

Nonferrous Castings: 2003

Issued October 2004

MA331E(03)-1

Current Industrial Reports

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/mcd/>. Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector;" then choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (WK format) to your personal computer.

These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS

In 2003, U.S. producers of nonferrous castings shipped an estimated 5,617 million pounds of nonferrous shapes and forms, compared to the estimated 5,724 million pounds shipped in 2002. Shipments of aluminum castings were 4,136 million pounds in 2003, compared to 4,193 million pounds shipped in 2002. Copper castings remained consistent from 2002 to 2003; however, zinc castings showed a 10 percent decrease from 2002 to 2003.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Brenda Campbell, 301-763-1031.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-763-4673.

U S C E N S U S B U R E A U

Helping You Make Informed Decisions

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

Table 1. Producers' Shipments of Nonferrous Castings: 2003 and 2002
[Thousands of pounds]

Year	By type of customer			By metal				
	Total	For sale	For own use	Aluminum and aluminum-based alloy	Copper and copper-base alloy	Magnesium and magnesium-base alloy	Zinc and zinc-base alloy	Lead and lead-base alloy die
2003.....	5,616,772	3,905,176	1,711,596	4,135,874	681,731	(D)	360,121	(D)
2002.....	5,723,584	3,911,375	1,812,209	4,192,913	685,129	(D)	397,696	(D)

D Withheld to avoid disclosing data for individual companies.

Table 2. Value of Shipments of Nonferrous Castings: 2003 and 2002
[Thousands of dollars]

Product description	2003		2002	
	Value of shipments	Standard error of estimate (percent)	Value of shipments	Standard error of estimate (percent)
Nonferrous castings.....	7,502,770	8.8	8,061,783	6.8
Aluminum and aluminum-based alloy.....	5,563,951	11.8	5,890,151	9.3
Copper and copper-based alloy.....	1,118,322	3.1	1,187,357	3.0
Magnesium and magnesium-based alloy.....	187,618	1.4 r/	215,891	1.3
Zinc and zinc-based alloy.....	630,240	2.2 r/	765,344	1.7
Lead and lead-based alloy.....	2,639	(Z) r/	3,040	10.3

r/Revised by 5 percent or more from previously published data. Z Less than half the unit value shown.

Note: Dollar value represents the value of castings for sale.

Table 3. Quantity of Shipments of Nonferrous Castings by Type and Methods of Castings: 2003 and 2002
[Quantity in thousands of pounds]

Product code	Product description	2003		2002	
		Quantity	Standard error of estimate (percent)	Quantity	Standard error of estimate (percent)
	Nonferrous castings	5,616,772	8.4	5,723,584	6.8
	For sale use	3,905,176	11.5	3,911,375	9.4
	For own use	1,711,596	2.5	1,812,209	2.3
	Aluminum and aluminum-base alloy	4,135,874	10.8	4,192,913	8.8
	For sale.....	3,060,142	13.8	3,024,399	11.4
	For own use.....	1,075,732	0.6	1,168,514	(Z)
3315240101	Sand.....	(D)	(NA)	(D)	(NA)
	For sale.....	(D)	(NA)	(D)	(NA)
	For own use.....	10,315	1.6	r/ 11,679	2.0
3315240206	Permanent and semipermanent mold 1/....	1,169,442	0.6	1,180,055	(Z)
3315210000	Die.....	1,893,265	25.3	r/ 1,955,153	20.6
	For sale.....	1,434,370	33.4	r/ 1,453,435	27.9
	For own use.....	458,895	1.2	501,718	1.1
3315240421	All other 1/.....	(D)	(NA)	(D)	(NA)
	Copper and copper-base alloy.....	681,731	3.9	685,129	3.5
	For sale.....	561,778	4.7	562,947	4.3
	For own use	119,953	1.0	122,182	1.0
3315250426	Sand.....	489,056	3.7	493,619	2.9
	For sale.....	406,592	4.4	407,164	3.6
	For own use.....	82,464	1.4	86,455	1.4
3315250531	Permanent and semipermanent mold 1/....	25,300	3.7	27,297	3.5
3315220101	Die 1/.....	6,456	1.1	6,920	1.2
3315250536	Centrifugal 1/.....	30,795	6.4	30,519	6.9
3315250546	All other 1/.....	130,125	14.7	126,775	15.0
	Magnesium and magnesium-base alloy.....	(D)	(NA)	(D)	(NA)
	For sale.....	(D)	(NA)	(D)	(NA)
	For own use.....	(D)	(NA)	(D)	(NA)
3315280201	Sand 1/.....	(D)	(NA)	(D)	(NA)
3315220311	Die 1/.....	24,151	(Z)	r/ 28,316	(Z)
3315280211	All other 1/.....	(D)	(NA)	(D)	(NA)
	Zinc and zinc-base alloy.....	360,121	11.8	397,696	10.5
	For sale.....	253,600	2.7	289,354	2.0
	For own use.....	106,521	39.4	108,342	38.1
3315220206	Die 1/.....	336,209	12.6	371,986	11.2
3315280201	All other 1/.....	23,912	(Z)	25,709	(Z)
3315220416	Lead and lead-base alloy die 1/.....	(D)	(NA)	(D)	(NA)

D Withheld to avoid disclosing data for individual companies. NA Not available. r/Revised by 5 percent or more from previously published data. Z Less than half the unit value shown.

1/Castings "For sale" and "For own use" are combined to avoid disclosing data for individual companies.

Note: Comparable data for Schedule B export codes and HTSUSA import codes are not available.

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the 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 Foodservices
- 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), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and

returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on nonferrous castings have been collected by the Census Bureau since 1942. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.