aluminum)	-	1	1	е	D	D	D	D	D	D	D	D
333	Machinery manufacturing	3	12	4	е	D	D	D	D	D	D	D	D
3331	Agriculture, construction, and mining machinery manufacturing	3	9	4	е	D	D	D	D	D	D	D	D
33313	Mining and oil and gas field machinery manufacturing	3	9	4	е	D	D	D	D	D	D	D	D
333131	Mining machinery and equipment manufacturing	3	9	4	e	D	D	D		D	D	D	D
	Beckley, WV Micropolitan Statistical Area											_	_
31-33	Manufacturing	2	58	16	910	31 233	652	1 306	18 872	66 027	89 837	158 601	8 968
	Oak Hill, WV Micropolitan Statistical Area												
31-33	Manufacturing	1	36	8	812	34 344	630	1 318	24 552	92 905	116 326	207 735	11 313
331	Primary metal manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production and processing	-	1	1	е	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting and												
331419	Primary smelting and refining of nonferrous metal (except	-	1	1	e	D	D	D	D	D	D	D	D
	Copper and aluminum) FAIRMONT-CLARKSBURG, WV COMBINED STATISTICAL AREA	_	1	1	e	D	D	D		D	D	D	D
31-33	Manufacturing	2	133	36	3 560	120 906	2 819	5 749	84 020	329 245	514 004	853 610	D
326	Plastics and rubber products manufacturing	2	7	4	е	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	-	11	4	е	D	D	D	D	D	D	D	D
3272	Glass and glass product manufacturing	-	6	3	395	12 565	323	656	9 028	40 075	18 794	58 550	D
32721	Glass and glass product manufacturing	_	6	3	395	12 565	323	656	9 028	40 075	18 794	58 550	D
327211	Flat glass manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
331 3313	Primary metal manufacturing Alumina and aluminum production and processing	_	3	3	e	D	D	D	D	D	D	D	D
33131	Alumina and aluminum		2	2	6	D	D	D		D		U	D
331315	production and processing Aluminum sheet, plate, and foil manufacturing	-	2 2	2 2	e e	D	D D	D D	D	D D	D D	D D	D
332	Fabricated metal product manufacturing	_	33	8	f	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing	-	7	2	e	D	D	D	D	D	D	D	D
33232	Ornamental and architectural metal products manufacturing	_	4	2	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	_	3	2	e	D	D	D	D	D	D	D	D
	See feetnetes at and of table												

See footnotes at end of table.

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			, 		All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry		establis	With 20 em-							Total	Total	Total capital
		E1	Total	ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	expendi- tures (\$1,000)
	FAIRMONT-CLARKSBURG, WV COMBINED STATISTICAL AREA-Con.												
336	Transportation equipment manufacturing	9	4	3	f	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	9	2	2	е	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	9	2	2	е	D	D	D	D	D	D	D	D
336412	Aircraft engine and engine parts manufacturing	9	1	1	е	D	D	D	D	D	D	D	D
	Clarksburg, WV Micropolitan Statistical Area												
31-33	Manufacturing	4	77	22	2 261	76 757	1 777	3 723	52 389	189 831	262 503	456 443	14 138
326	Plastics and rubber products manufacturing	2	5	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	-	9	4	476	15 530	375	777	10 467	47 012	26 906	73 553	3 284
3272	Glass and glass product manufacturing	-	6	3	395	12 565	323	656	9 028	40 075	18 794	58 550	D
32721 327211	Glass and glass product manufacturing Flat glass manufacturing	-	6 1	3 1	395 e	12 565 D	323 D	656 D	9 028 D	40 075 D	18 794 D	58 550 D	D D
336	Transportation equipment manufacturing	9	1	1	е	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	9	1	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	9	1	1	е	D	D	D	D	D	D	D	D
336412	Aircraft engine and engine parts manufacturing	9	1	1	е	D	D	D	D	D	D	D	D
	Fairmont, WV Micropolitan Statistical Area												
31-33	Manufacturing	-	56	14	1 299	44 149	1 042	2 026	31 631	139 414	251 501	397 167	D
332	Fabricated metal product manufacturing	-	16	6	460	10 954	384	729	8 301	33 315	19 926	53 529	2 257
3323	Architectural and structural metals manufacturing	-	3	2	е	D	D	D	D	D	D	D	1 131
33232	Ornamental and architectural metal products manufacturing	_	2	2	e	D	D	D	D	D	D	D	D
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA												
31-33	Manufacturing	1 2	r4 826 423	'1 329	'164 337 :	7 234 668	100 422 D	196 717 D	'3 524 327	'20 755 786 D	'17 295 811	'38 222 265	D
311 3111	Food manufacturing Animal food manufacturing	3	423	124 4	J e	D	D	D	D	D	D	D	105 862 D
31111	Animal food manufacturing	3	10	4	е	D	D	D	D	D	D	D	D
3112	Grain and oilseed milling	1	9	6	е	D	D	D	D	D	D	D	D
31122 311225	Starch and vegetable fats and oils manufacturing Fats and oils refining and blending	-	2	2 2	e	D	D	D	D	D	D	D	D
3113	Sugar and confectionery product manufacturing	9	25	6	f	D	D	D	D	D	D	D	D
31131 311312	Sugar manufacturing Cane sugar refining	9 9	1	1 1	e e	D D	D D	D D	D	D D	D D	D D	D D
3114	Fruit and vegetable preserving and specialty food manufacturing	_	14	4	f	D	D	D	D	D	D	D	D
31142	Fruit and vegetable canning, pickling, and drying		8	2	e	D	D	D	D	D	D	D	D
311421	Fruit and vegetable canning .	-	5	1	е	D	D	D	D	D	D	D	D
3115 31151	Dairy product manufacturing Dairy product (except frozen)	-	18	12	g	D	D	D	D	D	D	D	D
311511 311514	manufacturing Fluid milk manufacturing Dry, condensed, and	-	9 6	8 6	g	D D	D D	D D	D D	D D	D D	D D	D D
31152	evaporated dairy product manufacturing Ice cream and frozen dessert	-	2	2	е	D	D	D	D	D	D	D	D
311520	manufacturing Ice cream and frozen dessert	4	9	4	e	D	D	D	D	D	D	D	D
	manufacturing	14	9	4	e	D	D	D	D	D	D	D	D

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			A establisl	ll hments <sup>2</sup>	All emp	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA—Con.												
311 3116	Food manufacturing—Con. Animal slaughtering and processing	1	30	13	g	D	D	D	D	D	D	D	D
31161 311612	Animal slaughtering and processing Meat processed from carcasses	1	30 13	13 6	g	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	2	246	55	i	D	D	D	D	D	D	D	D
31181 311811 311812 31182	Bread and bakery product manufacturing	3 5 3 	233 164 66 8	52 25 25 25	h g h e	D D D	D D D	ם ם ם	D D D	D D D	D D D	D D D	D D D
3119	Other food manufacturing	1	66	23	h	D	D	D	D	D	D	D	D
31191 311919	Snack food manufacturing Other snack food	-	6	4	f	D	D	D	D	D	D	D	D
31194	manufacturing Seasoning and dressing manufacturing	1 1	5 15	3 10	g	D	D	D	D	D	D	D	D
311942	Spice and extract manufacturing All other food manufacturing	1	10	8	f	D	D	D	D	D	D	D	D
31199 311999	All other food manufacturing All other miscellaneous food manufacturing	-	34 28	6 5	g f	D	D D	D D	D	D	D	D	D
312	Beverage and tobacco product manufacturing	-	39	18	g	D	D	D	D	D	D	D	D
3121	Beverage manufacturing	-	39	18	g	D	D	D	D	D	D	D	D
31211 312111 31214 312140	Soft drink and ice manufacturing Soft drink manufacturing Distilleries Distilleries		18 13 5 5	14 12 4 4	g g e	D D D	D D D	D D D	D D D D	D D D	D D D D	D D D	D D D
313	Textile mills	7	33	5	f	D	D	D	D	D	D	D	D
3132	Fabric mills	7	16	3	е	D	D	D	D	D	D	D	D
31322	Narrow fabric mills and schiffli machine embroidery	4	4	1	е	D	D	D	D	D	D	D	D
3133	Textile and fabric finishing and fabric coating mills	8	13	2	е	D	D	D	D	D	D	D	D
31331 313311	Textile and fabric finishing mills Broadwoven fabric finishing mills	8 8	12 12	2	e	D	D	D	D	D	D	D	D
314	Textile product mills	8	143	16	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills	8	72	9	f	D	D	D	D	D	D	D	D
31411 314110 31412 31412	Carpet and rug mills Carpet and rug mills Curtain and linen mills Curtain and drapery mills	9 9 3 4	5 5 67 60	1 1 8 7	e e f e	D D D	D D D	ם ם ם	D D D	ם ם ם	D D D		
3149	Other textile product mills	6	71	7	f	D	D	D	D	D	D	D	D
31491 314912	Textile bag and canvas mills Canvas and related product mills	6 6	38 35	5 4	426 e	11 843 D	306 D	622 D	7 133 D	30 062 D	20 690 D	50 689 D	D
315	Apparel manufacturing	<sup>r</sup> 5	r115	'20	g	D	D	D	D	D	D	D	D
3152	Cut and sew apparel manufacturing	4	<sup>r</sup> 80	<sup>r</sup> 18	g	D	D	D	D	D	D	D	D
31521	Cut and sew apparel contractors	'7	<sup>r</sup> 42	r5	е	D	D	D	D	D	D	D	D
31522 315222	Men's and boys' cut and sew apparel manufacturing Men's and boys' cut and sew	4	12	6	f	D	D	D	D	D	D	D	D
315224	suit, coat, and overcoat manufacturing Men's and boys' cut and sew trouser, slack, and jean	8	8	4	f	D	D	D	D	D	D	D	D
31523	Women's and girls' cut and sew apparel manufacturing	-	2 21	2 7	e e	D D	D	D	D	D	D	D D	D D

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			Δ	ll hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA—Con.												
321	Wood product manufacturing	1	159	57	i	D	D	D	D	D	D	D	D
3211	Sawmills and wood preservation .	1	30	7	f	D	D	D	D	D	D	D	D
32111	Sawmills and wood preservation	1	30	7	f	D	D	D	D	D	D	D	D
321113 321114	Sawmills	1	24 6	4 3	e e	D D	D D	D D	D D	D D	D D	D D	D D
3212	Veneer, plywood, and engineered wood product manufacturing	1	19	13	f	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product												
321214	manufacturing Truss manufacturing	1 _	19 15	13 12	f	D D	D D	D D	D D	D D	D D	D D	D D
3219	Other wood product manufacturing	1	110	37	h	D	D	D	D	D	D	D	D
32191 321911	Millwork	2	60	20	g	D	D	D	D	D	D	D	D
321912	manufacturing Cut stock, resawing lumber,	1	16	7	f	D	D	D	D	D	D	D	D
321918	and planing Other millwork (including	2	12	4	е	D	D	D	D	D	D	D	D
32192	flooring) Wood container and pallet	4	32	9	f	D	D	D	D	D	D	D	D
321920	manufacturing Wood container and pallet	3	20	7	е	D	D	D	D	D	D	D	D
32199	manufacturing All other wood product	3	20 30	7 10	e	D	D	D	D	D	D	D	D
321992	manufacturing Prefabricated wood building manufacturing		9	4	g	D	D	D	D	D	D	D	D
321999	All other miscellaneous wood product manufacturing	4	21	6	g f	D	D	D	D	D	D	D	D
322	Paper manufacturing	1	48	29	h	D	D	D	D	D	D	D	D
3221	Pulp, paper, and paperboard mills	2	4	4	e	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	1	44	25	h	D	D	D	D	D	D	D	D
32221	Paperboard container												
322211	manufacturing Corrugated and solid fiber	-	25	14	h	D	D	D	D	D	D	D	D
322215	box manufacturing Nonfolding sanitary food container manufacturing	1	20 1	12 1	g	D	D	D	D	D	D	D	D
32223	Stationery product manufacturing	_	9	5	g f	D	D	D	D	D	ם	D	D
322232	Envelope manufacturing	-	4	3	e	D	Ď	Ď	D	Ď	Ď	Ď	D
323	Printing and related support activities	1	1 024	238	23 842	898 370	17 353	32 622	572 954	1 826 931	1 061 494	2 878 344	D
3231	Printing and related support activities	1	1 024	238	23 842	898 370	17 353	32 622	572 954	1 826 931	1 061 494	2 878 344	D
32311 323110	Printing Commercial lithographic	1	913	210	j	D	D	D	D	D	D	D	D
323112	printing Commercial flexographic printing	1	461 9	146 5	J	D	D	D	D	D	D	D	D
323113 323114 323115 323115 323116	Commercial screen printing Quick printing Digital printing Manifold business forms	1 3 1	66 216 42	15 12 5	e g g f	D D D	D D D	D D D	D D D	D D D	D D D	D D D	D D D
323117 323119 32312	printing Books printing Other commercial printing Support activities for printing	3  5 3	14 26 62 111	7 12 6 28	f 2 060 388 g	D 73 775 12 192 D	D 1 625 267 D	D 3 340 454 D	D 52 626 7 265 D	D 151 465 25 088 D	D 82 027 14 184 D	D 231 904 40 001 D	D 17 403 D D
323121	Tradebinding and related work	3	45	16	g	D	D	D	D	D	D	D	D
323122 324	Prepress services	2	66	12	f	D	D	D	D	D	D	D	D
3241	manufacturing Petroleum and coal products	-	39	9	f	D	D	D	D	D	D	D	D
32412	manufacturing	-	39	9	f	D	D	D	D	D	D	D	D
00.1	saturated materials	1	35	8	f	D	D	D	D	D	D	D	D
324121 324122	Asphalt paving mixture and block manufacturing Asphalt shingle and coating	3	29	4	е	D	D	D	D	D	D	D	D
524122	materials manufacturing	-	6	4	f	D	D	D	D	D	D	D	D

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	aning of abbreviations and symbols, see				All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
325	Chemical manufacturing	-	197	72	j	D	D	D	D	D	D	D	D
3251	Basic chemical manufacturing	-	31	14	2 455	153 249	1 421	2 911	79 551	358 447	467 535	823 045	D
32513	Synthetic dye and pigment manufacturing	_	4	4	f	D	D	D	D	D	D	D	D
325131	Inorganic dye and pigment manufacturing	-	4	4	f	D	D	D	D	D	D	D	D
32518 325188	Other basic inorganic chemical manufacturing All other basic inorganic	-	13	6	g	D	D	D	D	D	D	D	D
32519	chemical manufacturing Other basic organic chemical	-	13	6	g	D	D	D	D	D	D	D	D
325199	manufacturing All other basic organic	-	7	3	е	D	D	D	D	D	D	D	D
	chemical manufacturing	-	7	3	е	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	-	50	20	h	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	_	50	20	h	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing	1	21	6	g	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance manufacturing	1	12	8	g	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) manufacturing	-	13	5	g	D	D	D	D	D	D	D	D
3255	Paint, coating, and adhesive manufacturing	-	26	13	g	D	D	D	D	D	D	D	D
32551	Paint and coating manufacturing	_	18	10	g	D	D	D	D	D	D	D	D
325510	Paint and coating manufacturing	_	18	10		D	D	D	D	D	D	D	D
32552 325520	Adhesive manufacturing Adhesive manufacturing	-	8	3	g e e	D	D D	D	D	D D	DDD	D	D
3256	Soap, cleaning compound, and toilet preparation manufacturing .	-	24	7	g	D	D	D	D	D	D	D	D
32561	Soap and cleaning compound manufacturing	_	16	5	f	D	D	D	D	D	D	D	D
32562	Toilet preparation manufacturing	_	8	2	g	D	D	D	D	D	D	D	D
325620	Toilet preparation manufacturing	_	8	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	3	50	17	f	D	D	D	D	D	D	D	D
32591 325910	Printing ink manufacturing Printing ink manufacturing	2 2	10 10	6 6	e e	D D	D	D D	D	D	D	D	D D
32599	All other chemical product and preparation manufacturing	4	39	10	f	D	D	D	D	D	D	D	D
325998	All other miscellaneous chemical product and			-									
000	preparation manufacturing .	-	19	5	е	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	1	134	74	i	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing	1	113	63	i	D	D	D	D	D	D	D	D
32611	Plastics packaging materials and unlaminated film and			_		_	_	_	_	_	_	_	_
326111 32614	sheet manufacturing Plastics bag manufacturing Polystyrene foam product	1	10 4	5 2	f e	D D	D D	D D	D	D D	D D	D D	D D
32614	Polystyrene foam product Polystyrene foam product	-	6	4	е	D	D	D	D	D	D	D	D
32615	Urethane and other foam	-	6	4	е	D	D	D	D	D	D	D	D
326150	product (except polystyrene) manufacturing Urethane and other foam	-	4	3	е	D	D	D	D	D	D	D	D
32616	product (except polystyrene) manufacturing	-	47	3	e	D	D	D	D	D	D	D	D D
32616 326160	Plastics bottle manufacturing Plastics bottle manufacturing	_	7	6	g g	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	1	78	43	i g	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing	1	73	41	i i	D	D	D	D	D	D	D	D
3262	Rubber product manufacturing	3	21	11	f	D	D	D	D	D	D	D	D
32629	Other rubber product						_	-	D	_	_		D
326299	manufacturing All other rubber product manufacturing	4	11 9	6 5	e e	D	D	D	D D	D	D	D	D

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			A establis	ll hments <sup>2</sup>	All em	oloyees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
327	Nonmetallic mineral product manufacturing	2	<sup>r</sup> 252	'93	i	D	D	D	D	D	D	D	D
3271	Clay product and refractory manufacturing	2	26	4	е	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, and plumbing fixture manufacturing	_	19	2	е	D	D	D	D	D	D	D	D
3272	Glass and glass product manufacturing	2	29	4	e	D	D	D	D	D	D	D	D
32721 327213	Glass and glass product manufacturing Glass container	2	29	4	e	D	D	D	D	D	D	D	D
3273	manufacturing Cement and concrete product manufacturing	2	1 158	1 '73	e	D	D	D	D	D	D	D	D
32731 327310	Cement manufacturing	-	7	4	e	D	D	D	D	D	D	D	D
32732 327320	Ready-mix concrete manufacturing Ready-mix concrete	1	90	33	g	D	D	D	D	D	D	D	D
32733	manufacturing	1	90	33	g	D	D	D	D	D	D	D	D
327331	manufacturing Concrete block and brick manufacturing	3 5	22 15	15 8	f e	D	D	D	D	D	D	D	D
327332	Concrete pipe manufacturing	-	7	7	e	D	D	D	D	D	D	D	D
32739 327390	Other concrete product manufacturing Other concrete product	4	'39	ľ21	g	D	D	D	D	D	D	D	D
	manufacturing	4	'39	ľ21	g	D	D	D	D	D	D	D	D
3274	Lime and gypsum product manufacturing	-	7	2	е	D	D	D	D	D	D	D	D
32742 327420	Gypsum product manufacturing Gypsum product manufacturing	-	6	2	e	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product manufacturing	1	32	10	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product manufacturing	1	31	9	f	D	D	D	D	D	D	D	D
327991	Cut stone and stone product manufacturing	3	23	6	е	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	31	12	h	D	D	D	D	D	D	D	D
3311	Iron and steel mills and ferroalloy manufacturing	-	4	2	h	D	D	D	D	D	D	D	D
33111 331111	Iron and steel mills and ferroalloy manufacturing Iron and steel mills	-	4 4	2 2	h h	D D	D D	D D	D D	D D	D D	D D	D D
3312	Steel product manufacturing from purchased steel	_	9	4	е	D	D	D	D	D	D	D	D
33122 331222	Rolling and drawing of purchased steel Steel wire drawing	-	9 9	4 4	e e	D	D D	D D	D	D	D D	D D	D D
3313	Alumina and aluminum production and processing	-	6	3	f	D	D	D	D	D	D	D	D
33131 331312	Alumina and aluminum production and processing Primary aluminum	-	6	3	f	D	D	D	D	D	D	D	D
	production	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	2	'556	r163	'13 158	'517 586	'9 525	'18 914	'324 290	'1 342 511	'1 105 712	'2 474 895 -	D
3321 33211	Forging and stamping	1	16 16	10 10	f f	D D	D D	D D	D	D	D	D	D D
332116 3323	Metal stamping	-	6	4	326	15 394	231	454	8 476	21 582	22 270	43 820	1 065
33231	manufacturing	2	r185	'52	r4 710	'174 910	'3 268	'6 504	'103 374	'399 504	'376 050	'781 511	D
332312	structural product manufacturing Fabricated structural metal manufacturing	2	54 39	21 16	g	D	D	D	D	D	D	D	D
332313	Plate work manufacturing	1	10	16 2	g e	D	D	D	D	D		D	D

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- 1 OI IIIe			, 		Allem	ployees	Pro	oduction worl	kers				
NALCO			establis	hments <sup>2</sup>	741 611	picyees							
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
332 3323	Fabricated metal product manufacturing—Con. Architectural and structural metals manufacturing—Con.												
33232	Ornamental and architectural metal products												
332321	manufacturing Metal window and door manufacturing	1 1	'131 18	'31 3	h f	D D	D D	D D	D	D D	D D	D D	D D
332322 332323	Sheet metal work manufacturing Ornamental and architectural metal work manufacturing	2	<sup>r</sup> 64 49	'17 11	g 990	D 43 990	D 621	D 1 277	D 22 470	D 112 888	D 55 946	D 170 553	D 3 308
3324	Boiler, tank, and shipping container manufacturing	1	19	10	f	D	D	D	D	D	D	D	D
33243	Metal can, box, and other metal container (light gauge) manufacturing	1	11	7	f	D	D	D	D	D	D	D	D
332431 3326	Metal can manufacturing Spring and wire product	1	6	6	f	D	D	D	D	D	D	D	D
33261	manufacturing Spring and wire product	4	22	11	f	D	D	D	D	D	D	D	D
332618	Other fabricated wire product manufacturing	4 3	22 19	11 9	f	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	3	206	49	h	D	D	D	D	D	D	D	D
33271	Machine shops	4	184	43	h	D	D	D	D	D	D	D	D
332710 33272	Machine shops Turned product and screw, nut, and bolt manufacturing	4	184 22	43 6	h 537	D 22 014	D 399	D 826	D 15 799	D 45 467	D 13 531	D 58 154	D
332721	Precision turned product manufacturing	_	19	5	е	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, and allied activities	2	53	11	741	25 145	580	1 088	16 847	49 869	46 110	95 491	D
33281 332812	Coating, engraving, heat treating, and allied activities Metal coating, engraving (except jewelry and	2	53	11	741	25 145	580	1 088	16 847	49 869	46 110	95 491	D
332813	silverware), and allied services to manufacturers Electroplating, plating,	-	26	5	e	D	D	D	D	D	D	D	D
	polishing, anodizing, and coloring	5	24	6	е	D	D	D	D	D	D	D	D
3329	Other fabricated metal product manufacturing	1	45	19	g	D	D	D	D	D	D	D	D
33291 332912	Metal valve manufacturing Fluid power valve and hose	-	6	3	f	D	D	D	D	D	D	D	D
33299	fitting manufacturing All other fabricated metal product manufacturing	2	1 39	1 16	f	D	D	D	D	D	D	D	D
332994 332999	Small arms manufacturing All other miscellaneous fabricated metal product	-	4	2	e	D	D	D	D	D	D	D	D
333	manufacturing Machinery manufacturing	3 3	27 189	13 '57	t i	D	D	D	D	D	D	D	D
3332	Industrial machinery manufacturing	4	33	9	g	D	D	D	D	D	D	D	D
33329	Other industrial machinery manufacturing	4	31	9	g	D	D	D	D	D	D	D	D
333291	Paper industry machinery manufacturing	6	5	2	9 e	D	D	D	D	D	D	D	D
333298	All other industrial machinery manufacturing	4	12	6	е	D	D	D	D	D	D	D	D
3333	Commercial and service industry machinery manufacturing	5	40	8	g	D	D	D	D	D	D	D	D
33331	Commercial and service industry machinery	_				_	_	_	_		_	_	_
333311	Manufacturing	5	40	8	g	D	D	D	D	D	D	D	D
333319	manufacturing Other commercial and service industry machinery	9	4	2	t	D	D	D	D	D	D	D	D
3334	manufacturing Ventilation, heating, air- conditioning, and commercial refrigeration equipment	-	17	5	f	D	D	D	D	D	D	D	D
	manufacturing	1	22	11	g	D	D	D	D	D	D	D	D

See footnotes at end of table.

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			A establisl	ll nments <sup>2</sup>	All em	oloyees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
333 3334	Machinery manufacturing—Con. Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing—Con.												
33341	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing.	1	22	11	g	D	D	D	D	D	D	D	D
333415	manufacturing Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment				9	-		-					2
	manufacturing	-	14	7	g	D	D	D	D	D	D	D	D
3335	Metalworking machinery manufacturing	2	33	6	е	D	D	D	D	D	D	D	D
33351	Metalworking machinery manufacturing	2	33	6	е	D	D	D	D	D	D	D	D
3336	Engine, turbine, and power transmission equipment manufacturing	_	5	1	е	D	D	D	D	D	D	D	D
33361	Engine, turbine, and power transmission equipment												
333613	manufacturing Mechanical power transmission equipment manufacturing	-	5	1	e	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	4	<sup>50</sup>	r20	h	D	D	D	D	D	D	D	D
33392	Material handling equipment	-											
33399	manufacturing All other general purpose	- 7	۲14 30	'6 13	e	D	D	D	D	D	D	D	D
333993	machinery manufacturing Packaging machinery manufacturing	6	6	4	g e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general purpose machinery manufacturing	7	17	7	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	354	142	k	D	D	D	D	D	D	D	D
3341	Computer and peripheral equipment manufacturing	5	40	13	f	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	5	40	13	f	D	D	D	D	D	D	D	D
334111	Electronic computer manufacturing	5	17	6	e	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing	5	20	7	f	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	_	92	47	i	D	D	D	D	D	D	D	D
33421	Telephone apparatus manufacturing	2	22	9	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing	2	22	9	g	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment manufacturing	_	49	32	i	D	D	D	D	D	D	D	D
334220	Radio and television broadcasting and wireless communications equipment manufacturing		49	32		D	D	D	D	D	D	D	D
33429	Other communications equipment manufacturing	1	21	6	f	D	D	D	D	D	D	D	D
334290	Other communications equipment manufacturing	1	21	6	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	4	77	32	4 106	193 808	2 394	4 825	101 920	358 820	193 011	591 566	D
33441	Semiconductor and other electronic component												
334412	manufacturing Bare printed circuit board	4	77	32	4 106 f	193 808	2 394	4 825	101 920	358 820	193 011	591 566 D	D
334413	manufacturing Semiconductor and related device manufacturing	6	13	7 9	f	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly)	б	18		g		ט						
334419	Other electronic component manufacturing	1 5	15 24	6 10	f g	D	D D	D	D	D	D	D D	D D

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			A establist	ll nments <sup>2</sup>	All emp	oloyees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
334	Computer and electronic product manufacturing – Con.												
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	107	46	j	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control												
334510	instruments manufacturing Electromedical and electrotherapeutic	-	107 9	46 5	j	D	D	D	D	D	D	D	D
334511	apparatus manufacturing Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	-	9	5	e	D	D	U	U	U	U	D	D
334513	manufacturing Instruments and related products manufacturing for measuring, displaying, and	-	23	14	j	D	D	D	D	D	D	D	D
334514	controlling industrial process variables Totalizing fluid meter and counting device	4	15	5	e	D	D	D	D	D	D	D	D
334515	manufacturing Instrument manufacturing for measuring and testing electricity and electrical	-	6	2	e	D	D	D	D	D	D	D	D
334516	signals Analytical laboratory	-	11	7	g	D	D	D	D	D	D	D	D
334519	instrument manufacturing Other measuring and controlling device manufacturing	-	17 21	6	e	D	D	D	D	D	D	D	D
3346	Manufacturing and reproducing												
33461	magnetic and optical media Manufacturing and reproducing	1	28	3	е	D	D	D	D	D	D	D	D
334612	magnetic and optical media Prerecorded compact disc (except software), tape, and	1	28 17	3	e	D	D	D	D	D	D	D	D
335	record reproducing Electrical equipment, appliance, and component manufacturing	-	64	3 17	e g	D	D	D	D	D	D	D	D
3351	Electric lighting equipment manufacturing	-	15	3	f	D	D	D	D	D	D	D	D
33511 335110	Electric lamp bulb and part manufacturing Electric lamp bulb and part	-	2	1	е	D	D	D	D	D	D	D	D
33512	manufacturing Lighting fixture manufacturing	-	2 13	1 2	e e	D D	D D	D D	D D	D D	D D	D D	D D
3353	Electrical equipment manufacturing	-	18	5	g	D	D	D	D	D	D	D	D
33531 335311	Electrical equipment manufacturing Power, distribution, and specialty transformer	-	18	5	g	D	D	D	D	D	D	D	D
335313	specially transformer manufacturing Switchgear and switchboard apparatus manufacturing	-	1	1 2	e f	D D	D D	D D	D	D D	D D	D D	D D
3359	Other electrical equipment and component manufacturing	5	29	9	f	D	D	D	D	D	D	D	D
33592 335921	Communication and energy wire and cable manufacturing . Fiber optic cable	5	7	4	е	D	D	D	D	D	D	D	D
336	manufacturing	4	6	3	e	D	D	D	D	D	D	D	D
3361	manufacturing Motor vehicle manufacturing	-	99 5	35 1	i	D	D	D	D	D	D	D	D
33611 33611	Automobile and light duty motor	-	5	1	g	D	D	D	D	D	D	D	D
336112	vehicle manufacturing Light truck and utility vehicle manufacturing	_	2	1	g g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	_	33	18	h	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical and electronic equipment manufacturing	3	3	3	е	D	D	D	D	D	D	D	D
336322	Other motor vehicle electrical and electronic equipment manufacturing	3	3	3	е	D	D	D	D	D	D	D	D

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			A	ll hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA — Con.												
336	Transportation equipment												
3363	manufacturing—Con. Motor vehicle parts manufacturing—Con.												
33634	Motor vehicle brake system manufacturing	_	3	3	f	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system manufacturing	_	3	3	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission and power train parts			-			_	_	_	_	_	_	
336350	Motor vehicle transmission and power train parts	-	5	3	f	D	D	D	D	D	D	D	D
33636	manufacturing Motor vehicle seating and	-	5	3	t	D	D	D	D	D	D	D	D
336360	interior trim manufacturing Motor vehicle seating and	-	3	3	f	D	D	D	D	D	D	D	D
33637	interior trim manufacturing Motor vehicle metal stamping	_	3	3 1	f e	D D	D D	D D	D D	D D	D D	D D	D D
336370	Motor vehicle metal stamping	-	1	1	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts manufacturing	-	7	4	е	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts manufacturing	-	6	4	e	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	-	13	8	g	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	_	13	8	g	D	D	D	D	D	D	D	D
336412	Aircraft engine and engine parts manufacturing	_	2	2	e	D	D	D	D	D	D	D	D
336413	Other aircraft parts and auxiliary equipment												
336414	manufacturing Guided missile and space	-	6	3	e	D	D	D	D	D	D	D	D
336415	vehicle manufacturing Guided missile and space vehicle propulsion unit and propulsion unit parts manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
3366	Ship and boat building	2	34	4	f	D	D	D	D	D	D	D	D
33661	Ship and boat building	2	34	4	f	D	D	D	D	D	D	D	D
336611	Ship building and repairing	2	19	3	е	D	D	D	D	D	D	D	D
337 3371	Furniture and related product manufacturing Household and institutional	2	'364	'61	i	D	D	D	D	D	D	D	D
	furniture and kitchen cabinet manufacturing	2	260	27	h	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet and countertop manufacturing	1	158	14	g	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet and countertop manufacturing	1	158	14	g	D	D	D	D	D	D	D	D
33712	Household and institutional furniture manufacturing	2	102	13	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture manufacturing	4	21	3	f	D	D	D	D	D	D	D	D
337122	Nonupholstered wood household furniture manufacturing	1	66	7	f	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) manufacturing	3	87	28	2 534	84 554	1 711	3 438	50 754	151 533	94 248	247 212	D
33721	-												
337211	Office furniture (including fixtures) manufacturing Wood office furniture	3	87	28	2 534	84 554	1 711	3 438	50 754	151 533	94 248	247 212	D
337212	manufacturing Custom architectural	3	18	4	е	D	D	D	D	D	D	D	D
337215	woodwork and millwork manufacturing Showcase, partition, shelving, and locker	1	41	14	g	D	D	D	D	D	D	D	D
	manufacturing	4	24	7	938	32 683	693	1 359	20 819	57 555	40 394	98 049	D
3379	Other furniture related product manufacturing	-	r17	<sup>r</sup> 6	f	D	D	D	D	D	D	D	D
33791 337910	Mattress manufacturing Mattress manufacturing	-	7 7	r4 r4	f f	D D	D D	D D	D D	D D	D D	D D	D D
33792	Blind and shade manufacturing	-	10	2	е	D	D	D	D	D	D	D	D
337920	Blind and shade manufacturing	_	10	2	e	D	D	D	D	D	D	D	D

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For the	aning of abbreviations and symbols, see		A	JI	A.II								
			establis	hments <sup>2</sup>	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA—Con.												
339	Miscellaneous manufacturing	3	554	85	i	D	D	D	D	D	D	D	D
3391	Medical equipment and supplies manufacturing	3	258	29	g	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing	3	258	29	g	D	D	D	D	D	D	D	D
339112	Surgical and medical instrument manufacturing	3	21	6	е	D	D	D	D	D	D	D	D
339113	Surgical appliance and supplies manufacturing	3	41	9	f	D	D	D	D	D	p	D	D
339116 3399	Dental laboratories	4	158	7	Ţ	D	D	D	D	D	D	D	D
0000	manufacturing	2	296	56	h	D	D	D	D	D	D	D	D
33995 339950	Sign manufacturing	3 3	149 149	30 30	g g	D D	D D	D D	D	D D	D	D D	D D
33999	All other miscellaneous manufacturing	1	74	18	g	D	D	D	D	D	D	D	D
339992	Musical instrument manufacturing	-	11	3	e	D	D	D	D	D	D	D	D
339999	All other miscellaneous manufacturing	1	57	13	f	D	D	D	D	D	D	D	D
	Baltimore-Towson, MD												
31-33	Metropolitan Statistical Area Manufacturing	1	2 103	656	82 438	'3 692 128	51 841	100 867	r1 884 007	11 095 515	9 542 974	20 650 731	1 091 046
311	Food manufacturing	2	192	68	8 008	284 267	5 159	10 155	158 863	1 396 914	1 587 943	3 002 098	53 204
3112	Grain and oilseed milling	1	6	5	е	D	D	D	D	D	D	D	D
31122	Starch and vegetable fats and					_	_	_	_		_	_	_
311225	oils manufacturing Fats and oils refining and blending	-	2 2	2 2	e e	D D	D D	D D	D	D D	D D	D D	D D
3113	Sugar and confectionery product manufacturing	9	19	6	f	D	D	D	D	D	D	D	D
31131 311312	Sugar manufacturing Cane sugar refining	9 9	1 1	1 1	e e	D D	D D	D D	D	D D	D D	D D	D D
3115	Dairy product manufacturing	2	9	5	878	33 702	564	1 194	21 015	167 640	242 284	417 609	9 625
31151	Dairy product (except frozen) manufacturing	_	2	2	е	D	D	D	D	D	D	D	D
311511 31152	Fluid milk manufacturing Ice cream and frozen dessert	-	2 2	2	e	Ď	Ď	Ď	D	Ď	Ď	Ď	D
311520	manufacturing Ice cream and frozen dessert	4	7	3	е	D	D	D	D	D	D	D	D
0110		4	7	3	е	D	D	D	D	D	D	D	D
3116 31161	Animal slaughtering and processing	1	16	7	498	15 386	382	847	10 024	97 371	67 298	164 793	2 222
	Animal slaughtering and processing	1	16	7	498	15 386	382	847	10 024	97 371	67 298	164 793	2 222
3118	Bakeries and tortilla manufacturing	6	93	20	g	D	D	D	D	D	D	D	D
31181	Bread and bakery product manufacturing	6	87	20	g	D	D	D	D	D	D	D	7 842
311811 311812	Retail bakeries Commercial bakeries	6 7	55 30	5 13	e 1 399	D 45 982	D 709	D 1 431	D 19 766	D 111 759	D 59 328	D 171 596	D D
3119	Other food manufacturing	-	35	20	2 919	118 255	2 029	3 926	67 203	855 877	650 557	1 514 361	20 214
31191 311919	Snack food manufacturing Other snack food	-	4	3	f	D	D	D	D	D	D	D	D
31194	manufacturing Seasoning and dressing	-	3	2	f	D	D	D	D	D	D	D	D
311942	manufacturing Spice and extract	-	14	10	g	D	D	D	D	D	D	D	D
31199 311999	All other miscellaneous food	1 -	9 12	8 5	891 f	42 141 D	567 D	1 179 D	22 399 D	273 095 D	297 977 D	578 048 D	8 374 D
312	manufacturing Beverage and tobacco product	-	8	4	f	D	D	D	D	D	D	D	5 725
0464	manufacturing	-	16	10	1 178	46 873	647	1 204	22 531	276 964	335 617	618 597	D
3121 31211	Beverage manufacturing	-	16	10	1 178	46 873	647	1 204	22 531	276 964	335 617	618 597	D
31211	Soft drink and ice manufacturing Soft drink manufacturing	-	9 7	7 6	815 f	30 355 D	380 D	725 D	12 176 D	119 991 D	278 812 D	398 820 D	D D
31214 312140	Distilleries	-	33	3	e	D	D D	D	D	D			D D

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			A	ll hments <sup>2</sup>	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Baltimore-Towson, MD Metropolitan Statistical Area —Con.												
313	Textile mills	8	17	4	f	D	D	D	D	D	D	D	D
3132 31322	Fabric mills Narrow fabric mills and schiffli	6	9	2	е	D	D	D	D	D	D	D	D
3133	machine embroidery Textile and fabric finishing and	4	3	1	e	D	D	D	D	D	D	D	D
	fabric coating mills	8	8	2	е	D	D	D	D	D	D	D	D
31331 313311	Textile and fabric finishing mills Broadwoven fabric finishing	8	7	2	е	D	D	D	D	D	D	D	D
	mills	8	7	2	е	D	D	D	D	D	D	D	D
314 3141	Textile product mills Textile furnishings mills	8 9	73 26	8 3	1 002 f	26 200 D	800 D	1 574 D	18 494 D	141 845 D	305 864 D	446 319 D	D
31411	Carpet and rug mills	9	3	1	e	D	D	D	D	D	D	D	D
314110 3149	Carpet and rug mills Other textile product mills	9 6	3 47	1 5	e e	D	D	D D	D	D	D	D	D
31491	Textile bag and canvas mills	7	30	4	352	9 704	248	487	5 919	26 751	19 558	46 264	D
314912	Canvas and related product mills	6	28	3	е	D	D	D	D	D	D	D	D
315	Apparel manufacturing	3	r48	'14	g	D	D	D	D	D	D	D	D
3152	Cut and sew apparel manufacturing	3	r35	r12	g	D	D	D	D	D	D	D	D
31522	Men's and boys' cut and sew apparel manufacturing	3	7	5	f	D	D	D	D	D	D	D	D
315222	Men's and boys' cut and sew suit, coat, and overcoat					5						5	P
315224	manufacturing Men's and boys' cut and sew trouser, slack, and jean	8	4	3	е	D	D	D	D	D	D	D	D
31523	manufacturing Women's and girls' cut and sew	-	2	2	е	D	D	D	D	D	D	D	D
321	apparel manufacturing Wood product manufacturing	1	9 60	4 19	e 1 701	D 49 305	D 1 374	D 2 675	D 34 028	D 102 859	D 107 837	D 210 365	D
3212	Veneer, plywood, and engineered	-											
32121	wood product manufacturing Veneer, plywood, and	-	8	4	399	14 470	288	583	8 155	30 446	29 743	60 134	D
321214	engineered wood product manufacturing Truss manufacturing		8 7	4 4	399 e	14 470 D	288 D	583 D	8 155 D	30 446 D	29 743 D	60 134 D	D D
3219	Other wood product manufacturing	3	45	15	1 259	33 557	1 048	2 023	24 824	70 474	72 251	142 307	D
32191 321918	Millwork Other millwork (including	2	19	9	815	22 043	682	1 313	16 440	45 840	50 626	96 647	D
	flooring)	-	11	5	е	D	D	D	D	D	D	D	D
322 3222	Paper manufacturing Converted paper product	-	31	21	3 000	111 799	2 515	5 218	82 064	262 449	335 716	588 890	9 835
	manufacturing	-	28	18	h	D	D	D	D	D	D	D	D
32221	Paperboard container manufacturing	-	19	12	2 404	87 926	2 071	4 336	67 545	206 263	273 264	470 240	D
322211 322215	Corrugated and solid fiber box manufacturing Nonfolding sanitary food	-	16	10	g	D	D	D	D	D	D	D	D
322215	container manufacturing Stationery product	-	1	1	g	D	D	D	D	D	D	D	D
	manufacturing	1	3	3	е	D	D	D	D	D	D	D	D
323	Printing and related support activities	2	350	98	7 859	274 519	5 865	10 788	177 623	610 594	335 971	939 789	35 548
3231	Printing and related support activities	2	350	98	7 859	274 519	5 865	10 788	177 623	610 594	335 971	939 789	35 548
32311	Printing	2	302	80	6 540	223 943	4 827	8 792	141 493	524 058	315 866	833 343	D
323110 323112	Commercial lithographic printing Commercial flexographic	1	152	48	3 533	122 047	2 646	4 260	77 257	232 801	158 723	385 616	19 683
323113 323114	printing Commercial screen printing Quick printing	- 2 3	4 31 62	4 10 2	e 519 335	D 16 659 10 033	D 353 225	D 766 410	D 9 134 6 466	D 28 602 25 458	D 21 525 8 492	D 50 201 33 957	D 1 492 D
323116 323117	Manifold business forms printing Books printing	3	6 8	6 3	859 548	25 810 21 378	645 441	1 381 924	16 752 15 582	126 844 43 864	40 349 25 638	166 025 69 426	3 238 2 611
32312 323121	Support activities for printing Tradebinding and related work	1	48 20	18 11	1 319 f	50 576 D	1 038 D	1 996 D	36 130 D	40 004 86 536 D	20 105 D	106 446 D	2 882
323122	Prepress services		20	7	f	D		D			D	D	2 002 D

See footnotes at end of table.

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For the	aning of abbreviations and symbols, see												
			establis	hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Baltimore-Towson, MD Metropolitan Statistical Area —Con.												
324	Petroleum and coal products manufacturing	1	21	6	е	D	D	D	D	D	D	D	D
3241	Petroleum and coal products manufacturing	1	21	6	е	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, and saturated materials					_	_	_	_	_	_	_	_
325	manufacturing	1	17 113	5 44	e 8 634	D 411 163	D 4 802	D 9 100	D 227 513	D 1 996 698	D 1 138 796	D 3 123 965	D 177 440
3251	Basic chemical manufacturing	-	26	12	2 299	144 841	1 326	2 709	75 454	326 640	437 604	763 407	D
32513 325131	Synthetic dye and pigment manufacturing Inorganic dye and pigment	-	3	3	f	D	D	D	D	D	D	D	D
32518	manufacturing Other basic inorganic chemical	-	3	3	f	D	D	D	D	D	D	D	D
325188	Manufacturing	-	13	6	g	D	D	D	D	D	D	D	D
32519	chemical manufacturing Other basic organic chemical	-	13	6	g	D	D	D	D	D	D	D	D
325199	manufacturing All other basic organic chemical manufacturing	_	6	3 3	e e	D D	D D	D D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	_	20	7	2 917	143 486	1 417	2 457	72 696	468 870	111 277	557 479	D
32541	Pharmaceutical and medicine manufacturing	_	20	7	2 917	143 486	1 417	2 457	72 696	468 870	111 277	557 479	D
325412	Pharmaceutical preparation manufacturing	_	11	5	g	D	D	2 407 D	72 000 D	-00 0/0 D	D	D	D
325413	In-vitro diagnostic substance manufacturing	_	3	2	g	D	D	D	D	D	D	D	D
3255	Paint, coating, and adhesive manufacturing	_	17	8	g	D	D	D	D	D	D	D	D
32551	Paint and coating manufacturing	_	11	6	653	24 948	450	778	14 511	269 497	202 039	470 544	D
325510	Paint and coating manufacturing	_	11	6	653	24 948	450	778	14 511	269 497	202 039	470 544	D
32552 325520	Adhesive manufacturing Adhesive manufacturing	_	6 6	2	e e	D D	D D	D D	D D	D D	D D	D D	D D
3256	Soap, cleaning compound, and toilet preparation manufacturing .	-	15	7	g	D	D	D	D	D	D	D	10 111
32561	Soap and cleaning compound manufacturing	_	10	5	е	D	D	D	D	D	D	D	D
32562	Toilet preparation manufacturing	-	5	2	g	D	D	D	D	D	D	D	D
325620	Toilet preparation manufacturing	-	5	2	g	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	3	25	9	486	21 419	309	651	11 173	66 253	94 240	160 454	3 589
32599	All other chemical product and preparation manufacturing	3	18	4	е	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	1	74	38	4 545	154 075	3 615	7 226	104 574	430 648	379 380	793 504	33 621
3261	Plastics product manufacturing	1	59	31	4 117	137 938	3 352	6 722	97 034	384 177	355 503	727 121	32 913
32611	Plastics packaging materials and unlaminated film and sheet manufacturing	1	6	3	е	D	D	D	D	D	D	D	D
32615	Urethane and other foam product (except polystyrene) manufacturing		4	3	e	D	D	D	D	D	D	D	D
326150	Urethane and other foam product (except polystyrene)						D			D			
32616 326160	manufacturing Plastics bottle manufacturing Plastics bottle	=	4 6	3 5	e f	D D	D	D D	D D	D	D D	D D	D D
32619	Other plastics product	-	6	5	f	D	D	D	D	D	D	D	D
326199	Manufacturing All other plastics product	3	38	18	2 486	81 020	1 948	3 839	51 867	185 393	121 547	302 125	19 656
3262	manufacturing Rubber product manufacturing	3 1	37 15	18 7	g 428	D 16 137	D 263	D 504	D 7 540	D 46 471	D 23 877	D 66 383	D 708
3262	Other rubber product		15		4∠ð	10 13/	203	504	7 540	40 471	23 8/1	00 383	708
326299	Manufacturing All other rubber product	1	10	5	310	13 506	176	365	5 892	25 380	13 748	40 057	D
	manufacturing	1	9	5	e	D	D	D	D	D	D	D	D

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	aning of abbreviations and symbols, see		Δ	ll hments <sup>2</sup>	All em	ployees	Pro	duction worl	kers				
NAICS	Coorrentia area and industry		establis	With 20									Total
code	Geographic area and industry	E <sup>1</sup>	Total	em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA—Con.												
	Baltimore-Towson, MD Metropolitan Statistical Area —Con.												
327	Nonmetallic mineral product manufacturing	1	92	33	3 196	125 697	2 173	4 338	80 264	377 646	307 087	676 886	D
3271	Clay product and refractory manufacturing	1	13	2	е	D	D	D	D	D	D	D	D
3272	Glass and glass product manufacturing	1	13	2	e	D	D	D	D	D	D	D	942
32721 327213	Glass and glass product manufacturing Glass container manufacturing	1	13	2	e	D	D	D	D	D	D	D	942 D
3273	Cement and concrete product manufacturing	2	49	23	1 901	74 039	1 172	2 412	43 519	190 028	152 895	339 591	D
32732	Ready-mix concrete manufacturing	3	27	10	1 011	36 454	569	1 112	20 566	64 711	81 357	146 121	D
327320 32733	Ready-mix concrete manufacturing Concrete pipe, brick, and block	3	27	10	1 011	36 454	569	1 112	20 566	64 711	81 357	146 121	D
32739	manufacturing Other concrete product	1	10	7	е	D	D	D	D	D	D	D	D
327390	manufacturing Other concrete product manufacturing	5 5	9	4	317 317	12 882 12 882	204 204	388 388	7 277 7 277	30 015 30 015	15 097 15 097	44 281 44 281	D
3274	Lime and gypsum product manufacturing	5	4	2	e	12 002	204 D	500 D	D	50 013 D	13 097 D	44 201 D	D
32742	Gypsum product						5	-		2	_	5	5
327420	manufacturing Gypsum product manufacturing	-	3 3	2 2	e e	D	D D	D D	D	D D	D D	D D	D
3279	Other nonmetallic mineral product manufacturing	-	13	4	263	10 628	165	333	6 159	62 952	20 782	83 304	D
331	Primary metal manufacturing	-	22	9	h	D	D	D	D	D	D	D	D
3311	Iron and steel mills and ferroalloy manufacturing	-	3	1	h	D	D	D	D	D	D	D	D
33111 331111	Iron and steel mills and ferroalloy manufacturing Iron and steel mills	-	3	1	h h	D	D D	D	D	D	D D	D	D D
3312	Steel product manufacturing from purchased steel	-	6	3	e	D	D	D	D	D	D	D	D
33122	Rolling and drawing of purchased steel	_	6	3	٩	п	р	П	D	D	D	D	п
331222	Steel wire drawing	-	6	3	e	D	Ď	Ď	Ď	Ď	Ď	Ď	D
332	Fabricated metal product manufacturing	2	308	95	7 532	303 057	5 558	11 037	197 525	772 303	627 803	1 394 812	47 154
3321	Forging and stamping	1	12	8	f	D	D	D	D	D	D	D	2 478
33211 332116	Forging and stamping Metal stamping	1	12 6	8 4	f 326	D 15 394	D 231	D 454	D 8 476	D 21 582	D 22 270	D 43 820	2 478 1 065
3323	Architectural and structural metals manufacturing	2	73	16	1 482	55 461	1 030	2 055	34 792	117 194	110 528	226 824	5 319
33231	Plate work and fabricated structural product				0.40	00.070	101	075	44.005	07.500	54.000	00.001	4 004
332312	manufacturing Fabricated structural metal manufacturing	1 2	23 16	6 3	640 e	22 670 D	431 D	875 D	14 385 D	27 586 D	54 032 D	83 061 D	1 884 1 147
332313 33232	Plate work manufacturing Ornamental and architectural metal products	1	6	2	e	D	D	D	D	Ď	Ď	Ď	D
332322	manufacturing Sheet metal work	2	50	10	842	32 791	599	1 180	20 407	89 608	56 496	143 763	3 435
332323	manufacturing Ornamental and architectural metal work manufacturing	3 1	26 18	8	542 266	22 297 9 540	371 200	744 383	13 210 6 566	54 369 32 578	24 757 28 316	77 020 60 625	1 406 1 888
3324	Boiler, tank, and shipping container manufacturing	2	14	9	f	D	D	D	D	D	D	D	D
33243	Metal can, box, and other metal												
332431	container (light gauge) manufacturing Metal can manufacturing	2 3	8 5	6 5	f 521	D 24 454	D 429	D 868	D 18 835	D 58 691	D 93 634	D 153 823	D 3 425

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	ning of abbreviations and symbols, see		Δ		Allem	ployees	Pro	oduction wor	kers				
NAICS			establis	hments <sup>2</sup>	All offi	pioyees							
code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Baltimore-Towson, MD Metropolitan Statistical Area —Con.												
332 3326	Fabricated metal product manufacturing—Con. Spring and wire product manufacturing	5	15	9	785	23 484	676	1 357	17 507	44 514	41 448	83 225	2 251
33261 332618	Spring and wire product manufacturing Other fabricated wire product manufacturing	5 4	15 13	9 8	785 f	23 484 D	676 D	1 357 D	17 507 D	44 514 D	41 448 D	83 225 D	2 251 D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	3	134	36	2 245	94 484	1 631	3 295	59 047	196 407	107 075	303 148	D
33271 332710	Machine shops	4 4	118 118	30 30	1 751 1 751	74 311 74 311	1 262 1 262	2 537 2 537	44 762 44 762	154 780 154 780	94 433 94 433	249 709 249 709	16 445 16 445
33272	Turned product and screw, nut, and bolt manufacturing	-	16	6	494	20 173	369	758	14 285	41 627	12 642	53 439	D
332721	Precision turned product manufacturing	-	13	5	е	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, and allied activities	1	33	8	572	18 808	444	803	12 524	38 216	41 369	79 098	D
33281 332812	Coating, engraving, heat treating, and allied activities Metal coating, engraving (except jewelry and silverware), and allied	1	33	8	572	18 808	444	803	12 524	38 216	41 369	79 098	D
3329	services to manufacturers Other fabricated metal product manufacturing	-	14 21	4	e 1 094	D 51 044	D 729	D 1 365	D 33 608	D 239 028	D 147 583	D 384 622	D 9 760
33291	Metal valve manufacturing	_	4	2	f	D	D	D	D	D	D	D	D
332912	Fluid power valve and hose fitting manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33299 332999	All other fabricated metal product manufacturing All other miscellaneous	4	17	6	е	D	D	D	D	D	D	D	D
002000	fabricated metal product manufacturing	4	12	6	е	D	D	D	D	D	D	D	8 104
333	Machinery manufacturing	3	100	32	4 485	208 709	2 613	5 309	92 406	571 202	412 905	937 535	12 613
3332	Industrial machinery manufacturing	6	16	6	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery manufacturing	6	14	6	f	D	D	D	D	D	D	D	D
333291	Paper industry machinery manufacturing	6	4	2	е	D	D	D	D	D	D	D	D
3333	Commercial and service industry machinery manufacturing	_	14	3	f	D	D	D	D	D	D	D	D
33331	Commercial and service industry machinery		14	3	f	D	D	D	D	D	D	D	D
333319	manufacturing Other commercial and service industry machinery manufacturing	_	7	2	e	D	D	D	D	D	D	D	D
3334	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	_	15	7	1 292	59 900	716	1 600	21 571	143 585	85 984	228 195	D
33341	Ventilation, heating, air- conditioning, and commercial												
333415	refrigeration equipment manufacturing Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing	-	15	7	1 292 g	59 900 D	716 D	1 600 D	21 571 D	143 585 D	85 984 D	228 195 D	D
3336	Engine, turbine, and power transmission equipment manufacturing	_	2	1	e	D	D	D	D	D	D	D	D
33361	Engine, turbine, and power												
333613	transmission equipment manufacturing Mechanical power transmission equipment manufacturing	-	2	1	e	D	D	D	D	D	D	D	D
	transmission equipment manufacturing Mechanical power transmission equipment	-											

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	aning of abbreviations and symbols, see		Δ	ll hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Baltimore-Towson, MD Metropolitan Statistical Area —Con.												
333 3339	Machinery manufacturing—Con. Other general purpose machinery manufacturing	6	30	12	1 528	69 190	864	1 702	30 274	198 606	206 215	364 599	4 573
33399	All other general purpose machinery manufacturing	9	19	9	1 268	55 568	733	1 435	24 855	120 754	104 031	226 702	3 667
333993 333999	Packaging machinery manufacturing All other miscellaneous	8	4	2	е	D	D	D	D	D	D	D	D
000000	general purpose machinery manufacturing	9	12	6	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	_	118	53	j	D	D	D	D	D	D	D	195 246
3341	Computer and peripheral equipment manufacturing	5	17	5	e	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	5	17	5	е	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing	5	8	3	e	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	1	28	17	h	D	D	D	D	D	D	D	D
33421	Telephone apparatus manufacturing	_	6	2	f	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing	_	6	2	f	D	D	D	D	D	D	D	D
33422 334220	Radio and television broadcasting and wireless communications equipment manufacturing Radio and television	2	16	13	g	D	D	D	D	D	D	D	D
	broadcasting and wireless communications equipment manufacturing	2	16	13	g	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	4	27	11	899	35 701	489	935	14 176	56 391	45 807	104 345	D
33441	Semiconductor and other electronic component												_
334413	manufacturing Semiconductor and related device manufacturing	4 9	27 6	11 3	899 e	35 701 D	489 D	935 D	14 176 D	56 391 D	45 807 D	104 345 D	D
334418	Printed circuit assembly (electronic assembly) manufacturing	1	5	2	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	37	19	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control												
334510	instruments manufacturing Electromedical and electrotherapeutic	-	37	19	i	D	D	D	D	D	D	D	D
334511	apparatus manufacturing Search, detection, navigation, guidance,	-	7	5	е	D	D	D	D	D	D	D	D
	aeronautical, and nautical system and instrument manufacturing	-	9	6	i	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	2	33	7	1 265	46 537	907	1 643	26 037	71 849	55 860	133 451	D
3353	Electrical equipment manufacturing	_	7	2	680	21 900	529	829	14 097	38 870	26 111	67 512	D
33531	Electrical equipment manufacturing	_	7	2	680	21 900	529	829	14 097	38 870	26 111	67 512	D
335313	Switchgear and switchboard apparatus manufacturing	_	3	1	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	5	16	4	е	D	D	D	D	D	D	D	D
33592	Communication and energy wire and cable manufacturing.	4	5	3	391	16 228	255	553	8 628	17 160	13 639	33 783	722
335921	Fiber optic cable manufacturing	4	5	3		16 228	255	553	8 628	17 160	13 639	33 783	722

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			A establis		All em	oloyees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Baltimore-Towson, MD Metropolitan Statistical Area —Con.												
336	Transportation equipment manufacturing	_	60	20	4 361	'217 601	3 430	6 038	r159 467	1 018 276	1 370 039	2 390 913	D
3361	Motor vehicle manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
33611	Automobile and light duty motor vehicle manufacturing	_	2	1	g	D	D	D	D	D	D	D	D
336112	Light truck and utility vehicle manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	-	18	11	1 582	67 004	1 237	1 906	46 848	214 356	305 815	516 281	D
33632	Motor vehicle electrical and electronic equipment												
336322	Other motor vehicle electrical and electronic equipment	3	2	2	е	D	D	D	D	D	D	D	D
33635	manufacturing Motor vehicle transmission and power train parts	3	2	2	e	D	D	D	D	D	D	D	D
336350	Motor vehicle transmission and power train parts	-	2	2	e	D	D	D	D	D	D	D	D
33637 336370	manufacturing Motor vehicle metal stamping Motor vehicle metal	-	2 1	2 1	e e	D D	D D	D D	D	D D	D D	D D	D D
33639	stamping Other motor vehicle parts	-	1	1	e	D	D	D	D	D	D	D	D
336399	manufacturing All other motor vehicle parts manufacturing	_	5	3 3	e e	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	-	4	2	f	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	_	4	2	f	D	D	D	D	D	D	D	D
336412	Aircraft engine and engine parts manufacturing	_	2	2	e	D	D	D	D	D	D	D	D
3366	Ship and boat building	2	27	3	524	22 144	442	984	18 150	39 106	34 764	73 870	D
33661 336611	Ship and boat building Ship building and repairing	2 1	27 15	3 3	524 445	22 144 19 948	442 382	984 877	18 150 16 701	39 106 34 252	34 764 30 404	73 870 64 656	D D
337	Furniture and related product manufacturing	2	r145	'27	'2 532	'76 714	r1 774	'3 576	r44 022	'151 627	'114 412	'267 992	'7 652
3371	Household and institutional furniture and kitchen cabinet manufacturing	4	97	9	1 144	26 516	860	1 713	16 808	49 474	45 273	94 854	4 597
33711	Wood kitchen cabinet and	_											
337110	countertop manufacturing Wood kitchen cabinet and	5 5	56 56	5 5	424 424	11 170 11 170	300	565 565	7 139 7 139	21 465	12 974 12 974	34 443 34 443	D
33712	countertop manufacturing Household and institutional furniture manufacturing	э 3	41	э 4	424 720	15 346	300 560	505 1 148	9 669	21 465 28 009	32 299	34 443 60 411	D
337121	Upholstered household furniture manufacturing	8	4	1	285	4 744	241	462	3 435	9 336	10 821	20 338	D
337122	Nonupholstered wood household furniture												
3372	manufacturing	1	29 40	2 15	315	7 536	220	499	3 987	13 244 67 814	17 497	30 912 116 461	D
33721	manufacturing	1	40	15	1 024	37 378	739	1 488	22 335	67 814	46 838	110 401	D
337212	fixtures) manufacturing Custom architectural woodwork and millwork	1	40	15	1 024	37 378	739	1 488	22 335	67 814	46 838	116 461	D
337215	manufacturing Showcase, partition, shelving, and locker	-	18	6	e	D	D	D	D	D	D	D	D
3379	manufacturing	1	12	4	386	14 467	292	596	9 700	27 354	20 137	47 623	D
33792	manufacturing Blind and shade	-	<sup>r</sup> 8	٢3	'364	'12 820	'175	'375	r4 879	'34 339	'22 301	'56 677	D
33792 337920	Bind and shade manufacturing Bind and shade manufacturing	-	4	2	e	D	D	D	D	D	D	D	D

See footnotes at end of table.

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	aning of abbreviations and symbols, see				Allem	ployees	Pro	duction work	kers				
			establis	hments <sup>2</sup>	Airein	pioyees	FR						
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA—Con.												
	Baltimore-Towson, MD Metropolitan Statistical Area —Con.												
339	Miscellaneous manufacturing	2	226	48	2 881	112 605	1 853	3 598	56 495	240 946	155 860	390 597	D
3391	Medical equipment and supplies manufacturing	2	84	15	1 106	50 890	607	1 124	19 533	113 168	54 127	160 445	D
33911	Medical equipment and supplies manufacturing	2	84	15	1 106	50 890	607	1 124	19 533	113 168	54 127	160 445	D
339113	Surgical appliance and supplies manufacturing	2	18	7	e 100	D	D	D	D	D	D	D	D
339116	Dental laboratories	3	47	3	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	2	142	33	1 775	61 715	1 246	2 474	36 962	127 778	101 733	230 152	D
33995 339950	Sign manufacturing	4	66 66	14 14	663 663	22 092 22 092	439 439	898 898	11 850 11 850	40 725 40 725	21 554 21 554	61 514 61 514	D D
33999	All other miscellaneous manufacturing	1	41	14	779	26 802	553	1 059	16 196	63 617	38 581	101 281	D
339999	All other miscellaneous manufacturing	1	31	11	e	D	D	D	D	D	D	D	D
	Lexington Park, MD Micropolitan Statistical Area												
31-33	Manufacturing	3	31	4	430	11 979	281	532	6 601	24 774	21 058	45 970	D
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area												
31-33	Manufacturing	1	'2 553	<sup>r</sup> 602	'70 848	'3 130 998	40 783	80 218	1 384 798	'8 246 731	'6 370 167	'14 780 577	r429 781
311	Food manufacturing	2	214	48	4 586	130 942	2 776	5 415	73 444	698 209	503 845	1 200 246	16 240
3115 31151	Dairy product manufacturing Dairy product (except frozen)	-	7	5	f	D	D	D	D	D	D	D	D
311511	Fluid milk manufacturing	-	5 4	4 4	645 f	29 109 D	418 D	933 D	17 549 D	167 546 D	249 858 D	417 479 D	2 398 D
3116	Animal slaughtering and processing	2	11	4	506	14 241	387	893	9 308	80 029	36 255	116 262	1 298
31161	Animal slaughtering and processing Meat processed from	2	11	4	506	14 241	387	893	9 308	80 029	36 255	116 262	1 298
311612	carcasses	2	7	4	е	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	2	146	33	h	D	D	D	D	D	D	D	6 231
31181	Bread and bakery product manufacturing	2	140	31	h	D	D	D	D	D	D	D	D
311811 311812	Retail bakeries Commercial bakeries	4 1	105 34	20 11	g 1 104	39 899	538	1 123	17 360	256 875	58 641	315 384	4 726
3119	Other food manufacturing	9	30	3	431	12 541	320	645	7 487	91 646	84 803	174 630	3 345
312	Beverage and tobacco product manufacturing	1	22	7	664	29 487	226	469	8 868	139 199	239 911	379 974	10 645
3121	Beverage manufacturing	1	22	7	664	29 487	226	469	8 868	139 199	239 911	379 974	10 645
31211	Soft drink and ice manufacturing	-	8	6	f	D	D	D	D	D	D	D	9 899
312111 314	Soft drink manufacturing Textile product mills	- 5	5 67	5 8	f 588	D	D	D 837	D	D 28 009	D 20 806	D 49 641	D
314	Textile furnishings mills	5	44	6	414	14 826 9 589	436 305	560	8 056 5 067	16 573	20 806 16 075	33 363	D
31412	Curtain and linen mills	5	42	6	e	D	D	D	D	D	D	D	D
314121	Curtain and drapery mills	4	37	6	е	D	D	D	D	D	D	D	D
315 3152	Apparel manufacturing	9	62	5	е	D	D	D	D	D	D	D	D
5152	manufacturing	9	41	5	e	D	D	D	D	D	D	D	D
321	Wood product manufacturing	1	81	29	2 986	91 058	2 369	4 868	60 367	292 711	355 574	645 700	14 229
3212	Veneer, plywood, and engineered wood product manufacturing	2	8	7	328	10 268	254	583	6 153	21 800	23 909	45 633	D
32121	Veneer, plywood, and engineered wood product manufacturing	2	8	7	328	10 268	254	583	6 150	21 800	23 909	45 633	D
321214	Truss manufacturing	1	6	6	526 e	10 200 D	254 D	565 D	6 153 D	21 800 D	23 909 D	45 635 D	D

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- 1 OI IIIE													
			establis	hments <sup>2</sup>	All em	ployees	Pro	duction work	ters				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area —Con.												
321 3219	Wood product manufacturing—Con. Other wood product manufacturing	1	58	19	2 455	75 027	1 944	3 967	49 765	258 788	285 898	542 069	11 758
32191 321911	Millwork	3	38	9	968	31 732	764	1 653	20 936	71 177	87 010	156 969	D
321918	manufacturing Other millwork (including	-	11	4	582	19 188	456	1 024	12 566	44 553	49 141	92 992	1 320
32199	flooring) All other wood product	8	19	3	298	9 975	238	492	6 686	17 410	27 507	44 837	1 407
321992	manufacturing Prefabricated wood building	-	14	7	1 383	40 963	1 090	2 138	27 018	177 706	194 224	370 630	8 020
321999	Manufacturing	-	5	3	g	D	D	D	D	D	D	D	D
322	product manufacturing	3	9 15	4	e e	D	D	D	D	D	D	D	D
322 3222	Paper manufacturing Converted paper product manufacturing	2	14	5	e	D	D	D	D	D	D	D	D
323	Printing and related support activities	1	653	134	15 306	603 105	11 017	20 897	383 470	1 162 946	669 526	1 829 505	89 074
3231	Printing and related support activities	1	653	134	15 306	603 105	11 017	20 897	383 470	1 162 946	669 526	1 829 505	89 074
32311 323110	Printing Commercial lithographic	1	592	125	14 608	573 771	10 515	19 914	364 639	1 107 395	651 574	1 756 139	87 452
323113	printing	1	301 34	95 5	10 453 745	437 543 17 766	7 615 571	14 770 576	280 643 9 779	816 790 39 751	522 106 17 978	1 336 696 58 260	56 321 1 536
323114 323115	Quick printing Digital printing	3	147	5 8 2 9 4	983 497 1 512	30 861 20 734	621 237	1 141 468	17 525 10 632	66 156 43 973	23 921 11 322	89 937 55 074	4 071 D
323117 323119 32312	Books printing Other commercial printing Support activities for printing	5 5	18 45 61	9 4 9	1 512 280 698	52 397 9 284 29 334	1 184 194 502	2 416 351 983	37 044 5 592 18 831	107 601 19 469 55 551	56 389 10 414 17 952	162 478 30 594 73 366	14 792 452 1 622
323121	Tradebinding and related work	6	23		387	13 307	313	626	9 689	27 966	11 016	38 794	855
323122	Prepress services	5	38	4 5	311	16 027	189	357	9 142	27 585	6 936	34 572	767
324	Petroleum and coal products manufacturing	-	17	3	451	17 910	343	699	13 169	81 235	106 443	187 322	9 491
3241	Petroleum and coal products manufacturing	-	17	3	451	17 910	343	699	13 169	81 235	106 443	187 322	9 491
32412	Asphalt paving, roofing, and saturated materials					17.010	0.40		10,100	04,005	100 110	107 000	0.404
324122	Manufacturing Asphalt shingle and coating	_	17	3	451 e	17 910 D	343 D	699 D	13 169 D	81 235 D	106 443 D	187 322 D	9 491 D
325	materials manufacturing Chemical manufacturing		79	26	3 060	162 741	1 630	2 903	75 364	1 358 120	412 972	1 790 425	31 194
3254	Pharmaceutical and medicine												
32541	manufacturing Pharmaceutical and medicine	_	29	12	1 560	85 509	813	1 469	35 390	828 538	94 813	937 670	21 066
325413	manufacturing In-vitro diagnostic substance	-	29	12	1 560	85 509	813	1 469	35 390	828 538	94 813	937 670	21 066
325414	manufacturing Biological product (except	8	8	5	е	D	D	D	D	D	D	D	D
3255	diagnostic) manufacturing Paint, coating, and adhesive manufacturing	_	9	5	g f	D	D	D	D	D	D	D	D
32551	Paint and coating												
325510	Paint and coating	-	7	4	f	D	D	D	D	D	D	D	D
3259	manufacturing Other chemical product and	_	7	4	т	D	D	D	D	D	D	D	D
	preparation manufacturing	3	21	7	е	D	D	D	D	D	D	D	D
32599	All other chemical product and preparation manufacturing	6	17	5	е	D	D	D	D	D	D	D	1 116
326	Plastics and rubber products manufacturing	1	43	23	1 681	52 841	1 203	2 283	34 613	126 828	127 473	253 589	5 785
3261	Plastics product manufacturing	1	40	21	g	D	D	D	D	D	D	D	D
32611	Plastics packaging materials and unlaminated film and		_			_	_		-	5		5	-
326111 32619	sheet manufacturing Plastics bag manufacturing Other plastics product	-	3	2 1	e e	D D	D D	D D	D D	D D	D D	D D	D D
32619	All other plastics product	1	31	17	1 005	30 555	644	1 270	17 476	85 905	65 546	150 951	3 982
020100	manufacturing	1	27	15	939	28 777	604	1 202	16 640	79 039	60 797	139 587	D

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<u> </u>			Δ		All om	ployees	Pro	duction work	(ors				
			establis	hments <sup>2</sup>	Airem	pioyees	FIC		Ners .				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area —Con.												
327	Nonmetallic mineral product manufacturing	1	r148	'54	'3 176	'126 741	2 485	5 231	90 306	'373 658	'314 198	<sup>r</sup> 682 105	'33 623
3273	Cement and concrete product manufacturing	1	<sup>r</sup> 98	r44	r2 675	r108 944	2 104	4 504	76 866	r330 609	r293 560	r618 997	r32 086
32732	Ready-mix concrete manufacturing		57	21	1 185	51 539	994	2 090	40 958	175 860	187 429	362 571	D
327320	Ready-mix concrete manufacturing	_	57	21	1 185	51 539	994 994	2 090	40 958	175 860	187 429	362 571	D
32733	Concrete pipe, brick, and block manufacturing	4	11	7	е	D	D	_ 000	D	D	D	D	D
32739	Other concrete product manufacturing	1	'26	r14	<sup>r</sup> 964	'34 585	719	1 539	20 795	79 270	'38 276	r116 486	D
327390	Other concrete product manufacturing	1	'26	۲ <b>1</b> 4	'964	'34 585	719	1 539	20 795	79 270	'38 276	'116 486	D
3279	Other nonmetallic mineral product manufacturing	2	18	6	293	11 799	206	359	8 785	29 367	12 925	42 177	D
32799	All other nonmetallic mineral product manufacturing	2	18	6	293	11 799	206	359	8 785	29 367	12 925	42 177	D
327991	Cut stone and stone product manufacturing	3	15	5	е	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	8	3	f	D	D	D	D	D	D	D	D
3313	Alumina and aluminum production and processing	-	2	1	f	D	D	D	D	D	D	D	D
33131	Alumina and aluminum production and processing	-	2	1	f	D	D	D	D	D	D	D	D
331312	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	2	'228	'60	r4 749	'185 833	'3 280	'6 586	'105 328	<sup>r</sup> 456 230	'308 389	798 460	'17 429
3323	Architectural and structural metals manufacturing	2	r105	'31	'2 799	'107 572	r1 898	'3 839	'59 057	'226 046	'197 798	'430 550	'8 050
33231	Plate work and fabricated structural product												
332312	manufacturing Fabricated structural metal	3	26	12	1 025	38 954	681	1 408	22 185	78 385	110 573	192 061	3 278
33232	manufacturing Ornamental and architectural metal products	3	20	11	Ţ	D	D	D	D	D	D	D	D
332321	manufacturing Metal window and door	1	'79	'19	r1 774	'68 618	'1 217	'2 431	'36 872	<sup>147</sup> 661	'87 225	'238 489	r4 772
332322	manufacturing Sheet metal work	2	11	2	427	11 992	358	673	8 302	26 008	27 723	55 041	1 309
332323	manufacturing Ornamental and architectural metal work manufacturing	2	'37 31	'8 9	'623 724	'22 176 34 450	'438 421	'864 894	'12 666 15 904	'41 343 80 310	'31 872 27 630	'73 520 109 928	'2 043 1 420
3327	Machine shops; turned product;	'	51	5	724	54 450	421	054	15 904	00 310	27 000	109 920	1 420
	and screw, nut, and bolt manufacturing	2	64	12	690	29 433	539	1 031	20 724	60 382	15 722	76 062	5 088
33271 332710	Machine shops Machine shops	2 2	58 58	12 12	647 647	27 592 27 592	509 509	963 963	19 210 19 210	56 542 56 542	14 833 14 833	71 347 71 347	4 994 4 994
3329	Other fabricated metal product manufacturing	1	21	10	777	30 567	501	1 042	15 514	109 957	78 669	215 328	3 323
33299	All other fabricated metal product manufacturing	1	20	10	f	D	D	D	D	D	D	D	D
332994 332999	Small arms manufacturing All other miscellaneous fabricated metal product	-	3	2	e	D	D	D	D	D	D	D	D
	manufacturing	2	13	7	е	D	D	D	D	D	D	D	D
333 3332	Machinery manufacturing	4	'78	'21	'3 351	'130 306	'2 271	r4 417	'70 488	'274 147	'255 932	'533 965	'12 231
	Industrial machinery manufacturing	2	17	3	554	30 615	273	458	12 394	69 724	41 533	114 955	943
33329	Other industrial machinery manufacturing	2	17	3	554	30 615	273	458	12 394	69 724	41 533	114 955	943
3333	Commercial and service industry machinery manufacturing	8	24	5	1 290	38 990	1 049	2 080	27 441	102 585	101 207	204 704	D
33331	Commercial and service industry machinery												_
333311	Manufacturing	8	24	5	1 290	38 990	1 049	2 080	27 441	102 585	101 207	204 704	D
333319	manufacturing Other commercial and service industry machinery	9	3	2	Ť	D	D	D	D	D	D	D	D
	manufacturing	3	10	3	278	9 709	230	476	6 990	10 814	7 079	17 799	367

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			Δ	II hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area —Con.												
333 3334	Machinery manufacturing—Con. Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	6	5	2	281	11 430	161	323	4 887	9 383	19 929	29 007	D
33341	Ventilation, heating, air- conditioning, and commercial refrigeration equipment	0		-	201	11 400	101	020	4 007	0.000	10 020	20 007	U
333415	Manufacturing Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment	6	5	2	281	11 430	161	323	4 887	9 383	19 929	29 007	D
0000	manufacturing	6	4	2	е	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	1	<sup>1</sup> 16	7	<sup>r</sup> 878	'35 149	<sup>r</sup> 580	'1 161	'19 703	'74 431	'52 247	'126 284	D
33399 333999	All other general purpose machinery manufacturing All other miscellaneous general purpose machinery	1	9	4	f	D	D	D	D	D	D	D	D
334	manufacturing	-	4	1	e	D	D	D	D	D	D	D	D
3341	manufacturing Computer and peripheral equipment manufacturing	1 5	233	87	18 872 f	1 121 230 D	5 209 D	10 494 D	213 048 D	2 246 235 D	2 112 964 D	4 437 459 D	142 615 D
33411	Computer and peripheral												
334111	equipment manufacturing Electronic computer manufacturing	5 4	22 10	7	t e	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	_	64	30	6 453	378 207	1 094	2 167	34 234	570 933	1 384 280	1 982 748	65 173
33421	Telephone apparatus manufacturing	4	16	7	f	D	D	D	D	D	D	D	D
334210 33422	Telephone apparatus manufacturing Radio and television broadcasting and wireless	4	16	7	f	D	D	D	D	D	D	D	D
334220	communications equipment manufacturing Radio and television broadcasting and wireless	-	33	19	5 086	302 173	694	1 289	20 597	409 873	1 272 366	1 707 023	61 953
33429	communications equipment manufacturing Other communications	-	33	19	5 086	302 173	694	1 289	20 597	409 873	1 272 366	1 707 023	61 953
334290	equipment manufacturing Other communications equipment manufacturing	-	15 15	4	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	4	50	21	3 207	158 107	1 905	3 890	87 744	302 429	147 204	487 221	27 126
33441	Semiconductor and other electronic component												
334412	manufacturing Bare printed circuit board	4	50 8	21	3 207	158 107 D	1 905 D	3 890 D	87 744 D	302 429 D	147 204 D	487 221 D	27 126 D
334413	manufacturing Semiconductor and related device manufacturing	6	12	4	e g	D	D	D	D	D	D	D	16 473
334418	Printed circuit assembly (electronic assembly)				_								
334419	manufacturing Other electronic component manufacturing	1 5	10 13	4 7	593 f	30 595 D	201 D	506 D	5 739 D	58 238 D	43 299 D	101 193 D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	69	26	8 204	540 304	1 739	3 485	76 702	1 267 894	500 744	1 784 569	46 823
33451	Navigational, measuring, electromedical, and control instruments manufacturing	_	69	26	8 204	540 304	1 739	3 485	76 702	1 267 894	500 744	1 784 569	46 823
334511	Search, detection, navigation, guidance, aeronautical, and nautical			20	0 204	5-0 004	. 700	0 100	10 102	. 207 004		. 70- 009	10 020
334515	system and instrument manufacturing Instrument manufacturing for measuring and testing	-	14	8	5 096	320 736	1 048	2 097	51 109	891 627	183 793	1 096 588	24 403
334516	electricity and electrical signals Analytical laboratory instrument manufacturing	-	10 12	6 3	2 121 e	173 932 D	240 D	514 D	10 061 D	278 386 D	220 805 D	498 386 D	D

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			A establist	ll ments <sup>2</sup>	All em	oloyees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
N	ASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA – Con.												
A	ashington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area – Con.												
334 0	Computer and electronic product manufacturing-Con.												
3345	Navigational, measuring, electromedical, and control instruments manufacturing— Con.												
33451	Navigational, measuring, electromedical, and control instruments manufacturing— Con.												
334519	Other measuring and controlling device manufacturing	2	14	4	е	D	D	D	D	D	D	D	D
3346	Manufacturing and reproducing magnetic and optical media	1	22	3	е	D	D	D	D	D	D	D	D
33461	Manufacturing and reproducing magnetic and optical media	1	22	3	е	D	D	D	D	D	D	D	D
334612	Prerecorded compact disc (except software), tape, and												
335 E	record reproducing	-	15	3	е	D	D	D	D	D	D	D	D
336 Т	component manufacturing	3	27	8	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts	_	34 12	12 5	2 329 f	147 209 D	1 067 D	2 206 D	58 972 D	242 514 D	293 604 D	544 412 D	16 636 D
33635	Motor vehicle transmission and	_	12	5	1	D	U	U	U	J	U	D	D
336350	power train parts manufacturing Motor vehicle transmission	-	3	1	е	D	D	D	D	D	D	D	D
	and power train parts manufacturing	-	3	1	е	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	-	9	6	1 644	113 296	497	1 077	31 005	177 994	157 095	342 382	15 196
33641 336413	Aerospace product and parts manufacturing Other aircraft parts and auxiliary equipment	-	9	6	1 644	113 296	497	1 077	31 005	177 994	157 095	342 382	15 196
336414	manufacturing Guided missile and space	-	5	3	e	D	D	D	D	D	D	D	D
336415	vehicle manufacturing Guided missile and space vehicle propulsion unit and propulsion unit parts	-	1	1	Ť	D	D	D	D	D	D	D	D
337 F	manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
3371	manufacturing Household and institutional	2	205	31	3 669	113 549	2 712	5 432	74 804	297 563	208 900	506 169	10 267
	furniture and kitchen cabinet manufacturing	1	151	16	1 724	51 259	1 391	2 829	36 881	164 630	122 773	287 279	D
33711	Wood kitchen cabinet and countertop manufacturing	1	97	8	1 045	32 593	827	1 723	22 783	127 518	93 536	220 927	D
337110	Wood kitchen cabinet and countertop manufacturing	1	97	8	1 045	32 593	827	1 723	22 783	127 518	93 536	220 927	D
33712	Household and institutional furniture manufacturing	1	54	8	679	18 666	564	1 106	14 098	37 112	29 237	66 352	D
337121 337122	Upholstered household furniture manufacturing Nonupholstered wood	-	14	2	275	6 096	245	463	5 043	14 538	17 183	31 737	D
	household furniture manufacturing	2	33	4	271	8 204	217	431	6 340	15 461	9 033	24 359	D
3372	Office furniture (including fixtures) manufacturing	4	47	13	1 510	47 176	972	1 950	28 419	83 719	47 410	130 751	2 745
33721 337212	Office furniture (including fixtures) manufacturing	4	47	13	1 510	47 176	972	1 950	28 419	83 719	47 410	130 751	2 745
	woodwork and millwork manufacturing	1	23	8	802	23 381	447	935	13 517	41 085	20 212	60 951	D
337215	Showcase, partition, shelving, and locker manufacturing	6	12	3	552	18 216	401	763	11 119	30 201	20 257	50 426	D
3379	Other furniture related product manufacturing	_		2	435	15 114	349	653	9 504	49 214	38 717	88 139	D
33791 337910	Mattress manufacturing Mattress manufacturing	-	2	2 2	e	D	D	D	D	D	D	D	D

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			A		<b>A</b> II		Dur						
			establis	hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area —Con.												
339	Miscellaneous manufacturing	3	320	36	2 966	103 266	1 986	3 841	53 700	212 806	114 031	326 841	D
3391	Medical equipment and supplies manufacturing	4	170	14	1 163	41 817	750	1 411	21 089	96 023	40 987	136 376	D
33911	Medical equipment and supplies manufacturing	4	170	14	1 163	41 817	750	1 411	21 089	96 023	40 987	136 376	D
339116 3399	Dental laboratories Other miscellaneous	5	108	4	490	14 787	364	658	10 637	23 809	5 561	29 288	D
33995	manufacturing	3 3	150 82	22 16	1 803 1 178	61 449 43 021	1 236 775	2 430 1 543	32 611 22 421	116 783 77 905	73 044 44 491	190 465 123 396	D
339950 33999	Sign manufacturing All other miscellaneous	3	82	16	1 178	43 021	775	1 543	22 421	77 905	44 491	123 396	D
	manufacturing	1	31	3	368	10 271	280	539	6 142	17 562	14 400	31 551	D
	Bethesda-Frederick- Gaithersburg, MD Metropolitan Division												
31-33	Manufacturing	-	707 53	159 12	22 925 1 190	1 125 598 36 392	10 865	21 145 1 502	359 826 21 600	3 234 554 315 372	2 809 544 163 190	6 090 690 479 184	170 037 5 564
311 3115	Food manufacturing Dairy product manufacturing	-	4	2	e 1 190	30 392 D	739 D	1 502 D	21 600 D	515 372 D	163 190 D	479 184 D	5 564 D
31151	Dairy product (except frozen) manufacturing	_	3	2	е	D	D	D	D	D	D	D	D
311511	Fluid milk manufacturing	-	3 2	2 2	e	Ď	Ď	Ď	D	Ď	Ď	Ď	D
3118	Bakeries and tortilla manufacturing	1	38	9	780	20 166	468	910	11 925	200 417	36 626	236 932	3 010
31181	Bread and bakery product manufacturing	1	38	9	780	20 166	468	910	11 925	200 417	36 626	236 932	3 010
311811 311812	Retail bakeries Commercial bakeries	5	30 8	5 4	414 366	6 520 13 646	212 256	336 574	3 473 8 452	12 252 188 165	6 540 30 086	18 769 218 163	361 2 649
321	Wood product manufacturing	-	21	8	1 197	38 661	932	1 960	25 698	179 481	208 887	386 073	7 387
3219	Other wood product manufacturing	-	14	5	1 105	35 265	871	1 834	24 048	172 958	198 956	369 770	D
32199	All other wood product manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
321992	Prefabricated wood building manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	1	151	25	3 090	114 505	2 183	4 163	69 184	271 549	105 660	377 581	13 034
3231	Printing and related support activities	1	151	25	3 090	114 505	2 183	4 163	69 184	271 549	105 660	377 581	13 034
32311 323110	Printing Commercial lithographic	1	136	24	2 994	110 058	2 113	4 026	66 278	263 167	102 226	365 767	12 873
323117	printing	2	61 11	15 5	2 218 377	83 678 13 633	1 555 317	3 032 580	49 100 10 808	208 721 26 774	70 752 18 478	280 539 44 564	9 125 D
325	Chemical manufacturing	-	25	11	1 334	71 117	703	1 245	30 327	747 600	71 220	838 167	16 100
3254	Pharmaceutical and medicine manufacturing	_	16	8	1 161	64 331	633	1 096	27 839	733 514	56 439	809 541	15 224
32541	Pharmaceutical and medicine manufacturing	_	16	8	1 161	64 331	633	1 096	27 839	733 514	56 439	809 541	15 224
325413	In-vitro diagnostic substance manufacturing	8	7	5	е	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	-	9	4	257	8 337	174	342	4 724	36 015	30 444	66 010	659
3261	Plastics product manufacturing	-	9	4	257	8 337	174	342	4 724	36 015	30 444	66 010	659
32619	Other plastics product manufacturing	-	9	4	257	8 337	174	342	4 724	36 015	30 444	66 010	659
327	Nonmetallic mineral product manufacturing	1	39	15	809	33 637	641	1 214	23 352	85 623	76 285	158 506	D
3273	Cement and concrete product manufacturing	-	19	10	558	25 196	437	853	16 773	69 937	67 858	134 854	D
331	Primary metal manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
3313	Alumina and aluminum production and processing	-	1	1	f	D	D	D	D	D	D	D	D
33131 331312	Alumina and aluminum production and processing Primary aluminum	-	1	1	f	D	D	D	D	D	D	D	D
	production	ı –	1	1	f	D	D	D	D	D	DI	D	D

See footnotes at end of table.

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	aning of abbreviations and symbols, see		A		All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area —Con.												
	Bethesda-Frederick- Gaithersburg, MD Metropolitan Division—Con.												
332	Fabricated metal product manufacturing	3	52	12	1 105	40 635	736	1 389	24 400	77 096	62 329	139 681	3 602
3323	Architectural and structural metals manufacturing	2	19	7	813	29 524	523	1 027	17 083	55 664	52 028	107 916	2 947
33231	Plate work and fabricated structural product												
332312	manufacturing Fabricated structural metal	5	7	3	е	D	D	D	D	D	D	D	D
33232	manufacturing Ornamental and architectural metal products	5	5	3	е	D	D	D	D	D	D	D	D
332322	manufacturing Sheet metal work manufacturing	_	12 6	4 2	e 253	D 7 469	D 158	D 316	D 3 724	D 14 122	D 13 985	D 28 256	D 998
333	Machinery manufacturing	-	24	2	1 022	409	570	1 036	20 827	84 915	85 321	173 015	2 301
3332	Industrial machinery												
33329	manufacturing	2	7	2	365	22 619	152	206	8 376	48 060	28 941	80 423	D
3334	manufacturing	2	7	2	365	22 619	152	206	8 376	48 060	28 941	80 423	D
3334	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	6	4	2	е	D	D	D	D	D	D	D	D
33341 333415	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing Air-conditioning and warm air heating equipment and neuror grained industrial	6	4	2	e	D	D	D	D	D	D	D	D
	commercial and industrial refrigeration equipment manufacturing	6	4	2	e	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	-	93	38	9 881	609 547	2 033	4 047	65 406	983 094	1 641 942	2 646 688	95 701
3342	Communications equipment manufacturing	-	24	14	5 192	310 014	663	1 256	19 204	418 907	1 253 405	1 701 433	D
33422	Radio and television broadcasting and wireless communications equipment manufacturing	_	16	11	4 726	285 925	537	962	15 787	362 297	1 223 501	1 614 638	60 795
334220	Radio and television broadcasting and wireless communications equipment												
33429	manufacturing Other communications	-	16	11 2	4 726	285 925 D	537 D	962 D	15 787 D	362 297 D	1 223 501 D	1 614 638 D	60 795 D
334290	equipment manufacturing Other communications equipment manufacturing	_	4	2	e e	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	1	26	12	1 541	68 791	745	1 564	21 590	155 286	73 284	229 101	D
33441	Semiconductor and other electronic component												
334413	manufacturing	1	26	12	1 541	68 791	745	1 564	21 590	155 286	73 284	229 101	D
334418	device manufacturing Printed circuit assembly (electronic assembly)	-	6	3	е	D	D	D	D	D	D	D	D
334419	Other electronic component manufacturing	-	5 9	2 5	421 f	23 332 D	89 D	246 D	2 115 D	42 334 D	25 773 D	68 145 D	D D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	28	8	2 873	217 639	506	1 008	21 310		293 161	667 399	22 591

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For me	aning of abbreviations and symbols, see		A	JI	All		Du						
			establis	hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area —Con.												
	Bethesda-Frederick- Gaithersburg, MD Metropolitan Division—Con.												
334	Computer and electronic product manufacturing—Con.												
3345	Navigational, measuring, electromedical, and control instruments manufacturing – Con.												
33451	Navigational, measuring, electromedical, and control												
334511	instruments manufacturing Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	-	28	8	2 873	217 639	506	1 008	21 310	382 222	293 161	667 399	22 591
334515	Instrument manufacturing for measuring and testing electricity and electrical	-	4	1	e	D	D	D	D	D	D	D	D
005	signals	-	5	3	2 002	167 629	185	401	8 175	267 870	210 997	477 955	D
335	Electrical equipment, appliance, and component manufacturing	1	12	4	е	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	6	66	7	522	16 461	404	791	10 898	30 107	19 586	49 713	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	6	49	4	331	10 208	255	502	6 996	18 143	11 425	29 595	D
339	Miscellaneous manufacturing	6	109	8	656	22 465	435	796	11 575	47 553	18 678	66 058	D
3391	Medical equipment and supplies manufacturing	6	73	7	473	16 876	318	583	8 639	37 448	11 828	49 244	D
33911	Medical equipment and supplies manufacturing	6	73	7	473	16 876	318	583	8 639	37 448	11 828	49 244	D
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Division												
31-33	Manufacturing	2	'1 846	'443	'47 923	'2 005 400	29 918	59 073	1 024 972	'5 012 177	'3 560 623	'8 689 887	'259 744
311	Food manufacturing	3	161	36	3 396	94 550	2 037	3 913	51 844	382 837	340 655	721 062	10 676
3115	Dairy product manufacturing	-	3	3	420	19 810	284	626	12 486	76 542	150 843	226 946	D
31151	Dairy product (except frozen) manufacturing	-	2	2	е	D	D	D	D	D	D	D	D
311511 3116	Fluid milk manufacturing Animal slaughtering and	-		2	e	D	D	D	D	D	D	D	D
31161	Processing	2	11	4	506	14 241	387	893	9 308	80 029	36 255	116 262	1 298
311612	processing Meat processed from	2	11	4	506	14 241	387	893	9 308	80 029	36 255	116 262	1 298
3118	carcasses Bakeries and tortilla manufacturing	2	108	4 24	e g	D	D	D	D	D	D	D	D 3 221
31181	Bread and bakery product						D						
311811 311812	manufacturing Retail bakeries Commercial bakeries	3 4 3	102 75 26	22 15 7	g f 738	D D 26 253	D D 282	D D 549	D D 8 908	D D 68 710	D D 28 555	D D 97 221	D D 2 077
3119	Other food manufacturing	9	21	2	, 36 e	20 230 D	D	D	D	00 / 10 D	20 333 D	57 221 D	2 631
312	Beverage and tobacco product manufacturing	1	16	6	f	D	D	D	D	D	D	D	D
3121	Beverage manufacturing	1	16	6	f	D	D	D	D	D	D	D	D
31211	Soft drink and ice manufacturing	1	6	5	f	D	D	D	D	D	D	D	D
312111 314	Soft drink manufacturing Textile product mills	1 5	4 53	4	е 493	D 12 239	D 373	D 728	D 6 874	D 23 057	D 17 059	D 40 948	D
314	Textile furnishings mills	6	34	5	331	7 407	251	469	4 159	12 323	17 039	40 948 25 886	D
31412 314121	Curtain and linen mills	5 5	32	5 5		D	D	D	D	D	D	D	D D
517121			- 20		e e	D	. 01	D			DI	וט	D

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			A establis	II hments <sup>2</sup>	All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area —Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Division—Con.												
321	Wood product manufacturing	2	60	21	1 789	52 397	1 437	2 908	34 669	113 230	146 687	259 627	6 842
3219	Other wood product manufacturing	3	44	14	1 350	39 762	1 073	2 133	25 717	85 830	86 942	172 299	D
32191 321911	Millwork	4	30	7	f	D	D	D	D	D	D	D	3 550
321918	manufacturing Other millwork (including	-	8	3	е	D	D	D	D	D	D	D	D
32199	flooring)All other wood product	8	14	2	251	8 780	204	427	5 913	14 794	25 130	39 784	1 343
321999	Manufacturing All other miscellaneous wood	1	8	4	е	D	D	D	D	D	D	D	D
322	product manufacturing Paper manufacturing	2	6 13	3 6	e e	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	2	12	5	e	D	D	D	D	D	D	D	D
323	Printing and related support activities	1	502	109	12 216	488 600	8 834	16 734	314 286	891 397	563 866	1 451 924	76 040
3231	Printing and related support activities	1	502	109	12 216	488 600	8 834	16 734	314 286	891 397	563 866	1 451 924	76 040
32311 323110	Printing Commercial lithographic	1	456	101	11 614	463 713	8 402	15 888	298 361	844 228	549 348	1 390 372	74 579
323113	printing Commercial screen printing	1	240 24	80 5	8 235 659	353 865 15 269	6 060 521	11 738 493	231 543 8 666	608 069 34 979	451 354 15 659	1 056 157 51 169	47 196 1 473
323114 323115 323117	Quick printing Digital printing Books printing	3	122 22 7	5 5 2 4 8	824 475 1 135	25 445 20 144 38 764	537 222 867	987 450 1 836	15 119 10 297 26 236	55 628 41 833 80 827	19 667 10 867 37 911	75 152 52 480 117 914	3 144 D D
32312 323121	Support activities for printing Tradebinding and related	5	46	8	602	24 887	432	846	15 925	47 169	14 518	61 552	1 461
	work	6	19	4	377	13 061	303	608	9 450	27 594	10 985	38 391	D
325 3254	Chemical manufacturing Pharmaceutical and medicine	-	54	15	1 726	91 624	927	1 658	45 037	610 520	341 752	952 258	15 094
0204	manufacturing	1	13	4	399	21 178	180	373	7 551	95 024	38 374	128 129	5 842
32541 325414	Pharmaceutical and medicine manufacturing Biological product (except diagnostic) manufacturing	1	13 3	4	399 e	21 178 D	180 D	373 D	7 551 D	95 024 D	38 374 D	128 129 D	5 842 D
3255	Paint, coating, and adhesive manufacturing	_	6	3	f	D	D	D	D	D	D	D	D
32551	Paint and coating			_									
325510	manufacturing Paint and coating manufacturing	-	4	2	f f	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	3	19	6	e	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	2	34	19	1 424	44 504	1 029	1 941	29 889	90 813	97 029	187 579	5 126
3261	Plastics product manufacturing	1	31	17	g	D	D	D	D	D	D	D	D
32611	Plastics packaging materials and unlaminated film and												
326111	sheet manufacturing Plastics bag manufacturing	-	3 1	2 1	e e	D D	D D	D D	D D	D D	D D	D D	D D
32619	Other plastics product manufacturing	2	22	13	748	22 218	470	928	12 752	49 890	35 102	84 941	3 323
326199	All other plastics product manufacturing	2	19	12	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	1	r109	r39	r2 367	<sup>r</sup> 93 104	1 844	4 017	66 954	<sup>1</sup> 288 035	<sup>7</sup> 237 913	r523 599	D
3273	Cement and concrete product manufacturing	1	79	'34	'2 117	'83 748	1 667	3 651	60 093	'260 672	'225 702	'484 143	D
32732	Ready-mix concrete manufacturing	1	48	16	947	41 214	796	1 762	33 627	145 902	150 698	295 866	D
327320	Ready-mix concrete manufacturing	1	48	16	947	41 214	796	1 762	33 627	145 902	150 698	295 866	D
32739	Other concrete product manufacturing	1	'22	۲ <b>1</b> 3	<sup>r</sup> 916	'32 589	691	1 480	19 974	'75 753	'37 143	'111 829	D
327390	Other concrete product manufacturing	1	'22	r13	<sup>'916</sup>	'32 589	691	1 480	19 974	'75 753	'37 143	'111 829	D

See footnotes at end of table.

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			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area —Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Division—Con.												
332	Fabricated metal product manufacturing	1	r176	r48	r3 644	r145 198	r2 544	r5 197	r80 928	'379 134	'246 060	<sup>r</sup> 658 779	r13 827
3323	Architectural and structural metals manufacturing	2	<sup>r</sup> 86	'24	'1 986	78 048	r1 375	'2 812	r41 974	'170 382	'145 770	'322 634	'5 103
33231	Plate work and fabricated structural product					5							2
332312	manufacturing Fabricated structural metal manufacturing	2	19 15	9 8	f	D	D	D	D	D	D	D	D
33232	Ornamental and architectural metal products	r2	<sup>r</sup> 67	r15	g	D	D	D	D	D	D	D	D
332321	manufacturing Metal window and door manufacturing	1	9	2	e g	D	D	D	D	D	D	D	D
332322 332323	Sheet metal work manufacturing Ornamental and architectural	r3	'31	<sup>r</sup> 6	'370	'14 707	'280	<sup>r</sup> 548	r8 942	'27 221	r17 887	<sup>r</sup> 45 264	'1 045
3327	metal work manufacturing Machine shops; turned product;	1	27	7	f	D	D	D	D	D	D	D	D
	and screw, nut, and bolt manufacturing	2	46	9	е	D	D	D	D	D	D	D	D
33271 332710	Machine shops Machine shops	2 2	42 42	9 9	469 469	20 561 20 561	362 362	729 729	14 124 14 124	43 775 43 775	10 038 10 038	53 727 53 727	4 745 4 745
3329	Other fabricated metal product manufacturing	-	18	9	f	D	D	D	D	D	D	D	D
33299 332994	All other fabricated metal product manufacturing Small arms manufacturing	_	17 3	9 2	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product												
333	manufacturing	2 5	10 <sup>r</sup> 54	6 '12	e '2 329	D 182 705	D 1 701	D '3 381	D r49 661	D 189 232	D 170 611	D '360 950	582 '9 930
3333	Commercial and service industry machinery manufacturing	8	21	5	1 262	37 977	1 035	2 052	27 036	100 339	100 580	202 018	D
33331	Commercial and service industry machinery												
333311	manufacturing Automatic vending machine manufacturing	8 9	21 3	5 2	1 262 f	37 977 D	1 035 D	2 052 D	27 036 D	100 339 D	100 580 D	202 018 D	D
333319	Other commercial and service industry machinery	3	9	3		D	D	D	D	D	D	D	D
3339	manufacturing Other general purpose machinery	3		3 14	e								D
33399	manufacturing	_	r11		'717	'28 682	r478	'951	'16 281	'57 402	'28 909	'86 070	
333999	Machinery manufacturing All other miscellaneous general purpose machinery	_	7	3	f	D	D	D	D	D	D	D	D
334	manufacturing	-	3	1	e	D	D	D	D	D	D	D	D
3341	manufacturing Computer and peripheral	2	140	49	8 991	511 683	3 176	6 447	147 642	1 263 141	471 022	1 790 771	46 914
33411	equipment manufacturing	5	13	4	e	D	D	D	D	D	D	D	D
334111	equipment manufacturing Electronic computer	5	13	4	е	D	D	D	D	D	D	D	D
3342	manufacturing	5	6	3	e	D	D	D	D	D	D	D	D
33421	manufacturing	3	40	16	1 261	68 193	431	911	15 030	152 026	130 875	281 315	D
334210	manufacturing	3 3	12 12	6 6	f	D	D	D	D	D	D	D	D
33422	manufacturing Radio and television broadcasting and wireless	3	12	o	T	U	U	U		U	D	D	U
334220	communications equipment manufacturing Radio and television broadcasting and wireless communications coulomout	5	17	8	360	16 248	157	327	4 810	47 576	48 865	92 385	1 158
	communications equipment manufacturing	5	17	8	360	16 248	157	327	4 810	47 576	48 865	92 385	1 158

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	aning of abbreviations and symbols, see		A	JI	Allem	ployees	Pro	duction work	kers				
NAICS			establis	hments <sup>2</sup>	7.11 011	ployeee							
code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area —Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Division—Con.												
334 3342	Computer and electronic product manufacturing—Con. Communications equipment manufacturing—Con.												
33429 334290	Other communications equipment manufacturing Other communications equipment manufacturing	1	11 11	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	7	24	9	1 666	89 316	1 160	2 326	66 154	147 143	73 920	258 120	D
33441	Semiconductor and other electronic component	7	24	9	1 666	89 316	1 160	0.006	66 154	147 143	72 000	058 100	D
334412	manufacturing Bare printed circuit board manufacturing	-	4	2	1 666 e	69 310 D	1 160 D	2 326 D	00 134 D	147 143 D	73 920 D	258 120 D	D
334413	Semiconductor and related device manufacturing	9	6	3	734	50 018	703	1 305	48 025	57 929	42 969	136 589	D
334419	Other electronic component manufacturing	9	4	2	е	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	-	41	18	5 331	322 665	1 233	2 477	55 392	885 672	207 583	1 117 170	24 232
33451 334511	Navigational, measuring, electromedical, and control instruments manufacturing Search, detection,	-	41	18	5 331	322 665	1 233	2 477	55 392	885 672	207 583	1 117 170	24 232
001011	navigation, guidance, aeronautical, and nautical system and instrument manufacturing	_	10	7	h	D	D	D	D	D	D	D	D
3346	Manufacturing and reproducing magnetic and optical media	_	17	2	е	D	D	D	D	D	D	D	D
33461	Manufacturing and reproducing magnetic and optical media	_	17	2	е	D	D	D	D	D	D	D	D
334612	Prerecorded compact disc (except software), tape, and record reproducing	_	11	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	29	11	2 142	136 725	999	2 050	55 705	214 646	267 060	485 089	15 692
3363	Motor vehicle parts manufacturing	_	11	5	f	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission and power train parts								5	5	5	5	5
336350	manufacturing Motor vehicle transmission and power train parts manufacturing	-	3	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	_	8	5	g	D	D	D	D	D	D	D	D
33641	Aerospace product and parts		8	5		D	D	D	D	D	D	D	D
336414	manufacturing Guided missile and space vehicle manufacturing	_	1	э 1	g f	D	D	D	D	D	D	D	D
336415	Guided missile and space vehicle propulsion unit and propulsion unit parts manufacturing	_	1	1	e	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	1	139	24	3 147	97 088	2 308	4 641	63 906	267 456	189 314	456 456	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	_	102	12	1 393	41 051	1 136	2 327	29 885	146 487	111 348	257 684	D
33711	Wood kitchen cabinet and												D
337110	countertop manufacturing Wood kitchen cabinet and countertop manufacturing	_	62 62	5 5	810 810	25 203 25 203	645 645	1 366 1 366	17 720 17 720	115 107 115 107	85 742 85 742	200 708 200 708	D
33712	Household and institutional furniture manufacturing	1	40	7	583	15 848	491	961	12 165	31 380	25 606	56 976	D
337121	Upholstered household furniture manufacturing	_	11	2	e	D	D	D	D	D	D	D	D

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	aning of abbreviations and symbols, see		A	JI	Allem	ployees	Pro	duction work	ers				
NAICS			establis		7 41 611	ployeee							<b>-</b>
code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA—Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Statistical Area —Con.												
	Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Division—Con.												
337	Furniture and related product manufacturing—Con.												
3372	Office furniture (including fixtures) manufacturing	3	33	10	1 330	41 208	831	1 675	24 674	72 571	39 982	112 182	2 517
33721	Office furniture (including fixtures) manufacturing	3	33	10	1 330	41 208	831	1 675	24 674	72 571	39 982	112 182	2 517
337212 337215	Custom architectural woodwork and millwork manufacturing Showcase, partition,	1	17	7	751	21 549	408	865	12 493	37 856	18 144	55 661	D
337215	shelving, and locker manufacturing	6	8	3	518	17 263	375	714	10 508	29 108	19 093	48 169	D
3379	Other furniture related product manufacturing	-	4	2	424	14 829	341	639	9 347	48 398	37 984	86 590	D
33791 337910	Mattress manufacturing Mattress manufacturing	-	2	2 2	e e	D D	D	D	D D	D	D	D	D D
339	Miscellaneous manufacturing	2	211	28	2 310	80 801	1 551	3 045	42 125	165 253	95 353	260 783	D
3391	Medical equipment and supplies manufacturing	2	97	7	690	24 941	432	828	12 450	58 575	29 159	87 132	D
33911 339116	Medical equipment and supplies manufacturing Dental laboratories	2 5	97 65	7 2	690 306	24 941 9 374	432 227	828 407	12 450 6 749	58 575 15 612	29 159 3 324	87 132 18 863	D D
3399	Other miscellaneous manufacturing	2	114	21	1 620	55 860	1 119	2 217	29 675	106 678	66 194	173 651	D
33995 339950	Sign manufacturing Sign manufacturing	3	60 60	16 16	1 079 1 079	39 497 39 497	716 716	1 425 1 425	20 577 20 577	71 752 71 752	40 644 40 644	113 397 113 397	D D
33999	All other miscellaneous manufacturing	1	27	2	324	9 164	250	490	5 553	15 781	12 970	28 493	D
	Winchester, VA-WV Metropolitan Statistical Area												
31-33	Manufacturing	-	139	67	10 621	399 563	7 517	15 100	248 921	1 388 766	1 361 612	2 744 987	91 877
311	Food manufacturing	-	16	8	1 126	38 263	891	1 776	27 718	230 245	411 623	631 297	36 418
3114	Fruit and vegetable preserving and specialty food manufacturing	-	2	1	e	D	D	D	D	D	D	D	D
31142	Fruit and vegetable canning, pickling, and drying	_	2	1	е	D	D	D	D	D	D	D	D
311421	Fruit and vegetable canning .	-	2	1	е	D	D	D	D	D	D	D	D
3115 31151	Dairy product manufacturing	-	2	2	е	D	D	D	D	D	D	D	D
311514	Dairy product (except frozen) manufacturing Dry, condensed, and evaporated dairy product	-	2	2	e	D	D	D	D	D	D	D	D
3118	manufacturing	-	6	2	e	D	D	D	D	D	D	D	D
	manufacturing	_			е								
321	Wood product manufacturing	-	16	9	f	D	D	D	D	D	D	D	D
3211 32111	Sawmills and wood preservation . Sawmills and wood	_	7	4	420	13 343	219	480	4 477	31 756	25 709	57 990	D
321114	preservation	-	72	4 2	420 e	13 343 D	219 D	480 D	4 477 D	31 756 D	25 709 D	57 990 D	D D
323	Printing and related support activities	-	15	5	481	15 895	355	739	9 618	42 012	49 229	90 809	D
3231	Printing and related support activities	_	15	5	481	15 895	355	739	9 618	42 012	49 229	90 809	D
32311 323110	Printing Commercial lithographic printing	-	13 6	4 3	e 368	D 13 256	D 270	D 572	D 7 970	D 36 901	D 46 653	D 83 127	2 965 2 857
325	Chemical manufacturing		5	2	e	D		D	D	D	D	D	D

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	aning of abbreviations and symbols, see		A	JI	All em	ployees	Pro	duction wor	kers				
NAICS			establis										Tatal
code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WASHINGTON-BALTIMORE- NORTHERN VIRGINIA, DC- MD-VA-WV COMBINED STATISTICAL AREA-Con.												
	Winchester, VA-WV Metropolitan Statistical Area —Con.												
326	Plastics and rubber products manufacturing	_	16	12	3 112	125 203	2 016	4 067	72 137	511 052	231 993	745 907	20 551
3261	Plastics product manufacturing	-	13	10	2 992	120 599	1 956	3 940	70 075	499 241	221 708	723 818	20 073
32619 326199	Other plastics product manufacturing All other plastics product manufacturing	-	8 8	7 7	2 514 2 514	103 436 103 436	1 581 1 581	3 191 3 191	58 351 58 351	418 055 418 055	117 219 117 219	538 724 538 724	14 241 14 241
327	Nonmetallic mineral product manufacturing	7	7	5	565	20 328	433	968	12 823	46 827	33 784	80 371	2 501
3273	Cement and concrete product manufacturing	7	6	5	f	D	D	D	D	D	D	D	D
32739	Other concrete product manufacturing	9	2	2	е	D	D	D	D	D	D	D	D
327390	Other concrete product manufacturing	9	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	-	17	8	846	27 758	663	1 253	20 799	113 009	168 712	279 846	3 440
3323	Architectural and structural metals manufacturing	-	7	5	429	11 877	340	610	9 525	56 264	67 724	124 137	D
333	Machinery manufacturing	-	9	4	374	13 589	245	475	6 260	35 382	29 284	64 989	519
334	Computer and electronic product manufacturing	-	3	2	е	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control		-		-		_			_		_	
334514	instruments manufacturing Totalizing fluid meter and counting device	-	1	1	е	D	D	D	D	D	D	D	D
335	manufacturing	-	1	1	e	D	D	D	D	D	D	D	D
3351	component manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
33511	manufacturing	-	1	1	е						U	U	D
335110	manufacturing Electric lamp bulb and part manufacturing	-	1	1	e e	D	D	D	D	D	D	D	D
3353	Electrical equipment manufacturing	_	2	1	е	D	D	D	D	D	D	D	D
33531	Electrical equipment manufacturing	_	2	1	е	D	D	D	D	D	D	D	D
335311	Power, distribution, and specialty transformer manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	_	3	3	1 237	46 855	887	1 755	29 929	86 640	70 398	156 315	D
3363	Motor vehicle parts manufacturing	_	2	2	g	D	D	D	D	D	D	D	D
33634	Motor vehicle brake system					D	D	D	D	D	D	D	D
336340	manufacturing Motor vehicle brake system manufacturing	_	1	1	e e	D	D	D	D	D	D	D	D
33636	Motor vehicle seating and interior trim manufacturing		1	1	f	D	D	D	D	D	D	D	D
336360	Motor vehicle seating and interior trim manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	-	10	3	е	D	D	D	D	D	D	D	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	_	8	2	e	D	D	D	D	D	D	D	D
33712 337122	Household and institutional furniture manufacturing Nonupholstered wood	_	5	1	e	D	D	D	D	D	D	D	D
	household furniture manufacturing	_	3	1	е	D	D	D	D	D	D	D	D

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			A establisl	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BLUEFIELD, WV-VA MICROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	1	r123	39	r3 185	r109 586	r2 170	r4 281	r57 403	<sup>7</sup> 232 336	<sup>1</sup> 298 398	<sup>7</sup> 510 838	r14 287
311	Food manufacturing	-	3	2	е	D	D	D	D	D	D	D	D
321	Wood product manufacturing	1	12	5	481	12 437	416	903	8 900	30 032	49 796	76 061	1 081
3212	Veneer, plywood, and engineered wood product manufacturing	2	2	2	е	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product	2	2	2		D	D		D	D	D	D	
321211	manufacturing Hardwood veneer and plywood manufacturing	2	2	2	e e	D	D	D		D	D	D	D
332	Fabricated metal product	2	2	2	6	D		D			U	D	D
	manufacturing	3	32	9	f	D	D	D	D	D	D	D	1 339
333 3331	Machinery manufacturing	-	24	11	701	26 083	430	804	13 242	72 610	78 170	133 157	D
3331	Agriculture, construction, and mining machinery manufacturing	_	18	8	f	D	D	D	D	D	D	D	D
33313	Mining and oil and gas field machinery manufacturing	_	17	8	f	D	D	D	D	D	D	D	2 146
333131	Mining machinery and equipment manufacturing	_	17	8	f	D	D	D	D	D	D	D	2 146
334	Computer and electronic product manufacturing	5	5	2	е	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component	5			C								
	manufacturing	4	2	2	е	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	4	2	2	e	D	D	D	D	D	D	D	D
	CHARLESTON, WV METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	-	198	55	7 798	355 677	5 631	11 584	241 894	1 324 697	2 562 890	3 863 109	128 480
312	Beverage and tobacco product manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
3121	Beverage manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
31211	Soft drink and ice manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
312111	Soft drink manufacturing	-	i	1	e	Ď	Ď	D	Ď	Ď	Ď	Ď	Ď
321	Wood product manufacturing	-	16	4	279	6 817	229	422	4 789	13 527	12 631	26 109	550
323	Printing and related support activities	1	28	4	405	11 597	256	551	5 413	32 831	18 892	50 439	D
3231	Printing and related support activities	1	28	4	405	11 597	256	551	5 413	32 831	18 892	50 439	D
32311	Printing	1	27	4	е	D	D	D	D	D	D	D	D
324	Petroleum and coal products manufacturing	3	3	2	е	D	D	D	D	D	D	D	D
3241	Petroleum and coal products manufacturing	3	3	2	е	D	D	D	D	D	D	D	D
32419	Other petroleum and coal products manufacturing	3	2	2	е	D	D	D	D	D	D	D	D
324191	Petroleum lubricating oil and grease manufacturing	_	1	1	e	D	D	D	D	D	D	D	D
325	Chemical manufacturing	-	27	13	2 463	149 855	1 683	3 470	95 225	550 849	711 098	1 239 635	37 604
3251	Basic chemical manufacturing	-	17	9	2 051	132 003	1 383	2 857	84 689	485 967	686 201	1 144 371	34 078
32519	Other basic organic chemical		7	7	1 000	100,001	1 000	0.050	79 588	440 507	668 888	1 101 010	00 444
325199	manufacturing All other basic organic chemical manufacturing	_	7	7	1 882 1 882	122 031 122 031	1 290 1 290	2 653 2 653	79 588	443 567 443 567	668 888	1 101 810 1 101 810	29 444 29 444
3256	Soap, cleaning compound, and toilet preparation manufacturing.		5	2	e 1 002	122 031 D	1 290 D	2 055 D	79 566 D	443-567 D	000 000 D	D	29 444 D
32561	Soap and cleaning compound				Ū								
325612	manufacturing Polish and other sanitation good manufacturing	-	5 3	2 2	e e	D D	D D	D D	D	D D	D D	D D	D D
327	Nonmetallic mineral product manufacturing	3	20	6	285	8 662	207	366	5 023	24 365	22 907	47 480	1 513

See footnotes at end of table.

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				MI hments <sup>2</sup>	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	CHARLESTON, WV METROPOLITAN STATISTICAL AREA-Con.												
332	Fabricated metal product manufacturing	5	39	10	862	27 546	566	1 173	17 366	67 930	46 038	114 200	2 940
3323	Architectural and structural metals manufacturing	4	16	6	351	12 295	221	463	6 482	31 580	24 949	56 727	828
33231	Plate work and fabricated structural product manufacturing	3	12	5	322	11 716	205	432	6 108	29 436	23 955	53 534	717
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	5	13	2	391	11 718	243	535	8 137	22 106	7 159	29 237	1 896
33271 332710	Machine shops Machine shops	5 5	13 13	2 2	391 391	11 718 11 718	243 243	535 535	8 137 8 137	22 106 22 106	7 159 7 159	29 237 29 237	1 896 1 896
336	Transportation equipment manufacturing	-	4	3	1 926	92 756	1 661	3 615	77 804	450 714	1 402 357	1 846 224	D
3363	Motor vehicle parts manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine and engine parts		1	1	4	D	D	D	D	D	D	D	D
336312 33632	manufacturing Gasoline engine and engine parts manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
33632	Motor vehicle electrical and electronic equipment manufacturing Other motor vehicle electrical	-	1	1	e	D	D	D	D	D	D	D	D
33637	and electronic equipment manufacturing Motor vehicle metal stamping	-	1	1	e f	D D	D D	D D	D	D	D	D D	D D
336370	Motor vehicle metal stamping	-	1	1	f	D	D	D	D	D	D	D	D
	CUMBERLAND, MD-WV METROPOLITAN STATISTICAL AREA												
31-33 313	Manufacturing	- 9	76 2	22 2	4 694	183 802 D	3 445 D	6 989 D	120 123 D	590 827 D	465 825 D	1 061 104 D	24 965 D
3132	Fabric mills	9	2	2	e e	D	D	D	D	D	D	D	D
31321 313210	Broadwoven fabric mills Broadwoven fabric mills	9 9	2	2	e e	D	D	D	D	D	D	D	D D
321	Wood product manufacturing	3	8	3	258	5 834	116	263	2 588	10 671	17 672	28 322	964
322	Paper manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
3221	Pulp, paper, and paperboard mills	-	1	1	g	D	D	D	D	D	D	D	D
32212 322121	Paper mills Paper (except newsprint) mills	-	1	1	g g	D D	D D	D D	D	D D	D D	D D	D D
326	Plastics and rubber products manufacturing	-	3	2	e	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing	-	3	2	е	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	4	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33641 336415	Aerospace product and parts manufacturing Guided missile and space vehicle propulsion unit and propulsion unit parts	-	1	1	f	D	D	D	D	D	D	D	D
3366	manufacturing	_	1	1	e	D	D	D	D	D	D	D	D
33661 336612	Ship and boat building	-	1	1	e	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	_	7	1	f	D	D	D	D	D	D	D	D
3379	Other furniture related product manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33792	Blind and shade manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
337920	Blind and shade manufacturing	_	1	1	f	D	D	D	D	D		D	D

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			Δ	ll hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	HAGERSTOWN- MARTINSBURG, MD-WV METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	1	199	81	12 696	460 707	10 161	19 605	339 189	1 575 070	1 590 862	3 193 178	154 359
311	Food manufacturing	-	12	7	864	28 177	760	1 145	23 969	187 907	132 711	322 458	D
3115	Dairy product manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
31152 311520	Ice cream and frozen dessert manufacturing Ice cream and frozen dessert manufacturing	-	1	1	e	D	D D	D	D	D	D	D	D D
313	Textile mills	_	3	3	f	D	D	D	D	D	D	D	D
3132	Fabric mills	1	2	2	f	D	D	D	D	D	D	D	D
31322 313221	Narrow fabric mills and schiffli machine embroidery Narrow fabric mills	1	2	2	f	D	D	D	D	D	D	D	D D
316	Leather and allied product manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
3161	Leather and hide tanning and finishing	-	1	1	g	D	D	D	D	D	D	D	D
31611 316110	Leather and hide tanning and finishing Leather and hide tanning and finishing	-	1	1	g	D	D D	D D	D	D D	D D	D D	D D
323	Printing and related support activities	-	21	8	2 245	74 750	1 927	3 828	59 304	233 018	194 320	427 027	D
3231	Printing and related support activities	-	21	8	2 245	74 750	1 927	3 828	59 304	233 018	194 320	427 027	D
32311 323110	Printing Commercial lithographic printing	-	18 7	7	g 399	D 12 771	D 268	D 399	D 7 704	D 30 749	D 19 039	D 50 180	D
323111 323117 32312	Commercial gravure printing . Books printing Support activities for printing	_	1 3 3	1 2 1	f e	D D D	D D D	D D D	D D D				D D D
323121	Tradebinding and related work	_	1	1	e	D	D	D	D	D	D	D	D
325	Chemical manufacturing	-	8	5	е	D	D	D	D	D	D	D	D
3255	Paint, coating, and adhesive manufacturing	-	3	2	e	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	1	16	10	1 584	51 178	1 394	2 872	41 869	237 054	183 026	420 550	D
3261	Plastics product manufacturing	1	14	9	g	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	1	10	7	g	D	D	D	D	D	D	D	D
326192	Resilient floor covering manufacturing	9	1	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing	-	8	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	6	17	7	1 078	44 036	883	1 817	32 274	131 646	108 811	239 863	11 880
3272	Glass and glass product manufacturing	9	2	1	е	D	D	D	D	D	D	D	D
32721 327212	Glass and glass product manufacturing Other pressed and blown glass and glassware manufacturing	9 9	2	1	e	D	D	D	D	D	D	D	D
3273	Cement and concrete product manufacturing	5	10	4	f	D	D	D	D	D	D	D	D
32731 327310	Cement manufacturing Cement manufacturing	6 6	2	2	e	D	D	D	D	D	D	D	D D
332	Fabricated metal product manufacturing	2	32	12	912	28 610	712	1 388	18 906	63 957	31 442	95 826	2 003
3323	Architectural and structural metals manufacturing	-	15	8	422	13 580	318	648	8 873	22 378	16 998	39 380	D
33232	Ornamental and architectural metal products manufacturing	_	10	6	361	11 744	271	551	7 690	17 733	13 065	30 815	604
3325	Hardware manufacturing	6	3	2	е	D	D	D	D	D	D	D	D
33251 332510	Hardware manufacturing Hardware manufacturing	6 6	3 3	2 2	e	D	D D	D D	D	D	D	D	D D

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			Aestablis		All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	HAGERSTOWN- MARTINSBURG, MD-WV METROPOLITAN STATISTICAL AREA-Con.												
333	Machinery manufacturing	-	6	3	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, and power transmission equipment manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
33361	Engine, turbine, and power transmission equipment												
333618	manufacturing Other engine equipment manufacturing	-	1	1	g g	D D	D D	D D	D	D D	D D	D	D
336	Transportation equipment manufacturing	-	11	6	g	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	-	5	2	е	D	D	D	D	D	D	D	D
33621 336214	Motor vehicle body and trailer manufacturing Travel trailer and camper	-	5	2	e	D	D	D	D	D	D	D	D
3363	manufacturing	_			e								
33632	manufacturing	-	3	2	е	D	D	D	D	D	D	D	D
336322	electronic equipment manufacturing Other motor vehicle electrical and electronic equipment	-	1	1	e	D	D	D	D	D	D	D	D
337	manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
3371	manufacturing	1	18	6	597	16 515	449	825	12 348	44 907	27 725	72 923	D
	furniture and kitchen cabinet manufacturing	2	16	5	е	D	D	D	D	D	D	D	D
33712 337122	Household and institutional furniture manufacturing Nonupholstered wood	-	11	4	352	8 698	242	441	6 005	18 151	8 273	26 776	D
	household furniture manufacturing	-	9	3	е	D	D	D	D	D	D	D	D
	HUNTINGTON-ASHLAND, WV- KY-OH METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	-	240	75	10 879	444 286	7 978	16 679	308 209	1 662 516	3 930 382	5 603 295	213 979
311	Food manufacturing	1	12	2	499	18 493	226	499	8 181	55 747	25 623	81 365	D
3118	Bakeries and tortilla manufacturing	-	6	1	е	D	D	D	D	D	D	D	D
31181 311812	Bread and bakery product manufacturing Commercial bakeries	-	6 3	1 1	e e	D D	D D	D D	D D	D D	D	D D	D D
315	Apparel manufacturing	9	2	2	е	D	D	D	D	D	D	D	D
3152	Cut and sew apparel manufacturing	9	2	2	е	D	D	D	D	D	D	D	D
31522	Men's and boys' cut and sew apparel manufacturing	9	2	2	е	D	D	D	D	D	D	D	D
321	Wood product manufacturing	1	17	4	е	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	-	9	3	е	D	D	D	D	D	D	D	D
32191	Millwork	-	5	3	е	D	D	D	D	D	D	D	1 931
323	Printing and related support activities	_	17	3	317	9 045	236	521	5 559	29 617	35 183	63 773	D
3231	Printing and related support activities	-	17	3	317	9 045	236	521	5 559	29 617	35 183	63 773	D
32311	Printing	-	17	3	317	9 045	236	521	5 559	29 617	35 183	63 773	D
324	Petroleum and coal products manufacturing	_	8	2	f	D	D	D	D	D	D	D	D
3241	Petroleum and coal products manufacturing	-	8	2	f	D	D	D	D	D	D	D	D
32411 324110	Petroleum refineries Petroleum refineries	_	1	1	f f	D D	D	D	D D	D	D	D	D D

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			A establis	II hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	HUNTINGTON-ASHLAND, WV- KY-OH METROPOLITAN STATISTICAL AREA—Con.												
325 3251	Chemical manufacturing Basic chemical manufacturing	-	18 7	11 4	975 283	48 634 14 696	738 174	1 501 395	34 475 8 701	188 912 82 604	373 754 49 261	548 784 125 707	18 270 D
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	_	2	2	е	D	D	D	D	D	D	D	D
32521	Resin and synthetic rubber												
325211	manufacturing Plastics material and resin manufacturing	-	2	2 2	e e	D D	D D	D	D	D	D D	D D	D
326	Plastics and rubber products manufacturing	2	9	3	410	13 800	311	648	8 974	37 447	38 568	76 049	D
3261	Plastics product manufacturing	3	5	2	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	2	19	5	439	13 660	360	783	10 951	48 568	39 308	89 157	D
3271	Clay product and refractory manufacturing	2	4	3	e	D	D	D	D	D	D	D	D
32712 331	Clay building material and refractories manufacturing Primary metal manufacturing	2	4	3 7	e h	D D	D D	D D	D	D	D D	D D	D D
3311	Iron and steel mills and ferroalloy manufacturing		4	4	g	D	D	D	D	D	D	D	D
33111	Iron and steel mills and ferroalloy manufacturing	_	4	4		D	D	D	D	D	D	D	D
331111 3314	Iron and steel mills	-	4	4	g	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production and processing	_	3	3	g	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and												
331491	alloying Nonferrous metal (except copper and aluminum) rolling, drawing, and	1	2	2	g	D	D	D	D	D	D	D	D
332	extruding Fabricated metal product				g								
3323	manufacturing Architectural and structural metals manufacturing	2	56 16	17 6	835 262	27 428 8 810	641 178	1 297 376	18 891 5 189	63 707 21 100	46 864 25 248	109 943 45 289	D
3327	Machine shops; turned product;		10	0	202	0 010	170	570	5 105	21 100	23 240	43 209	D
	and screw, nut, and bolt manufacturing	3	30	7	е	D	D	D	D	D	D	D	1 509
33271 332710	Machine shops Machine shops	3 3	26 26	5 5	307 307	11 032 11 032	252 252	501 501	8 344 8 344	24 624 24 624	8 021 8 021	32 594 32 594	1 208 1 208
333 3331	Machinery manufacturing Agriculture, construction, and	1	21	5	893	31 378	628	1 222	17 258	98 093	75 089	174 538	D
3331	mining machinery manufacturing	-	4	3	394	16 842	240	519	8 103	27 270	26 170	54 457	D
33313	Mining and oil and gas field machinery manufacturing	-	4	3	394	16 842	240	519	8 103	27 270	26 170	54 457	D
333131	Mining machinery and equipment manufacturing	-	4	3	394	16 842	240	519	8 103	27 270	26 170	54 457	D
3334	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	_	2	1	е	D	D	D	D	D	D	D	D
33341	Ventilation, heating, air- conditioning, and commercial												
333415	refrigeration equipment manufacturing Air-conditioning and warm air heating equipment and commercial and industrial	-	2	1	e	D	D	D	D	D	D	D	D
337	refrigeration equipment manufacturing Furniture and related product	-	2	1	е	D	D	D	D	D	D	D	D
	manufacturing	-	12	2	е	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	-	22	3	679	24 121	579	1 174	18 780	86 490	24 672	110 809	D
3391 33911	Medical equipment and supplies manufacturing	-	11	1	e	D	D	D	D	D	D	D	D
33911 339113	Medical equipment and supplies manufacturing Surgical appliance and supplies manufacturing	-	11 2	1	e	D	D	D	D	D	D	D	D

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	aning of appreviations and symbols, see		Δ	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MORGANTOWN, WV METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	-	82	26	3 419	170 942	1 959	3 683	69 185	327 787	691 568	1 020 262	22 788
321	Wood product manufacturing	-	15	7	439	9 953	403	830	8 792	29 096	39 470	69 815	1 272
325	Chemical manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
32541 325412	Pharmaceutical and medicine manufacturing Pharmaceutical preparation manufacturing	-	1	1	g	D D	D D	D D	D	D D	D D	D D	D D
327	Nonmetallic mineral product manufacturing	2	10	3	е	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	1	1	e	D	D	D	D	D	D	D	D
3315	Foundries	-	1	1	e	D	D	D	D	D	D	D	D
33152 331522	Nonferrous metal foundries Nonferrous (except aluminum) die-casting	-	1	1	e	D	D	D	D	D	D	D	D
332	foundries Fabricated metal product manufacturing	-	21	1	e 430	D 12 093	D 367	D 582	D 9 048	D 25 549	D 12 152	D 37 501	D 1 831
	PARKERSBURG-MARIETTA, WV-OH METROPOLITAN STATISTICAL AREA					12 000		001		20 0 10	12 102		
31-33	Manufacturing	-	194	74	11 046	496 851	7 360	14 862	306 722	1 925 194	2 090 737	4 022 754	126 567
321	Wood product manufacturing	5	23	8	543	12 398	448	822	9 427	24 940	34 592	59 432	1 513
3219	Other wood product manufacturing	4	12	6	408	8 685	331	644	6 450	16 725	19 974	36 710	1 078
32192 321920	Wood container and pallet manufacturing Wood container and pallet	4	7	4	325	6 354	257	505	4 428	11 311	16 595	27 932	D
322	manufacturing	4	7	4	325 e	6 354 D	257 D	505 D	4 428 D	11 311 D	16 595 D	27 932 D	D
3222	Converted paper product manufacturing		3	2	e	D	D	D	D	D	D	D	D
32222	Paper bag and coated and			2	Ū	U	D	D		U	D	D	D
322222	treated paper manufacturing Coated and laminated paper manufacturing	-	2	2	e e	D	D D	D	D	D	D	D	D
325	Chemical manufacturing	_	21	14	4 313	264 449	2 688	5 646	162 005	1 339 531	1 481 324	2 812 349	97 340
3251	Basic chemical manufacturing	-	9	4	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical manufacturing	_	2	1	е	D	D	D	D	D	D	D	D
325199	All other basic organic chemical manufacturing	-	2	1	e	D	D	D	D	D	D	D	D
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	-	8	8	3 637	231 026	2 376	5 030	146 727	1 172 177	1 351 197	2 503 482	66 704
32521	Resin and synthetic rubber manufacturing	_	8	8	3 637	231 026	2 376	5 030	146 727	1 172 177	1 351 197	2 503 482	66 704
325211	Plastics material and resin manufacturing	_	7	7	h	201 020 D	2 3/0 D	5 000 D	D	D	D	2 303 402 D	00 704 D
325212	Synthetic rubber manufacturing	_	1	1	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	-	17	8	975	29 224	686	1 402	20 871	70 011	32 439	102 351	D
3272	Glass and glass product manufacturing	-	6	4	721	22 338	517	1 130	15 726	53 995	21 644	75 825	D
32721 327212	Glass and glass product manufacturing Other pressed and blown glass and glassware	_	6	4	721	22 338	517	1 130	15 726	53 995	21 644	75 825	D
	manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	9	7	822	37 798	575	1 321	23 287	66 220	205 320	281 872	6 372
3311	Iron and steel mills and ferroalloy manufacturing	-	4	4	730	35 259	504	1 180	21 613	56 338	187 803	256 212	D
33111 331112	Iron and steel mills and ferroalloy manufacturing Electrometallurgical ferroalloy	-	4	4	730	35 259	504	1 180	21 613	56 338	187 803	256 212	D
	product manufacturing	- 1	3	3	l fl	D	D	D	D D	D	DI	D	D

See footnotes at end of table.

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

	aning of abbreviations and symbols, see			-									
			establis	ll hments <sup>2</sup>	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PARKERSBURG-MARIETTA, WV-OH METROPOLITAN STATISTICAL AREA-Con.												
332	Fabricated metal product manufacturing	-	34	14	1 593	52 151	1 136	2 070	36 117	148 682	81 616	237 871	D
3322	Cutlery and handtool manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33221 332212	Cutlery and handtool manufacturing Hand and edge tool manufacturing		2	2	f	D D	D D	D D	D	D D	D D	D	D
3323	Architectural and structural metals manufacturing	2	14	8	467	14 776	301	548	7 881	37 399	20 952	58 096	D
33232	Ornamental and architectural metal products manufacturing	2	6	4	278	10 392	174	342	5 273	22 613	13 534	36 138	726
332322	Sheet metal work manufacturing	2	6	4	278	10 392	174	342	5 273	22 613	13 534	36 138	726
333	Machinery manufacturing	5	13	4	е	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	-	13	2	302	10 081	203	387	5 826	35 432	21 607	57 788	277
339	Miscellaneous manufacturing	1	15	4	962	38 232	507	984	15 114	82 772	63 047	145 377	2 401
3391	Medical equipment and supplies manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
33911 339111	Medical equipment and supplies manufacturing Laboratory apparatus and furniture manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	4	9	2	e	D	D	D	D	D	D	D	D
	POINT PLEASANT, WV-OH MICROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	-	37	11	1 628	64 445	1 258	2 636	43 882	240 483	351 705	589 269	49 633
325	Chemical manufacturing	-	3	2	е	D	D	D	D	D	D	D	D
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
32521	Resin and synthetic rubber manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
325211	Plastics material and resin manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
3353	Electrical equipment manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
33531 335312	Electrical equipment manufacturing Motor and generator manufacturing		1	1	e	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	_	2	1	е	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
33635	Motor vehicle transmission and power train parts		1	1		D	D	D	D	D	D	D	D
336350	manufacturing Motor vehicle transmission and power train parts manufacturing	_	1	1	e	D	D	D		D	D	D	D

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

	NAICS		, 	ll hments <sup>2</sup>	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WEIRTON-STEUBENVILLE, WV-OH METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	-	99	51	11 559	498 190	9 055	18 640	372 793	1 355 178	2 437 542	3 744 691	82 250
322	Paper manufacturing	-	5	5	387	12 020	299	625	8 465	34 124	30 365	64 433	D
3222	Converted paper product manufacturing	-	3	3	е	D	D	D	D	D	D	D	D
323	Printing and related support activities	-	9	4	е	D	D	D	D	D	D	D	D
3231	Printing and related support activities	_	9	4	е	D	D	D	D	D	D	D	D
32311	Printing	-	9	4	е	D	D	D	D	D	D	D	D
324	Petroleum and coal products manufacturing	-	3	2	e	D	D	D	D	D	D	D	D
3241	Petroleum and coal products manufacturing	-	3	2	е	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	_	13	7	1 345	36 241	1 116	2 176	27 420	76 379	47 249	123 537	3 155
3271	Clay product and refractory manufacturing	_	6	4	1 221	32 241	1 010	1 989	24 205	59 454	31 200	91 158	D
32711 327112		-	4	3	g	D	D	D	D	D	D	D	D
	earthenware, and other pottery product manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	6	6	6 664	336 276	5 259	11 109	258 747	814 779	1 363 196	2 156 027	D
3311	Iron and steel mills and ferroalloy manufacturing	-	5	5	i	D	D	D	D	D	D	D	D
33111 331111	Iron and steel mills and ferroalloy manufacturing Iron and steel mills	-	5 5	5 5	i i	D D	D D	D D	D D	D D	D D	D D	D D
3314	Nonferrous metal (except aluminum) production and processing	_	1	1	е	D	D	D	D	D	D	D	D
33149 331491	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying	-	1	1	е	D	D	D	D	D	D	D	D
001101	copper and aluminum) rolling, drawing, and extruding	-	1	1	e	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	-	21	15	1 664	52 385	1 220	2 465	35 664	181 591	538 949	717 872	12 030
3323	Architectural and structural metals manufacturing	_	6	4	е	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, and allied activities	_	5	5	487	21 930	358	764	15 131	84 579	410 408	488 300	D
33281 332812	(except jewelry and silverware), and allied	_	5	5	487	21 930	358	764	15 131	84 579	410 408	488 300	D
3329	services to manufacturers Other fabricated metal product	-	3	3	е	D	D	D	D	D	D	D	3 470
33291	manufacturing	_	3	2	f	D	D	D D	D	D	D	D	D
33291	Industrial valve manufacturing	_	1	1	f	D	D	D	D	ם	D	D	D

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

				All hments <sup>2</sup>	All em	ployees	Production workers						
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WHEELING, WV-OH METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	-	'130	'31	'3 385	'116 984	'2 593	'5 064	79 614	'368 386	'574 079	'936 105	'11 037
311	Food manufacturing	-	14	3	405	13 306	280	591	8 904	49 610	65 481	115 089	352
332	Fabricated metal product manufacturing	-	<sup>7</sup> 28	r8	'1 077	<sup>r</sup> 40 251	<sup>r</sup> 849	'1 648	<sup>1</sup> 28 032	'101 032	'341 706	'433 605	'1 635
3328	Coating, engraving, heat treating, and allied activities	_	4	3	f	D	D	D	D	D	D	D	D
33281 332812	Coating, engraving, heat treating, and allied activities Metal coating, engraving (except jewelry and	-	4	3	f	D	D	D	D	D	D	D	D
	silverware), and allied services to manufacturers	-	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	3	1	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	-	3	1	e	D	D	D	D	D	D	D	D
33637 336370	Motor vehicle metal stamping Motor vehicle metal	-	1	1	е	D	D	D	D	D	D	D	D
330370	stamping	_	1	1	е	D	D	D	D	D	D	D	D

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more. <sup>2</sup>Includes establishments with payroll at any time during the year. <sup>3</sup>Industries with 250 employees in more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: e–250 to 499 employees; 1–500 to 999 employees; g–1,000 to 24,999 employees; k–2500 to 49,999 employees; i–50,000 to 99,999 employees; m–100,000 employees or more. <sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March. May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

# Table 3. Industry Statistics for Counties: 2002

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

			Δ			ployees		oduction worl					
			establis	hments <sup>2</sup>	7 0111	p.09000							
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BERKELEY												
31-33	Manufacturing	3	40	22	h	D	D	D	D	D	D	D	104 740
323	Printing and related support activities	_	6	2	g	D	D	D	D	D	D	D	D
3231	Printing and related support						D	D				D	D
32311	activities Printing	_	6	2	a a	D	D	D D	D	D	D D	D D	D
323111	Printing Commercial gravure printing .	-	1	1	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	3	5	4	f	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing	3	5	4	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	3	3	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	9	6	4	730	29 959	604	1 247	22 041	99 763	67 162	166 585	D
	BROOKE												
31-33	Manufacturing	-	27	20	5 644	281 194	4 379	9 541	213 004	688 372	1 311 166	1 955 520 D	42 158
331 3311	Primary metal manufacturing Iron and steel mills and ferroalloy	-	2	2	h	D	D	D	D	D	D	D	D
	manufacturing	-	2	2	h	D	D	D	D	D	D	D	D
33111 331111	Iron and steel mills and ferroalloy manufacturing Iron and steel mills	-	2	2	h	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	_	12	10	f	D	D	D	D	D	D	D	D
	CABELL												
31-33	Manufacturing	1	113	42	5 288	201 921	3 740	7 829	125 449	559 834	529 053	1 119 571	D
331	Primary metal manufacturing	-	5	4	g	D	D	D	D	D	D	D	D
3311	Iron and steel mills and ferroalloy manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33111 331111	Iron and steel mills and ferroalloy manufacturing Iron and steel mills	-	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except	_	2	2		D	U	D	D	U	U	U	D
	aluminum) production and processing	-	2	2	g	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and					_		_	_			_	_
331491	alloying Nonferrous metal (except copper and aluminum) rolling, drawing, and	-	1	1	g	D	D	D	D	D	D	D	D
339	extruding Miscellaneous manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
555			12	2				D	D	D		U	D
31-33	Manufacturing	1	36	8	812	34 344	630	1 318	24 552	92 905	116 326	207 735	11 313
	GRANT												
31-33	Manufacturing	-	13	8	641	15 351	563	1 065	11 070	54 083	60 703	116 192	3 750
	GREENBRIER												
31-33	Manufacturing	4	32	8	851	26 897	629	1 249	13 524	62 284	54 030	116 748	1 579
04.00	HANCOCK			47	0.574	70.004	4 004	0.000	40,000	000 470	440 474	000.045	00.440
31-33 327	Manufacturing	-	30	17	2 571	73 264	1 961	3 939	48 838	229 172	443 174	668 315	30 146
	manufacturing	-	7	5	g	D	D	D	D	D	D	D	D
3271	Clay product and refractory manufacturing	-	5	4	g	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, and plumbing fixture												
327112	manufacturing Vitreous china, fine earthenware, and other pottery product	-	4	3	g	D	D	D	D	D	D	D	D
	manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	-	4	3	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33291 332911	Metal valve manufacturing Industrial valve manufacturing	-	1   1	1	f	D	D	D	D	D	D	D	D D

# Table 3. Industry Statistics for Counties: 2002-Con.

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

						ployees		oduction work					
NAICS	• · · · · · ·		establisi										Tatal
code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	HARDY												
31-33	Manufacturing	-	16	7	3 968	75 618	3 421	5 725	62 165	164 894	363 372	525 123	6 100
311	Food manufacturing	-	5	4	h	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing	-	4	3	h	D	D	D	D	D	D	D	D
31161 311615	Animal slaughtering and processing Poultry processing	_	4	3 2	h h	D D	D D	D D	D D	D D	D D	D D	D D
321	Wood product manufacturing	-	6	2	g	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	-	4	2	g	D	D	D	D	D	D	D	D
32191 321912	Millwork Cut stock, resawing lumber,	-	4	2	g	D	D	D	D	D	D	D	D
	and planing	-	3	1	f	D	D	D	D	D	D	D	D
	HARRISON												
31-33	Manufacturing	4	63	15	1 778	60 976	1 390	2 907	40 943	153 416	208 717	366 330	D
	JACKSON												
31-33	Manufacturing	-	19	9	2 632	104 761	2 097	4 097	72 058	279 363	605 304	864 841	27 779
331	Primary metal manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
3313	Alumina and aluminum production and processing	-	2	2	g	D	D	D	D	D	D	D	D
33131	Alumina and aluminum production and processing	-	2	2	g	D	D	D	D	D	D	D	D
331312 331315	Primary aluminum production	-	1	1	f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, and foil manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
	JEFFERSON												
31-33	Manufacturing	6	24	15	1 733	55 266	1 377	2 797	38 529	150 121	192 268	351 979	9 695
333	Machinery manufacturing	9	2	2	f	D	D	D	D	D	D	D	D
3333	Commercial and service industry machinery manufacturing	9	2	2	f	D	D	D	D	D	D	D	D
33331	Commercial and service industry machinery	9	2	2		D	D	D	D	D	D	D	D
333311	manufacturing	9	2	2	f	D	D	D	D	D	D	D	D
	KANAWHA												
31-33	Manufacturing	-	144	42	5 767	267 392	4 191	8 649	178 385	892 878	1 449 112	2 317 389	84 028
325	Chemical manufacturing	-	24	13	g	D	D	D	D	D	D	D	D
3251	Basic chemical manufacturing	-	16	9	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical manufacturing		7	7	1 882	122 031	1 290	2 653	79 588	443 567	668 888	1 101 810	29 444
325199	All other basic organic chemical manufacturing	_	7	7	1 882	122 031	1 290	2 653	79 588	443 567	668 888	1 101 810	29 444 29 444
332	Fabricated metal product manufacturing	7	28	7	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
33637 336370	Motor vehicle metal stamping Motor vehicle metal stamping	_	1	1	f	D D	D	D D	D	D	D	D	D
	LOGAN												
31-33	Manufacturing	1	37	10	689	17 309	546	1 074	12 263	37 544	43 878	81 263	4 903
	MARION												
31-33	Manufacturing	-	56	14	1 299	44 149	1 042	2 026	31 631	139 414	251 501	397 167	D
91.00	MASON			_					-		_		5
31-33	Manufacturing	-	16	6	f	D	D	D	D	D	D	D	D
31-33	Manufacturing	1	r61	19	r1 773	'66 127	'1 182	'2 414	'33 074	'126 570	'161 566	<sup>7</sup> 265 332	D
0.00	See footnotes at end of table					50 IE/	1 102		00 074	.20 0701	.01 0001	200 0021	5

See footnotes at end of table.

# Table 3. Industry Statistics for Counties: 2002-Con.

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

			A								,	,	
			establish	nments <sup>2</sup>	All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E <sup>1</sup>	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	MINERAL												
31-33	Manufacturing	-	17	7	1 272	52 061	802	1 728	28 218	158 377	80 673	235 700	D
336	Transportation equipment					_	_	_	_	_	_	_	_
0004	manufacturing	-	1	1	T	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33641	Aerospace product and parts		1	1	4	D	D	D	D	D	D	D	D
336415	manufacturing Guided missile and space vehicle propulsion unit and propulsion unit parts manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
	MONONGALIA												
31-33	Manufacturing	_	55	18	2 538	148 113	1 180	2 302	50 514	275 426	639 176	913 324	20 673
325	Chemical manufacturing	_	2	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine				, , , , , , , , , , , , , , , , , , ,								
	manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
32541 325412	Pharmaceutical and medicine manufacturing Pharmaceutical preparation manufacturing	-	1	1 1	g	D D	D D	D D	D D	D D	D D	D D	D D
	NICHOLAS												
31-33	Manufacturing	1	30	8	829	24 005	666	1 413	16 408	73 247	84 683	158 706	1 282
	оню												
31-33	Manufacturing	_	r53	r15	r1 173	r37 766	r905	r1 748	r23 272	r144 975	<sup>r</sup> 50 216	r199 275	D
	PLEASANTS												
31-33	Manufacturing	_	6	3	f	D	D	D	D	D	D	D	D
0.00	PRESTON		Ĵ	0		5	5	5	5	5	5	5	5
31-33		_	27	8	881	22 829	779	1 381	18 671	52 361	52 392	106 938	2 115
31-33		_	21	0	001	22 029	115	1 301	10 071	52 501	JZ 392	100 930	2 115
31-33	PUTNAM		41	11	1 879	83 316	1 309	2 719	59 470	423 398	1 102 949	1 526 519	44 049
336	Manufacturing Transportation equipment	_	41		1 0/9	03 310	1 309	2 / 19	59 470	423 398	1 102 949	1 520 519	44 049
000	manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine					D		, D	D	U	D	U	D
	and engine parts manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
336312	Gasoline engine and engine parts manufacturing		1	1		D	D	D	D	D	D	D	D
		_		1	1	D		U	D	U	U	U	D
	RALEIGH							4 000	10.070		~ ~ ~ ~	150.001	
31-33	Manufacturing	2	58	16	910	31 233	652	1 306	18 872	66 027	89 837	158 601	8 968
	RANDOLPH												
31-33		-	34	16	1 723	39 196	1 620	3 152	35 333	129 111	140 562	266 174	8 499
321 3219	Wood product manufacturing Other wood product	-	20	14	1 620	36 786	1 539	2 987	33 798	122 712	135 918	255 143	8 336
0210	manufacturing	-	11	7	1 300	29 348	1 229	2 286	26 908	93 672	97 034	186 533	7 440
32191 321918	Millwork Other millwork (including	-	7	5	1 234	27 775	1 166	2 160	25 416	89 268	94 775	180 486	7 395
521910	flooring)	-	4	3	g	D	D	D	D	D	D	D	D
	RITCHIE												
31-33	Manufacturing	1	22	9	1 598	50 379	1 078	2 151	24 769	122 035	92 207	214 456	6 152
326	Plastics and rubber products			0		D							P
3261	manufacturing	_	3	3 3	g	D	D	D D	D	D	D	D	D
32619	Plastics product manufacturing Other plastics product	_	3	3	g	D		U	D	U	U	U	D
326199	Manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
520133	manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
	TYLER												
31-33	Manufacturing	-	12	6	f	D	D	D	D	D	D	D	D
325	Chemical manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
3251	Basic chemical manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical												
325199	manufacturing All other basic organic	-	1	1	f	D	D	D	D	D	D	D	D
	chemical manufacturing	_	1	1	f	D	D	D	D	D	D	D	D

### Table 3. Industry Statistics for Counties: 2002-Con.

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

	3.3.1				0 0	5.1		Plane Plane -		0	,		, ,
			A establis	.ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	UPSHUR												
31-33	Manufacturing	1	26	10	883	27 059	757	1 398	19 984	113 784	141 069	256 871	6 398
	WAYNE												
31-33	Manufacturing	2	36	9	852	31 701	643	1 209	19 449	117 585	192 775	304 587	D
	WETZEL												
31-33	Manufacturing	-	18	4	1 654	99 334	1 099	2 145	60 857	284 358	294 472	587 547	D
325	Chemical manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
3251	Basic chemical manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
32518	Other basic inorganic chemical manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
325181	Alkalies and chlorine	_	1	1	f	D	D	D	D	D	D	D	D
32519	manufacturing Other basic organic chemical manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
325192	Cyclic crude and intermediate manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
	WOOD												
31-33	Manufacturing	-	75	28	i	D	D	D	D	D	D	D	D
325	Chemical manufacturing	-	6	3	h	D	D	D	D	D	D	D	D
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	_	2	2	h	D	D	D	D	D	D	D	D
32521	Resin and synthetic rubber	_		0	6	D	D	D	D	D	D	D	D
325211	manufacturing Plastics material and resin manufacturing	_	2	2	h h	D	D	D		D	D	D D	D
327	Nonmetallic mineral product												
3272	manufacturing	-	7	5	f	D	D	D	D	D	D	D	D
3212	manufacturing	-	3	3	f	D	D	D	D	D	D	D	D
32721	Glass and glass product manufacturing	_	3	3	f	D	D	D	D	D	D	D	D
327212	Other pressed and blown glass and glassware manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	_	19	9	g	D	D	D	D	D	D	D	D
3322	Cutlery and handtool manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33221 332212	Cutlery and handtool manufacturing Hand and edge tool	-	2	2	f	D	D	D	D	D	D	D	D
	manufacturing	-	2	2	f	D	D	D	D	D	D	D	D

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where establishments with payroll at any time during the year. <sup>2</sup>Includes establishments with payroll at any time during the year. <sup>3</sup>Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 1–500 to 9.999 employees; j=5,000 to 9.999 employees; j=10,000 to 2.4999 employees; h=2,500 to 4.999 employees; j=5,000 to 9.999 employees; m=100,000 employees or more. <sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March, May, August, and November plus other employees for payroll to a difference.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

# Table 4. Industry Statistics for Places: 2002

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

						graphic aload	, ,	ooo r ppono					lony toxig
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BRIDGEPORT												
31-33	Manufacturing	7	11	3	f	D	D	D	D	D	D	D	D
	CHARLESTON												
31-33	Manufacturing	3	51	14	1 056	34 145	703	1 416	19 065	74 893	76 984	152 176	4 175
	FAIRMONT												
31-33	Manufacturing	-	31	5	f	D	D	D	D	D	D	D	2 275
	FOLLANSBEE												
31-33	Manufacturing	-	6	5	f	D	D	D	D	D	D	D	4 432
	HUNTINGTON												
31-33	Manufacturing	1	71	28	3 924	152 586	2 657	5 526	90 555	374 742	414 012	820 988	D
331	Primary metal manufacturing	-	4	3	g	D	D	D	D	D	D	D	D
3311	Iron and steel mills and ferroalloy manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
33111	Iron and steel mills and ferroalloy manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
331111 3314	Iron and steel mills Nonferrous metal (except	_	2	2		D	D	D		D	U	D	D
	aluminum) production and processing	-	1	1	g	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloving		1	1	g	D	D	D	D	D	D	D	D
331491	alloying Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	_	1	1	g	D	D	D	D	D	D	D	D
	KEYSER												
31-33	Manufacturing	_	5	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment								D			D	
3364	Manufacturing	-	1	1	1	D	D	D		D	D	U	D
	manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33641 336415	Aerospace product and parts manufacturing Guided missile and space vehicle propulsion unit and	-	1	1	f	D	D	D	D	D	D	D	D
	propulsion unit parts manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
	MARTINSBURG												
31-33	Manufacturing	2	21	12	1 970	65 582	1 667	3 428	51 055	286 312	211 008	500 151	D
323	Printing and related support activities	-	5	1	f	D	D	D	D	D	D	D	D
3231	Printing and related support activities	-	5	1	f	D	D	D	D	D	D	D	D
32311 323111	Printing Commercial gravure printing .	-	5 1	1 1	f f	D D	D D	D D	D D	D D	D D	D D	D D
	MORGANTOWN												
31-33	Manufacturing	-	20	8	g	D	D	D	D	D	D	D	D
325	Chemical manufacturing	-	2	2	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
	NITRO												
31-33	Manufacturing	2	14	6	502	14 123	337	742	8 945	48 795	38 298	86 072	2 149
	PARKERSBURG												
31-33	Manufacturing	3	34	11	1 002	34 274	755	1 544	21 604	83 421	73 314	157 951	D
	PRINCETON												
31-33	Manufacturing	1	25	10	938	28 809	684	1 450	17 027	30 256	106 983	132 408	D

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

BALANCOCK       I				1										
constrained         constrained <thconstrained< th=""> <thconstrained< th=""></thconstrained<></thconstrained<>				establis	hments <sup>2</sup>	All em	ployees	Pro	oduction worl	kers				
3133         Manufacturing         -         1         9         1         75         76         82         240         55         30         35         77         550         37         350         37         350         37         350         37         350		Geographic area and industry	E1	Total	em- ploy- ees or	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)		cost of materials	value of shipments	capital expendi- tures
1999         Thrancyclicle ordinary         -         -         1         1         1         1         0         D <td></td> <td>SOUTH CHARLESTON</td> <td></td>		SOUTH CHARLESTON												
Immunicaturing	31-33	Manufacturing	-	16	9	1 715	79 606	1 346	2 801	57 352	243 054	510 351	765 189	17 459
manufacturing         -         1         1         1         1         1         0         D <thd< th="">         D         <thd< th=""> <th< td=""><td>336</td><td></td><td>-</td><td>1</td><td>1</td><td>f</td><td>D</td><td>D</td><td>D</td><td>D</td><td>D</td><td>D</td><td>D</td><td>D</td></th<></thd<></thd<>	336		-	1	1	f	D	D	D	D	D	D	D	D
Matrix while metal         A         I	3363	Motor vehicle parts manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
313       Manulaclung	33637 336370	Motor vehicle metal	-			f								
9331       Primary match manufacturing       -       -       1       1       1       0       <		WEIRTON												
3113         Iron and sets initial and results)         -         1         1         h         D <thd< th=""> <thd< th="">         D</thd<></thd<>	31-33	Manufacturing	-	18	12	4 444	233 287	3 422	7 686	176 350	559 315	863 065	1 382 073	24 480
	331	Primary metal manufacturing	-	1	1	h	D	D	D	D	D	D	D	D
samual ferroading member outled uning	3311		-	1	1	h	D	D	D	D	D	D	D	D
manufacturing         2         8         7         f         0         <		ferroalloy manufacturing					D D							D D
31-33         Manufacturing         11         446         12         980         22.560         12.5         11.61         11.624         99.490         11.51.490         12.657           31-33         Manufacturing         -	332		2	8	7	f	D	D	D	D	D	D	D	D
WILLIAMSTOWN     I		WHEELING												
31-33       Manufacturing	31-33	Manufacturing	r1	r46	'12	<sup>r</sup> 806	'25 866	'625	'1 192	'16 138	'116 524	'39 490	'151 498	'2 857
BALANCE OF BERKELEY BCOUNTY         C		WILLIAMSTOWN												
COUNTY         I </td <td>31-33</td> <td>Manufacturing</td> <td>-  </td> <td>7</td> <td>4</td> <td>f</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>525</td>	31-33	Manufacturing	-	7	4	f	D	D	D	D	D	D	D	525
BALANCE OF CABELL         I														
COUNTY         I </td <td>31-33</td> <td>Manufacturing</td> <td>5</td> <td>19</td> <td>10</td> <td>g</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td>	31-33	Manufacturing	5	19	10	g	D	D	D	D	D	D	D	D
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		BALANCE OF CABELL COUNTY												
BALANCE OF FAYETTE         I <thi< th="">         I         <thi< th=""></thi<></thi<>	31-33	Manufacturing	1	40	13	g	D	D	D	D	D	D	D	D
COUNTY	339	Miscellaneous manufacturing	-	6	2	f	D	D	D	D	D	D	D	D
BALANCE OF GRANT COUNTY13864115 3515631 06511 07054 08360 703116 1923 75031-33Manufacturing13864115 3515631 06511 07054 08360 703116 1923 75031-33Manufacturing-6227fDDDDDDDD31-33Manufacturing1612gDDDDDDDDDD3271Nonmetallic mineral product manufacturing1612gDDDDDDDDD32711Poltery, coranies, and putnying fiture manufacturing22gDDDDDDDDDD32711Poltery, coranies, and putnying fiture manufacturing22gDD <td></td>														
COUNTYII <td>31-33</td> <td>Manufacturing</td> <td>-</td> <td>25</td> <td>8</td> <td>737</td> <td>32 356</td> <td>570</td> <td>1 197</td> <td>23 024</td> <td>88 695</td> <td>113 932</td> <td>201 124</td> <td>11 113</td>	31-33	Manufacturing	-	25	8	737	32 356	570	1 197	23 024	88 695	113 932	201 124	11 113
BALANCE OF GREENBRIER COUNTY6227fDDDDDDDD31-33Manufacturing6227fDDDDDDDDD31-33Manufacturing1612gDDDDDDDD327Normetallic mineral product manufacturing-44gDDDDDDDD3271Clay product and refractory manufacturing-33gDDDDDDDD327112Potery, ceramics, and plumbing fixture manufacturing-22gDDDDDDDD3322Fabricated metal product manufacturing-11gDDDDDDDD3329Other fabricated metal product manufacturing-11fDDDDDDDD3329Other fabricated metal product manufacturing-11fDDDDDDDDD3329Other fabricated metal product manufacturing-11fDDDDDDDDDDDD3440540540540540														
COUNTYCOUN	31-33	Manufacturing	-	13	8	641	15 351	563	1 065	11 070	54 083	60 703	116 192	3 750
BALANCE OF HANCOCK COUNTY       -       16       12       g       D		BALANCE OF GREENBRIER COUNTY												
COUNTYCOUNTYCC <thc< td=""><td>31-33</td><td>Manufacturing</td><td>6</td><td>22</td><td>7</td><td>f</td><td>D</td><td>D</td><td>D</td><td>D</td><td>D</td><td>D</td><td>D</td><td>D</td></thc<>	31-33	Manufacturing	6	22	7	f	D	D	D	D	D	D	D	D
327Nonmetallic mineral product manufacturing														
manufacturing44gDDDDDDDDD3271Clay product and refractory manufacturing-33gDDDDDDDDD32711Pottery, ceramics, and plumbing fixture manufacturing-22gDDDDDDDDD327112Pottery, ceramics, and 	31-33	Manufacturing	-	16	12	g	D	D	D	D	D	D	D	D
manufacturing-33gDDDDDDDDD32711Pottery, ceramics, and plumbing fixture manufacturing-22gDDDDDDDDD327112Vitreous china, fine earthenware, and other pottery product manufacturing-11gDDDDDDDDD332Fabricated metal product manufacturing-11gDDDDDDDD3329Other fabricated metal product manufacturing-11fDDDDDDDD			-	4	4	g	D	D	D	D	D	D	D	D
327112plumbing fixture manufacturing		manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
327112manufacturing-22gDDDDDDDD327112Vitreous china, fine earthenware, and other pottery product manufacturing-11gDDDDDDDDD332Fabricated metal product manufacturing-22fDDDDDDDD3329Other fabricated metal product manufacturing-11fDDDDDDDD	32711	Pottery, ceramics, and plumbing fixture					_	_	_	_			_	_
332     Fabricated metal product manufacturing     -     2     2     f     D     D     D     D     D     D     D       3329     Other fabricated metal product manufacturing     -     1     1     f     D     D     D     D     D     D     D     D	327112	Vitreous china, fine earthenware, and other pottery product	-											
3329 Other fabricated metal product manufacturing	332	Fabricated metal product	-			g								
manufacturing         -         1         1         f         D         <	3329	Other fabricated metal product												
		manufacturing	-			f								D
332911 Industrial valve	33291 332911	Industrial valve	-			f f								D

See footnotes at end of table.

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

terms,		- enu	or table.		ation on geo	graphic areas i	onowed by ,	, see Append			allons and symbo	3, 366 milloude	
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry			With 20 em- ploy- ees or		Payroll		Hours	Wages	Value added	Total cost of materials	Total value of shipments	Total capital expendi- tures
		E1	Total	more	Number <sup>3</sup>	(\$1,000)	Number <sup>4</sup>	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	BALANCE OF HARDY COUNTY												
31-33	Manufacturing	-	16	7	3 968	75 618	3 421	5 725	62 165	164 894	363 372	525 123	6 100
311	Food manufacturing	-	5	4	h	D	D	D	D	D	D	D	D
3116	Animal slaughtering and		4	3	h	D	D	D	D	D	D	D	D
31161	processing Animal slaughtering and		-	5		D	D	U		D	D	D	D
311615	processing Poultry processing	-	4 2	3 2	h h	D D	D D	D D	D	D	D D	D D	D D
321	Wood product manufacturing		6	2	g	D	D	D	D	D	D	D	D
3219	Other wood product				9					_		-	
	manufacturing	-	4	2	g	D	D	D	D	D	D	D	D
32191 321912	Millwork Cut stock, resawing lumber,	-	4	2	g	D	D	D	D	D	D	D	D
	and planing	-	3	1	f	D	D	D	D	D	D	D	D
	BALANCE OF HARRISON COUNTY												
31-33	Manufacturing	1	33	11	920	27 246	750	1 549	17 222	67 796	83 981	155 861	D
	BALANCE OF JACKSON COUNTY												
31-33	Manufacturing	-	11	6	g	D	D	D	D	D	D	D	D
331 3313	Primary metal manufacturing Alumina and aluminum production	-	2	2	g	D	D	D	D	D	D	D	D
3313	and processing	-	2	2	g	D	D	D	D	D	D	D	D
33131	Alumina and aluminum production and processing	_	2	2	g	D	D	D	D	D	D	D	D
331312	Primary aluminum production		1	1	g f	D	D	D	D	D	D	D	D
331315	Aluminum sheet, plate, and foil manufacturing		1	1		D	D	D	D	D	D	D	D
	-		'		g	D	D	U		D	D	D	U
04.00	BALANCE OF JEFFERSON COUNTY	-		10								5	5
31-33 333	Manufacturing	7 9	22	13 2	g f	D	D D	D	D	D	D	D	D
3333 3333	Machinery manufacturing Commercial and service industry	9	2	2		U	D	D		D	U	D	U
33331	machinery manufacturing	9	2	2	f	D	D	D	D	D	D	D	D
	industry machinery manufacturing	9	2	2	f	D	D	D	D	D	D	D	D
333311	Automatic vending machine manufacturing	9	2	2	f	D	D	D	D	D	D	D	D
	BALANCE OF KANAWHA	Ū	_	_		5	5					5	5
31-33	COUNTY Manufacturing	_	49	13	2 554	140 696	1 809	3 722	94 279	528 097	817 633	1 310 031	60 261
325	Chemical manufacturing		13	6	2 334 g	140 030 D	1 005 D	0 722 D	D	520 037 D	D	1 010 001 D	00 201 D
3251	Basic chemical manufacturing	_	12	6	g	D	D	D	D	D	D	D	D
32519	Other basic organic chemical				Ū								
325199	manufacturing All other basic organic	-	5	5	g	D	D	D	D	D	D	D	D
	chemical manufacturing	-	5	5	g	D	D	D	D	D	D	D	D
04.00	COUNTY			10		17 309	5.40	4 074	10.000	37 544	40, 070	01.000	4 000
31-33	Manufacturing	1	37	10	689	17 309	546	1 074	12 263	37 544	43 878	81 263	4 903
	COUNTY												
31-33	Manufacturing	-	11	4	f	D	D	D	D	D	D	D	D
	COUNTY												
31-33	Manufacturing	1	26	8	f	D	D	D	D	D	D	D	D
	BALANCE OF NICHOLAS COUNTY												
31-33	Manufacturing	-	23	8	800	23 221	649	1 388	15 993	71 210	82 691	154 678	D
	BALANCE OF PLEASANTS COUNTY												
31-33	Manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
	BALANCE OF PRESTON COUNTY												
31-33	Manufacturing	-	24	6	f f	D	D	D	l D	D	D	D	D

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

1011113, 1		i enu	or table.		ation on geog	graphic areas	ionowed by ,	, see Append	IX D. TOTTICE		allons and symbo		
			A establis	ll hments <sup>2</sup>	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E1	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BALANCE OF PUTNAM COUNTY												
31-33	Manufacturing	-	30	9	1 652	76 857	1 184	2 462	55 052	410 495	1 097 200	1 507 836	D
336	Transportation equipment manufacturing		1	1	4	D	D	D	D	D	D	D	D
3363	Motor vehicle parts					D		D		D		U	D
	manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
33631	Motor vehicle gasoline engine and engine parts												
336312	manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
	Gasoline engine and engine parts manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
	BALANCE OF RALEIGH COUNTY												
31-33	Manufacturing	1	36	10	628	21 487	441	898	12 850	45 832	71 738	120 563	8 263
	BALANCE OF RANDOLPH COUNTY												
31-33	Manufacturing	-	19	12	1 560	35 334	1 479	2 869	32 477	119 813	131 780	248 106	8 217
321	Wood product manufacturing	-	16	12	g	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing	-	8	5	g	D	D	D	D	D	D	D	D
32191 321918	Millwork Other millwork (including	-	5	4	g	D	D	D	D	D	D	D	D
021010	flooring)	-	3	3	g	D	D	D	D	D	D	D	D
	BALANCE OF RITCHIE COUNTY												
31-33	Manufacturing	1	22	9	1 598	50 379	1 078	2 151	24 769	122 035	92 207	214 456	6 152
326	Plastics and rubber products manufacturing	_	3	3	g	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing	_	3	3	g	D	D	D	D	D	D	D	D
32619	Other plastics product					_	_	_	_	_	_	_	_
326199	Manufacturing All other plastics product	-	3	3	g	D	D	D	D	D	D	D	D
	manufacturing	-	3	3	g	D	D	D	D	D	D	D	D
01.00	BALANCE OF TYLER COUNTY		10	6				P				D	D
31-33 325	Manufacturing	_	12	6	T f	D	D	D D	D	D	D	D	D
3251	Basic chemical manufacturing		1	1	f	D	D	D	D	D	D	D	D
32519	Other basic organic chemical												_
325199	manufacturing All other basic organic	-	1	1	f	D	D	D	D	D	D	D	D
	chemical manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
	COUNTY					_	_	_	_	_		_	_
31-33	Manufacturing	3	28	6	f	D	D	D	D	D	D	D	D
	BALANCE OF WETZEL COUNTY					_	_	_	_			_	_
31-33	Manufacturing	-	11	2	g	D	D	D D	D	D	D	D	D
325 3251	Chemical manufacturing Basic chemical manufacturing		3	2	g g	D	D	D	р С	D	D	D	D
32518	Other basic inorganic chemical				9								
325181	manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
32519	manufacturing Other basic organic chemical	-	1	1	f	D	D	D	D	D	D	D	D
325192	manufacturing Cyclic crude and intermediate manufacturing	-		1	f f	D	D	D	D	D	D	D	D
	BALANCE OF WOOD COUNTY					D	D	D		U	D	D	D
31-33	Manufacturing	-	30	11	3 621	201 524	2 487	5 183	136 523	865 167	809 943	1 686 533	D
325	Chemical manufacturing	-	6	3	h	D	D	D	D	D	D	D	D
3252	Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	_	2	2	h	D	D	D	D	D	D	D	D
32521	Resin and synthetic rubber	-		2		D		D				D	U
325211	Plastics material and resin manufacturing	-	2	2	h	D	D	D	D	D	D	D	D
332	Fabricated metal product												
	manufacturing	-	9	3	f	D	D	D	D	D	D	D	803

See footnotes at end of table.

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more or more and uning the year. <sup>2</sup>Includes establishments with payroll at any time during the year. <sup>3</sup>Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 9,999 employees; j–10,000 to 2,499 employees; k–25,000 to 4,999 employees; i–50,000 to 99,999 employees; m–100,000 employees or more. <sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

## Table 5. Detailed Statistics for the State: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
WEST VIRGINIA	
Companies1number	N
All establishments <sup>2</sup> number.         Establishments with 1 to 19 employees       number.         Establishments with 20 to 99 employees       number.         Establishments with 100 employees or more       number.	'1 480 '991 '353 136
All employees <sup>3</sup> number.           Total compensation         \$1,000.           Annual payroll         \$1,000.           Total fringe benefits         \$1,000.	'67 319 '3 427 587 '2 586 956 '840 631
Production workers, average for year	"50 443 "50 472 "50 745 "50 663 "49 789
Production worker hours	'101 570 '1 695 796
Total cost of materials         \$1,000.           Materials, parts, containers, packaging, etc., used         \$1,000.           Resales         \$1,000.           Purchased fuels         \$1,000.           Purchased electricity         \$1,000.           Contract work         \$1,000.	'10 965 884 '9 367 037 '730 966 '334 247 '334 139 '199 495
Quantity of electricity purchased for heat and power       1,000 kWh.         Quantity of electricity generated less sold for heat and power       1,000 kWh.	'8 649 953 1 658 491
Total value of shipments	'18 911 332 '809 081
Value added \$1,000	7 983 845
Total inventories, beginning of year         \$1,000.           Finished goods inventories         \$1,000.           Work-in-process inventories         \$1,000.           Materials and supplies inventories         \$1,000.	'2 464 840 '1 044 680 '543 697 '876 463
Total inventories, end of year         \$1,000.           Finished goods inventories         \$1,000.           Work-in-process inventories         \$1,000.           Materials and supplies inventories         \$1,000.	'2 449 566 '1 046 760 '580 851 '821 955
Gross value of depreciable assets (acquisition costs) at beginning of year	'13 224 640 '675 453 69 581 '605 872 '13 257 '21 539 '571 076 '571 076 '513 878
Depreciation charges during year	<sup>r</sup> 858 796
Total rental payments         \$1,000           Buildings and other structures         \$1,000           Machinery and equipment.         \$1,000	'120 804 '49 537 '71 267

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control. <sup>2</sup>Includes establishments with payroll at any time during the year. <sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

# Appendix A. Explanation of Terms

# COMPANY

A company or "enterprise" is comprised of all the establishments that operate under the ownership or control of a single organization. A company may be a business, service, or membership organization; consist of one or several establishments; and operate at one or several locations. It includes all subsidiary organizations, all establishments that are majority-owned by the company or any subsidiary, and all the establishments that can be directed or managed by the company or any subsidiary.

A company may have one or many establishments. Examples include product and service sales offices (retail and wholesale), industrial production plants, processing or assembly operations, mines or well sites, and support operations (such as an administrative office, warehouse, customer service center, or regional headquarters). Each establishment should receive, complete, and return a separate census form.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

## Establishment

An establishment is a single physical location where business is conducted or where services or industrial operations are performed. Data in this sector includes those establishments where manufacturing is performed. A separate report was required for each manufacturing establishment (plant) with one employee or more that was in operation at any time during the year.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

## PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

## TOTAL FRINGE BENEFITS

This item is the employer's costs for social security tax, unemployment tax, workmen's compensation insurance, state disability insurance pension plans, stock purchase plans, union-negotiated benefits, life insurance premiums, and insurance premiums on hospital and medical plans for employees.

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation, whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

## NUMBER OF EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period that included the 12th of the months specified on the report form. Included are employees on paid sick leave, paid holidays, and paid vacations; not included are proprietors and partners of unincorporated businesses.

These individuals consist of all full-time and part-time employees who are on the payrolls of establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November.

The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November

## **Production Workers**

The "production workers" number includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

# **All Other Employees**

The "other employees" covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

## **PRODUCTION-WORKER HOURS**

This item covers all hours worked or paid for at the manufacturing plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the establishment.

## **COST OF MATERIALS**

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

- 1. Cost of parts, components, containers, etc. Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
- 2. Cost of products bought and sold in the same condition.
- 3. Cost of fuels consumed for heat and power. Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
- 4. Cost of purchased electricity. The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
- 5. Cost of contract work. This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term "Contract Work" refers to the fee a company pays to another company to perform a service.

## Specific materials consumed

In addition to the total cost of materials, which every establishment was required to report, information also was collected for most manufacturing industries on the consumption of major materials used in manufacturing. The inquiries were restricted to those materials that were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. If less than \$25,000 of a listed material was consumed by an establishment, the cost data could be reported in the "Cost of all other materials" Census material code 00970099.

Also, the cost of materials for small establishments for which administrative records or short forms were used was imputed into the "Materials not specified by kind" Census materials code 00971000.

## QUANTITY OF ELECTRICITY PURCHASED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

# TOTAL VALUE OF SHIPMENTS

Includes the received or receivable net selling values, "Free on Board" (FOB) plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment's value of product shipments:

- 1. reported contract work receipts for work or services that a plant performed for others on their materials;
- 2. value of resales sales of products bought and sold without further manufacture, processing, or assembly; and
- 3. other miscellaneous receipts includes repair work, installation, sales of scrap, etc.

Industry primary product value of shipments represents one of three components of value of shipments. These components are:

- 1. primary product value of shipments;
- 2. secondary product value of shipments; and
- 3. total miscellaneous receipts.

Primary product shipments is used in the calculations of industry specialization ratio and industry coverage ratio.

## Duplication in cost of materials and value of shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication, since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to the paper manufacturing group of industries.

Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate twothirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries that included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

#### Specialization and coverage ratio

An establishment is classified in a particular industry, if its shipments of primary products of that industry exceed in value its shipments of the products of any other single industry.

An establishment's shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.).

Specialization and coverage ratio have been developed to measure the relationship of primary product shipments to the data on shipments for a particular industry.

Specialization ratio represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

Coverage ratio represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments wherever classified.

## VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

"Value added" avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

#### TOTAL END-OF-YEAR INVENTORIES

This item is comprised of:

- a. Finished products
- b. Work-in-process
- c. Materials, supplies, fuels, etc.

Beginning in 1982, respondents were asked to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method. Therefore, 1982 through 2002 data for inventories are not strictly comparable to prior-year data.

In addition, total beginning-of-year inventories is the sum of several different types of inventory valuations.

Inventory valuations include:

- 1. Subject to Last-in, first-out (LIFO) costing (including LIFO reserve and value)
- 2. Not subject to LIFO costing
- 3. Valuation method not reported, and
- 4. Amount subject to LIFO reported without associated reserve and value.

# **GROSS VALUE OF DEPRECIABLE/DEPLETABLE ASSETS AT BEGINNING OF YEAR**

Gross value of depreciable/depletable assets includes all fixed depreciable/depletable assets contained in accounting records of establishments. The values shown (gross book value) represent the actual cost of assets at the time they were acquired. Included are all costs incurred in making the assets usable (such as transportation and installation)

Gross value of depreciable/depletable assets includes:

- 1. Buildings and other structures (new and used).
- 2. Machinery and equipment (new and used), including automobiles, trucks, etc. for highway use and computers and peripheral data processing equipment.
- 3. Retirements.

Excluded are nondepreciable capital assets including inventories and intangible assets.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

## CAPITAL EXPENDITURES FOR NEW AND USED PLANT AND EQUIPMENT

Represents the total new and used capital expenditures reported by establishments in operation and any known plants under construction.

These data include expenditures for:

- 1. Permanent additions and major alterations to manufacturing and mining establishments.
- 2. New and used machinery and equipment used for replacement and additions to plant capacity, if they are of the type for which depreciation, depletion, or (for mining establishments) Office of Minerals Exploration accounts are ordinarily maintained. In addition, for mining establishments, these data include expenditures made during the year for development and exploration of mineral properties. For manufacturing establishments, these data are broken down into three types.
  - a. Automobiles, trucks, etc. for highway use. These include vehicles acquired under a leasepurchase agreement and excludes vehicles leased or normally designed to transport materials, property, or equipment on mining, construction, petroleum development, and similar projects. These vehicles are of such size or weight as to be normally restricted by state laws or regulations from operating on public highways. It also excludes purchases of vehicles that are purchased by a company for highway use.
  - b. Computers and peripheral data processing equipment. This item includes all purchases of computers and related equipment.
  - c. All other expenditures for machinery and equipment excluding automobiles and computer equipment.

Capital expenditures include work done by contract, as well as by the establishment's own work-force.

These data exclude expenditures for land and mineral rights and cost of maintenance and repairs charged as current operating expenses.

## **RETIREMENTS OF DEPRECIABLE ASSETS**

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

## **RENTAL PAYMENTS**

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments.

However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

## **DEPRECIATION CHARGES FOR FIXED ASSETS**

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

# Appendix B. NAICS Codes, Titles, and Descriptions

## SECTOR 31-33 MANUFACTURING

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**

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

## **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.

## **311111 DOG AND CAT FOOD MANUFACTURING**

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.

## **311119 OTHER ANIMAL FOOD MANUFACTURING**

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.

## **3112 GRAIN AND OILSEED MILLING**

This industry group 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.

## **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.

#### **311211 FLOUR MILLING**

This U.S. industry comprises establishments primarily engaged in the following:

- 1. Milling flour or meal from grains (except rice) or vegetables and/or
- 2. Milling flour and preparing flour mixes or doughs.

#### **311212 RICE MILLING**

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.

## **311213 MALT MANUFACTURING**

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

## **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.

## **311221 WET CORN MILLING**

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).

## **311222 SOYBEAN PROCESSING**

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.

## **311223 OTHER OILSEED PROCESSING**

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

## **311225 FATS AND OILS REFINING AND BLENDING**

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.

## **31123 BREAKFAST CEREAL MANUFACTURING**

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

#### **311230 BREAKFAST CEREAL MANUFACTURING**

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

#### **3113 SUGAR AND CONFECTIONERY PRODUCT MANUFACTURING**

This industry group comprises establishments primarily engaged in one of the following:

- 1. 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.

## **311311 SUGARCANE MILLS**

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

## **311312 CANE SUGAR REFINING**

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

#### **311313 BEET SUGAR MANUFACTURING**

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

#### **31132 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.

# 311320 CHOCOLATE AND CONFECTIONERY MANUFACTURING FROM CACAO BEANS

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

## 31133 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.

## 311330 CONFECTIONERY MANUFACTURING FROM PURCHASED CHOCOLATE

This U.S. 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.

## **31134 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.

## **311340 NONCHOCOLATE CONFECTIONERY MANUFACTURING**

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

## 3114 FRUIT AND VEGETABLE PRESERVING AND SPECIALTY FOOD MANUFACTURING

This industry group comprises establishments primarily engaged in the following:

- 1. Those 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.

# 311411 FROZEN FRUIT, JUICE, AND VEGETABLE MANUFACTURING

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

# **311412 FROZEN SPECIALTY FOOD MANUFACTURING**

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.

# 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.

# **311421 FRUIT AND VEGETABLE CANNING**

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, spa-ghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

## **311422 SPECIALTY CANNING**

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.

#### **311423 DRIED AND DEHYDRATED FOOD MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in one of the following:

- 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.

## **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.

#### **311511 FLUID MILK MANUFACTURING**

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.

#### **311512 CREAMERY BUTTER MANUFACTURING**

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

## **311513 CHEESE MANUFACTURING**

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.

## 311514 DRY, CONDENSED, AND EVAPORATED DAIRY PRODUCT MANUFACTURING

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

## **31152 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).

#### **311520 ICE CREAM AND FROZEN DESSERT MANUFACTURING**

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

#### **3116 ANIMAL SLAUGHTERING AND PROCESSING**

This industry group 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.

## **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.

## **311611 ANIMAL (EXCEPT POULTRY) SLAUGHTERING**

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.

#### **311612 MEAT PROCESSED FROM CARCASSES**

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.

# **311613 RENDERING AND MEAT BYPRODUCT PROCESSING**

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

#### **311615 POULTRY PROCESSING**

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.

#### **3117 SEAFOOD PRODUCT PREPARATION AND PACKAGING**

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Canning seafood (including soup);
- 2. Smoking, salting, and drying seafood;
- 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 also included in this industry group.

#### **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 seafood;
- 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 also included in this industry.

## **311711 SEAFOOD CANNING**

This U.S. industry comprises establishments primarily engaged in one of the following:

- 1. Canning seafood (including soup) and marine fats and oils and/or
- 2. Smoking, salting, and drying seafood.

Establishments known as "floating factory ships" that are engaged in the gathering and processing of seafood into canned seafood products are also included in this industry.

## **311712 FRESH AND FROZEN SEAFOOD PROCESSING**

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;
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- 3. Manufacturing frozen seafood; and
- 4. Processing fresh and frozen marine fats and oils.

#### **3118 BAKERIES AND TORTILLA MANUFACTURING**

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Bread and bakery product manufacturing;
- 2. Cookie, cracker, and pasta manufacturing; and
- 3. Tortilla manufacturing.

#### **31181 BREAD AND BAKERY PRODUCT MANUFACTURING**

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

#### **311811 RETAIL BAKERIES**

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.

#### **311812 COMMERCIAL BAKERIES**

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.

#### **311813 FROZEN CAKES, PIES, AND OTHER PASTRIES MANUFACTURING**

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

## **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.

#### **311821 COOKIE AND CRACKER MANUFACTURING**

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

#### **311822 FLOUR MIXES AND DOUGH MANUFACTURING FROM PURCHASED FLOUR**

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

#### **311823 DRY PASTA MANUFACTURING**

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.

# **311821 COOKIE AND CRACKER MANUFACTURING**

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

#### **311822 FLOUR MIXES AND DOUGH MANUFACTURING FROM PURCHASED FLOUR**

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

#### **311823 DRY PASTA MANUFACTURING**

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.

#### **31183 TORTILLA MANUFACTURING**

This industry comprises establishments primarily engaged in manufacturing tortillas.

#### **311830 TORTILLA MANUFACTURING**

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

#### **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.

## **311911 ROASTED NUTS AND PEANUT BUTTER MANUFACTURING**

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.

## **311919 OTHER SNACK FOOD MANUFACTURING**

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

# **31192 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.

# **311920 COFFEE AND TEA MANUFACTURING**

This U.S. 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.

## 31193 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.

## **311930 FLAVORING SYRUP AND CONCENTRATE MANUFACTURING**

This U.S. 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.

## **31194 SEASONING AND DRESSING MANUFACTURING**

This U.S. 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.

## 311941 MAYONNAISE, DRESSING, AND OTHER PREPARED SAUCE MANUFACTURING

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).

## **311942 SPICE AND EXTRACT MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in one of the following:

- 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.

# **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.

## **311991 PERISHABLE PREPARED FOOD MANUFACTURING**

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**

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; bakery and tortillas products; 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.

# **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**

This industry group comprises establishments primarily engaged in manufacturing soft drinks; ice; bottled water; breweries; wineries; and/or distilleries.

## **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.

#### **312111 SOFT DRINK MANUFACTURING**

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

## **312112 BOTTLED WATER MANUFACTURING**

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

#### **312113 ICE MANUFACTURING**

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

#### **31212 BREWERIES**

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

#### **312120 BREWERIES**

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

#### **31213 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.

#### **312130 WINERIES**

This U.S. 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.

#### **31214 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.

#### **312140 DISTILLERIES**

This U.S. 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.

# **3122 TOBACCO MANUFACTURING**

This industry group comprises establishments primarily engaged in the stemming and redrying of tobacco, and in the manufacturing of tobacco products.

#### **31221 TOBACCO STEMMING AND REDRYING**

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

#### **312210 TOBACCO STEMMING AND REDRYING**

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

#### **31222 TOBACCO PRODUCT MANUFACTURING**

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

#### **312221 CIGARETTE MANUFACTURING**

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

#### **312229 OTHER TOBACCO PRODUCT MANUFACTURING**

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

#### **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**

This NAICS Industry Group include establishments classified in NAICS Industry 31311, 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

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- 2. manufacturing thread of any fiber
- 3. texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments
- 4. producing hemp yarn and further processing into rope or bags.

#### **313111 YARN SPINNING MILLS**

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**

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

#### **313113 THREAD MILLS**

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

#### **3132 FABRIC MILLS**

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Broadwoven fabric mills;
- 2. Narrow fabric mills and schiffli machine embroidery;
- 3. Nonwoven fabric mills; and
- 4. Knit fabric mills.

#### **31321 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.

#### **313210 BROADWOVEN FABRIC MILLS**

This U.S. 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.

#### **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
- 3. making fabric-covered elastic yarn and thread.

#### **313221 NARROW FABRIC MILLS**

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**

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

#### **31323 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.

#### **313230 NONWOVEN FABRIC MILLS**

This U.S. 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
- 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).

## **313241 WEFT KNIT FABRIC MILLS**

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).

## **313249 OTHER KNIT FABRIC AND LACE MILLS**

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).

## **3133 TEXTILE AND FABRIC FINISHING AND FABRIC COATING MILLS**

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Textile and fabric finishing mills and
- 2. Fabric coating mills.

#### **31331 TEXTILE AND FABRIC FINISHING MILLS**

This industry comprises:

- 1. establishments primarily engaged in finishing of textiles, fabrics, and apparel
- 2. establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include:

- a. bleaching
- b. dyeing
- c. printing (e.g., roller, screen, flock, plisse)
- d. stonewashing
- e. other mechanical finishing (preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock).

#### **313311 BROADWOVEN FABRIC FINISHING MILLS**

This U.S. industry comprises:

- 1. Establishments primarily engaged in finishing broadwoven fabrics
- 2. Establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

#### 313312 TEXTILE AND FABRIC FINISHING (EXCEPT BROADWOVEN FABRIC) MILLS

This U.S. industry comprises:

- 1. Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven)
- 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.

## **31332 FABRIC COATING MILLS**

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

## **313320 FABRIC COATING MILLS**

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

## **314 TEXTILE PRODUCT MILLS**

Industries in the Textile Product Mills subsector group establishments that make 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**

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Carpet and rug mills and
- 2. Curtain and linen mills.

## **31411 CARPET AND RUG MILLS**

This industry comprises establishments primarily engaged in one or more of the following:

- 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.

# **314110 CARPET AND RUG MILLS**

This U.S. 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.

## **314121 CURTAIN AND DRAPERY MILLS**

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.

## **314129 OTHER HOUSEHOLD TEXTILE PRODUCT MILLS**

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.

## **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.

## **314911 TEXTILE BAG MILLS**

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

## **314912 CANVAS AND RELATED PRODUCT MILLS**

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.

## **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.

## **314991 ROPE, CORDAGE, AND TWINE MILLS**

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).

## **314992 TIRE CORD AND TIRE FABRIC MILLS**

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**

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.

## **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.

## **315111 SHEER HOSIERY MILLS**

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).

## **315119 OTHER HOSIERY AND SOCK MILLS**

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

## **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.

## **315191 OUTERWEAR KNITTING MILLS**

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.

## **315192 UNDERWEAR AND NIGHTWEAR KNITTING MILLS**

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.

## **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**

This industry comprises establishments commonly referred to as contractors primarily engaged in one of the following:

- 1. cutting materials owned by others for apparel and accessories and/or
- 2. sewing materials owned by others for apparel and accessories.

## 315211 MEN'S AND BOYS' CUT AND SEW APPAREL CONTRACTORS

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.

## 315212 WOMEN'S, GIRLS', AND INFANTS' CUT AND SEW APPAREL CONTRACTORS

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in one of the following:

- 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.

# 31522 MEN'S AND BOYS' CUT AND SEW APPAREL MANUFACTURING

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.

## 315221 MEN'S AND BOYS' CUT AND SEW UNDERWEAR AND NIGHTWEAR MANUFAC-TURING

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.

## 315222 MEN'S AND BOYS' CUT AND SEW SUIT, COAT, AND OVERCOAT MANUFACTUR-ING

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.

# 315223 MEN'S AND BOYS' CUT AND SEW SHIRT (EXCEPT WORK SHIRT) MANUFACTUR-ING

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.

# 315224 MEN'S AND BOYS' CUT AND SEW TROUSER, SLACK, AND JEAN MANUFACTUR-ING

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 made from their materials, and marketing finished apparel, are included.

# 315225 MEN'S AND BOYS' CUT AND SEW WORK CLOTHING MANUFACTURING

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.

## 315228 MEN'S AND BOYS' CUT AND SEW OTHER OUTERWEAR MANUFACTURING

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.

## 31523 WOMEN'S AND GIRLS' CUT AND SEW APPAREL MANUFACTURING

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.

# 315231 WOMEN'S AND GIRLS' CUT AND SEW LINGERIE, LOUNGEWEAR, AND NIGHTWEAR MANUFACTURING

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.

## 315232 WOMEN'S AND GIRLS' CUT AND SEW BLOUSE AND SHIRT MANUFACTURING

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.

# 315233 WOMEN'S AND GIRLS' CUT AND SEW DRESS MANUFACTURING

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.

# 315234 WOMEN'S AND GIRLS' CUT AND SEW SUIT, COAT, TAILORED JACKET, AND SKIRT MANUFACTURING

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.

## 315239 WOMEN'S AND GIRLS' CUT AND SEW OTHER OUTERWEAR MANUFACTURING

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.

## **31529 OTHER CUT AND SEW APPAREL MANUFACTURING**

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.

## **315291 INFANTS' CUT AND SEW APPAREL MANUFACTURING**

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.

## **315292 FUR AND LEATHER APPAREL MANUFACTURING**

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.

# **315299 ALL OTHER CUT AND SEW APPAREL MANUFACTURING**

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.

## **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.

## 315991 HAT, CAP, AND MILLINERY MANUFACTURING

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.

## **315992 GLOVE AND MITTEN MANUFACTURING**

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.

## **315993 MEN'S AND BOYS' NECKWEAR MANUFACTURING**

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.

# **315999 OTHER APPAREL ACCESSORIES AND OTHER APPAREL MANUFACTURING**

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, and suspenders.

# **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**

This industry group 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.

#### **31611 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.

## **316110 LEATHER AND HIDE TANNING AND FINISHING**

This U.S. 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**

This industry group 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.

# **31621 FOOTWEAR MANUFACTURING**

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

#### **316211 RUBBER AND PLASTICS FOOTWEAR MANUFACTURING**

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.

#### **316212 HOUSE SLIPPER MANUFACTURING**

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

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.

#### **316214 WOMEN'S FOOTWEAR (EXCEPT ATHLETIC) MANUFACTURING**

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.

# **316219 OTHER FOOTWEAR MANUFACTURING**

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)).

## **3169 OTHER LEATHER AND ALLIED PRODUCT MANUFACTURING**

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

## **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).

## **316991 LUGGAGE MANUFACTURING**

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

## **316992 WOMEN'S HANDBAG AND PURSE MANUFACTURING**

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

## 316993 PERSONAL LEATHER GOOD (EXCEPT WOMEN'S HANDBAG AND PURSE) MANUFACTURING

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).

## **316999 ALL OTHER LEATHER GOOD MANUFACTURING**

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

## **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.

#### 321113 SAWMILLS

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.

#### **321114 WOOD PRESERVATION**

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.

## 3212 VENEER, PLYWOOD, AND ENGINEERED WOOD PRODUCT MANUFACTURING

This industry group 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.

#### 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.

#### 321211 HARDWOOD VENEER AND PLYWOOD MANUFACTURING

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

# 321212 SOFTWOOD VENEER AND PLYWOOD MANUFACTURING

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

#### 321213 ENGINEERED WOOD MEMBER (EXCEPT TRUSS) MANUFACTURING

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

#### **321214 TRUSS MANUFACTURING**

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

#### 321219 RECONSTITUTED WOOD PRODUCT MANUFACTURING

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

#### **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.

## 321911 WOOD WINDOW AND DOOR MANUFACTURING

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.

## 321912 CUT STOCK, RESAWING LUMBER, AND PLANING

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.

#### **321918 OTHER MILLWORK (INCLUDING FLOORING)**

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

## 32192 WOOD CONTAINER AND PALLET MANUFACTURING

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

## **321920 WOOD CONTAINER AND PALLET MANUFACTURING**

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

## 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).

## 321991 MANUFACTURED HOME (MOBILE HOME) MANUFACTURING

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.

## 321992 PREFABRICATED WOOD BUILDING MANUFACTURING

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

## 321999 ALL OTHER MISCELLANEOUS WOOD PRODUCT MANUFACTURING

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).

# **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 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**

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.

#### **322110 PULP MILLS**

This U.S. 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.

#### **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.

#### **322121 PAPER (EXCEPT NEWSPRINT) MILLS**

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.

#### **322122 NEWSPRINT MILLS**

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.

#### **32213 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.

## **322130 PAPERBOARD MILLS**

This U.S. 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.

# **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.

## 322211 CORRUGATED AND SOLID FIBER BOX MANUFACTURING

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.

## 322212 FOLDING PAPERBOARD BOX MANUFACTURING

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

## **322213 SETUP PAPERBOARD BOX MANUFACTURING**

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.

#### 322214 FIBER CAN, TUBE, DRUM, AND SIMILAR PRODUCTS MANUFACTURING

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

## 322215 NONFOLDING SANITARY FOOD CONTAINER MANUFACTURING

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

## 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.

# 322221 COATED AND LAMINATED PACKAGING PAPER AND PLASTICS FILM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

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.

# 322222 COATED AND LAMINATED PAPER MANUFACTURING

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. laminating 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.

## 322223 PLASTICS, FOIL, AND COATED PAPER BAG MANUFACTURING

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.

#### 322224 UNCOATED PAPER AND MULTIWALL BAG MANUFACTURING

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

# 322225 LAMINATED ALUMINUM FOIL MANUFACTURING FOR FLEXIBLE PACKAGING USES

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.

## 322226 SURFACE-COATED PAPERBOARD MANUFACTURING

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.

## 322231 DIE-CUT PAPER AND PAPERBOARD OFFICE SUPPLIES MANUFACTURING

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.

#### **322232 ENVELOPE MANUFACTURING**

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

## 322233 STATIONERY, TABLET, AND RELATED PRODUCT MANUFACTURING

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, and tablets).

## 32229 OTHER CONVERTED PAPER PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in one of the following:

- 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.

## **322291 SANITARY PAPER PRODUCT MANUFACTURING**

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

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.

## **323 PRINTING AND RELATED SUPPORT ACTIVITIES**

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, labels, business cards, stationery, business forms, and other materials, and perform support activities, such as data imaging, platemaking services, and bookbinding. 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, film, 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 (except Internet). 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**

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods) and/or
- 2. Performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing 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 folding, cutting, or laminating the materials they print, and mailing.

## 323110 COMMERCIAL LITHOGRAPHIC PRINTING

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.

## 323111 COMMERCIAL GRAVURE PRINTING

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.

## 323112 COMMERCIAL FLEXOGRAPHIC PRINTING

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.

## 323113 COMMERCIAL SCREEN PRINTING

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.

## **323114 QUICK PRINTING**

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.

# **323115 DIGITAL PRINTING**

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.

## 323116 MANIFOLD BUSINESS FORMS PRINTING

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.

# **323117 BOOKS PRINTING**

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

# 323118 BLANKBOOK, LOOSELEAF BINDERS, AND DEVICES MANUFACTURING

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.

## **323119 OTHER COMMERCIAL PRINTING**

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.

## 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.

## 323121 TRADEBINDING AND RELATED WORK

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).

## **323122 PREPRESS SERVICES**

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. prepress services, such as imagesetting or typesetting, for printers and
- 2. preparing film or plates for printing purposes.

## 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

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Petroleum refineries manufacturing;
- 2. Asphalt paving, roofing, and saturated materials manufacturing; and/or
- 3. Other petroleum and coal products manufacturing.

## **32411 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.

## **324110 PETROLEUM REFINERIES**

This U.S. 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.

## 32412 ASPHALT PAVING, ROOFING, AND SATURATED MATERIALS MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 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.

## 324121 ASPHALT PAVING MIXTURE AND BLOCK MANUFACTURING

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

## 324122 ASPHALT SHINGLE AND COATING MATERIALS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 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.

## 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.

# 324191 PETROLEUM LUBRICATING OIL AND GREASE MANUFACTURING

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.

## 324199 ALL OTHER PETROLEUM AND COAL PRODUCTS MANUFACTURING

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.

## **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**

This industry comprises establishments primarily engaged in one of the following:

- 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.

## 325110 PETROCHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

- 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.

## **32512 INDUSTRIAL GAS MANUFACTURING**

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

# **325120 INDUSTRIAL GAS MANUFACTURING**

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

## **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).

## 325131 INORGANIC DYE AND PIGMENT MANUFACTURING

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

## 325132 SYNTHETIC ORGANIC DYE AND PIGMENT MANUFACTURING

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

## 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).

## 325181 ALKALIES AND CHLORINE MANUFACTURING

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.

## 325182 CARBON BLACK MANUFACTURING

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

# 325188 ALL OTHER BASIC INORGANIC CHEMICAL MANUFACTURING

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).

# 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).

## 325191 GUM AND WOOD CHEMICAL MANUFACTURING

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).

## 325192 CYCLIC CRUDE AND INTERMEDIATE MANUFACTURING

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 petro-chemicals) from refined petroleum or natural gas.

## **325193 ETHYL ALCOHOL MANUFACTURING**

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

#### 325199 ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING

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).

# 3252 RESIN, SYNTHETIC RUBBER, AND ARTIFICIAL AND SYNTHETIC FIBERS AND FILAMENTS MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Resin and synthetic rubber manufacturing and
- 2. Artificial and 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.

#### 325211 PLASTICS MATERIAL AND RESIN MANUFACTURING

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.

#### **325212 SYNTHETIC RUBBER MANUFACTURING**

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

#### 32522 ARTIFICIAL AND SYNTHETIC FIBERS AND FILAMENTS MANUFACTURING

This industry comprises establishments primarily engaged in one of the following:

- 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.

#### 325221 CELLULOSIC ORGANIC FIBER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

- 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.

## 325222 NONCELLULOSIC ORGANIC FIBER MANUFACTURING

This U.S. industry consists of establishments primarily engaged in one of the following:

- 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.

# 3253 PESTICIDE, FERTILIZER, AND OTHER AGRICULTURAL CHEMICAL MANUFACTUR-ING

This industry group includes establishments classified in one of the following:

- 1. Fertilizer manufacturing and/or
- 2. Pesticide 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

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.

## 325312 PHOSPHATIC FERTILIZER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing phosphatic fertilizer materials or
- 2. manufacturing phosphatic materials and mixing them into fertilizers.

## 325314 FERTILIZER (MIXING ONLY) MANUFACTURING

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

## 32532 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).

# 325320 PESTICIDE AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

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

## 3254 PHARMACEUTICAL AND MEDICINE MANUFACTURING

This industry group 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.

## 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

This U.S. industry comprises establishments primarily engaged in one of the following:

- 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.

#### 325412 PHARMACEUTICAL PREPARATION MANUFACTURING

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.

## 325413 IN-VITRO DIAGNOSTIC SUBSTANCE MANUFACTURING

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.

## 325414 BIOLOGICAL PRODUCT (EXCEPT DIAGNOSTIC) MANUFACTURING

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

## 3255 PAINT, COATING, AND ADHESIVE MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Paint and coating manufacturing and/or
- 2. Adhesive manufacturing.

#### 32551 PAINT AND COATING MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellant coatings for concrete and masonry, and/or 2. manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

## 325510 PAINT AND COATING MANUFACTURING

This U.S. 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 repellant coatings for concrete and masonry and/or
- 2. manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

#### **32552 ADHESIVE MANUFACTURING**

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

#### **325520 ADHESIVE MANUFACTURING**

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

#### 3256 SOAP, CLEANING COMPOUND, AND TOILET PREPARATION MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Soap and cleaning compound manufacturing and/or
- 2. 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.

## 325611 SOAP AND OTHER DETERGENT MANUFACTURING

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.

#### 325612 POLISH AND OTHER SANITATION GOOD MANUFACTURING

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

## 325613 SURFACE ACTIVE AGENT MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one or more of the following:

- 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**

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.

## **325620 TOILET PREPARATION MANUFACTURING**

This U.S. 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.

## 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**

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

## **325910 PRINTING INK MANUFACTURING**

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

## **32592 EXPLOSIVES MANUFACTURING**

This industry comprises establishments primarily engaged in manufacturing explosives.

## **325920 EXPLOSIVES MANUFACTURING**

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

## 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).

## 325991 CUSTOM COMPOUNDING OF PURCHASED RESINS

This U.S. industry group comprises establishments primarily engaged in one or more of the following:

- 1. custom mixing and blending plastics resins made elsewhere or
- 2. reformulating plastics resins from recycled plastics products.

## 325992 PHOTOGRAPHIC FILM, PAPER, PLATE, AND CHEMICAL MANUFACTURING

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.

# 325998 ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

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).

## 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 Hoses 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 PLASTICS PACKAGING MATERIALS AND UNLAMINATED FILM AND SHEET MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. converting plastics resins into unsupported plastics film and sheet and/or
- 2. forming, coating or laminating plastics film and sheet into plastics bags.

## **326111 PLASTICS BAG MANUFACTURING**

This U.S. industry group comprises establishments primarily engaged in one of the following:

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.

## **326112 PLASTICS PACKAGING FILM AND SHEET (INCLUDING LAMINATED)** MANUFACTURING

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

## 326113 UNLAMINATED PLASTICS FILM AND SHEET (EXCEPT PACKAGING) MANUFACTURING

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

## **32612 PLASTICS PIPE, PIPE FITTING, AND UNLAMINATED 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.

## 326121 UNLAMINATED PLASTICS PROFILE SHAPE MANUFACTURING

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.

## **326122 PLASTICS PIPE AND PIPE FITTING MANUFACTURING**

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

# 32613 LAMINATED PLASTICS PLATE, SHEET (EXCEPT PACKAGING), 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.

# **326130 LAMINATED PLASTICS PLATE, SHEET (EXCEPT PACKAGING), AND SHAPE MANUFACTURING**

This U.S. 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.

# 32614 POLYSTYRENE FOAM PRODUCT MANUFACTURING

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

#### **326140 POLYSTYRENE FOAM PRODUCT MANUFACTURING**

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

# 32615 URETHANE AND OTHER FOAM PRODUCT (EXCEPT POLYSTYRENE) MANUFAC-TURING

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

## **326150 URETHANE AND OTHER FOAM PRODUCT (EXCEPT POLYSTYRENE)** MANUFACTURING

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

## **32616 PLASTICS BOTTLE MANUFACTURING**

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

## **326160 PLASTICS BOTTLE MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

## **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).

# **326191 PLASTICS PLUMBING FIXTURE MANUFACTURING**

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.

## 326192 RESILIENT FLOOR COVERING MANUFACTURING

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

## **326199 ALL OTHER PLASTICS PRODUCT MANUFACTURING**

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).

## **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.

## **326211 TIRE MANUFACTURING (EXCEPT RETREADING)**

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

## **326212 TIRE RETREADING**

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

## 32622 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.

## 326220 RUBBER AND PLASTICS HOSES AND BELTING MANUFACTURING

This U.S. 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.

## **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.

## 326291 RUBBER PRODUCT MANUFACTURING FOR MECHANICAL USE

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

## **326299 ALL OTHER RUBBER PRODUCT MANUFACTURING**

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.

## 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

This industry group 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 and/or shaping, molding, baking, burning, or hardening clay refractories, non-clay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

# 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.

## 327111 VITREOUS CHINA PLUMBING FIXTURE AND CHINA AND EARTHENWARE BATHROOM ACCESSORIES MANUFACTURING

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.

# 327112 VITREOUS CHINA, FINE EARTHENWARE, AND OTHER POTTERY PRODUCT MANUFACTURING

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.

## 327113 PORCELAIN ELECTRICAL SUPPLY MANUFACTURING

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.

## 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.

# 327121 BRICK AND STRUCTURAL CLAY TILE MANUFACTURING

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

## 327122 CERAMIC WALL AND FLOOR TILE MANUFACTURING

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

# 327123 OTHER STRUCTURAL CLAY PRODUCT MANUFACTURING

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.

## 327124 CLAY REFRACTORY MANUFACTURING

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.

# 327125 NONCLAY REFRACTORY MANUFACTURING

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.

## 3272 GLASS AND GLASS PRODUCT MANUFACTURING

This industry group 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.

## 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.

## 327211 FLAT GLASS MANUFACTURING

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.

## 327212 OTHER PRESSED AND BLOWN GLASS AND GLASSWARE MANUFACTURING

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).

## 327213 GLASS CONTAINER MANUFACTURING

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

## 327215 GLASS PRODUCT MANUFACTURING MADE OF PURCHASED GLASS

This U.S. industry comprises establishments primarily engaged in coating, laminating, tempering, or shaping purchased glass.

## 3273 CEMENT AND CONCRETE PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Cement manufacturing;
- 2. Ready-mix concrete manufacturing;
- 3. Concrete pipe, brick, and block manufacturing; and/or
- 4. Other concrete product manufacturing.

## 32731 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.

# **327310 CEMENT MANUFACTURING**

This U.S. 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.

## 32732 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.

## 327320 READY-MIX CONCRETE MANUFACTURING

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

## 32733 CONCRETE PIPE, BRICK, AND BLOCK MANUFACTURING

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

## 327331 CONCRETE BLOCK AND BRICK MANUFACTURING

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

# 327332 CONCRETE PIPE MANUFACTURING

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

## 32739 OTHER CONCRETE PRODUCT MANUFACTURING

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

## 327390 OTHER CONCRETE PRODUCT MANUFACTURING

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

## 3274 LIME AND GYPSUM PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells and/or gypsum products such as wallboard, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work.

## **32741 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.

## **327410 LIME MANUFACTURING**

This U.S. 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.

# 32742 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.

## 327420 GYPSUM PRODUCT MANUFACTURING

This U.S. 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.

## 3279 OTHER NONMETALLIC MINERAL PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

## 32791 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.

## **327910 ABRASIVE PRODUCT MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

## 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).

## 327991 CUT STONE AND STONE PRODUCT MANUFACTURING

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.

## 327992 GROUND OR TREATED MINERAL AND EARTH MANUFACTURING

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.

## 327993 MINERAL WOOL MANUFACTURING

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.

## 327999 ALL OTHER MISCELLANEOUS NONMETALLIC MINERAL PRODUCT MANUFAC-TURING

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).

## **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

This industry group 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, and wire); and
- 7. Making steel and forming pipe and tube.

## 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, and wire); and
- 7. making steel and forming pipe and tube.

## **331111 IRON AND STEEL MILLS**

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. direct reduction of iron ore;
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- 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.

## 331112 ELECTROMETALLURGICAL FERROALLOY PRODUCT MANUFACTURING

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.

## 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

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

## 331210 IRON AND STEEL PIPE AND TUBE MANUFACTURING FROM PURCHASED STEEL

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

## 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.

## **331221 ROLLED STEEL SHAPE MANUFACTURING**

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.

## **331222 STEEL WIRE DRAWING**

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

## 3313 ALUMINA AND ALUMINUM PRODUCTION AND PROCESSING

This industry group 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, and wire).

## 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, and wire).

## **331311 ALUMINA REFINING**

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

#### **331312 PRIMARY ALUMINUM PRODUCTION**

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, and strip).

Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

#### 331314 SECONDARY SMELTING AND ALLOYING OF ALUMINUM

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.

#### 331315 ALUMINUM SHEET, PLATE, AND FOIL MANUFACTURING

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.

#### 331316 ALUMINUM EXTRUDED PRODUCT MANUFACTURING

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.

#### **331319 OTHER ALUMINUM ROLLING AND DRAWING**

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.

## 3314 NONFERROUS METAL (EXCEPT ALUMINUM) PRODUCTION AND PROCESSING

This industry group comprises establishments primarily engaged in one of the following:

- 1. Nonferrous metal (except aluminum) smelting and refining;
- 2. Copper rolling, drawing, extruding, and alloying; and/or
- 3. Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying.

#### 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.

#### **331411 PRIMARY SMELTING AND REFINING OF COPPER**

This U.S. industry comprises establishments primarily engaged in one of the following:

- 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.

# 331419 PRIMARY SMELTING AND REFINING OF NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM)

This U.S. industry comprises establishments primarily engaged in:

- 1. making (primary production) nonferrous metals by smelting ore and/or
- 2. the primary refining of nonferrous metals by electrolytic methods or other processes.

#### 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, 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, wire).

#### 331421 COPPER ROLLING, DRAWING, AND EXTRUDING

This U.S. industry comprises establishments primarily engaged in:

- 1. rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and 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, and tube (except bare or insulated copper communication or energy wire) in integrated mills.

# 331422 COPPER WIRE (EXCEPT MECHANICAL) DRAWING

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.

## 331423 SECONDARY SMELTING, REFINING, AND ALLOYING OF COPPER

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.

# 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.

# 331491 NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM) ROLLING, DRAWING, AND EXTRUDING

This U.S. industry comprises establishments primarily engaged in:

- 1. rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and 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, and tube) in integrated mills.

# 331492 SECONDARY SMELTING, REFINING, AND ALLOYING OF NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM)

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, and wire) using smelting or refining processes.

## **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 made castings. Establishments in this industry purchase iron and steel made in other establishments.

# **331511 IRON FOUNDRIES**

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 manhole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

## **331512 STEEL INVESTMENT FOUNDRIES**

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.

## **331513 STEEL FOUNDRIES (EXCEPT INVESTMENT)**

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.

## **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.

## **331521 ALUMINUM DIE-CASTING FOUNDRIES**

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.

# 331522 NONFERROUS (EXCEPT ALUMINUM) DIE-CASTING FOUNDRIES

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.

# 331524 ALUMINUM FOUNDRIES (EXCEPT DIE-CASTING)

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.

## 331525 COPPER FOUNDRIES (EXCEPT DIE-CASTING)

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.

# 331528 OTHER NONFERROUS FOUNDRIES (EXCEPT DIE-CASTING)

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.

# **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**

This industry group 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, and coins); and
- 4. Manufacturing powder metallurgy products.

Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining and 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.

# **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, and coins); and
- 4. manufacturing powder metallurgy products.

Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining and 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.

# **332111 IRON AND STEEL FORGING**

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.

## **332112 NONFERROUS FORGING**

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.

## 332114 CUSTOM ROLL FORMING

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.

# 332115 CROWN AND CLOSURE MANUFACTURING

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**

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.

## 332117 POWDER METALLURGY PART MANUFACTURING

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**

This industry group 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).

## 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).

#### 332211 CUTLERY AND FLATWARE (EXCEPT PRECIOUS) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

#### 332212 HAND AND EDGE TOOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

#### 332213 SAW BLADE AND HANDSAW MANUFACTURING

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).

## 332214 KITCHEN UTENSIL, POT, AND PAN MANUFACTURING

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).

# 3323 ARCHITECTURAL AND STRUCTURAL METALS MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing one or more of the following:

- 1. Plate work and fabricated structural product manufacturing and
- 2. Ornamental and architectural metal products 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.

#### 332311 PREFABRICATED METAL BUILDING AND COMPONENT MANUFACTURING

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

# 332312 FABRICATED STRUCTURAL METAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

## **332313 PLATE WORK MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

#### 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.

#### 332321 METAL WINDOW AND DOOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (typically using purchased glass) and metal doors. Examples of products made by these establishments are: metal door frames; metal framed window and door screens; and metal molding and trim (except automotive).

#### **332322 SHEET METAL WORK MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

#### 332323 ORNAMENTAL AND ARCHITECTURAL METAL WORK MANUFACTURING

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.

## 3324 BOILER, TANK, AND SHIPPING CONTAINER MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Power boiler and heat exchanger manufacturing;
- 2. Metal tank (heavy gauge) manufacturing; and
- 3. Metal can, box, and other metal container (light gauge) manufacturing.

## 33241 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.

#### 332410 POWER BOILER AND HEAT EXCHANGER MANUFACTURING

This U.S. 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.

# 33242 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.

#### 332420 METAL TANK (HEAVY GAUGE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

## 33243 METAL CAN, BOX, AND OTHER METAL CONTAINER (LIGHT GAUGE) MANUFACTURING

This industry comprises establishments primarily engaged in forming light gauge metal containers.

#### 332431 METAL CAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

#### **332439 OTHER METAL CONTAINER MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

## **3325 HARDWARE MANUFACTURING**

This industry group comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

## **33251 HARDWARE MANUFACTURING**

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

## **332510 HARDWARE MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

#### **3326 SPRING AND WIRE PRODUCT MANUFACTURING**

This industry group 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).

#### **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).

# **332611 SPRING (HEAVY GAUGE) MANUFACTURING**

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.

#### **332612 SPRING (LIGHT GAUGE) MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

#### 332618 OTHER FABRICATED WIRE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

#### 3327 MACHINE SHOPS; TURNED PRODUCT; AND SCREW, NUT, AND BOLT MANUFAC-TURING

This industry group comprises establishments primarily engaged in:

- 1. Machine shops and/or
- 2. Turned product and screw, nut, and bolt manufacturing.

## **33271 MACHINE SHOPS**

This industry comprises establishments primarily engaged in machining metal parts on a job or order basis (known as machine shops). 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.

## **332710 MACHINE SHOPS**

This U.S. industry comprises establishments primarily engaged in machining metal parts on a job or order basis (known as machine shops). 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.

## 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 in manufacturing parts for machinery and equipment on a customized basis.

## 332721 PRECISION TURNED PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in machining precision products of all materials on a job or order basis (known as precision turned manufacturers). 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.

## 332722 BOLT, NUT, SCREW, RIVET, AND WASHER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

# 3328 COATING, ENGRAVING, HEAT TREATING, AND ALLIED ACTIVITIES

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Heat treating metals and metal products;
- 2. Enameling, lacquering, and 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.

Included in this industry are establishments that coat engravings and heat treat metals and metal formed products fabricated elsewhere.

## 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, and 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.

Included in this industry are establishments that coat engravings and heat treat metals and metal formed products fabricated elsewhere.

## **332811 METAL HEAT TREATING**

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing metals and metal products for the trade.

# 332812 METAL COATING, ENGRAVING (EXCEPT JEWELRY AND SILVERWARE), AND ALLIED SERVICES TO MANUFACTURERS

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;
- 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.

## 332813 ELECTROPLATING, PLATING, POLISHING, ANODIZING, AND COLORING

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.

## **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.

## **332911 INDUSTRIAL VALVE MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

## 332912 FLUID POWER VALVE AND HOSE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

## 332913 PLUMBING FIXTURE FITTING AND TRIM MANUFACTURING

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.

## 332919 OTHER METAL VALVE AND PIPE FITTING MANUFACTURING

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).

## 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).

## **332991 BALL AND ROLLER BEARING MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

## **332992 SMALL ARMS AMMUNITION MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

#### 332993 AMMUNITION (EXCEPT SMALL ARMS) MANUFACTURING

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.

#### **332994 SMALL ARMS MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

#### 332995 OTHER ORDNANCE AND ACCESSORIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

#### **332996 FABRICATED PIPE AND PIPE FITTING MANUFACTURING**

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.

#### **332997 INDUSTRIAL PATTERN MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

#### 332998 ENAMELED IRON AND METAL SANITARY WARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

#### 332999 ALL OTHER MISCELLANEOUS FABRICATED METAL PRODUCT MANUFACTUR-ING

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).

#### **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-Agricultural, 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

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Agricultural implement manufacturing;
- 2. Construction machinery manufacturing; and
- 3. Mining and oil and gas field 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.

#### 333111 FARM MACHINERY AND EQUIPMENT MANUFACTURING

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).

#### 333112 LAWN AND GARDEN TRACTOR AND HOME LAWN AND GARDEN EQUIPMENT MANUFACTURING

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.

#### **33312 CONSTRUCTION MACHINERY MANUFACTURING**

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

#### **333120 CONSTRUCTION MACHINERY MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

#### 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.

#### 333131 MINING MACHINERY AND EQUIPMENT MANUFACTURING

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, and rock drills and
- 2. manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

#### 333132 OIL AND GAS FIELD MACHINERY AND EQUIPMENT MANUFACTURING

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.

#### 3332 INDUSTRIAL MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Sawmill and woodworking machinery manufacturing;
- 2. Plastics and rubber industry machinery manufacturing; and
- 3. Other industrial machinery manufacturing.

#### 33321 SAWMILL AND WOODWORKING MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

#### 333210 SAWMILL AND WOODWORKING MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

#### 33322 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.

#### 333220 PLASTICS AND RUBBER INDUSTRY MACHINERY MANUFACTURING

This U.S. 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.

#### **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).

#### 333291 PAPER INDUSTRY MACHINERY MANUFACTURING

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.

#### **333292 TEXTILE MACHINERY MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

#### 333293 PRINTING MACHINERY AND EQUIPMENT MANUFACTURING

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.

#### 333294 FOOD PRODUCT MACHINERY MANUFACTURING

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, and ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, and pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

#### 333295 SEMICONDUCTOR MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

#### 333298 ALL OTHER INDUSTRIAL MACHINERY MANUFACTURING

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).

#### 3333 COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning 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.

#### 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.

#### 333311 AUTOMATIC VENDING MACHINE MANUFACTURING

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.

### 333312 COMMERCIAL LAUNDRY, DRYCLEANING, AND PRESSING MACHINE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

#### 333313 OFFICE MACHINERY MANUFACTURING

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.

#### 333314 OPTICAL INSTRUMENT AND LENS MANUFACTURING

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 and proton), telescopes, prisms, and lenses (except ophthalmic);
- 2. coating or polishing lenses (except ophthalmic); and
- 3. mounting lenses (except ophthalmic).

#### 333315 PHOTOGRAPHIC AND PHOTOCOPYING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, and digital), projectors, film developing equipment, photocopying equipment, and microfilm equipment.

#### 333319 OTHER COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

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).

#### 3334 VENTILATION, HEATING, AIR-CONDITIONING, AND COMMERCIAL REFRIGERA-TION EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing ventilation, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

#### 33341 VENTILATION, HEATING, AIR-CONDITIONING, AND COMMERCIAL REFRIGERA-TION EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing ventilation, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

#### 333411 AIR PURIFICATION EQUIPMENT MANUFACTURING

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.

#### 333412 INDUSTRIAL AND COMMERCIAL FAN AND BLOWER MANUFACTURING

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.

#### 333414 HEATING EQUIPMENT (EXCEPT WARM AIR FURNACES) MANUFACTURING

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.

### 333415 AIR-CONDITIONING AND WARM AIR HEATING EQUIPMENT AND COMMERCIAL AND INDUSTRIAL REFRIGERATION EQUIPMENT MANUFACTURING

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.

#### 3335 METALWORKING MACHINERY MANUFACTURING

This industry group 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.

#### 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.

#### 333511 INDUSTRIAL MOLD MANUFACTURING

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.

#### 333512 MACHINE TOOL (METAL CUTTING TYPES) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

#### 333513 MACHINE TOOL (METAL FORMING TYPES) MANUFACTURING

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.

#### 333514 SPECIAL DIE AND TOOL, DIE SET, JIG, AND FIXTURE MANUFACTURING

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.

#### 333515 CUTTING TOOL AND MACHINE TOOL ACCESSORY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

#### 333516 ROLLING MILL MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

#### 333518 OTHER METALWORKING MACHINERY MANUFACTURING

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).

#### 3336 ENGINE, TURBINE, AND POWER TRANSMISSION EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive, gasoline, and aircraft).

#### 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 air-craft).

#### 333611 TURBINE AND TURBINE GENERATOR SET UNITS MANUFACTURING

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.

#### 333612 SPEED CHANGER, INDUSTRIAL HIGH-SPEED DRIVE, AND GEAR MANUFACTUR-ING

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

#### 333613 MECHANICAL POWER TRANSMISSION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

#### 333618 OTHER ENGINE EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

#### **3339 OTHER GENERAL PURPOSE MACHINERY MANUFACTURING**

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Pump and compressor manufacturing;
- 2. Material handling equipment manufacturing; and
- 3. All 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.

#### 333911 PUMP AND PUMPING EQUIPMENT MANUFACTURING

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.

#### 333912 AIR AND GAS COMPRESSOR MANUFACTURING

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.

#### 333913 MEASURING AND DISPENSING PUMP MANUFACTURING

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.

#### 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.

#### 333921 ELEVATOR AND MOVING STAIRWAY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

#### 333922 CONVEYOR AND CONVEYING EQUIPMENT MANUFACTURING

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.

#### 333923 OVERHEAD TRAVELING CRANE, HOIST, AND MONORAIL SYSTEM MANUFAC-TURING

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

### 333924 INDUSTRIAL TRUCK, TRACTOR, TRAILER, AND STACKER MACHINERY MANUFACTURING

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.

#### 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).

#### 333991 POWER-DRIVEN HANDTOOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, and pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

#### 333992 WELDING AND SOLDERING EQUIPMENT MANUFACTURING

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).

#### **333993 PACKAGING MACHINERY MANUFACTURING**

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

This U.S. Industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, and wood).

#### 333995 FLUID POWER CYLINDER AND ACTUATOR MANUFACTURING

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

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

#### 333997 SCALE AND BALANCE (EXCEPT LABORATORY) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

#### 333999 ALL OTHER MISCELLANEOUS GENERAL PURPOSE MACHINERY MANUFACTUR-ING

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).

#### 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

This industry group 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.

#### 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.

#### 334111 ELECTRONIC COMPUTER MANUFACTURING

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.

#### 334112 COMPUTER STORAGE DEVICE MANUFACTURING

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.

#### 334113 COMPUTER TERMINAL MANUFACTURING

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.

#### 334119 OTHER COMPUTER PERIPHERAL EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

#### 3342 COMMUNICATIONS EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Telephone apparatus manufacturing;
- 2. Radio and television broadcasting and wireless communications equipment manufacturing; and
- 3. Other communications equipment manufacturing.

#### **33421 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, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways.

#### **334210 TELEPHONE APPARATUS MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone 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.

### 33422 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.

# 334220 RADIO AND TELEVISION BROADCASTING AND WIRELESS COMMUNICATIONS EQUIPMENT MANUFACTURING

This U.S. 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.

#### 33429 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).

#### 334290 OTHER COMMUNICATIONS EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

#### 3343 AUDIO AND VIDEO EQUIPMENT MANUFACTURING

This industry group 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.

#### 33431 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.

#### 334310 AUDIO AND VIDEO EQUIPMENT MANUFACTURING

This U.S. 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.

#### 3344 SEMICONDUCTOR AND OTHER ELECTRONIC COMPONENT MANUFACTURING

This industry group 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.

#### 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.

#### 334411 ELECTRON TUBE MANUFACTURING

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.

#### 334412 BARE PRINTED CIRCUIT BOARD MANUFACTURING

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.

#### 334413 SEMICONDUCTOR AND RELATED DEVICE MANUFACTURING

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 opto-electronic devices.

#### 334414 ELECTRONIC CAPACITOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

#### 334415 ELECTRONIC RESISTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and variators.

#### 334416 ELECTRONIC COIL, TRANSFORMER, AND OTHER INDUCTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

#### 334417 ELECTRONIC CONNECTOR MANUFACTURING

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.

#### 334418 PRINTED CIRCUIT ASSEMBLY (ELECTRONIC ASSEMBLY) MANUFACTURING

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.

#### 334419 OTHER ELECTRONIC COMPONENT MANUFACTURING

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).

### 3345 NAVIGATIONAL, MEASURING, ELECTROMEDICAL, AND CONTROL INSTRUMENTS MANUFACTURING

This industry group 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.

# 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.

#### 334510 ELECTROMEDICAL AND ELECTROTHERAPEUTIC APPARATUS MANUFACTUR-ING

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.

#### 334511 SEARCH, DETECTION, NAVIGATION, GUIDANCE, AERONAUTICAL, AND NAUTICAL SYSTEM AND INSTRUMENT MANUFACTURING

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.

#### 334512 AUTOMATIC ENVIRONMENTAL CONTROL MANUFACTURING FOR RESIDEN-TIAL, COMMERCIAL, AND APPLIANCE USE

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration, and appliances.

#### 334513 INSTRUMENTS AND RELATED PRODUCTS MANUFACTURING FOR MEASURING, DISPLAYING, AND CONTROLLING INDUSTRIAL PROCESS VARIABLES

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 (i.e., monitor and analyze) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

#### 334514 TOTALIZING FLUID METER AND COUNTING DEVICE MANUFACTURING

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.

#### 334515 INSTRUMENT MANUFACTURING FOR MEASURING AND TESTING ELECTRICITY AND ELECTRICAL SIGNALS

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.

#### 334516 ANALYTICAL LABORATORY INSTRUMENT MANUFACTURING

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.

#### 334517 IRRADIATION APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, and 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

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.

#### 334519 OTHER MEASURING AND CONTROLLING DEVICE MANUFACTURING

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).

#### 3346 MANUFACTURING AND REPRODUCING MAGNETIC AND OPTICAL MEDIA

This industry group 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.

#### 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.

#### 334611 SOFTWARE REPRODUCING

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.

### 334612 PRERECORDED COMPACT DISC (EXCEPT SOFTWARE), TAPE, AND RECORD REPRODUCING

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.

#### 334613 MAGNETIC AND OPTICAL RECORDING MEDIA MANUFACTURING

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.

#### 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

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Electric lamp bulb and part manufacturing and/or
- 2. Lighting fixture manufacturing.

#### 33511 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).

#### 335110 ELECTRIC LAMP BULB AND PART MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

#### **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).

#### 335121 RESIDENTIAL ELECTRIC LIGHTING FIXTURE MANUFACTURING

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.

# 335122 COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL ELECTRIC LIGHTING FIXTURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

#### **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) and nonelectric lighting equipment.

#### **3352 HOUSEHOLD APPLIANCE MANUFACTURING**

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Small electrical appliance manufacturing and/or
- 2. Major 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.

#### 335211 ELECTRIC HOUSEWARES AND HOUSEHOLD FAN MANUFACTURING

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).

#### 335212 HOUSEHOLD VACUUM CLEANER MANUFACTURING

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.

#### **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.

#### 335221 HOUSEHOLD COOKING APPLIANCE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

#### 335222 HOUSEHOLD REFRIGERATOR AND HOME FREEZER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

#### 335224 HOUSEHOLD LAUNDRY EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

#### 335228 OTHER MAJOR HOUSEHOLD APPLIANCE MANUFACTURING

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).

#### 3353 ELECTRICAL EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switch-gear and switchboard apparatus; relays; and industrial controls.

#### 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.

#### 335311 POWER, DISTRIBUTION, AND SPECIALTY TRANSFORMER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumertype 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.

#### 335312 MOTOR AND GENERATOR MANUFACTURING

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.

#### 335313 SWITCHGEAR AND SWITCHBOARD APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

#### 335314 RELAY AND INDUSTRIAL CONTROL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

#### 3359 OTHER ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING

This industry group comprises establishments primarily engaged in 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**

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries.

#### **335912 PRIMARY BATTERY MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

#### 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.

#### **335921 FIBER OPTIC CABLE MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiberoptic cable from purchased fiber-optic strand.

#### **335929 OTHER COMMUNICATION AND ENERGY WIRE MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

#### **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.

#### 335931 CURRENT-CARRYING WIRING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

#### 335932 NONCURRENT-CARRYING WIRING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrentcarrying wiring devices.

#### 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).

#### 335991 CARBON AND GRAPHITE PRODUCT MANUFACTURING

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.

### 335999 ALL OTHER MISCELLANEOUS ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING

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.

#### **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**

This industry group comprises establishments primarily engaged in:

- 1. Automobile and light duty motor vehicle manufacturing and/or
- 2. Heavy duty truck 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.

#### **336111 AUTOMOBILE MANUFACTURING**

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.

#### 336112 LIGHT TRUCK AND UTILITY VEHICLE MANUFACTURING

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.

#### **33612 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.

#### **336120 HEAVY DUTY TRUCK MANUFACTURING**

This U.S. 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.

#### 3362 MOTOR VEHICLE BODY AND TRAILER MANUFACTURING

This industry group 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.

#### 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.

#### 336211 MOTOR VEHICLE BODY MANUFACTURING

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.

#### **336212 TRUCK TRAILER MANUFACTURING**

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.

#### **336213 MOTOR HOME MANUFACTURING**

This U.S. industry group 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.

#### 336214 TRAVEL TRAILER AND CAMPER MANUFACTURING

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.

#### **3363 MOTOR VEHICLE PARTS MANUFACTURING**

This industry group comprises establishments primarily engaged in:

- 1. Motor vehicle gasoline engine and engine parts manufacturing;
- 2. Motor vehicle electrical and electronic equipment manufacturing;
- 3. Motor vehicle steering and suspension components (except spring) manufacturing;
- 4. Motor vehicle brake system manufacturing;
- 5. Motor vehicle transmission and power train parts manufacturing;
- 6. Motor vehicle seating and interior trim manufacturing;
- 7. Motor vehicle metal stamping; and/or
- 8. Other 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.

#### 336311 CARBURETOR, PISTON, PISTON RING, AND VALVE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

#### 336312 GASOLINE ENGINE AND ENGINE PARTS MANUFACTURING

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.

#### 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, and ships).

#### 336321 VEHICULAR LIGHTING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

#### 336322 OTHER MOTOR VEHICLE ELECTRICAL AND ELECTRONIC EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

#### 33633 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).

#### 336330 MOTOR VEHICLE STEERING AND SUSPENSION COMPONENTS (EXCEPT SPRING) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

#### **33634 MOTOR VEHICLE BRAKE SYSTEM MANUFACTURING**

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

#### **336340 MOTOR VEHICLE BRAKE SYSTEM MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

#### 33635 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.

#### 336350 MOTOR VEHICLE TRANSMISSION AND POWER TRAIN PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

#### 33636 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.

#### 336360 MOTOR VEHICLE SEATING AND INTERIOR TRIM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

#### **33637 MOTOR VEHICLE METAL STAMPING**

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

#### 336370 MOTOR VEHICLE METAL STAMPING

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

#### **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).

#### 336391 MOTOR VEHICLE AIR-CONDITIONING MANUFACTURING

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.

#### **336399 ALL OTHER MOTOR VEHICLE PARTS MANUFACTURING**

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).

#### **3364 AEROSPACE PRODUCT AND PARTS MANUFACTURING**

This industry group 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).

#### 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).

#### **336411 AIRCRAFT MANUFACTURING**

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).

#### 336412 AIRCRAFT ENGINE AND ENGINE PARTS MANUFACTURING

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).

#### 336413 OTHER AIRCRAFT PARTS AND AUXILIARY EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments 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.

#### 336414 GUIDED MISSILE AND SPACE VEHICLE MANUFACTURING

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.

### 336415 GUIDED MISSILE AND SPACE VEHICLE PROPULSION UNIT AND PROPULSION UNIT PARTS MANUFACTURING

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.

### 336419 OTHER GUIDED MISSILE AND SPACE VEHICLE PARTS AND AUXILIARY EQUIPMENT MANUFACTURING

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.

#### 3365 RAILROAD ROLLING STOCK MANUFACTURING

This industry group 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.

#### 33651 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.

#### 336510 RAILROAD ROLLING STOCK MANUFACTURING

This U.S. 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.

#### **3366 SHIP AND BOAT BUILDING**

This industry group 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 able 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.

#### **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.

#### **336611 SHIP BUILDING AND REPAIRING**

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.

#### **336612 BOAT BUILDING**

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.

#### **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.

#### 336991 MOTORCYCLE, BICYCLE, AND PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment, and parts.

#### 336992 MILITARY ARMORED VEHICLE, TANK, AND TANK COMPONENT MANUFACTUR-ING

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and selfpropelled weapons.

#### **336999 ALL OTHER TRANSPORTATION EQUIPMENT MANUFACTURING**

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, and armored vehicles and tanks).

#### 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

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.

#### 337110 WOOD KITCHEN CABINET AND COUNTERTOP MANUFACTURING

This U.S. 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.

#### 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).

#### 337121 UPHOLSTERED HOUSEHOLD FURNITURE MANUFACTURING

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.

#### 337122 NONUPHOLSTERED WOOD HOUSEHOLD FURNITURE MANUFACTURING

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).

#### 337124 METAL HOUSEHOLD FURNITURE MANUFACTURING

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).

#### 337125 HOUSEHOLD FURNITURE (EXCEPT WOOD AND METAL) MANUFACTURING

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 fiber-glass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

#### 337127 INSTITUTIONAL FURNITURE MANUFACTURING

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).

#### 337129 WOOD TELEVISION, RADIO, AND SEWING MACHINE CABINET MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

#### 3372 OFFICE FURNITURE (INCLUDING FIXTURES) MANUFACTURING

This industry group 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).

#### 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).

#### 337211 WOOD OFFICE FURNITURE MANUFACTURING

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

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.

#### 337214 OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood officetype 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

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.

#### 337211 WOOD OFFICE FURNITURE MANUFACTURING

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).

#### 337214 OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood officetype furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

#### 3379 OTHER FURNITURE RELATED PRODUCT MANUFACTURING

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

#### **33791 MATTRESS MANUFACTURING**

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

#### **337910 MATTRESS MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

#### 33792 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.

#### 337920 BLIND AND SHADE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following:

- 1. venetian blinds, other window blinds, shades;
- 2. curtain and drapery rods, poles; and/or
- 3. curtain and drapery fixtures.

The blinds and shades may be made on a stock or custom basis and may be made of any material.

#### **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

This industry group 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.

#### 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.

#### 339111 LABORATORY APPARATUS AND FURNITURE MANUFACTURING

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.

For this industry, the 1997 Economic Census did not fully implement the conversion to NAICS. The data from 1997 to 2001 for NAICS industry 339111 did not include establishments primarily engaged in the manufacture of hospital beds and other hospital furniture. These establishments are included in the 2002 Economic Census data.

#### 339112 SURGICAL AND MEDICAL INSTRUMENT MANUFACTURING

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.

#### 339113 SURGICAL APPLIANCE AND SUPPLIES MANUFACTURING

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).

#### **339114 DENTAL EQUIPMENT AND SUPPLIES MANUFACTURING**

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 and dental cements.

#### 339115 OPHTHALMIC GOODS MANUFACTURING

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, reading glasses made to standard powers, and protective eyewear.

#### **339116 DENTAL LABORATORIES**

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

#### **3399 OTHER MISCELLANEOUS MANUFACTURING**

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Jewelry and silverware manufacturing;
- 2. Sporting and athletic goods manufacturing;
- 3. Doll, toy, and game manufacturing;
- 4. Office supplies (except paper) manufacturing;
- 5. Sign manufacturing; and/or
- 6. All 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.

#### 339911 JEWELRY (EXCEPT COSTUME) MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one 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.

#### 339912 SILVERWARE AND HOLLOWWARE MANUFACTURING

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 hollowware.

#### 339913 JEWELERS' MATERIAL AND LAPIDARY WORK MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one 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.

#### 339914 COSTUME JEWELRY AND NOVELTY MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

- 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.

#### **33992 SPORTING AND ATHLETIC GOODS MANUFACTURING**

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

#### 339920 SPORTING AND ATHLETIC GOODS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

#### 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).

#### 339931 DOLL AND STUFFED TOY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes; action figures; and stuffed toys.

#### 339932 GAME, TOY, AND CHILDREN'S VEHICLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

#### **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.

#### 339941 PEN AND MECHANICAL PENCIL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

#### 339942 LEAD PENCIL AND ART GOOD MANUFACTURING

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.

#### **339943 MARKING DEVICE MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

#### 339944 CARBON PAPER AND INKED RIBBON MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

#### **33995 SIGN MANUFACTURING**

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, and displays).

#### **339950 SIGN MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, and displays).

#### **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).

#### 339991 GASKET, PACKING, AND SEALING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

#### 339992 MUSICAL INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

#### 339993 FASTENER, BUTTON, NEEDLE, AND PIN MANUFACTURING

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).

#### 339994 BROOM, BRUSH, AND MOP MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

#### **339995 BURIAL CASKET MANUFACTURING**

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

#### 339999 ALL OTHER MISCELLANEOUS MANUFACTURING

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).

### Appendix C. Methodology

#### SOURCES OF THE DATA

The manufacturing sector includes approximately 350,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing. The amount of information requested from manufacturing establishments was dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the Annual Survey of Manufactures (ASM).

Establishments in the 2002 Economic Census are divided into those sent report forms and those not sent report forms. The coverage of and the method of obtaining census information from each are described below:

- 1. Establishments sent a report form:
  - a. ASM sample establishments. This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments, as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-10000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A. Explanation of Terms, for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 473 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries, as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in certain cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry, which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided

for the respondent to describe significant materials not listed on the form.

A wide variety of special inquiries were included to measure activities peculiar to a given industry, such as operations performed and equipment used.

- b. Large and medium establishments (non-ASM). Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrativerecord payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census — manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.
- c. Small single-establishment companies (non-ASM). This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated "short form" was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics, because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the "not specified by kind" (nsk) categories.

- 2. Establishments not sent a report form:
  - a. Small single-establishment companies not sent a report form. Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and the Census Bureau's ability to assign the correct six-digit NAICS industry classification to the establishment. For each six-digit NAICS industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report that requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these establishments, but were included in the product and material "not specified by kind" (nsk) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit NAICS group classification codes available in the files. For manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as "All other" industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics, other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

b. All nonemployers, i.e., all firms subject to federal income tax, with no paid employees, during 2002 are excluded as in previous censuses. Data for nonemployers are not included in this report, but are released in the annual *Nonemployer Statistics* series.

The report forms used to collect information for establishments in this sector are available at help.econ.census.gov/econhelp/resources/.

A more detailed examination of census methodology is presented in the *History of the Economic Census* at www.census.gov/econ/www/history.html.

#### INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

The classifications for all establishments covered in the 2002 Economic Census — Manufacturing are classified in 1 of 473 industries in accordance with the industry definitions in the *North American Industry Classification System (NAICS), United States, 2002* manual. There were no changes between the 2002 edition and the 1997 edition affecting this sector. When applicable, Appendix F of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or productionoriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 2002, there are 21 sub-sectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. There are 1,450 product classes (seven-digit codes), 5,674 census products, and an additional 3,746 ten-digit product codes. The ten-digit products are considered the primary products of the industry with the same first six digits.

For the 2002 Economic Census — Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 2002, there were no "resistance rules" or "frozen industries."

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments that may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry's output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

#### ESTABLISHMENT BASIS OF REPORTING

The 2002 Economic Census — Manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports, if the plant records permit such a separation and if the activities are substantial in size.

In 2002, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures, except for data on number of establishments for a few industries.

The 2002 Economic Census — Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

#### **DESCRIPTION OF THE ASM SURVEY SAMPLE**

The ASM sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1999 survey year based on the 1997 Economic Census — Manufacturing. This sample will be in place through the 2003 ASM.

In 1997, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the establishments in the 1997 manufacturing population were partitioned into two components for developing estimates within the ASM. The details of each are described below:

1. Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 200,000 of the 370,000 establishments in the 1997 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1999 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1997 census. Supplemental samples representing both 1998 and 1999 births (newly active establishments that were not included in the 1997 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 2003.

The 1999-2003 ASM sample design is similar to the one used since 1984. Companies in the 1997 Economic Census — Manufacturing with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1999-2003 sample, there are approximately 500 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. Across these arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1997 Economic Census — Manufacturing.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1997 industry classification and its 1997 product class data. For each product class (1,755) and six-digit industry (473), a desired reliability constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints, while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by the Census Bureau's primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) that permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

2. Nonmail stratum. The initial nonmail component of the survey was comprised of approximately 170,000 small, single-establishment companies that were tabulated as administrative records in the 1997 Economic Census — Manufacturing. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

#### **RELIABILITY OF DATA**

All data compiled in the economic census are subject to nonsampling errors. Nonsampling errors can be attributed to many sources during the development or execution of the census. The following are two ways that further explain this method: ASM Estimating Procedure. Most of the ASM

estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1997 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1998-2002 ASM estimates, the 1997 Economic Census — Manufacturing values serve as the base year. For the 2003 ASM, the base will be updated to be the 2002 Economic Census — Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contained approximately 170,000 individual establishments in 1999, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication. ASM Data Qualifications. The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists, but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

- From one standard error below to one standard error above the derived estimate for about twothirds of all possible samples.
- From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.
- From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

#### DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

#### VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 2002 Economic Census — Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

#### DISCLOSURE

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. Nonetheless, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures, which can be suppressed even though value of shipments data are published.

### Appendix D. Geographic Notes

#### **WEST VIRGINIA**

**Fayetteville** is now tabulated separately due to a population increase. This change deletes territory from the Balance of Fayette County.

Huntington is in Cabell and Wayne Counties.

Nitro is in Kanawha and Putnam Counties.

Paden City is in Tyler and Wetzel Counties.

**Petersburg** is no longer tabulated separately due to a population decrease. This change adds territory to the Balance of Grant County.

**Pleasant Valley** incorporated in July 1996, but this change was not submitted to the Census Bureau until March 1999. This change deletes territory from the Balance of Marion County.

**Richwood** is no longer tabulated separately due to a population decrease. This change adds territory to the Balance of Nicholas County.

**Shinnston** is no longer tabulated separately due to a population decrease. This change adds territory to the Balance of Harrison County.

Weirton is in Brooke and Hancock Counties.

Wheeling is in Marshall and Ohio Counties.

**White Sulphur Springs** is no longer tabulated separately due to a population decrease. This change adds territory to the Balance of Greenbrier County.

**Balance of Fayette County** no longer includes Fayetteville, which is tabulated separately due to a population increase.

**Balance of Grant County** includes Petersburg, which is no longer tabulated separately due to a population decrease.

**Balance of Greenbrier County** includes White Sulphur Springs, which is no longer tabulated separately due to a population decrease.

**Balance of Harrison County** includes Shinnston, which is no longer tabulated separately due to a population decrease.

Balance of Marion County lost territory due to the incorporation of Pleasant Valley.

**Balance of Nicholas County** includes Richwood, which is no longer tabulated separately due to a population decrease.

### Appendix E. Metropolitan and Micropolitan Statistical Areas

#### **BECKLEY-OAK HILL, WV COMBINED STATISTICAL AREA**

### Beckley, WV Micropolitan Statistical Area

Raleigh County, WV

#### Oak Hill, WV Micropolitan Statistical Area

Fayette County, WV

#### FAIRMONT-CLARKSBURG, WV COMBINED STATISTICAL AREA

#### Clarksburg, WV Micropolitan Statistical Area

Doddridge County, WV

Harrison County, WV

Taylor County, WV

#### Fairmont, WV Micropolitan Statistical Area

Marion County, WV

# WASHINGTON-BALTIMORE-NORTHERN VIRGINIA, DC-MD-VA-WV COMBINED STATISTICAL AREA

#### Baltimore-Towson, MD Metropolitan Statistical Area

Anne Arundel County, MD Baltimore County, MD Carroll County, MD Harford County, MD Howard County, MD Queen Anne's County, MD Baltimore (IC), MD **Lexington Park, MD Micropolitan Statistical Area** 

### St. Mary's County, MD

#### Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area

#### Bethesda-Frederick-Gaithersburg, MD Metropolitan Division

Frederick County, MD

Montgomery County, MD

#### Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division

District of Columbia, DC

Calvert County, MD

Charles County, MD

Prince George's County, MD

Arlington County, VA

Clarke County, VA

Fairfax County, VA

Fauquier County, VA

Loudoun County, VA

Prince William County, VA

Spotsylvania County, VA

Stafford County, VA

Warren County, VA

Alexandria (IC), VA

Fairfax (IC), VA

Falls Church (IC), VA

Fredericksburg (IC), VA

Manassas (IC), VA

Manassas Park (IC), VA

Jefferson County, WV

#### Winchester, VA-WV Metropolitan Statistical Area

Frederick County, VA

Winchester (IC), VA

Hampshire County, WV

#### **BLUEFIELD, WV-VA MICROPOLITAN STATISTICAL AREA**

Tazewell County, VA

Mercer County, WV

#### CHARLESTON, WV METROPOLITAN STATISTICAL AREA

Boone County, WV

Clay County, WV

Kanawha County, WV

Lincoln County, WV

Putnam County, WV

#### CUMBERLAND, MD-WV METROPOLITAN STATISTICAL AREA

Allegany County, MD

Mineral County, WV

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#### HAGERSTOWN-MARTINSBURG, MD-WV METROPOLITAN STATISTICAL AREA

Washington County, MD Berkeley County, WV Morgan County, WV

#### HUNTINGTON-ASHLAND, WV-KY-OH METROPOLITAN STATISTICAL AREA

Boyd County, KY Greenup County, KY Lawrence County, OH Cabell County, WV Wayne County, WV

#### MORGANTOWN, WV METROPOLITAN STATISTICAL AREA

Monongalia County, WV

Preston County, WV

#### PARKERSBURG-MARIETTA, WV-OH METROPOLITAN STATISTICAL AREA

Washington County, OH Pleasants County, WV Wirt County, WV Wood County, WV

#### POINT PLEASANT, WV-OH MICROPOLITAN STATISTICAL AREA

Gallia County, OH Mason County, WV

#### WEIRTON-STEUBENVILLE, WV-OH METROPOLITAN STATISTICAL AREA

Jefferson County, OH

Brooke County, WV

Hancock County, WV

#### WHEELING, WV-OH METROPOLITAN STATISTICAL AREA

Belmont County, OH Marshall County, WV Ohio County, WV