

# Colorado: 2002

Issued September 2005

EC02-31A-CO (RV)

## 2002 Economic Census

*Manufacturing*

Geographic Area Series



**USCENSUSBUREAU**

*Helping You Make Informed Decisions*

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



## ACKNOWLEDGMENTS

This report was prepared in the Manufacturing and Construction Division under the direction of **Mendel D. Gayle**, Assistant Division Chief for Census and Related Programs who was responsible for the overall planning, management, and coordination. **Mendel D. Gayle**, Chief, Census and Related Programs Support Branch, assisted by **Arminta Quash** Section Chief, **Robert Reinard**, Chief, Consumer Goods Industries Branch, assisted by **Suzanne Conard**, **Susan DiCola**, and **James Hinckley**, Section Chiefs, **Kenneth Hansen**, Chief, Investment Goods Industries Branch, assisted by **Chris Blackburn**, **Jazmin Rose** and **Wanda Sledd**, Section Chiefs, **Nathaniel Shelton**, Chief, Primary Goods Industries Branch, assisted by **Walter Hunter**, **Joanna Nguyen**, and **Athanasios Theodoropoulos**, Section Chiefs, and **Raphael Corrado**, **Tom Flood**, **Robert Miller**, and **Robert Rosati**, Special Assistants, performed the planning and implementation. **Bill Baldwin**, **Luis Blanco**, **Larry Blumberg**, **Phillip Brown**, **Brenda Campbell**, **Catherine Cooper**, **Paul Corey**, **Mary Kim Corley**, **Theresa Crowley**, **Chris Cunningham**, **Vance Davis**, **Jesse Dawson**, **Kellie Friedrich**, **Dennis Gosier**, **Vera Harris-Bourne**, **Karen Harshbarger**, **Nancy Higgins**, **Steven Hood**, **Rachael Horwitz**, **Tom Ickes**, **Evelyn Jordan**, **Daphne Kelly**, **Cathy Knudsen**, **Kristen Lauziere**, **Mai Ngan Le**, **Jennifer Lee**, **Robert Lee**, **Jennifer Leotta**, **John Linehan**, **Keith McKenzie**, **Blynda Metcalf**, **Stanley Montgomery**, **Philippe Morris**, **Madelyn Nieves**, **Betty Pannell**, **Bridgett Parker-Bell**, **Dorothy Parsons**, **Gloria Peebles-Butler**, **Michael Perkinson**, **Deanna Pickerall**, **Dana Sklut**, **LaTanya Steele**, **Susan Sundermann**, **Myss Sykes-Stephens**, **Betty Sutter**, **Dora Thomas**, **Ronanne Vinson**, **Keeley Voor**, **Denneth Wallace**, **Hilda Ward**, **Edward Watkins III**, **Tempie Whittington**, **Ernest Wilson Jr.**, **Barbara Wongus**, and **Kevin Younes**, provided primary staff assistance.

**Mendel D. Gayle**, Chief, Census and Related Programs Support Branch, assisted by **Arlinda Allen**, **Kimberly DePhillip**, and **Baruti Taylor**, Section Chiefs, performed overall coordination of the publication process. **Patrick Duck**, **Michael Flaherty**, **Taylor C. Murph**, and **Veronica White** provided primary staff assistance.

Mathematical and statistical techniques as well as the coverage operations were provided by **Paul Hsen**, Assistant Division Chief for Research and Methodology Programs, assisted by **Stacey Cole**, Chief, Manufacturing Methodology Branch, and **Robert Struble**, Section Chief and **Jeffrey Dalzell** and **Cathy Gregor** provided primary staff assistance.

**Eddie J. Salyers**, Assistant Division Chief of Economic Planning and Coordination Division, was responsible for overseeing the editing and tabulation procedures and the interactive analytical software. **Dennis Shoemaker** and **Kim Wortman**, Special Assistants, **John D. Ward**, Chief, Analytical Branch, and **Brandy L. Yarbrough**, Chief, Edit Branch, were responsible for developing the systems and procedures for data collection, editing, review, and correction. **Donna L. Hambric**, Chief of the Economic Planning Staff, was responsible for overseeing the systems and information for dissemination. **Douglas J. Miller**, Chief, Tables and Dissemination Branch, assisted by **Lisa Aispuro**, **Jamie Fleming**, **Keith Fuller**, **Andrew W. Hait**, and **Kathy G. Padgett** were responsible for developing the data dissemination systems and procedures.

The Geography Division staff, **Robert LaMacchia**, Chief, developed geographic coding procedures and associated computer programs.

The Economic Statistical Methods and Programming Division, **Howard R. Hogan**, Chief, developed and coordinated the computer processing systems. **Barry F. Sessamen**, Assistant Division Chief for Post Collection, was responsible for design and implementation of the processing system and computer programs. **Gary T. Sheridan**, Chief, Macro Analytical Branch, assisted by **Apparao V. Katikineni** and **Edward F. Johnson** provided computer programming and implementation.

The Systems Support Division provided the table composition system. **Robert Joseph Brown**, Table Image Processing System (TIPS) Senior Software Engineer, was responsible for the design and development of the TIPS, under the supervision of **Robert J. Bateman**, Assistant Division Chief, Information Systems.

The staff of the National Processing Center performed mailout preparation and receipt operations, clerical and analytical review activities, and data entry.

**Margaret A. Smith**, **Bernadette J. Beasley**, and **Michael T. Browne** of the Administrative and Customer Services Division, **Walter C. Odom**, Chief, provided publication and printing management, graphics design and composition, and editorial review for print and electronic media. General direction and production management were provided by **James R. Clark**, Assistant Division Chief, and **Susan L. Rappa**, Chief, Publications Services Branch.

Special acknowledgment is also due the many businesses whose cooperation contributed to the publication of these data.

## 2002 Economic Census

### *Manufacturing*

#### Geographic Area Series



**U.S. Department of Commerce**

**Carlos M. Gutierrez,**

Secretary

**David A. Sampson,**

Deputy Secretary

**Economics and Statistics Administration**

**Kathleen B. Cooper,**

Under Secretary for  
Economic Affairs

**U.S. CENSUS BUREAU**

**Charles Louis Kincannon,**

Director

---



**Economics  
and Statistics  
Administration**

**Kathleen B. Cooper,**  
Under Secretary  
for Economic Affairs



**U.S. CENSUS BUREAU**

**Charles Louis Kincannon,**  
Director

**Hermann Habermann,**  
Deputy Director and  
Chief Operating Officer

**Thomas L. Mesenbourg,**  
Associate Director  
for Economic Programs

**Thomas L. Mesenbourg,**  
Acting Assistant Director  
for Economic Programs

**William G. Bostic, Jr.,**  
Chief, Manufacturing  
and Construction Division

## CONTENTS

---

Introduction to the Economic Census .....	v
Manufacturing .....	ix
Tables	
1. Industry Statistics for the State: 2002 .....	1
2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002 .....	11
3. Industry Statistics for Counties: 2002 .....	30
4. Industry Statistics for Places: 2002 .....	38
5. Detailed Statistics for the State: 2002 .....	46
Appendixes	
A. Explanation of Terms .....	A-1
B. NAICS Codes, Titles, and Descriptions .....	B-1
C. Methodology .....	C-1
D. Geographic Notes .....	D-1
E. Metropolitan Areas and Micropolitan Statistical Areas .....	E-1

# 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	Mining
22	Utilities
23	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](http://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](http://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](http://www.census.gov/econ/www/history.html).



---

This page is intentionally blank.

# 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](http://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 contains statistics on the number of establishments for the three- and 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](http://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](http://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](mailto: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	250 to 499 employees
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 24,999 employees
k	25,000 to 49,999 employees
l	50,000 to 99,999 employees
m	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]

NAICS code	Geographic area and industry	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E <sup>1</sup>	Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)					Wages (\$1,000)
<b>COLORADO</b>													
31-33	Manufacturing .....	1	'5 349	'1 194	'148 824	'6 323 772	'94 984	'188 404	'3 249 630	'17 798 062	'16 695 548	'34 661 144	'1 975 737
311	Food manufacturing .....	-	453	104	16 322	494 193	12 027	24 893	324 916	1 640 803	3 890 367	5 530 900	63 363
3111	Animal food manufacturing .....	-	32	11	711	26 816	508	1 015	16 933	257 580	267 405	516 057	6 183
31111	Animal food manufacturing ....	-	32	11	711	26 816	508	1 015	16 933	257 580	267 405	516 057	6 183
311111	Dog and cat food manufacturing .....	-	6	2	e	D	D	D	D	D	D	D	D
311119	Other animal food manufacturing .....	1	26	9	e	D	D	D	D	D	D	D	D
3112	Grain and oilseed milling .....	-	12	1	162	7 913	121	280	5 393	57 455	73 668	131 234	D
31121	Flour milling and malt manufacturing .....	-	7	1	115	5 787	87	202	4 037	54 026	64 839	118 090	2 095
311211	Flour milling .....	-	7	1	115	5 787	87	202	4 037	54 026	64 839	118 090	2 095
3113	Sugar and confectionery product manufacturing .....	1	44	9	1 493	34 636	1 124	2 007	24 093	157 305	97 354	265 872	D
31133	Confectionery manufacturing from purchased chocolate ....	-	27	7	1 202	25 197	881	1 565	16 217	91 407	64 125	154 904	1 572
311330	Confectionery manufacturing from purchased chocolate ..	-	27	7	1 202	25 197	881	1 565	16 217	91 407	64 125	154 904	1 572
31134	Nonchocolate confectionery manufacturing .....	-	12	1	c	D	D	D	D	D	D	D	50
311340	Nonchocolate confectionery manufacturing .....	-	12	1	c	D	D	D	D	D	D	D	50
3114	Fruit and vegetable preserving and specialty food manufacturing .....	2	26	5	e	D	D	D	D	D	D	D	1 389
31141	Frozen food manufacturing ....	1	7	2	167	4 547	152	301	3 833	15 038	10 058	25 094	720
311412	Frozen specialty food manufacturing .....	1	7	2	167	4 547	152	301	3 833	15 038	10 058	25 094	720
31142	Fruit and vegetable canning, pickling, and drying .....	2	19	3	c	D	D	D	D	D	D	D	669
311422	Specialty canning .....	1	4	2	157	4 166	129	239	3 117	13 583	14 272	27 747	344
3115	Dairy product manufacturing .....	1	22	12	1 674	59 531	910	1 911	31 011	155 950	434 164	591 752	17 152
31151	Dairy product (except frozen) manufacturing .....	1	15	9	1 453	52 441	743	1 583	26 085	125 008	395 994	521 581	D
311511	Fluid milk manufacturing ....	1	10	8	g	D	D	D	D	D	D	D	D
311513	Cheese manufacturing .....	-	4	1	e	D	D	D	D	D	D	D	749
31152	Ice cream and frozen dessert manufacturing .....	4	7	3	221	7 090	167	328	4 926	30 942	38 170	70 171	D
311520	Ice cream and frozen dessert manufacturing .....	4	7	3	221	7 090	167	328	4 926	30 942	38 170	70 171	D
3116	Animal slaughtering and processing .....	-	85	25	6 954	197 643	6 091	13 970	155 117	480 254	2 689 079	3 160 196	21 472
31161	Animal slaughtering and processing .....	-	85	25	6 954	197 643	6 091	13 970	155 117	480 254	2 689 079	3 160 196	21 472
311611	Animal (except poultry) slaughtering .....	-	51	12	5 283	143 529	4 730	10 796	116 239	352 250	2 479 105	2 821 636	16 236
311612	Meat processed from carcasses .....	-	27	11	f	D	D	D	D	D	D	D	D
311615	Poultry processing .....	-	5	1	f	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing .....	2	164	29	3 547	112 110	2 022	3 312	60 412	294 337	169 650	464 958	8 040
31181	Bread and bakery product manufacturing .....	3	143	23	2 944	93 128	1 547	2 517	45 724	214 794	108 791	324 021	5 413
311811	Retail bakeries .....	4	94	9	f	D	D	D	D	D	D	D	D
311812	Commercial bakeries .....	3	47	13	2 164	80 439	1 075	1 786	38 099	191 288	91 381	283 147	4 398
311813	Frozen cakes, pies, and other pastries manufacturing .....	-	2	1	c	D	D	D	D	D	D	D	D
31182	Cookie, cracker, and pasta manufacturing .....	1	11	1	160	6 467	99	200	5 244	36 266	39 165	76 004	662
311822	Flour mixes and dough manufacturing from purchased flour .....	-	4	1	c	D	D	D	D	D	D	D	D
31183	Tortilla manufacturing .....	-	10	5	443	12 515	376	595	9 444	43 277	21 694	64 933	1 965
311830	Tortilla manufacturing .....	-	10	5	443	12 515	376	595	9 444	43 277	21 694	64 933	1 965
3119	Other food manufacturing .....	1	66	11	1 334	43 560	863	1 642	22 526	202 129	119 280	325 398	4 938
31191	Snack food manufacturing ....	-	7	4	f	D	D	D	D	D	D	D	1 434
311919	Other snack food manufacturing .....	-	6	4	491	15 223	346	661	9 330	97 488	40 365	139 106	D
31192	Coffee and tea manufacturing .	-	8	1	328	14 023	128	228	4 510	60 696	38 337	101 887	1 268
311920	Coffee and tea manufacturing .....	-	8	1	328	14 023	128	228	4 510	60 696	38 337	101 887	1 268
31199	All other food manufacturing ...	5	42	5	441	11 019	343	659	7 096	32 268	33 588	65 801	1 970
311991	Perishable prepared food manufacturing .....	5	12	4	304	6 319	249	466	4 278	16 421	13 024	29 436	531
311999	All other miscellaneous food manufacturing .....	4	30	1	137	4 700	94	193	2 818	15 847	20 564	36 365	1 439
312	Beverage and tobacco product manufacturing .....	-	50	13	6 315	390 931	2 751	5 843	157 443	1 468 556	1 033 163	2 495 701	329 574
3121	Beverage manufacturing .....	-	50	13	6 315	390 931	2 751	5 843	157 443	1 468 556	1 033 163	2 495 701	329 574
31211	Soft drink and ice manufacturing .....	-	17	7	1 156	42 593	337	694	8 768	273 907	261 444	530 764	40 086
312111	Soft drink manufacturing ....	-	6	6	1 065	40 535	295	637	8 133	266 552	259 825	522 092	39 735
31212	Breweries .....	-	19	6	5 118	346 766	2 396	5 116	148 081	1 189 894	767 071	1 955 747	289 097
312120	Breweries .....	-	19	6	5 118	346 766	2 396	5 116	148 081	1 189 894	767 071	1 955 747	289 097

**Table 1. Industry Statistics for the State: 2002—Con.**

[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]

NAICS code	Geographic area and industry	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E <sup>1</sup>	Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)					Wages (\$1,000)
<b>COLORADO—Con.</b>													
313	Textile mills .....	3	22	2	167	5 223	135	277	2 999	13 936	14 363	29 110	263
314	Textile product mills .....	—	122	20	2 247	63 261	1 624	3 232	30 852	294 029	143 352	439 403	7 750
3141	Textile furnishings mills .....	6	40	4	304	6 278	235	393	3 674	11 230	13 286	25 034	201
31412	Curtain and linen mills .....	6	38	4	e	D	D	D	D	D	D	D	D
314121	Curtain and drapery mills .....	4	29	4	244	4 759	181	287	2 520	7 160	6 104	13 762	92
3149	Other textile product mills .....	—	82	16	1 943	56 983	1 389	2 839	27 178	282 799	130 066	414 369	7 549
31491	Textile bag and canvas mills .....	—	40	9	f	D	D	D	D	D	D	D	1 141
314911	Textile bag mills .....	2	12	5	c	D	D	D	D	D	D	D	117
314912	Canvas and related product mills .....	—	28	4	446	13 363	321	570	6 982	39 499	37 776	76 367	1 024
31499	All other textile product mills .....	—	42	7	g	D	D	D	D	D	D	D	6 408
314999	All other miscellaneous textile product mills .....	—	41	6	1 308	39 358	915	1 977	17 447	234 662	86 968	323 982	D
315	Apparel manufacturing .....	5	100	12	974	23 527	694	1 391	14 029	61 355	45 505	104 492	D
3152	Cut and sew apparel manufacturing .....	3	71	9	593	14 304	436	831	8 714	43 424	28 344	69 362	D
31521	Cut and sew apparel contractors .....	3	51	3	259	5 032	216	383	3 436	10 136	2 519	12 515	199
315212	Women's, girls', and infants' cut and sew apparel contractors .....	3	39	1	171	3 615	139	248	2 296	6 921	1 742	8 663	184
31522	Men's and boys' cut and sew apparel manufacturing .....	1	9	5	272	6 503	174	352	3 542	27 681	18 752	44 218	404
315228	Men's and boys' cut and sew other outerwear manufacturing .....	1	6	4	227	5 309	146	290	2 965	25 892	17 063	40 759	300
3159	Apparel accessories and other apparel manufacturing .....	9	27	3	e	D	D	D	D	D	D	D	88
31599	Apparel accessories and other apparel manufacturing .....	9	27	3	e	D	D	D	D	D	D	D	88
315991	Hat, cap, and millinery manufacturing .....	9	6	2	e	D	D	D	D	D	D	D	D
316	Leather and allied product manufacturing .....	—	31	5	504	16 011	279	534	6 185	98 706	45 308	142 468	1 615
3162	Footwear manufacturing .....	1	6	1	c	D	D	D	D	D	D	D	D
31621	Footwear manufacturing .....	1	6	1	c	D	D	D	D	D	D	D	D
316219	Other footwear manufacturing .....	—	3	1	c	D	D	D	D	D	D	D	D
3169	Other leather and allied product manufacturing .....	—	23	3	345	11 810	169	319	4 040	84 938	26 424	109 915	D
31699	Other leather and allied product manufacturing .....	—	23	3	345	11 810	169	319	4 040	84 938	26 424	109 915	D
316991	Luggage manufacturing .....	—	7	2	c	D	D	D	D	D	D	D	D
316999	All other leather goods manufacturing .....	5	9	1	c	D	D	D	D	D	D	D	D
321	Wood product manufacturing .....	2	257	49	4 173	120 758	3 209	6 201	78 946	230 313	325 379	556 348	10 847
3211	Sawmills and wood preservation .....	1	34	7	496	15 079	408	780	11 271	35 479	115 139	148 659	2 491
32111	Sawmills and wood preservation .....	1	34	7	496	15 079	408	780	11 271	35 479	115 139	148 659	2 491
321113	Sawmills .....	4	23	4	269	8 028	229	467	6 279	20 455	30 135	49 731	1 404
321114	Wood preservation .....	—	11	3	227	7 051	179	313	4 992	15 024	85 004	98 928	1 087
3212	Veneer, plywood, and engineered wood product manufacturing .....	2	43	13	792	24 775	589	1 176	15 671	34 355	37 386	74 680	2 302
32121	Veneer, plywood, and engineered wood product manufacturing .....	2	43	13	792	24 775	589	1 176	15 671	34 355	37 386	74 680	2 302
321214	Truss manufacturing .....	1	34	10	649	21 021	482	968	13 376	29 273	28 460	60 139	2 157
3219	Other wood product manufacturing .....	2	180	29	2 885	80 904	2 212	4 245	52 004	160 479	172 854	333 009	6 054
32191	Millwork .....	2	98	17	1 527	46 382	1 123	2 173	27 963	84 401	117 614	201 929	2 955
321911	Wood window and door manufacturing .....	2	37	5	658	22 589	466	971	12 531	46 733	35 442	82 201	1 403
321912	Cut stock, resawing lumber, and planing .....	—	14	3	427	10 976	333	577	7 750	13 100	55 362	68 212	323
321918	Other millwork (including flooring) .....	3	47	9	442	12 817	324	625	7 682	24 568	26 810	51 516	1 229
32192	Wood container and pallet manufacturing .....	1	24	4	354	8 432	299	530	6 008	21 393	14 973	36 402	682
321920	Wood container and pallet manufacturing .....	1	24	4	354	8 432	299	530	6 008	21 393	14 973	36 402	682
32199	All other wood product manufacturing .....	2	58	8	1 004	26 090	790	1 542	18 033	54 685	40 267	94 678	2 417
321991	Manufactured home (mobile home) manufacturing .....	1	5	4	499	13 411	380	746	8 854	25 934	23 870	49 695	1 745
321992	Prefabricated wood building manufacturing .....	3	9	3	189	5 434	157	319	3 775	11 355	7 954	19 262	282
321999	All other miscellaneous wood product manufacturing .....	2	44	1	316	7 245	253	477	5 404	17 396	8 443	25 721	390

**Table 1. Industry Statistics for the State: 2002—Con.**

[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]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>COLORADO—Con.</b>													
322	Paper manufacturing .....	—	44	19	2 248	88 406	1 772	3 376	60 042	194 775	275 722	473 143	14 638
3222	Converted paper product manufacturing .....	—	43	19	g	D	D	D	D	D	D	D	D
32221	Paperboard container manufacturing .....	—	24	14	1 546	64 927	1 181	2 360	42 639	127 096	224 745	354 415	D
322211	Corrugated and solid fiber box manufacturing .....	—	13	8	951	40 312	724	1 414	25 825	82 472	140 600	224 303	5 177
322212	Folding paperboard box manufacturing .....	—	6	5	538	22 822	411	853	15 475	40 325	78 691	120 395	2 379
32222	Paper bag and coated and treated paper manufacturing ..	—	4	2	316	9 001	301	446	8 063	33 998	22 106	56 524	D
322222	Coated and laminated paper manufacturing .....	—	4	2	316	9 001	301	446	8 063	33 998	22 106	56 524	D
32223	Stationery product manufacturing .....	1	10	2	e	D	D	D	D	D	D	D	1 204
322232	Envelope manufacturing ....	—	5	2	263	9 658	199	392	6 581	22 751	18 333	40 710	1 127
323	Printing and related support activities .....	1	740	106	10 528	348 848	6 785	12 459	195 490	937 139	470 453	1 408 527	49 380
3231	Printing and related support activities .....	1	740	106	10 528	348 848	6 785	12 459	195 490	937 139	470 453	1 408 527	49 380
32311	Printing .....	1	678	101	10 120	336 570	6 481	11 950	187 184	912 999	454 973	1 368 671	47 834
323110	Commercial lithographic printing .....	1	288	64	5 637	206 399	4 018	7 371	122 995	478 063	296 847	773 804	35 900
323112	Commercial flexographic printing .....	2	16	3	142	5 835	97	181	3 004	10 481	9 851	20 282	1 507
323113	Commercial screen printing ..	2	88	12	1 081	32 454	704	1 433	16 835	68 593	39 875	109 950	2 227
323114	Quick printing .....	3	177	4	807	22 637	565	925	13 411	47 892	21 614	69 553	2 330
323115	Digital printing .....	2	36	6	460	16 577	289	406	7 725	26 736	12 235	39 024	1 379
323116	Manifold business forms printing .....	—	12	6	1 528	37 998	495	1 038	14 279	250 619	51 443	302 437	3 424
323117	Books printing .....	—	9	3	182	6 515	126	271	3 925	12 028	6 658	18 561	90
323119	Other commercial printing ..	2	41	1	176	4 909	109	169	2 793	12 606	11 831	24 438	458
32312	Support activities for printing ...	2	62	5	408	12 278	304	509	8 306	24 140	15 480	39 856	1 546
323121	Tradebinding and related work .....	2	27	3	217	5 416	187	324	4 056	9 938	11 688	21 792	557
323122	Prepress services .....	3	35	2	191	6 862	117	185	4 250	14 202	3 792	18 064	989
324	Petroleum and coal products manufacturing .....	—	22	6	657	36 041	424	852	20 995	144 364	681 201	819 530	25 259
3241	Petroleum and coal products manufacturing .....	—	22	6	657	36 041	424	852	20 995	144 364	681 201	819 530	25 259
32411	Petroleum refineries .....	—	1	1	c	D	D	D	D	D	D	D	D
324110	Petroleum refineries .....	—	1	1	c	D	D	D	D	D	D	D	D
32412	Asphalt paving, roofing, and saturated materials manufacturing .....	—	15	4	e	D	D	D	D	D	D	D	D
324121	Asphalt paving mixture and block manufacturing .....	—	10	2	208	9 428	151	291	6 433	31 295	112 701	142 439	D
324122	Asphalt shingle and coating materials manufacturing ...	1	5	2	c	D	D	D	D	D	D	D	3 005
325	Chemical manufacturing .....	1	171	53	7 049	366 135	3 932	7 135	162 353	1 549 445	1 090 510	2 553 539	127 053
3251	Basic chemical manufacturing ...	3	21	7	391	23 136	155	318	8 227	67 848	39 557	105 636	8 983
32512	Industrial gas manufacturing ..	2	7	3	134	8 003	30	61	1 611	30 697	12 847	43 555	1 239
325120	Industrial gas manufacturing ..	2	7	3	134	8 003	30	61	1 611	30 697	12 847	43 555	1 239
32518	Other basic inorganic chemical manufacturing .....	4	9	3	c	D	D	D	D	D	D	D	D
325188	All other basic inorganic chemical manufacturing .....	2	8	2	158	9 107	61	128	2 945	23 599	10 958	33 012	D
3254	Pharmaceutical and medicine manufacturing .....	3	42	21	3 140	188 170	1 371	2 797	67 126	598 378	308 461	823 641	77 937
32541	Pharmaceutical and medicine manufacturing .....	3	42	21	3 140	188 170	1 371	2 797	67 126	598 378	308 461	823 641	77 937
325411	Medicinal and botanical manufacturing .....	—	10	4	613	40 592	337	703	20 065	82 367	55 644	145 596	20 118
325412	Pharmaceutical preparation manufacturing .....	1	13	7	1 180	65 881	711	1 450	32 354	221 003	159 203	399 733	10 525
325413	In-vitro diagnostic substance manufacturing .....	1	11	5	563	29 562	128	249	5 746	55 124	23 484	77 902	D
325414	Biological product (except diagnostic) manufacturing ..	9	8	5	784	52 135	195	395	8 961	239 884	70 130	200 410	D
3255	Paint, coating, and adhesive manufacturing .....	2	19	4	e	D	D	D	D	D	D	D	D
32551	Paint and coating manufacturing .....	3	16	3	161	6 282	76	144	2 393	16 159	17 798	34 048	637
325510	Paint and coating manufacturing .....	3	16	3	161	6 282	76	144	2 393	16 159	17 798	34 048	637
32552	Adhesive manufacturing .....	—	3	1	c	D	D	D	D	D	D	D	D
325520	Adhesive manufacturing .....	—	3	1	c	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, and toilet preparation manufacturing ..	2	39	12	886	31 576	579	953	14 942	133 458	113 231	249 420	9 097
32561	Soap and cleaning compound manufacturing .....	2	25	6	393	17 757	197	401	7 168	89 074	88 090	178 825	6 579
325612	Polish and other sanitation good manufacturing .....	5	12	4	228	10 098	120	251	3 806	29 295	16 886	45 992	5 092
32562	Toilet preparation manufacturing .....	3	14	6	493	13 819	382	552	7 774	44 384	25 141	70 595	2 518
325620	Toilet preparation manufacturing .....	3	14	6	493	13 819	382	552	7 774	44 384	25 141	70 595	2 518

**Table 1. Industry Statistics for the State: 2002—Con.**

[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]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>COLORADO—Con.</b>													
325 3259	Chemical manufacturing—Con. Other chemical product and preparation manufacturing . . . . .	—	34	5	2 196	104 609	1 583	2 607	63 103	701 396	571 177	1 267 060	D
32599 325992	All other chemical product and preparation manufacturing . . . . . Photographic film, paper, plate, and chemical manufacturing . . . . .	—	27	4	2 140	102 107	1 546	2 531	61 701	693 998	563 922	1 252 478	D
326	Plastics and rubber products manufacturing . . . . .	2	199	65	5 375	179 582	3 699	7 325	99 185	469 920	410 962	884 405	28 317
3261	Plastics product manufacturing . . . . .	2	176	62	5 161	172 317	3 558	7 026	95 426	457 047	392 530	852 271	27 770
32611	Plastics packaging materials and un laminated film and sheet manufacturing . . . . .	3	20	7	e	D	D	D	D	D	D	D	4 622
326111 326113	Plastics bag manufacturing . . . . . Unlaminated plastics film and sheet (except packaging) manufacturing . . . . .	8	3	1	c	D	D	D	D	D	D	D	D
32612	Plastics pipe, pipe fitting, and un laminated profile shape manufacturing . . . . .	—	17	5	257	8 650	191	390	5 504	31 262	43 536	75 516	1 948
326122	Plastics pipe and pipe fitting manufacturing . . . . .	—	7	4	203	6 679	149	303	4 398	26 408	40 622	67 814	1 763
32614	Polystyrene foam product manufacturing . . . . .	1	6	5	243	8 123	177	391	4 904	24 113	25 758	50 092	1 100
326140	Polystyrene foam product manufacturing . . . . .	1	6	5	243	8 123	177	391	4 904	24 113	25 758	50 092	1 100
32615	Urethane and other foam product (except polystyrene) manufacturing . . . . .	—	9	1	111	3 269	87	184	2 356	14 810	23 336	37 892	1 464
326150	Urethane and other foam product (except polystyrene) manufacturing . . . . .	—	9	1	111	3 269	87	184	2 356	14 810	23 336	37 892	1 464
32616	Plastics bottle manufacturing . . . . .	—	4	3	195	7 275	166	348	5 748	17 935	28 765	46 713	D
326160	Plastics bottle manufacturing . . . . .	—	4	3	195	7 275	166	348	5 748	17 935	28 765	46 713	D
32619	Other plastics product manufacturing . . . . .	2	115	39	h	D	D	D	D	D	D	D	D
326191	Plastics plumbing fixture manufacturing . . . . .	—	6	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing . . . . .	3	108	38	3 226	103 955	2 394	4 808	61 282	252 773	168 653	423 985	13 805
3262	Rubber product manufacturing . . . . .	2	23	3	214	7 265	141	299	3 759	12 873	18 432	32 134	547
32621	Tire manufacturing . . . . .	1	12	2	117	3 704	78	173	2 010	6 876	14 096	21 947	311
326212	Tire retreading . . . . .	—	10	2	c	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing . . . . .	1	295	110	9 299	341 111	7 046	14 145	226 423	876 544	642 597	1 524 390	330 901
3271	Clay product and refractory manufacturing . . . . .	—	37	9	2 066	84 667	1 482	3 280	45 776	162 061	61 561	222 220	12 247
32711	Pottery, ceramics, and plumbing fixture manufacturing . . . . .	—	22	3	g	D	D	D	D	D	D	D	D
327112	Vitreous china, fine earthenware, and other pottery product manufacturing . . . . .	—	19	1	c	D	D	D	D	D	D	D	99
327113	Porcelain electrical supply manufacturing . . . . .	—	2	2	g	D	D	D	D	D	D	D	D
32712	Clay building material and refractories manufacturing . . . . .	2	15	6	f	D	D	D	D	D	D	D	D
327121	Brick and structural clay tile manufacturing . . . . .	1	5	5	487	18 480	371	823	10 815	48 707	20 313	64 631	D
3272	Glass and glass product manufacturing . . . . .	3	46	8	899	40 632	648	1 357	26 598	116 773	58 906	175 876	7 380
32721	Glass and glass product manufacturing . . . . .	3	46	8	899	40 632	648	1 357	26 598	116 773	58 906	175 876	7 380
327213	Glass container manufacturing . . . . .	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product manufacturing made of purchased glass . . . . .	8	32	6	536	19 977	339	679	9 682	37 987	30 479	68 037	D
3273	Cement and concrete product manufacturing . . . . .	—	151	79	5 079	176 731	4 067	8 104	129 494	491 663	444 822	941 253	303 628
32731	Cement manufacturing . . . . .	—	3	3	e	D	D	D	D	D	D	D	D
327310	Cement manufacturing . . . . .	—	3	3	e	D	D	D	D	D	D	D	D
32732	Ready-mix concrete manufacturing . . . . .	—	94	46	2 567	81 026	2 163	3 805	66 084	225 577	257 587	483 842	D
327320	Ready-mix concrete manufacturing . . . . .	—	94	46	2 567	81 026	2 163	3 805	66 084	225 577	257 587	483 842	D
32733	Concrete pipe, brick, and block manufacturing . . . . .	—	20	14	f	D	D	D	D	D	D	D	D
327331	Concrete block and brick manufacturing . . . . .	—	12	7	e	D	D	D	D	D	D	D	D
327332	Concrete pipe manufacturing . . . . .	—	8	7	491	17 464	384	1 094	11 121	50 151	23 458	73 756	D
32739	Other concrete product manufacturing . . . . .	1	34	16	1 294	45 749	1 016	2 157	30 397	102 921	57 352	160 158	D
327390	Other concrete product manufacturing . . . . .	1	34	16	1 294	45 749	1 016	2 157	30 397	102 921	57 352	160 158	D

**Table 1. Industry Statistics for the State: 2002—Con.**

[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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>COLORADO—Con.</b>													
327	Nonmetallic mineral product manufacturing—Con.												
3274	Lime and gypsum product manufacturing .....	1	5	1	c	D	D	D	D	D	D	D	61
32742	Gypsum product manufacturing .....	1	5	1	c	D	D	D	D	D	D	D	61
327420	Gypsum product manufacturing .....	1	5	1	c	D	D	D	D	D	D	D	61
3279	Other nonmetallic mineral product manufacturing .....	2	56	13	g	D	D	D	D	D	D	D	7 585
32799	All other nonmetallic mineral product manufacturing .....	2	54	12	g	D	D	D	D	D	D	D	D
327991	Cut stone and stone product manufacturing .....	3	28	4	574	16 174	351	608	9 652	27 941	11 874	40 188	1 269
327993	Mineral wool manufacturing .	—	6	3	231	5 870	193	229	4 472	23 451	9 409	31 420	D
327999	All other miscellaneous nonmetallic mineral product manufacturing .....	1	15	4	202	6 738	115	210	2 783	25 425	25 358	51 276	1 168
331	Primary metal manufacturing .....	—	'42	'19	'2 002	'87 991	'1 526	'3 340	'65 990	'201 623	'388 182	'588 122	D
3311	Iron and steel mills and ferroalloy manufacturing .....	—	'7	'4	g	D	D	D	D	D	D	D	D
33111	Iron and steel mills and ferroalloy manufacturing .....	—	'7	'4	g	D	D	D	D	D	D	D	D
331111	Iron and steel mills .....	—	'7	'4	g	D	D	D	D	D	D	D	D
3312	Steel product manufacturing from purchased steel .....	—	4	1	194	9 033	155	353	7 969	17 654	33 559	51 006	D
33122	Rolling and drawing of purchased steel .....	—	2	1	c	D	D	D	D	D	D	D	D
331222	Steel wire drawing .....	—	1	1	c	D	D	D	D	D	D	D	D
3313	Alumina and aluminum production and processing .....	—	5	4	409	18 468	326	661	13 343	35 123	90 118	127 279	2 750
33131	Alumina and aluminum production and processing ...	—	5	4	409	18 468	326	661	13 343	35 123	90 118	127 279	2 750
331315	Aluminum sheet, plate, and foil manufacturing .....	—	1	1	c	D	D	D	D	D	D	D	D
331319	Other aluminum rolling and drawing .....	—	2	1	c	D	D	D	D	D	D	D	D
3315	Foundries .....	4	17	7	309	8 289	259	516	5 885	21 150	7 407	28 905	D
33151	Ferrous metal foundries .....	3	4	2	105	2 478	93	181	2 023	6 271	1 847	8 411	D
33152	Nonferrous metal foundries ...	4	13	5	204	5 811	166	335	3 862	14 879	5 560	20 494	D
331524	Aluminum foundries (except die-casting).....	3	7	3	100	2 888	78	173	1 822	9 214	3 047	12 307	165
332	Fabricated metal product manufacturing .....	2	'837	'156	'14 088	'513 291	'10 242	'20 365	'316 925	'1 229 089	'1 026 720	'2 261 356	'48 616
3321	Forging and stamping.....	3	26	13	725	22 938	586	1 207	15 982	56 343	51 720	108 573	1 924
33211	Forging and stamping.....	3	26	13	725	22 938	586	1 207	15 982	56 343	51 720	108 573	1 924
332111	Iron and steel forging .....	5	8	4	261	8 634	215	431	6 249	28 085	22 386	51 210	479
332116	Metal stamping .....	2	11	6	371	10 857	305	640	7 764	18 717	13 638	32 540	1 011
3322	Cutlery and handtool manufacturing .....	—	15	2	897	25 688	790	1 521	20 162	76 162	29 801	104 045	D
33221	Cutlery and handtool manufacturing .....	—	15	2	897	25 688	790	1 521	20 162	76 162	29 801	104 045	D
332212	Hand and edge tool manufacturing .....	—	11	1	f	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing .....	2	'223	'65	'4 399	'156 878	'3 005	'6 068	'91 338	'341 553	'308 649	'646 775	'17 660
33231	Plate work and fabricated structural product manufacturing .....	2	'85	'31	'1 765	'71 235	'1 207	'2 404	'39 995	'167 301	'167 849	'330 917	'6 266
332311	Prefabricated metal building and component manufacturing .....	2	12	3	219	8 536	139	278	3 664	18 541	29 243	47 826	863
332312	Fabricated structural metal manufacturing .....	2	'63	'25	'1 305	'53 791	'870	'1 734	'29 946	'130 355	'124 865	'250 953	'4 347
332313	Plate work manufacturing ...	—	10	3	241	8 908	198	392	6 385	18 405	13 741	32 138	1 056
33232	Ornamental and architectural metal products manufacturing .....	2	138	34	2 634	85 643	1 798	3 664	51 343	174 252	140 800	315 858	11 394
332321	Metal window and door manufacturing .....	3	14	4	456	14 094	334	701	8 084	28 444	37 324	65 466	936
332322	Sheet metal work manufacturing .....	2	64	25	1 630	56 790	1 154	2 333	33 946	118 080	85 617	202 919	9 250
332323	Ornamental and architectural metal work manufacturing ..	1	60	5	548	14 759	310	630	9 313	27 728	17 859	47 473	1 208
3324	Boiler, tank, and shipping container manufacturing .....	—	15	5	718	36 246	571	1 187	27 912	153 051	238 733	399 483	D
33243	Metal can, box, and other metal container (light gauge) manufacturing .....	—	11	3	645	33 956	536	1 104	26 641	144 209	235 694	387 615	2 330
332431	Metal can manufacturing ...	—	4	3	595	31 946	500	1 030	25 216	140 222	230 839	378 692	2 251
3325	Hardware manufacturing .....	—	9	4	1 032	42 915	723	1 703	20 991	64 157	88 237	153 091	1 288
33251	Hardware manufacturing .....	—	9	4	1 032	42 915	723	1 703	20 991	64 157	88 237	153 091	1 288
332510	Hardware manufacturing .....	—	9	4	1 032	42 915	723	1 703	20 991	64 157	88 237	153 091	1 288



**Table 1. Industry Statistics for the State: 2002—Con.**

[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]

NAICS code	Geographic area and industry	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E <sup>1</sup>	Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)					Wages (\$1,000)
<b>COLORADO—Con.</b>													
332	Fabricated metal product manufacturing—Con.												
3326	Spring and wire product manufacturing .....	2	29	4	526	16 121	463	983	11 696	53 431	40 162	93 278	2 034
33261	Spring and wire product manufacturing .....	2	29	4	526	16 121	463	983	11 696	53 431	40 162	93 278	2 034
332612	Spring (light gauge) manufacturing .....	—	4	2	c	D	D	D	D	D	D	D	D
332618	Other fabricated wire product manufacturing .....	5	24	2	e	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing .....	3	351	36	3 034	110 799	2 271	4 169	72 071	218 894	102 234	322 266	13 296
33271	Machine shops .....	3	310	25	2 173	79 341	1 609	3 017	52 093	151 867	70 907	224 207	8 537
332710	Machine shops .....	3	310	25	2 173	79 341	1 609	3 017	52 093	151 867	70 907	224 207	8 537
33272	Turned product and screw, nut, and bolt manufacturing .....	1	41	11	861	31 458	662	1 152	19 978	67 027	31 327	98 059	4 759
332721	Precision turned product manufacturing .....	3	34	8	554	19 332	449	721	13 503	39 387	12 763	51 987	2 744
332722	Bolt, nut, screw, rivet, and washer manufacturing .....	—	7	3	307	12 126	213	431	6 475	27 640	18 564	46 072	2 015
3328	Coating, engraving, heat treating, and allied activities .....	1	71	9	834	28 637	486	998	13 846	62 769	53 030	116 190	D
33281	Coating, engraving, heat treating, and allied activities ..	1	71	9	834	28 637	486	998	13 846	62 769	53 030	116 190	D
332811	Metal heat treating .....	—	5	1	207	7 643	16	34	495	17 228	3 526	20 754	D
332812	Metal coating, engraving (except jewelry and silverware), and allied services to manufacturers ..	1	33	4	273	9 004	221	446	6 294	25 086	37 863	63 224	671
332813	Electroplating, plating, polishing, anodizing, and coloring .....	1	33	4	354	11 990	249	518	7 057	20 455	11 641	32 212	1 049
3329	Other fabricated metal product manufacturing .....	2	98	18	1 923	73 069	1 347	2 529	42 927	202 729	114 154	317 655	D
33291	Metal valve manufacturing ....	2	10	5	958	42 627	632	1 192	23 806	132 899	79 569	213 596	2 456
332912	Fluid power valve and hose fitting manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
332919	Other metal valve and pipe fitting manufacturing .....	5	5	3	e	D	D	D	D	D	D	D	D
33299	All other fabricated metal product manufacturing .....	3	88	13	965	30 442	715	1 337	19 121	69 830	34 585	104 059	D
332993	Ammunition (except small arms) manufacturing .....	—	4	1	c	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product manufacturing .....	3	70	12	754	23 581	584	1 077	16 029	54 791	27 062	81 630	1 979
333	Machinery manufacturing .....	1	332	91	10 106	448 721	6 037	12 359	209 719	1 148 506	919 816	2 051 979	70 125
3331	Agriculture, construction, and mining machinery manufacturing .....	2	36	8	f	D	D	D	D	D	D	D	D
33311	Agricultural implement manufacturing .....	1	18	6	f	D	D	D	D	D	D	D	4 766
333111	Farm machinery and equipment manufacturing ..	1	17	5	442	15 356	342	715	10 427	37 568	41 036	79 195	D
3332	Industrial machinery manufacturing .....	—	48	17	1 456	70 399	872	1 822	32 402	154 043	174 783	318 729	11 882
33329	Other industrial machinery manufacturing .....	—	41	16	1 402	68 559	831	1 729	31 386	150 731	172 465	313 076	11 815
333292	Textile machinery manufacturing .....	—	3	2	c	D	D	D	D	D	D	D	D
333293	Printing machinery and equipment manufacturing ..	—	7	2	182	8 478	96	204	3 398	28 028	15 163	45 632	813
333294	Food product machinery manufacturing .....	—	3	2	c	D	D	D	D	D	D	D	D
333295	Semiconductor machinery manufacturing .....	—	6	4	482	23 054	355	749	14 558	58 770	117 541	165 225	6 639
333298	All other industrial machinery manufacturing .....	1	21	5	338	16 077	204	396	7 968	31 173	26 646	61 746	2 153
3333	Commercial and service industry machinery manufacturing .....	1	54	22	2 265	96 332	1 284	2 393	44 246	251 271	170 429	414 142	20 470
33331	Commercial and service industry machinery manufacturing .....	1	54	22	2 265	96 332	1 284	2 393	44 246	251 271	170 429	414 142	20 470
333311	Automatic vending machine manufacturing .....	—	1	1	c	D	D	D	D	D	D	D	D
333313	Office machinery manufacturing .....	—	2	2	c	D	D	D	D	D	D	D	D
333314	Optical instrument and lens manufacturing .....	—	21	9	750	36 530	437	884	16 500	71 105	45 810	117 610	12 759
333319	Other commercial and service industry machinery manufacturing .....	1	26	10	1 267	51 644	740	1 297	25 722	165 349	113 383	270 976	7 294
3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	1	20	8	1 396	55 871	930	1 978	26 292	205 215	227 146	435 589	D

**Table 1. Industry Statistics for the State: 2002—Con.**

[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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>COLORADO—Con.</b>													
333	Machinery manufacturing—Con.												
3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing—Con.												
33341	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	1	20	8	1 396	55 871	930	1 978	26 292	205 215	227 146	435 589	D
333411	Air purification equipment manufacturing .....	1	9	2	127	5 293	74	156	2 475	9 179	10 674	19 922	201
333415	Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing .....	1	6	4	1 188	46 478	811	1 732	22 308	191 301	211 191	405 181	3 383
3335	Metalworking machinery manufacturing .....	1	84	13	1 016	43 842	705	1 415	25 523	80 955	31 558	115 033	D
33351	Metalworking machinery manufacturing .....	1	84	13	1 016	43 842	705	1 415	25 523	80 955	31 558	115 033	D
333511	Industrial mold manufacturing .....	—	31	5	484	21 508	349	752	12 594	44 526	13 860	60 192	3 831
333514	Special die and tool, die set, jig, and fixture manufacturing .....	2	26	2	223	9 644	155	287	5 923	14 687	5 795	20 848	534
333515	Cutting tool and machine tool accessory manufacturing...	4	17	1	110	4 044	75	126	2 535	8 810	2 521	11 427	339
3336	Engine, turbine, and power transmission equipment manufacturing .....	—	6	2	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, and power transmission equipment manufacturing .....	—	6	2	f	D	D	D	D	D	D	D	D
333618	Other engine equipment manufacturing .....	—	3	1	f	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing .....	1	84	21	2 378	111 730	1 272	2 644	44 898	305 283	162 855	461 774	D
33391	Pump and compressor manufacturing .....	—	10	3	532	32 844	238	525	11 591	94 128	49 883	136 517	D
333911	Pump and pumping equipment manufacturing ..	—	5	3	494	31 004	218	481	10 912	89 683	44 042	126 231	3 671
33392	Material handling equipment manufacturing .....	—	28	10	1 065	49 833	502	987	17 426	123 443	71 140	195 982	D
333922	Conveyor and conveying equipment manufacturing ..	—	16	6	601	32 090	267	548	8 751	97 350	48 517	143 634	5 084
333923	Overhead traveling crane, hoist, and monorail system manufacturing .....	1	5	1	c	D	D	D	D	D	D	D	136
333924	Industrial truck, tractor, trailer, and stacker machinery manufacturing ..	—	5	3	228	8 240	102	185	3 526	18 800	11 538	30 354	D
33399	All other general purpose machinery manufacturing ....	2	46	8	781	29 053	532	1 132	15 881	87 712	41 832	129 275	1 613
333993	Packaging machinery manufacturing .....	—	8	3	250	9 669	151	329	4 476	10 322	15 180	26 948	641
333995	Fluid power cylinder and actuator manufacturing ....	—	3	1	c	D	D	D	D	D	D	D	221
333999	All other miscellaneous general purpose machinery manufacturing .....	1	30	3	379	13 324	274	587	8 277	43 671	12 729	53 820	398
334	Computer and electronic product manufacturing .....	1	369	125	27 375	1 460 561	12 654	25 965	496 925	4 072 877	2 709 127	6 877 248	676 245
3341	Computer and peripheral equipment manufacturing .....	1	48	12	3 807	172 984	1 576	3 020	42 755	663 506	664 417	1 281 541	57 556
33411	Computer and peripheral equipment manufacturing ....	1	48	12	3 807	172 984	1 576	3 020	42 755	663 506	664 417	1 281 541	57 556
334111	Electronic computer manufacturing .....	9	12	1	c	D	D	D	D	D	D	D	772
334112	Computer storage device manufacturing .....	1	12	8	3 005	134 181	1 116	2 230	28 969	583 741	588 027	1 123 208	52 210
334119	Other computer peripheral equipment manufacturing ..	2	23	2	654	31 129	400	667	11 782	65 822	64 676	132 248	4 574
3342	Communications equipment manufacturing .....	1	48	21	4 127	248 461	1 407	2 879	56 052	325 271	629 557	1 045 800	117 341
33421	Telephone apparatus manufacturing .....	1	14	7	2 885	185 086	798	1 797	36 748	188 154	518 811	803 522	103 032
334210	Telephone apparatus manufacturing .....	1	14	7	2 885	185 086	798	1 797	36 748	188 154	518 811	803 522	103 032
33422	Radio and television broadcasting and wireless communications equipment manufacturing .....	4	19	8	906	49 091	415	724	13 979	93 685	76 467	164 226	3 153
334220	Radio and television broadcasting and wireless communications equipment manufacturing .....	4	19	8	906	49 091	415	724	13 979	93 685	76 467	164 226	3 153
33429	Other communications equipment manufacturing ....	—	15	6	336	14 284	194	358	5 325	43 432	34 279	78 052	11 156
334290	Other communications equipment manufacturing ..	—	15	6	336	14 284	194	358	5 325	43 432	34 279	78 052	11 156

**Table 1. Industry Statistics for the State: 2002—Con.**

[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]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>COLORADO—Con.</b>													
334	Computer and electronic product manufacturing—Con.												
3344	Semiconductor and other electronic component manufacturing .....	—	113	41	7 563	371 032	5 134	11 282	221 129	1 365 911	662 124	2 067 625	319 575
33441	Semiconductor and other electronic component manufacturing .....	—	113	41	7 563	371 032	5 134	11 282	221 129	1 365 911	662 124	2 067 625	319 575
334412	Bare printed circuit board manufacturing .....	1	28	9	777	28 393	496	967	13 852	59 568	47 992	105 569	D
334413	Semiconductor and related device manufacturing .....	—	25	8	3 785	204 352	3 046	7 113	153 485	966 899	191 276	1 191 234	D
334414	Electronic capacitor manufacturing .....	—	1	1	c	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) manufacturing .....	—	16	8	1 105	45 480	700	1 563	21 592	141 585	308 383	453 609	8 438
334419	Other electronic component manufacturing .....	—	32	13	1 637	83 856	703	1 275	27 718	157 017	102 688	264 791	18 215
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	1	123	44	11 428	651 631	4 221	8 199	168 158	1 677 564	723 747	2 409 666	179 014
33451	Navigational, measuring, electromedical, and control instruments manufacturing .....	1	123	44	11 428	651 631	4 221	8 199	168 158	1 677 564	723 747	2 409 666	179 014
334510	Electromedical and electrotherapeutic apparatus manufacturing .....	2	13	7	3 377	172 574	1 453	2 742	40 609	499 461	261 078	767 002	14 859
334511	Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing .....	—	9	5	812	42 901	415	733	16 662	372 130	97 724	464 123	D
334513	Instruments and related products manufacturing for measuring, displaying, and controlling industrial process variables .....	—	24	7	977	53 525	339	722	13 057	165 284	59 334	225 252	8 189
334514	Totalizing fluid meter and counting device manufacturing .....	—	3	1	c	D	D	D	D	D	D	D	D
334515	Instrument manufacturing for measuring and testing electricity and electrical signals .....	—	27	7	4 301	287 838	1 127	2 335	69 261	407 258	145 695	561 288	D
334516	Analytical laboratory instrument manufacturing .....	1	18	7	1 022	52 856	374	735	13 890	131 405	70 986	200 948	D
334517	Irradiation apparatus manufacturing .....	—	2	2	c	D	D	D	D	D	D	D	D
334519	Other measuring and controlling device manufacturing .....	4	21	6	444	19 217	278	493	8 565	40 541	21 292	60 466	1 904
3346	Manufacturing and reproducing magnetic and optical media .....	3	25	7	371	13 408	258	468	7 470	34 554	21 208	58 475	2 555
33461	Manufacturing and reproducing magnetic and optical media .....	3	25	7	371	13 408	258	468	7 470	34 554	21 208	58 475	2 555
334611	Software reproducing .....	3	8	1	105	4 219	78	132	2 683	11 865	6 317	18 093	451
334612	Prerecorded compact disc (except software), tape, and record reproducing .....	6	13	4	c	D	D	D	D	D	D	D	2 052
334613	Magnetic and optical recording media manufacturing .....	—	4	2	c	D	D	D	D	D	D	D	52
335	Electrical equipment, appliance, and component manufacturing .....	2	83	24	1 860	76 073	1 051	2 126	31 097	187 667	152 774	343 171	9 776
3351	Electric lighting equipment manufacturing .....	1	17	4	e	D	D	D	D	D	D	D	D
33512	Lighting fixture manufacturing ..	1	15	4	e	D	D	D	D	D	D	D	514
335122	Commercial, industrial, and institutional electric lighting fixture manufacturing .....	—	4	3	223	8 613	103	193	2 433	42 250	19 836	62 133	450
3353	Electrical equipment manufacturing .....	3	30	9	817	32 833	472	950	13 041	74 917	73 486	149 097	1 900
33531	Electrical equipment manufacturing .....	3	30	9	817	32 833	472	950	13 041	74 917	73 486	149 097	1 900
335311	Power, distribution, and specialty transformer manufacturing .....	9	3	1	c	D	D	D	D	D	D	D	D
335314	Relay and industrial control manufacturing .....	—	17	6	546	21 776	273	564	6 134	39 871	42 643	83 066	1 059
3359	Other electrical equipment and component manufacturing .....	2	35	11	741	31 658	413	850	13 383	61 241	54 280	117 573	7 341
33591	Battery manufacturing .....	—	5	2	e	D	D	D	D	D	D	D	D
335911	Storage battery manufacturing .....	—	2	2	c	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component manufacturing .....	5	20	5	307	11 971	167	319	4 299	19 645	19 332	39 392	1 696
335999	All other miscellaneous electrical equipment and component manufacturing ..	5	20	5	307	11 971	167	319	4 299	19 645	19 332	39 392	1 696

**Table 1. Industry Statistics for the State: 2002—Con.**

[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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>COLORADO—Con.</b>													
336	Transportation equipment manufacturing .....	—	130	39	11 402	729 492	8 670	16 086	470 794	1 386 293	1 735 056	3 311 181	98 652
3361	Motor vehicle manufacturing .....	—	4	1	e	D	D	D	D	D	D	D	D
33612	Heavy duty truck manufacturing .....	—	3	1	e	D	D	D	D	D	D	D	D
336120	Heavy duty truck manufacturing .....	—	3	1	e	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing .....	2	32	12	851	30 228	630	1 259	18 014	37 377	77 390	126 777	D
33621	Motor vehicle body and trailer manufacturing .....	2	32	12	851	30 228	630	1 259	18 014	37 377	77 390	126 777	D
336211	Motor vehicle body manufacturing .....	2	12	6	326	11 719	255	500	7 392	9 979	28 778	50 674	803
336212	Truck trailer manufacturing ..	—	6	4	383	13 435	273	612	7 827	20 288	42 728	62 442	D
336214	Travel trailer and camper manufacturing .....	4	11	2	c	D	D	D	D	D	D	D	35
3363	Motor vehicle parts manufacturing .....	1	46	9	1 681	61 657	1 191	2 147	32 921	153 679	129 588	282 872	4 265
33636	Motor vehicle seating and interior trim manufacturing ....	1	4	2	e	D	D	D	D	D	D	D	D
336360	Motor vehicle seating and interior trim manufacturing ..	1	4	2	e	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts manufacturing .....	1	16	4	1 146	40 578	832	1 415	21 542	96 817	98 703	197 192	2 684
336399	All other motor vehicle parts manufacturing .....	1	16	4	1 146	40 578	832	1 415	21 542	96 817	98 703	197 192	2 684
3364	Aerospace product and parts manufacturing .....	—	23	13	7 854	601 625	6 203	11 422	403 285	1 105 130	1 427 109	2 697 363	90 922
33641	Aerospace product and parts manufacturing .....	—	23	13	7 854	601 625	6 203	11 422	403 285	1 105 130	1 427 109	2 697 363	90 922
336411	Aircraft manufacturing .....	2	4	1	c	D	D	D	D	D	D	D	D
336412	Aircraft engine and engine parts manufacturing .....	—	3	2	c	D	D	D	D	D	D	D	D
336413	Other aircraft parts and auxiliary equipment manufacturing .....	—	15	9	g	D	D	D	D	D	D	D	D
336414	Guided missile and space vehicle manufacturing .....	—	1	1	i	D	D	D	D	D	D	D	D
3369	Other transportation equipment manufacturing .....	1	21	3	495	17 892	240	348	6 683	55 908	26 031	83 241	D
33699	Other transportation equipment manufacturing .....	1	21	3	495	17 892	240	348	6 683	55 908	26 031	83 241	D
336991	Motorcycle, bicycle, and parts manufacturing .....	—	12	2	359	12 582	188	245	4 985	43 497	12 687	54 533	D
336999	All other transportation equipment manufacturing ..	1	9	1	136	5 310	52	103	1 698	12 411	13 344	28 708	629
337	Furniture and related product manufacturing .....	1	364	67	5 946	184 152	4 424	8 919	118 456	404 732	261 168	663 492	D
3371	Household and institutional furniture and kitchen cabinet manufacturing .....	2	276	34	3 303	88 278	2 575	5 065	61 983	188 222	99 125	281 574	D
33711	Wood kitchen cabinet and countertop manufacturing ....	2	170	22	1 637	47 562	1 215	2 368	30 396	92 284	56 590	148 434	3 712
337110	Wood kitchen cabinet and countertop manufacturing ..	2	170	22	1 637	47 562	1 215	2 368	30 396	92 284	56 590	148 434	3 712
33712	Household and institutional furniture manufacturing .....	3	106	12	1 666	40 716	1 360	2 697	31 587	95 938	42 535	133 140	D
337122	Nonupholstered wood household furniture manufacturing .....	2	79	9	1 303	30 610	1 085	2 129	24 601	73 594	24 935	93 392	D
337127	Institutional furniture manufacturing .....	4	5	3	243	7 078	176	383	4 718	15 073	10 623	25 516	318
3372	Office furniture (including fixtures) manufacturing .....	1	72	25	1 936	72 272	1 317	2 796	41 411	141 533	92 984	238 235	D
33721	Office furniture (including fixtures) manufacturing .....	1	72	25	1 936	72 272	1 317	2 796	41 411	141 533	92 984	238 235	D
337212	Custom architectural woodwork and millwork manufacturing .....	—	40	13	912	33 170	637	1 402	21 008	61 847	40 710	105 911	2 302
337214	Office furniture (except wood) manufacturing .....	—	3	1	c	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, and locker manufacturing .....	2	21	9	783	28 839	558	1 144	16 452	58 034	38 323	96 063	D
3379	Other furniture related product manufacturing .....	—	16	8	707	23 602	532	1 058	15 062	74 977	69 059	143 683	2 616
33791	Mattress manufacturing .....	—	8	5	522	18 752	410	850	12 572	66 298	62 196	128 095	2 438
337910	Mattress manufacturing .....	—	8	5	522	18 752	410	850	12 572	66 298	62 196	128 095	2 438
33792	Blind and shade manufacturing .....	6	8	3	185	4 850	122	208	2 490	8 679	6 863	15 588	178
337920	Blind and shade manufacturing .....	6	8	3	185	4 850	122	208	2 490	8 679	6 863	15 588	178

**Table 1. Industry Statistics for the State: 2002—Con.**

[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]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>COLORADO—Con.</b>													
339	Miscellaneous manufacturing . . . . .	1	686	109	10 187	349 464	6 003	11 581	159 866	1 187 390	433 823	1 602 639	55 970
3391	Medical equipment and supplies manufacturing . . . . .	—	269	42	5 400	197 828	2 802	5 729	84 362	773 090	212 474	975 301	37 586
33911	Medical equipment and supplies manufacturing . . . . .	—	269	42	5 400	197 828	2 802	5 729	84 362	773 090	212 474	975 301	37 586
339111	Laboratory apparatus and furniture manufacturing . . . . .	—	9	5	367	17 216	291	621	12 052	33 202	22 883	56 493	1 258
339112	Surgical and medical instrument manufacturing . . . . .	—	33	15	2 366	97 981	1 182	2 535	34 889	565 536	99 795	662 381	17 175
339113	Surgical appliance and supplies manufacturing . . . . .	1	40	7	1 064	28 617	355	761	9 429	63 064	43 439	105 369	14 053
339114	Dental equipment and supplies manufacturing . . . . .	3	26	6	518	19 912	209	353	6 202	35 704	26 742	56 920	2 563
339115	Ophthalmic goods manufacturing . . . . .	4	14	3	177	6 152	118	224	2 998	19 352	8 612	27 968	778
339116	Dental laboratories . . . . .	3	147	6	908	27 950	647	1 235	18 792	56 232	11 003	66 170	1 759
3399	Other miscellaneous manufacturing . . . . .	2	417	67	4 787	151 636	3 201	5 852	75 504	414 300	221 349	627 338	18 384
33991	Jewelry and silverware manufacturing . . . . .	5	48	5	324	8 362	225	375	4 685	20 619	11 918	32 006	300
339911	Jewelry (except costume) manufacturing . . . . .	6	31	2	205	5 520	139	220	3 005	13 087	10 268	23 339	190
33992	Sporting and athletic goods manufacturing . . . . .	3	61	12	913	30 074	622	1 142	14 831	111 821	58 112	166 938	2 559
339920	Sporting and athletic goods manufacturing . . . . .	3	61	12	913	30 074	622	1 142	14 831	111 821	58 112	166 938	2 559
33993	Doll, toy, and game manufacturing . . . . .	—	27	9	566	16 906	387	693	7 137	76 109	35 698	104 381	2 581
339931	Doll and stuffed toy manufacturing . . . . .	—	6	5	312	7 613	218	391	3 742	42 202	16 002	52 230	1 077
339932	Game, toy, and children's vehicle manufacturing . . . . .	1	21	4	254	9 293	169	302	3 395	33 907	19 696	52 151	1 504
33994	Office supplies (except paper) manufacturing . . . . .	1	16	3	418	9 847	359	651	7 291	21 276	15 470	36 770	283
339944	Carbon paper and inked ribbon manufacturing . . . . .	1	2	2	e	D	D	D	D	D	D	D	D
33995	Sign manufacturing . . . . .	3	142	18	1 272	44 640	814	1 501	21 733	86 501	48 605	135 070	3 301
339950	Sign manufacturing . . . . .	3	142	18	1 272	44 640	814	1 501	21 733	86 501	48 605	135 070	3 301
33999	All other miscellaneous manufacturing . . . . .	3	123	20	1 294	41 807	794	1 490	19 827	97 974	51 546	152 173	9 360
339991	Gasket, packing, and sealing device manufacturing . . . . .	1	5	4	182	6 517	103	226	2 745	19 243	5 857	24 806	D
339999	All other miscellaneous manufacturing . . . . .	4	105	14	987	30 854	632	1 157	15 556	68 418	33 499	104 808	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 100 employees or more are 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 249 employees; e–250 to 499 employees; 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 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.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
	<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA</b>												
31-33	Manufacturing .....	1	'3 168	'786	'90 371	'4 058 537	'55 855	'109 556	'2 006 477	'10 780 989	'9 143 796	'20 109 813	'848 081
311	Food manufacturing .....	1	240	67	7 855	259 336	5 188	10 432	155 424	1 022 576	925 114	1 950 968	37 262
3111	Animal food manufacturing .....	-	11	3	e	D	D	D	D	D	D	D	D
31111	Animal food manufacturing .....	-	11	3	e	D	D	D	D	D	D	D	D
3113	Sugar and confectionery product manufacturing .....	-	16	4	491	13 596	368	721	10 445	70 369	28 751	105 518	D
31133	Confectionery manufacturing from purchased chocolate .....	-	10	3	e	D	D	D	D	D	D	D	195
311330	Confectionery manufacturing from purchased chocolate .....	-	10	3	e	D	D	D	D	D	D	D	195
3115	Dairy product manufacturing .....	3	13	7	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) manufacturing .....	3	7	4	f	D	D	D	D	D	D	D	D
311511	Fluid milk manufacturing .....	3	5	4	f	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing .....	-	33	16	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing .....	-	33	16	g	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses .....	-	20	11	f	D	D	D	D	D	D	D	D
311615	Poultry processing .....	-	2	1	f	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing .....	2	104	22	h	D	D	D	D	D	D	D	D
31181	Bread and bakery product manufacturing .....	3	92	18	g	D	D	D	D	D	D	D	D
311811	Retail bakeries .....	3	56	5	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries .....	3	34	12	g	D	D	D	D	D	D	D	D
3119	Other food manufacturing .....	1	41	10	1 183	38 912	754	1 415	19 476	181 709	100 791	285 284	D
31191	Snack food manufacturing .....	-	5	3	e	D	D	D	D	D	D	D	D
311919	Other snack food manufacturing .....	-	4	3	e	D	D	D	D	D	D	D	D
31192	Coffee and tea manufacturing .....	-	4	1	e	D	D	D	D	D	D	D	D
311920	Coffee and tea manufacturing .....	-	4	1	e	D	D	D	D	D	D	D	D
31199	All other food manufacturing .....	6	29	5	e	D	D	D	D	D	D	D	D
311991	Perishable prepared food manufacturing .....	5	10	4	e	D	D	D	D	D	D	D	D
312	Beverage and tobacco product manufacturing .....	-	15	10	i	D	D	D	D	D	D	D	D
3121	Beverage manufacturing .....	-	15	10	i	D	D	D	D	D	D	D	D
31211	Soft drink and ice manufacturing .....	-	7	6	f	D	D	D	D	D	D	D	D
312111	Soft drink manufacturing .....	-	5	5	f	D	D	D	D	D	D	D	D
31212	Breweries .....	-	8	4	h	D	D	D	D	D	D	D	D
312120	Breweries .....	-	8	4	h	D	D	D	D	D	D	D	D
314	Textile product mills .....	-	70	16	g	D	D	D	D	D	D	D	D
3141	Textile furnishings mills .....	7	26	4	e	D	D	D	D	D	D	D	D
31412	Curtain and linen mills .....	6	24	4	e	D	D	D	D	D	D	D	D
3149	Other textile product mills .....	-	44	12	g	D	D	D	D	D	D	D	D
31491	Textile bag and canvas mills .....	-	19	7	e	D	D	D	D	D	D	D	D
314912	Canvas and related product mills .....	-	13	4	e	D	D	D	D	D	D	D	D
31499	All other textile product mills .....	-	25	5	g	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills .....	-	24	4	g	D	D	D	D	D	D	D	D
315	Apparel manufacturing .....	4	61	9	f	D	D	D	D	D	D	D	D
3152	Cut and sew apparel manufacturing .....	-	40	6	e	D	D	D	D	D	D	D	D
3159	Apparel accessories and other apparel manufacturing .....	9	19	3	e	D	D	D	D	D	D	D	D
31599	Apparel accessories and other apparel manufacturing .....	9	19	3	e	D	D	D	D	D	D	D	D
315991	Hat, cap, and millinery manufacturing .....	9	5	2	e	D	D	D	D	D	D	D	D

See footnotes at end of table.



**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
	<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>												
321	Wood product manufacturing .....	1	103	23	1 862	56 182	1 390	2 738	35 229	111 044	141 757	251 117	D
3212	Veneer, plywood, and engineered wood product manufacturing ....	3	18	5	e	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing .....	3	18	5	e	D	D	D	D	D	D	D	D
321214	Truss manufacturing .....	1	13	3	e	D	D	D	D	D	D	D	D
3219	Other wood product manufacturing .....	1	78	16	1 428	43 842	1 039	2 061	26 256	89 664	110 928	200 383	D
32191	Millwork .....	1	46	12	g	D	D	D	D	D	D	D	D
321911	Wood window and door manufacturing .....	1	15	2	e	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, and planing .....	—	8	3	e	D	D	D	D	D	D	D	D
321918	Other millwork (including flooring) .....	2	23	7	e	D	D	D	D	D	D	D	D
322	Paper manufacturing .....	—	31	17	g	D	D	D	D	D	D	D	13 459
3222	Converted paper product manufacturing .....	—	31	17	g	D	D	D	D	D	D	D	13 459
32221	Paperboard container manufacturing .....	—	18	13	g	D	D	D	D	D	D	D	D
322211	Corrugated and solid fiber box manufacturing .....	—	10	7	f	D	D	D	D	D	D	D	D
322212	Folding paperboard box manufacturing .....	—	6	5	f	D	D	D	D	D	D	D	2 379
32223	Stationery product manufacturing .....	1	8	2	e	D	D	D	D	D	D	D	D
322232	Envelope manufacturing ....	—	4	2	e	D	D	D	D	D	D	D	D
323	Printing and related support activities .....	2	'484	'83	'7 091	'249 465	'4 935	'8 983	'143 996	'499 787	'309 627	'810 903	'25 359
3231	Printing and related support activities .....	2	'484	'83	'7 091	'249 465	'4 935	'8 983	'143 996	'499 787	'309 627	'810 903	'25 359
32311	Printing .....	2	'436	'78	'6 737	'238 649	'4 674	'8 526	'136 675	'479 684	'294 897	'775 834	D
323110	Commercial lithographic printing .....	2	181	48	4 140	154 248	2 932	5 237	89 970	305 192	184 437	489 202	17 285
323113	Commercial screen printing ..	1	51	11	855	26 039	553	1 148	13 292	54 749	32 493	88 928	1 814
323114	Quick printing .....	3	114	3	f	D	D	D	D	D	D	D	D
323115	Digital printing .....	2	29	5	411	15 416	252	372	7 074	24 283	10 135	34 473	1 296
323116	Manifold business forms printing .....	—	'10	'5	e	D	D	D	D	D	D	D	D
32312	Support activities for printing ...	2	48	5	354	10 816	261	457	7 321	20 103	14 730	35 069	D
324	Petroleum and coal products manufacturing .....	—	18	6	621	34 638	397	800	20 004	135 530	663 441	793 691	D
3241	Petroleum and coal products manufacturing .....	—	18	6	621	34 638	397	800	20 004	135 530	663 441	793 691	D
32412	Asphalt paving, roofing, and saturated materials manufacturing .....	—	12	4	e	D	D	D	D	D	D	D	D
325	Chemical manufacturing .....	3	122	37	4 104	228 722	2 002	3 937	88 968	769 227	433 521	1 120 847	88 123
3254	Pharmaceutical and medicine manufacturing .....	3	32	17	2 766	171 027	1 217	2 588	63 293	576 692	291 000	784 261	75 243
32541	Pharmaceutical and medicine manufacturing .....	3	32	17	2 766	171 027	1 217	2 588	63 293	576 692	291 000	784 261	75 243
325411	Medicinal and botanical manufacturing .....	—	8	4	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing .....	1	9	5	f	D	D	D	D	D	D	D	D
325413	In-vitro diagnostic substance manufacturing .....	2	10	4	e	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) manufacturing ..	9	5	4	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, and toilet preparation manufacturing .	3	33	10	f	D	D	D	D	D	D	D	D
32561	Soap and cleaning compound manufacturing .....	3	21	5	e	D	D	D	D	D	D	D	D
32562	Toilet preparation manufacturing .....	3	12	5	e	D	D	D	D	D	D	D	D
325620	Toilet preparation manufacturing .....	3	12	5	e	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing .....	2	140	43	3 090	106 564	2 153	4 399	58 825	288 983	277 719	568 013	20 064
3261	Plastics product manufacturing ..	2	122	40	h	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing .....	3	77	25	2 082	69 918	1 454	2 953	38 504	189 097	128 130	319 243	10 447
326199	All other plastics product manufacturing .....	3	74	25	g	D	D	D	D	D	D	D	D

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
	<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>												
327	Nonmetallic mineral product manufacturing .....	-	147	68	5 974	226 734	4 504	9 010	145 049	605 714	376 208	987 815	D
3271	Clay product and refractory manufacturing .....	-	18	6	g	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, and plumbing fixture manufacturing .....	-	9	2	g	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
32712	Clay building material and refractories manufacturing .....	-	9	4	e	D	D	D	D	D	D	D	D
327121	Brick and structural clay tile manufacturing .....	-	4	4	e	D	D	D	D	D	D	D	D
3272	Glass and glass product manufacturing .....	2	31	6	f	D	D	D	D	D	D	D	D
32721	Glass and glass product manufacturing .....	2	31	6	f	D	D	D	D	D	D	D	D
327213	Glass container manufacturing .....	-	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product manufacturing made of purchased glass ..	7	20	4	e	D	D	D	D	D	D	D	D
3273	Cement and concrete product manufacturing .....	-	70	47	2 872	98 912	2 346	4 398	70 343	317 778	246 800	566 763	D
32732	Ready-mix concrete manufacturing .....	-	40	29	g	D	D	D	D	D	D	D	D
327320	Ready-mix concrete manufacturing .....	-	40	29	g	D	D	D	D	D	D	D	D
32733	Concrete pipe, brick, and block manufacturing .....	-	9	6	f	D	D	D	D	D	D	D	D
327331	Concrete block and brick manufacturing .....	-	6	4	e	D	D	D	D	D	D	D	D
327332	Concrete pipe manufacturing .....	-	3	2	e	D	D	D	D	D	D	D	D
32739	Other concrete product manufacturing .....	1	20	11	f	D	D	D	D	D	D	D	D
327390	Other concrete product manufacturing .....	1	20	11	f	D	D	D	D	D	D	D	D
3279	Other nonmetallic mineral product manufacturing .....	1	25	9	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product manufacturing .....	1	24	8	f	D	D	D	D	D	D	D	D
327991	Cut stone and stone product manufacturing .....	2	16	4	f	D	D	D	D	D	D	D	D
331	Primary metal manufacturing .....	1	26	10	f	D	D	D	D	D	D	D	D
3311	Iron and steel mills and ferroalloy manufacturing .....	-	5	3	e	D	D	D	D	D	D	D	D
33111	Iron and steel mills and ferroalloy manufacturing .....	-	5	3	e	D	D	D	D	D	D	D	D
331111	Iron and steel mills .....	-	5	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing .....	2	509	99	8 175	311 629	5 705	11 404	188 934	760 755	640 611	1 402 767	31 730
3321	Forging and stamping.....	-	15	7	359	12 752	278	587	8 414	34 078	31 107	64 781	1 158
33211	Forging and stamping.....	-	15	7	359	12 752	278	587	8 414	34 078	31 107	64 781	1 158
3323	Architectural and structural metals manufacturing .....	2	121	43	2 862	103 030	1 950	4 033	60 730	209 910	216 364	426 597	13 074
33231	Plate work and fabricated structural product manufacturing .....	2	40	20	1 049	45 254	714	1 444	24 959	95 266	120 750	215 486	3 414
332312	Fabricated structural metal manufacturing .....	2	32	16	f	D	D	D	D	D	D	D	D
33232	Ornamental and architectural metal products manufacturing .....	2	81	23	1 813	57 776	1 236	2 589	35 771	114 644	95 614	211 111	9 660
332321	Metal window and door manufacturing .....	3	9	4	413	12 941	309	651	7 477	26 105	35 351	61 122	848
332322	Sheet metal work manufacturing .....	2	41	15	970	33 474	699	1 447	20 987	67 922	47 658	114 900	7 891
332323	Ornamental and architectural metal work manufacturing ..	1	31	4	430	11 361	228	491	7 307	20 617	12 605	35 089	921
3324	Boiler, tank, and shipping container manufacturing .....	-	11	4	f	D	D	D	D	D	D	D	D
33243	Metal can, box, and other metal container (light gauge) manufacturing .....	-	8	2	f	D	D	D	D	D	D	D	D
332431	Metal can manufacturing .....	-	3	2	e	D	D	D	D	D	D	D	D

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
	<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>												
332	Fabricated metal product manufacturing—Con.												
3326	Spring and wire product manufacturing .....	4	19	3	e	D	D	D	D	D	D	D	D
33261	Spring and wire product manufacturing .....	4	19	3	e	D	D	D	D	D	D	D	D
332618	Other fabricated wire product manufacturing .....	5	16	2	e	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing .....	3	220	22	1 979	74 672	1 452	2 677	47 766	151 316	65 658	216 252	9 527
33271	Machine shops .....	3	190	16	1 465	54 819	1 074	1 976	35 708	106 802	45 473	151 891	6 335
332710	Machine shops .....	3	190	16	1 465	54 819	1 074	1 976	35 708	106 802	45 473	151 891	6 335
33272	Turned product and screw, nut, and bolt manufacturing .....	1	30	6	514	19 853	378	701	12 058	44 514	20 185	64 361	3 192
332721	Precision turned product manufacturing .....	2	25	4	e	D	D	D	D	D	D	D	D
3328	Coating, engraving, heat treating, and allied activities .....	1	43	8	f	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, and allied activities ..	1	43	8	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product manufacturing .....	2	66	9	g	D	D	D	D	D	D	D	D
33291	Metal valve manufacturing ....	2	8	4	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	All other fabricated metal product manufacturing .....	4	58	5	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product manufacturing .....	4	47	5	e	D	D	D	D	D	D	D	D
333	Machinery manufacturing .....	1	214	54	5 283	243 985	2 870	5 701	102 167	612 411	415 051	1 026 951	36 395
3332	Industrial machinery manufacturing .....	—	29	7	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery manufacturing .....	—	24	7	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery manufacturing .....	1	15	4	e	D	D	D	D	D	D	D	D
3333	Commercial and service industry machinery manufacturing .....	—	42	18	1 985	87 451	1 143	2 166	39 931	235 546	152 965	379 574	19 882
33331	Commercial and service industry machinery manufacturing .....	—	42	18	1 985	87 451	1 143	2 166	39 931	235 546	152 965	379 574	19 882
333314	Optical instrument and lens manufacturing .....	—	17	7	f	D	D	D	D	D	D	D	D
333319	Other commercial and service industry machinery manufacturing .....	1	18	8	g	D	D	D	D	D	D	D	D
3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	3	12	5	e	D	D	D	D	D	D	D	1 188
33341	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	3	12	5	e	D	D	D	D	D	D	D	1 188
333415	Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing .....	4	3	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery manufacturing .....	2	59	8	f	D	D	D	D	D	D	D	D
33351	Metalworking machinery manufacturing .....	2	59	8	f	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing .....	—	53	13	g	D	D	D	D	D	D	D	8 651
33391	Pump and compressor manufacturing .....	—	7	2	e	D	D	D	D	D	D	D	D
333911	Pump and pumping equipment manufacturing ..	—	3	2	e	D	D	D	D	D	D	D	D
33392	Material handling equipment manufacturing .....	—	20	7	731	37 567	305	631	10 435	90 241	52 816	145 221	4 801
333922	Conveyor and conveying equipment manufacturing ..	—	12	4	e	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing ....	1	26	4	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general purpose machinery manufacturing .....	1	18	3	e	D	D	D	D	D	D	D	D

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>													
334	Computer and electronic product manufacturing .....	1	246	82	14 297	763 711	5 861	11 056	196 589	2 061 528	1 566 541	3 737 636	230 468
3341	Computer and peripheral equipment manufacturing .....	2	30	6	1 980	119 667	583	973	20 153	442 023	305 078	767 541	D
33411	Computer and peripheral equipment manufacturing ....	2	30	6	1 980	119 667	583	973	20 153	442 023	305 078	767 541	D
334112	Computer storage device manufacturing .....	2	6	4	g	D	D	D	D	D	D	D	D
334119	Other computer peripheral equipment manufacturing ..	2	15	1	e	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing .....	1	40	18	3 974	241 397	1 336	2 773	54 794	298 712	613 275	1 003 778	D
33421	Telephone apparatus manufacturing .....	1	13	7	h	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing .....	1	13	7	h	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment manufacturing .....	4	15	7	f	D	D	D	D	D	D	D	D
334220	Radio and television broadcasting and wireless communications equipment manufacturing .....	4	15	7	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing .....	1	63	23	2 022	80 148	1 121	2 048	31 773	168 621	136 660	301 658	D
33441	Semiconductor and other electronic component manufacturing .....	1	63	23	2 022	80 148	1 121	2 048	31 773	168 621	136 660	301 658	D
334412	Bare printed circuit board manufacturing .....	1	20	8	699	26 261	431	825	12 559	55 555	45 866	99 445	D
334413	Semiconductor and related device manufacturing .....	-	8	2	e	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) manufacturing .....	3	9	5	e	D	D	D	D	D	D	D	D
334419	Other electronic component manufacturing .....	-	18	7	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	1	84	29	5 981	310 744	2 580	4 844	83 195	1 124 269	492 608	1 617 786	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	1	84	29	5 981	310 744	2 580	4 844	83 195	1 124 269	492 608	1 617 786	D
334510	Electromedical and electrotherapeutic apparatus manufacturing ...	2	13	7	3 377	172 574	1 453	2 742	40 609	499 461	261 078	767 002	D
334511	Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing .....	-	8	5	f	D	D	D	D	D	D	D	D
334513	Instruments and related products manufacturing for measuring, displaying, and controlling industrial process variables .....	-	19	6	946	52 232	326	692	12 641	161 814	58 757	221 205	D
3346	Manufacturing and reproducing magnetic and optical media .....	4	21	6	e	D	D	D	D	D	D	D	D
33461	Manufacturing and reproducing magnetic and optical media ...	4	21	6	e	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing .....	2	49	13	f	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing .....	2	21	6	e	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing .....	-	71	22	i	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing .....	1	19	8	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing .....	1	19	8	f	D	D	D	D	D	D	D	D
336212	Truck trailer manufacturing ..	-	2	2	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing .....	2	27	6	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts manufacturing .....	1	10	3	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts manufacturing .....	1	10	3	g	D	D	D	D	D	D	D	D

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)					
	<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>													
336	Transportation equipment manufacturing—Con.													
3364	Aerospace product and parts manufacturing .....	-	14	8	i	D	D	D	D	D	D	D	D	
33641	Aerospace product and parts manufacturing .....	-	14	8	i	D	D	D	D	D	D	D	D	
336413	Other aircraft parts and auxiliary equipment manufacturing .....	-	8	5	e	D	D	D	D	D	D	D	D	
336414	Guided missile and space vehicle manufacturing .....	-	1	1	i	D	D	D	D	D	D	D	D	
337	Furniture and related product manufacturing .....	1	177	49		4 167	133 659	3 077	6 357	84 898	298 088	200 882	497 543	D
3371	Household and institutional furniture and kitchen cabinet manufacturing .....	2	121	25	g	D	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet and countertop manufacturing ....	1	71	15	f	D	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet and countertop manufacturing ..	1	71	15	f	D	D	D	D	D	D	D	D	D
33712	Household and institutional furniture manufacturing .....	2	50	10		1 299	31 957	1 056	2 153	24 973	75 035	27 599	97 655	D
337122	Nonupholstered wood household furniture manufacturing .....	2	33	8	g	D	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) manufacturing .....	1	42	17		1 240	49 321	808	1 746	26 536	91 771	66 700	162 766	D
33721	Office furniture (including fixtures) manufacturing .....	1	42	17		1 240	49 321	808	1 746	26 536	91 771	66 700	162 766	D
337212	Custom architectural woodwork and millwork manufacturing .....	-	25	9	f	D	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, and locker manufacturing .....	4	11	5	e	D	D	D	D	D	D	D	D	D
3379	Other furniture related product manufacturing .....	-	14	7	f	D	D	D	D	D	D	D	D	D
33791	Mattress manufacturing .....	-	7	5	f	D	D	D	D	D	D	D	D	D
337910	Mattress manufacturing .....	-	7	5	f	D	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing .....	2	419	76		7 026	234 990	4 090	8 114	107 480	665 573	299 416	954 834	44 092
3391	Medical equipment and supplies manufacturing .....	1	171	35		3 865	135 931	1 920	4 010	56 129	373 749	147 873	517 511	30 951
33911	Medical equipment and supplies manufacturing .....	1	171	35		3 865	135 931	1 920	4 010	56 129	373 749	147 873	517 511	30 951
339111	Laboratory apparatus and furniture manufacturing ....	-	6	5	e	D	D	D	D	D	D	D	D	D
339112	Surgical and medical instrument manufacturing ..	-	26	12	g	D	D	D	D	D	D	D	D	D
339113	Surgical appliance and supplies manufacturing ....	1	22	5	f	810	21 063	202	451	6 190	42 197	31 438	72 264	D
339116	Dental laboratories .....	2	91	6		D	D	D	D	D	D	D	D	1 249
3399	Other miscellaneous manufacturing .....	3	248	41		3 161	99 059	2 170	4 104	51 351	291 824	151 543	437 323	13 141
33992	Sporting and athletic goods manufacturing .....	3	43	7	f	D	D	D	D	D	D	D	D	D
339920	Sporting and athletic goods manufacturing .....	3	43	7	f	D	D	D	D	D	D	D	D	D
33993	Doll, toy, and game manufacturing .....	-	16	5		359	9 194	254	454	4 323	50 185	23 574	67 845	D
339931	Doll and stuffed toy manufacturing .....	-	4	3	e	D	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) manufacturing .....	-	9	2	e	D	D	D	D	D	D	D	D	D
339944	Carbon paper and inked ribbon manufacturing .....	-	1	1	e	D	D	D	D	D	D	D	D	D
33995	Sign manufacturing .....	4	83	10		690	24 893	456	867	12 803	48 540	29 003	77 624	D
339950	Sign manufacturing .....	4	83	10		690	24 893	456	867	12 803	48 540	29 003	77 624	D
33999	All other miscellaneous manufacturing .....	4	76	16		874	28 706	525	1 011	12 594	66 763	30 917	100 139	D
339999	All other miscellaneous manufacturing .....	5	63	11	f	D	D	D	D	D	D	D	D	D
	<b>Boulder, CO Metropolitan Statistical Area</b>													
31-33	Manufacturing .....	2	581	146		16 770	771 640	8 580	16 864	278 814	2 191 400	1 267 748	3 400 112	199 511

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
	<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>												
	<b>Boulder, CO Metropolitan Statistical Area—Con.</b>												
311	Food manufacturing .....	1	37	9	1 620	55 510	1 162	2 588	35 026	145 736	135 490	283 981	4 169
3116	Animal slaughtering and processing .....	—	5	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing .....	—	5	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing .....	—	1	1	f	D	D	D	D	D	D	D	D
3119	Other food manufacturing .....	1	9	2	406	16 141	208	389	6 208	68 053	45 401	116 289	D
31192	Coffee and tea manufacturing .	—	1	1	e	D	D	D	D	D	D	D	D
311920	Coffee and tea manufacturing .....	—	1	1	e	D	D	D	D	D	D	D	D
321	Wood product manufacturing .....	—	19	4	511	13 418	391	701	9 152	22 567	59 960	81 907	D
3219	Other wood product manufacturing .....	—	15	4	475	12 256	362	639	8 384	20 205	56 285	76 236	D
32191	Millwork .....	—	11	4	e	D	D	D	D	D	D	D	D
321912	Cut stock, resawing lumber, and planing .....	—	2	2	e	D	D	D	D	D	D	D	D
323	Printing and related support activities .....	5	55	10	824	30 398	575	1 040	16 931	53 963	34 450	88 170	3 396
3231	Printing and related support activities .....	5	55	10	824	30 398	575	1 040	16 931	53 963	34 450	88 170	3 396
32311	Printing .....	5	52	10	817	30 109	570	1 032	16 749	53 457	34 337	87 551	D
323110	Commercial lithographic printing .....	6	21	4	374	14 805	271	527	9 195	27 544	18 267	45 745	2 173
325	Chemical manufacturing .....	5	27	13	1 750	115 694	529	1 098	30 618	374 173	153 613	427 233	66 376
3254	Pharmaceutical and medicine manufacturing .....	5	15	10	1 618	107 649	494	1 032	29 247	356 768	141 190	397 057	65 493
32541	Pharmaceutical and medicine manufacturing .....	5	15	10	1 618	107 649	494	1 032	29 247	356 768	141 190	397 057	65 493
325411	Medicinal and botanical manufacturing .....	—	6	4	606	40 203	332	696	19 904	81 050	54 736	143 371	19 993
325413	In-vitro diagnostic substance manufacturing .....	1	4	4	e	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) manufacturing ..	9	2	2	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing .....	3	30	9	644	20 031	439	860	10 868	68 029	28 738	97 393	3 224
3261	Plastics product manufacturing ..	3	28	9	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing .....	3	21	7	527	17 274	352	694	9 405	59 871	22 402	83 078	2 581
326199	All other plastics product manufacturing .....	3	20	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing .....	—	29	11	561	19 366	432	827	13 331	76 283	37 774	120 716	D
3273	Cement and concrete product manufacturing .....	—	10	6	279	10 656	227	437	7 966	56 907	24 942	85 614	D
332	Fabricated metal product manufacturing .....	5	64	11	880	33 160	623	1 177	19 216	69 811	42 137	113 396	8 327
3323	Architectural and structural metals manufacturing .....	3	15	4	319	11 183	241	469	7 134	23 663	14 092	37 639	5 618
33232	Ornamental and architectural metal products manufacturing .....	2	10	4	289	9 951	219	428	6 456	21 146	11 674	32 631	5 473
332322	Sheet metal work manufacturing .....	2	6	4	268	9 086	204	397	5 908	18 991	10 368	29 170	5 420
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing .....	4	34	4	287	10 624	229	394	7 193	21 170	6 361	27 647	1 152
333	Machinery manufacturing .....	1	52	13	982	42 904	617	1 237	19 878	82 844	58 140	144 912	15 040
3333	Commercial and service industry machinery manufacturing .....	—	15	9	682	30 609	422	861	13 676	55 626	36 810	93 034	13 420
33331	Commercial and service industry machinery manufacturing .....	—	15	9	682	30 609	422	861	13 676	55 626	36 810	93 034	13 420
333314	Optical instrument and lens manufacturing .....	—	11	6	513	24 870	287	596	10 492	42 482	26 705	70 052	D

See footnotes at end of table.



**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>													
<b>Boulder, CO Metropolitan Statistical Area—Con.</b>													
334	Computer and electronic product manufacturing .....	2	108	31	6 297	341 728	2 366	4 339	77 267	1 030 958	578 588	1 634 377	71 641
3341	Computer and peripheral equipment manufacturing .....	2	16	4	1 630	95 113	517	845	17 983	383 416	255 500	661 652	33 046
33411	Computer and peripheral equipment manufacturing ....	2	16	4	1 630	95 113	517	845	17 983	383 416	255 500	661 652	33 046
334112	Computer storage device manufacturing .....	2	4	3	1 288	75 409	343	606	12 422	345 012	215 265	581 263	D
334119	Other computer peripheral equipment manufacturing ..	—	7	1	329	19 155	169	233	5 432	37 505	39 217	78 471	D
3342	Communications equipment manufacturing .....	5	19	5	903	57 458	295	547	9 888	83 849	63 363	154 651	D
33421	Telephone apparatus manufacturing .....	6	5	2	e	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing .....	6	5	2	e	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment manufacturing .....	4	8	2	e	D	D	D	D	D	D	D	D
334220	Radio and television broadcasting and wireless communications equipment manufacturing .....	4	8	2	e	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing .....	2	25	8	749	29 884	382	701	10 686	56 760	52 490	106 334	D
33441	Semiconductor and other electronic component manufacturing .....	2	25	8	749	29 884	382	701	10 686	56 760	52 490	106 334	D
334412	Bare printed circuit board manufacturing .....	—	9	3	270	10 530	154	268	4 284	19 759	26 231	44 007	D
334419	Other electronic component manufacturing .....	—	7	3	274	11 755	90	168	2 258	20 394	7 961	27 924	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	1	39	13	2 935	156 294	1 118	2 132	37 313	499 094	199 935	696 575	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	1	39	13	2 935	156 294	1 118	2 132	37 313	499 094	199 935	696 575	D
334510	Electromedical and electrotherapeutic apparatus manufacturing ...	2	6	3	1 637	86 442	668	1 236	19 271	305 423	128 053	431 183	D
334513	Instruments and related products manufacturing for measuring, displaying, and controlling industrial process variables .....	—	10	5	892	49 830	301	645	11 930	153 963	54 639	209 121	D
337	Furniture and related product manufacturing .....	—	29	6	490	18 277	410	961	13 526	30 082	22 105	55 523	D
3372	Office furniture (including fixtures) manufacturing .....	—	6	3	290	12 227	243	627	8 828	17 052	14 253	34 522	D
33721	Office furniture (including fixtures) manufacturing .....	—	6	3	290	12 227	243	627	8 828	17 052	14 253	34 522	D
337212	Custom architectural woodwork and millwork manufacturing .....	—	5	3	e	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing .....	3	73	11	1 245	41 964	493	952	16 599	89 834	49 533	138 846	17 552
3391	Medical equipment and supplies manufacturing .....	2	26	7	905	29 956	297	632	12 448	59 984	33 794	91 829	16 336
33911	Medical equipment and supplies manufacturing .....	2	26	7	905	29 956	297	632	12 448	59 984	33 794	91 829	16 336
339113	Surgical appliance and supplies manufacturing ....	1	7	1	542	11 498	59	130	1 864	25 616	12 649	38 399	D
3399	Other miscellaneous manufacturing .....	6	47	4	340	12 008	196	320	4 151	29 850	15 739	47 017	1 216
<b>Denver-Aurora, CO Metropolitan Statistical Area</b>													
31-33	Manufacturing .....	1	'2 587	'640	'73 601	'3 286 897	'47 275	'92 692	'1 727 663	'8 589 589	'7 876 048	'16 709 701	'648 570

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>													
<b>Denver-Aurora, CO Metropolitan Statistical Area—Con.</b>													
311	Food manufacturing .....	1	203	58	6 235	203 826	4 026	7 844	120 398	876 840	789 624	1 666 987	33 093
3111	Animal food manufacturing .....	—	10	3	323	14 360	225	466	9 466	214 503	143 589	349 577	4 503
31111	Animal food manufacturing ....	—	10	3	323	14 360	225	466	9 466	214 503	143 589	349 577	4 503
3113	Sugar and confectionery product manufacturing .....	—	16	4	491	13 596	368	721	10 445	70 369	28 751	105 518	D
31133	Confectionery manufacturing from purchased chocolate ....	—	10	3	e	D	D	D	D	D	D	D	195
311330	Confectionery manufacturing from purchased chocolate ..	—	10	3	e	D	D	D	D	D	D	D	195
3115	Dairy product manufacturing .....	3	11	7	871	30 348	514	1 142	17 037	106 461	163 719	271 970	D
31151	Dairy product (except frozen) manufacturing .....	3	6	4	f	D	D	D	D	D	D	D	D
311511	Fluid milk manufacturing ....	3	5	4	f	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing .....	—	28	14	857	24 409	636	1 422	14 686	77 181	174 742	252 419	D
31161	Animal slaughtering and processing .....	—	28	14	857	24 409	636	1 422	14 686	77 181	174 742	252 419	D
311612	Meat processed from carcasses .....	—	16	10	f	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing .....	2	86	18	2 570	86 764	1 439	2 470	46 486	225 890	139 312	366 331	D
31181	Bread and bakery product manufacturing .....	3	74	14	2 241	75 969	1 208	1 990	38 515	180 615	92 390	273 550	4 277
311811	Retail bakeries .....	4	49	3	e	D	D	D	D	D	D	D	D
311812	Commercial bakeries .....	3	24	10	1 826	68 810	945	1 550	34 054	168 667	80 417	249 665	D
3119	Other food manufacturing .....	—	32	8	777	22 771	546	1 026	13 268	113 656	55 390	168 995	D
31191	Snack food manufacturing .....	—	4	3	e	D	D	D	D	D	D	D	D
311919	Other snack food manufacturing .....	—	3	3	e	D	D	D	D	D	D	D	D
31199	All other food manufacturing ...	4	22	4	269	6 309	204	379	3 767	19 375	14 529	33 813	D
312	Beverage and tobacco product manufacturing .....	—	11	9	i	D	D	D	D	D	D	D	D
3121	Beverage manufacturing .....	—	11	9	i	D	D	D	D	D	D	D	D
31211	Soft drink and ice manufacturing .....	—	6	6	f	D	D	D	D	D	D	D	D
312111	Soft drink manufacturing ....	—	5	5	f	D	D	D	D	D	D	D	D
31212	Breweries .....	—	5	3	h	D	D	D	D	D	D	D	D
312120	Breweries .....	—	5	3	h	D	D	D	D	D	D	D	D
314	Textile product mills .....	—	53	11	1 775	52 041	1 260	2 560	23 944	266 310	123 879	392 174	7 328
3149	Other textile product mills .....	—	30	7	1 537	47 115	1 078	2 262	21 128	258 030	114 118	373 615	7 186
31491	Textile bag and canvas mills ...	—	11	3	349	10 598	252	464	5 539	32 352	33 709	65 184	D
314912	Canvas and related product mills .....	—	11	3	349	10 598	252	464	5 539	32 352	33 709	65 184	D
31499	All other textile product mills ...	—	19	4	1 188	36 517	826	1 798	15 589	225 678	80 409	308 431	D
314999	All other miscellaneous textile product mills .....	—	18	3	g	D	D	D	D	D	D	D	D
315	Apparel manufacturing .....	4	50	7	642	15 422	438	911	8 983	44 300	33 434	75 585	485
3152	Cut and sew apparel manufacturing .....	—	32	5	e	D	D	D	D	D	D	D	396
3159	Apparel accessories and other apparel manufacturing .....	9	17	2	337	8 243	223	491	4 707	16 025	16 073	32 165	D
31599	Apparel accessories and other apparel manufacturing .....	9	17	2	337	8 243	223	491	4 707	16 025	16 073	32 165	D
315991	Hat, cap, and millinery manufacturing .....	9	4	2	e	D	D	D	D	D	D	D	D
321	Wood product manufacturing .....	1	84	19	1 351	42 764	999	2 037	26 077	88 477	81 797	169 210	D
3212	Veneer, plywood, and engineered wood product manufacturing ....	3	15	5	335	9 010	274	553	6 577	15 306	15 028	30 421	D
32121	Veneer, plywood, and engineered wood product manufacturing .....	3	15	5	335	9 010	274	553	6 577	15 306	15 028	30 421	D
3219	Other wood product manufacturing .....	1	63	12	953	31 586	677	1 422	17 872	69 459	54 643	124 147	D
32191	Millwork .....	1	35	8	599	21 470	391	829	11 043	47 348	37 728	85 116	D
321911	Wood window and door manufacturing .....	1	10	2	327	13 193	194	443	6 116	29 764	20 457	50 129	D

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
	<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>												
	<b>Denver-Aurora, CO Metropolitan Statistical Area—Con.</b>												
322	Paper manufacturing .....	—	30	17	1 870	76 115	1 427	2 820	49 719	163 030	241 021	405 920	13 459
3222	Converted paper product manufacturing .....	—	30	17	1 870	76 115	1 427	2 820	49 719	163 030	241 021	405 920	13 459
32221	Paperboard container manufacturing .....	—	17	13	1 404	58 415	1 067	2 098	37 793	111 713	200 325	313 835	D
322211	Corrugated and solid fiber box manufacturing .....	—	10	7	f	D	D	D	D	D	D	D	D
322212	Folding paperboard box manufacturing .....	—	5	5	f	D	D	D	D	D	D	D	2 379
32223	Stationery product manufacturing .....	1	8	2	e	D	D	D	D	D	D	D	D
322232	Envelope manufacturing .....	—	4	2	e	D	D	D	D	D	D	D	D
323	Printing and related support activities .....	2	'429	'73	'6 267	'219 067	'4 360	'7 943	'127 065	'445 824	'275 177	'722 733	'21 963
3231	Printing and related support activities .....	2	'429	'73	'6 267	'219 067	'4 360	'7 943	'127 065	'445 824	'275 177	'722 733	'21 963
32311	Printing .....	2	'384	'68	'5 920	'208 540	'4 104	'7 494	'119 926	'426 227	'260 560	'688 283	'21 037
323110	Commercial lithographic printing .....	2	160	44	3 766	139 443	2 661	4 710	80 775	277 648	166 170	443 457	15 112
323113	Commercial screen printing .....	1	43	9	746	23 437	473	1 022	11 812	49 690	29 486	80 862	1 726
323114	Quick printing .....	3	102	3	454	13 138	314	539	7 631	27 019	12 370	39 401	997
323115	Digital printing .....	1	26	3	321	10 667	216	333	6 174	18 718	8 135	26 908	1 026
323116	Manifold business forms printing .....	—	'10	'5	e	D	D	D	D	D	D	D	D
32312	Support activities for printing .....	2	45	5	347	10 527	256	449	7 139	19 597	14 617	34 450	926
324	Petroleum and coal products manufacturing .....	—	18	6	621	34 638	397	800	20 004	135 530	663 441	793 691	D
3241	Petroleum and coal products manufacturing .....	—	18	6	621	34 638	397	800	20 004	135 530	663 441	793 691	D
32412	Asphalt paving, roofing, and saturated materials manufacturing .....	—	12	4	e	D	D	D	D	D	D	D	D
325	Chemical manufacturing .....	2	95	24	2 354	113 028	1 473	2 839	58 350	395 054	279 908	693 614	21 747
3254	Pharmaceutical and medicine manufacturing .....	1	17	7	1 148	63 378	723	1 556	34 046	219 924	149 810	387 204	9 750
32541	Pharmaceutical and medicine manufacturing .....	1	17	7	1 148	63 378	723	1 556	34 046	219 924	149 810	387 204	9 750
325412	Pharmaceutical preparation manufacturing .....	1	6	5	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, and toilet preparation manufacturing .....	3	29	10	697	25 058	474	721	12 448	96 399	57 185	154 446	8 314
32561	Soap and cleaning compound manufacturing .....	3	20	5	285	13 514	167	345	6 423	58 679	34 829	93 274	6 207
32562	Toilet preparation manufacturing .....	3	9	5	412	11 544	307	376	6 025	37 720	22 356	61 172	2 107
325620	Toilet preparation manufacturing .....	3	9	5	412	11 544	307	376	6 025	37 720	22 356	61 172	2 107
326	Plastics and rubber products manufacturing .....	2	110	34	2 446	86 533	1 714	3 539	47 957	220 954	248 981	470 620	16 840
3261	Plastics product manufacturing .....	2	94	31	2 278	80 531	1 610	3 320	45 114	210 032	233 870	443 832	16 480
32619	Other plastics product manufacturing .....	2	56	18	1 555	52 644	1 102	2 259	29 099	129 226	105 728	236 165	7 866
326199	All other plastics product manufacturing .....	2	54	18	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing .....	—	118	57	5 413	207 368	4 072	8 183	131 718	529 431	338 434	867 099	41 953
3271	Clay product and refractory manufacturing .....	—	15	6	1 638	72 744	1 138	2 624	37 914	131 893	47 168	179 055	D
32711	Pottery, ceramics, and plumbing fixture manufacturing .....	—	7	2	g	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply manufacturing .....	—	1	1	g	D	D	D	D	D	D	D	D
32712	Clay building material and refractories manufacturing .....	—	8	4	e	D	D	D	D	D	D	D	D
327121	Brick and structural clay tile manufacturing .....	—	4	4	e	D	D	D	D	D	D	D	D
3272	Glass and glass product manufacturing .....	2	23	6	618	29 487	500	1 058	22 504	97 782	43 261	141 569	6 517
32721	Glass and glass product manufacturing .....	2	23	6	618	29 487	500	1 058	22 504	97 782	43 261	141 569	6 517
327213	Glass container manufacturing .....	—	1	1	e	D	D	D	D	D	D	D	D
327215	Glass product manufacturing made of purchased glass .....	7	15	4	273	9 401	205	407	6 016	20 508	15 465	35 873	D

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
	<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>												
	<b>Denver-Aurora, CO Metropolitan Statistical Area—Con.</b>												
327	Nonmetallic mineral product manufacturing—Con.												
3273	Cement and concrete product manufacturing .....	—	60	41	2 593	88 256	2 119	3 961	62 377	260 871	221 858	481 149	22 815
32732	Ready-mix concrete manufacturing .....	—	34	25	1 285	38 951	1 160	1 870	33 135	119 025	142 918	261 955	5 793
327320	Ready-mix concrete manufacturing .....	—	34	25	1 285	38 951	1 160	1 870	33 135	119 025	142 918	261 955	5 793
32733	Concrete pipe, brick, and block manufacturing .....	—	8	6	513	19 274	381	848	11 953	67 083	41 612	107 050	D
327331	Concrete block and brick manufacturing .....	—	6	4	e	D	D	D	D	D	D	D	D
327332	Concrete pipe manufacturing .....	—	2	2	e	D	D	D	D	D	D	D	D
32739	Other concrete product manufacturing .....	1	18	10	795	30 031	578	1 243	17 289	74 763	37 328	112 144	D
327390	Other concrete product manufacturing .....	1	18	10	795	30 031	578	1 243	17 289	74 763	37 328	112 144	D
3279	Other nonmetallic mineral product manufacturing .....	1	18	4	f	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product manufacturing .....	1	18	4	f	D	D	D	D	D	D	D	D
327991	Cut stone and stone product manufacturing .....	3	12	2	438	12 011	244	385	6 812	19 403	6 458	25 849	D
331	Primary metal manufacturing .....	1	25	9	f	D	D	D	D	D	D	D	D
3311	Iron and steel mills and ferroalloy manufacturing .....	—	5	3	e	D	D	D	D	D	D	D	D
33111	Iron and steel mills and ferroalloy manufacturing .....	—	5	3	e	D	D	D	D	D	D	D	D
331111	Iron and steel mills .....	—	5	3	e	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing .....	1	445	88	7 295	278 469	5 082	10 227	169 718	690 944	598 474	1 289 371	23 403
3321	Forging and stamping.....	—	15	7	359	12 752	278	587	8 414	34 078	31 107	64 781	1 158
33211	Forging and stamping.....	—	15	7	359	12 752	278	587	8 414	34 078	31 107	64 781	1 158
3323	Architectural and structural metals manufacturing .....	2	106	39	2 543	91 847	1 709	3 564	53 596	186 247	202 272	388 958	7 456
33231	Plate work and fabricated structural product manufacturing .....	2	35	20	1 019	44 022	692	1 403	24 281	92 749	118 332	210 478	3 269
332312	Fabricated structural metal manufacturing .....	2	29	16	777	33 885	531	1 074	19 478	72 130	89 656	161 189	2 343
33232	Ornamental and architectural metal products manufacturing .....	2	71	19	1 524	47 825	1 017	2 161	29 315	93 498	83 940	178 480	4 187
332321	Metal window and door manufacturing .....	3	9	4	413	12 941	309	651	7 477	26 105	35 351	61 122	848
332322	Sheet metal work manufacturing .....	2	35	11	702	24 388	495	1 050	15 079	48 931	37 290	85 730	2 471
332323	Ornamental and architectural metal work manufacturing ..	1	27	4	409	10 496	213	460	6 759	18 462	11 299	31 628	868
3324	Boiler, tank, and shipping container manufacturing .....	—	11	4	f	D	D	D	D	D	D	D	D
33243	Metal can, box, and other metal container (light gauge) manufacturing .....	—	8	2	f	D	D	D	D	D	D	D	D
332431	Metal can manufacturing .....	—	3	2	e	D	D	D	D	D	D	D	D
3326	Spring and wire product manufacturing .....	4	17	3	312	10 273	259	510	6 684	24 066	14 366	38 538	1 309
33261	Spring and wire product manufacturing .....	4	17	3	312	10 273	259	510	6 684	24 066	14 366	38 538	1 309
332618	Other fabricated wire product manufacturing .....	4	15	2	e	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing .....	2	186	18	1 692	64 048	1 223	2 283	40 573	130 146	59 297	188 605	8 375
33271	Machine shops .....	3	161	14	1 303	48 255	945	1 727	31 184	94 439	40 970	134 910	5 749
332710	Machine shops .....	3	161	14	1 303	48 255	945	1 727	31 184	94 439	40 970	134 910	5 749
33272	Turned product and screw, nut, and bolt manufacturing .....	1	25	4	389	15 793	278	556	9 389	35 707	18 327	53 695	2 626
3328	Coating, engraving, heat treating, and allied activities .....	1	39	7	589	20 567	312	639	9 199	49 183	42 250	91 704	1 565
33281	Coating, engraving, heat treating, and allied activities ..	1	39	7	589	20 567	312	639	9 199	49 183	42 250	91 704	1 565

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
	<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>												
	<b>Denver-Aurora, CO Metropolitan Statistical Area—Con.</b>												
332	Fabricated metal product manufacturing—Con.												
3329	Other fabricated metal product manufacturing .....	1	60	7	1 048	44 129	736	1 478	26 306	129 312	60 992	189 980	2 107
33291	Metal valve manufacturing ....	—	7	3	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	All other fabricated metal product manufacturing .....	4	53	4	e	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product manufacturing .....	4	45	4	386	13 121	294	613	8 918	30 043	14 360	44 217	611
333	Machinery manufacturing .....	1	162	41	4 301	201 081	2 253	4 464	82 289	529 567	356 911	882 039	21 355
3332	Industrial machinery manufacturing .....	—	20	4	441	21 994	201	435	8 388	49 789	34 539	89 351	2 027
33329	Other industrial machinery manufacturing .....	—	17	4	433	21 572	196	424	8 204	48 965	33 956	87 944	2 003
3333	Commercial and service industry machinery manufacturing .....	1	27	9	1 303	56 842	721	1 305	26 255	179 920	116 155	286 540	6 462
33331	Commercial and service industry machinery manufacturing .....	1	27	9	1 303	56 842	721	1 305	26 255	179 920	116 155	286 540	6 462
333319	Other commercial and service industry machinery manufacturing .....	1	16	6	943	42 576	539	947	20 233	149 716	94 071	234 904	5 797
3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	3	11	5	e	D	D	D	D	D	D	D	1 188
33341	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	3	11	5	e	D	D	D	D	D	D	D	1 188
333415	Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing .....	4	2	2	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery manufacturing .....	2	39	7	406	17 661	267	530	10 609	30 411	13 245	43 629	2 596
33351	Metalworking machinery manufacturing .....	2	39	7	406	17 661	267	530	10 609	30 411	13 245	43 629	2 596
3339	Other general purpose machinery manufacturing .....	—	49	13	1 496	74 984	747	1 593	26 836	212 580	93 431	302 441	8 544
33391	Pump and compressor manufacturing .....	—	7	2	e	D	D	D	D	D	D	D	D
333911	Pump and pumping equipment manufacturing ..	—	3	2	e	D	D	D	D	D	D	D	D
33392	Material handling equipment manufacturing .....	—	20	7	731	37 567	305	631	10 435	90 241	52 816	145 221	4 801
333922	Conveyor and conveying equipment manufacturing ..	—	12	4	e	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing ....	1	22	4	e	D	D	D	D	D	D	D	D
333999	All other miscellaneous general purpose machinery manufacturing .....	—	15	3	320	11 114	234	526	7 116	38 431	8 583	44 372	232
334	Computer and electronic product manufacturing .....	1	138	51	8 000	421 983	3 495	6 717	119 322	1 030 570	987 953	2 103 259	158 827
3341	Computer and peripheral equipment manufacturing .....	2	14	2	350	24 554	66	128	2 170	58 607	49 578	105 889	D
33411	Computer and peripheral equipment manufacturing ....	2	14	2	350	24 554	66	128	2 170	58 607	49 578	105 889	D
3342	Communications equipment manufacturing .....	—	21	13	3 071	183 939	1 041	2 226	44 906	214 863	549 912	849 127	106 126
33421	Telephone apparatus manufacturing .....	—	8	5	2 384	148 946	632	1 492	30 470	143 389	472 806	706 314	D
334210	Telephone apparatus manufacturing .....	—	8	5	2 384	148 946	632	1 492	30 470	143 389	472 806	706 314	D
33422	Radio and television broadcasting and wireless communications equipment manufacturing .....	4	7	5	503	27 234	294	503	10 825	56 244	64 420	114 957	D
334220	Radio and television broadcasting and wireless communications equipment manufacturing .....	4	7	5	503	27 234	294	503	10 825	56 244	64 420	114 957	D

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
	<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>												
	<b>Denver-Aurora, CO Metropolitan Statistical Area—Con.</b>												
334	Computer and electronic product manufacturing—Con.												
3344	Semiconductor and other electronic component manufacturing .....	1	38	15	1 273	50 264	739	1 347	21 087	111 861	84 170	195 324	D
33441	Semiconductor and other electronic component manufacturing .....	1	38	15	1 273	50 264	739	1 347	21 087	111 861	84 170	195 324	D
334412	Bare printed circuit board manufacturing .....	1	11	5	429	15 731	277	557	8 275	35 796	19 635	55 438	5 038
334413	Semiconductor and related device manufacturing .....	—	5	2	e	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	1	45	16	3 046	154 450	1 462	2 712	45 882	625 175	292 673	921 211	36 692
33451	Navigational, measuring, electromedical, and control instruments manufacturing .....	1	45	16	3 046	154 450	1 462	2 712	45 882	625 175	292 673	921 211	36 692
334510	Electromedical and electrotherapeutic apparatus manufacturing .....	3	7	4	1 740	86 132	785	1 506	21 338	194 038	133 025	335 819	D
334511	Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing .....	—	5	4	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing .....	2	40	9	785	31 839	408	824	12 619	104 224	69 318	175 172	D
3359	Other electrical equipment and component manufacturing .....	3	15	2	327	14 538	186	417	6 523	36 144	31 568	69 256	D
336	Transportation equipment manufacturing .....	—	63	18	8 819	625 622	6 938	12 498	417 256	1 136 320	1 524 620	2 819 806	D
3362	Motor vehicle body and trailer manufacturing .....	1	17	7	f	D	D	D	D	D	D	D	996
33621	Motor vehicle body and trailer manufacturing .....	1	17	7	f	D	D	D	D	D	D	D	996
336212	Truck trailer manufacturing .....	—	2	2	e	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing .....	1	24	5	g	D	D	D	D	D	D	D	2 374
33639	Other motor vehicle parts manufacturing .....	—	8	2	966	32 238	700	1 141	17 467	83 497	87 247	172 527	D
336399	All other motor vehicle parts manufacturing .....	—	8	2	966	32 238	700	1 141	17 467	83 497	87 247	172 527	D
3364	Aerospace product and parts manufacturing .....	—	12	6	i	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing .....	—	12	6	i	D	D	D	D	D	D	D	D
336413	Other aircraft parts and auxiliary equipment manufacturing .....	—	6	3	e	D	D	D	D	D	D	D	D
336414	Guided missile and space vehicle manufacturing .....	—	1	1	i	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing .....	1	148	43	3 677	115 382	2 667	5 396	71 372	268 006	178 777	442 020	D
3371	Household and institutional furniture and kitchen cabinet manufacturing .....	2	99	22	2 065	55 932	1 599	3 277	39 245	119 747	59 043	173 268	D
33711	Wood kitchen cabinet and countertop manufacturing .....	1	58	13	872	26 807	641	1 307	16 784	51 932	35 633	87 267	D
337110	Wood kitchen cabinet and countertop manufacturing .....	1	58	13	872	26 807	641	1 307	16 784	51 932	35 633	87 267	D
33712	Household and institutional furniture manufacturing .....	3	41	9	1 193	29 125	958	1 970	22 461	67 815	23 410	86 001	D
337122	Nonupholstered wood household furniture manufacturing .....	2	26	7	954	22 364	783	1 583	17 796	53 556	12 422	60 878	D
3372	Office furniture (including fixtures) manufacturing .....	2	36	14	950	37 094	565	1 119	17 708	74 719	52 447	128 244	D
33721	Office furniture (including fixtures) manufacturing .....	2	36	14	950	37 094	565	1 119	17 708	74 719	52 447	128 244	D
337212	Custom architectural woodwork and millwork manufacturing .....	—	20	6	e	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, and locker manufacturing .....	4	10	5	381	15 215	246	474	7 453	30 612	23 037	53 738	D

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA—Con.</b>													
<b>Denver-Aurora, CO Metropolitan Statistical Area—Con.</b>													
337	Furniture and related product manufacturing—Con.												
3379	Other furniture related product manufacturing .....	—	13	7	662	22 356	503	1 000	14 419	73 540	67 287	140 508	D
33791	Mattress manufacturing .....	—	7	5	f	D	D	D	D	D	D	D	D
337910	Mattress manufacturing .....	—	7	5	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing .....	1	346	65	5 781	193 026	3 597	7 162	90 881	575 739	249 883	815 988	26 540
3391	Medical equipment and supplies manufacturing .....	1	145	28	2 960	105 975	1 623	3 378	43 681	313 765	114 079	425 682	14 615
33911	Medical equipment and supplies manufacturing .....	1	145	28	2 960	105 975	1 623	3 378	43 681	313 765	114 079	425 682	14 615
339112	Surgical and medical instrument manufacturing ..	—	23	10	g	D	D	D	D	D	D	D	10 882
339113	Surgical appliance and supplies manufacturing .....	1	15	4	268	9 565	143	321	4 326	16 581	18 789	33 865	D
339116	Dental laboratories .....	2	80	6	667	20 990	469	914	13 840	44 066	8 225	51 330	1 210
3399	Other miscellaneous manufacturing .....	2	201	37	2 821	87 051	1 974	3 784	47 200	261 974	135 804	390 306	11 925
33992	Sporting and athletic goods manufacturing .....	3	30	6	607	20 510	436	905	11 384	89 286	42 277	128 603	2 094
339920	Sporting and athletic goods manufacturing .....	3	30	6	607	20 510	436	905	11 384	89 286	42 277	128 603	2 094
33993	Doll, toy, and game manufacturing .....	—	12	4	334	8 566	232	409	3 841	48 509	22 236	64 865	D
339931	Doll and stuffed toy manufacturing .....	—	3	3	e	D	D	D	D	D	D	D	D
33994	Office supplies (except paper) manufacturing .....	—	7	2	376	8 648	329	609	6 645	18 852	13 019	31 895	D
339944	Carbon paper and inked ribbon manufacturing .....	—	1	1	e	D	D	D	D	D	D	D	D
33995	Sign manufacturing .....	4	73	9	632	22 549	418	812	11 726	44 679	24 485	69 177	D
339950	Sign manufacturing .....	4	73	9	632	22 549	418	812	11 726	44 679	24 485	69 177	D
33999	All other miscellaneous manufacturing .....	2	63	15	763	23 443	481	923	11 757	51 479	27 943	80 808	6 971
339999	All other miscellaneous manufacturing .....	3	51	10	540	15 736	349	644	8 392	30 663	18 764	51 164	1 117
<b>CANON CITY, CO MICROPOLITAN STATISTICAL AREA</b>													
31-33	Manufacturing .....	1	48	4	627	26 110	424	850	16 382	67 345	85 518	153 300	D
327	Nonmetallic mineral product manufacturing .....	—	9	2	253	12 975	195	401	9 863	27 167	61 334	90 502	D
<b>COLORADO SPRINGS, CO METROPOLITAN STATISTICAL AREA</b>													
31-33	Manufacturing .....	—	524	117	19 316	806 090	11 816	24 262	402 377	2 610 085	1 205 225	3 780 907	451 371
311	Food manufacturing .....	—	30	5	493	13 903	259	354	5 602	32 173	56 670	90 085	D
323	Printing and related support activities .....	—	79	11	1 723	42 241	625	1 142	16 262	253 839	41 982	296 105	5 978
3231	Printing and related support activities .....	—	79	11	1 723	42 241	625	1 142	16 262	253 839	41 982	296 105	5 978
32311	Printing .....	—	73	11	1 695	41 472	601	1 109	15 716	252 240	41 620	294 144	D
323110	Commercial lithographic printing .....	1	31	7	293	8 305	214	339	5 451	18 531	9 706	28 252	2 251
323116	Manifold business forms printing .....	—	2	1	g	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing .....	1	11	3	551	16 490	419	847	10 792	18 967	10 586	29 297	887
3261	Plastics product manufacturing ..	1	10	3	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing .....	5	7	1	e	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing .....	7	5	1	e	D	D	D	D	D	D	D	D

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>COLORADO SPRINGS, CO METROPOLITAN STATISTICAL AREA—Con.</b>													
327	Nonmetallic mineral product manufacturing .....	1	23	10	761	24 028	598	1 260	17 948	45 401	49 864	95 944	D
3273	Cement and concrete product manufacturing .....	—	9	7	635	20 324	516	1 133	15 884	36 505	43 304	80 505	D
32732	Ready-mix concrete manufacturing .....	—	6	4	353	10 541	248	546	7 042	17 706	27 017	45 452	2 150
327320	Ready-mix concrete manufacturing .....	—	6	4	353	10 541	248	546	7 042	17 706	27 017	45 452	2 150
32739	Other concrete product manufacturing .....	2	2	2	e	D	D	D	D	D	D	D	D
327390	Other concrete product manufacturing .....	2	2	2	e	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing .....	1	99	22	3 375	112 136	2 637	5 384	70 589	240 410	195 353	433 436	7 496
3322	Cutlery and handtool manufacturing .....	—	3	1	f	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing .....	—	3	1	f	D	D	D	D	D	D	D	D
332212	Hand and edge tool manufacturing .....	—	3	1	f	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing .....	3	23	9	597	19 663	406	809	10 958	39 806	23 322	63 006	1 217
33232	Ornamental and architectural metal products manufacturing .....	4	14	6	467	15 488	305	620	8 066	30 601	15 185	45 762	781
332322	Sheet metal work manufacturing .....	3	10	6	443	14 912	292	591	7 709	29 335	14 430	43 790	753
3325	Hardware manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing .....	1	36	3	294	10 320	219	344	6 600	15 885	9 489	25 706	1 676
3329	Other fabricated metal product manufacturing .....	—	14	3	275	8 523	210	336	6 468	22 930	18 178	40 982	616
333	Machinery manufacturing .....	—	22	5	385	19 267	225	439	8 666	32 954	31 493	60 529	1 281
334	Computer and electronic product manufacturing .....	—	62	25	8 331	441 567	4 654	10 417	204 092	1 385 426	636 943	1 995 169	416 656
3341	Computer and peripheral equipment manufacturing .....	—	15	6	1 821	52 947	990	2 043	22 538	220 515	358 331	512 024	D
33411	Computer and peripheral equipment manufacturing .....	—	15	6	1 821	52 947	990	2 043	22 538	220 515	358 331	512 024	D
334112	Computer storage device manufacturing .....	—	5	4	g	D	D	D	D	D	D	D	17 878
3344	Semiconductor and other electronic component manufacturing .....	—	29	13	3 843	201 200	3 211	7 470	156 481	975 413	187 043	1 196 896	D
33441	Semiconductor and other electronic component manufacturing .....	—	29	13	3 843	201 200	3 211	7 470	156 481	975 413	187 043	1 196 896	D
334413	Semiconductor and related device manufacturing .....	—	13	5	3 368	186 723	2 875	6 786	149 544	932 820	154 026	1 121 187	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	1	11	3	2 470	178 474	343	690	22 341	154 696	68 051	226 038	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing .....	1	11	3	2 470	178 474	343	690	22 341	154 696	68 051	226 038	D
334515	Instrument manufacturing for measuring and testing electricity and electrical signals .....	—	3	1	g	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing .....	7	12	4	264	10 591	201	408	6 859	24 320	23 206	47 607	D
336	Transportation equipment manufacturing .....	1	7	3	575	23 749	282	525	9 271	74 077	19 770	92 681	1 431
3369	Other transportation equipment manufacturing .....	—	2	1	e	D	D	D	D	D	D	D	D
33699	Other transportation equipment manufacturing .....	—	2	1	e	D	D	D	D	D	D	D	D
336991	Motorcycle, bicycle, and parts manufacturing .....	—	1	1	e	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing .....	2	36	6	470	13 513	327	647	8 044	30 889	15 193	45 335	862

See footnotes at end of table.



**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>COLORADO SPRINGS, CO METROPOLITAN STATISTICAL AREA—Con.</b>													
339	Miscellaneous manufacturing .....	—	85	12	1 450	60 497	906	1 709	27 768	403 559	62 462	464 945	4 784
3391	Medical equipment and supplies manufacturing .....	—	38	4	975	43 287	607	1 218	20 757	369 558	42 790	411 562	4 211
33911	Medical equipment and supplies manufacturing .....	—	38	4	975	43 287	607	1 218	20 757	369 558	42 790	411 562	4 211
339112	Surgical and medical instrument manufacturing ..	—	4	3	f	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing .....	3	47	8	475	17 210	299	491	7 011	34 001	19 672	53 383	573
<b>DURANGO, CO MICROPOLITAN STATISTICAL AREA</b>													
31-33	Manufacturing .....	2	73	7	654	19 706	375	730	9 584	49 001	31 999	80 618	D
<b>EDWARDS, CO MICROPOLITAN STATISTICAL AREA</b>													
31-33	Manufacturing .....	2	55	3	415	14 239	308	574	9 673	35 756	33 486	69 379	D
<b>FORT COLLINS-LOVELAND, CO METROPOLITAN STATISTICAL AREA</b>													
31-33	Manufacturing .....	—	390	81	12 362	555 485	6 835	13 287	246 092	1 559 876	1 210 363	2 776 316	272 344
312	Beverage and tobacco product manufacturing .....	—	8	2	f	D	D	D	D	D	D	D	D
3121	Beverage manufacturing .....	—	8	2	f	D	D	D	D	D	D	D	D
31212	Breweries .....	—	5	2	f	D	D	D	D	D	D	D	D
312120	Breweries .....	—	5	2	f	D	D	D	D	D	D	D	D
321	Wood product manufacturing .....	1	27	6	621	17 417	450	826	10 279	32 434	38 255	71 514	D
3219	Other wood product manufacturing .....	1	20	4	532	14 500	391	759	8 670	27 222	21 255	48 500	D
32199	All other wood product manufacturing .....	—	10	1	313	8 530	209	399	4 560	16 885	13 336	30 162	D
321991	Manufactured home (mobile home) manufacturing .....	—	1	1	e	D	D	D	D	D	D	D	D
323	Printing and related support activities .....	1	53	4	661	23 738	480	918	14 733	72 672	30 159	101 599	10 905
3231	Printing and related support activities .....	1	53	4	661	23 738	480	918	14 733	72 672	30 159	101 599	10 905
32311	Printing .....	1	50	4	656	23 521	476	913	14 581	72 141	30 086	100 995	D
323110	Commercial lithographic printing .....	—	20	3	432	17 217	323	650	11 029	57 203	23 581	79 739	10 382
325	Chemical manufacturing .....	2	11	3	286	15 151	70	151	2 293	21 918	14 650	36 578	2 357
326	Plastics and rubber products manufacturing .....	1	19	8	983	32 670	531	876	14 172	98 266	64 379	162 202	4 544
3261	Plastics product manufacturing ..	1	19	8	983	32 670	531	876	14 172	98 266	64 379	162 202	4 544
32619	Other plastics product manufacturing .....	1	16	8	971	32 302	520	854	13 840	96 377	63 239	159 234	4 444
326191	Plastics plumbing fixture manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing .....	4	15	7	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing .....	—	20	4	320	11 219	222	436	8 128	31 274	24 420	55 728	D
3273	Cement and concrete product manufacturing .....	—	10	4	282	9 974	193	374	7 234	28 593	22 511	51 116	D
332	Fabricated metal product manufacturing .....	4	49	8	418	13 913	342	609	9 657	28 535	16 986	46 854	D
333	Machinery manufacturing .....	—	24	9	1 593	76 278	881	1 855	35 280	149 586	166 101	314 933	18 265
3336	Engine, turbine, and power transmission equipment manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, and power transmission equipment manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing .....	3	8	4	349	13 354	193	368	6 607	26 687	30 533	58 535	1 077

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>FORT COLLINS-LOVELAND, CO METROPOLITAN STATISTICAL AREA—Con.</b>													
334	Computer and electronic product manufacturing .....	-	34	13	4 322	240 598	1 875	3 992	89 834	583 252	475 444	1 071 590	27 563
3344	Semiconductor and other electronic component manufacturing .....	-	13	5	1 666	88 469	783	1 731	32 339	218 331	336 439	563 566	13 807
33441	Semiconductor and other electronic component manufacturing .....	-	13	5	1 666	88 469	783	1 731	32 339	218 331	336 439	563 566	13 807
334418	Printed circuit assembly (electronic assembly) manufacturing .....	-	3	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component manufacturing .....	-	4	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	-	16	7	2 604	149 870	1 065	2 218	57 026	361 456	136 966	502 569	13 649
33451	Navigational, measuring, electromedical, and control instruments manufacturing .....	-	16	7	2 604	149 870	1 065	2 218	57 026	361 456	136 966	502 569	13 649
334515	Instrument manufacturing for measuring and testing electricity and electrical signals .....	-	7	3	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument manufacturing .....	-	3	3	f	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing .....	-	6	4	435	18 447	206	419	4 065	18 154	20 406	39 529	D
3353	Electrical equipment manufacturing .....	-	3	2	e	D	D	D	D	D	D	D	D
33531	Electrical equipment manufacturing .....	-	3	2	e	D	D	D	D	D	D	D	D
335314	Relay and industrial control manufacturing .....	-	3	2	e	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing .....	2	12	3	e	D	D	D	D	D	D	D	907
337	Furniture and related product manufacturing .....	1	31	6	511	15 143	392	742	10 525	29 200	16 575	45 667	D
3371	Household and institutional furniture and kitchen cabinet manufacturing .....	2	28	4	e	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing .....	1	47	8	767	26 584	351	612	9 419	45 790	37 049	77 432	3 655
3391	Medical equipment and supplies manufacturing .....	2	18	1	330	12 090	108	199	3 657	14 182	14 713	23 544	2 034
33911	Medical equipment and supplies manufacturing .....	2	18	1	330	12 090	108	199	3 657	14 182	14 713	23 544	2 034
339114	Dental equipment and supplies manufacturing .....	-	2	1	e	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing .....	1	29	7	437	14 494	243	413	5 762	31 608	22 336	53 888	1 621
<b>FORT MORGAN, CO MICROPOLITAN STATISTICAL AREA</b>													
31-33	Manufacturing .....	-	27	5	h	D	D	D	D	D	D	D	D
311	Food manufacturing .....	-	8	4	h	D	D	D	D	D	D	D	D
3115	Dairy product manufacturing .....	-	1	1	e	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) manufacturing .....	-	1	1	e	D	D	D	D	D	D	D	D
311513	Cheese manufacturing .....	-	1	1	e	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing .....	-	4	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing .....	-	4	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering .....	-	3	2	g	D	D	D	D	D	D	D	D

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>GRAND JUNCTION, CO METROPOLITAN STATISTICAL AREA</b>													
31-33	Manufacturing .....	1	161	28	2 922	93 185	2 052	4 235	53 333	225 575	163 877	394 216	18 393
327	Nonmetallic mineral product manufacturing .....	-	11	4	491	14 104	416	944	9 862	40 342	17 782	54 757	6 146
332	Fabricated metal product manufacturing .....	1	22	5	516	17 607	384	741	10 443	41 705	21 968	63 729	1 578
336	Transportation equipment manufacturing .....	-	4	2	361	14 339	224	481	7 670	33 358	29 976	72 094	1 438
<b>GREELEY, CO METROPOLITAN STATISTICAL AREA</b>													
31-33	Manufacturing .....	-	231	63	9 540	345 981	7 505	14 832	230 313	1 289 514	2 513 715	3 792 185	65 789
311	Food manufacturing .....	-	24	8	3 037	86 381	2 747	6 012	69 690	142 579	1 381 157	1 519 947	11 945
3116	Animal slaughtering and processing .....	-	7	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing .....	-	7	4	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering .....	-	7	4	h	D	D	D	D	D	D	D	D
321	Wood product manufacturing .....	-	11	4	463	11 234	391	714	8 668	23 960	70 782	94 120	D
3219	Other wood product manufacturing .....	1	7	3	e	D	D	D	D	D	D	D	D
323	Printing and related support activities .....	-	19	3	471	16 242	355	710	10 775	75 025	71 963	147 355	D
3231	Printing and related support activities .....	-	19	3	471	16 242	355	710	10 775	75 025	71 963	147 355	D
32311	Printing .....	-	19	3	471	16 242	355	710	10 775	75 025	71 963	147 355	D
323110	Commercial lithographic printing .....	-	12	2	e	D	D	D	D	D	D	D	D
325	Chemical manufacturing .....	-	10	6	g	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing .....	-	5	2	g	D	D	D	D	D	D	D	D
32599	All other chemical product and preparation manufacturing .....	-	4	2	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, and chemical manufacturing .....	-	2	2	g	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing .....	-	11	5	313	10 125	253	476	6 635	31 697	21 892	54 092	1 215
3261	Plastics product manufacturing .....	-	9	5	e	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing .....	-	8	4	e	D	D	D	D	D	D	D	D
326199	All other plastics product manufacturing .....	-	7	4	e	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing .....	3	19	11	645	22 548	418	742	12 323	47 414	40 825	88 100	D
3273	Cement and concrete product manufacturing .....	-	14	10	460	14 564	340	584	10 411	34 832	28 758	63 491	D
32732	Ready-mix concrete manufacturing .....	-	8	5	258	8 836	173	308	6 888	24 718	22 720	47 431	D
327320	Ready-mix concrete manufacturing .....	-	8	5	258	8 836	173	308	6 888	24 718	22 720	47 431	D
332	Fabricated metal product manufacturing .....	-	49	6	481	19 672	328	662	12 562	57 761	90 113	154 108	2 843
333	Machinery manufacturing .....	-	24	9	931	38 167	709	1 483	24 342	111 931	124 680	227 786	7 809
3332	Industrial machinery manufacturing .....	-	3	2	e	D	D	D	D	D	D	D	D
33329	Other industrial machinery manufacturing .....	-	2	1	e	D	D	D	D	D	D	D	D
333295	Semiconductor machinery manufacturing .....	-	1	1	e	D	D	D	D	D	D	D	D
3335	Metalworking machinery manufacturing .....	-	4	2	e	D	D	D	D	D	D	D	717
33351	Metalworking machinery manufacturing .....	-	4	2	e	D	D	D	D	D	D	D	717
333511	Industrial mold manufacturing .....	-	4	2	e	D	D	D	D	D	D	D	717

See footnotes at end of table.

**Table 2. Industry Statistics for Metropolitan and Micropolitan Statistical Areas: 2002—Con.**

[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 code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>MONTRÖSE, CO MICROPOLITAN STATISTICAL AREA</b>													
31-33	Manufacturing .....	1	64	18	1 388	35 094	1 109	1 998	24 309	100 927	60 497	161 695	D
311	Food manufacturing .....	—	4	1	f	D	D	D	D	D	D	D	D
3113	Sugar and confectionery product manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery manufacturing from purchased chocolate ...	—	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery manufacturing from purchased chocolate ..	—	1	1	f	D	D	D	D	D	D	D	D
<b>PUEBLO, CO METROPOLITAN STATISTICAL AREA</b>													
31-33	Manufacturing .....	—	122	36	4 088	163 029	3 037	6 331	106 810	540 720	603 754	1 144 120	26 231
311	Food manufacturing .....	—	12	6	521	14 646	438	671	11 369	60 043	64 964	124 080	D
3118	Bakeries and tortilla manufacturing .....	—	7	3	294	8 259	261	326	6 805	34 709	13 727	48 387	D
31183	Tortilla manufacturing .....	—	2	2	e	D	D	D	D	D	D	D	D
311830	Tortilla manufacturing .....	—	2	2	e	D	D	D	D	D	D	D	D
331	Primary metal manufacturing .....	—	4	4	f	D	D	D	D	D	D	D	D
3311	Iron and steel mills and ferroalloy manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
33111	Iron and steel mills and ferroalloy manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
331111	Iron and steel mills .....	—	1	1	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing .....	5	23	8	416	15 270	300	553	9 556	44 308	33 802	77 281	D
333	Machinery manufacturing .....	—	8	2	g	D	D	D	D	D	D	D	4 232
3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
333415	Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing .....	—	4	1	e	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing .....	—	2	1	e	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing .....	—	2	1	e	D	D	D	D	D	D	D	D
336413	Other aircraft parts and auxiliary equipment manufacturing .....	—	2	1	e	D	D	D	D	D	D	D	D
<b>STERLING, CO MICROPOLITAN STATISTICAL AREA</b>													
31-33	Manufacturing .....	—	18	3	e	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 or 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; 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 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.

**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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>ADAMS</b>													
31-33	Manufacturing .....	1	442	146	12 823	508 738	8 281	16 421	273 469	1 144 260	1 862 819	3 100 310	81 374
311	Food manufacturing .....	-	36	12	1 350	51 982	674	1 263	24 136	169 637	141 532	310 186	5 448
3118	Bakeries and tortilla manufacturing .....	-	13	4	899	36 642	331	538	14 102	82 096	31 619	113 734	D
31181	Bread and bakery product manufacturing .....	-	13	4	899	36 642	331	538	14 102	82 096	31 619	113 734	D
311812	Commercial bakeries .....	-	6	3	f	D	D	D	D	D	D	D	D
321	Wood product manufacturing .....	2	24	8	584	19 542	484	995	14 090	44 596	39 192	82 698	D
323	Printing and related support activities .....	-	54	9	754	25 242	530	764	13 997	47 781	29 771	78 037	2 891
3231	Printing and related support activities .....	-	54	9	754	25 242	530	764	13 997	47 781	29 771	78 037	2 891
32311	Printing .....	-	49	9	f	D	D	D	D	D	D	D	2 852
323110	Commercial lithographic printing .....	-	23	8	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing .....	3	19	8	659	21 920	511	1 065	14 164	62 371	65 268	127 684	2 409
3261	Plastics product manufacturing ..	3	16	8	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing .....	-	28	16	1 136	39 849	869	1 759	26 578	109 879	93 520	203 793	6 142
3273	Cement and concrete product manufacturing .....	-	19	14	987	34 203	763	1 548	23 070	97 671	81 126	178 084	D
332	Fabricated metal product manufacturing .....	1	89	25	1 501	59 294	1 117	2 353	38 649	135 726	126 229	263 617	5 500
3323	Architectural and structural metals manufacturing .....	1	28	11	638	25 674	439	921	15 132	60 996	52 220	113 691	2 049
333	Machinery manufacturing .....	3	28	6	883	37 189	374	760	12 841	54 961	40 225	101 256	4 682
334	Computer and electronic product manufacturing .....	-	23	15	2 025	98 733	1 059	2 206	41 839	74 375	397 907	560 148	D
3342	Communications equipment manufacturing .....	-	5	5	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus manufacturing .....	-	2	2	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing .....	-	2	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing .....	1	19	9	g	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing .....	2	28	11	930	28 153	671	1 306	17 489	67 918	49 658	117 822	D
<b>ARAPAHOE</b>													
31-33	Manufacturing .....	1	511	101	10 125	404 358	6 152	11 820	190 398	1 019 898	758 720	1 765 338	40 367
323	Printing and related support activities .....	3	91	11	1 256	42 959	828	1 675	23 917	81 048	55 370	137 427	4 192
3231	Printing and related support activities .....	3	91	11	1 256	42 959	828	1 675	23 917	81 048	55 370	137 427	4 192
32311	Printing .....	3	83	11	1 207	41 250	799	1 618	22 849	77 589	54 676	133 274	4 000
323110	Commercial lithographic printing .....	4	30	7	663	24 391	465	869	13 845	40 644	25 734	66 398	2 416
332	Fabricated metal product manufacturing .....	2	94	19	1 994	80 649	1 305	2 620	44 675	207 009	124 245	330 245	6 330
3323	Architectural and structural metals manufacturing .....	5	24	9	587	21 957	447	957	13 648	44 563	48 043	92 404	2 407
3329	Other fabricated metal product manufacturing .....	-	8	1	f	D	D	D	D	D	D	D	D
33291	Metal valve manufacturing ....	-	1	1	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
333	Machinery manufacturing .....	-	29	13	1 333	59 897	807	1 619	31 299	199 791	117 706	311 405	5 669
3333	Commercial and service industry machinery manufacturing .....	-	6	3	f	D	D	D	D	D	D	D	D
33331	Commercial and service industry machinery manufacturing .....	-	6	3	f	D	D	D	D	D	D	D	D
333319	Other commercial and service industry machinery manufacturing .....	-	5	3	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing .....	3	37	11	1 196	69 263	452	926	15 347	152 344	108 997	258 170	11 332

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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>ARAPAHOE—Con.</b>													
336	Transportation equipment manufacturing .....	—	7	2	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
33639	Other motor vehicle parts manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing .....	1	85	12	1 157	43 599	645	1 203	16 408	105 284	59 407	157 333	3 361
3391	Medical equipment and supplies manufacturing .....	1	47	8	727	32 239	382	753	11 104	63 947	42 601	104 907	2 886
33911	Medical equipment and supplies manufacturing .....	1	47	8	727	32 239	382	753	11 104	63 947	42 601	104 907	2 886
<b>BOULDER</b>													
31-33	Manufacturing .....	2	581	146	16 770	771 640	8 580	16 864	278 814	2 191 400	1 267 748	3 400 112	199 511
311	Food manufacturing .....	1	37	9	1 620	55 510	1 162	2 588	35 026	145 736	135 490	283 981	4 169
3116	Animal slaughtering and processing .....	—	5	2	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing .....	—	5	2	f	D	D	D	D	D	D	D	D
311615	Poultry processing .....	—	1	1	f	D	D	D	D	D	D	D	D
321	Wood product manufacturing .....	—	19	4	511	13 418	391	701	9 152	22 567	59 960	81 907	D
323	Printing and related support activities .....	5	55	10	824	30 398	575	1 040	16 931	53 963	34 450	88 170	3 396
3231	Printing and related support activities .....	5	55	10	824	30 398	575	1 040	16 931	53 963	34 450	88 170	3 396
32311	Printing .....	5	52	10	817	30 109	570	1 032	16 749	53 457	34 337	87 551	D
325	Chemical manufacturing .....	5	27	13	1 750	115 694	529	1 098	30 618	374 173	153 613	427 233	D
3254	Pharmaceutical and medicine manufacturing .....	5	15	10	1 618	107 649	494	1 032	29 247	356 768	141 190	397 057	D
32541	Pharmaceutical and medicine manufacturing .....	5	15	10	1 618	107 649	494	1 032	29 247	356 768	141 190	397 057	D
325411	Medicinal and botanical manufacturing .....	—	6	4	606	40 203	332	696	19 904	81 050	54 736	143 371	19 993
325414	Biological product (except diagnostic) manufacturing ..	9	2	2	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing .....	3	30	9	644	20 031	439	860	10 868	68 029	28 738	97 393	3 224
3261	Plastics product manufacturing ..	3	28	9	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing .....	3	21	7	527	17 274	352	694	9 405	59 871	22 402	83 078	2 581
326199	All other plastics product manufacturing .....	3	20	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing .....	—	29	11	561	19 366	432	827	13 331	76 283	37 774	120 716	D
332	Fabricated metal product manufacturing .....	5	64	11	880	33 160	623	1 177	19 216	69 811	42 137	113 396	8 327
333	Machinery manufacturing .....	1	52	13	982	42 904	617	1 237	19 878	82 844	58 140	144 912	15 040
3333	Commercial and service industry machinery manufacturing .....	—	15	9	682	30 609	422	861	13 676	55 626	36 810	93 034	D
33331	Commercial and service industry machinery manufacturing .....	—	15	9	682	30 609	422	861	13 676	55 626	36 810	93 034	D
333314	Optical instrument and lens manufacturing .....	—	11	6	513	24 870	287	596	10 492	42 482	26 705	70 052	D
334	Computer and electronic product manufacturing .....	2	108	31	6 297	341 728	2 366	4 339	77 267	1 030 958	578 588	1 634 377	71 641
3341	Computer and peripheral equipment manufacturing .....	2	16	4	1 630	95 113	517	845	17 983	383 416	255 500	661 652	33 046
33411	Computer and peripheral equipment manufacturing .....	2	16	4	1 630	95 113	517	845	17 983	383 416	255 500	661 652	33 046
334112	Computer storage device manufacturing .....	2	4	3	1 288	75 409	343	606	12 422	345 012	215 265	581 263	D
3342	Communications equipment manufacturing .....	5	19	5	903	57 458	295	547	9 888	83 849	63 363	154 651	D
3344	Semiconductor and other electronic component manufacturing .....	2	25	8	749	29 884	382	701	10 686	56 760	52 490	106 334	D
33441	Semiconductor and other electronic component manufacturing .....	2	25	8	749	29 884	382	701	10 686	56 760	52 490	106 334	D

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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>BOULDER—Con.</b>													
334	Computer and electronic product manufacturing—Con.												
3345	Navigational, measuring, electromedical, and control instruments manufacturing . . . .	1	39	13	2 935	156 294	1 118	2 132	37 313	499 094	199 935	696 575	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing . . .	1	39	13	2 935	156 294	1 118	2 132	37 313	499 094	199 935	696 575	D
334510	Electromedical and electrotherapeutic apparatus manufacturing . . .	2	6	3	1 637	86 442	668	1 236	19 271	305 423	128 053	431 183	D
334513	Instruments and related products manufacturing for measuring, displaying, and controlling industrial process variables . . . . .	—	10	5	892	49 830	301	645	11 930	153 963	54 639	209 121	D
339	Miscellaneous manufacturing . . . . .	3	73	11	1 245	41 964	493	952	16 599	89 834	49 533	138 846	17 552
3391	Medical equipment and supplies manufacturing . . . . .	2	26	7	905	29 956	297	632	12 448	59 984	33 794	91 829	16 336
33911	Medical equipment and supplies manufacturing . . . . .	2	26	7	905	29 956	297	632	12 448	59 984	33 794	91 829	16 336
339113	Surgical appliance and supplies manufacturing . . . .	1	7	1	542	11 498	59	130	1 864	25 616	12 649	38 399	D
<b>BROOMFIELD</b>													
31-33	Manufacturing . . . . .	—	77	25	5 682	281 413	2 700	5 489	84 213	1 079 909	620 621	1 722 416	147 052
314	Textile product mills . . . . .	—	2	2	g	D	D	D	D	D	D	D	D
3149	Other textile product mills . . . . .	—	2	2	g	D	D	D	D	D	D	D	D
31499	All other textile product mills . . .	—	1	1	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
325	Chemical manufacturing . . . . .	—	3	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing . . . . .	—	1	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing . . . . .	—	12	6	2 180	138 296	422	769	15 986	529 019	281 622	816 941	D
3342	Communications equipment manufacturing . . . . .	—	1	1	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus manufacturing . . . . .	—	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing . . . . .	—	1	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing . . . .	—	5	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing . . .	—	5	3	f	D	D	D	D	D	D	D	D
<b>DENVER</b>													
31-33	Manufacturing . . . . .	1	'895	'258	'22 116	'767 073	'15 091	'29 553	'436 317	'2 304 647	'1 883 946	'4 179 072	'130 872
311	Food manufacturing . . . . .	1	108	41	3 921	123 071	2 703	5 245	76 604	587 320	546 819	1 129 263	24 730
3115	Dairy product manufacturing . . . . .	4	6	5	f	D	D	D	D	D	D	D	12 381
3116	Animal slaughtering and processing . . . . .	—	14	11	724	20 642	528	1 189	12 415	68 337	157 495	226 439	D
31161	Animal slaughtering and processing . . . . .	—	14	11	724	20 642	528	1 189	12 415	68 337	157 495	226 439	D
3118	Bakeries and tortilla manufacturing . . . . .	3	41	14	1 530	47 348	1 030	1 815	30 775	136 880	101 691	239 677	D
31181	Bread and bakery product manufacturing . . . . .	5	32	10	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries . . . . .	6	15	7	983	32 952	640	1 049	20 344	87 979	49 690	138 230	D
3119	Other food manufacturing . . . . .	—	20	6	655	18 496	474	867	11 287	102 040	44 933	147 017	D
312	Beverage and tobacco product manufacturing . . . . .	—	8	7	f	D	D	D	D	D	D	D	D
3121	Beverage manufacturing . . . . .	—	8	7	f	D	D	D	D	D	D	D	D
31211	Soft drink and ice manufacturing . . . . .	—	5	5	f	D	D	D	D	D	D	D	D
312111	Soft drink manufacturing . . . . .	—	4	4	f	D	D	D	D	D	D	D	D

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]

NAICS code	Geographic area and industry	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E <sup>1</sup>	Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)					Wages (\$1,000)
<b>DENVER—Con.</b>													
321	Wood product manufacturing .....	1	27	8	560	17 721	360	755	8 389	34 128	33 461	67 558	D
3219	Other wood product manufacturing .....	—	25	7	f	D	D	D	D	D	D	D	D
322	Paper manufacturing .....	—	15	8	1 018	40 260	750	1 433	24 937	73 814	97 396	172 278	D
3222	Converted paper product manufacturing .....	—	15	8	1 018	40 260	750	1 433	24 937	73 814	97 396	172 278	D
32221	Paperboard container manufacturing .....	—	10	7	f	D	D	D	D	D	D	D	D
322211	Corrugated and solid fiber box manufacturing .....	—	6	4	511	20 547	381	751	12 313	37 306	53 450	91 818	D
323	Printing and related support activities .....	1	'177	'42	'3 346	'119 865	'2 402	'4 428	'73 287	'242 903	'149 187	'393 090	'12 651
3231	Printing and related support activities .....	1	'177	'42	'3 346	'119 865	'2 402	'4 428	'73 287	'242 903	'149 187	'393 090	'12 651
32311	Printing .....	2	'155	'37	'3 102	'112 801	'2 218	'4 115	'68 354	'229 883	'136 214	'366 870	'12 114
323110	Commercial lithographic printing .....	2	74	26	2 217	82 942	1 607	2 973	50 521	174 948	97 266	272 724	9 752
325	Chemical manufacturing .....	4	34	10	679	29 609	392	774	14 534	104 426	63 311	168 856	D
326	Plastics and rubber products manufacturing .....	2	38	14	845	29 122	611	1 281	16 711	67 784	91 572	158 861	8 537
3261	Plastics product manufacturing ..	2	34	12	760	25 766	576	1 201	15 706	62 613	83 462	144 829	D
327	Nonmetallic mineral product manufacturing .....	2	33	17	1 507	50 938	1 084	2 119	32 242	134 029	90 933	218 602	D
3273	Cement and concrete product manufacturing .....	1	13	10	617	21 984	519	1 013	16 443	63 451	54 020	115 744	2 102
332	Fabricated metal product manufacturing .....	1	122	24	2 002	68 843	1 353	2 763	42 184	147 261	142 461	290 454	4 458
3323	Architectural and structural metals manufacturing .....	1	32	12	975	30 430	599	1 222	17 195	54 997	77 286	133 217	1 847
33232	Ornamental and architectural metal products manufacturing .....	—	23	6	700	19 125	402	856	10 747	34 433	47 278	82 711	1 419
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing .....	1	40	5	501	20 424	365	743	12 982	46 007	21 843	67 450	1 853
333	Machinery manufacturing .....	3	52	12	1 082	50 720	600	1 132	19 223	150 577	85 220	232 900	5 424
3339	Other general purpose machinery manufacturing .....	1	17	6	513	29 970	202	425	6 911	88 545	43 341	129 650	3 746
334	Computer and electronic product manufacturing .....	5	27	9	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing .....	1	62	20	2 012	62 284	1 532	3 194	41 615	154 152	97 367	245 770	3 458
3371	Household and institutional furniture and kitchen cabinet manufacturing .....	2	44	11	1 345	34 900	1 052	2 211	25 651	82 166	31 346	108 068	D
33712	Household and institutional furniture manufacturing .....	3	24	6	1 037	25 478	822	1 711	19 589	61 900	19 622	76 416	D
337122	Nonupholstered wood household furniture manufacturing .....	3	14	4	805	18 872	652	1 332	15 016	48 047	8 872	51 937	D
339	Miscellaneous manufacturing .....	2	107	22	1 870	62 233	1 312	2 484	33 444	175 991	77 218	251 727	4 707
3399	Other miscellaneous manufacturing .....	2	72	17	1 377	45 811	1 004	1 911	25 030	135 328	65 057	199 883	3 180
<b>DOUGLAS</b>													
31-33	Manufacturing .....	2	102	20	1 381	48 688	976	1 922	29 342	149 623	96 261	243 935	18 248
327	Nonmetallic mineral product manufacturing .....	2	14	7	526	19 305	422	788	12 845	58 890	42 106	101 255	16 268

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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>EL PASO</b>													
31-33	Manufacturing .....	-	507	116	19 254	804 165	11 772	24 181	401 315	2 606 368	1 202 798	3 774 765	451 243
323	Printing and related support activities .....	-	78	11	g	D	D	D	D	D	D	D	D
3231	Printing and related support activities .....	-	78	11	g	D	D	D	D	D	D	D	D
32311	Printing .....	-	72	11	g	D	D	D	D	D	D	D	D
323116	Manifold business forms printing .....	-	2	1	g	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing .....	1	10	3	f	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing ..	1	9	3	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing .....	1	21	10	f	D	D	D	D	D	D	D	D
3273	Cement and concrete product manufacturing .....	-	9	7	635	20 324	516	1 133	15 884	36 505	43 304	80 505	D
332	Fabricated metal product manufacturing .....	1	95	22	3 371	112 029	2 633	5 377	70 517	240 209	195 187	433 069	D
3322	Cutlery and handtool manufacturing .....	-	3	1	f	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing .....	-	3	1	f	D	D	D	D	D	D	D	D
332212	Hand and edge tool manufacturing .....	-	3	1	f	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing .....	3	23	9	597	19 663	406	809	10 958	39 806	23 322	63 006	1 217
3325	Hardware manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing .....	-	59	24	i	D	D	D	D	D	D	D	D
3341	Computer and peripheral equipment manufacturing .....	-	15	6	1 821	52 947	990	2 043	22 538	220 515	358 331	512 024	D
33411	Computer and peripheral equipment manufacturing ....	-	15	6	1 821	52 947	990	2 043	22 538	220 515	358 331	512 024	D
334112	Computer storage device manufacturing .....	-	5	4	g	D	D	D	D	D	D	D	17 878
3344	Semiconductor and other electronic component manufacturing .....	-	27	12	h	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing .....	-	27	12	h	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing .....	-	13	5	3 368	186 723	2 875	6 786	149 544	932 820	154 026	1 121 187	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	1	10	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	1	10	3	g	D	D	D	D	D	D	D	D
334515	Instrument manufacturing for measuring and testing electricity and electrical signals .....	-	2	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing .....	1	7	3	575	23 749	282	525	9 271	74 077	19 770	92 681	1 431
339	Miscellaneous manufacturing .....	-	84	12	g	D	D	D	D	D	D	D	D
3391	Medical equipment and supplies manufacturing .....	-	37	4	f	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing .....	-	37	4	f	D	D	D	D	D	D	D	D
339112	Surgical and medical instrument manufacturing ..	-	4	3	f	D	D	D	D	D	D	D	D
<b>FREMONT</b>													
31-33	Manufacturing .....	1	48	4	627	26 110	424	850	16 382	67 345	85 518	153 300	D

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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>JEFFERSON</b>													
31-33	Manufacturing .....	-	504	87	21 241	1 270 098	13 901	27 213	710 357	2 876 528	2 635 516	5 665 892	230 076
312	Beverage and tobacco product manufacturing .....	-	2	1	h	D	D	D	D	D	D	D	D
3121	Beverage manufacturing .....	-	2	1	h	D	D	D	D	D	D	D	D
31212	Breweries .....	-	2	1	h	D	D	D	D	D	D	D	D
312120	Breweries .....	-	2	1	h	D	D	D	D	D	D	D	D
323	Printing and related support activities .....	1	84	10	813	28 079	533	962	14 105	68 486	38 926	106 652	2 030
3231	Printing and related support activities .....	1	84	10	813	28 079	533	962	14 105	68 486	38 926	106 652	2 030
32311	Printing .....	1	76	10	791	27 403	516	935	13 668	67 258	38 583	105 072	D
327	Nonmetallic mineral product manufacturing .....	-	20	7	1 718	82 407	1 243	2 782	48 627	180 531	70 835	256 295	14 375
3271	Clay product and refractory manufacturing .....	-	6	2	g	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, and plumbing fixture manufacturing .....	-	4	1	g	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing .....	-	88	15	1 413	55 993	1 026	1 963	35 666	171 371	181 329	352 492	6 223
333	Machinery manufacturing .....	-	35	6	813	45 624	363	757	15 224	109 543	104 244	213 747	D
334	Computer and electronic product manufacturing .....	3	32	9	1 954	87 530	1 126	2 024	32 841	209 928	145 626	354 707	7 822
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	3	11	4	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing .....	3	11	4	g	D	D	D	D	D	D	D	D
334510	Electromedical and electrotherapeutic apparatus manufacturing .....	4	3	2	g	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing .....	-	15	2	i	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing .....	-	4	2	i	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing .....	-	4	2	i	D	D	D	D	D	D	D	D
336414	Guided missile and space vehicle manufacturing .....	-	1	1	i	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing .....	1	90	19	1 976	64 522	1 116	2 433	28 376	219 525	77 614	297 174	11 118
3391	Medical equipment and supplies manufacturing .....	-	38	10	1 531	50 183	788	1 780	20 158	177 920	53 633	232 043	9 764
33911	Medical equipment and supplies manufacturing .....	-	38	10	1 531	50 183	788	1 780	20 158	177 920	53 633	232 043	9 764
339112	Surgical and medical instrument manufacturing .....	-	6	4	1 104	34 440	484	1 147	11 325	142 174	39 439	181 793	D
<b>LA PLATA</b>													
31-33	Manufacturing .....	2	73	7	654	19 706	375	730	9 584	49 001	31 999	80 618	D
<b>LARIMER</b>													
31-33	Manufacturing .....	-	390	81	12 362	555 485	6 835	13 287	246 092	1 559 876	1 210 363	2 776 316	272 344
312	Beverage and tobacco product manufacturing .....	-	8	2	f	D	D	D	D	D	D	D	D
3121	Beverage manufacturing .....	-	8	2	f	D	D	D	D	D	D	D	D
31212	Breweries .....	-	5	2	f	D	D	D	D	D	D	D	D
312120	Breweries .....	-	5	2	f	D	D	D	D	D	D	D	D
321	Wood product manufacturing .....	1	27	6	621	17 417	450	826	10 279	32 434	38 255	71 514	D
3219	Other wood product manufacturing .....	1	20	4	f	D	D	D	D	D	D	D	D
323	Printing and related support activities .....	1	53	4	661	23 738	480	918	14 733	72 672	30 159	101 599	10 905
3231	Printing and related support activities .....	1	53	4	661	23 738	480	918	14 733	72 672	30 159	101 599	10 905
32311	Printing .....	1	50	4	656	23 521	476	913	14 581	72 141	30 086	100 995	D

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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>LARIMER—Con.</b>													
326	Plastics and rubber products manufacturing .....	1	19	8	f	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing ..	1	19	8	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing .....	1	16	8	f	D	D	D	D	D	D	D	D
326191	Plastics plumbing fixture manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing .....	-	24	9	1 593	76 278	881	1 855	35 280	149 586	166 101	314 933	18 265
3336	Engine, turbine, and power transmission equipment manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, and power transmission equipment manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing .....	-	34	13	4 322	240 598	1 875	3 992	89 834	583 252	475 444	1 071 590	27 563
3344	Semiconductor and other electronic component manufacturing .....	-	13	5	1 666	88 469	783	1 731	32 339	218 331	336 439	563 566	13 807
33441	Semiconductor and other electronic component manufacturing .....	-	13	5	1 666	88 469	783	1 731	32 339	218 331	336 439	563 566	13 807
334418	Printed circuit assembly (electronic assembly) manufacturing .....	-	3	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component manufacturing .....	-	4	3	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	-	16	7	2 604	149 870	1 065	2 218	57 026	361 456	136 966	502 569	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ..	-	16	7	2 604	149 870	1 065	2 218	57 026	361 456	136 966	502 569	D
334515	Instrument manufacturing for measuring and testing electricity and electrical signals .....	-	7	3	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument manufacturing ..	-	3	3	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing .....	1	31	6	511	15 143	392	742	10 525	29 200	16 575	45 667	D
339	Miscellaneous manufacturing .....	1	47	8	767	26 584	351	612	9 419	45 790	37 049	77 432	D
<b>MESA</b>													
31-33	Manufacturing .....	1	161	28	2 922	93 185	2 052	4 235	53 333	225 575	163 877	394 216	18 393
332	Fabricated metal product manufacturing .....	1	22	5	516	17 607	384	741	10 443	41 705	21 968	63 729	1 578
<b>MONTROSE</b>													
31-33	Manufacturing .....	1	64	18	1 388	35 094	1 109	1 998	24 309	100 927	60 497	161 695	D
311	Food manufacturing .....	-	4	1	f	D	D	D	D	D	D	D	D
3113	Sugar and confectionery product manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery manufacturing from purchased chocolate .....	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery manufacturing from purchased chocolate ..	-	1	1	f	D	D	D	D	D	D	D	D
<b>MORGAN</b>													
31-33	Manufacturing .....	-	27	5	h	D	D	D	D	D	D	D	D
311	Food manufacturing .....	-	8	4	h	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing .....	-	4	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing .....	-	4	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering .....	-	3	2	g	D	D	D	D	D	D	D	D
<b>PROWERS</b>													
31-33	Manufacturing .....	-	17	7	768	22 631	634	1 350	14 197	37 051	83 040	133 402	870

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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>PUEBLO</b>													
31-33	Manufacturing .....	-	122	36	4 088	163 029	3 037	6 331	106 810	540 720	603 754	1 144 120	26 231
311	Food manufacturing .....	-	12	6	521	14 646	438	671	11 369	60 043	64 964	124 080	D
331	Primary metal manufacturing .....	-	4	4	f	D	D	D	D	D	D	D	D
3311	Iron and steel mills and ferroalloy manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron and steel mills and ferroalloy manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron and steel mills .....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing .....	-	8	2	g	D	D	D	D	D	D	D	4 232
3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
333415	Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
<b>WELD</b>													
31-33	Manufacturing .....	-	231	63	9 540	345 981	7 505	14 832	230 313	1 289 514	2 513 715	3 792 185	65 789
311	Food manufacturing .....	-	24	8	3 037	86 381	2 747	6 012	69 690	142 579	1 381 157	1 519 947	11 945
3116	Animal slaughtering and processing .....	-	7	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing .....	-	7	4	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering .....	-	7	4	h	D	D	D	D	D	D	D	D
325	Chemical manufacturing .....	-	10	6	g	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing .....	-	5	2	g	D	D	D	D	D	D	D	D
32599	All other chemical product and preparation manufacturing .....	-	4	2	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, and chemical manufacturing .....	-	2	2	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing .....	3	19	11	645	22 548	418	742	12 323	47 414	40 825	88 100	D
333	Machinery manufacturing .....	-	24	9	931	38 167	709	1 483	24 342	111 931	124 680	227 786	7 809

<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 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 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.

**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]

NAICS code	Geographic area and industry	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
		E <sup>1</sup>	Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)					Wages (\$1,000)
<b>ARVADA</b>													
31-33	Manufacturing .....	2	113	21	g	D	D	D	D	D	D	D	
334	Computer and electronic product manufacturing .....	-	7	1	f	D	D	D	D	D	D	D	
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	-	2	1	f	D	D	D	D	D	D	D	
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	-	2	1	f	D	D	D	D	D	D	D	
334510	Electromedical and electrotherapeutic apparatus manufacturing ...	-	1	1	f	D	D	D	D	D	D	D	
<b>AURORA</b>													
31-33	Manufacturing .....	1	152	35	3 715	132 550	2 603	4 748	75 930	331 925	317 165	655 130	19 806
336	Transportation equipment manufacturing .....	-	4	4	f	D	D	D	D	D	D	D	
3363	Motor vehicle parts manufacturing .....	-	2	2	f	D	D	D	D	D	D	D	
33639	Other motor vehicle parts manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	
336399	All other motor vehicle parts manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	
337	Furniture and related product manufacturing .....	2	7	5	623	18 853	468	892	12 016	50 700	41 123	92 108	1 666
<b>BERTHOUD</b>													
31-33	Manufacturing .....	-	25	6	569	17 606	413	782	10 477	35 180	27 130	64 230	D
<b>BOULDER</b>													
31-33	Manufacturing .....	3	251	62	7 942	397 151	3 831	7 314	133 130	1 055 201	608 221	1 618 346	87 334
311	Food manufacturing .....	1	24	7	633	21 699	315	573	8 437	81 851	49 445	134 134	1 845
323	Printing and related support activities .....	5	34	9	655	23 462	478	888	14 454	43 424	26 720	69 911	1 859
3231	Printing and related support activities .....	5	34	9	655	23 462	478	888	14 454	43 424	26 720	69 911	1 859
32311	Printing .....	5	31	9	648	23 173	473	880	14 272	42 918	26 607	69 292	D
325	Chemical manufacturing .....	4	13	6	961	64 527	402	842	24 145	206 196	82 262	231 231	25 851
3254	Pharmaceutical and medicine manufacturing .....	4	9	6	952	64 108	395	830	23 895	204 219	80 272	227 264	D
32541	Pharmaceutical and medicine manufacturing .....	4	9	6	952	64 108	395	830	23 895	204 219	80 272	227 264	D
325411	Medicinal and botanical manufacturing .....	-	5	3	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing .....	2	57	15	3 902	211 445	1 491	2 747	49 155	554 726	345 783	903 837	41 267
3341	Computer and peripheral equipment manufacturing .....	5	10	3	g	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing ...	5	10	3	g	D	D	D	D	D	D	D	D
334112	Computer storage device manufacturing .....	7	2	2	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	1	19	5	2 207	120 620	821	1 607	27 563	389 155	151 153	538 705	14 140
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	1	19	5	2 207	120 620	821	1 607	27 563	389 155	151 153	538 705	14 140
334510	Electromedical and electrotherapeutic apparatus manufacturing ...	2	2	2	g	D	D	D	D	D	D	D	D
334513	Instruments and related products manufacturing for measuring, displaying, and controlling industrial process variables .....	-	5	2	f	D	D	D	D	D	D	D	D

See footnotes at end of table.

**Table 4. Industry Statistics for Places: 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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>BROOMFIELD</b>													
31-33	Manufacturing .....	-	77	25	5 682	281 413	2 700	5 489	84 213	1 079 909	620 621	1 722 416	147 052
314	Textile product mills .....	-	2	2	g	D	D	D	D	D	D	D	D
3149	Other textile product mills .....	-	2	2	g	D	D	D	D	D	D	D	D
31499	All other textile product mills ...	-	1	1	f	D	D	D	D	D	D	D	D
314999	All other miscellaneous textile product mills .....	-	1	1	f	D	D	D	D	D	D	D	D
325	Chemical manufacturing .....	-	3	2	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
325412	Pharmaceutical preparation manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing .....	-	12	6	2 180	138 296	422	769	15 986	529 019	281 622	816 941	D
3342	Communications equipment manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	-	5	3	f	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	-	5	3	f	D	D	D	D	D	D	D	D
<b>CENTENNIAL</b>													
31-33	Manufacturing .....	2	70	14	1 215	54 778	674	1 330	22 628	114 867	102 069	219 158	4 877
<b>COLORADO SPRINGS</b>													
31-33	Manufacturing .....	-	399	98	15 695	695 825	9 244	18 835	333 562	2 039 760	729 010	2 762 406	429 143
323	Printing and related support activities .....	-	63	9	1 636	39 932	562	1 030	14 799	248 880	39 669	288 859	5 617
3231	Printing and related support activities .....	-	63	9	1 636	39 932	562	1 030	14 799	248 880	39 669	288 859	5 617
32311	Printing .....	-	58	9	g	D	D	D	D	D	D	D	5 577
323116	Manifold business forms printing .....	-	2	1	g	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing .....	-	14	8	647	19 984	508	1 072	15 120	34 985	42 117	77 802	D
3273	Cement and concrete product manufacturing .....	-	5	5	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing .....	1	74	18	2 101	63 362	1 644	3 140	42 254	140 423	79 320	218 225	5 138
3322	Cutlery and handtool manufacturing .....	-	3	1	f	D	D	D	D	D	D	D	D
33221	Cutlery and handtool manufacturing .....	-	3	1	f	D	D	D	D	D	D	D	D
332212	Hand and edge tool manufacturing .....	-	3	1	f	D	D	D	D	D	D	D	D
3323	Architectural and structural metals manufacturing .....	3	19	8	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing .....	-	50	22	i	D	D	D	D	D	D	D	D
3341	Computer and peripheral equipment manufacturing .....	1	12	5	f	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing .....	1	12	5	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing .....	-	25	11	h	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing .....	-	25	11	h	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing .....	-	13	5	3 368	186 723	2 875	6 786	149 544	932 820	154 026	1 121 187	D

See footnotes at end of table.

**Table 4. Industry Statistics for Places: 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]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>COLORADO SPRINGS—Con.</b>													
334	Computer and electronic product manufacturing—Con.												
3345	Navigational, measuring, electromedical, and control instruments manufacturing . . . .	1	8	3	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing . . .	1	8	3	g	D	D	D	D	D	D	D	D
334515	Instrument manufacturing for measuring and testing electricity and electrical signals . . . . .	—	2	1	g	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing . . . . .	1	7	3	575	23 749	282	525	9 271	74 077	19 770	92 681	1 431
339	Miscellaneous manufacturing . . . . .	1	69	9	f	D	D	D	D	D	D	D	D
<b>COMMERCE CITY</b>													
31-33	Manufacturing . . . . .	1	82	29	1 899	71 018	1 184	2 376	37 561	206 550	246 340	451 000	10 634
311	Food manufacturing . . . . .	—	9	5	576	24 653	256	553	10 344	93 105	73 403	165 652	2 824
<b>DENVER</b>													
31-33	Manufacturing . . . . .	1	'895	'258	'22 116	'767 073	'15 091	'29 553	'436 317	'2 304 647	'1 883 946	'4 179 072	'130 872
311	Food manufacturing . . . . .	1	108	41	3 921	123 071	2 703	5 245	76 604	587 320	546 819	1 129 263	24 730
3115	Dairy product manufacturing . . . . .	4	6	5	f	D	D	D	D	D	D	D	12 381
3116	Animal slaughtering and processing . . . . .	—	14	11	724	20 642	528	1 189	12 415	68 337	157 495	226 439	D
31161	Animal slaughtering and processing . . . . .	—	14	11	724	20 642	528	1 189	12 415	68 337	157 495	226 439	D
3118	Bakeries and tortilla manufacturing . . . . .	3	41	14	1 530	47 348	1 030	1 815	30 775	136 880	101 691	239 677	D
31181	Bread and bakery product manufacturing . . . . .	5	32	10	g	D	D	D	D	D	D	D	D
311812	Commercial bakeries . . . . .	6	15	7	983	32 952	640	1 049	20 344	87 979	49 690	138 230	D
3119	Other food manufacturing . . . . .	—	20	6	655	18 496	474	867	11 287	102 040	44 933	147 017	D
312	Beverage and tobacco product manufacturing . . . . .	—	8	7	f	D	D	D	D	D	D	D	D
3121	Beverage manufacturing . . . . .	—	8	7	f	D	D	D	D	D	D	D	D
31211	Soft drink and ice manufacturing . . . . .	—	5	5	f	D	D	D	D	D	D	D	D
312111	Soft drink manufacturing . . . . .	—	4	4	f	D	D	D	D	D	D	D	D
321	Wood product manufacturing . . . . .	1	27	8	560	17 721	360	755	8 389	34 128	33 461	67 558	D
3219	Other wood product manufacturing . . . . .	—	25	7	f	D	D	D	D	D	D	D	D
322	Paper manufacturing . . . . .	—	15	8	1 018	40 260	750	1 433	24 937	73 814	97 396	172 278	D
3222	Converted paper product manufacturing . . . . .	—	15	8	1 018	40 260	750	1 433	24 937	73 814	97 396	172 278	D
32221	Paperboard container manufacturing . . . . .	—	10	7	f	D	D	D	D	D	D	D	D
322211	Corrugated and solid fiber box manufacturing . . . . .	—	6	4	511	20 547	381	751	12 313	37 306	53 450	91 818	D
323	Printing and related support activities . . . . .	1	'177	'42	'3 346	'119 865	'2 402	'4 428	'73 287	'242 903	'149 187	'393 090	'12 651
3231	Printing and related support activities . . . . .	1	'177	'42	'3 346	'119 865	'2 402	'4 428	'73 287	'242 903	'149 187	'393 090	'12 651
32311	Printing . . . . .	2	'155	'37	'3 102	'112 801	'2 218	'4 115	'68 354	'229 883	'136 214	'366 870	'12 114
323110	Commercial lithographic printing . . . . .	2	74	26	2 217	82 942	1 607	2 973	50 521	174 948	97 266	272 724	9 752
325	Chemical manufacturing . . . . .	4	34	10	679	29 609	392	774	14 534	104 426	63 311	168 856	D
326	Plastics and rubber products manufacturing . . . . .	2	38	14	845	29 122	611	1 281	16 711	67 784	91 572	158 861	8 537
3261	Plastics product manufacturing . . . . .	2	34	12	760	25 766	576	1 201	15 706	62 613	83 462	144 829	D
327	Nonmetallic mineral product manufacturing . . . . .	2	33	17	1 507	50 938	1 084	2 119	32 242	134 029	90 933	218 602	D
3273	Cement and concrete product manufacturing . . . . .	1	13	10	617	21 984	519	1 013	16 443	63 451	54 020	115 744	2 102

See footnotes at end of table.

**Table 4. Industry Statistics for Places: 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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>DENVER—Con.</b>													
332	Fabricated metal product manufacturing .....	1	122	24	2 002	68 843	1 353	2 763	42 184	147 261	142 461	290 454	4 458
3323	Architectural and structural metals manufacturing .....	1	32	12	975	30 430	599	1 222	17 195	54 997	77 286	133 217	1 847
33232	Ornamental and architectural metal products manufacturing .....	—	23	6	700	19 125	402	856	10 747	34 433	47 278	82 711	1 419
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing .....	1	40	5	501	20 424	365	743	12 982	46 007	21 843	67 450	1 853
333	Machinery manufacturing .....	3	52	12	1 082	50 720	600	1 132	19 223	150 577	85 220	232 900	5 424
3339	Other general purpose machinery manufacturing .....	1	17	6	513	29 970	202	425	6 911	88 545	43 341	129 650	3 746
334	Computer and electronic product manufacturing .....	5	27	9	f	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing .....	1	62	20	2 012	62 284	1 532	3 194	41 615	154 152	97 367	245 770	3 458
3371	Household and institutional furniture and kitchen cabinet manufacturing .....	2	44	11	1 345	34 900	1 052	2 211	25 651	82 166	31 346	108 068	D
33712	Household and institutional furniture manufacturing .....	3	24	6	1 037	25 478	822	1 711	19 589	61 900	19 622	76 416	D
337122	Nonupholstered wood household furniture manufacturing .....	3	14	4	805	18 872	652	1 332	15 016	48 047	8 872	51 937	D
339	Miscellaneous manufacturing .....	2	107	22	1 870	62 233	1 312	2 484	33 444	175 991	77 218	251 727	4 707
3399	Other miscellaneous manufacturing .....	2	72	17	1 377	45 811	1 004	1 911	25 030	135 328	65 057	199 883	3 180
<b>ENGLEWOOD</b>													
31-33	Manufacturing .....	1	187	48	4 733	186 691	2 811	5 516	83 400	475 631	358 737	818 304	20 977
323	Printing and related support activities .....	4	25	7	651	20 296	428	940	11 115	39 818	25 413	66 185	2 043
3231	Printing and related support activities .....	4	25	7	651	20 296	428	940	11 115	39 818	25 413	66 185	2 043
32311	Printing .....	4	24	7	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing .....	5	59	10	703	26 475	530	1 064	16 651	49 574	40 093	89 586	2 157
333	Machinery manufacturing .....	—	14	8	1 012	44 117	625	1 228	23 533	162 536	92 781	244 765	5 267
3333	Commercial and service industry machinery manufacturing .....	—	3	3	f	D	D	D	D	D	D	D	D
33331	Commercial and service industry machinery manufacturing .....	—	3	3	f	D	D	D	D	D	D	D	D
333319	Other commercial and service industry machinery manufacturing .....	—	3	3	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing .....	—	26	6	697	28 612	365	715	8 910	58 191	39 016	93 671	2 436
<b>FORT COLLINS</b>													
31-33	Manufacturing .....	—	110	22	4 965	236 115	2 608	5 318	101 325	811 855	799 658	1 614 298	227 008
312	Beverage and tobacco product manufacturing .....	—	3	2	f	D	D	D	D	D	D	D	D
3121	Beverage manufacturing .....	—	3	2	f	D	D	D	D	D	D	D	D
31212	Breweries .....	—	3	2	f	D	D	D	D	D	D	D	D
312120	Breweries .....	—	3	2	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing .....	—	9	4	g	D	D	D	D	D	D	D	D
3336	Engine, turbine, and power transmission equipment manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
33361	Engine, turbine, and power transmission equipment manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D
333618	Other engine equipment manufacturing .....	—	1	1	f	D	D	D	D	D	D	D	D

See footnotes at end of table.



**Table 4. Industry Statistics for Places: 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]

NAICS code	Geographic area and industry	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>FORT COLLINS—Con.</b>													
334	Computer and electronic product manufacturing .....	-	9	5	1 572	86 345	707	1 574	31 031	206 372	335 855	553 255	D
3344	Semiconductor and other electronic component manufacturing .....	-	4	2	g	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing .....	-	4	2	g	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly) manufacturing .....	-	2	1	f	D	D	D	D	D	D	D	D
334419	Other electronic component manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
<b>FORT MORGAN</b>													
31-33	Manufacturing .....	-	11	2	g	D	D	D	D	D	D	D	D
311	Food manufacturing .....	-	2	2	g	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing .....	-	1	1	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing .....	-	1	1	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering .....	-	1	1	g	D	D	D	D	D	D	D	D
<b>FOUNTAIN</b>													
31-33	Manufacturing .....	-	8	3	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
3341	Computer and peripheral equipment manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
334112	Computer storage device manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
<b>GOLDEN</b>													
31-33	Manufacturing .....	1	54	15	2 246	99 745	1 556	3 492	53 650	193 125	137 998	335 005	14 002
327	Nonmetallic mineral product manufacturing .....	-	3	2	g	D	D	D	D	D	D	D	D
3271	Clay product and refractory manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
32711	Pottery, ceramics, and plumbing fixture manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
327113	Porcelain electrical supply manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
<b>GRAND JUNCTION</b>													
31-33	Manufacturing .....	-	102	25	2 438	80 619	1 666	3 698	44 644	191 580	141 114	339 549	12 736
<b>GREELEY</b>													
31-33	Manufacturing .....	-	69	14	3 821	112 895	3 356	7 253	87 664	248 512	1 427 668	1 674 178	13 081
311	Food manufacturing .....	-	12	6	h	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing .....	-	5	4	h	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing .....	-	5	4	h	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering .....	-	5	4	h	D	D	D	D	D	D	D	D
<b>LAFAYETTE</b>													
31-33	Manufacturing .....	-	28	7	869	28 989	640	1 314	18 269	37 969	71 867	111 319	D
<b>LAKEWOOD</b>													
31-33	Manufacturing .....	3	122	19	2 604	97 626	1 370	2 853	36 794	278 699	168 715	447 748	13 226
334	Computer and electronic product manufacturing .....	9	6	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing .....	-	30	9	1 321	38 311	705	1 584	17 386	156 411	46 543	202 150	D
3391	Medical equipment and supplies manufacturing .....	-	18	6	1 197	33 797	618	1 422	14 977	143 530	38 996	182 053	D
33911	Medical equipment and supplies manufacturing .....	-	18	6	1 197	33 797	618	1 422	14 977	143 530	38 996	182 053	D
339112	Surgical and medical instrument manufacturing ..	-	3	3	g	D	D	D	D	D	D	D	D
<b>LAMAR</b>													
31-33	Manufacturing .....	-	12	6	704	20 980	580	1 264	13 134	34 453	80 452	128 211	824

See footnotes at end of table.

**Table 4. Industry Statistics for Places: 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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>LITTLETON</b>													
31-33	Manufacturing .....	-	56	9	i	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing .....	1	6	3	677	31 289	457	900	17 483	100 663	53 722	153 533	2 072
3329	Other fabricated metal product manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
33291	Metal valve manufacturing ....	-	1	1	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
336	Transportation equipment manufacturing .....	-	1	1	i	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing .....	-	1	1	i	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing .....	-	1	1	i	D	D	D	D	D	D	D	D
336414	Guided missile and space vehicle manufacturing .....	-	1	1	i	D	D	D	D	D	D	D	D
<b>LONGMONT</b>													
31-33	Manufacturing .....	1	131	35	3 619	132 502	2 564	5 356	77 134	325 947	237 543	561 468	D
311	Food manufacturing .....	-	4	1	f	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing .....	-	1	1	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing .....	-	1	1	f	D	D	D	D	D	D	D	D
311615	Poultry processing .....	-	1	1	f	D	D	D	D	D	D	D	D
333	Machinery manufacturing .....	-	21	6	611	24 877	427	903	13 473	58 177	28 082	86 971	D
334	Computer and electronic product manufacturing .....	1	22	7	635	24 468	286	530	8 241	56 807	42 836	96 243	D
<b>LOUISVILLE</b>													
31-33	Manufacturing .....	-	44	19	1 658	81 493	674	1 166	19 622	428 639	183 022	630 058	28 387
334	Computer and electronic product manufacturing .....	-	9	4	894	47 944	315	575	9 149	354 037	143 923	515 961	D
<b>LOVELAND</b>													
31-33	Manufacturing .....	-	82	24	4 723	228 988	2 280	4 351	89 790	554 319	255 714	809 672	29 312
326	Plastics and rubber products manufacturing .....	-	4	2	f	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing ..	-	4	2	f	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing .....	-	3	2	f	D	D	D	D	D	D	D	D
326191	Plastics plumbing fixture manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing .....	-	13	6	2 637	149 233	1 102	2 292	56 581	365 894	132 878	500 520	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing .....	-	4	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing ...	-	4	2	g	D	D	D	D	D	D	D	D
334515	Instrument manufacturing for measuring and testing electricity and electrical signals .....	-	3	1	g	D	D	D	D	D	D	D	D
334516	Analytical laboratory instrument manufacturing ..	-	1	1	f	D	D	D	D	D	D	D	D
<b>MONTROSE</b>													
31-33	Manufacturing .....	-	44	15	1 175	29 190	925	1 612	19 837	85 894	41 695	128 768	D
311	Food manufacturing .....	-	2	1	f	D	D	D	D	D	D	D	D
3113	Sugar and confectionery product manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
31133	Confectionery manufacturing from purchased chocolate ....	-	1	1	f	D	D	D	D	D	D	D	D
311330	Confectionery manufacturing from purchased chocolate ..	-	1	1	f	D	D	D	D	D	D	D	D
<b>NORTHGLENN</b>													
31-33	Manufacturing .....	3	39	10	706	26 317	504	1 052	16 326	61 974	83 056	145 943	D

See footnotes at end of table.

**Table 4. Industry Statistics for Places: 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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>PUEBLO</b>													
31-33	Manufacturing .....	-	72	21	2 107	90 468	1 505	3 254	58 550	261 714	323 237	581 457	18 897
331	Primary metal manufacturing .....	-	2	2	f	D	D	D	D	D	D	D	D
3311	Iron and steel mills and ferroalloy manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
33111	Iron and steel mills and ferroalloy manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
331111	Iron and steel mills .....	-	1	1	f	D	D	D	D	D	D	D	D
<b>WESTMINSTER</b>													
31-33	Manufacturing .....	-	57	15	2 277	105 324	1 239	2 542	50 908	79 683	363 280	531 968	8 536
334	Computer and electronic product manufacturing .....	-	8	7	g	D	D	D	D	D	D	D	6 760
3342	Communications equipment manufacturing .....	-	3	3	g	D	D	D	D	D	D	D	D
33421	Telephone apparatus manufacturing .....	-	2	2	g	D	D	D	D	D	D	D	D
334210	Telephone apparatus manufacturing .....	-	2	2	g	D	D	D	D	D	D	D	D
<b>WHEAT RIDGE</b>													
31-33	Manufacturing .....	-	51	9	1 241	52 748	928	1 851	35 380	190 714	92 801	291 080	D
<b>WINDSOR</b>													
31-33	Manufacturing .....	-	18	6	686	27 197	498	1 036	18 719	63 800	185 487	255 131	4 773
<b>BALANCE OF ADAMS COUNTY</b>													
31-33	Manufacturing .....	-	172	57	4 698	187 976	3 211	6 349	109 648	526 798	888 608	1 411 697	40 529
311	Food manufacturing .....	-	14	6	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing .....	-	19	12	f	D	D	D	D	D	D	D	D
3273	Cement and concrete product manufacturing .....	-	16	11	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing .....	2	42	12	738	28 703	564	1 176	19 508	66 762	54 153	121 088	2 723
336	Transportation equipment manufacturing .....	-	10	3	f	D	D	D	D	D	D	D	D
<b>BALANCE OF ARAPAHOE COUNTY</b>													
31-33	Manufacturing .....	2	51	14	1 233	45 168	675	1 251	19 205	108 603	83 908	193 155	3 493
<b>BALANCE OF BOULDER COUNTY</b>													
31-33	Manufacturing .....	5	116	22	2 839	140 077	965	1 923	34 016	364 369	167 432	499 930	61 539
334	Computer and electronic product manufacturing .....	9	20	5	866	57 871	274	487	10 722	65 388	46 046	118 336	3 306
3342	Communications equipment manufacturing .....	9	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing .....	1	13	1	537	11 164	58	129	1 865	23 811	11 651	35 626	D
3391	Medical equipment and supplies manufacturing .....	-	5	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing .....	-	5	1	f	D	D	D	D	D	D	D	D
339113	Surgical appliance and supplies manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
<b>BALANCE OF DOUGLAS COUNTY</b>													
31-33	Manufacturing .....	3	70	13	947	33 703	656	1 310	19 613	100 166	72 694	171 846	14 793

See footnotes at end of table.

**Table 4. Industry Statistics for Places: 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]

NAICS code	Geographic area and industry	E1	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
<b>BALANCE OF EL PASO COUNTY</b>													
31-33	Manufacturing .....	-	94	15	g	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing .....	-	19	4	g	D	D	D	D	D	D	D	D
3325	Hardware manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
33251	Hardware manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
332510	Hardware manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing .....	-	15	3	f	D	D	D	D	D	D	D	D
3391	Medical equipment and supplies manufacturing .....	-	6	1	f	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing .....	-	6	1	f	D	D	D	D	D	D	D	D
<b>BALANCE OF JEFFERSON COUNTY</b>													
31-33	Manufacturing .....	-	148	23	6 392	398 028	3 218	6 663	170 244	1 074 386	763 195	1 835 071	106 370
312	Beverage and tobacco product manufacturing .....	-	1	1	h	D	D	D	D	D	D	D	D
3121	Beverage manufacturing .....	-	1	1	h	D	D	D	D	D	D	D	D
31212	Breweries .....	-	1	1	h	D	D	D	D	D	D	D	D
312120	Breweries .....	-	1	1	h	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing .....	-	23	3	560	26 401	439	827	18 574	111 789	153 634	265 077	1 065
<b>BALANCE OF LARIMER COUNTY</b>													
31-33	Manufacturing .....	3	150	28	1 990	69 250	1 446	2 726	42 252	150 572	122 284	274 589	10 981
<b>BALANCE OF PUEBLO COUNTY</b>													
31-33	Manufacturing .....	1	50	15	1 981	72 561	1 532	3 077	48 260	279 006	280 517	562 663	7 334
333	Machinery manufacturing .....	-	6	1	f	D	D	D	D	D	D	D	D
3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
33341	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
333415	Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing .....	-	1	1	f	D	D	D	D	D	D	D	D
<b>BALANCE OF WELD COUNTY</b>													
31-33	Manufacturing .....	-	98	29	3 787	161 202	2 693	4 723	96 743	858 029	796 256	1 639 850	43 672
325	Chemical manufacturing .....	-	4	4	g	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
32599	All other chemical product and preparation manufacturing .....	-	1	1	g	D	D	D	D	D	D	D	D
325992	Photographic film, paper, plate, and chemical manufacturing .....	-	1	1	g	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 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 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.

**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
<b>COLORADO</b>	
Companies <sup>1</sup> .....	N
All establishments <sup>2</sup> .....	'5 349
Establishments with 1 to 19 employees .....	4 155
Establishments with 20 to 99 employees .....	'927
Establishments with 100 employees or more .....	267
All employees <sup>3</sup> .....	'148 824
Total compensation .....	\$1,000.. '7 846 624
Annual payroll .....	\$1,000.. '6 323 772
Total fringe benefits .....	\$1,000.. '1 522 852
Production workers, average for year .....	number.. '94 984
Production workers on March 12 .....	number.. '93 750
Production workers on May 12 .....	number.. '96 327
Production workers on August 12 .....	number.. '95 534
Production workers on November 12 .....	number.. '94 047
Production worker hours .....	1,000.. '188 404
Production worker wages .....	\$1,000.. '3 249 630
Total cost of materials .....	\$1,000.. '16 695 548
Materials, parts, containers, packaging, etc., used .....	\$1,000.. '13 928 612
Resales .....	\$1,000.. '972 096
Purchased fuels .....	\$1,000.. '125 693
Purchased electricity .....	\$1,000.. '253 659
Contract work .....	\$1,000.. '1 415 488
Quantity of electricity purchased for heat and power .....	1,000 kWh.. 5 525 490
Quantity of electricity generated less sold for heat and power .....	1,000 kWh.. D
Total value of shipments .....	\$1,000.. '34 661 144
Value of resales .....	\$1,000.. '1 295 963
Value added .....	\$1,000.. '17 798 062
Total inventories, beginning of year .....	\$1,000.. '4 157 220
Finished goods inventories .....	\$1,000.. '1 351 683
Work-in-process inventories .....	\$1,000.. 1 113 677
Materials and supplies inventories .....	\$1,000.. '1 691 860
Total inventories, end of year .....	\$1,000.. '3 918 257
Finished goods inventories .....	\$1,000.. '1 353 192
Work-in-process inventories .....	\$1,000.. 944 674
Materials and supplies inventories .....	\$1,000.. '1 620 391
Gross value of depreciable assets (acquisition costs) at beginning of year .....	\$1,000.. '16 381 706
Total capital expenditures (new and used) .....	\$1,000.. '1 975 737
Buildings and other structures (new and used) .....	\$1,000.. 525 832
Machinery and equipment (new and used) .....	\$1,000.. '1 449 905
Automobiles, trucks, etc., for highway use .....	\$1,000.. 38 719
Computers and peripheral data processing equipment .....	\$1,000.. '122 379
All other expenditures for machinery and equipment .....	\$1,000.. '1 288 807
Total retirements .....	\$1,000.. 773 083
Gross value of depreciable assets at end of year .....	\$1,000.. '17 584 360
Depreciation charges during year .....	\$1,000.. '1 338 488
Total rental payments .....	\$1,000.. '458 905
Buildings and other structures .....	\$1,000.. '298 896
Machinery and equipment .....	\$1,000.. '160 009

<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 two-thirds 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 lease-purchase 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 workforce.

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 nonchocolate 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, spaghetti, 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;

- 
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

- 
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 MANUFACTURING**

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 MANUFACTURING**

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) MANUFACTURING**

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 MANUFACTURING**

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 shoo, 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 shoo, 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, but all other bag manufacturing is classified in this subsector.

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

### **3221 PULP, PAPER, AND PAPERBOARD MILLS**

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

#### **32211 PULP MILLS**

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 petrochemicals) 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 MANUFACTURING**

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 repellent coatings for concrete and masonry, and/or

- 
2. manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

### **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 repellent coatings for concrete and masonry and/or
2. manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

### **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 un laminated 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) MANUFACTURING**

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 lathe-cutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

### **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. Ready-mix 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 MANUFACTURING**

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;



- 
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 make 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 MANUFACTURING**

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;
3. engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates);
4. powder coating metals and metal products; and
5. providing other metal surfacing services for the trade.

---

### **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 MANUFACTURING**

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 wood-working 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 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.

### **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 REFRIGERATION 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 REFRIGERATION 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 aircraft).

#### **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 MANUFACTURING**

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 MANUFACTURING**

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 MANUFACTURING**

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 optoelectronic 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 varistors.

### **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 MANUFACTURING**

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 RESIDENTIAL, 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 non-electric 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; switchgear 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 consumer-type transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

---

### **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 fiber-optic 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 noncurrent-carrying 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 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 MANUFACTURING**

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

### **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 fiberglass. 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 office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

### **337215 SHOWCASE, PARTITION, SHELVING, AND LOCKER MANUFACTURING**

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 office-type 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, electro-medical 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 administrative-record 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/](http://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](http://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 production-oriented 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 subsectors (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 two-thirds 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](http://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

---

### **COLORADO**

**Arvada** is in Adams and Jefferson Counties.

**Aurora** is in Adams, Arapahoe, and Douglas Counties.

**Avon** is now tabulated separately due to a population increase. This change deletes territory from the Balance of Eagle County.

**Basalt** is in Eagle and Pitkin Counties; it is now tabulated separately due to a population increase. This change deletes territory from the Balances of Eagle and Pitkin Counties.

**Berthoud** is in Larimer and Weld Counties.

**Brighton** is in Adams and Weld Counties.

**Broomfield** is in the new Broomfield County organized in November 2001; it is no longer in Adams, Boulder, Jefferson, and Weld Counties.

**Centennial** incorporated in February 2001. This change deletes territory from the Balance of Arapahoe County.

**Eagle** is now tabulated separately due to a population increase. This change deletes territory from the Balance of Eagle County.

**Eaton** is now tabulated separately due to a population increase. This change deletes territory from the Balance of Weld County.

**Erie** is in Boulder and Weld Counties; it is now tabulated separately due to a population increase. This change deletes territory from the Balances of Boulder and Weld Counties.

**Gypsum** is now tabulated separately due to a population increase. This change deletes territory from the Balance of Eagle County.

**Johnstown** is now tabulated separately due to a population increase. This change deletes territory from the Balance of Weld County.

**Littleton** is in Arapahoe, Douglas, and Jefferson Counties.

**Lone Tree** incorporated in December 1996, but this change was not submitted to the Census Bureau until August 1997. This change deletes territory from the Balance of Douglas County.

**Longmont** is in Boulder and Weld Counties.

**Milliken** is now tabulated separately due to a population increase. This change deletes territory from the Balance of Weld County.

**Northglenn** is in Adams and Weld Counties.

**Palisade** is now tabulated separately due to a population increase. This change deletes territory from the Balance of Mesa County.

**Superior** is in Boulder and Jefferson Counties.

**Thornton** is in Adams and Weld Counties.

**Wellington** is now tabulated separately due to a population increase. This change deletes territory from the Balance of Larimer County.

**Westminster** is in Adams and Jefferson Counties.

---

**Windsor** is in Larimer and Weld Counties.

**Adams County** no longer includes Broomfield (part), which organized as Broomfield County.

**Balance of Arapahoe County** lost territory due to the incorporation of Centennial.

**Balance of Boulder County** no longer includes Erie (part), which is tabulated separately due to a population increase; Boulder County no longer includes Broomfield (part), which organized as Broomfield County.

**Balance of Douglas County** lost territory due to the incorporation of Lone Tree.

**Balance of Eagle County** no longer includes Avon, Basalt (part), Eagle, and Gypsum, which are tabulated separately due to a population increase.

**Balance of Jefferson County** no longer includes Broomfield (part), which organized as Broomfield County.

**Balance of Larimer County** no longer includes Wellington, which is tabulated separately due to a population increase.

**Balance of Mesa County** no longer includes Palisade, which is tabulated separately due to a population increase.

**Balance of Pitkin County** no longer includes Basalt (part), which is tabulated separately due to a population increase.

**Balance of Weld County** no longer includes Eaton, Erie (part), Johnstown, and Milliken, which are tabulated separately due to a population increase; Weld County no longer includes Broomfield (part), which organized as Broomfield County.



# Appendix E.

## Metropolitan and Micropolitan Statistical Areas

### **DENVER-AURORA-BOULDER, CO COMBINED STATISTICAL AREA**

#### **Boulder, CO Metropolitan Statistical Area**

Boulder County, CO

#### **Denver-Aurora, CO Metropolitan Statistical Area**

Adams County, CO

Arapahoe County, CO

Broomfield County, CO

Clear Creek County, CO

Denver County, CO

Douglas County, CO

Elbert County, CO

Gilpin County, CO

Jefferson County, CO

Park County, CO

### **CANON CITY, CO MICROPOLITAN STATISTICAL AREA**

Fremont County, CO

### **COLORADO SPRINGS, CO METROPOLITAN STATISTICAL AREA**

El Paso County, CO

Teller County, CO

### **DURANGO, CO MICROPOLITAN STATISTICAL AREA**

La Plata County, CO

### **EDWARDS, CO MICROPOLITAN STATISTICAL AREA**

Eagle County, CO

Lake County, CO

### **FORT COLLINS-LOVELAND, CO METROPOLITAN STATISTICAL AREA**

Larimer County, CO

### **FORT MORGAN, CO MICROPOLITAN STATISTICAL AREA**

Morgan County, CO

### **GRAND JUNCTION, CO METROPOLITAN STATISTICAL AREA**

Mesa County, CO

---

**GREELEY, CO METROPOLITAN STATISTICAL AREA**

Weld County, CO

**MONTROSE, CO MICROPOLITAN STATISTICAL AREA**

Montrose County, CO

**PUEBLO, CO METROPOLITAN STATISTICAL AREA**

Pueblo County, CO

**SILVERTHORNE, CO MICROPOLITAN STATISTICAL AREA**

Summit County, CO

**STERLING, CO MICROPOLITAN STATISTICAL AREA**

Logan County, CO

