

Industrial Production Source and Description Tables

Table 3. Industry Structure of Capacity and Capacity Utilization:
Classification, Value-Added Proportions, and Descriptions of Series

| Groups and series ¹ | Classification ¹ | | | Value added proportion 2021 ¹ | Beginning date ^{1,2} | Source data |
|--|-----------------------------|-------|-------|--|----------------------------------|-------------|
| | NAICS | SOP | Type | | | |
| Total index | . . . | . . . | . . . | 100.00 | 1967 | . . . |
| Manufacturing (SIC)³ | . . . | . . . | . . . | 75.84 | 1948 | . . . |
| Manufacturing (NAICS) | 31–33 | . . . | . . . | 73.99 | 1972 | . . . |
| Durable manufacturing | 321, 327, 331–339 | . . . | . . . | 37.38 | 1967 | . . . |
| Nondurable manufacturing | 311–316, 322–326 | . . . | . . . | 36.61 | 1967 | . . . |
| Other manufacturing | 1133, 5111 | . . . | . . . | 1.85 | 1972 | . . . |
| Mining | 21 | . . . | . . . | 13.75 | 1967 | . . . |
| Utilities | 2211, 2 | . . . | . . . | 10.41 | 1967 | . . . |
| | | | | | | |
| Stage of process groups | | | | | | |
| Crude | . . . | C | . . . | 18.15 | 1967 | . . . |
| Semifinished | . . . | P | . . . | 45.70 | 1948 | . . . |
| Finished | . . . | F | . . . | 36.15 | 1948 | . . . |

. . . Not applicable.

1. Description of columns:

Groups and Series: Series marked with either an asterisk (*) or a dagger (†) are included in the published totals but are not published separately. Series marked with an asterisk are available in the auxiliary data (www.federalreserve.gov/releases/G17/Current/ipdisk/auxiliary.htm). The following abbreviations are used: ex. = excluding; eq. = equipment; misc. = miscellaneous; pt. = part.

Classification:

NAICS: *North American Industry Classification System*, 2017 edition, published by the U.S. Office of Management and Budget.

SOP: Stage of process classification: Crude processing (C), Primary & semifinished processing (P), Finished processing (F).

Type: Basis for capacity estimates.

Phys: Capacity estimates are based on physical data.

SPC: Capacity estimates are based on measures of capital services from the Federal Reserve Board and on utilization rate data for the fourth quarter of each year from the *Survey of Plant Capacity* (1974 to 2006) and from the *Quarterly Survey of Plant Capacity* (after 2006), both conducted by the Census Bureau.

TTP: Capacity estimates are based on trends through peaks in output.

Value-added proportion, 2021: This proportion is compiled from information contained in the Census of Manufactures, Annual Survey of Manufactures, and Census of Mineral Industries and in reports from the Department of Energy, the Edison Electric Institute, and the American Gas Association. The figures may not add to totals because of rounding.

Beginning date: Denotes beginning dates for series. Underlying physical data for some series may start at different dates.

2. Series beginning prior to 1972 are based, in part, on the McGraw-Hill/DRI survey that was available from 1955–88. In those industries where the McGraw-Hill/DRI survey is used at an aggregate level and the Census’s Survey of Plant Capacity is used for more detailed components, the level of estimated capacity based on the Census survey has been adjusted to achieve consistency with the McGraw-Hill/DRI survey.

3. Manufacturing (SIC) consists of those industries included in the North American Industry Classification System (NAICS) definition of manufacturing plus those industries—logging and newspaper, periodical, book, and directory publishing—that traditionally have been considered to be manufacturing and included in the industrial sector.

**Table 3. Industry Structure of Capacity and Capacity Utilization:
Classification, Value-Added Proportions, and Descriptions of Series—Continued**

| Groups and series | Classification | | | Value added proportion 2021 | Beginning date | Source data |
|---|----------------------|-------|-------|-----------------------------------|-------------------|---|
| | NAICS | SOP | Type | | | |
| Industry groups | | | | | | |
| Manufacturing (SIC) | . . . | . . . | . . . | 75.84 | 1948 | . . . |
| Manufacturing (NAICS) | 31–33 | . . . | . . . | 73.99 | 1972 | . . . |
| Durable manufacturing | 321, 327, 331–339 | . . . | . . . | 37.38 | 1967 | . . . |
| Wood product | 321 | . . . | . . . | 2.07 | 1972 | . . . |
| Sawmills and wood preservation* | 3211 | P | SPC | .69 | 1972 | . . . |
| Plywood and misc. wood products* | 3212,9 | P | . . . | 1.38 | 1972 | . . . |
| Veneer, plywood, and engineered wood product† | 3212 | P | Phys | .51 | 1986 | Capacity and output, thousand sq. ft. of 3/4-inch basis particleboard and fiberboard; Composite Panel Association. Million sq. ft. of 3/8-inch basis plywood and oriented strand board; APA: The Engineered Wood Association. |
| Other wood product* | 3219 | P | SPC | .88 | 1986 | . . . |
| Nonmetallic mineral product | 327 | . . . | . . . | 2.11 | 1948 | . . . |
| Clay, lime, gypsum, and misc. nonmetallic mineral products* | 3271,4,9 | . . . | . . . | .74 | 1972 | . . . |
| Clay and misc. nonmetallic mineral products* | 3271,9 | P | SPC | .62 | 1972 | . . . |
| Lime and gypsum product† | 3274 | P | Phys | .13 | 1972 | Capacity and output, billions of sq. ft. of 1/2 inch basis gypsum board; Gypsum Industry Association. |
| Glass and glass product* | 3272 | P | SPC | .39 | 1972 | . . . |
| Cement and concrete product* | 3273 | . . . | . . . | .98 | 1972 | . . . |
| Cement* | 32731 | P | Phys | .15 | 1972 | Kiln capacity and output of cement clinker, tons; U.S. Geological Survey. |
| Concrete and product* | 32732–9 | P | SPC | .83 | 1972 | . . . |
| Primary metal | 331 | . . . | . . . | 3.33 | 1967 | . . . |
| Iron and steel products | 3311,2 | P | Phys | 1.90 | 1972 | Capacity and output of raw steel, tons; American Iron and Steel Institute. |
| Alumina and aluminum production and processing* | 3313 | P | Phys | .41 | 1972 | Capacity and output, metric tons of ingot; Aluminum Association, U.S. Geological Survey. |
| Nonferrous metal (except aluminum) production and processing* | 3314 | P | Phys | .61 | 1972 | Capacity and output, tons, copper refining, copper smelting, and zinc smelting; U.S. Geological Survey. |
| Foundries* | 3315 | P | SPC | .40 | 1972 | . . . |
| Fabricated metal product | 332 | P | SPC | 5.74 | 1948 | . . . |
| Machinery | 333 | . . . | . . . | 5.20 | 1967 | . . . |

* Auxiliary index.

† Unpublished.

. . . Not applicable.

**Table 3. Industry Structure of Capacity and Capacity Utilization:
Classification, Value-Added Proportions, and Descriptions of Series—Continued**

| Groups and series | Classification | | | Value added proportion 2021 | Beginning date | Source data |
|--|------------------|-----|------|-----------------------------------|-------------------|--|
| | NAICS | SOP | Type | | | |
| Agriculture, construction, and mining machinery* | 3331 | F | SPC | 1.11 | 1972 | ... |
| Industrial machinery* | 3332 | F | SPC | .54 | 1972 | ... |
| Commercial and service industry machinery and other general purpose machinery* | 3333,9 | F | SPC | 1.86 | 1972 | ... |
| HVAC, metalworking, and power transmission machinery* | 3334–6 | P | SPC | 1.70 | 1972 | ... |
| Computer and electronic product | 334 | ... | ... | 4.84 | 1972 | ... |
| Computer and peripheral equipment | 3341 | F | SPC | .24 | 1972 | ... |
| Communications equipment | 3342 | F | SPC | .44 | 1972 | ... |
| Audio and video equipment and media* | 3343,6 | F | SPC | .08 | 1972 | ... |
| Semiconductor and other electronic component | 3344 | ... | ... | 1.46 | 1972 | ... |
| Semiconductor and related device* | 334413 | P | ... | .88 | 1972 | ... |
| MPUs† | 334413pt. | P | SPC | .28 | 1992 | ... |
| Semiconductors except MPUs† | 334413pt. | P | SPC | .59 | 1992 | ... |
| Electronic components ex. chips* | 33441 ex. 334413 | P | ... | .58 | 1972 | ... |
| Navigational, measuring, electromedical, and control instruments* | 3345 | F | SPC | 2.62 | 1972 | ... |
| Electrical equipment, appliance, and component | 335 | ... | ... | 1.95 | 1972 | ... |
| Household appliance* | 3352 | F | SPC | .38 | 1972 | ... |
| Electrical equipment except appliances* | 3351,3,9 | P | SPC | 1.57 | 1972 | ... |
| Transportation equipment | 336 | ... | ... | 8.41 | 1967 | ... |
| Motor vehicles and parts | 3361–3 | ... | ... | 5.20 | 1948 | ... |
| Motor vehicle* | 3361 | ... | ... | 2.43 | 1972 | ... |
| Automobile and light duty motor vehicle | 33611 | ... | ... | 2.28 | 1972 | ... |
| Automobile* | 336111 | F | Phys | .42 | 1972 | Capacity and output, line speeds and peaks in output for individual plants; Ward's Communications. Census Survey, 1972–1975. |
| Light truck and utility vehicle* | 336112 | F | Phys | 1.86 | 1972 | Same as above. |
| Heavy duty truck* | 33612 | ... | ... | .15 | 1972 | ... |
| Heavy trucks* | 33612pt. | F | Phys | .06 | 1972 | Daily production rate at capacity by plant; Stark's Truck & Off-Highway Ledger. Census Survey, 1972–1976. |

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Classification, Value-Added Proportions, and Descriptions of Series—Continued**

| Groups and series | Classification | | | Value added proportion 2021 | Beginning date | Source data |
|--|---------------------|-------|-------|-----------------------------------|-------------------|---|
| | NAICS | SOP | Type | | | |
| Medium trucks* | 33612pt. | F | Phys | .09 | 1972 | Same as above. |
| Motor vehicle body and trailer* | 3362 | F | SPC | .59 | 1972 | . . . |
| Motor vehicle parts* | 3363 | P | SPC | 2.17 | 1972 | . . . |
| Aerospace and miscellaneous transportation eq. | 3364–9 | . . . | . . . | 3.21 | 1948 | . . . |
| Aerospace product and parts* | 3364 | F | SPC | 2.30 | 1972 | . . . |
| Railroad eq., ships and boats, and other transportation equipment* | 3365–9 | F | SPC | .91 | 1972 | . . . |
| Furniture and related product | 337 | F | SPC | 1.09 | 1967 | . . . |
| Miscellaneous | 339 | . . . | . . . | 2.65 | 1972 | . . . |
| Medical equipment and supplies* | 3391 | F | SPC | 1.64 | 1972 | . . . |
| Other miscellaneous* | 3399 | F | SPC | 1.01 | 1967 | . . . |
| Nondurable manufacturing | 311–316, 322–326 | . . . | . . . | 36.61 | 1967 | . . . |
| Food | 311 | F | SPC | 9.39 | 1972 | . . . |
| Beverage and tobacco product | 312 | . . . | . . . | 2.83 | 1972 | . . . |
| Beverage* | 3121 | F | SPC | 1.67 | 1972 | . . . |
| Tobacco* | 3122 | F | SPC | 1.16 | 1967 | . . . |
| Textile mills | 313 | . . . | . . . | .30 | 1972 | . . . |
| Fiber, yarn, and thread mills* | 3131 | P | SPC | .05 | 1972 | . . . |
| Fabric mills* | 3132 | P | SPC | .17 | 1972 | . . . |
| Textile and fabric finishing and fabric coating mills* | 3133 | P | SPC | .08 | 1972 | . . . |
| Textile product mills | 314 | F | SPC | .31 | 1972 | . . . |
| Apparel | 315 | F | SPC | .14 | 1972 | . . . |
| Leather and allied product | 316 | F | SPC | .06 | 1967 | . . . |
| Paper | 322 | . . . | . . . | 2.39 | 1948 | . . . |
| Pulp, paper, and paperboard mills* | 3221 | . . . | . . . | 1.09 | 1972 | . . . |
| Pulp mills† | 32211 | C | Phys | .10 | 1972 | Capacity and output, tons; American Forest and Paper Association. |
| Paper mills† | 32212 | C | Phys | .48 | 1972 | Same as above. |
| Paperboard mills† | 32213 | C | Phys | .51 | 1972 | Same as above. |
| Converted paper product* | 3222 | P | SPC | 1.30 | 1972 | . . . |
| Printing and related support activities | 323 | P | SPC | 1.22 | 1972 | . . . |
| Petroleum and coal products | 324 | . . . | . . . | 3.81 | 1948 | . . . |
| Petroleum and coal products* | . . . | . . . | . . . | 3.81 | 1972 | . . . |

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. . . Not applicable.

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|---|-------------------|-------|-------|-----------------------------------|-------------------|--|
| | NAICS | SOP | Type | | | |
| Petroleum refineries* | 32411 | P | Phys | 3.22 | 1972 | Capacity and gross input to crude distillation units at petroleum refineries, millions of barrels per calendar day; Department of Energy. |
| Paving, roofing, and other petroleum and coal products* | 32412,9 | P | SPC | .59 | 1972 | . . . |
| Chemical | 325 | . . . | . . . | 12.46 | 1948 | . . . |
| Basic chemical* | 3251 | . . . | . . . | 3.24 | 1972 | . . . |
| Organic chemicals* | 32511,9 | C | . . . | 2.42 | 1972 | . . . |
| Ethyl alcohol† | 325193 | C | Phys | .33 | 1997 | Output, barrels; Energy Information Administration, Department of Energy. Capacity, gallons; Renewable Fuels Association. |
| Organic chemicals ex. ethanol* | 32511,9 ex 325193 | C | SPC | 2.08 | 1996 | . . . |
| Basic inorganic chemicals* | 32512–8 | C | . . . | .82 | 1972 | . . . |
| Alkalies and chlorine† | 32518pt. | C | Phys | .11 | 1972 | Capacity and output, tons of chlorine; Chlorine Institute. |
| Basic inorganic chemicals ex. alkalies and chlorine* | 32512–3, 32518pt. | C | SPC | .71 | 1972 | . . . |
| Resin, synthetic rubber, and artificial and synthetic fibers and filaments* | 3252 | . . . | . . . | 1.16 | 1972 | . . . |
| Resin and synthetic rubber* | 32521 | . . . | . . . | 1.09 | 1972 | . . . |
| Plastics material and resin | 325211 | P | Phys | 1.01 | 1972 | Capacity and output, major thermosetting and thermoplastic resins, pounds; American Plastics Council. Society of the Plastics Industry, Inc., 1972–98. |
| Synthetic rubber | 325212 | P | SPC | .08 | 1972 | Census Survey. Capacity, tons; International Institute of Synthetic Rubber Producers. Output, tons; Rubber Manufacturers Association, 1972–2001. |
| Artificial and synthetic fibers and filaments | 32522 | P | SPC | .07 | 1972 | Census Survey. Capacity and output, pounds; Fiber Economics Bureau, 1972–2016. |
| Pesticide, fertilizer, and other agricultural chemical* | 3253 | . . . | . . . | .65 | 1972 | . . . |
| Fertilizer* | 32531 | C | SPC | .42 | 1972 | Census Survey. Capacity and Output, thousands of short tons; The Fertilizer Institute, 1997–2016. |
| Pesticide and other agricultural chemical* | 32532 | C | SPC | .22 | 1972 | . . . |
| Pharmaceutical and medicine* | 3254 | F | SPC | 4.91 | 1972 | . . . |

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| Groups and series | Classification | | | Value added proportion 2021 | Beginning date | Source data |
|---|----------------|-------|-------|-----------------------------------|-------------------|---|
| | NAICS | SOP | Type | | | |
| Paints, soaps and toiletries, and other chemical products* | 3255–9 | . . . | . . . | 2.51 | 1972 | . . . |
| Paints and other chemical products* | 3255,9 | P | SPC | 1.23 | 1972 | . . . |
| Soap, cleaning compound, and toilet preparation* | 3256 | F | SPC | 1.27 | 1972 | . . . |
| Plastics and rubber products | 326 | . . . | . . . | 3.69 | 1948 | . . . |
| Plastics product* | 3261 | P | SPC | 3.03 | 1972 | . . . |
| Rubber product* | 3262 | . . . | . . . | .66 | 1972 | . . . |
| Tire* | 32621 | P | SPC | .31 | 1972 | . . . |
| Rubber products ex. tires* | 32622,9 | P | SPC | .35 | 1972 | . . . |
| Other manufacturing | 1133, 5111 | . . . | . . . | 1.85 | 1972 | . . . |
| Newspaper, periodical, book, and directory publishers* | 5111 | P | SPC | 1.68 | 1972 | . . . |
| Logging* | 1133 | C | TTP | .17 | 1972 | Census Survey, 1974–1996. |
| Mining | 21 | . . . | . . . | 13.75 | 1967 | . . . |
| Oil and gas extraction | 211 | . . . | . . . | 10.03 | 1972 | . . . |
| Oil and gas extraction* | . . . | . . . | . . . | 10.03 | 1972 | . . . |
| Crude oil* | 21112 | . . . | . . . | 7.02 | 1972 | . . . |
| Texas crude oil† | 211120pt. | C | TTP | 2.98 | 1972 | . . . |
| Alaska and California crude oil† | 211120pt. | C | TTP | .51 | 1972 | . . . |
| Louisiana and other crude oil† | 211120pt. | C | TTP | 3.54 | 1972 | . . . |
| Natural gas and natural gas liquids* | 21113 | . . . | . . . | 3.01 | 1972 | . . . |
| Natural gas* | 211130pt. | C | TTP | 2.04 | 1972 | Capacity, billion cubic feet per day; Energy Information Administration, Department of Energy, 1984–2003. |
| Natural gas liquid extraction* | 211130pt. | . . . | . . . | .96 | 1972 | . . . |
| Propane† | 211130pt. | C | TTP | .13 | 1972 | . . . |
| Liquefied petroleum† | 211130pt. | C | TTP | .83 | 1972 | . . . |
| Mining (except oil and gas) | 212 | . . . | . . . | 2.09 | 1972 | . . . |
| Coal mining | 2121 | C | Phys | .43 | 1967 | Capacity estimates and output, coal, thousand short tons per year; Energy Information Administration, Department of Energy. |
| Metal ore mining | 2122 | . . . | . . . | .81 | 1967 | . . . |
| Iron ore mining* | 21221 | C | Phys | .07 | 1972 | Capacity estimates and output, taconite pellets, million metric tons per year; U.S. Geological Survey. |
| Gold ore and silver ore mining* | 21222 | . . . | . . . | .22 | 1972 | . . . |
| Gold ore mining* | 212221 | C | Phys | .21 | 1972 | Capacity estimates and output, gold ore, thousand troy ounces per year; U.S. Geological Survey. |

* Auxiliary index.

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. . . Not applicable.

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| Groups and series | Classification | | | Value added proportion 2021 | Beginning date | Source data |
|--|----------------|-------|-------|-----------------------------------|-------------------|---|
| | NAICS | SOP | Type | | | |
| Silver ore mining* | 212222 | C | Phys | .02 | 1972 | Capacity estimates and output, silver ore, thousand metric tons per year; U.S. Geological Survey. |
| Copper, nickel, lead, and zinc mining* | . . . | . . . | . . . | .33 | 1972 | . . . |
| Lead ore and zinc ore mining* | 212230pt. | C | Phys | .04 | 1972 | Capacity estimates and output, tons; U.S. Geological Survey. |
| Copper ore and nickel ore mining* | 212230pt. | C | Phys | .29 | 1972 | Capacity estimates and output, copper ores, tons; U.S. Geological Survey. |
| Other metal ore mining* | 21229 | C | Phys | .19 | 1972 | Capacity estimates and output, molybdenum ores, tons; U.S. Geological Survey. |
| Nonmetallic mineral mining and quarrying | 2123 | . . . | . . . | .85 | 1967 | . . . |
| Stone, sand, gravel, clay, and ceramic and refractory minerals mining and quarrying† | 21231,2 | P | TTP | .75 | 1972 | . . . |
| Other nonmetallic mineral mining and quarrying† | 21239 | C | Phys | .11 | 1972 | Capacity estimates and output, soda ash and phosphate rock, tons; U.S. Geological Survey. |
| Support activities for mining | 213 | C | Phys | 1.63 | 1972 | Capacity based on available rigs; physical utilization is ratio of active to available rigs; NOV Downhole. |
| Utilities | 2211, 2 | . . . | . . . | 10.41 | 1967 | . . . |
| Electric power generation, transmission, and distribution | 2211 | P | Phys | 8.98 | 1967 | Capacity and output, Department of Energy. Capacity projections, North American Electric Reliability Council. |
| Natural gas distribution | 2212 | P | TTP | 1.43 | 1967 | . . . |

* Auxiliary index.

† Unpublished.

. . . Not applicable.