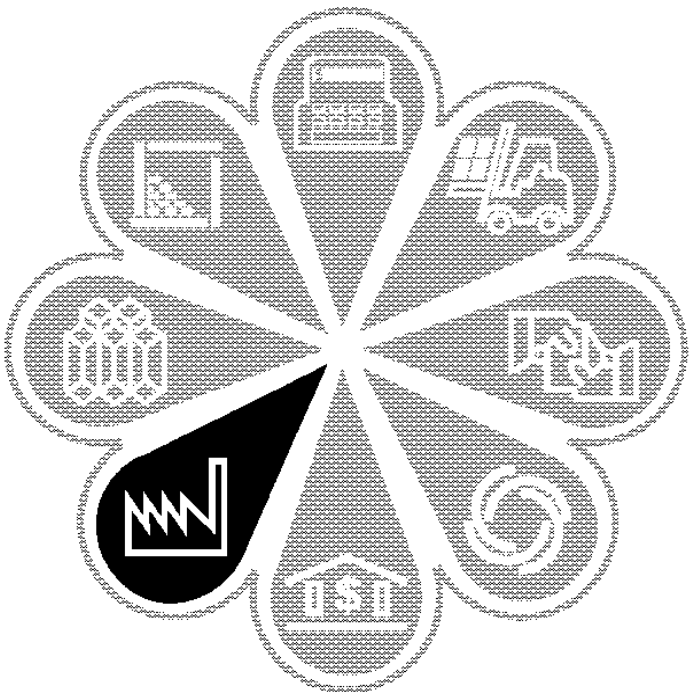
1992 Census of Manufactures

MC92-I-32D

INDUSTRY SERIES

Concrete, Plaster, and Cut Stone Products

Industries 3271, 3272, 3273, 3274, 3275, and 3281



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

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U.S. Department of Commerce
Ronald H. Brown, Secretary
David J. Barram, Deputy Secretary

Economics and Statistics Administration
Everett M. Ehrlich, Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
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Acknowledgments

Many persons participated in the various activities of the 1992 Census of Manufactures. The overall planning and review of the census operations were performed by the Economic Census Staff of the Economic Planning and Coordination Division.

Manufacturing and Construction Division prepared this report. **David W. Cartwright**, Assistant Chief for Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of manufactures. Planning and implementation were under the direction of **Michael Zampogna,** Chief, Wood and Chemical Products Branch, assisted by **Ted McGrath**, Section Chief, with primary staff assistance by **Robert Miller.**

Brian Greenberg, Assistant Chief for Research and Methodology Programs, assisted by **Stacey Cole**, provided the mathematical and statistical techniques as well as the coverage operations.

Baruti A. Taylor, under the direction of **A. William Visnansky,** Chief, Special Reports Branch, performed overall coordination of the publication process. **Julius Smith, Jr.** and **Andrew W. Hait** provided primary staff assistance.

The Economic Planning and Coordination Division provided the computer processing procedures. **Shirin A. Ahmed,** Assistant Chief for Post Data Collection Processing, was responsible for editing and the analysts' interactive database review and correction system. Design and specifications were prepared under the supervision of **Dennis L. Wagner,** Chief, Post Collection Census Branch, assisted by **S. Mark Schmidt** and **Robert A. Rosati.**

The staff of the Data Preparation Division, **Judith N. Petty,** Acting Chief, performed mailout preparation and receipt operations, clerical and analytical review activities, data keying, and geocoding review.

The Geography Division staff developed geographic coding procedures and associated computer programs.

The Economic Statistical Methods and Programming Division, **Charles P. Pautler, Jr.,** Chief, developed and coordinated the computer processing systems. **Martin S. Harahush,** Assistant Chief for Quinquennial Programs, was responsible for design and implementation of the computer systems. **Gary T. Sheridan,** Chief, Manufactures and Construction Branch, assisted by **Gerald S. Turnage**, supervised the preparation of the computer programs.

Computer Services Division, **Marvin D. Raines,** Chief, performed the computer processing.

The staff of the Administrative and Publications Services Division, **Walter C. Odom,** Chief, performed publication planning, design, composition, editorial review, and printing planning and procurement for publications and report forms. **Cynthia G. Brooks** provided publication coordination and editing.

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

If you have any questions concerning the statistics in this report, call 301-457-4810.

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

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

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

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 and 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.

AUTHORITY AND SCOPE

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 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, financial, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents 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 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, 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 questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

Census of Manufactures

GENERAL

This report, from the 1992 Census of Manufactures, is one of a series of 83 industry reports, each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and the District of Columbia and for special subjects such as manufacturers' shipments to the federal government and concentration ratios in manufacturing.

The industry reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, capital expenditures, product shipments, etc.

State reports present similar statistics for each State and its important metropolitan areas (MA's), counties, and places. Selected statistical totals for ''all manufacturing'' have been shown in the State reports for MA's with 250 employees or more and for counties and places with 500 employees or more.

The *General Summary* report contains industry, product class, and geographic area statistics summarized in one report. The introduction to the *General Summary* discusses, at greater length, many of the subjects described in this introduction. For example, the *General Summary* text discusses the relationship of value added by manufacture to national income by industry of origin, the changes in statistical concepts over the history of the censuses, and the valuation problems arising from intracompany transfers between manufacturing plants of a company and between manufacturing plants and sales offices and sales branches of a company.

SCOPE OF CENSUS AND DEFINITION OF MANUFACTURING

The 1992 Census of Manufactures covers all establishments with one paid employee or more primarily engaged in manufacturing as defined in the *1987 Standard Industrial Classification (SIC) Manual*[1] This is the system of industrial classification developed by experts on classification in Government and private industry under the guidance of the Office of Information and Regulatory Affairs, Office of Management and Budget. This classification system is used by Government agencies as well as many organizations outside the Government.

The SIC Manual defines manufacturing as the mechanical or chemical transformation of substances or materials into new products. The assembly of component parts of products also is considered to be manufacturing if the resulting product is neither a structure nor other fixed improvement. These activities are usually carried on in plants, factories, or mills that characteristically use power-driven machines and materials-handling equipment.

Manufacturing production is usually carried on for the wholesale market, for transfers to other plants of the same company, or to the order of industrial users rather than for direct sale to the household consumer. Some manufacturers in a few industries sell chiefly at retail to household consumers through the mail, through house-to-house routes, or through salespersons. Some activities of a service nature (enameling, engraving, etc.) are included in manufacturing when they are performed primarily for trade. They are considered nonmanufacturing when they are performed primarily to the order of the household consumer.

RELATIONSHIP BETWEEN ANNUAL SURVEY OF MANUFACTURES AND CENSUS OF MANUFACTURES

The Bureau of the Census conducts the annual survey of manufactures (ASM) in each of the 4 years between the censuses of manufactures. The ASM is a probability-based sample of approximately 62,000 establishments and collects the same industry statistics (employment, payroll, value of shipments, etc.) as the census of manufactures. In addition to collecting the information normally requested on the census form, the establishments in the ASM sample are requested to supply information on assets, capital expenditures, retirements, depreciation, rental payments, supplemental labor costs, costs of purchased services, and foreign content of materials consumed. Except for supplemental labor costs, the extra ASM items are collected only in census years.

ESTABLISHMENT BASIS OF REPORTING

The census of manufactures is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each

[1] *Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

location. 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 1992, 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. This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company (see Auxiliaries).

MANUFACTURING UNIVERSE AND CENSUS REPORT FORMS

The 1992 Census of Manufactures universe includes approximately 380,000 establishments. The amounts of information requested from manufacturing establishments were 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. The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. **Small single-establishment companies not sent a report form.** In the 1992 Census of Manufactures, approximately 143,000 small single-establishment companies were excused from filing reports. Selection of these small establishments was done on an industry-by-industry basis and was based on annual payroll and total shipments data as well as on the industry classification codes contained in the administrative records of Federal agencies. The cutoffs were selected so that these administrative-records cases would account for no more than 3 percent of the value of shipments for all manufacturing. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms.

   Information on the physical location of the establishment, as well as information on payrolls, receipts (shipments), and industry classification, was obtained from the administrative records of other Federal agencies under special arrangements, which 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'' (n.s.k.) categories.

   The industry classification codes included in the administrative-records 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 at the four-digit SIC level. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

   Sometimes these administrative-records cases were only given a two- or three-digit SIC group. For the 1992 Census of Manufactures, 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 four-digit SIC level. Establishments that did not return the classification form were coded later to those four-digit SIC industries identified as ''not elsewhere classified'' (n.e.c.) within the given two- or three-digit industry groups.

   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.

2. **Establishments sent a report form.** The over 237,000 establishments covered in the mail canvass were divided into three groups:

   a. **ASM sample establishments.** This group consisted of approximately 62,000 establishments covering 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 (see Appendix B, Annual Survey of Manufactures).

      In a census of manufactures year, the ASM report form (MA-1000) 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 information on assets, capital expenditures, retirements, depreciation, rental payments, supplemental labor costs, and costs of purchased services. See appendix A, section 2, for an explanation of these items.

The census part of the report form is 1 of approximately 200 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of these many forms to canvass the 459 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 be performing. Respondents were requested to identify the products, the value of each product, and, in a large number of 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 material not identified on the form.

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

b. **Large and medium establishments (non-ASM).** Approximately 112,000 establishments were included in this group. A variable cutoff, based on administrative-records payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the approximately 200 census of manufactures 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 consisted of approximately 63,000 establishments. For those industries where application of the variable cutoff for administrative-records cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or ''short'' form was used. These establishments received 1 of the approximately 80 versions of the short form, which requested summary product and material data and totals but no details on employment, payrolls, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics; the same data were collected on the short form as on the long form. However, detailed information on materials consumed was not collected on the short form; thus its use would increase the value of the n.s.k. categories.

AUXILIARIES

In this industry report, the data on employment and payroll are limited to operating manufacturing establishments. The census report form filed for auxiliaries (ES-9200) requested a description of the activity of the establishments serviced. However, the manufacturing auxiliaries were coded only to the two-digit major group of the establishments they served; whereas, the operating establishments were coded to a four-digit manufacturing industry. Data for the approximately 11,000 separately operated auxiliaries are included in the geographic area series and in a report issued as part of the 1992 Enterprise Statistics Survey.

Auxiliaries are establishments whose employees are primarily engaged in performing supporting services for other establishments of the same company, rather than for the general public or for other business firms. They can be at different locations from the establishments served or at the same location as one of those establishments but not operating as an integral part thereof and serving two establishments or more. Where auxiliary operations are conducted at the same location as the manufacturing operation and operate as an integral part thereof, they usually are included in the report for the operating manufacturing establishment.

Included in the broad category of auxiliaries are administrative offices. Employees in administrative offices are concerned with the general management of multiestablishment companies, i.e., with the general supervision and control of two units or more, such as manufacturing plants, mines, sales branches, or stores. The functions of these employees may include the following:

1. Program planning, including sales research and coordination of purchasing, production, and distribution
2. Company purchasing, including general contracts and purchasing methods
3. Company financial policy and accounting
4. General engineering, including design of product machinery and equipment, and direction of engineering effort conducted at the individual operation locations
5. Company personnel matters
6. Legal and patent matters

Other types of auxiliaries serving the plants or central management of the company include purchasing offices, sales promotion offices, research and development organizations, etc.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the census was classified in 1 of 459 manufacturing industries in accordance with the industry definitions in the 1987 SIC Manual. The 1987 edition of this manual represents a major revision for manufacturing industries from the 1972 edition and its 1977 supplement. Appendix A of the 1987 Manual notes the revisions in the four-digit industry levels between 1972/ 77 and 1987.

An industry is generally defined as a group of establishments producing the same product or a closely related group of products. The product groupings from which industry classifications are derived are based on considerations such as similarity of manufacturing processes, types of materials used, types of customers, and the like. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees. The system operates in such a way that the definitions progressively become narrower with successive additions of numerical digits. For 1992, there are 20 major groups (two-digit SIC), 139 industry groups (three-digit SIC), and 459 industries (four-digit SIC). This represents an expansion of four-digit industries from 452 in 1972/ 77 and a reduction of three-digit groups from 143 in 1972/ 77. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. There are about 11,000 products identified by a seven-digit code. The seven-digit products are considered the primary products of the industry with the same four digits.

Accordingly, an establishment is usually classified in a particular industry on the basis of its major activity during a particular year, i.e., production of the products primary to that industry exceeds, in value, production of the products primary to any other single industry. In a few instances, however, the industry classification of an establishment is not only determined by the products it makes but also by the process employed in operations. Refining of nonferrous metals from ore or rolling and drawing of nonferrous metals (processes which involve heavy capitalization in specialized equipment) would be classified according to the process used during a census year. These establishments then would be ''frozen'' in that industry during the following ASM years.

In either a census or ASM year, establishments included in the ASM sample with certainty weight, other than those involved with heavily capitalized activities described above, 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 (see Appendix B, Annual Survey of Manufactures). 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, at the aggregate level, some industries comprise different mixes of establishments between survey years and establishment data for such industry statistics as employment and payroll may be tabulated in different industries between survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the four-digit SIC 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-records 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.

While some establishments produce only the primary products of the industry in which they are classified, all establishments of an industry rarely specialize to this extent. The industry statistics (employment, inventories, value added by manufacture, total value of shipments including resales and miscellaneous receipts, etc.) shown in tables 1a through 5a, therefore, reflect not only the primary activities of the establishments in that industry but also their secondary activities. The product statistics in table 6a represent the output of all establishments whether or not they are classified in the same industry as the product. For this reason, in relating the industry statistics, especially the value of shipments to the product statistics, the composition of the industry's output shown in table 5b should be considered.

The extent to which industry and product statistics may be matched with each other is measured by two ratios which are computed from the figures shown in table 5b. The first of these ratios, called the primary product specialization ratio, measures the proportion of product shipments (both primary and secondary) of the establishments classified in the industry represented by the primary products of those establishments. The second ratio, called the coverage ratio, is the proportion of primary products shipped by the establishments classified in the industry to total shipments of such products by all manufacturing establishments.

However, establishments making products falling into the same industry category may use a variety of processes and materials to produce them. Also, the same industry classification (based on end products) may include both establishments that are highly integrated and those that

put only the finishing touches on an already highly fabricated item. For example, the refrigeration equipment industry includes instances of almost complete integration (production of the compressor, condensing unit, electric motor, casting, stamping of the case, and final assembly) all carried on at one plant. On the other hand, the condensing unit, the motor, and the case may be purchased and only assembled into the finished product.

In some instances, separate industry categories have been established for integrated and nonintegrated establishments. For other industries, the census provides separate statistics on the production of intermediate commodities made and used in the producing plant. For some industries characterized by many plants of the same company, separate figures on interplant transfers of products usually are shown.

Differences in the integration of production processes, types of operations, and alternatives in types of materials used should be considered when relating the industry statistics (employment, payrolls, value added, etc.) to the product and material data.

VALUE OF SHIPMENTS FOR THE INDUSTRY COMPARED WITH VALUE OF PRODUCT SHIPMENTS

This report shows value of shipments data for industries and products. In tables 1a through 5b, 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 table 6a represents the total value of all products shipped that are classified as primary to an industry.

CENSUS DISCLOSURE RULES

In accordance with Federal law governing census reports, no data are published that would disclose the data for an individual establishment or company. However, the number of establishments classified in a specific industry is not considered a disclosure, so this information may be released even though other information is withheld.

The disclosure analysis for the industry statistics in tables 1a through 5a of this report 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 new capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for new capital expenditures that can be suppressed even though value of shipments data are publishable.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Manufactures may be obtained on computer diskette or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

–	Represents zero.
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(NC)	Not comparable.
(S)	Withheld because estimate did not meet publication standards.
(X)	Not applicable.
(Z)	Less than half the unit shown.
n.e.c.	Not elsewhere classified.
n.s.k.	Not specified by kind.
pt.	Part.
r	Revised.
SIC	Standard Industrial Classification.

Other abbreviations, such as lb, gal, yd, doz, bbl, and s tons, are used in the customary sense.

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SIC's 357, 36-39	Bruce Goldhirsch	301-457-4817
Import/ export publications	Foreign Trade Division	301-457-3041
Industry analysis and forecasting	International Trade Administration	202-377-4356

Users' Guide for Locating Statistics in This Report by Table Number

[For explanation of terms, see appendixes]

Item	Four-digit industry statistics							Five-digit product class and seven-digit product statistics			
	Historical	Operating ratios	By geographic area	Summary and supplemental	By employment size	By industry and product class specialization	Materials consumed by kind	Industry-product analysis	Product shipments	Product class by geographic area	Historical product class
Number of companies	1a			3a					*6a		
Number of establishments	1a		2	3a	4	5a					
Employment and payroll:											
Number of employees	1a	1b	2	3a	4	5a					
Payroll	1a	1b	2	3a	4	5a					
Supplemental labor costs				3a							
Production workers	1a	1b	2	3a	4	5a					
Production-worker hours	1a	1b	2	3a	4	5a					
Production-worker wages	1a	1b	2	3a	4	5a					
Shipments, cost of materials, and value added:											
Value of shipments (four-digit)	1a	1b	2	3a	4	5a		5b			
Product class shipments (five-digit)									6a	6b	6c
Product shipments (seven-digit)									6a		
Value added by manufacture	1a	1b	2	3a	4	5a					
Cost of materials	1a	1b	2	3a	4	5a					
Fuels and electric energy				3a							
Materials consumed by kind							7				
Inventories:											
Total, end of year	1a			3a	4						
By stage of fabrication				3a							
Capital expenditures, assets, rental payments, and purchased services:											
New capital expenditures	1a		2	3b	4	5a					
Used plant and equipment expenditures				3b							
Gross assets				3b							
Depreciation				3b							
Retirements of buildings and machinery				3b							
Rental payments				3b							
Foreign content of materials consumed				3c							
Purchased services				3c							
Ratios:											
Specialization	1a							5b			
Coverage	1a							5b			

*Number of companies with shipments of more than $100 thousand.

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Concrete, Plaster, and Cut Stone Products

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Description of Industries and Summary of Findings

This report shows 1992 Census of Manufactures statistics for establishments classified in each of the following industries:

SIC code and title	
3271	Concrete Block and Brick
3272	Concrete Products, N.E.C.
3273	Ready-Mixed Concrete
3274	Lime
3275	Gypsum Products
3281	Cut Stone and Stone Products

The industry statistics (employment, payroll, cost of materials, value of shipments, inventories, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments but also their activities in the manufacture of secondary products as well as their miscellaneous activities (contract work on materials owned by others, repair work, etc.). This fact should be taken into account in comparing industry statistics (tables 1 through 5a) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the ''product mix'' is indicated in table 5b, which shows the value of primary and secondary products shipped by establishments classified in the specified industry and the value of primary products of the industry shipped as secondary products by establishments classified in other industries.

Establishment data were tabulated based on industry definitions included in the *1987 Standard Industrial Classification (SIC) Manual*[1]. The 1987 edition represents a major revision for manufacturing industries from the 1972 edition and its 1977 supplement. In addition to the 1987 SIC revision, changes were made to the product class (five-digit) and product code (seven-digit) categories. The product class and product code comparability between the 1992 and 1987 censuses is shown in appendix C. This appendix presents, in tabular form, the linkage from 1992 to 1987, and 1987 to 1992.

[1] *Standard Industrial Classification Manual: 1987.* For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

INDUSTRY 3271, CONCRETE BLOCK AND BRICK

This industry is made up of establishments primarily engaged in manufacturing concrete building block and brick from a combination of cement and aggregate. Contractors engaged in concrete construction work are classified in Division C, Construction, and establishments primarily engaged in mixing and delivering ready-mixed concrete are classified in industry 3273.

The 1992 definition of this industry is the same as that used in the 1987 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1992 Census of Manufactures, Industry 3271, Concrete Block and Brick, had employment of 16.4 thousand. The employment figure was 12 percent below the 18.6 thousand reported in 1987.

The leading States in employment in 1992 were Pennsylvania, California, Texas, and Michigan. This represents a shift from 1987 when California, New Jersey, Pennsylvania, and Texas were the leading States.

The total value of shipments for establishments classified in this industry was $2.1 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry in which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 3271 shipped $1.5 billion of concrete block and brick considered primary to the industry, $127.0 million of secondary products, and had $451.6 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in this industry was 92 percent (specialization ratio). In 1987, the specialization ratio was 94 percent.

Establishments in this industry also accounted for 88 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio also was 88 percent.

The products primary to industry 3271, no matter in what industry they were produced, appear in table 6a and aggregate to $1.7 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and energy used by establishments classified in the concrete block and brick industry amounted to $1.0 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 5 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 14 percent of the total value of shipments.

INDUSTRY 3272, CONCRETE PRODUCTS, N.E.C.

This industry is made up of establishments primarily engaged in manufacturing concrete products, except block and brick, from a combination of cement and aggregate. Contractors engaged in concrete construction work are classified in Division C, Construction, and establishments primarily engaged in mixing and delivering ready-mixed concrete are classified in industry 3273.

The 1992 definition of this industry is the same as that used in the 1987 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1992 Census of Manufactures, Industry 3272, Concrete Products, N.E.C., had employment of 58.9 thousand. The employment figure was 16 percent below the 70.0 thousand reported in 1987.

The leading States in employment in 1992 were California, Florida, Texas, and Pennsylvania, accounting for approximately 31 percent of the industry's employment. These same States were the leaders in 1987 when they accounted for 35 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was $5.9 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry in which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 3272 shipped $5.4 billion of concrete products, not elsewhere classified, considered primary to the industry, $127.0 million of secondary products, and had $446.0 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in this industry was 98 percent (specialization ratio). In 1987, the specialization ratio was 97 percent.

Establishments in this industry also accounted for 96 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio was 97 percent.

The products primary to industry 3272, no matter in what industry they were produced, appear in table 6a and aggregate to $5.6 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and energy used by establishments classified in the concrete products, not elsewhere classified, industry amounted to $2.6 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 5 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 14 percent of the total value of shipments.

INDUSTRY 3273, READY-MIXED CONCRETE

This industry is made up of establishments primarily engaged in manufacturing Portland cement concrete manufactured and delivered to a purchaser in a plastic and unhardened state. This industry includes production and sale of central-mixed concrete, shrink-mixed concrete, and truck-mixed concrete.

The 1992 definition of this industry is the same as that used in the 1987 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1992 Census of Manufactures, Industry 3273, Ready-Mixed Concrete, had employment of 82.4 thousand. The employment figure was 15 percent below the 96.8 thousand reported in 1987.

The leading States in employment in 1992 were California, Texas, Florida, and Ohio, accounting for approximately 28 percent of the industry's employment. This represents a shift from 1987 when California, Texas, Florida, and Arizona accounted for approximately 31 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was $12.0 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry in which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 3273 shipped $10.7 billion of ready-mixed concrete considered primary to the industry, $568.3 million of secondary products, and had $731.6 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in this industry was 95 percent (specialization ratio). In 1987, the specialization ratio also was 95 percent.

Establishments in this industry also accounted for 98 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio also was 98 percent.

The products primary to industry 3273, no matter in what industry they were produced, appear in table 6a and aggregate to $10.9 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and energy used by establishments classified in the ready-mixed concrete industry amounted to $6.7 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 5 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 21 percent of the total value of shipments.

INDUSTRY 3274, LIME

This industry is made up of establishments primarily engaged in manufacturing quicklime, hydrated lime, and ''dead-burned'' dolomite from limestone, dolomite shells, or other substances.

The 1992 definition of this industry is the same as that used in the 1987 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1992 Census of Manufactures, Industry 3274, Lime, had employment of 5.6 thousand. The employment figure was 2 percent below the 5.7 thousand reported in 1987.

The leading States in employment in 1992 were Missouri, Ohio, Pennsylvania, and Texas. This represents a shift from 1987 when Kentucky, Missouri, Pennsylvania, and Texas were the leading States.

The total value of shipments for establishments classified in this industry was $903.7 million.

Establishments in virtually all industries ship secondary products as well as products primary to the industry in which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 3274 shipped $800.2 million of lime considered primary to the industry, $89.0 million of secondary products, and had $14.4 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in this industry was 90 percent (specialization ratio). In 1987, the specialization ratio also was 90 percent.

Establishments in this industry also accounted for 94 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio was 90 percent.

The products primary to industry 3274, no matter in what industry they were produced, appear in table 6a and aggregate to $851.0 million. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and energy used by establishments classified in the lime industry amounted to $446.2 million. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 10 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 3 percent of the total value of shipments.

INDUSTRY 3275, GYPSUM PRODUCTS

This industry is made up of establishments primarily engaged in manufacturing plaster, plasterboard, and other products composed wholly or chiefly of gypsum, except articles of plaster of paris and papier mache.

The 1992 definition of this industry is the same as that used in the 1987 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1992 Census of Manufactures, Industry 3275, Gypsum Products, had employment of 10.5 thousand. The employment figure was 13 percent below the 12.1 thousand reported in 1987.

The leading States in employment in 1992 were California, Iowa, Florida, and Texas, accounting for approximately 32 percent of the industry's employment. This represents a shift from 1987 when California, Indiana, Iowa, and Texas accounted for approximately 34 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was $2.1 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry in which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 3275 shipped $1.9 billion of gypsum products considered primary to the industry, $87.2 million of secondary products, and had $79.2 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in this industry was 96 percent (specialization ratio). In 1987, the specialization ratio was 97 percent.

Establishments in this industry also accounted for 99 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio was 98 percent.

The products primary to industry 3275, no matter in what industry they were produced, appear in table 6a and aggregate to $1.9 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and energy used by establishments classified in the gypsum products industry amounted to $1.3 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 15 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 4 percent of the total value of shipments.

INDUSTRY 3281, CUT STONE AND STONE PRODUCTS

This industry is made up of establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Establishments primarily engaged in buying or selling partly finished monuments and tombstones, but performing no work on the stones other than lettering, finishing, or shaping to custom order are classified in Division F, Wholesale Trade, or Division G, Retail Trade. The cutting of grindstones, pulpstones, and whetstones at the quarry is classified in Division B, Mining.

The 1992 definition of this industry is the same as that used in the 1987 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1992 Census of Manufactures, Industry 3281, Cut Stone and Stone Products, had employment of 12.3 thousand. The employment figure was 2 percent below the 12.5 thousand reported in 1987.

The leading States in employment in 1992 were Minnesota, Georgia, and Vermont, accounting for approximately 35 percent of the industry's employment. This represents a shift from 1987 when Georgia, Vermont, Texas, and Minnesota were the leading States.

The total value of shipments for establishments classified in this industry was $1.0 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry in which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 3281 shipped $921.7 million of cut stone and stone products considered primary to the industry, $17.9 million of secondary products, and had $71.8 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in this industry was 98 percent (specialization ratio). In 1987, the specialization ratio also was 98 percent.

Establishments in this industry also accounted for 97 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio was 98 percent.

The products primary to industry 3281, no matter in what industry they were produced, appear in table 6a and aggregate to $948.5 million. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and energy used by establishments classified in the cut stone and stone products industry amounted to $407.1 million. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 5 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 18 percent of the total value of shipments.

Table 1a. Historical Statistics for the Industry: 1992 and Earlier Years

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year[1]	Companies[2] (no.)	All establishments[3] Total (no.)	All establishments[3] With 20 employees or more (no.)	All employees Number (1,000)	All employees Payroll (million dollars)	Production workers Number (1,000)	Production workers Hours (millions)	Production workers Wages (million dollars)	Value added by manufacture[4] (million dollars)	Cost of materials[5] (million dollars)	Value of shipments (million dollars)	New capital expenditures[6] (million dollars)	End-of-year inventories[4] (million dollars)	Ratios: Specialization[7] (percent)	Ratios: Coverage[8] (percent)
INDUSTRY 3271, CONCRETE BLOCK AND BRICK															
1992 Census	887	1 071	290	16.4	429.9	9.2	20.3	208.5	1 030.8	1 025.1	2 051.1	57.3	287.3	92	88
1991 ASM	(NA)	(NA)	(NA)	17.8	461.8	9.9	22.4	225.5	1 064.2	1 072.6	2 143.8	48.8	286.4	(NA)	(NA)
1990 ASM	(NA)	(NA)	(NA)	18.3	438.9	10.5	22.0	214.1	1 134.3	1 162.5	2 304.0	65.9	287.7	(NA)	(NA)
1989 ASM	(NA)	(NA)	(NA)	18.7	432.0	10.4	22.2	211.1	1 087.9	1 194.5	2 282.1	75.1	266.4	(NA)	(NA)
1988 ASM	(NA)	(NA)	(NA)	18.3	433.2	10.4	22.9	222.3	1 125.3	1 207.3	2 338.8	39.5	270.9	(NA)	(NA)
1987 Census	975	1 128	339	18.6	411.6	10.8	23.5	216.0	1 071.4	1 185.5	2 245.8	72.0	252.1	94	88
1986 ASM	(NA)	(NA)	(NA)	16.1	337.1	9.4	20.0	173.1	922.0	1 080.1	1 989.4	70.6	222.0	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	16.0	311.0	9.5	18.8	158.2	771.9	936.9	1 689.7	72.5	203.7	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	16.2	297.2	9.7	18.9	148.8	746.1	894.5	1 632.2	56.4	199.4	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	15.9	282.4	9.5	17.9	141.8	731.1	858.5	1 581.9	107.9	217.6	(NA)	(NA)
1982 Census	1 039	1 155	251	15.5	261.9	9.1	17.8	133.7	577.8	718.4	1 301.8	37.6	198.3	95	87
1981 ASM	(NA)	(NA)	(NA)	17.8	280.2	9.9	18.5	133.0	592.5	813.9	1 404.2	74.4	197.8	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	18.7	291.6	10.9	20.2	141.6	652.3	883.2	1 524.1	134.6	191.2	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	19.3	267.2	12.3	23.4	143.8	587.6	947.0	1 494.6	149.7	178.0	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	20.4	266.0	13.0	25.9	144.0	650.9	751.2	1 391.5	81.4	145.4	(NA)	(NA)
1977 Census	1 162	1 273	348	18.7	237.1	11.8	24.1	126.6	520.3	627.7	1 143.8	55.6	124.0	93	85
INDUSTRY 3272, CONCRETE PRODUCTS, N.E.C.															
1992 Census	2 606	3 113	888	58.9	1 513.3	42.7	90.9	947.9	3 353.5	2 581.7	5 934.2	171.9	696.4	98	96
1991 ASM	(NA)	(NA)	(NA)	61.0	1 406.8	45.0	95.4	914.4	3 226.5	2 676.7	5 917.1	153.4	698.5	(NA)	(NA)
1990 ASM	(NA)	(NA)	(NA)	68.3	1 524.4	51.5	107.6	1 019.5	3 504.2	2 876.1	6 366.5	219.9	754.0	(NA)	(NA)
1989 ASM	(NA)	(NA)	(NA)	73.0	1 572.9	54.9	114.1	1 053.6	3 687.7	2 921.4	6 554.6	260.3	725.1	(NA)	(NA)
1988 ASM	(NA)	(NA)	(NA)	71.5	1 550.3	53.4	115.0	1 048.5	3 453.3	2 736.1	6 144.8	131.5	736.5	(NA)	(NA)
1987 Census	2 687	3 154	922	70.0	1 467.2	53.1	112.7	993.2	3 313.1	2 540.9	5 828.4	194.1	686.9	97	97
1986 ASM	(NA)	(NA)	(NA)	59.7	1 181.3	46.1	93.9	798.7	2 736.7	2 227.6	4 931.2	137.4	529.7	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	57.4	1 109.6	43.9	89.9	754.8	2 540.7	1 990.5	4 509.8	212.2	526.0	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	57.4	1 061.1	43.2	87.9	704.9	2 276.8	1 991.4	4 194.2	145.1	525.7	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	54.2	960.0	41.3	83.8	638.0	2 099.9	1 666.9	3 719.2	112.9	482.8	(NA)	(NA)
1982 Census	2 750	3 173	729	55.7	961.7	42.5	84.8	649.2	2 006.4	1 627.7	3 649.2	127.7	443.3	97	95
1981 ASM	(NA)	(NA)	(NA)	61.7	975.3	47.4	96.8	656.7	2 066.7	1 788.8	3 839.3	197.0	445.2	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	62.2	909.1	47.4	96.7	607.7	2 043.4	1 708.2	3 709.4	235.1	435.7	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	68.0	914.2	52.4	106.9	631.5	2 033.2	1 687.4	3 674.7	172.3	431.9	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	63.6	808.9	49.7	99.5	555.4	1 740.9	1 478.5	3 193.9	142.2	435.7	(NA)	(NA)
1977 Census	3 475	3 916	862	61.7	734.9	48.1	96.0	494.5	1 529.3	1 234.1	2 736.2	134.4	389.7	96	95
INDUSTRY 3273, READY-MIXED CONCRETE															
1992 Census	3 248	5 254	1 362	82.4	2 291.5	60.9	129.2	1 577.7	5 342.5	6 662.4	12 009.9	313.0	424.7	95	98
1991 ASM	(NA)	(NA)	(NA)	86.1	2 243.1	62.8	138.3	1 545.7	5 169.7	6 520.7	11 681.2	263.6	429.4	(NA)	(NA)
1990 ASM	(NA)	(NA)	(NA)	91.8	2 353.2	70.4	152.7	1 685.3	5 633.5	7 197.9	12 829.6	470.8	433.9	(NA)	(NA)
1989 ASM	(NA)	(NA)	(NA)	93.0	2 279.7	70.9	148.2	1 630.0	5 792.8	7 057.6	12 860.3	491.3	407.4	(NA)	(NA)
1988 ASM	(NA)	(NA)	(NA)	93.2	2 280.3	68.8	135.2	1 609.8	5 715.2	7 179.0	12 884.0	338.0	442.7	(NA)	(NA)
1987 Census	3 749	5 319	1 531	96.8	2 287.2	73.8	154.8	1 638.6	5 728.9	7 254.7	12 966.3	479.3	438.4	95	98
1986 ASM	(NA)	(NA)	(NA)	81.6	1 874.0	62.9	133.3	1 343.5	4 553.0	6 058.0	10 614.3	378.0	363.8	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	83.5	1 785.7	66.2	135.0	1 292.6	4 249.0	5 843.2	10 087.9	459.4	358.7	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	83.3	1 728.8	65.2	133.8	1 240.7	4 041.8	5 658.6	9 675.6	398.5	355.4	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	83.8	1 602.0	63.1	126.6	1 092.9	3 635.0	5 394.0	9 025.7	284.5	378.9	(NA)	(NA)
1982 Census	4 161	5 379	1 239	81.4	1 475.3	60.4	118.5	1 005.3	3 282.1	4 877.6	8 163.3	282.4	333.5	95	98
1981 ASM	(NA)	(NA)	(NA)	85.8	1 603.5	69.3	137.2	1 089.4	3 641.6	5 326.3	8 983.2	393.9	347.6	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	92.0	1 568.8	71.2	141.2	1 032.5	3 632.5	5 195.1	8 810.1	438.1	338.2	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	98.0	1 541.6	76.0	151.2	1 010.8	3 744.1	5 235.3	8 962.2	479.2	271.8	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	92.5	1 368.6	67.4	135.8	884.7	3 281.7	4 477.7	7 756.3	523.2	259.6	(NA)	(NA)
1977 Census	4 317	5 433	1 357	87.9	1 175.8	62.0	125.3	766.6	2 693.2	3 757.0	6 440.6	353.1	231.5	93	98
INDUSTRY 3274, LIME															
1992 Census	57	88	59	5.6	171.4	4.3	9.6	121.3	461.1	446.2	903.7	47.9	104.9	90	94
1991 ASM	(NA)	(NA)	(NA)	4.4	148.0	3.3	7.4	103.4	411.5	299.8	715.4	66.4	80.6	(NA)	(NA)
1990 ASM	(NA)	(NA)	(NA)	4.7	148.4	3.7	8.7	111.7	422.5	300.6	719.8	43.7	81.1	(NA)	(NA)
1989 ASM	(NA)	(NA)	(NA)	6.5	168.6	5.0	10.3	115.9	430.9	385.0	812.2	41.7	73.7	(NA)	(NA)
1988 ASM	(NA)	(NA)	(NA)	5.7	150.7	4.6	9.6	113.9	418.0	413.9	830.6	28.0	73.1	(NA)	(NA)
1987 Census	56	82	56	5.7	141.9	4.5	9.4	103.6	350.4	364.5	715.5	33.0	72.6	90	90
1986 ASM	(NA)	(NA)	(NA)	5.8	136.5	4.6	9.3	101.7	318.0	351.8	670.9	38.8	72.2	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	5.8	133.2	4.6	9.6	100.4	316.5	359.2	675.8	70.1	75.7	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	5.6	121.1	4.5	9.2	91.0	295.1	347.6	642.3	72.9	80.2	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	5.2	109.9	4.1	8.4	81.1	250.6	305.6	557.7	20.9	72.9	(NA)	(NA)
1982 Census	59	87	59	5.6	108.6	4.4	8.5	79.4	245.0	298.2	543.2	36.0	66.4	89	92
1981 ASM	(NA)	(NA)	(NA)	6.5	116.5	5.1	10.2	85.5	298.3	359.0	653.5	56.7	62.1	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	6.4	99.9	5.0	10.2	76.2	282.9	316.9	598.8	69.7	51.5	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	6.6	98.4	5.3	11.1	75.9	284.1	322.4	604.2	38.3	53.3	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	6.5	97.0	5.4	11.2	74.4	260.2	317.7	577.3	62.7	54.2	(NA)	(NA)
1977 Census	64	94	63	5.9	75.4	4.8	9.8	59.4	218.2	264.8	484.2	29.7	47.2	92	92
INDUSTRY 3275, GYPSUM PRODUCTS															
1992 Census	80	152	95	10.5	329.0	8.3	19.0	242.0	793.3	1 283.9	2 075.9	43.8	140.7	96	99
1991 ASM	(NA)	(NA)	(NA)	10.3	311.6	8.1	17.8	228.4	759.8	1 232.6	2 008.3	34.2	145.7	(NA)	(NA)
1990 ASM	(NA)	(NA)	(NA)	11.5	341.0	9.1	20.5	251.5	967.0	1 404.9	2 375.1	68.1	150.1	(NA)	(NA)
1989 ASM	(NA)	(NA)	(NA)	11.3	332.9	9.0	20.7	248.5	1 075.3	1 332.1	2 408.0	53.6	133.3	(NA)	(NA)
1988 ASM	(NA)	(NA)	(NA)	11.4	313.4	9.2	21.4	235.5	1 076.9	1 300.9	2 378.5	57.0	123.0	(NA)	(NA)
1987 Census	80	152	97	12.1	324.3	9.6	22.5	242.5	1 331.4	1 347.5	2 670.9	88.1	130.2	97	98
1986 ASM	(NA)	(NA)	(NA)	11.1	290.6	8.8	20.6	219.2	1 392.4	1 221.8	2 619.0	139.3	121.5	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	10.6	262.6	8.4	19.2	199.3	1 249.5	1 263.0	2 511.7	107.7	121.1	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	10.3	241.0	8.2	18.5	185.4	1 009.3	1 173.5	2 176.4	59.4	124.4	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	9.4	211.5	7.5	16.8	164.3	722.2	974.5	1 709.7	34.5	97.8	(NA)	(NA)
1982 Census	70	139	84	9.1	186.9	7.1	15.5	138.9	492.1	809.2	1 289.2	85.5	110.4	93	98
1981 ASM	(NA)	(NA)	(NA)	9.7	184.1	7.5	16.6	137.1	512.9	801.2	1 313.9	124.6	103.0	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	9.9	180.2	7.8	17.5	135.7	584.8	763.6	1 342.1	99.4	107.1	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	10.7	185.1	8.6	19.9	143.8	790.8	773.0	1 554.7	72.8	95.4	(NA)	(NA)

See footnotes at end of table.

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Table 1a. **Historical Statistics for the Industry: 1992 and Earlier Years**—Con.

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year[1]	Companies[2] (no.)	All establishments[3] Total (no.)	All establishments[3] With 20 employees or more (no.)	All employees Number (1,000)	All employees Payroll (million dollars)	Production workers Number (1,000)	Production workers Hours (millions)	Production workers Wages (million dollars)	Value added by manufacture[4] (million dollars)	Cost of materials[5] (million dollars)	Value of shipments (million dollars)	New capital expenditures[6] (million dollars)	End-of-year inventories[4] (million dollars)	Ratios Specialization[7] (percent)	Ratios Coverage[8] (percent)
	INDUSTRY 3275, GYPSUM PRODUCTS—Con.														
1978 ASM	(NA)	(NA)	(NA)	10.4	170.9	8.4	18.9	132.2	720.8	675.4	1 394.8	44.9	83.4	(NA)	(NA)
1977 Census	58	128	81	9.5	143.6	7.6	17.3	111.5	429.6	565.6	1 000.0	31.9	72.4	96	98
	INDUSTRY 3281, CUT STONE AND STONE PRODUCTS														
1992 Census	901	921	161	12.3	284.4	9.5	19.3	205.8	607.4	407.1	1 011.3	36.9	156.4	98	97
1991 ASM	(NA)	(NA)	(NA)	12.2	267.1	9.5	18.6	191.3	582.0	371.5	956.3	27.5	119.2	(NA)	(NA)
1990 ASM	(NA)	(NA)	(NA)	13.9	297.0	10.6	20.5	198.8	575.3	430.4	988.8	38.4	161.5	(NA)	(NA)
1989 ASM	(NA)	(NA)	(NA)	13.3	281.0	10.2	20.2	188.0	550.0	395.3	934.9	40.6	126.9	(NA)	(NA)
1988 ASM	(NA)	(NA)	(NA)	13.0	257.7	9.9	19.7	170.9	518.7	380.8	890.1	31.4	117.8	(NA)	(NA)
1987 Census	731	746	167	12.5	243.0	10.0	19.8	173.7	450.5	385.8	840.8	30.6	105.5	98	98
1986 ASM	(NA)	(NA)	(NA)	11.2	198.9	8.8	17.6	147.5	375.5	317.5	683.0	33.2	79.5	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	11.2	199.5	8.9	17.4	148.9	352.8	317.0	674.3	30.5	74.5	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	11.3	187.3	8.9	16.7	139.4	344.3	275.2	626.3	27.9	71.5	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	10.2	158.3	8.5	16.3	120.7	302.1	266.7	570.0	7.0	71.3	(NA)	(NA)
1982 Census	698	711	132	10.5	155.9	8.5	16.5	118.5	295.2	259.0	555.4	23.9	70.0	97	98
1981 ASM	(NA)	(NA)	(NA)	12.0	157.0	10.1	20.5	121.3	292.7	236.6	528.7	16.6	68.2	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	13.0	155.8	10.9	22.0	118.8	289.6	221.1	504.0	11.5	67.9	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	13.3	147.0	11.2	22.4	113.1	283.9	201.5	479.8	13.1	58.2	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	13.7	154.4	11.3	23.2	118.4	300.8	204.2	505.9	23.2	60.6	(NA)	(NA)
1977 Census	963	993	164	12.7	131.5	10.6	21.4	98.8	238.2	157.5	393.0	10.4	53.8	96	95

[1]In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments. ASM publication shows percentage standard errors. Unless otherwise noted, for data prior to 1977, see 1977 Census of Manufactures, vol. II, table 1 of the industry chapter.

[2]For the Census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

[3]Includes establishments with payroll at any time during the year.

[4]Beginning in 1982, all respondents were requested to report their inventories at cost or market prior to adjustment to LIFO cost. This is a change from prior years when respondents were permitted to value their inventories using any generally accepted accounting method. Consequently, 1982 data for inventories and value added by manufacture are not comparable to prior-year data.

[5]Cost of materials is the sum of five components: the cost of (1) parts used in the manufacture of finished goods (materials, parts, containers, and supplies incorporated into products or otherwise directly consumed in the process); (2) purchased items later resold without further manufacture; (3) fuels; (4) electricity; and (5) commissions or fees to outside parties for contract manufacturing. A separate cost for each of the five components is shown in table 3a. Detailed data on materials consumed by type, are shown in table 7.

[6]Detailed data on new machinery and equipment expenditures are provided in table 3c.

[7]Represents ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for establishments classified in the industry.

[8]Represents ratio of primary products shipped by establishments classified in industry to total shipments of such products by all manufacturing establishments, wherever classified.

Table 1b. **Selected Operating Ratios for the Industry: 1992 and Earlier Years**

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year	Payroll per employee (dollars)	Production workers as percent of total employment (percent)	Annual hours of production workers (number)	Average hourly earnings of production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percent of value of shipments (percent)	Value added per employee (dollars)	Payroll as percent of value added (percent)	Value added per production worker hour (dollars)
	INDUSTRY 3271, CONCRETE BLOCK AND BRICK								
1992 Census	26 213	56	2 207	10.27	50	71	62 854	42	50.78
1991 ASM	25 944	56	2 263	10.07	50	72	59 787	43	47.51
1990 ASM	23 984	57	2 095	9.73	50	70	61 984	39	51.56
1989 ASM	23 102	56	2 135	9.51	52	71	58 176	40	49.00
1988 ASM	23 672	57	2 202	9.71	52	70	61 492	38	49.14
1987 Census	22 129	58	2 176	9.19	53	71	57 602	38	45.59
1986 ASM	20 938	58	2 128	8.66	54	71	57 267	37	46.10
1985 ASM	19 438	59	1 979	8.41	55	74	48 244	40	41.06
1984 ASM	18 346	60	1 948	7.87	55	73	46 056	40	39.48
1983 ASM	17 761	60	1 884	7.92	54	72	45 981	39	40.84
1982 Census	16 897	59	1 956	7.51	55	75	37 277	45	32.46
1981 ASM	15 742	56	1 869	7.19	58	78	33 287	47	32.03
1980 ASM	15 594	58	1 853	7.01	58	77	34 882	45	32.29
1979 ASM	13 845	64	1 902	6.15	63	81	30 446	45	25.11
1978 ASM	13 039	64	1 992	5.56	54	73	31 907	41	25.13
1977 Census	12 679	63	2 042	5.25	55	76	27 824	46	21.59
	INDUSTRY 3272, CONCRETE PRODUCTS, N.E.C.								
1992 Census	25 693	72	2 129	10.43	44	69	56 935	45	36.89
1991 ASM	23 062	74	2 120	9.58	45	69	52 893	44	33.82
1990 ASM	22 319	75	2 089	9.47	45	69	51 306	44	32.57
1989 ASM	21 547	75	2 078	9.23	45	69	50 516	43	32.32
1988 ASM	21 683	75	2 154	9.12	45	70	48 298	45	30.03
1987 Census	20 960	76	2 122	8.81	44	69	47 330	44	29.40
1986 ASM	19 787	77	2 037	8.51	45	69	45 841	43	29.14
1985 ASM	19 331	76	2 048	8.40	44	69	44 263	44	28.26
1984 ASM	18 486	75	2 035	8.02	47	73	39 666	47	25.90
1983 ASM	17 712	76	2 029	7.61	45	71	38 744	46	25.06
1982 Census	17 266	76	1 995	7.66	45	71	36 022	48	23.66
1981 ASM	15 807	77	2 042	6.78	47	72	33 496	47	21.35
1980 ASM	14 616	76	2 040	6.28	46	71	32 852	44	21.13
1979 ASM	13 444	77	2 040	5.91	46	71	29 900	45	19.02
1978 ASM	12 719	78	2 002	5.58	46	72	27 373	46	17.50
1977 Census	11 911	78	1 996	5.15	45	72	24 786	48	15.93

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Table 1b. **Selected Operating Ratios for the Industry: 1992 and Earlier Years**—Con.

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year	Payroll per employee (dollars)	Production workers as percent of total employment (percent)	Annual hours of production workers (number)	Average hourly earnings of production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percent of value of shipments (percent)	Value added per employee (dollars)	Payroll as percent of value added (percent)	Value added per production worker hour (dollars)
	INDUSTRY 3273, READY-MIXED CONCRETE								
1992 Census	27 809	74	2 122	12.21	55	75	64 836	43	41.35
1991 ASM	26 052	73	2 202	11.18	56	75	60 043	43	37.38
1990 ASM	25 634	77	2 169	11.04	56	74	61 367	42	36.89
1989 ASM	24 513	76	2 090	11.00	55	73	62 288	39	39.09
1988 ASM	24 467	74	1 965	11.91	56	73	61 322	40	42.27
1987 Census	23 628	76	2 098	10.59	56	74	59 183	40	37.01
1986 ASM	22 966	77	2 119	10.08	57	75	55 797	41	34.16
1985 ASM	21 386	79	2 039	9.57	58	76	50 886	42	31.47
1984 ASM	20 754	78	2 052	9.27	58	76	48 521	43	30.21
1983 ASM	19 117	75	2 006	8.63	60	78	43 377	44	28.71
1982 Census	18 124	74	1 962	8.48	60	78	40 321	45	27.70
1981 ASM	18 689	81	1 980	7.94	59	77	42 443	44	26.54
1980 ASM	17 052	77	1 983	7.31	59	77	39 484	43	25.73
1979 ASM	15 731	78	1 989	6.69	58	76	38 205	41	24.76
1978 ASM	14 796	73	2 015	6.51	58	75	35 478	42	24.17
1977 Census	13 377	71	2 021	6.12	58	77	30 639	44	21.49
	INDUSTRY 3274, LIME								
1992 Census	30 607	77	2 233	12.64	49	68	82 339	37	48.03
1991 ASM	33 636	75	2 242	13.97	42	63	93 523	36	55.61
1990 ASM	31 574	79	2 351	12.84	42	62	89 894	35	48.56
1989 ASM	25 938	77	2 060	11.25	47	68	66 292	39	41.83
1988 ASM	26 439	81	2 087	11.86	50	68	73 333	36	43.54
1987 Census	24 895	79	2 089	11.02	51	71	61 474	40	37.28
1986 ASM	23 534	79	2 022	10.94	52	73	54 828	43	34.19
1985 ASM	22 966	79	2 087	10.46	53	73	54 569	42	32.97
1984 ASM	21 625	80	2 044	9.89	54	73	52 696	41	32.08
1983 ASM	21 135	79	2 049	9.65	55	75	48 192	44	29.83
1982 Census	19 393	79	1 932	9.34	55	75	43 750	44	28.82
1981 ASM	17 923	78	2 000	8.38	55	73	45 892	39	29.25
1980 ASM	15 609	78	2 040	7.47	53	70	44 203	35	27.74
1979 ASM	14 909	80	2 094	6.84	53	70	43 045	35	25.59
1978 ASM	14 923	83	2 074	6.64	55	72	40 031	37	23.23
1977 Census	12 780	81	2 042	6.06	55	70	36 983	35	22.27
	INDUSTRY 3275, GYPSUM PRODUCTS								
1992 Census	31 333	79	2 289	12.74	62	78	75 552	41	41.75
1991 ASM	30 252	79	2 198	12.83	61	77	73 767	41	42.69
1990 ASM	29 652	79	2 253	12.27	59	74	84 087	35	47.17
1989 ASM	29 460	80	2 300	12.00	55	69	95 159	31	51.95
1988 ASM	27 491	81	2 326	11.00	55	68	94 465	29	50.32
1987 Census	26 802	79	2 344	10.78	50	63	110 033	24	59.17
1986 ASM	26 180	79	2 341	10.64	47	58	125 441	21	67.59
1985 ASM	24 774	79	2 286	10.38	50	61	117 877	21	65.08
1984 ASM	23 398	80	2 256	10.02	54	65	97 990	24	54.56
1983 ASM	22 500	80	2 240	9.78	57	69	76 830	29	42.99
1982 Census	20 538	78	2 183	8.96	63	77	54 077	38	31.75
1981 ASM	18 979	77	2 213	8.26	61	75	52 876	36	30.90
1980 ASM	18 202	79	2 244	7.75	57	70	59 071	31	33.42
1979 ASM	17 299	80	2 314	7.23	50	62	73 907	23	39.74
1978 ASM	16 433	81	2 250	6.99	48	61	69 308	24	38.14
1977 Census	15 116	80	2 276	6.45	57	71	45 221	33	24.83
	INDUSTRY 3281, CUT STONE AND STONE PRODUCTS								
1992 Census	23 122	77	2 032	10.66	40	68	49 382	47	31.47
1991 ASM	21 893	78	1 958	10.28	39	67	47 705	46	31.29
1990 ASM	21 367	76	1 934	9.70	44	74	41 388	52	28.06
1989 ASM	21 128	77	1 980	9.31	42	72	41 353	51	27.23
1988 ASM	19 823	76	1 990	8.68	43	72	39 900	50	26.33
1987 Census	19 440	80	1 980	8.77	46	75	36 040	54	22.75
1986 ASM	17 759	79	2 000	8.38	46	76	33 527	53	21.34
1985 ASM	17 813	79	1 955	8.56	47	77	31 500	57	20.28
1984 ASM	16 575	79	1 876	8.35	44	74	30 469	54	20.62
1983 ASM	15 520	83	1 918	7.40	47	75	29 618	52	18.53
1982 Census	14 848	81	1 941	7.18	47	75	28 114	53	17.89
1981 ASM	13 083	84	2 030	5.92	45	74	24 392	54	14.28
1980 ASM	11 985	84	2 018	5.40	44	75	22 277	54	13.16
1979 ASM	11 053	84	2 000	5.05	42	73	21 346	52	12.67
1978 ASM	11 270	82	2 053	5.10	40	71	21 956	51	12.97
1977 Census	10 354	83	2 019	4.62	40	74	18 756	55	11.13

Note: For qualifications of data, see footnotes on table 1a.

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Table 2. **Industry Statistics for Selected States: 1992 and 1987**

[Excludes data for auxiliaries. States with 100 employees or more are shown. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and geographic area	1992												1987	
		All establishments		All employees		Production workers								
	E[1]	Total (no.)	With 20 employees or more (no.)	Number[2] (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	All employees[2] (1,000)	Value added by manufacture (million dollars)
INDUSTRY 3271, CONCRETE BLOCK AND BRICK														
United States	**E1**	**1 071**	**290**	**16.4**	**429.9**	**9.2**	**20.3**	**208.5**	**1 030.8**	**1 025.1**	**2 051.1**	**57.3**	**18.6**	**1 071.4**
Alabama	E1	23	6	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.2	.4	15.7
Arizona	–	27	12	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.7	F	(D)
Arkansas	–	17	2	.2	3.7	.1	.3	2.1	8.4	7.3	15.3	.3	(NA)	(NA)
California	–	74	24	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	G	(D)
Colorado	E2	12	3	.2	4.4	.1	.2	2.0	10.3	9.0	19.5	(D)	(NA)	(D)
Connecticut	–	11	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.2	14.5
Florida	E2	71	11	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
Georgia	E2	28	6	.4	9.2	.2	.6	4.7	23.1	21.8	45.5	.6	.9	46.8
Illinois	E1	33	10	.5	14.9	.3	.7	7.5	32.9	29.9	62.0	1.1	.5	26.7
Indiana	–	26	11	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
Iowa	–	14	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.7	(NA)	(D)
Kentucky	E1	23	4	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.4	E	(D)
Maine	–	6	2	.1	3.3	(Z)	.1	1.1	6.6	7.6	14.2	(D)	(NA)	(NA)
Maryland	–	19	8	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
Massachusetts	E3	23	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)
Michigan	E1	56	12	.8	20.5	.3	.7	7.1	47.3	46.9	94.0	(D)	F	(D)
Minnesota	–	34	9	.5	18.5	.4	.9	11.7	47.3	32.9	78.4	2.1	.5	26.1
Missouri	E3	20	9	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.3	20.1
Nebraska	–	6	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Nevada	E4	6	5	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.9	(NA)	(NA)
New Jersey	E1	28	12	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.6	F	(D)
New Mexico	–	8	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
New York	E2	58	10	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
North Carolina	–	37	9	.6	13.7	.3	.7	6.5	22.4	49.4	72.1	(D)	.9	46.8
Ohio	E1	49	15	.7	20.0	.4	.8	9.2	48.2	54.0	102.1	(D)	.8	50.1
Oregon	–	12	2	.1	3.8	.1	.2	2.0	11.9	12.2	24.4	.4	(NA)	(NA)
Pennsylvania	E1	91	23	1.5	35.4	1.0	2.0	19.8	93.2	79.7	173.3	4.0	1.3	73.9
South Carolina	E1	16	5	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.4	17.3
Tennessee	E1	38	14	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
Texas	–	44	16	.8	18.7	.4	1.0	8.5	44.8	53.5	96.9	2.5	1.0	46.2
Utah	E2	9	3	.2	4.9	.1	.3	2.9	7.9	13.9	21.4	(D)	(NA)	(NA)
Virginia	E1	32	10	.5	12.7	.3	.7	6.6	33.0	39.4	72.3	(D)	F	(D)
Washington	–	11	3	.2	5.4	.1	.2	2.7	15.6	9.8	24.3	(D)	.2	9.1
West Virginia	E3	16	3	.2	4.4	.1	.3	2.1	10.2	12.1	22.4	.5	E	(D)
Wisconsin	–	26	8	.4	13.7	.2	.6	6.3	34.0	31.3	65.4	2.6	.4	23.6
INDUSTRY 3272, CONCRETE PRODUCTS, N.E.C.														
United States	**E1**	**3 113**	**888**	**58.9**	**1 513.3**	**42.7**	**90.9**	**947.9**	**3 353.5**	**2 581.7**	**5 934.2**	**171.9**	**70.0**	**3 313.1**
Alabama	E1	81	16	1.1	22.7	.9	2.0	15.6	48.6	48.3	96.8	1.8	1.4	54.0
Arizona	–	47	15	1.1	31.0	.8	1.7	19.8	75.1	60.7	135.2	(D)	1.5	69.2
Arkansas	–	39	10	.5	10.7	.3	.8	6.4	25.4	13.5	38.4	1.2	.5	22.6
California	E1	244	94	5.8	170.1	4.3	8.9	108.1	361.8	368.5	736.1	24.3	7.4	459.8
Colorado	E1	50	16	1.4	36.8	1.1	2.3	22.3	102.5	73.4	175.5	4.0	1.4	48.3
Connecticut	E1	45	12	.8	29.4	.6	1.3	18.7	57.8	39.5	97.0	2.6	1.3	80.4
Delaware	E1	9	5	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.7	(NA)	(NA)
Florida	E1	234	79	5.1	120.0	3.7	8.0	74.7	253.7	204.0	459.2	13.1	7.2	286.8
Georgia	E2	118	40	2.3	50.4	1.7	3.5	32.4	120.5	82.2	201.5	5.2	2.7	100.0
Hawaii	–	16	5	.3	12.7	.2	.5	7.6	33.0	24.2	56.9	(D)	.2	16.5
Idaho	E5	14	1	.1	2.8	.1	.2	1.9	5.9	5.4	11.4	.5	(NA)	(NA)
Illinois	E1	120	35	2.3	69.1	1.6	3.4	42.7	139.6	110.6	246.0	8.7	2.3	122.7
Indiana	E1	108	19	1.4	38.3	1.0	2.1	23.9	73.7	53.4	127.1	4.3	1.3	60.0
Iowa	–	63	15	.9	22.1	.7	1.5	14.7	53.9	34.1	87.1	2.2	F	(D)
Kansas	E1	34	11	.6	14.3	.5	1.0	9.7	33.8	22.5	56.5	3.4	.7	31.3
Kentucky	E2	56	14	.8	17.9	.6	1.2	11.2	43.0	32.8	74.3	(D)	.7	28.3
Louisiana	–	48	13	1.0	22.4	.7	1.5	11.8	55.6	35.8	88.4	6.1	.9	30.6
Maine	–	17	7	.3	7.8	.2	.4	3.6	22.9	10.5	32.6	(D)	E	(D)
Maryland	–	45	12	1.0	23.4	.7	1.4	16.3	47.1	42.9	93.0	2.7	1.5	86.8
Massachusetts	E4	57	13	1.0	27.5	.7	1.5	17.5	62.9	43.2	106.5	3.8	1.5	74.9
Michigan	E2	100	22	1.4	41.2	.9	2.1	24.6	83.6	83.9	168.1	5.1	1.5	86.0
Minnesota	E1	79	21	1.6	47.4	1.1	2.3	28.1	112.4	67.1	178.7	5.4	1.3	77.0
Mississippi	–	29	12	.8	16.6	.6	1.4	11.5	47.3	35.4	83.2	(D)	F	(D)
Missouri	E1	82	17	1.2	29.2	.9	1.8	18.9	63.6	42.7	106.2	3.8	1.2	47.1
Montana	–	18	–	.1	2.8	.1	.2	2.0	6.4	5.9	12.2	.2	(NA)	(NA)
Nebraska	–	26	8	.7	16.1	.6	1.4	12.4	35.0	28.3	64.4	1.4	F	(D)
Nevada	E5	17	6	.4	14.6	.3	.8	10.0	33.2	31.6	64.1	1.5	.3	15.6
New Hampshire	–	24	6	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.4	E	(D)
New Jersey	E1	64	24	1.3	37.3	1.0	2.1	25.8	76.6	60.5	139.1	2.8	1.8	96.7
New Mexico	–	20	4	.2	6.1	.2	.4	3.8	15.6	13.1	27.7	1.0	.3	12.9
New York	E1	114	25	1.7	45.8	1.2	2.5	26.4	102.1	66.5	167.2	4.9	1.8	92.7
North Carolina	E1	87	25	1.6	34.1	1.1	2.3	20.5	77.2	51.2	127.9	2.3	G	(D)
North Dakota	–	16	5	.3	5.1	.2	.3	3.3	13.1	7.1	20.3	(D)	.2	14.0
Ohio	E2	125	37	2.4	63.0	1.7	3.7	37.7	132.5	89.0	223.4	4.7	2.9	156.8
Oklahoma	E2	43	6	.4	9.5	.3	.7	6.4	24.6	16.1	39.9	(D)	F	(D)
Oregon	E3	40	12	.6	16.2	.4	.9	10.0	42.6	29.3	72.1	2.2	.6	30.5
Pennsylvania	E1	164	48	3.1	77.3	2.3	4.7	49.8	162.5	137.1	296.0	8.8	3.4	156.3
South Carolina	E1	37	9	1.1	28.0	.7	1.5	13.7	50.1	46.7	96.7	1.6	1.4	69.5
South Dakota	–	10	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Tennessee	E2	70	23	1.1	23.1	.7	1.6	13.8	54.8	32.7	86.0	2.2	1.3	47.6

See footnotes at end of table.

TIPS [UPF] BATCH_1295 [EISS,BA_TAYLOR] MCD-SRB 4/19/95 4:41 PM MACHINE: EPCV21 DATA:NONE TAPE: NOreel FRAME: 4
TSF:32D_92.DAT;2 4/19/95 16:39:15 UTF:32D_93.DAT;2 4/19/95 16:39:16 META:TIPS96-16385478.DAT;1 4/19/95 16:40:59

Table 2. **Industry Statistics for Selected States: 1992 and 1987**—Con.

[Excludes data for auxiliaries. States with 100 employees or more are shown. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and geographic area	1992												1987	
		All establishments		All employees		Production workers								
	E[1]	Total (no.)	With 20 employees or more (no.)	Number[2] (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	All employees[2] (1,000)	Value added by manufacture (million dollars)
INDUSTRY 3272, CONCRETE PRODUCTS, N.E.C.—Con.														
Texas	E1	194	60	4.1	90.9	3.2	6.9	61.7	208.2	155.8	364.3	10.6	6.4	269.8
Utah	–	22	6	.6	14.4	.4	.9	9.3	26.1	24.7	50.8	1.7	.6	23.8
Vermont	E1	11	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)
Virginia	–	86	31	2.4	59.1	1.7	3.5	35.3	122.4	84.0	207.3	4.9	2.9	116.6
Washington	–	65	15	1.2	35.4	.9	1.8	21.8	80.5	56.6	136.3	4.1	1.3	63.6
West Virginia	E3	17	4	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
Wisconsin	E1	89	23	1.3	36.2	.9	2.0	22.3	90.6	57.0	147.2	4.9	1.3	69.0
INDUSTRY 3273, READY-MIXED CONCRETE														
United States	**E2**	**5 254**	**1 362**	**82.4**	**2 291.5**	**60.9**	**129.2**	**1 577.7**	**5 342.5**	**6 662.4**	**12 009.9**	**313.0**	**96.8**	**5 728.9**
Alabama	–	89	19	1.3	29.9	1.0	2.1	20.3	82.8	87.4	170.1	7.1	1.4	65.7
Alaska	–	17	3	.2	6.5	.1	.3	4.3	16.8	18.1	35.0	(D)	E	(D)
Arizona	E1	75	28	1.8	40.9	1.3	2.6	28.7	100.9	122.1	224.6	5.5	4.3	287.4
Arkansas	E1	80	16	.9	19.6	.7	1.5	13.3	48.9	60.7	109.9	5.1	1.1	45.6
California	E2	436	153	8.5	281.9	6.2	12.5	197.6	599.5	819.5	1 420.9	21.3	9.7	744.0
Colorado	E2	70	27	1.7	52.6	1.2	2.6	32.4	121.3	146.6	267.6	6.9	1.8	99.5
Connecticut	E2	33	8	.5	19.4	.4	.9	13.0	41.3	53.5	94.9	2.0	.8	71.2
Delaware	–	13	7	.4	8.6	.3	.6	6.3	23.2	20.0	43.2	.5	E	(D)
District of Columbia	–	5	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
Florida	–	313	86	4.7	116.1	3.5	7.8	81.1	300.2	465.3	762.3	9.3	7.1	392.6
Georgia	E1	160	50	2.5	58.1	1.9	4.0	42.2	158.8	207.0	366.7	7.4	3.0	155.8
Hawaii	E1	15	7	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	3.1	.3	36.7
Idaho	–	40	10	.5	13.5	.4	.9	10.3	26.4	32.7	59.1	1.4	.5	22.4
Illinois	E3	215	66	3.4	118.1	2.6	5.4	84.7	247.9	310.9	558.9	14.9	3.7	262.3
Indiana	E3	140	39	2.0	60.5	1.5	3.3	43.0	154.2	168.8	323.6	13.5	1.8	125.1
Iowa	–	157	25	1.7	46.0	1.3	2.8	30.7	103.1	133.3	236.4	7.5	1.2	65.1
Kansas	E1	102	19	1.2	27.2	.9	2.0	19.3	64.3	79.7	143.9	4.8	1.3	53.0
Kentucky	–	105	29	1.7	38.3	1.2	2.5	23.5	93.6	117.5	211.1	4.9	1.6	78.6
Louisiana	E2	71	29	1.6	34.0	1.1	2.4	21.7	72.6	106.1	178.8	5.3	2.0	81.7
Maine	–	29	5	.3	9.1	.3	.7	6.7	21.9	24.3	46.7	.8	.6	30.9
Maryland	E1	63	27	1.3	40.1	1.1	2.4	31.1	87.3	114.2	202.3	4.5	1.5	99.2
Massachusetts	E4	53	20	1.2	39.8	.8	1.7	25.5	87.0	92.9	180.0	5.4	1.7	120.3
Michigan	E1	206	33	2.4	79.5	1.7	3.6	50.9	186.2	195.0	380.7	10.7	2.8	201.4
Minnesota	E2	110	28	1.5	43.2	1.1	2.2	27.2	93.1	105.1	198.5	5.2	1.6	89.1
Mississippi	E3	79	9	1.0	21.3	.8	1.6	15.0	55.0	61.9	117.1	3.4	1.1	49.1
Missouri	E1	186	34	2.2	55.7	1.7	3.4	37.2	115.0	148.1	263.1	8.5	2.8	136.8
Montana	E1	41	6	.5	11.1	.3	.7	7.5	28.8	32.0	60.8	1.9	.5	18.8
Nebraska	–	75	13	.8	17.3	.6	1.3	13.6	47.7	68.8	116.3	2.8	.7	32.6
Nevada	–	29	9	1.0	31.9	.8	1.7	26.1	64.9	76.6	141.7	5.0	.7	42.5
New Hampshire	E4	19	5	.3	9.1	.2	.5	5.6	19.8	22.3	42.2	(D)	.8	42.7
New Jersey	E4	74	25	1.4	54.1	1.0	2.0	34.2	114.1	145.8	259.9	5.9	1.7	137.4
New Mexico	E1	36	14	.8	18.1	.5	1.1	10.8	46.5	49.0	95.9	2.0	.9	43.9
New York	E3	185	45	3.0	99.9	2.0	4.3	63.5	236.8	254.9	491.1	9.8	3.2	252.4
North Carolina	E1	166	38	2.6	56.9	2.0	4.1	39.9	134.5	176.3	312.0	11.4	2.8	123.1
North Dakota	E1	37	4	.3	8.1	.2	.4	4.8	13.9	15.5	29.1	.6	.3	14.3
Ohio	E3	238	62	3.5	101.2	2.5	5.6	67.9	244.5	303.0	546.7	20.0	3.5	225.8
Oklahoma	E2	124	16	1.4	28.4	1.1	2.2	20.9	64.2	76.3	140.5	3.3	2.0	86.5
Oregon	E1	55	15	1.1	29.4	.8	1.5	20.7	54.6	72.0	126.3	4.3	1.0	45.9
Pennsylvania	E1	188	43	2.9	82.6	2.0	4.4	54.9	179.2	231.4	410.8	10.6	2.9	166.3
Rhode Island	E1	11	2	.1	4.7	.1	.2	2.4	10.7	13.4	24.1	.7	.2	14.7
South Carolina	E1	83	20	1.2	29.0	1.0	2.0	20.9	65.6	87.1	152.9	4.1	1.3	59.4
South Dakota	E3	34	1	.2	5.1	.2	.4	3.6	11.6	17.9	29.5	.8	(NA)	(D)
Tennessee	E1	103	28	1.6	36.9	1.1	2.3	22.9	88.3	108.7	196.9	6.2	1.8	95.7
Texas	E2	430	100	6.2	146.3	4.8	10.7	103.5	383.8	529.3	914.2	22.9	8.5	401.0
Utah	–	31	14	1.1	33.1	.8	2.0	24.0	78.7	89.0	168.4	3.8	1.5	73.5
Vermont	E2	13	3	.2	7.0	.1	.3	4.2	13.6	12.8	26.3	(D)	.4	26.3
Virginia	E1	118	34	1.9	49.5	1.4	3.0	33.6	131.4	144.9	276.0	10.1	2.8	169.6
Washington	–	98	37	2.1	65.7	1.6	3.2	49.7	162.7	142.4	304.5	11.3	1.9	121.8
West Virginia	E3	41	8	.5	12.8	.4	.8	8.7	33.7	36.4	70.1	1.6	.6	32.9
Wisconsin	E2	137	35	2.0	58.3	1.6	3.2	40.4	146.7	163.8	310.7	10.1	1.8	109.0
Wyoming	E1	26	5	.3	8.8	.3	.5	6.0	20.5	16.2	36.7	1.4	.4	12.9
INDUSTRY 3274, LIME														
United States	**–**	**88**	**59**	**5.6**	**171.4**	**4.3**	**9.6**	**121.3**	**461.1**	**446.2**	**903.7**	**47.9**	**5.7**	**350.4**
Alabama	–	7	6	.4	13.0	.3	.7	8.9	33.9	46.1	80.1	(D)	.3	14.5
Arizona	–	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Arkansas	–	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
California	–	3	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Florida	E4	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Illinois	–	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
Iowa	–	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
Kentucky	–	3	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
Missouri	–	2	2	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	G	(D)
Nevada	–	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Ohio	–	9	7	.6	19.6	.4	.9	12.5	54.2	57.0	110.5	4.9	.5	42.5
Pennsylvania	–	8	5	.6	19.5	.5	1.1	15.6	37.1	53.0	88.5	(D)	F	(D)
Tennessee	–	4	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Texas	–	6	5	.5	14.2	.3	.8	8.0	46.3	30.4	77.0	3.2	.5	21.8
Virginia	E1	7	6	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.6	E	(D)
Wisconsin	E2	5	4	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)

See footnotes at end of table.

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Table 2. **Industry Statistics for Selected States: 1992 and 1987**—Con.

[Excludes data for auxiliaries. States with 100 employees or more are shown. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and geographic area	1992												1987	
		All establishments		All employees		Production workers								
	E[1]	Total (no.)	With 20 employees or more (no.)	Number[2] (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	All employees[2] (1,000)	Value added by manufacture (million dollars)
INDUSTRY 3275, GYPSUM PRODUCTS														
United States	**–**	**152**	**95**	**10.5**	**329.0**	**8.3**	**19.0**	**242.0**	**793.3**	**1 283.9**	**2 075.9**	**43.8**	**12.1**	**1 331.4**
Arkansas	–	3	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)
California	E1	21	13	1.2	40.8	.9	2.3	29.8	78.3	174.9	252.1	6.7	1.2	179.3
Colorado	–	2	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Delaware	–	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	–	(NA)	(NA)
Florida	–	11	4	.7	22.8	.6	1.4	17.3	57.3	99.5	156.0	4.4	.8	89.5
Georgia	–	8	7	.5	15.2	.4	.8	11.1	42.1	67.6	109.6	.8	.6	59.5
Illinois	–	5	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
Indiana	–	5	5	.6	19.5	.5	1.2	15.4	74.4	73.0	146.9	2.2	1.1	86.9
Iowa	–	6	5	.8	25.0	.6	1.5	19.1	63.2	85.6	148.8	(D)	.8	74.4
Kansas	–	2	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Louisiana	–	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
Maryland	–	3	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)
Massachusetts	–	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Michigan	–	6	4	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.1	.5	74.5
Nevada	–	4	3	.4	12.4	.3	.7	9.8	27.7	38.3	65.9	(D)	(NA)	(D)
New Hampshire	–	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
New Jersey	–	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
New Mexico	–	2	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
New York	–	7	4	.6	20.6	.5	1.0	15.3	51.9	65.2	117.9	(D)	.7	82.8
North Carolina	–	3	3	.1	3.9	.1	.3	2.8	14.6	24.9	39.6	(D)	(NA)	(D)
Ohio	–	7	3	.5	16.1	.4	1.0	12.2	40.5	55.3	95.7	(D)	.8	63.0
Oklahoma	–	4	4	.5	13.5	.4	.9	10.0	31.2	40.5	71.7	1.0	.7	64.2
Texas	–	9	8	.7	21.5	.6	1.3	16.0	48.9	79.6	128.3	1.9	1.1	100.0
Utah	–	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
Virginia	–	4	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)
Washington	–	3	3	.3	10.0	.2	.4	6.2	26.4	43.4	70.1	(D)	.3	29.5
Wyoming	–	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
INDUSTRY 3281, CUT STONE AND STONE PRODUCTS														
United States	**E1**	**921**	**161**	**12.3**	**284.4**	**9.5**	**19.3**	**205.8**	**607.4**	**407.1**	**1 011.3**	**36.9**	**12.5**	**450.5**
Arizona	–	13	2	.1	4.0	.1	.3	3.0	6.8	4.5	11.4	(D)	(NA)	(NA)
California	E2	86	8	.7	16.5	.6	1.2	11.9	37.9	21.6	59.6	1.6	F	(D)
Florida	E3	51	3	.3	6.5	.2	.5	4.4	11.7	10.8	22.3	.7	.2	5.9
Georgia	E1	113	26	1.5	30.2	1.2	2.3	23.2	59.6	47.3	107.6	3.2	1.8	56.7
Illinois	E2	31	10	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)
Indiana	–	26	14	.8	22.1	.6	1.2	16.2	31.8	25.4	57.3	.9	F	(D)
Kansas	E4	9	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	(NA)	(NA)
Massachusetts	E1	23	2	.2	7.2	.2	.4	5.3	14.5	14.9	27.6	.4	E	(D)
Michigan	E7	15	3	.2	4.3	.1	.2	2.2	6.3	4.3	10.4	.4	(NA)	(NA)
Minnesota	E1	18	10	1.7	38.4	1.3	2.5	28.3	118.9	46.5	165.6	(D)	G	(D)
Missouri	E2	21	3	.1	3.3	.1	.2	2.1	4.7	3.7	8.2	(D)	(NA)	(NA)
New Hampshire	E3	5	3	.2	3.7	.1	.2	2.1	9.0	4.5	13.7	(D)	(NA)	(NA)
New York	E2	51	11	.5	13.6	.4	.8	9.3	25.8	15.2	41.2	(D)	F	(D)
North Carolina	E2	30	9	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
Ohio	E1	36	6	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)
Pennsylvania	E4	35	4	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.3	F	(D)
South Dakota	–	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Tennessee	E4	27	3	.2	4.4	.2	.3	2.9	9.3	7.7	17.0	.4	(NA)	(D)
Texas	E1	72	7	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.8	G	(D)
Vermont	–	66	16	1.1	27.5	.9	1.8	20.7	59.2	54.8	113.9	4.7	1.3	47.9
Wisconsin	E1	16	5	.2	4.0	.1	.3	2.4	7.7	5.9	13.3	.3	(NA)	(D)

Note: For qualifications of data, see footnotes on table 1a.

[1]Payroll and sales data for some 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 the items shown 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 for those States where estimated value of shipments data based on administrative-record data account for 10 percent or more of figure shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

[2]Statistics for some producing States have been withheld to avoid disclosing data for individual companies. However, for States with 100 employees 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.

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Table 3a. **Summary Statistics for the Industry: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Concrete block and brick (SIC 3271)	Concrete products, n.e.c. (SIC 3272)	Ready-mixed concrete (SIC 3273)	Lime (SIC 3274)	Gypsum products (SIC 3275)	Cut stone and stone products (SIC 3281)
Companies ---- number	887	2 606	3 248	57	80	901
All establishments ---- number	1 071	3 113	5 254	88	152	921
With 1 to 19 employees ---- number	781	2 225	3 892	29	57	760
With 20 to 99 employees ---- number	284	802	1 314	40	55	149
With 100 employees or more ---- number	6	86	48	19	40	12
Employment and labor costs:						
Employees ---- 1,000	16.4	58.9	82.4	5.6	10.5	12.3
Compensation, total ---- mil dol	519.5	1 906.8	2 825.5	220.0	405.1	357.8
Annual payroll ---- mil dol	429.9	1 513.3	2 291.5	171.4	329.0	284.4
Fringe benefits ---- mil dol	89.6	393.4	534.0	48.6	76.1	73.4
Social Security and other legally required payments ---- mil dol	46.7	208.0	272.7	18.4	33.8	35.4
Employer voluntary payments ---- mil dol	42.9	185.5	261.3	30.2	42.3	38.0
Production workers:						
Average for year ---- 1,000	9.2	42.7	60.9	4.3	8.3	9.5
March ---- 1,000	8.9	41.4	57.5	4.3	8.3	9.7
May ---- 1,000	9.4	43.4	62.9	4.3	8.4	9.6
August ---- 1,000	9.6	44.5	63.9	4.3	8.4	9.4
November ---- 1,000	8.9	41.8	59.7	4.3	8.3	9.2
Hours ---- millions	20.3	90.9	129.2	9.6	19.0	19.3
Wages ---- mil dol	208.5	947.9	1 577.7	121.3	242.0	205.8
Cost of materials[1] ---- mil dol	1 025.1	2 581.7	6 662.4	446.2	1 283.9	407.1
Materials, parts, containers, etc., consumed[2] ---- mil dol	634.9	2 036.2	5 964.8	194.7	1 001.1	271.5
Resales ---- mil dol	333.4	289.6	392.2	9.9	68.9	31.3
Fuels ---- mil dol	27.5	56.1	152.4	167.8	141.1	6.3
Purchased electricity ---- mil dol	24.0	49.8	83.9	57.2	68.6	18.8
Contract work ---- mil dol	5.3	150.1	69.1	16.6	4.2	79.1
Quantity of electric energy used for heat and power:						
Purchased ---- mil kWh	363.3	731.9	1 275.5	1 133.6	1 194.6	286.0
Generated less sold ---- mil kWh	(D)	(D)	3.2	–	(D)	(D)
Total value of shipments ---- mil dol	2 051.1	5 934.2	12 009.9	903.7	2 075.9	1 011.3
Value added ---- mil dol	1 030.8	3 353.5	5 342.5	461.1	793.3	607.4
Inventories by stage of fabrication:						
Beginning of 1992 ---- mil dol	282.8	701.3	434.8	95.8	142.1	152.7
Finished goods ---- mil dol	239.7	462.7	138.6	21.7	42.5	88.4
Work in process ---- mil dol	3.1	65.9	14.1	9.5	8.9	26.6
Materials and supplies ---- mil dol	40.0	172.8	282.0	64.6	90.8	37.6
End of 1992 ---- mil dol	287.3	696.4	424.7	104.9	140.7	156.4
Finished goods ---- mil dol	245.1	470.7	135.2	24.3	43.9	90.1
Work in process ---- mil dol	2.4	58.8	12.5	10.4	8.8	28.1
Materials and supplies ---- mil dol	39.7	166.9	277.0	70.2	88.0	38.2

Note: For qualifications of data, see footnotes on table 1a.

[1]Data on purchased services for the repair of buildings and machinery and for communication services are not included in cost of materials, etc., but are shown in table 3c.
[2]Data on materials consumed by type are shown in table 7. Data on amount purchased or transferred from foreign sources are shown in table 3c.

Table 3b. **Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation, and Rental Payments: 1992**

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Concrete block and brick (SIC 3271)	Concrete products, n.e.c. (SIC 3272)	Ready-mixed concrete (SIC 3273)	Lime (SIC 3274)	Gypsum products (SIC 3275)	Cut stone and stone products (SIC 3281)
Gross book value of depreciable assets:						
Total:						
Beginning of year	1 115.9	2 807.0	5 658.2	821.6	1 635.4	372.6
New capital expenditures[1]	57.3	171.9	313.0	47.9	43.8	36.9
Used capital expenditures	10.1	34.0	90.0	5.0	1.6	6.5
Retirements	12.4	69.9	185.5	27.8	14.3	12.4
End of year	1 170.9	2 943.0	5 875.7	846.8	1 666.4	403.6
Buildings and other structures:						
Beginning of year	216.6	606.0	777.4	130.8	438.3	75.6
New capital expenditures	9.0	26.2	34.7	4.0	3.1	6.7
Used capital expenditures	.7	3.9	6.1	.2	.2	.1
Retirements	2.3	6.5	12.5	1.0	.3	1.6
End of year	223.9	629.6	805.7	134.0	441.4	80.8
Machinery and equipment:						
Beginning of year	899.3	2 201.1	4 880.8	690.8	1 197.1	297.0
New capital expenditures[1]	48.3	145.6	278.3	44.0	40.6	30.2
Used capital expenditures	9.4	30.1	83.9	4.8	1.4	6.4
Retirements	10.1	63.4	173.0	26.8	14.0	10.8
End of year	946.9	2 313.3	5 070.0	712.8	1 225.0	322.8
Depreciation charges during 1992:						
Total	101.6	190.1	463.6	46.7	87.7	30.6
Buildings and other structures	19.3	30.9	52.2	5.6	14.4	4.4
Machinery and equipment	82.3	159.3	411.4	41.1	73.3	26.2
Rental payments:						
Total	24.8	85.1	147.7	7.8	5.5	11.7
Buildings and other structures	13.3	42.3	75.3	2.6	2.3	7.0
Machinery and equipment	11.5	42.8	72.4	5.2	3.2	4.7

[1]Data on new machinery and equipment expenditures by type are provided in table 3c.

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Table 3c. **Supplemental Industry Statistics Based on Sample Estimates: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Concrete block and brick (SIC 3271)		Concrete products, n.e.c. (SIC 3272)		Ready-mixed concrete (SIC 3273)	
	Amount (million dollars)	Relative standard error of estimate[1] (percent)	Amount (million dollars)	Relative standard error of estimate[1] (percent)	Amount (million dollars)	Relative standard error of estimate[1] (percent)
Purchased services:						
Cost of purchased services for the repair of–						
Buildings and other structures	3.3	(X)	10.1	(X)	19.9	(X)
Response coverage ratio (percent)[2]	64.9	(X)	70.4	(X)	60.7	(X)
Machinery	41.4	(X)	77.2	(X)	179.7	(X)
Response coverage ratio (percent)[2]	66.2	(X)	70.4	(X)	63.4	(X)
Other purchased services:						
Communications	5.7	(X)	16.9	(X)	20.0	(X)
Response coverage ratio (percent)[2]	60.3	(X)	66.7	(X)	55.0	(X)
Legal	7.2	(X)	8.2	(X)	12.1	(X)
Response coverage ratio (percent)[2]	64.3	(X)	70.6	(X)	61.8	(X)
Accounting and bookkeeping	3.8	(X)	8.7	(X)	11.1	(X)
Response coverage ratio (percent)[2]	64.6	(X)	72.1	(X)	61.9	(X)
Advertising	5.5	(X)	16.6	(X)	11.8	(X)
Response coverage ratio (percent)[2]	65.3	(X)	70.8	(X)	62.1	(X)
Software and other data processing	1.1	(X)	2.2	(X)	3.2	(X)
Response coverage ratio (percent)[2]	63.5	(X)	70.5	(X)	60.2	(X)
Refuse removal, including hazardous waste	1.2	(X)	7.4	(X)	6.4	(X)
Response coverage ratio (percent)[2]	61.4	(X)	69.2	(X)	59.5	(X)
New machinery and equipment expenditures	48.3	(X)	145.6	(X)	278.3	(X)
Automobiles, trucks, etc., for highway use	9.0	15	39.3	13	180.6	6
Computers and peripheral data processing equipment	1.3	27	6.4	14	8.3	15
All other	38.0	5	99.9	6	89.4	10
Adjustment ratio[3]	1.6	(X)	1.6	(X)	1.6	(X)
Cost of materials, components, parts, etc., used	634.9	(X)	2 036.2	(X)	5 964.8	(X)
Materials purchased or transferred from foreign sources[4]	7.3	21	17.9	15	(S)	(X)
Materials purchased or transferred from domestic sources	627.6	1	2 018.2	1	(S)	(X)
Adjustment ratio[3]	1.9	(X)	1.9	(X)	(S)	(X)

Item	Lime (SIC 3274)		Gypsum products (SIC 3275)		Cut stone and stone products (SIC 3281)	
	Amount (million dollars)	Relative standard error of estimate[1] (percent)	Amount (million dollars)	Relative standard error of estimate[1] (percent)	Amount (million dollars)	Relative standard error of estimate[1] (percent)
Purchased services:						
Cost of purchased services for the repair of–						
Buildings and other structures	2.3	(X)	1.8	(X)	(S)	(X)
Response coverage ratio (percent)[2]	88.1	(X)	87.6	(X)	(S)	(X)
Machinery	28.9	(X)	19.6	(X)	(S)	(X)
Response coverage ratio (percent)[2]	88.1	(X)	87.6	(X)	(S)	(X)
Other purchased services:						
Communications	2.5	(X)	1.9	(X)	(S)	(X)
Response coverage ratio (percent)[2]	86.7	(X)	83.4	(X)	(S)	(X)
Legal	4.4	(X)	.7	(X)	(S)	(X)
Response coverage ratio (percent)[2]	88.1	(X)	82.7	(X)	(S)	(X)
Accounting and bookkeeping	2.1	(X)	.2	(X)	(S)	(X)
Response coverage ratio (percent)[2]	86.7	(X)	83.2	(X)	(S)	(X)
Advertising	.7	(X)	.1	(X)	(S)	(X)
Response coverage ratio (percent)[2]	88.1	(X)	83.4	(X)	(S)	(X)
Software and other data processing	.2	(X)	.4	(X)	(S)	(X)
Response coverage ratio (percent)[2]	88.1	(X)	83.2	(X)	(S)	(X)
Refuse removal, including hazardous waste	1.5	(X)	4.5	(X)	(S)	(X)
Response coverage ratio (percent)[2]	88.1	(X)	83.2	(X)	(S)	(X)
New machinery and equipment expenditures	44.0	(X)	40.6	(X)	30.2	(X)
Automobiles, trucks, etc., for highway use	1.6	18	.3	1	3.2	43
Computers and peripheral data processing equipment	1.1	11	.8	3	2.6	62
All other	41.3	1	39.6	1	24.5	9
Adjustment ratio[3]	1.5	(X)	1.3	(X)	1.5	(X)
Cost of materials, components, parts, etc., used	194.7	(X)	1 001.1	(X)	271.5	(X)
Materials purchased or transferred from foreign sources[4]	6.4	32	70.6	10	6.9	41
Materials purchased or transferred from domestic sources	188.3	2	930.6	1	264.7	2
Adjustment ratio[3]	1.2	(X)	1.2	(X)	1.5	(X)

Note: The amounts shown for purchased services reflect only those services that establishments purchase from other companies. Amounts purchased by separate central admnistrative offices and services provided to establishments by central administrative offices are excluded.

[1]For description of relative standard error of estimate, see Qualifications of the Data in appendixes.

[2]A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight, see appendix B) for those ASM establishments that reported to the weighted total employment for all ASM establishments classified in the industry.

[3]Detail has been adjusted upwards to account for nonresponse. Inverse of the ratio shown represents a measure of the response of the inquiry. (See appendixes for further explanation.)

[4]Data may understate the true cost of imported parts, components, and supplies since some respondents do not know the origin of these materials. Includes cases where materials were purchased from secondary suppliers or where they were transferred from company-operated warehouses or other distribution points. Direct purchases from foreign suppliers and importers by domestic manufacturing establishments are believed to be reported accurately.

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Table 4. **Industry Statistics by Employment Size of Establishment: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and employment size class	E[1]	All establishments (no.)	All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories (million dollars)
			Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)					
INDUSTRY 3271, CONCRETE BLOCK AND BRICK												
Total	**E1**	**1 071**	**16.4**	**429.9**	**9.2**	**20.3**	**208.5**	**1 030.8**	**1 025.1**	**2 051.1**	**57.3**	**287.3**
Establishments with an average of—												
1 to 4 employees	E6	283	.4	10.7	.3	.6	5.6	32.7	31.3	63.9	6.3	9.8
5 to 9 employees	E2	221	1.5	35.3	.9	2.0	18.9	99.2	103.3	202.0	4.8	31.9
10 to 19 employees	–	277	3.8	96.0	2.1	4.9	46.9	242.0	245.8	487.8	10.7	72.0
20 to 49 employees	E1	237	6.8	182.3	3.7	8.2	83.2	426.7	429.1	853.1	23.8	116.0
50 to 99 employees	E1	47	3.1	87.8	1.7	3.6	42.9	187.3	186.4	373.2	10.7	51.2
100 to 249 employees	–	6	.7	17.8	.5	.9	11.0	42.9	29.0	71.2	1.0	6.3
Covered by administrative records[2]	E9	249	.5	10.5	.3	.6	5.0	27.4	27.6	55.0	1.3	7.1
INDUSTRY 3272, CONCRETE PRODUCTS, N.E.C.												
Total	**E1**	**3 113**	**58.9**	**1 513.3**	**42.7**	**90.9**	**947.9**	**3 353.5**	**2 581.7**	**5 934.2**	**171.9**	**696.4**
Establishments with an average of—												
1 to 4 employees	E6	1 118	2.0	44.2	1.5	3.2	30.1	109.4	83.8	196.5	6.5	24.8
5 to 9 employees	E2	518	3.5	77.8	2.6	5.3	53.1	180.7	126.0	306.9	8.6	32.9
10 to 19 employees	E1	589	8.1	192.6	5.7	11.5	118.6	431.3	339.8	771.9	20.2	87.4
20 to 49 employees	E1	604	18.5	476.6	13.1	27.6	288.1	1 138.9	841.5	1 977.0	64.3	240.6
50 to 99 employees	E1	198	13.8	373.2	10.1	22.0	233.8	795.0	591.7	1 379.5	37.0	169.9
100 to 249 employees	E1	82	11.6	315.2	8.8	19.0	204.5	612.2	540.4	1 159.1	26.7	121.8
250 to 499 employees	–	4	1.3	33.8	1.0	2.2	19.9	86.0	58.5	143.3	8.6	18.9
Covered by administrative records[2]	E9	942	1.8	34.9	1.3	2.8	23.2	82.0	65.5	147.4	4.5	17.2
INDUSTRY 3273, READY-MIXED CONCRETE												
Total	**E2**	**5 254**	**82.4**	**2 291.5**	**60.9**	**129.2**	**1 577.7**	**5 342.5**	**6 662.4**	**12 009.9**	**313.0**	**424.7**
Establishments with an average of—												
1 to 4 employees	E4	1 422	2.9	75.8	2.3	4.8	54.9	275.2	347.3	623.1	14.9	21.7
5 to 9 employees	E2	1 169	8.0	192.0	6.0	12.8	139.0	528.7	693.6	1 223.6	28.9	40.7
10 to 19 employees	E1	1 301	18.0	467.4	13.5	28.4	333.0	1 179.1	1 496.7	2 675.5	59.3	93.5
20 to 49 employees	E1	1 112	33.3	944.2	24.1	50.8	623.5	2 128.3	2 574.6	4 702.1	126.2	161.1
50 to 99 employees	E2	202	13.4	392.8	9.7	21.1	265.0	809.0	971.9	1 783.4	54.5	64.8
100 to 249 employees	E4	46	6.8	219.4	5.2	11.2	162.2	422.1	578.3	1 002.1	29.2	42.9
250 to 499 employees	–	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Covered by administrative records[2]	E9	942	2.9	58.9	2.3	5.0	42.4	143.9	186.9	330.8	10.1	11.8
INDUSTRY 3274, LIME												
Total	**–**	**88**	**5.6**	**171.4**	**4.3**	**9.6**	**121.3**	**461.1**	**446.2**	**903.7**	**47.9**	**104.9**
Establishments with an average of—												
1 to 4 employees	E4	11	(Z)	.8	(Z)	(Z)	.5	1.7	1.3	3.0	.1	.2
5 to 9 employees	–	10	.1	2.4	.1	.2	1.7	8.1	5.3	12.2	.5	2.6
10 to 19 employees	–	8	.1	2.6	.1	.2	2.0	13.3	8.9	22.2	.6	1.1
20 to 49 employees	–	19	.6	17.9	.4	1.0	12.0	58.3	56.6	114.6	3.7	14.2
50 to 99 employees	–	21	1.5	48.8	1.1	2.5	34.4	138.1	141.8	279.8	10.6	36.8
100 to 249 employees	–	18	3.3	98.9	2.6	5.7	70.8	241.7	232.2	471.9	32.5	49.9
500 to 999 employees	–	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Covered by administrative records[2]	E9	6	(Z)	.4	(Z)	(Z)	.3	.7	.6	1.4	.1	.1
INDUSTRY 3275, GYPSUM PRODUCTS												
Total	**–**	**152**	**10.5**	**329.0**	**8.3**	**19.0**	**242.0**	**793.3**	**1 283.9**	**2 075.9**	**43.8**	**140.7**
Establishments with an average of—												
1 to 4 employees	E8	16	(Z)	.8	(Z)	.1	.6	2.8	3.2	6.0	.1	.6
5 to 9 employees	E6	22	.2	3.9	.1	.3	2.8	10.4	17.2	27.6	.4	1.9
10 to 19 employees	E3	19	.3	6.1	.2	.4	4.2	20.1	28.4	48.7	.4	3.0
20 to 49 employees	E2	18	.5	12.5	.4	.9	8.7	35.8	69.2	104.7	1.7	7.1
50 to 99 employees	–	37	2.9	92.4	2.3	5.1	65.5	207.7	416.2	623.2	14.0	45.3
100 to 249 employees	–	36	6.6	213.3	5.3	12.3	160.2	516.5	749.6	1 265.8	27.1	82.8
250 to 499 employees	–	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Covered by administrative records[2]	E9	20	.1	1.8	.1	.1	1.3	4.4	6.5	10.9	.2	.7

See footnotes at end of table.

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Table 4. **Industry Statistics by Employment Size of Establishment: 1992**—Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and employment size class	E[1]	All establishments (no.)	All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories (million dollars)
			Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)					
INDUSTRY 3281, CUT STONE AND STONE PRODUCTS												
Total	**E1**	**921**	**12.3**	**284.4**	**9.5**	**19.3**	**205.8**	**607.4**	**407.1**	**1 011.3**	**36.9**	**156.4**
Establishments with an average of—												
1 to 4 employees	E6	434	.8	18.0	.6	1.4	13.7	37.6	32.9	70.3	1.2	10.3
5 to 9 employees	E2	176	1.2	25.2	.9	1.9	19.1	52.2	43.2	95.1	1.6	12.4
10 to 19 employees	E1	150	2.1	47.4	1.6	3.4	34.2	87.1	70.5	157.0	4.0	22.8
20 to 49 employees	E1	121	3.6	85.1	2.7	5.5	57.4	165.3	116.0	280.1	17.1	41.2
50 to 99 employees	–	28	1.9	46.9	1.5	2.9	33.9	91.4	65.1	156.7	5.2	21.6
100 to 249 employees	E2	10	2.7	61.7	2.1	4.1	47.4	173.7	79.5	252.1	7.8	48.1
250 to 499 employees	–	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1,000 to 2,499 employees	–	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Covered by administrative records[2]	E9	404	.9	18.6	.8	1.6	14.3	35.1	29.5	64.5	1.3	9.7

Note: For qualifications of data, see footnotes on table 1a. Data shown as (D) are included in underscored figures above.

[1]Payroll and sales data for some small single-establishment manufacturing 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 the items shown 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 for those employment-size classes where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

[2]Report forms were not mailed to small single-establishment companies with up to 20 employees (cutoff varied by industry). Payroll and sales data for 1992 were obtained from administrative records supplied by other agencies of the Federal Government. Those data were then used in conjunction with industry averages to estimate the items shown. Data are also included in respective employment-size classes shown.

Table 5a. **Industry Statistics by Industry and Primary Product Class Specialization: 1992**

[Table presents selected statistics for establishments according to their degree of specialization in products primary to their industry. Measures of plant specialization shown are (1) industry specialization: ratio of primary product shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment; and (2) product class specialization: ratio of largest primary product class shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment. See appendix for method of computing ratios. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry or product class code	Industry or primary product class	All establishments (number)	All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)
			Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
3271	**Concrete block and brick:**										
	All establishments in industry	1 071	16.4	429.9	9.2	20.3	208.5	1 030.8	1 025.1	2 051.1	57.3
3272	**Concrete products, n.e.c.:**										
	All establishments in industry	3 113	58.9	1 513.3	42.7	90.9	947.9	3 353.5	2 581.7	5 934.2	171.9
	Establishments with this product class primary:										
32721	Concrete pipe	339	10.9	299.7	8.2	17.6	195.5	743.5	539.2	1 288.2	38.8
32722	Precast concrete products	1 235	28.5	733.7	19.9	42.2	441.9	1 560.9	1 216.4	2 774.1	88.3
32723	Prestressed concrete products	176	11.2	287.8	8.7	18.6	189.5	598.9	458.5	1 056.3	21.4
3273	**Ready-mixed concrete:**										
	All establishments in industry	5 254	82.4	2 291.5	60.9	129.2	1 577.7	5 342.5	6 662.4	12 009.9	313.0
3274	**Lime:**										
	All establishments in industry	88	5.6	171.4	4.3	9.6	121.3	461.1	446.2	903.7	47.9
3275	**Gypsum products:**										
	All establishments in industry	152	10.5	329.0	8.3	19.0	242.0	793.3	1 283.9	2 075.9	43.8
	Establishments with this product class primary:										
32751	Gypsum building materials	80	8.5	271.0	6.8	15.4	199.9	639.9	1 063.6	1 702.0	38.1
32752	Other gypsum products	28	1.6	48.8	1.3	2.9	35.2	129.8	185.8	316.0	4.7
3281	**Cut stone and stone products:**										
	All establishments in industry	921	12.3	284.4	9.5	19.3	205.8	607.4	407.1	1 011.3	36.9
	Establishments with this product class primary:										
32811	Dressed dimension granite (including gneiss, syenite, diorite, and cut granite)	195	5.2	122.5	4.0	8.0	89.6	304.5	179.7	484.1	12.6
32812	Dressed dimension limestone (including dolomite, travertine, calcareous, tufa, and cut limestone)	53	1.7	43.9	1.3	2.6	31.2	70.0	50.2	119.4	2.2
32813	Dressed dimension marble and other stone	109	2.2	49.5	1.8	3.6	34.8	100.8	70.0	172.0	6.1

Note: For qualifications of data, see footnotes on table 1a.

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Table 5b. Industry–Product Analysis—Value of Industry and Primary Product Shipments; Specialization and Coverage Ratios: 1992 and Earlier Census Years

[Million dollars. An establishment is assigned to an industry based on shipment values of products representing largest amount considered primary to an industry. Frequently, establishment shipments comprise mixtures of products assigned to an industry (primary), those considered primary to other industries (secondary), and receipts for activities such as merchandising or contract work (total miscellaneous receipts). Subtotals for total value of shipments show this product pattern for an industry. Primary products specialization ratio is the primary products value of shipments divided by the sum of primary products value of shipments plus secondary products value of shipments. The extent of which an industry's primary products are shipped by establishments classified both in and out of an industry is the coverage ratio and is calculated by dividing the primary products value of shipments by the value of primary products shipments made in all industries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry	1992	1987	1982
INDUSTRY 3271, CONCRETE BLOCK AND BRICK			
Total value of shipments	2 051.1	2 245.8	1 301.8
Primary products value of shipments	1 472.5	1 719.6	1 024.0
Secondary products value of shipments	127.0	110.8	59.0
Total miscellaneous receipts	451.6	415.4	218.8
Value of resales	437.9	401.2	202.6
Contract receipts	7.4	3.7	(D)
Other miscellaneous receipts	6.3	10.5	(D)
Primary products specialization ratio	92	94	95
Value of primary products shipments made in all industries	1 665.7	1 950.7	1 173.2
Value of primary products shipments made in this industry	1 472.5	1 719.6	1 024.0
Value of primary products shipments made in other industries	193.3	231.1	149.2
Coverage ratio	88	88	87
INDUSTRY 3272, CONCRETE PRODUCTS, N.E.C.			
Total value of shipments	5 934.2	5 828.4	3 649.2
Primary products value of shipments	5 360.4	5 323.6	3 335.6
Secondary products value of shipments	127.8	169.2	101.1
Total miscellaneous receipts	446.0	335.6	212.5
Value of resales	345.9	253.0	134.8
Contract receipts	29.0	25.9	27.0
Other miscellaneous receipts	71.1	56.7	50.7
Primary products specialization ratio	98	97	97
Value of primary products shipments made in all industries	5 569.5	5 511.7	3 503.3
Value of primary products shipments made in this industry	5 360.4	5 323.6	3 335.6
Value of primary products shipments made in other industries	209.1	188.2	167.7
Coverage ratio	96	97	95
INDUSTRY 3273, READY-MIXED CONCRETE			
Total value of shipments	12 009.9	12 966.3	8 163.3
Primary products value of shipments	10 710.0	11 601.1	7 415.7
Secondary products value of shipments	568.3	613.3	368.7
Total miscellaneous receipts	731.6	751.9	378.9
Value of resales	539.7	610.3	269.2
Contract receipts	79.1	48.2	29.4
Other miscellaneous receipts	112.7	93.4	80.3
Receipts for installation (or construction) of products of this establishment	24.0	(NA)	38.0
Other miscellaneous receipts	73.0	(NA)	35.5
Other miscellaneous receipts, n.s.k.	15.6	(NA)	6.8
Primary products specialization ratio	95	95	95
Value of primary products shipments made in all industries	10 907.0	11 794.9	7 544.9
Value of primary products shipments made in this industry	10 710.0	11 601.1	7 415.7
Value of primary products shipments made in other industries	197.1	193.8	129.3
Coverage ratio	98	98	98
INDUSTRY 3274, LIME			
Total value of shipments	903.7	715.5	543.2
Primary products value of shipments	800.2	636.8	477.0
Secondary products value of shipments	89.0	67.2	61.7
Total miscellaneous receipts	14.4	11.5	4.5
Value of resales	10.9	9.9	2.1
Contract receipts	(D)	–	–
Other miscellaneous receipts	(D)	1.6	–
Primary products specialization ratio	90	90	89
Value of primary products shipments made in all industries	851.0	703.9	517.8
Value of primary products shipments made in this industry	800.2	636.8	477.0
Value of primary products shipments made in other industries	50.7	67.1	40.9
Coverage ratio	94	90	92
INDUSTRY 3275, GYPSUM PRODUCTS			
Total value of shipments	2 075.9	2 670.9	1 289.2
Primary products value of shipments	1 909.5	2 513.8	1 160.4
Secondary products value of shipments	87.2	88.9	88.6
Total miscellaneous receipts	79.2	68.2	40.3
Value of resales	78.4	66.1	(D)
Contract receipts	(D)	(Z)	–
Other miscellaneous receipts	(D)	2.1	(D)
Primary products specialization ratio	96	97	93
Value of primary products shipments made in all industries	1 930.0	2 563.1	1 178.2
Value of primary products shipments made in this industry	1 909.5	2 513.8	1 160.4
Value of primary products shipments made in other industries	20.5	49.3	17.8
Coverage ratio	99	98	98

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Table 5b. Industry–Product Analysis—Value of Industry and Primary Product Shipments; Specialization and Coverage Ratios: 1992 and Earlier Census Years—Con.

[Million dollars. An establishment is assigned to an industry based on shipment values of products representing largest amount considered primary to an industry. Frequently, establishment shipments comprise mixtures of products assigned to an industry (primary), those considered primary to other industries (secondary), and receipts for activities such as merchandising or contract work (total miscellaneous receipts). Subtotals for total value of shipments show this product pattern for an industry. Primary products specialization ratio is the primary products value of shipments divided by the sum of primary products value of shipments plus secondary products value of shipments. The extent of which an industry's primary products are shipped by establishments classified both in and out of an industry is the coverage ratio and is calculated by dividing the primary products value of shipments by the value of primary products shipments made in all industries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry	1992	1987	1982
INDUSTRY 3281, CUT STONE AND STONE PRODUCTS			
Total value of shipments	1 011.3	840.8	555.4
Primary products value of shipments	921.7	796.1	513.5
Secondary products value of shipments	17.9	17.7	17.2
Total miscellaneous receipts	71.8	26.9	24.8
Value of resales	46.8	17.5	13.9
Contract receipts	11.3	6.5	(D)
Other miscellaneous receipts	13.6	3.0	(D)
Primary products specialization ratio	98	98	97
Value of primary products shipments made in all industries	948.5	808.8	526.2
Value of primary products shipments made in this industry	921.7	796.1	513.5
Value of primary products shipments made in other industries	26.8	12.6	12.8
Coverage ratio	97	98	98

Note: For qualifications of data, see footnotes on table 1a.

Table 6a. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1992 and 1987

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	1992			1987		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
3271– —	**CONCRETE BLOCK AND BRICK**						
	Total	**(NA)**	**(X)**	**1 665.7**	**(NA)**	**(X)**	**1 950.7**
32710	Concrete brick and block	(NA)	(X)	1 665.7	(NA)	(X)	1 950.7
	Structural block:						
32710 11	Lightweight units (units made with concrete weighing less than 105 lb per cubic foot) (dry weight) mil blocks	329	(S)	483.4	317	*758.7	575.6
32710 15	Mediumweight units (units made with concrete weighing at least 105 lb but less than 125 lb per cubic foot) (dry weight)	120	(X)	148.4	156	(X)	237.1
32710 17	Normal weight units (units made with concrete weighing at least 125 lb per cubic foot) (dry weight) mil blocks	384	(S)	484.0	342	**1 110.5	549.9
32710 18	Decorative block (such as screen block, split block, slump block, shadowal block, etc.)	164	(X)	128.0	155	(X)	171.2
32710 34	Concrete pavers (including grid, interlocking, etc.)	87	(X)	104.5	(NA)	(X)	(3)
32710 51	Concrete brick	59	(X)	52.7	86	(X)	74.0
32710 00	Concrete block and brick, n.s.k.[4]	(NA)	(X)	208.9	(NA)	(X)	3233.7
32710 02	Concrete block and brick, n.s.k.[5]	(NA)	(X)	55.8	(NA)	(X)	109.2
3272– —	**CONCRETE PRODUCTS, N.E.C.**						
	Total	**(NA)**	**(X)**	**5 569.5**	**(NA)**	**(X)**	**5 511.7**
32721	Concrete pipe	(NA)	(X)	1 232.5	(NA)	(X)	1 389.4
	Culvert pipe:						
	Reinforced:						
32721 12	36 inches or more 1,000 s tons	67	**1 599.5	153.1	64	*1 143.8	131.5
32721 14	Less than 36 inches 1,000 s tons	53	*1 080.0	87.8	58	*637.0	64.4
32721 17	Nonreinforced	9	(X)	8.6	20	(X)	18.0
	Storm sewer pipe:						
	Reinforced:						
32721 21	36 inches or more 1,000 s tons	73	**2 139.1	186.9	77	*2 049.2	218.2
32721 24	Less than 36 inches 1,000 s tons	71	*1 973.1	168.4	77	*1 787.6	155.9
32721 25	Nonreinforced	6	(X)	8.3	18	(X)	27.8
	Sanitary sewer pipe:						
	Reinforced:						
32721 26	24 inches or more 1,000 s tons	44	*917.8	82.2	46	**966.8	111.3
32721 27	Less than 24 inches	23	(X)	17.3	31	(X)	34.3
32721 30	Nonreinforced	5	(X)	4.3	8	(X)	3.2
	Pressure pipe:						
32721 31	Reinforced concrete pressure pipe	5	(X)	18.3	9	(X)	32.2
32721 32	Prestressed concrete cylinder pipe	6	(X)	90.7	9	(X)	162.3
32721 37	Pretensioned concrete cylinder pipe and other pressure pipe 1,000 lin ft	4	(D)	(6)	(NA)	(D)	(7)
32721 51	Irrigation pipe and drain tile	16	(X)	22.4	16	(X)	14.9

See footnotes at end of table.

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Table 6a. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1992 and 1987—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	1992			1987		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
3272– —	**CONCRETE PRODUCTS, N.E.C.**—Con.						
32721	Concrete pipe—Con.						
32721 98	Other concrete pipe (such as manholes and conduits)	173	(X)	[6]317.9	144	(X)	[7]315.3
32721 00	Concrete pipe, n.s.k.	(NA)	(X)	66.3	(NA)	(X)	100.0
32722	Precast concrete products	(NA)	(X)	2 641.7	(NA)	(X)	2 241.7
	Roof and floor units:						
32722 13	Slabs and tile	51	(X)	304.7	55	(X)	266.2
32722 17	Joists and beams	19	(X)	12.7	23	(X)	21.9
32722 23	Architectural wall panels	126	(X)	290.4	115	(X)	342.5
32722 25	Piling, posts, and poles	22	(X)	27.6	25	(X)	37.8
32722 27	Cast stone products for architectural purposes (except architectural wall panels, such as window sills, ashlar, etc.)	96	(X)	61.8	68	(X)	65.4
32722 28	Prefabricated building systems, primarily concrete, sold as complete units, and shipped in panel or modular form	49	(X)	133.0	25	(X)	74.8
32722 29	Other precast concrete construction or building products (including prefabricated housing components)	225	(X)	403.8	169	(X)	345.2
	Burial vaults and boxes:						
32722 33	Vaults	300	(X)	233.0	231	(X)	194.2
32722 35	Boxes	100	(X)	58.2	70	(X)	35.5
32722 61	Septic tanks	273	(X)	151.2	206	(X)	133.1
32722 71	Dry-mixed concrete materials (including prepackaged sand, gravel, and cement, mortar and cement premixes)	227	(X)	471.3	179	(X)	306.0
32722 99	Other precast concrete products (except construction or building products)	253	(X)	286.1	(NA)	(X)	243.8
32722 00	Precast concrete products, n.s.k.	(NA)	(X)	207.8	(NA)	(X)	175.2
32723	Prestressed concrete products	(NA)	(X)	907.8	(NA)	(X)	1 048.1
32723 11	Single tees, double tees, and channels—1,000 sq ft	60	*31 728.8	147.8	78	(S)	278.3
32723 23	Piling, bearing piles, and sheet piles—1,000 lin ft	37	**7 123.4	83.7	38	(S)	93.3
32723 25	Bridge beams—1,000 lin ft	73	*3 883.4	230.5	66	*3 000.0	198.8
32723 27	Joists, girders, and beams (other than bridge beams)—1,000 lin ft	43	1 649.3	50.5	47	(S)	80.3
32723 31	Solid and hollow cored slabs and panels—1,000 sq ft	87	**50 967.2	202.0	93	*61 000.0	231.1
32723 98	Other prestressed concrete products (such as arches, columns, etc.)—1,000 s tons	53	**1 303.7	140.1	54	(S)	88.0
32723 00	Prestressed concrete products, n.s.k.	(NA)	(X)	53.0	(NA)	(X)	78.3
32720	Concrete products, n.e.c., n.s.k.	(NA)	(X)	787.5	(NA)	(X)	832.6
32720 00	Concrete products, n.e.c., n.s.k.[4]	(NA)	(X)	640.1	(NA)	(X)	640.1
32720 02	Concrete products, n.e.c., n.s.k.[5]	(NA)	(X)	147.4	(NA)	(X)	192.4
3273– —	**READY-MIXED CONCRETE**						
	Total	**(NA)**	**(X)**	**10 907.0**	**(NA)**	**(X)**	**11 794.9**
32730	Ready-mixed concrete	(NA)	(X)	10 907.0	(NA)	(X)	11 794.9
32730 00	Ready-mixed concrete—mil cu yd	2 381	(S)	10 575.8	(NA)	(S)	11 204.8
32730 02	Ready-mixed concrete, n.s.k.[5]	(NA)	(X)	331.3	(NA)	(X)	590.1
3274– —	**LIME**						
	Total	**(NA)**	**(X)**	**851.0**	**(NA)**	**(X)**	**703.9**
32740	Lime (including cost of containers)	(NA)	(X)	851.0	(NA)	(X)	703.9
32740 11	Quicklime—1,000 s tons	36	*12 516.2	614.1	32	*10 348.8	508.4
32740 51	Hydrated lime—1,000 s tons	28	*1 874.2	124.5	27	*1 936.2	130.7
32740 71	Dead-burned dolomite[8]—1,000 s tons	8	396.5	28.3	6	r330.1	25.2
32740 72	Other lime—1,000 s tons	22	*571.6	37.2	(NA)	(NA)	([9])
32740 00	Lime, n.s.k.[10]	(NA)	(X)	45.5	(NA)	(X)	[9]33.3
32740 02	Lime, n.s.k.[11]	(NA)	(X)	1.4	(NA)	(X)	6.4
3275– —	**GYPSUM PRODUCTS**						
	Total	**(NA)**	**(X)**	**1 930.0**	**(NA)**	**(X)**	**2 563.1**
32751	Gypsum building materials	(NA)	(X)	1 584.1	(NA)	(X)	2 043.7
32751 12	Plaster building boards and lath—1,000 s tons	20	**18 000.1	1 378.0	20	*17 442.3	1 843.6
32751 13	Building plasters	9	(X)	202.1	5	(X)	84.7
32751 00	Gypsum building materials, n.s.k.	(NA)	(X)	4.1	(NA)	(X)	115.4
32752	Other gypsum products	(NA)	(X)	284.4	(NA)	(X)	448.6
32752 11	Industrial plasters	7	(X)	64.7	7	(X)	120.4
32752 21	Other calcined gypsum products	23	(X)	209.3	16	(X)	302.5
32752 00	Other gypsum products, n.s.k.	(NA)	(X)	10.4	(NA)	(X)	25.7
32750	Gypsum products, n.s.k.	(NA)	(X)	61.4	(NA)	(X)	70.8
32750 00	Gypsum products, n.s.k.[12]	(NA)	(X)	24.8	(NA)	(X)	21.7
32750 02	Gypsum products, n.s.k.[13]	(NA)	(X)	36.7	(NA)	(X)	49.1

See footnotes at end of table.

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Table 6a. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1992 and 1987—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	1992			1987		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
3281– —	**CUT STONE AND STONE PRODUCTS**						
	Total	**(NA)**	**(X)**	**948.5**	**(NA)**	**(X)**	**808.8**
32811	Dressed dimension granite (including gneiss, syenite, diorite, and cut granite)	(NA)	(X)	449.3	(NA)	(X)	404.6
32811 13	Building stone, 1,000 cubic feet	52	(S)	177.4	46	(S)	208.0
32811 35	Monumental stone, 1,000 cubic feet	140	(S)	206.3	91	(S)	143.6
32811 98	Other granite products, such as paving blocks and curbing, 1,000 cubic feet	30	(S)	55.9	22	(S)	47.1
32811 00	Dressed dimension granite (including gneiss, syenite, diorite, and cut granite), n.s.k.	(NA)	(X)	9.7	(NA)	(X)	5.8
32812	Dressed dimension limestone (including dolomite, travertine, calcareous, tufa, and cut limestone)	(NA)	(X)	123.3	(NA)	(X)	66.6
32812 13	Building stone, 1,000 cubic feet	47	**2 923.8	68.6	30	(S)	47.4
32812 98	Other limestone products, such as flagging, 1,000 cubic feet	17	(S)	31.4	6	(S)	4.6
32812 00	Dressed dimension limestone (including dolomite, travertine, calcareous, tufa, and cut limestone), n.s.k.	(NA)	(X)	23.3	(NA)	(X)	14.7
32813	Dressed dimension marble and other stone	(NA)	(X)	159.5	(NA)	(X)	146.4
32813 37	Building stone, monumental stone, and other marble products, 1,000 cubic feet	79	(S)	94.9	44	(S)	81.2
32813 98	Other stone, such as slate, sandstone, gabbro, and basalt, and other dressed dimension stone products, 1,000 cubic feet	42	(S)	49.8	33	(S)	50.4
32813 00	Dressed dimension marble and other stone, n.s.k.	(NA)	(X)	14.9	(NA)	(X)	14.8
32810	Cut stone and stone products, n.s.k.	(NA)	(X)	216.4	(NA)	(X)	191.2
32810 00	Cut stone and stone products, n.s.k.[4]	(NA)	(X)	151.8	(NA)	(X)	130.4
32810 02	Cut stone and stone products, n.s.k.[5]	(NA)	(X)	64.5	(NA)	(X)	60.8

[1]Data reported by all producers, not just those with shipments of $100,000 or more.
[2]For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: *10 to 19 percent estimated; **20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).
[3]For 1987, data for product code 32710 34 were included with product code 32710 00.
[4]Typically for establishments with 5 employees or more.
[5]Typically for establishments with less than 5 employees.
[6]For 1992, data for product code 32721 37 are included with product code 32721 98.
[7]For 1987, data for product code 32721 37 were included with product code 32721 98.
[8]Additional detail is collected for this product code in the Current Industrial Reports. For the survey number and title, see appendix C, part 3.
[9]For 1987, data for product code 32740 72 were included with product code 32740 00.
[10]Typically for establishments with 10 employees or more.
[11]Typically for establishments with less than 10 employees.
[12]Typically for establishments with 15 employees or more.
[13]Typically for establishments with less than 15 employees.

Table 6b. Product Classes—Value of Shipments by All Producers for Specified States: 1992 and 1987

[Million dollars. Product classes shown are those where the data are geographically dispersed, provided dispersion is not approximated by data in table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some States are withheld because they are either less than $2 million in product class shipments or they disclose data for individual companies in 1992. For meaning of abbreviations and symbols, see introductory text]

Product class and geographic area	1992 value of product shipments	1987 value of product shipments	Product class and geographic area	1992 value of product shipments	1987 value of product shipments
32721, CONCRETE PIPE			**32721, CONCRETE PIPE**—Con.		
United States	**1 232.5**	**1 389.4**	Kentucky	7.0	7.6
Alabama	19.5	(NA)	Louisiana	16.2	8.8
Arizona	19.1	(NA)	Maine	5.2	(NA)
Arkansas	12.0	(NA)	Maryland	40.5	44.8
California	124.7	153.4	Massachusetts	6.3	17.6
Colorado	35.7	(NA)	Michigan	49.7	51.4
Connecticut	25.7	39.6	Minnesota	53.4	55.5
Florida	58.8	84.1	Missouri	28.4	15.6
Georgia	26.6	29.6	Montana	2.4	(NA)
Illinois	75.3	64.1	Nebraska	12.7	8.5
Indiana	25.9	19.1	New Jersey	27.5	47.1
Iowa	22.4	14.9	New York	12.3	33.2
Kansas	11.2	16.9	North Carolina	29.4	27.1

See footnotes at end of table.

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Table 6b. Product Classes—Value of Shipments by All Producers for Specified States: 1992 and 1987—Con.

[Million dollars. Product classes shown are those where the data are geographically dispersed, provided dispersion is not approximated by data in table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some States are withheld because they are either less than $2 million in product class shipments or they disclose data for individual companies in 1992. For meaning of abbreviations and symbols, see introductory text]

Product class and geographic area	1992 value of product shipments	1987 value of product shipments
32721, CONCRETE PIPE—Con.		
Ohio	47.8	61.3
Oklahoma	10.3	7.6
Oregon	20.9	13.7
Pennsylvania	34.8	45.4
South Carolina	12.4	25.1
Tennessee	18.4	16.9
Texas	121.4	188.0
Virginia	69.0	49.4
Washington	20.1	32.2
Wisconsin	32.2	22.0
32722, PRECAST CONCRETE PRODUCTS		
United States	**2 641.7**	**2 241.7**
Alabama	22.7	21.7
Alaska	4.1	(NA)
Arizona	61.3	42.6
Arkansas	18.0	11.6
California	458.0	434.8
Colorado	41.3	24.5
Connecticut	53.6	61.2
Delaware	4.9	(NA)
Florida	225.8	208.5
Georgia	79.3	76.0
Hawaii	16.0	7.0
Idaho	3.0	(NA)
Illinois	64.7	81.1
Indiana	55.9	30.4
Iowa	20.2	13.2
Kansas	17.9	23.2
Kentucky	26.9	19.7
Louisiana	57.2	26.4
Maine	16.6	11.0
Maryland	26.7	63.2
Massachusetts	52.4	48.3
Michigan	92.0	77.1
Minnesota	51.6	26.4
Mississippi	11.5	12.9
Missouri	43.8	37.0
Montana	5.5	(NA)
Nebraska	19.7	10.8
Nevada	16.8	4.5
New Hampshire	22.6	19.3
New Jersey	63.8	57.6
New Mexico	11.2	4.6
New York	103.1	73.4
North Carolina	59.0	48.0
North Dakota	6.5	6.3
Ohio	124.7	130.5
Oklahoma	12.6	9.7
Oregon	26.6	22.0
Pennsylvania	167.8	122.3
South Carolina	28.8	16.8
South Dakota	6.3	(NA)
Tennessee	34.8	32.9
Texas	161.6	125.9
Utah	21.2	14.1
Vermont	12.5	9.0
Virginia	75.6	78.5
Washington	62.9	40.1
West Virginia	11.8	(NA)
Wisconsin	56.6	35.3
32723, PRESTRESSED CONCRETE PRODUCTS		
United States	**907.8**	**1 048.1**
Alabama	27.1	10.2
California	28.4	84.7
Florida	68.8	113.2
Georgia	38.2	33.1
Illinois	40.6	27.4
Indiana	27.0	23.8
Iowa	13.9	(NA)
Kentucky	18.3	13.8
Louisiana	6.9	9.0
Maryland	4.8	(NA)
Massachusetts	17.0	(NA)
Michigan	8.1	13.9
Minnesota	35.5	19.6
Mississippi	29.1	33.1
Missouri	11.0	(NA)
32723, PRESTRESSED CONCRETE PRODUCTS—Con.		
New Jersey	29.5	41.4
North Carolina	19.9	17.0
Ohio	20.4	28.8
Pennsylvania	41.7	55.0
South Carolina	34.6	62.6
Tennessee	18.5	20.2
Texas	52.9	87.5
Virginia	38.8	49.5
Washington	34.4	43.9
32751, GYPSUM BUILDING MATERIALS		
United States	**1 584.1**	**2 043.7**
California	169.3	287.4
Florida	132.4	144.1
Georgia	81.3	136.4
Indiana	104.7	144.9
Iowa	132.4	130.7
Michigan	57.2	109.7
Nevada	61.8	(NA)
New York	108.8	149.5
North Carolina	36.5	(NA)
Ohio	41.2	64.9
Oklahoma	36.3	69.1
Texas	115.4	164.5
Washington	51.2	(NA)
32752, OTHER GYPSUM PRODUCTS		
United States	**284.4**	**448.6**
California	36.9	48.9
Florida	4.8	19.0
Texas	10.4	9.9
Virginia	5.5	(NA)
32811, DRESSED DIMENSION GRANITE (INCLUDING GNEISS, SYENITE, DIORITE, AND CUT GRANITE)		
United States	**449.3**	**404.6**
California	21.1	21.7
Georgia	62.7	49.4
Illinois	10.8	10.3
Kansas	2.1	(NA)
Massachusetts	19.5	20.1
New York	8.5	4.6
North Carolina	23.4	15.8
Ohio	5.2	(NA)
Pennsylvania	2.9	3.0
Texas	38.9	42.3
Vermont	79.5	63.4
Washington	3.2	(NA)
Wisconsin	4.0	(NA)
32812, DRESSED DIMENSION LIMESTONE (INCLUDING DOLOMITE, TRAVERTINE, CALCAREOUS, TUFA, AND CUT LIMESTONE)		
United States	**123.3**	**66.6**
Illinois	8.7	(NA)
Indiana	44.2	36.4
Kansas	3.3	(NA)
Minnesota	17.1	(NA)
Ohio	6.9	(NA)
Texas	6.4	3.6
Wisconsin	2.2	(NA)
32813, DRESSED DIMENSION MARBLE AND OTHER STONE		
United States	**159.5**	**146.4**
California	10.6	3.1
Florida	6.7	(NA)
Georgia	18.2	20.0
Illinois	6.6	4.3
Missouri	3.2	4.5
New Jersey	2.8	(NA)
New York	20.8	17.5
North Carolina	11.2	5.0
Ohio	13.0	15.3
Pennsylvania	12.7	11.8
Tennessee	6.8	(NA)
Texas	4.8	14.9
Vermont	11.5	(NA)
Wisconsin	3.5	(NA)

Note: For qualifications of data, see footnotes on table 6a.

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Table 6c. Historical Statistics for Product Classes—Value Shipped by All Producers: 1992 and Earlier Years

[Million dollars. For meaning of abbreviations and symbols, see introductory text]

Product code	Product class	1992	1991[1]	1990[1]	1989[1]	1988[1]	1987	1982	1977
3271-	**Concrete block and brick**	**1 665.7**	**1 919.9**	**1 989.2**	**2 033.5**	**2 130.1**	**1 950.7**	**1 173.2**	**1 005.1**
32710	Concrete brick and block	1 665.7	1 919.9	1 989.2	2 033.5	2 130.1	1 950.7	1 173.2	1 005.1
3272-	**Concrete products, n.e.c.**	**5 569.5**	**5 501.5**	**6 141.2**	**6 253.1**	**5 784.3**	**5 511.7**	**3 503.3**	**2 596.1**
32721	Concrete pipe	1 232.5	1 192.9	1 354.0	1 411.8	1 401.8	1 389.4	919.0	843.8
32722	Precast concrete products	2 641.7	2 334.2	2 583.1	2 683.7	2 334.5	2 241.7	1 349.6	772.6
32723	Prestressed concrete products	907.8	1 161.6	1 284.4	1 310.5	1 218.2	1 048.1	741.9	423.6
32720	Concrete products, n.e.c., n.s.k.	787.5	812.8	919.8	847.0	829.9	832.6	492.8	556.1
3273-	**Ready-mixed concrete**	**10 907.0**	**10 611.6**	**11 735.3**	**11 771.4**	**11 833.5**	**11 794.9**	**7 544.9**	**5 679.9**
32730	Ready-mixed concrete	10 907.0	10 611.6	11 735.3	11 771.4	11 833.5	11 794.9	7 544.9	5 679.9
3274-	**Lime**	**851.0**	**691.8**	**694.4**	**766.8**	**777.9**	**703.9**	**517.8**	**473.5**
32740	Lime (including cost of containers)	851.0	691.8	694.4	766.8	777.9	703.9	517.8	473.5
3275-	**Gypsum products**	**1 930.0**	**1 898.9**	**2 257.8**	**2 237.9**	**2 269.6**	**2 563.1**	**1 178.2**	**932.1**
32751	Gypsum building materials	1 584.1	1 553.7	1 772.8	1 809.9	1 813.8	2 043.7	1 076.5	864.9
32752	Other gypsum products	284.4	277.4	307.1	363.2	405.4	448.6	85.8	54.0
32750	Gypsum products, n.s.k.	61.4	67.8	177.9	64.8	50.5	70.8	15.9	13.3
3281-	**Cut stone and stone products**	**948.5**	**903.9**	**931.1**	**876.7**	**826.9**	**808.8**	**526.2**	**385.5**
32811	Dressed dimension granite (including gneiss, syenite, diorite, and cut granite)	449.3	426.2	447.7	444.3	414.2	404.6	296.0	164.4
32812	Dressed dimension limestone (including dolomite, travertine, calcareous, tufa, and cut limestone)	123.3	75.6	64.0	65.5	62.8	66.6	42.9	53.3
32813	Dressed dimension marble and other stone	159.5	147.6	141.4	154.7	140.0	146.4	96.2	83.6
32810	Cut stone and stone products, n.s.k.	216.4	254.5	278.0	212.2	209.8	191.2	91.1	84.2

[1]Figures are estimates derived from a representative sample of manufacturing establishments. Standard errors associated with estimates are published in annual survey of manufactures publications for this period.

Table 7. Materials Consumed by Kind: 1992 and 1987

[Includes cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendixes. For meaning of abbreviations and symbols, see introductory text]

Material code	Material	1992 delivered cost (million dollars)	1987 delivered cost (million dollars)
	INDUSTRY 3271, CONCRETE BLOCK AND BRICK		
	Materials, ingredients, containers, and supplies	**634.9**	**819.5**
	Stone, clay, glass, and concrete products:		
324101	Portland cement	137.3	219.5
327300	Ready-mixed concrete	5.1	6.6
320040	Other stone, clay, glass, and concrete products	36.1	(1)
	Mining and quarrying of nonmetallic minerals, except fuels:		
142011	Crushed or broken stone (including cement rock, limestone, etc.)	34.6	63.5
144201	Sand and gravel	78.1	96.7
140080	Other mining and quarrying of nonmetallic minerals, except fuels	20.1	(1)
	Shapes and forms (except castings, forgings, and fabricated metal products):		
	Steel shapes and forms:		
331059	Wire strand and bars or rods, high strength, stress relieved	.8	1.8
331092	Welded wire concrete reinforcing mesh	1.0	2.5
331009	Concrete reinforcing bars	1.6	7.5
331060	Other steel shapes and forms	.6	(1)
336002	Other shapes and forms (except castings, forgings, and fabricated metal products)	1.3	(1)
970099	All other materials and components, parts, containers, and supplies	109.9	[1]154.9
971000	Materials, ingredients, containers, and supplies, n.s.k.[2]	208.3	266.4
	INDUSTRY 3272, CONCRETE PRODUCTS, N.E.C.		
	Materials, ingredients, containers, and supplies	**2 036.2**	**2 045.9**
	Stone, clay, glass, and concrete products:		
324101	Portland cement	327.8	398.2
327300	Ready-mixed concrete	66.8	57.5
320040	Other stone, clay, glass, and concrete products	27.7	(1)
	Mining and quarrying of nonmetallic minerals, except fuels:		
142011	Crushed or broken stone (including cement rock, limestone, etc.)	43.9	59.3
144201	Sand and gravel	165.4	179.0
140080	Other mining and quarrying of nonmetallic minerals, except fuels	3.7	(1)
	Shapes and forms (except castings, forgings, and fabricated metal products):		
	Steel shapes and forms:		
331059	Wire strand and bars or rods, high strength, stress relieved	121.1	132.1
331092	Welded wire concrete reinforcing mesh	94.5	93.0
331009	Concrete reinforcing bars	69.8	68.0
331060	Other steel shapes and forms	44.1	(1)
336002	Other shapes and forms (except castings, forgings, and fabricated metal products)	33.1	(1)
970099	All other materials and components, parts, containers, and supplies	478.9	[1]467.9
971000	Materials, ingredients, containers, and supplies, n.s.k.[2]	559.3	590.8

See footnotes at end of table.

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Table 7. **Materials Consumed by Kind: 1992 and 1987**—Con.

[Includes cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendixes. For meaning of abbreviations and symbols, see introductory text]

Material code	Material	1992 delivered cost (million dollars)	1987 delivered cost (million dollars)
	INDUSTRY 3273, READY-MIXED CONCRETE		
	Materials, ingredients, containers, and supplies	**5 964.8**	**6 517.5**
	Mining and quarrying of nonmetallic minerals, except fuels:		
144201	Sand and gravel	974.6	1 222.9
	Crushed and broken stone, including riprap:		
142200	Limestone (including dolomite, cement rock, marl, travertine, and calcareous tufa)	225.5	251.9
142300	Granite (including gneiss, syenite, and diorite)	47.4	35.2
142900	Other crushed and broken stone (riprap, slate, marble, trap rock, sandstone, quartz, and miscellaneous types of stone)	74.2	45.5
140065	Other mining and quarrying of nonmetallic minerals, except fuels	4.1	(1)
190008	Fly ash	.8	(1)
281001	Ready-mixed concrete chemical processing preparations and materials	230.2	97.2
	Stone, clay, glass, and concrete products:		
324102	Portland and blended cements	1 576.5	1 951.5
329520	Lightweight aggregate (including vermiculite, perlite, expanded clays, shale, and slag)	1.6	(1)
320099	Other stone, clay, glass, and concrete products	73.9	(1)
970099	All other materials and components, parts, containers, and supplies	398.0	[1]392.3
971000	Materials, ingredients, containers, and supplies, n.s.k.[2]	2 358.0	2 520.9
	INDUSTRY 3274, LIME		
	Materials, ingredients, containers, and supplies	**194.7**	**156.9**
	Paper and allied products:		
263112	Paperboard liners	(D)	(1)
267420	Paper shipping sacks and multiwall bags	8.4	7.3
260080	Other paper and allied products	.8	(1)
	Stone, clay, glass, and concrete products:		
320591	Refractories, clay or nonclay	20.6	4.2
324103	Cement clinker	–	–
329509	Minerals and earths, ground or otherwise treated	2.0	9.3
320020	Other stone, clay, glass, and concrete products	(D)	(1)
142011	Crushed and broken stone (including cement rock, limestone, etc.)	62.7	42.3
970099	All other materials and components, parts, containers, and supplies	89.4	[1]74.8
971000	Materials, ingredients, containers, and supplies, n.s.k.[2]	8.1	19.1
	INDUSTRY 3275, GYPSUM PRODUCTS		
	Materials, ingredients, containers, and supplies	**1 001.1**	**1 067.1**
	Paper and allied products:		
263112	Paperboard liners	108.2	203.4
267420	Paper shipping sacks and multiwall bags	(D)	6.2
260080	Other paper and allied products	208.6	(1)
	Stone, clay, glass, and concrete products:		
320591	Refractories, clay or nonclay	.6	4.7
324103	Cement clinker	(D)	(1)
329509	Minerals and earths, ground or otherwise treated	93.3	199.6
320020	Other stone, clay, glass, and concrete products	29.8	(1)
142011	Crushed and broken stone (including cement rock, limestone, etc.)	122.2	40.5
970099	All other materials and components, parts, containers, and supplies	401.5	[1]503.7
971000	Materials, ingredients, containers, and supplies, n.s.k.[2]	27.5	108.9
	INDUSTRY 3281, CUT STONE AND STONE PRODUCTS		
	Materials, ingredients, containers, and supplies	**271.5**	**301.8**
141101	Rough blocks used to produce dressed stone	83.5	83.4
329104	Abrasives and abrasive products	4.8	12.0
342301	Stonecutting tools and accessories (including blades)	12.5	29.1
970099	All other materials and components, parts, containers, and supplies	32.7	48.3
971000	Materials, ingredients, containers, and supplies, n.s.k.[2]	138.0	129.0

[1]For 1987, data for this material code were included with material code 970099.
[2]Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

Table 8. **Employees Engaged in Transportation: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Industry	Total		Establishments reporting transportation employees			
				Total		Engaged in transportation	
		Employees (1,000)	Payroll (millions)	Employees (1,000)	Payroll (millions)	Employees (1,000)	Payroll (millions)
3273	Ready-mixed concrete	82.4	2 291.5	37.8	1 071.9	21.9	539.7

Note: Establishments in selected industries were instructed to report number of employees included in total employment that were engaged in delivery of products sold by that establishment and utilized as a separate work force.

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Appendix A.
Explanation of Terms

This appendix is in two sections. Section 1 includes items requested of all establishments mailed census of manufactures forms including annual survey of manufactures (ASM) forms. Note that this section also includes several items (number of establishments and companies, value added, classes of products, and specialization and coverage ratios) not included on the report forms but derived from information collected on the forms. Section 2 covers supplementary items requested only from establishments included in the ASM sample. Results of the supplementary ASM inquiries are included in table 3c of this report.

SECTION 1. ITEMS COLLECTED OR DERIVED BASED ON ALL CENSUS OF MANUFACTURES (INCLUDING ASM) REPORT FORMS

Number of establishments and companies. A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

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.

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.

In this report, data are shown for establishments in operation at any time during the year. A comparison with the number of establishments in operation at the end of the year will be provided in the Introduction of the *General Summary* subject report.

Employment and related items. The report forms requested separate information on production workers for a specific payroll period within each quarter of the year and on other employees as of the payroll period which included the 12th of March.

All 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 which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. 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. This item 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. This item 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 truckdrivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office function, 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 to the plant and utilized as a separate work force.

In addition to reports sent to operating manufacturing establishments, information on employment during the payroll period which included March 12 and annual payrolls also was requested of auxiliary units (e.g., administrative offices, warehouses, and research and development

laboratories) of multiestablishment companies. However, these figures are not included in the totals for individual industries shown in this report. They are included in the *General Summary* and geographic area reports as a separate category.

Payroll. This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year 1992. 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' supplemental labor costs, both those required by Federal and State laws and those incurred voluntarily or as part of collective bargaining agreements. (Supplemental labor costs are explained later in this appendix.)

As in the case of employment figures, the payrolls of separate auxiliary units of multiestablishment companies are not included in the totals for individual industries or industry groups.

Production-worker hours. This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

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.

The important components of this cost item are (1) 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) electric energy purchased, (3) fuels consumed for heat, power, or the generation of electricity, (4) work done by others on materials or parts furnished by manufacturing establishments (contract work), and (5) products bought and resold in the same condition. (See discussion of duplication of data below.)

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 which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. Information on the establishments consuming less than a specified amount (usually $25,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which either administrative records or short forms were used was imputed as ''not specified by kind.'' (See Census of Manufactures for the importance of administrative records in the industry.)

Value of shipments. This item covers the received or receivable net selling values, f.o.b. 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 resold without further processing. Included are all items made by or for the establishments from materials 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. (See discussion of duplication of data below.)

Individual products. As in previous censuses, data were collected for most industries on the quantity and value of individual products shipped. In the 1992 census program, information was collected on the output of almost 11,000 individual product items. The term ''product,'' as used in the census of manufactures, represents the finest level of detail for which output information was requested. Consequently, it is not necessarily synonymous with the term ''product'' as used in the marketing sense. In some cases, it may be much more detailed and, in other cases, it is more aggregative. For example, ''pharmaceutical preparations'' was distributed into over 100 terms; whereas, ''motor gasoline'' was reported as a single item.

Approximately 6,300 of the product items were listed separately on the 1992 census report forms. Data for

about 4,500 products were obtained in the monthly, quarterly, or annual surveys comprising the Current Industrial Reports series of the Census Bureau. Totals for the year 1992 for these items, as derived from the commodity surveys, are shown in the ''products shipped'' table.

The list of products for which separate information was collected was prepared after consultation with industry and government representatives. Comparability with previous figures was given considerable weight in the selection of product categories so that comparable 1987 information is presented for most products.

Typically, both quantity and value of shipments information were collected. However, if quantity was not significant or could not be reported by manufacturers, only value of shipments was collected.

Shipments include both commercial shipments and transfers of products to other plants of the same company. For industries in which a considerable portion of the total shipments is transferred to other plants of the same company, separate information on interplant transfers also was collected. Moreover, for products that are used to a large degree within the same establishment as materials or components in the fabrication of other products, total production and often consumption of the item within the plant was collected. Typically, the information on production also was collected for products for which there are significant differences between total production and shipments in a given year because of wide fluctuations in finished goods inventories. Other measures of output of products with long production cycles were used as appropriate and feasible.

Classes of products. To summarize the product information, the separate products were aggregated into classes of products that, in turn, were grouped into all primary products of each industry. The code structure used is a seven-digit number for the individual product, a five-digit number for the class of product, and a four-digit number for the total primary products in an industry. (See Census of Manufactures, Industry Classification of Establishments, for application of the coding structure to the assignment of SIC codes for establishments.)

In the 1992 census, the 11,000 products were grouped into approximately 1,500 separate classes on the basis of general similarity of manufacturing processes, types of materials used, etc. However, the grouping of products was affected by the economic significance of the class and, in some cases, dissimilar products were grouped because the products were not sufficiently significant to warrant separate classes.

Duplication in cost of materials and value of shipments. 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 paper mills in the paper and allied products 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 which 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.

Value added by manufacture. 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 (see footnote in table 1a), 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.

New and used capital expenditures. For establishments in operation and any known plants under construction, manufacturers were asked to report their new expenditures for (1) permanent additions and major alterations to

manufacturing establishments, and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

The totals for new expenditures include expenditures leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies, and plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expenses.

Manufacturers also were requested to report the value of all used buildings and equipment purchased during the year at the purchase price. For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. Furthermore, if the establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported under used capital expenditures.

Total expenditures for used plant and equipment is a universe figure; it is collected on all census forms. However, the breakdown of this figure between expenditures for used buildings and other structures and expenditures for used machinery and equipment is collected only on the ASM form. The data for total new capital expenditures, new building expenditures, and new machinery expenditures, as well as the data for total used expenditures, are shown in table 3b.

End-of-year inventories. Respondents were asked to report their 1991 and 1992 end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). In 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Because of this change in reporting instructions, the 1982 through 1992 data for inventories and value added by manufacture included in the tables of this report are not comparable to the prior-year data shown in table 1a of this report and in historical census of manufactures and annual survey of manufactures publications.

In using inventory data by stage of fabrication for ''all industries'' and at the two-digit industry level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by another establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for individual industries, industry groups, and ''all manufacturing'', which are aggregates of figures reported by establishments in specified industries.

Specialization and coverage ratios. These items are not collected on the report forms but are derived from the data shown in table 5b. 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 ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in tables 1a through 5a and data on product shipments shown in tables 6a through 6c.

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.

SECTION 2. ITEMS COLLECTED ONLY ON ASM REPORT FORMS

The following items were collected only from establishments included in the ASM sample:

Supplemental labor costs. Supplemental labor costs 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.

While the excluded items do benefit employees and all or part of their cost generally is similar to the items covered in the ASM labor costs statistics, accounting records generally do not provide reliable figures on net employee benefits of these types.

Retirements of depreciable assets. Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during 1992. 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.

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.

Rental payments. Total rental payments is 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.

Depreciable assets. Total value of gross depreciable assets is collected on all census forms. However, the detail for depreciable assets is collected only on the ASM forms. The data encompass all fixed depreciable assets on the books of establishments at the beginning and end of the year. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets, including inventories and intangible assets, such as timber and mineral rights.

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. Accordingly, the value of assets at the end of the year includes the value of construction in progress. In addition, respondents were requested to make certain that assets at the beginning of the year plus new and used capital expenditures, less retirements, equalled assets at the end of the year.

New and used capital expenditures. The data for total new capital expenditures, new building expenditures, new machinery expenditures, and total used capital expenditures are collected on all census forms. However, the breakdown between expenditures for used buildings and other structures and expenditures for used machinery and equipment is collected only on the ASM form. (See further explanation on capital expenditures in section 1.)

Quantity of electric energy consumed for heat and power. Data on the cost of purchased electric energy are collected on all census forms. However, data on the quantity of purchased electric energy are collected only on the ASM forms. 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.

Breakdown of new capital expenditures for machinery and equipment. ASM establishments were requested to separate their capital expenditures for new machinery and equipment into (1) automobiles, trucks, etc., for highway use, (2) computers and peripheral data processing equipment, and (3) all other.

The category ''automobiles, trucks, etc., for highway use'' is intended to measure expenditures for vehicles designed for highway use that were acquired through a purchase or lease-purchase agreement. Vehicles normally operating off public highways (vehicles specifically designed to transport materials, property, or equipment on mining, construction, logging, and petroleum development projects) are excluded from this item.

Foreign content of cost of materials. Establishments included in the ASM sample panel were requested to provide information on foreign-made materials purchased or transferred from foreign sources. This includes materials acquired from a central warehouse or other domestic establishment of the same company but made in an operation outside of the 50 States, District of Columbia, Puerto Rico, or U.S. territories.

Cost of purchased services. ASM establishments were requested to provide information on the cost of purchased services for the repair of buildings and other structures, the repair of machinery, communication services, legal services, accounting and bookkeeping services, advertising, software and other data processing services, and refuse removal. Each of these items reflect the costs paid directly by the establishment, and exclude salaries paid to employees of the establishment for these services.

Included in the cost of purchased services for the repair of buildings and machinery are payments made for all maintenance and repair work on buildings and equipment, such as painting, roof repairs, replacing parts, and overhauling equipment. Such payments made to other establishments of the same company and for repair and maintenance of any leased property also are included. Extensive repairs or reconstruction that were capitalized are considered capital expenditures for used buildings and machinery and are, therefore, excluded from this item. Repair and maintenance costs provided by an owner as part of a rental contract or incurred directly by an establishment in using its own work force also are excluded.

Included in the cost of purchased advertising services are payments for printing, media coverage, and other advertising services and materials.

Included in the cost of purchased software and other data processing services are all purchases by the establishment from other companies. Excluded are services provided by other establishments of the same company (such as by a separate data processing unit).

Included in the cost of purchased refuse removal services are all costs of refuse removal services paid by the establishment, including costs for hazardous waste removal or treatment. Excluded are all costs included in rental payments or as capital expenditures.

Three basic approaches were utilized to produce these statistics.

1. For items 1 through 6, data were estimated (imputed) for all non-ASM establishments using the available data in the establishment record and industry-based parameters. The statistics were then generated by simply tabulating all census records including the imputed value for non-ASM establishments and the unweighted value for ASM establishments. Separate imputation rates were developed and are shown in the table. For quantity of purchased electricity for heat and power (item 7), a similar procedure was used; however, the imputation parameters were geographically-based instead of industry-based. For quantities of generated less sold electricity, no imputation was performed for non-ASM establishments. The estimates for these items are simply tabulations of unweighted ASM values.

   Since the published statistics for these items were developed from the complete census universe and not just the ASM establishments, there are no sampling variances associated with these statistics. However, there is an unknown level of bias for each of the items due to the imputation of the non-ASM establishments. This bias is felt to be small due to the strong correlation between the items being imputed and the collected items that were used to generate the impute values.

2. For items 8 and 9, the estimates were developed using a ratio estimation methodology. For item 8, an estimate of the breakout of new capital expenditures for machinery and equipment into the three categories was made from ASM establishments reporting these categories. The estimated proportions were then applied to the corresponding census value for new capital expenditures for machinery and equipment to produce the estimates.

   The estimates for item 9, foreign content of cost of materials, were developed in a similar manner based on costs of parts, supplies, and components (item 5a) as the control total for the three categories.

   For items 8 and 9, an adjustment ratio of the following form was computed:

$$Rj = \frac{NMc}{TMEasm}$$

   where:

   NMc = the census value of new capital expenditures for machinery and equipment

   TMEasm = the weighted ASM value of new capital expenditures for machinery and equipment from reporters of the detailed breakout data

3. For item 10, cost of purchased services, the estimates were made by simply tabulating weighted data for all the ASM records that reported the item. A response coverage ratio (a measure of the extent to which respondents reported for each item) is shown in table 3c for the types of services. It is derived for each item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight, see appendix B) for those ASM establishments that reported the specific inquiry to the weighted total employment for all ASM establishments classified in the industry.

Appendix B.
Annual Survey of Manufactures Sampling and Estimating Methodologies

DESCRIPTION OF SURVEY SAMPLE

The annual survey of manufactures (ASM) contains two components. The mail portion of the survey is a probability sample of about 64,000 manufacturing establishments selected from a total of about 216,000 establishments. These 216,000 establishments represent all manufacturing establishments of multiunit companies and all single-establishment companies mailed schedules in the 1987 Census of Manufactures. This mail portion is supplemented annually by a Social Security Administration list of new manufacturing establishments opened after 1987 and a list of new multiunit manufacturing establishments identified from the Census Bureau's Company Organization Survey.

For the current panel, all establishments of companies with 1987 shipments in manufacturing in excess of $500 million were included in the survey panel with certainty. There are approximately 500 such companies collectively accounting for approximately 18,000 establishments. For the remaining portion of the mail survey, the establishment was defined as the sampling unit. For this portion, all establishments with 250 employees or more and establishments with a very large value of shipments also were included in the survey panel with certainty. A total of 12,100 establishments were selected from this portion of the universe with certainty. Therefore, of the 64,000 manufacturing establishments included in the ASM panel, approximately 31,000 are selected with certainty. These certainty establishments collectively account for approximately 80 percent of the total value of shipments in the 1987 census.

Smaller establishments in the remaining portion of the mail survey were sampled with probabilities ranging from 0.999 to 0.005 in accordance with mathematical theory for optimum allocation of a sample. The probabilities of selection assigned to the smaller establishments were proportional to measures of size determined for each establishment. The measures of size depend directly upon each establishment's 1987 product class values and the historic variability of the year-to-year shipments of each product class. Product classes displaying more volatile year-to-year change in shipments at the establishment level were sampled at a heavier rate.

This method of assigning measures of size was used in order to maximize the precision (that is, minimize the variance of estimates of the year-to-year change) in the value of product class shipments. Implicitly, it also gave weight differences in employment, value added, and other general statistics, since these are highly correlated with value of shipments. Individual sample selection probabilities were obtained by multiplying each establishment's final measure of size by an overall sampling fraction coefficient calculated to yield a total expected sample size.

The sample selection procedure gave each establishment in the sampling frame an independent chance of selection. This method of independent selection permits the rotation of small establishments out of a given sample panel without introducing a bias into the survey estimates.

The nonmail portion of the survey includes all single-establishment companies that were tabulated as administrative records in the 1987 Census of Manufactures. Although this portion contained approximately 134,000 establishments, it accounted for less than 2 percent of the estimate for total value of shipments at the total manufacturing level. This portion was not sampled; rather, the data for every establishment in this group were estimated based on selected information obtained annually from the administrative records of the Internal Revenue Service and the Social Security Administration. This administrative-records information, which includes payroll, total employment, industry classification, and physical location of the establishment, was obtained under conditions which safeguard the confidentiality of both tax and census records. Estimates of data other than payroll and employment for these small establishments were developed from industry averages.

The corresponding estimates for the mail and nonmail establishments were added together, along with the base-year differences, as defined in the Description of Estimating Procedure section, to produce the figures shown in this publication.

DESCRIPTION OF ESTIMATING PROCEDURES

Most of the ASM estimates for the years 1988-1991 were computed using a difference estimation procedure. For each item, a base-year difference was developed. This base-year difference is equal to the difference between the 1987 census published number for an item total and the linear ASM estimate of the total for 1987. The ASM linear estimate was obtained by multiplying each sample establishment's data by its sample weight (the reciprocal of its probability of selection) and summing the weighted values.

These base-year differences were then added to the corresponding current-year linear estimates, which include the sum of the estimates for the mail and nonmail

establishments, to produce the estimates for the years 1983-1991. Estimates developed by this procedure usually are far more reliable than comparable linear estimates developed from the current sample data alone.

However, the 1992 sample estimates for the purchased service items, shown in table 3c, are strictly ASM linear estimates developed only from ASM establishments that reported the specific item.

The remaining estimates in table 3c, showing the breakdown of expenditures for new machinery and equipment and costs of parts (separated into purchases from foreign sources and purchases from domestic sources), were computed as ratio estimates. To do this, linear estimates of the new machinery detail items were developed from the ASM establishments and were ratio adjusted to the corresponding census total for new machinery. In a similar fashion, the ASM linear estimates of the detailed purchased materials items were ratio adjusted to the corresponding census total for cost of parts.

QUALIFICATIONS OF THE DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sampled lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the differences between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of the estimates.

The particular sample selected for the ASM is one of a large number of 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 theoretical, comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected statistics in this report. They are presented 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:

1. From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.
2. From two standard errors below to two standard errors above the derived estimate for about 19 of 20 of all possible samples.
3. 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 as 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 in the course of 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 only moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown.

The concept of complete coverage under the conditions prevailing for the ASM is not identical to the complete coverage of the census of manufactures, as the censuses have been conducted. Nearly all types of operational errors that affect the ASM also occur in the censuses. The ASM and the censuses, are conducted under quite different conditions, and operational errors can be better controlled in the ASM than in the censuses. As a result, for many of the census figures, the errors are of the same order of size as the total errors of the corresponding annual survey estimates. The differences between the census and ASM operating conditions also disturb, to some degree, the comparability of the ASM and census data.

Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be of limited reliability. However, the figure may be combined with higher-level totals, creating a broader aggregate, which then may be of acceptable reliability.

Appendix C.
Product Code Reference Tables

Part 1. Comparability of Product Classes and Product Codes That Changed: 1992 to 1987

1992	1987	1992	1987	1992	1987	1992	1987
32113 00	32113 21	32318 84	32318 81	32630 00	32630 15	32922 58	32922 51
32113 00	32113 41	32318 84	32318 83	32630 00	32630 19	32922 58	32922 55
32113 00	32113 69						
		32410 18	32410 15	32640 55	32640 52		
32114 24	32114 21	32410 18	32410 17			32927 10	32927 15
32114 24	32114 23	32410 23	32410 22	32710 34	32710 00	32927 10	32927 31
						32927 11	32927 33
		32610 20	32610 10	32721 37	32721 36	32927 11	32927 34
32293 25	32293 00	32610 61	32610 51	32721 37	32721 39	32927 12	32927 41
32293 29	32293 00	32610 70	32610 10			32927 12	32927 77
		32610 70	32610 51	32722 99	32722 41	32927 12	32927 78
32313 00	32313 21			32722 99	32722 98	32927 99	32927 14
32313 00	32313 41	32620 00	32620 15			32927 99	32927 36
32313 00	32313 69	32620 00	32620 19	32740 72	32740 00	32927 99	32927 98

Part 2. Comparability of Product Classes and Product Codes That Changed: 1987 to 1992

1987	1992	1987	1992	1987	1992	1987	1992
32113 21	32113 00	32318 81	32318 84	32630 15	32630 00	32922 51	32922 58
32113 41	32113 00	32318 83	32318 84	32630 19	32630 00	32922 55	32922 58
32113 69	32113 00						
		32410 15	32410 18	32640 52	32640 55		
32114 21	32114 24	32410 17	32410 18			32927 14	32927 99
32114 23	32114 24	32410 22	32410 23	32710 00	32710 34	32927 15	32927 10
						32927 31	32927 10
		32610 10	32610 20	32721 36	32721 37	32927 33	32927 11
32293 00	32293 25	32610 10	32610 70	32721 39	32721 37	32927 34	32927 11
32293 00	32293 29	32610 51	32610 61			32927 36	32927 99
		32610 51	32610 70	32722 41	32722 99	32927 41	32927 12
32313 21	32313 00			32722 98	32722 99	32927 77	32927 12
32313 41	32313 00	32620 15	32620 00			32927 78	32927 12
32313 69	32313 00	32620 19	32620 00	32740 00	32740 72	32927 98	32927 99

Part 3. Current Industrial Reports by Product Code

[Current Industrial Reports (CIR) data are contained in the publication *Manufacturing Profiles: 1992* [MP-1(92)] issued August 1994 and available through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. To access the most current CIR data electronically, dial the Census-BEA Electronic Forum at 301-457-2310. Your communications modem should be set as follows: Baud rate: 1200, 2400, 9600; Parity: None; Data bits: 8; Stop bits: 1; Duplex: full. Before making your first call, decide on a password and be prepared to provide the following regarding your computer: PC brand name, monitor screen dimensions (e.g., 80 columns by 24 lines), monitor color support, modem baud rate, and PC communications software package. Call the voice number, 301-457-1242, for further bulletin board assistance]

Product code	Current Industrial Report
3211500	MQ32A, Flat Glass
3229500	MA32E, Consumer, Scientific, Technical, and Industrial Glassware
3229600	MA32E, Consumer, Scientific, Technical, and Industrial Glassware
3229700	MA32E, Consumer, Scientific, Technical, and Industrial Glassware
3229800	MA32E, Consumer, Scientific, Technical, and Industrial Glassware
3231892	MA33L, Insulated Wire and Cable
3251011	MQ32D, Clay Construction Products
3251020	MQ32D, Clay Construction Products
3253000	MQ32D, Clay Construction Products
3255000	MA32C, Refractories
3259100	MQ32D, Clay Construction Products
3261020	MQ34E, Plumbing Fixtures
3274071	MA32C, Refractories
3295020	MA32C, Refractories
3297000	MA32C, Refractories

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Publication Program

1992 CENSUS OF MANUFACTURES

Publications of the 1992 Census of Manufactures, containing preliminary and final data on manufacturing establishments in the United States, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300.

Preliminary Reports

Industry series—83 reports (MC92-I-20A(P) to -39D(P))

Preliminary industry data are issued in 83 separate reports covering 459 industries. Preliminary summary data for the United States and States are released in one report.

Final Reports

Industry series—83 reports (MC92-1-20A to -39D)

Each of the 83 reports provides information for a group of related industries (''dairy products'' includes industries for butter, cheese, milk, etc.). Final figures for the United States are shown for each of the 459 manufacturing industries on quantity and value of products shipped and materials consumed, cost of fuels and electric energy, capital expenditures, assets, rents, inventories, employment, payroll, payroll supplements, hours worked, value added by manufacture, number of establishments, and number of companies. Comparative statistics for earlier years are provided where available.

For each industry, data on value of shipments, value added by manufacture, capital expenditures, employment, and payroll are shown by employment-size class of establishment, State, and degree of primary product specialization.

Geographic area series—51 reports (MC92-A-1 to -51)

A separate report is being published for each State and the District of Columbia. Each report presents data for industry groups and industries on value of shipments, cost of materials, value added by manufacture, employment, payroll, hours worked, new capital expenditures, and number of manufacturing establishments for the State, MA's, counties, and selected places. Comparative statistics for earlier census years are shown for the State and large MA's. Manufacturing totals are presented for each county and for places with significant manufacturing activity. Detailed statistics (including inventories, assets, rents, and energy costs) are presented only in statewide totals.

Subject series—3 reports (MC92-S-1 to -3)

Each of the three reports contains detailed statistics for an individual subject, such as concentration ratios in manufacturing, manufacturers' shipments to the Federal Government, and a general national-level summary.

Reference series—1 report (MC92-R-1)

The *Numerical List of Manufactured and Mineral Products* includes a description of the principal products and services published in the 1992 Censuses of Manufactures and Mineral Industries.

Location of Manufacturing Plants—1 report (MC92-LM)

This report includes data for number of establishments by four-digit SIC industry and by employment-size class for counties, incorporated places of 2,500 inhabitants or more, and Zip Codes for each State. This report is available only on compact disc-read only memory (CD-ROM).

Analytical Reports—2 reports (AR92-1 and -2)

Exports From Manufacturing Establishments (AR92-1)

This report presents data on exports by two- and three-digit SIC industry groups for the United States and States. Information is presented on value of direct report shipments and estimates of the employment required to manufacture these products. Included are estimates of employment in manufacturing and nonmanufacturing establishments that supply parts, materials, and services for production of manufactured exports.

Selected Characteristics of Manufacturing Establishments That Export (AR92-2)

This report presents data on the number of manufacturing companies and establishments that export by major group, State, employment size, and ratios of exports to shipments.

Electronic Media

All data included in the printed reports are available on CD-ROM. The CD-ROM's provide the same information found in the reports as well as additional information not published in the final reports, such as location of manufacturing plants. Electronic media products are available for users who wish to summarize, rearrange, or process large amounts of data. These products, with corresponding technical documentation, are sold by Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300.

OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, financial, insurance, real estate, service industries, construction industries, mineral industries, transportation, communications, utilities, enterprise statistics, minority-owned businesses, and women-owned businesses also are available from the 1992 Economic Census. A separate series of reports covers the census of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Commonwealth of the Northern Mariana Islands. Separate announcements describing these reports are available free of charge from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300.