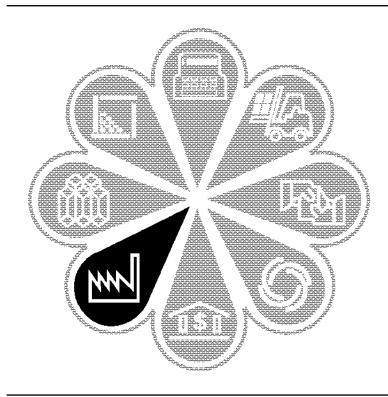
# **1992** Census of Manufactures

MC92-I-26C

**INDUSTRY SERIES** 

## **Converted Paper and Paperboard Products, Except Containers and Boxes**

Industries 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, and 2679



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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 Martha Farnsworth Riche, Director

## Acknowledgments

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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 **Allen Foreman**, Section Chief, with primary staff assistance by **Brenda Lukenich**.

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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<sup>1</sup> 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 powerdriven 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

<sup>&</sup>lt;sup>1</sup>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 industryby-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 fourdigit 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 materialsconsumed 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 ESTABLISH-MENTS

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 threedigit 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 administrativerecords 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, 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]

			Four-dig	it industry :	statistics				ve-digit prov ven-digit pro		
ltem	His- torical	Oper- ating ratios	By geo- graphic area	Sum- mary and supple- mental	By employ- ment size	By industry and product class special- ization	Materials con- sumed by kind	Industry- product analysis	Product ship- ments	Product class by geo- graphic area	Historical product class
Number of companies	1a			3a					*6a		
Number of establishments	1a		2	3a	4	5a					
Employment and payroll: Number of employees Payroll Supplemental labor costs Production workers Production-worker hours Production-worker wages	1a 1a 1a 1a 1a	1b 1b 1b 1b 1b	2 2 2 2 2	3a 3a 3a 3a 3a	4 4 4 4	5a 5a 5a 5a					
Shipments, cost of materials, and value added: Value of shipments (four-digit) Product class shipments (five-digit) Product shipments (seven-digit) Value added by manufacture Cost of materials	1a 1a 1a	1b 1b 1b	2 2 2	3a 3a 3a	4	5a 5a 5a		5b	6a 6a	6b	6c
Fuels and electric energy Materials consumed by kind . Inventories: Total, end of year By stage of fabrication	1a			3a 3a 3a	4		7				
Capital expenditures, assets, rental payments, and purchased services: New capital expenditures Used plant and equipment expenditures Gross assets Depreciation Retirements of buildings and machinery Foreign content of materials consumed	1a		2	3b 3b 3b 3b 3b 3b 3b	4	5a					
Purchased services Ratios: Specialization Coverage	1a 1a			Зс				5b 5b			

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

## **Contents** Converted Paper and Paperboard Products, Except Containers and Boxes

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MANUFACTURES-INDUSTRY SERIES

CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-1

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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

- 2671 Paper Coated and Laminated, Packaging
- 2672 Paper Coated and Laminated, N.E.C.
- 2673 Bags: Plastics, Laminated, and Coated
- 2674 Bags: Uncoated Paper and Multiwall
- 2675 Die-Cut Paper and Board
- 2676 Sanitary Paper Products
- 2677 Envelopes
- 2678 Stationery Products
- 2679 Converted Paper Products, N.E.C.

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*<sup>1</sup>. 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.

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 2671, PAPER COATED AND LAMINATED, PACKAGING

This industry is made up of establishments primarily engaged in manufacturing coated or laminated flexible materials made of combinations of paper, plastics film, and similar materials (excluding textiles) for packaging purposes. These are made from purchased sheet materials or plastics resins and may be printed in the same establishment. Establishments primarily engaged in manufacturing coated or laminated paper for other purposes are classified in industry 2672, including establishments manufacturing all gummed or pressure sensitive tape; those manufacturing unsupported plastics film are classified in industry 3081; those manufacturing or converting aluminum foil are classified in industry 3497; and those manufacturing paper from pulp are classified in industry 2621.

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 2671, Paper Coated and Laminated, Packaging, had employment of 17.3 thousand. The employment figure was 15 percent above the 15.0 thousand reported in 1987. Compared with 1991, employment increased 12 percent. The 1991 data are based on the Census Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The leading States in employment in 1992 were Wisconsin, Illinois, Pennsylvania, and Tennessee, accounting for approximately 42 percent of the industry's employment. This represents a shift from 1987 when Wisconsin, Indiana, Pennsylvania, and Illinois accounted for approximately 42 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$3.5 billion.

<sup>&</sup>lt;sup>1</sup>*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.

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 2671 shipped \$3.0 billion of coated and laminated paper and film packaging products considered primary to the industry, \$456.4 million of secondary products, and had \$44.8 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 87 percent (specialization ratio). In 1987, the specialization ratio was 85 percent.

Establishments in this industry also accounted for 85 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio was 82 percent.

The products primary to industry 2671, no matter in what industry they were produced, appear in table 6a and aggregate to \$3.5 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 paper coated and laminated, packaging, industry amounted to \$2.1 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 2672, PAPER COATED AND LAMINATED, N.E.C.

This industry is made up of establishments primarily engaged in manufacturing coated, laminated, or processed paper and film from purchased paper, except for packaging. Also included are establishments primarily manufacturing gummed paper products and pressure sensitive tape with backing of any material other than rubber, for any application. Establishments primarily engaged in manufacturing coated and laminated paper for packaging are classified in industry 2671; those manufacturing carbon paper are classified in industry 3995; and those manufacturing photographic and blueprint paper are classified in industry 3861.

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 2672, Paper Coated and Laminated, N.E.C., had employment of 32.4 thousand. The employment figure was 5 percent above the 30.9 thousand reported in 1987. Compared with 1991, employment decreased 5 percent. The 1991 data are based on the Census Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The leading States in employment in 1992 were Illinois, Ohio, Wisconsin, and Pennsylvania, accounting for approximately 36 percent of the industry's employment. This represents a shift from 1987 when Massachusetts, Ohio, Illinois, and Pennsylvania accounted for approximately 38 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$7.7 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 2672 shipped \$6.6 billion of coated and laminated paper products, not elsewhere classified, considered primary to the industry, \$912.4 million of secondary products, and had \$209.9 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 88 percent (specialization ratio). In 1987, the specialization ratio was 87 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 was 87 percent.

The products primary to industry 2672, no matter in what industry they were produced, appear in table 6a and aggregate to \$7.4 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 paper coated and laminated, not elsewhere classified, industry amounted to \$4.1 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 8 percent of the total value of shipments.

## INDUSTRY 2673, BAGS: PLASTICS, LAMINATED, AND COATED

This industry is made up of establishments primarily engaged in manufacturing bags of unsupported plastics film, coated paper, metal foil, or laminated combinations of these materials, whether or not printed. Establishments primarily engaged in manufacturing uncoated paper bags and multiwall bags and sacks are classified in industry 2674; those manufacturing textile bags are classified in industry 2393; and those manufacturing garment storage bags, except of plastics film and paper, are classified in industry 2392.

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 2673, Bags: Plastics, Laminated, and Coated, had employment of 38.7 thousand. The employment figure was 6 percent above the 36.6 thousand reported in 1987. Compared with 1991, employment increased 9 percent. The 1991 data are based on the Census Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The leading States in employment in 1992 were Illinois, Texas, New York, and California, accounting for approximately 35 percent of the industry's employment. This represents a shift from 1987 when New York, Texas, Illinois, and Georgia accounted for approximately 41 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$5.7 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 2673 shipped \$4.8 billion of bags: plastics, laminated, and coated, products considered primary to the industry, \$769.9 million of secondary products, and had \$161.2 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 86 percent (specialization ratio). In 1987, the specialization ratio was 81 percent.

Establishments in this industry also accounted for 89 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio was 91 percent.

The products primary to industry 2673, no matter in what industry they were produced, appear in table 6a and aggregate to \$5.4 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 bags: plastics, laminated, and coated, industry amounted to \$2.9 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 8 percent of the total value of shipments.

#### INDUSTRY 2674, BAGS: UNCOATED PAPER AND MULTIWALL

This industry is made up of establishments primarily engaged in manufacturing uncoated paper bags, or manufacturing multiwall bags and sacks, whether or not coated or containing plastics film or metal foil. Establishments primarily engaged in manufacturing bags from plastics, unsupported film, foil, coated paper, or laminated or coated combinations of these materials, are classified in industry 2673; and those manufacturing textile bags are classified in industry 2393.

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 2674, Bags: Uncoated Paper and Multiwall, had employment of 18.6 thousand. The employment figure was 9 percent above the 17.1 thousand reported in 1987.

The leading States in employment in 1992 were Arkansas, Illinois, Kentucky, and Georgia, accounting for approximately 35 percent of the industry's employment. This represents a shift from 1987 when Arkansas, Illinois, Georgia, and Tennessee accounted for approximately 33 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$2.8 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 2674 shipped \$2.5 billion of uncoated paper and multiwall bags considered primary to the industry, \$240.5 million of secondary products, and had \$104.2 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 91 percent (specialization ratio). In 1987, the specialization ratio was 94 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 95 percent.

The products primary to industry 2674, no matter in what industry they were produced, appear in table 6a and aggregate to \$2.6 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 uncoated paper and multiwall bag industry amounted to \$1.8 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 20 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 2675, DIE-CUT PAPER AND BOARD**

This industry is made up of establishments primarily engaged in die-cutting purchased paper and paperboard; and in manufacturing cardboard by laminating, lining, or surface coating paperboard. Establishments primarily engaged in laminating building paper from purchased paper are classified in industry 2679.

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 2675, Die-Cut Paper and Board, had employment of 15.6 thousand. The employment figure was 1 percent below the 15.7 thousand reported in 1987.

The leading States in employment in 1992 were New York, Illinois, and California, accounting for approximately 33 percent of the industry's employment. These same States were the leaders in 1987 when they accounted for 38 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$2.0 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 2675 shipped \$1.7 billion of die-cut paper and board products considered primary to the industry, \$99.0 million of secondary products, and had \$219.0 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 94 percent (specialization ratio). In 1987, the specialization ratio was 90 percent.

Establishments in this industry also accounted for 87 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio was 88 percent.

The products primary to industry 2675, 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 die-cut paper and board industry amounted to \$1.2 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 8 percent of the total value of shipments.

#### **INDUSTRY 2676, SANITARY PAPER PRODUCTS**

This industry is made up of establishments primarily engaged in manufacturing sanitary paper products from purchased paper, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, and sanitary napkins and tampons.

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 2676, Sanitary Paper Products, had employment of 40.5 thousand. The employment figure was 5 percent above the 38.4 thousand reported in 1987. Compared with 1991, employment increased 4 percent. The 1991 data are based on the Census Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The leading States in employment in 1992 were Wisconsin, Pennsylvania, Georgia, and California, accounting for approximately 43 percent of the industry's employment. This represents a shift from 1987 when Wisconsin, Pennsylvania, New Jersey, and California were the leading States.

The total value of shipments for establishments classified in this industry was \$15.6 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 2676 shipped \$14.7 billion of sanitary paper products considered primary to the industry, \$668.7 million of secondary products, and had \$272.5 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 also was 96 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 was 99 percent.

The products primary to industry 2676, no matter in what industry they were produced, appear in table 6a and aggregate to \$14.9 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 sanitary paper products industry amounted to \$7.4 billion. 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 1 percent of the total value of shipments.

#### **INDUSTRY 2677, ENVELOPES**

This industry is made up of establishments primarily engaged in manufacturing envelopes of any description from purchased paper and paperboard. Establishments primarily engaged in manufacturing stationery are classified in industry 2678.

In the 1992 Census of Manufactures, Industry 2677, Envelopes, had employment of 24.9 thousand. The employment figure was 10 percent below the 27.6 thousand reported in 1987.

The leading States in employment in 1992 were New York, California, Illinois, and Missouri, accounting for approximately 33 percent of the industry's employment. This represents a shift from 1987 when New York, California, Illinois, and Massachusetts accounted for approximately 39 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$2.9 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 2677 shipped \$2.6 billion of envelopes considered primary to the industry, \$96.1 million of secondary products, and had \$202.6 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 96 percent (specialization ratio). In 1987, the specialization ratio was 98 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 also was 96 percent.

The products primary to industry 2677, no matter in what industry they were produced, appear in table 6a and aggregate to \$2.7 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 envelopes industry amounted to \$1.5 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 13 percent of the total value of shipments.

#### **INDUSTRY 2678, STATIONERY PRODUCTS**

This industry is made up of establishments primarily engaged in manufacturing stationery, tablets, looseleaf fillers, and related items from purchased paper. Establishments primarily engaged in manufacturing envelopes are classified in industry 2677.

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 2678, Stationery Products, had employment of 9.5 thousand. The employment figure was 15 percent below the 11.2 thousand reported in 1987.

The leading States in employment in 1992 were Pennsylvania, Missouri, California, and Massachusetts. This represents a shift from 1987 when Pennsylvania, Missouri, Massachusetts, and New York were the leading States.

The total value of shipments for establishments classified in this industry was \$1.4 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 2678 shipped \$1.1 billion of stationery products considered primary to the industry, \$271.6 million of secondary products, and had \$101.3 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 79 percent (specialization ratio). In 1987, the specialization ratio was 74 percent.

Establishments in this industry also accounted for 82 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio was 74 percent.

The products primary to industry 2678, no matter in what industry they were produced, appear in table 6a and aggregate to \$1.3 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 stationery products industry amounted to \$730.7 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 19 percent of the total value of shipments.

## INDUSTRY 2679, CONVERTED PAPER PRODUCTS, N.E.C.

This industry is made up of establishments primarily engaged in manufacturing miscellaneous converted paper or paperboard products, not elsewhere classified, from purchased paper or paperboard. Also included in this industry are pressed and molded pulp goods, such as papier-mache articles other than statuary and art goods.

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 2679, Converted Paper Products, N.E.C., had employment of 31.6 thousand. The employment figure was 7 percent above the 29.6 thousand reported in 1987.

The leading States in employment in 1992 were Tennessee, Pennsylvania, New York, and California, accounting for approximately 35 percent of the industry's employment. These same States were the leaders in 1987 when they accounted for 37 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$4.4 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 2679 shipped \$3.7 billion of converted paper products, not elsewhere classified, considered primary to the industry, \$442.7 million of secondary products, and had \$338.4 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 89 percent (specialization ratio). In 1987, the specialization ratio was 91 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 was 89 percent.

The products primary to industry 2679, no matter in what industry they were produced, appear in table 6a and aggregate to \$4.2 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 converted paper products, not elsewhere classified, industry amounted to \$2.3 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.

# 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]

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]															
		All establi	shments <sup>3</sup>	All emp	loyees	Pro	duction wor	kers				N	End of	Rat	ios
Year <sup>1</sup>	Com- panies <sup>2</sup> (no.)	Total (no.)	With 20 employ- ees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufac- ture <sup>4</sup> (million dollars)	Cost of materials <sup>5</sup> (million dollars)	Value of shipments (million dollars)	New capital expend- itures <sup>6</sup> (million dollars)	End-of- year inven- tories <sup>4</sup> (million dollars)	Spe- ciali- zation <sup>7</sup> (per- cent)	Cover- age <sup>8</sup> (per- cent)
					INDUS	TRY 267 <sup>.</sup>	I, PAPER	COATED	AND LAMINA	TED, PACK	AGING				
1992 Census 1991 ASM 1990 ASM 1989 ASM 1988 ASM 1987 Census	156 (NA) (NA) (NA) (NA) 91	204 (NA) (NA) (NA) (NA) 120	136 (NA) (NA) (NA) (NA) 111	17.3 15.4 16.4 16.3 15.5 15.0	533.9 492.1 488.5 458.3 434.5 406.2	12.9 11.0 11.4 11.3 10.9 10.4	27.8 24.0 23.8 23.7 23.5 22.0	348.1 311.0 299.7 285.6 276.3 253.6	1 427.4 1 261.1 1 133.4 1 094.6 1 018.9 997.0	2 068.8 1 907.0 1 899.1 1 845.9 1 648.4 1 442.0	3 508.0 3 145.8 3 026.7 2 938.8 2 640.1 2 416.0	129.4 122.7 101.4 113.9 85.2 128.3	462.6 432.2 430.8 420.9 409.6 358.2	87 (NA) (NA) (NA) (NA) 85	85 (NA) (NA) (NA) (NA) 82
	INDUSTRY 2672, PAPER COATED AND LAMINATED, N.E.C.														
1992 Census 1991 ASM 1990 ASM 1989 ASM 1988 ASM 1987 Census	385 (NA) (NA) (NA) (NA) 369	453 (NA) (NA) (NA) (NA) 412	242 (NA) (NA) (NA) (NA) 226	32.4 34.2 35.0 35.9 32.5 30.9	1 041.6 991.5 985.4 973.0 908.4 838.7	22.1 23.1 23.5 24.5 22.5 21.1	47.9 46.8 48.2 51.4 48.0 43.5	623.1 575.2 577.4 597.3 556.8 502.4	3 551.2 3 401.1 3 321.0 3 419.3 3 361.7 2 861.4	4 144.1 3 951.5 3 736.4 3 731.1 3 490.9 3 034.5	7 688.3 7 381.1 7 077.8 7 145.1 6 821.2 5 891.7	270.1 243.3 290.8 217.1 203.8 201.3	774.4 774.7 813.8 831.2 795.7 678.0	88 (NA) (NA) (NA) (NA) 87	88 (NA) (NA) (NA) (NA) 87
					INDU	STRY 26	73, BAGS:	PLASTIC	S, LAMINATE	ED, AND CO	ATED				
1992 Census 1991 ASM 1990 ASM 1988 ASM 1988 ASM 1987 Census	458 (NA) (NA) (NA) (NA) 424	521 (NA) (NA) (NA) (NA) 483	306 (NA) (NA) (NA) (NA) 301	38.7 35.4 37.4 39.0 36.2 36.6	988.7 875.1 869.9 882.1 790.1 783.7	30.5 28.5 30.0 31.4 29.3 29.0	64.7 61.0 63.7 65.6 61.1 59.8	673.7 621.1 611.7 621.3 554.3 542.6	2 853.7 2 364.3 2 625.1 2 682.7 2 349.0 2 215.0	2 871.4 2 685.8 2 870.3 3 024.3 2 746.7 2 367.6	5 708.2 5 083.6 5 494.6 5 646.3 5 058.0 4 576.9	185.6 178.3 213.1 219.2 201.6 199.1	627.3 559.0 668.5 698.9 657.8 587.6	86 (NA) (NA) (NA) (NA) 81	89 (NA) (NA) (NA) (NA) 91
					INDU	ISTRY 26	74, BAGS	: UNCOAT	ED PAPER A	ND MULTIN	/ALL				
1992 Census 1991 ASM 1990 ASM 1989 ASM 1988 ASM 1987 Census	79 (NA) (NA) (NA) (NA) 76	143 (NA) (NA) (NA) (NA) 132	123 (NA) (NA) (NA) (NA) 112	18.6 17.9 16.9 17.0 17.2 17.1	438.3 398.4 374.3 357.7 364.7 347.8	15.5 15.0 14.3 14.4 14.5 14.3	32.0 29.7 29.0 28.7 29.6 29.0	325.1 298.9 282.3 270.6 281.7 265.0	1 024.3 895.5 877.1 910.1 934.5 874.8	1 824.0 1 837.4 1 881.8 1 899.8 1 808.8 1 588.9	2 846.0 2 735.8 2 750.1 2 787.2 2 731.8 2 448.0	55.1 50.6 63.8 53.5 87.4 46.2	395.2 393.4 425.3 412.3 369.0 326.1	91 (NA) (NA) (NA) (NA) 94	96 (NA) (NA) (NA) (NA) 95
	`76 `132 `112 17.1 347.8 14.3 29.0 265.0 874.8 1 588.9 2 448.0 46.2 326.1 `94 ` INDUSTRY 2675, DIE-CUT PAPER AND BOARD														
1992 Census           1991 ASM           1990 ASM           1989 ASM           1987 Census           1987 Census           1986 ASM           1985 ASM           1985 ASM           1986 ASM           1985 ASM           1985 ASM           1985 ASM           1985 ASM           1985 ASM           1982 Census           1981 ASM           1983 ASM	355 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	381 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	163 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	15.6 17.0 16.8 16.1 16.2 15.7 17.9 16.9 17.5 16.3 15.9 17.2	375.2 407.5 395.4 384.0 329.4 307.8 328.0 302.2 300.4 271.3 245.9 258.1	12.4 14.0 13.5 12.8 13.1 12.5 14.0 13.6 14.1 13.1 12.6 13.2	25.0 28.2 27.0 26.5 25.9 26.7 25.8 27.1 24.7 23.7 24.9	248.1 279.3 253.8 252.4 222.5 205.3 218.2 204.6 198.6 185.9 168.6 166.8	845.4 1 053.1 1 045.7 989.6 712.7 680.8 788.4 677.9 838.0 813.3 708.7 683.5	1 168.1 1 240.5 1 068.8 1 019.9 1 140.4 1 086.1 1 011.6 1 052.9 1 119.0 1 088.3 975.4 1 004.6	2 011.1 2 290.6 2 119.0 1 984.2 1 850.8 1 749.3 1 794.8 1 730.3 1 931.3 1 897.8 1 680.1 1 676.6	52.6 91.3 44.1 68.8 31.9 33.4 31.0 35.0 46.7 30.4 32.7 23.2	243.4 298.2 262.7 272.4 235.6 230.4 235.9 232.7 226.5 207.3 191.5 179.4	94 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	87 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)
1980 ASM 1979 ASM 1979 ASM 1978 ASM 1977 Census	(NA) (NA) (NA) 316	(NA) (NA) (NA) (NA) 371	(NA) (NA) (NA) (NA) 141	16.6 17.0 15.1 14.3	229.3 217.2 194.8 174.6	12.7 13.1 11.8 11.3	24.0 25.2 23.1 22.7	147.3 144.0 129.6 119.6	610.2 649.7 477.8 429.5	857.0 836.4 716.4 640.9	1 453.5 1 468.2 1 188.6 1 057.7	41.0 32.7 26.4 15.3	158.5 155.3 118.3 114.3	(NA) (NA) (NA) 88	(NA) (NA) (NA) 84
									RY PAPER PF						
1992         Census            1991         ASM            1980         ASM            1988         ASM            1986         ASM            1987         Census            1986         ASM            1985         ASM            1984         ASM            1983         ASM	80 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	150 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	125 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	40.5 38.8 39.0 37.8 37.5 38.4 37.8 38.0 38.1 36.7 36.6 37.7 36.6 37.7 37.7 35.0 34.5	1 451.1 1 342.9 1 299.2 1 234.8 1 197.7 1 155.0 1 123.3 1 045.7 1 003.4 900.4 863.3 804.6 740.0 660.1 562.3 509.1	32.7 31.1 31.0 29.6 29.4 30.0 30.0 28.4 28.8 28.9 29.5 30.2 27.7 27.4	68.1 65.5 65.3 61.9 62.1 60.4 56.9 59.0 58.4 59.5 61.2 54.5	1 095.2 1 011.7 986.7 925.2 883.4 860.5 834.8 785.7 754.0 673.0 641.3 599.5 549.4 492.7 414.2 381.8	8 220,4 8 747,0 7 896,2 7 741,0 6 294,3 6 309,3 5 913,2 5 630,3 4 992,9 4 332,7 4 341,0 3 654,0 3 552,4 3 047,9 2 658,2 2 194,5	7 369.9 6 818.0 6 887.4 6 627.1 6 078.7 5 500.9 5 256.3 5 351.6 4 925.5 4 736.6 4 670.4 4 176.2 3 608.0 2 983.6 2 781.5	$\begin{array}{c} 15 \ 622.7 \\ 15 \ 593.5 \\ 14 \ 709.2 \\ 14 \ 332.2 \\ 12 \ 312.3 \\ 11 \ 698.4 \\ 11 \ 153.2 \\ 10 \ 751.3 \\ 10 \ 326.8 \\ 9 \ 239.7 \\ 9 \ 086.0 \\ 8 \ 345.8 \\ 7 \ 636.2 \\ 6 \ 615.2 \\ 5 \ 590.7 \\ 4 \ 921.2 \\ \end{array}$	418.5 460.6 526.2 630.2 478.7 430.4 466.0 486.7 312.8 372.6 271.1 248.2 250.9 265.4 210.6 199.1	944.7 963.3 865.7 842.7 809.0 701.7 683.1 674.4 646.1 640.0 614.5 668.1 569.8 477.0 409.9	96 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	98 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)
							INDUS	FRY 2677,	ENVELOPES	3					
1992 Census            1991 ASM            1990 ASM            1988 ASM            1987 Census            1986 ASM	192 (NA) (NA) (NA) (NA) (NA) (NA) (NA)	283 (NA) (NA) (NA) (NA) 298 (NA) (NA) (NA) (NA)	207 (NA) (NA) (NA) 215 (NA) (NA) (NA)	24.9 24.5 26.1 27.3 27.5 27.6 25.2 24.0 25.1 24.8	672.3 615.5 648.4 644.8 628.4 612.8 545.4 503.4 504.4 464.7	19.0 19.0 20.3 21.1 20.8 19.2 18.6 19.7 19.3	39.0 38.8 42.4 43.3 42.9 43.4 40.3 39.0 40.5 38.6	445.1 410.1 432.6 431.9 421.1 407.4 370.7 343.4 342.4 305.4	1 361.7 1 195.1 1 194.9 1 246.9 1 253.1 1 192.9 1 048.1 991.6 1 016.5 907.0	1 488.4 1 458.1 1 620.6 1 578.3 1 537.5 1 403.8 1 292.3 1 164.3 999.5	2 854.1 2 668.9 2 816.6 2 816.0 2 769.4 2 598.1 2 336.7 2 147.4 2 169.3 1 888.1	55.3 43.9 66.8 75.5 66.9 61.3 72.8 74.1 63.5 32.6	294.8 282.9 320.3 332.9 359.8 303.6 272.1 251.0 254.4 239.3	96 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	96 (NA) (NA) (NA) (NA) 96 (NA) (NA) (NA) (NA)
1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM 1977 Census	(NA) 196 (NA) (NA) (NA) (NA) 182 otes at end	296 (NA) (NA) (NA) (NA) 265	216 (NA) (NA) (NA) (NA) 184	24.8 24.4 25.6 25.6 24.9 22.9 22.6	404.7 393.8 362.0 329.8 295.6 270.0	19.3 19.0 20.3 20.4 19.8 17.9 17.6	37.0 39.8 39.6 38.8 35.5 34.6	287.5 268.8 246.9 225.7 200.2 182.4	853.6 770.7 741.1 665.7 556.0 503.4	919.9 837.1 734.1 648.6 569.3 493.4	1 771.3 1 600.7 1 460.4 1 303.6 1 120.7 990.5	45.1 38.1 55.2 38.7 29.3 22.9	233.3 210.4 182.6 177.9 155.8 131.4 122.2	(NA) (NA) (NA) (NA) (NA) 97	94 (NA) (NA) (NA) (NA) 93

#### MANUFACTURES-INDUSTRY SERIES

#### CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-9

TIPS UPF [APS\_PSB,C\_BROOKS] 6/12/95 15:21:59 EPCV23 TLP:26C.BTI:60 6/12/95 13:55:28 DATA:NONE UPF:92MFFI\_PUBS:26CDAT.UPF PAGE: 1 TSF:26C\_92.DAT;2 6/12/95 13:55:49 UTF:26C\_93.DAT;8 6/12/95 15:19:25 META:TIPS96-09131893.DAT;1 6/12/95 15:21:29

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

[	aananoo.	i oi mean	ing of abbit		u symbols, s		tory text. T		in or terms, see	appendixes					
		All establi	shments <sup>3</sup>	All em	ployees	Pro	duction wor	kers						Rat	tios
Year <sup>1</sup>	Com- panies <sup>2</sup> (no.)	Total (no.)	With 20 employ- ees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufac- ture <sup>4</sup> (million dollars)	Cost of materials <sup>5</sup> (million dollars)	Value of shipments (million dollars)	New capital expend- itures <sup>6</sup> (million dollars)	End-of- year inven- tories <sup>4</sup> (million dollars)	Spe- ciali- zation <sup>7</sup> (per- cent)	Cover- age <sup>8</sup> (per- cent)
						IND	USTRY 26	578, STATI	ONERY PRO	DUCTS					
1992 Census	160	177	79	9.5	220.9	7.0	13.6	138.1	694.7	730.7	1 423.7	28.0	281.5	79	82
1991 ASM	(NA)	(NA)	(NA)	10.1	209.3	7.6	15.1	137.7	602.2	746.1	1 359.1	25.0	273.5	(NA)	(NA)
1990 ASM	(NA)	(NA)	(NA)	10.1	202.6	7.6	14.6	132.2	577.9	751.2	1 332.1	42.1	284.0	(NA)	(NA)
1989 ASM	(NA)	(NA)	(NA)	10.5	202.9	8.0	15.5	130.6	568.9	749.8	1 316.1	38.4	290.8	(NA)	(NA)
1988 ASM	(NA)	(NA)	(NA)	12.4	215.9	9.5	18.2	144.8	598.1	724.9	1 280.4	19.3	317.1	(NA)	(NA)
1987 Census	170	189	92	11.2	205.9	8.5	16.4	135.3	520.7	690.8	1 216.4	25.1	255.7	74	74
1986 ASM	(NA)	(NA)	(NA)	12.7	229.4	9.5	17.5	142.9	515.8	711.1	1 200.8	43.5	277.6	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	12.4	228.3	9.7	18.4	151.5	491.0	620.7	1 101.5	48.9	242.9	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	13.6	232.7	10.3	20.1	154.3	486.3	701.5	1 172.8	42.2	234.7	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	13.1	209.9	9.9	18.4	140.1	481.2	665.0	1 132.2	20.8	199.0	(NA)	(NA)
1982 Census	194	214	112	12.6	193.1	9.5	18.3	127.1	433.1	600.7	1 034.0	21.4	177.2	79	73
1981 ASM	(NA)	(NA)	(NA)	11.9	168.6	9.0	17.3	110.4	235.7	666.2	892.9	13.1	144.7	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	13.0	172.6	9.9	19.1	112.1	219.6	625.5	835.6	12.7	140.4	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	13.4	161.4	10.2	19.4	106.2	192.8	587.5	765.8	14.6	137.4	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	13.9	156.8	10.7	19.6	105.4	344.6	402.4	747.0	18.4	129.7	(NA)	(NA)
1977 Census	221	242	109	12.6	135.2	9.8	18.5	91.0	291.0	364.4	651.7	15.9	118.2	86	80
					IN	DUSTRY	2679, CO	NVERTED	PAPER PRO	DUCTS, N.E.	.C.				
1992 Census	725	790	311	31.6	802.9	23.6	48.7	514.7	2 167.7	2 294.1	4 437.2	148.5	711.1	89	88
1991 ASM	(NA)	(NA)	(NA)	30.9	710.6	23.4	48.7	474.9	2 017.1	2 259.2	4 301.9	182.1	660.4	(NA)	(NA)
1990 ASM	(NA)	(NA)	(NA)	30.7	659.2	23.2	47.0	434.6	1 930.7	2 197.9	4 127.9	155.2	662.0	(NA)	(NA)
1989 ASM	(NA)	(NA)	(NA)	30.1	627.4	22.8	45.6	413.3	1 746.3	2 046.5	3 796.4	98.7	648.5	(NA)	(NA)
1988 ASM	(NA)	(NA)	(NA)	31.0	621.8	23.0	46.8	397.3	1 878.0	2 154.3	3 998.5	76.2	698.6	(NA)	(NA)
1987 Census	743	821	299	29.6	593.1	21.5	43.5	372.0	1 796.3	1 785.3	3 570.1	74.5	603.1	91	89
1986 ASM	(NA)	(NA)	(NA)	28.4	571.1	20.7	41.2	361.4	1 588.6	1 665.0	3 222.5	73.0	625.9	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	29.3	556.4	21.6	42.0	353.0	1 595.7	1 575.2	3 136.2	70.4	569.2	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	31.6	568.7	23.5	45.2	365.5	1 651.5	1 596.4	3 195.7	70.1	547.5	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	31.7	523.5	23.5	44.6	341.6	1 431.9	1 400.9	2 816.8	36.2	469.7	(NA)	(NA)
1982 Census	742	809	317	30.4	496.3	22.3	43.7	314.4	1 291.3	1 336.0	2 637.7	74.3	444.9	88	82
1981 ASM	(NA)	(NA)	(NA)	33.3	524.3	24.6	48.8	323.8	1 361.4	1 507.6	2 836.2	57.9	502.6	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	35.2	488.3	26.2	51.2	312.5	1 213.8	1 360.5	2 553.3	76.5	437.4	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	34.7	445.7	26.4	51.7	293.0	1 073.2	1 217.4	2 262.9	92.9	404.3	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	35.1	436.5	26.0	50.7	277.4	1 027.7	1 120.5	2 126.4	92.8	363.2	(NA)	(NA)
1977 Census	799	871	318	34.3	383.9	25.9	51.7	249.8	988.0	977.4	1 937.8	62.0	302.2	89	83

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

<sup>1</sup>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.

chapter. <sup>2</sup>For the Census, a company is defined as a business organization consisting of one establishment or more under common ownership or control. <sup>3</sup>Includes establishments with payroll at any time during the year. <sup>4</sup>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. <sup>5</sup>Cost of materials is the sum of five components: the cost of (1) parts used in the 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. <sup>6</sup>Detailed data on new machinery and equipment expenditures are provided in table 3c. <sup>7</sup>Represents ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for establishments classified in the industry. <sup>8</sup>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]

-	9			,	•	11 1			
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)
			INDUSTR	Y 2671, PAPER	COATED AND	LAMINATED, P	ACKAGING		
1992 Census 1991 ASM 1990 ASM 1989 ASM 1988 ASM 1987 Census	30 861 31 955 29 787 28 117 28 032 27 080	75 71 70 69 70 69	2 155 2 182 2 088 2 097 2 156 2 115	12.52 12.96 12.59 12.05 11.76 11.53	59 61 63 63 63 62 60	74 76 79 78 79 76	82 509 81 890 69 110 67 153 65 735 66 467	37 39 43 42 43 41	51.35 52.55 47.62 46.19 43.36 45.32
			INDU	STRY 2672, PAF	PER COATED A	ND LAMINATED	, N.E.C.		
1992 Census 1991 ASM 1990 ASM 1989 ASM 1988 ASM 1987 Census	32 148 28 991 28 154 27 103 27 951 27 142	68 68 67 68 69 68	2 167 2 026 2 051 2 098 2 133 2 062	13.01 12.29 11.98 11.62 11.60 11.55	54 53 52 51 52	67 67 67 66 66 64 64	109 605 99 447 94 886 95 245 103 437 92 602	29 29 30 28 27 29	74.14 72.67 68.90 66.52 70.04 65.78
			INDUST	RY 2673, BAGS	: PLASTICS, LA	MINATED, AND	COATED		
1992 Census 1991 ASM 1990 ASM 1889 ASM 1988 ASM 1987 Census	25 548 24 720 23 259 22 618 21 826 21 413	79 81 80 81 81 79	2 121 2 140 2 123 2 089 2 085 2 062	10.41 10.18 9.60 9.47 9.07 9.07	50 53 52 54 54 54	68 70 68 69 70 69	73 739 66 788 70 190 68 787 64 890 60 519	35 37 33 33 33 34 35	44.11 38.76 41.21 40.89 38.45 37.04

26C–10 CONVERTED PAPER AND PAPERBOARD PRODUCTS

MANUFACTURES-INDUSTRY SERIES

TIPS UPF [APS\_PSB\_C\_BROOKS] 6/12/95 15:21:59 EPCV23 TLP:26C.BTI;60 6/12/95 13:55:28 DATA:NONE UPF:92MFFL\_PUBS:26CDAT.UPF PAGE: 2 TSF:26C\_92.DAT;2 6/12/95 13:55:49 UTF:26C\_93.DAT;8 6/12/95 15:19:25 META:TIPS96-09131893.DAT;1 6/12/95 15:21:29

## 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)	
			INDUST	RY 2674, BAGS	: UNCOATED F	PAPER AND MUL	TIWALL	·		
1992 Census 1991 ASM 1990 ASM 1889 ASM 1888 ASM 1987 Census	23 565 22 257 22 148 21 041 21 203 20 339	83 84 85 85 84 84	2 065 1 980 2 028 1 993 2 041 2 028	10.16 10.06 9.73 9.43 9.52 9.14	64 67 68 68 68 66 65	79 82 82 81 80 79	55 070 50 028 51 899 53 535 54 331 51 158	43 44 43 39 39 40	32.01 30.15 30.24 31.71 31.57 30.17	
					•	PER AND BOAR				
1992 Census 1991 ASM 1990 ASM 1989 ASM 1988 ASM	24 051 23 971 23 536 23 851 20 333	79 82 80 80 81	2 016 2 014 2 000 2 070 1 977	9.92 9.90 9.40 9.52 8.59	58 54 50 51 62	77 72 69 71 79	54 192 61 947 62 244 61 466 43 994	44 39 38 39 46	33.82 37.34 38.73 37.34 27.52	
1987 Census 1986 ASM 1985 ASM 1984 ASM 1983 ASM	19 605 18 324 17 882 17 166 16 644	80 78 80 81 80	1 992 1 907 1 897 1 922 1 885	8.24 8.17 7.93 7.33 7.53	62 56 61 58 57	80 75 78 73 72	43 363 44 045 40 112 47 886 49 896	45 42 45 36 33	27.34 29.53 26.28 30.92 32.93	
1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM 1977 Census	15 465 15 006 13 813 12 776 12 901 12 210	79 77 77 77 78 79	1 881 1 886 1 890 1 924 1 958 2 009	7.11 6.70 6.14 5.71 5.61 5.27	58 60 59 57 60 61	73 75 75 72 77 77	44 572 39 738 36 759 38 218 31 642 30 035	35 38 33 33 41 41	29.90 27.45 25.43 25.78 20.68 18.92	
1977 Census	12 210	15						41	10.92	
1992 Census	35 830	81	2 083	16.08	47	56 52	202 973	18	120.71	
1991 ASM 1990 ASM 1989 ASM 1988 ASM	34 611 33 313 32 667 31 939	80 79 78 78	2 106 2 106 2 091 2 112	15.45 15.11 14.95 14.23	44 47 46 49	52 56 55 59	225 438 202 467 204 788 167 848	15 16 16 19	133.54 120.92 125.06 101.36	
1987 Census 1986 ASM 1985 ASM 1984 ASM 1983 ASM	30 078 29 717 27 518 26 336 24 534	78 78 79 79 77	2 090 2 068 2 037 2 013 2 004	13.77 13.73 12.86 12.48 11.83	47 47 48 52 53	57 57 57 62 63	164 305 156 434 148 166 131 047 118 057	18 19 19 20 21	100.95 97.26 92.15 82.66 76.15	
1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM 1977 Census	23 523 21 984 19 629 17 509 16 066 14 757	78 79 78 80 79 79	2 049 2 021 2 017 2 026 1 993 1 989	10.87 10.27 9.23 8.05 7.50 7.01	52 56 55 55 53 57	62 66 64 65 63 67	118 283 99 836 94 228 80 846 75 949 63 609	20 22 21 22 21 22 21 23	73.58 62.57 59.70 49.80 48.16 40.27	
				INDUS	TRY 2677, ENV	ELOPES				
1992 Census 1991 ASM 1990 ASM 1989 ASM 1988 ASM	27 000 25 122 24 843 23 619 22 851	76 78 78 77 76	2 053 2 042 2 089 2 052 2 063	11.41 10.57 10.20 9.97 9.82	52 55 58 56 56	76 78 81 79 78	54 687 48 780 45 782 45 674 45 567	49 52 54 52 50	34.92 30.80 28.18 28.80 29.21	
1987 Census 1986 ASM 1985 ASM 1984 ASM 1983 ASM	22 203 21 643 20 975 20 096 18 738	75 76 78 78 78 78	2 087 2 099 2 097 2 056 2 000	9.39 9.20 8.81 8.45 7.91	54 55 54 54 53	78 79 78 77 78	43 221 41 591 41 317 40 498 36 573	51 52 51 50 51	27.49 26.01 25.43 25.10 23.50	
1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM 1977 Census	17 570 15 383 14 141 13 245 12 908 11 947	78 79 80 80 78 78	1 947 1 961 1 941 1 960 1 983 1 966	7.77 6.75 6.23 5.82 5.64 5.27	52 52 50 50 51 50	76 77 75 75 75 77 77	34 984 30 105 28 949 26 735 24 279 22 274	50 51 49 50 53 54	23.07 19.36 18.71 17.16 15.66 14.55	
				INDUSTRY 26	578, STATIONE	RY PRODUCTS	I	I		
1992 Census 1991 ASM 1990 ASM 1989 ASM 1988 ASM	23 253 20 723 20 059 19 324 17 411	74 75 75 76 77	1 943 1 987 1 921 1 938 1 916	10.15 9.12 9.05 8.43 7.96	51 55 56 57 57	67 70 72 72 73	73 126 59 624 57 218 54 181 48 234	32 35 35 36 36	51.08 39.88 39.58 36.70 32.86	
1987 Census 1986 ASM 1985 ASM 1984 ASM 1983 ASM	18 384 18 063 18 411 17 110 16 023	76 75 78 76 76	1 929 1 842 1 897 1 951 1 859	8.25 8.17 8.23 7.68 7.61	57 59 56 60 59	74 78 77 80 77	46 491 40 614 39 597 35 757 36 733	40 44 46 48 44	31.75 29.47 26.68 24.19 26.15	
1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM 1977 Census	15 325 14 168 13 277 12 045 11 281 10 730	75 76 76 76 77 77	1 926 1 922 1 929 1 902 1 832 1 888	6.95 6.38 5.87 5.47 5.38 4.92	58 75 75 77 54 56	77 93 96 98 75 77	34 373 19 807 16 892 14 388 24 791 23 095	45 72 79 84 46 46	23.67 13.62 11.50 9.94 17.58 15.73	

MANUFACTURES-INDUSTRY SERIES

#### CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-11

### 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)
			INDU	ISTRY 2679, CO	NVERTED PAP	ER PRODUCTS,	N.E.C.		
1992 Census           1991 ASM           1990 ASM           1889 ASM           1986 ASM	25 408 22 997 21 472 20 844 20 058 20 037 20 109 18 990 17 997	75 76 76 76 76 76 74 73 73 73 73 73 73 73 73	2 064 2 081 2 026 2 000 2 035 2 023 1 990 1 944 1 923	10.57 9.75 9.06 8.49 8.55 8.77 8.40 8.09	52 53 53 54 54 54 50 52 50 50	70 69 69 70 69 69 69 68 68 68	68 598 65 278 62 889 58 017 60 581 60 686 55 937 54 461 52 263	37 35 34 36 33 33 36 35 35 34	44.51 41.42 41.08 38.30 40.13 41.29 38.56 37.99 36.54
1983 ASM 1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM 1977 Census	16 514 16 326 15 745 13 872 12 844 12 436 11 192	74 73 74 74 76 74 76 74 76	1 898 1 960 1 984 1 954 1 958 1 950 1 996	7.66 7.19 6.64 6.10 5.67 5.47 4.83	50 51 53 54 53 53 53 50	68 69 72 73 73 73 73 70	45 170 42 477 40 883 34 483 30 928 29 279 28 805	37 38 39 40 42 42 39	32.11 29.55 27.90 23.71 20.76 20.27 19.11

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

#### 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]

							199	12						1987
Industry and geographic area		All estab	With 20 employ- ees or		ployees Payroll		duction wo	rkers Wages	Value added by manufac- ture	Cost of materials	Value of shipments	New capital expend- itures	All employ-	Value added by manufac- ture
	E1	Total (no.)	more (no.)	Number <sup>2</sup> (1,000)	(million dollars)	Number (1,000)	Hours (millions)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	(million dollars)	ees <sup>2</sup> (1,000)	(million dollars)
INDUSTRY 2671, PAPER COATED AND LAMINATED, PACKAGING														
United States	-	204	136	17.3	533.9	12.9	27.8	348.1	1 427.4	2 068.8	3 508.0	129.4	15.0	997.0
Arkansas California Georgia Illinois Indiana		5 18 9 17 9	2 12 7 13 6	E 1.0 .9 1.3 .7	(D) 28.7 28.6 41.9 22.6	(D) .7 .7 1.0 .6	(D) 1.4 1.7 2.1 1.2	(D) 17.4 22.9 24.6 16.7	(D) 61.2 90.7 111.2 54.2	(D) 85.8 133.5 132.1 62.5	(D) 146.9 227.9 244.9 115.6	(D) 3.6 (D) 3.8 2.7	(NA) F 1.1 1.6	(NA) (D) (D) 72.9 90.7
lowa Kansas Louisiana Massachusetts Michigan	- - E1 -	3 2 3 7 6	2 2 2 4 4	E E .4 .5	(D) (D) (D) 13.0 14.7	(D) (D) .2 .4	(D) (D) (D) .5 .9	(D) (D) (D) 8.1 10.4	(D) (D) (D) 48.8 33.1	(D) (D) (D) 88.9 72.3	(D) (D) 137.5 102.6	(D) (D) (D) 7.4 (D)	(NA) E (NA) .6 .2	(NA) (D) (D) 40.5 11.0
Minnesota Missouri New Jersey New York North Carolina	E2 E3 E2 E1	5 7 9 5	4 4 7 4 4	.4 .8 .6 .3 .3	11.1 24.8 22.0 8.9 7.5	.3 .7 .5 .2	.6 1.4 1.1 .5 .4	7.1 16.9 13.6 6.5 5.8	29.5 56.7 49.1 17.6 26.5	51.3 92.5 57.5 21.6 29.8	79.5 150.7 107.6 39.4 55.5	4.7 6.7 1.6 (D) 5.0	(NA) F .7 E	(D) (D) 40.6 (D) (D)
Ohio Oregon Pennsylvania South Carolina Tennessee		14 2 10 3 8	9 1 6 3 6	.8 E 1.1 C 1.1	23.8 (D) 38.6 (D) 27.5	.6 (D) .7 (D) .8	1.3 (D) 1.2 (D) 1.3	15.5 (D) 17.9 (D) 17.0	62.3 (D) 78.3 (D) 75.1	97.0 (D) 92.1 (D) 133.8	162.0 (D) 175.0 (D) 204.6	9.3 (D) 2.0 (D) 8.5	.6 (NA) 1.2 (NA) .7	36.9 (NA) 59.5 (NA) 40.4
Texas Virginia Washington Wisconsin		8 3 2 24	4 3 2 21	.6 .3 C 3.7	13.4 10.9 (D) 119.4	.4 .3 (D) 2.7	.9 .6 (D) 6.2	10.1 7.6 (D) 77.0	27.2 21.9 (D) 359.6	51.9 46.0 (D) 494.3	80.4 67.7 (D) 859.3	1.1 .7 (D) 37.0	F .4 (NA) 2.4	(D) 26.8 (NA) 192.2

See footnotes at end of table.

#### 26C–12 CONVERTED PAPER AND PAPERBOARD PRODUCTS

#### MANUFACTURES-INDUSTRY SERIES

#### Industry Statistics for Selected States: 1992 and 1987-Con. Table 2.

[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] 1992 1987 All establishments All employees Production workers New Industry and geographic area With 20 Value added Value added capital by manufacemploy-ees or by manufac Cost of Value of expend-itures All employ-ees<sup>2</sup> (1,000) shipments (million dollars) Payroll (million Wages (million ture (million) materials (million ture (million Number<sup>2</sup> Total Number Hours (million more E<sup>1</sup> dollars (no.) (no.) (1,000)dollars) (1,000) (millions) dollars) dollars) dollars) dollars) INDUSTRY 2672, PAPER COATED AND LAMINATED, N.E.C. United States \_\_\_\_\_ 453 242 32.4 1 041.6 47.9 623.1 3 551.2 7 688.3 270.1 30.9 2 861.4 22.1 4 144.1 2.2 .2 .3 C C California E1 (D)48 28 59.4 1.1 2.3 29.4 139.8 150.7 291.7 G .2 9.2 6.6 7.8 (D) (D) .4 .3 (D) (D) 4.8 2.9 (D) (D) 27.6 Colorado \_\_\_\_\_ Connecticut\_\_\_\_\_ 12.3 25.4 39.1 50.7 (D) 11.1 16.0 E2 10 3 (D) (D) (D) Delaware \_\_\_\_\_ Florida \_\_\_\_\_ (D) (D) (D) (D) (NA) (NA) 1 2 (D) (D) (NA) (NA) E7 8 .6 .9 3.9 1.4 3.6 10.9 Georgia ..... E2 E1 10 18.4 12.9 84.9 122.6 207.0 91.6 7 25 .5 3.2 .8 F C .8 2.8 1.9 314.9 31.8 Illinois 33 10 105. 55.2 17.8 381.8 305.3 187.2 689.8 5.7 (D) (D) Indiana Iowa Kansas 24.8 8 2 1 .6 95.4 283.0 (D) (D) 53 (D) (NA) (D) (D) (D) (D) 2.5 (D) (NA) (NA) 213.7 Kentucky \_\_\_\_\_ 6 G C (D) F 422 (NA) (NA) Louisiana Maryland \_\_\_\_\_ Massachusetts \_\_\_\_\_ .8 9.6 6.7 6 18.1 2.2 2.2 .8 2.8 1.1 40.5 13.3 32 9 16 6 78.9 26.3 1.4 .5 174 164.4 340.2 135.5 3.3 1.1 68.5 68.0 62.8 Michigan \_\_\_\_\_ (D) (NA) (NA) Minnesota \_\_\_\_\_ 6 4 н (D) 9.8 (D) (D) (D) 6.3 2.9 (D) 21.1 (D) 35.3 23.3 (D) 55.0 (D) 1.2 1.6 13 G (NA) (NA) E2 Missouri \_\_\_\_\_ 9 .4 .2 F Nevada \_\_\_\_\_ New Hampshire \_\_\_\_\_ 4 4 5.5 .3 7.2 29.7 5 2 (D (D) 1.4 (D) 3.0 (D) 37.0 (D) 151.1 (D (D) 367.8 (D) 12.6 (D 1.9 New Jersey E2 29 16 . 2.1 66.8 220.8 101.8 154.0 114.8 448.4 86.4 64.7 203.2 315.2 New York E3 31 10 37 12 1.3 1.0 41.6 .9 1.9 1.9 24.2 16.7 116.3 65.3 271.0 8.8 1.5 ------North Carolina .8 2.0 1.9 .2 6 21.2 179.5 779.0 2.2 12.2 1.1 20 22 4 3.0 2.7 .3 4.8 4.2 .4 108.7 59.1 331.6 2.9 98.2 7.2 60.8 4.5 472.6 42.5 2.6 (NA) 30 6 350.0 821.3 52.0 (NA) 23.2 (D) (D) 6.2 4.5 2.3 61.9 (D) (D) 37.8 44.4 11.9 (D) (D) 44.0 67.4 16.5 477.6 (D) (D) 9.9 7.0 (D) (D) 81.5 (D) (D) (D) (D) (D) (D) (D) (D) (D) 1.2 South Carolina Δ 2 4 4 G C E1 E2 (NA) Tennessee \_\_\_\_\_ .3 .2 .1 2.1 .5 .4 .2 4.5 20 .4 3 3 17 110.2 28.2 804.4 (D) .5 34.4 (NA) (D) 199.8 (NA) (NA) Virginia Virginia\_\_\_\_\_ Washington\_\_\_\_\_ E2 9 24 4.3 94.4 2.8 327.5 Wisconsin \_\_\_\_\_ 2. INDUSTRY 2673, BAGS: PLASTICS, LAMINATED, AND COATED United States \_\_\_\_\_ 988.7 673.7 2 871.4 5 708.2 2 215.0 521 306 38.7 64.7 2 853.7 185.6 36.6 30.5 \_ (D) (D) 12.2 (D) 3.6 (NA) 25.0 138.3 (D) 48.6 (D) (D) 5.0 (D) 2.0 Alabama ..... (D) (D) 71.4 (D) 25.2 (D) (D) 2.2 (NA) (D) (D) (D) (D) (D) (D) 232.3 (D) 65.3 Arkansas \_\_\_\_\_ California \_\_\_\_\_ Connecticut \_\_\_\_\_ ìD G 3 46.8 (D) 16.2 (D) 495.1 (D) 121.7 75 3 23 34 2.9 E 258.5 (D) (D) .9 (NA) E3 E1 3 13 1.1 56.7 Florida \_\_\_\_\_ 1.1 195.3 156.0 69.9 (D) (NA) 3.5 6.8 4.3 150.3 354.5 165.7 1.6 3.2 2.0 (D) 306.4 629.9 2.8 3.5 1.4 47.4 Georgia \_\_\_\_\_ 13 37 12 5 5 11 1.9 4.1 34.4 156.7 277.7 9.7 17.7 25 11 4 Illinois\_\_\_\_\_ 106.2 68.2 48.3 (D) 6.7 18.4 (D) 1.1 Indiana\_\_\_\_\_ 2.3 F 61.0 187.9 353.5 (D) (D) 33.3 (D) 10.9 (D) 22.5 lowa \_\_\_\_\_ (NA) Kansas\_\_\_\_\_ .4 55.5 5 .8 (D) 1.0 (D) 6.2 E4 E4 37 Е (D) 11.4 (D) (D) 7.6 (D) 33.8 (D) 37.9 (D) 71.8 (D) 2.5 F Kentucky 3 5 1 3 9 Maine\_\_\_\_\_ Maine\_\_\_\_\_ Maryland \_\_\_\_\_ Massachusetts \_\_\_\_\_ .6 C .1 .7 (NA) (NA) 41.7 (D) 10.3 47.3 (D) 17.8 (D) (D) 2.0 (NA) (NA) (D) (D) (D) (D) 7.5 (D) E1 E3 5 17 .1 .5 1.1 18.3 11.6 52.2 99.4 1.2 .9 (D) 1.8 164.2 Michigan ..... 15 13 4 11 5 7 .8 28.0 19.6 87.3 163.1 .6 .4 .3 .8 .3 74.3 .8 E Minnesota ..... Mississippi..... .6 .3 1.0 16.5 5.5 9.1 4.1 44.9 12.2 65.0 13.1 40.7 84.8 (D)(D) 6.3 (D) (NA) 9.1 (D) .6 1.7 28.5 140.4 16.8 (NA) 2 8 3 26.3 Missouri \_\_\_\_\_ New Hampshire \_\_\_\_\_ 16.8 5.2 .3 E Δ 8.3 .6 13.5 26.5 142.4 180.8 97.9 68.9 10.4 E1 22 35 11 1.3 2.3 1.0 2.7 5.0 2.0 1.6 158.4 201.7 103.4 69.1 166.9 209.3 29.0 297.2 1.8 45.7 87.3 9.1 10.1 1.6 4.7 New Jersey 36 65 14 16 3.3 1.4 1.0 51.9 21.5 19.3 New York \_\_\_\_\_\_ North Carolina \_\_\_\_\_\_ Ohio \_\_\_\_\_ 379.9 (D) (D) (D) 33.2 27.0 199.5 13.5 137.0 5.4 (D) 8 3 .7 .2 E1 Oklahoma 6 .3 6.6 .3 4.6 23.5 34.9 (NA) 19 10 2 4 41.0 2.9 (D) 32.0 101.3 115.5 212.9 75.0 (NA) Pennsylvania 1.6 C 1.4 (D) 4.8 4.0 (D) (D) (D) 3.6 (D) 6.6 (D) 21.7 (D) 4.0 (D) 15.9 (D) 19.2 (D) 78.4 (D) 36.3 (D) 112.7 Rhode Island \_\_\_\_\_ South Carolina \_\_\_\_\_ (D) (NA) (D) 16.9 (D) 34.7 GEF (D) (D) (D) 62 .3 E .9 .4 (D) 1.7 South Dakota \_\_\_\_\_ (D) E1 14 10 Tennessee \_\_\_\_\_ Ŕ E1 36 19 3.3 E F 80.8 2.6 50.4 227.1 320.3 545.1 4.0 289.1 Texas ..... 5.2 17.4 (D) (D) 53.2 (D) 122.5 Virginia\_\_\_\_\_ Washington\_\_\_\_\_ (D) (D) 21.4 (D) (D) 1.3 (D) (D) 41.4 (D) (D) 93.8 (D) (D) (D) (D) 8.0 (D) (D) (D) (NA) 74.5 (D) (D) (D) (D) E 1 2 4 2 10 .8 C 1.9 6 .6 (D) 1.5 16.7 -West Virginia \_\_\_\_\_ Wisconsin \_\_\_\_\_ 2 17 (D) 57.9 (D) 3.1 (D) 37.9 (D) (D) (NA) 143.7 265.6

See footnotes at end of table.

#### MANUFACTURES-INDUSTRY SERIES

#### CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-13

TIPS UPF [APS\_PSB,C\_BROOKS] 6/12/95 15:21:59 EPCV23 TLP:26C.BTI:60 6/12/95 13:55:28 DATA:NONE UPF:92MFFL\_PUBS:26CDAT.UPF PAGE: 5 TSF:26C\_92.DAT;2 6/12/95 13:55:49 UTF:26C\_93.DAT;8 6/12/95 15:19:25 META:TIPS96-09131893.DAT;1 6/12/95 15:21:29

#### Industry Statistics for Selected States: 1992 and 1987-Con. Table 2.

[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] 1992 1987 All establishments All employees Production workers New Industry and geographic area With 20 Value added Value added capital by manufacemploy-ees or by manufac Cost of Value of expend-itures All employ-ees<sup>2</sup> (1,000) materials (million dollars) shipments (million dollars) Payroll (million Wages (million ture (million) ture (million Number<sup>2</sup> Total Number Hours (million more E<sup>1</sup> (no.) (no.) (1,000)dollars) (1,000) (millions) dollars) dollars) dollars) dollars) INDUSTRY 2674, BAGS: UNCOATED PAPER AND MULTIWALL United States \_\_\_\_\_ 438.3 325.1 1 024.3 2 846.0 874.8 143 123 18.6 15.5 32.0 1 824.0 55.1 17.1 -(D) 4.1 1.0 (D) 86.2 47.1 Alabama ..... (D) (D) (D) 6.5 (D) (D) 3.1 F (D)(D) (D) (D) 122.7 39.4 10.5 Arkansas ..... California ..... 2.3 51.2 2.0 194. 314 1 1.8 14 13 8 40. .6 14.9 .5 .6 64.3 123.8 106.1 .9 Florida \_\_\_\_\_ Georgia \_\_\_\_\_ 6 6 16.1 1.2 12.3 45.9 167.9 .8 60.6 E1 4 4 1.3 29.4 1.1 2.2 21.6 52.8 106.0 157.7 1.3 45.8 1.5 C F 4.5 (D) (D) Illinois\_\_\_\_\_ 9 37.7 1.2 (D) (D) .2 1.2 2.5 23.6 84.3 118.3 202.1 81.9 9 2 3 3 5 1.4 (D) (D) 3.9 (D) (D) .3 2.4 (D) (D) 25.6 (D) (D) 2.9 Indiana\_\_\_\_\_ Iowa \_\_\_\_\_ (NA) 3 (D) (D) (NA) (D) (D) (D) (D) (D) 4 14.8 116.4 (NA) F 3 5 .2 1.4 ... (D) 34.0 26.3 84.5 202.2 Kentucky \_\_\_\_\_ 1.1 C C C .7 (D) (D) (D) (D) .7 Louisiana \_\_\_\_\_ Massachusetts \_\_\_\_\_ 47 1 109.4 51.6 4 26 1 9 18 184 155.9 1.0 E 3 2 1 2 4 (D) (D) (D) 1.2 (D) (NA) (D) (D) 4 (D) (D) (D) 15.9 (D) (D) (D) (D) (D) (D) 11.8 (D) (D) (D) (D) (D) (D) 67.9 (D) (D) (D) (NA) (NA) Minnesota \_\_\_\_\_ E6 Mississippi 2 Missouri 5 É 48 1 1165 Nebraska (D) .5 (D) 1.0 (D) 12.6 (D) 22.4 (D) 109.1 (D) C .6 (D) (D) (NA) (NA) 1 E3 (D) (NA) (D) (D) New Jersey\_\_\_\_\_ New York \_\_\_\_\_ North Carolina \_\_\_\_\_ 8*6*.2 5 18.0 1.1 (D) .6 4 6 16.8 1.3 131 31.0 53.8 86.3 (NA)3 5 2 .7 .5 E 5 2 9.3 (D) 6.9 (D) 30.5 (D) 35.1 (D) 66.8 (NA) .2 (D) Ohio \_\_\_\_\_ (D) (D) (D) .6 .6 (D) 1.6 6.4 5.8 (D) 17.4 .5 2. (D) 1.6 167 Oregon\_\_\_\_\_ 5 87 .3 177 48.5 66.0 5 4 2 .4 .4 F 8.2 (D) 21.6 24.3 (D) 54.1 46.5 34.3 (D) 88.2 (D) (D) 43.4 Pennsylvania \_\_\_\_\_ South Carolina \_\_\_\_\_ 58.5 (NA) (D) (D) 143.4 -6 .9 .7 Tennessee \_\_\_\_\_ 1.2 F Texas ..... 8 6 16.4 .6 1.1 11.4 49.4 75.7 124.5 (D) (D) (D) 38.4 28.9 (D) (D) (D) (D) 27.9 (D) (D) 12.0 (D) (D) 72.5 (D) 37.1 EF (D) (D) (D) (D) (D) (D) 9.8 (D) (D) 44.6 (D) 23.0 (NA) (D) (D) Utah ..... 1 1 4 4 Virginia\_\_\_\_\_ Washington\_\_\_\_\_ .4 C 5 2 ).5 (D) (D) (D) (D) West Virginia \_\_\_\_\_ Wisconsin \_\_\_\_\_ (D) 4.1 (D) 14.4 (NA) (NA) 23 (D) 3.2 4 .2 **INDUSTRY 2675, DIE-CUT** PAPER AND BOARD 381 248.1 1 168.1 2 011.1 680.8 United States \_\_\_\_\_ 163 15.6 375.2 12.4 25.0 845.4 52.6 15.7 5.8 (D) 4.0 Alabama \_\_\_\_\_ E2 .2 .3 .2 15.4 2.4 24.0 (NA) (NA) 8 5 .2 2.7 1.9 8.9 (NA) 85.1 (D) 25.6 Arkansas \_\_\_\_\_ California \_\_\_\_\_ 1.0 1 C (NA 2.3 2.5 .8 17 5 5 1.2 .3 .4 24.2 6.2 8.5 106.9 25.8 78.1 48 15 11 1.4 35.0 75.6 15.0 185.7 40.1 Florida \_\_\_\_\_ (NA) .4 .5 8.2 11.4 .5 (D) 109.5 Georgia ..... 32.3 .6 2.5 1.0 1.1 Illinois\_\_\_\_\_ 33 5 9 13 4 4 64.2 32.3 E1 1.6 40.6 1.3 24.6 104.9 112.6 217.2 5.1 (D) 2.2 1.5 Indiana \_\_\_\_\_\_ Massachusetts \_\_\_\_\_\_ Michigan \_\_\_\_\_\_ Minnesota \_\_\_\_\_ .4 .5 .3 95.0 .6 7. 14.2 9.9 28.5 67.1 .6 F E2 12.0 (D) (D) (D) 22.3 43.7 33.0 77.0 13.9 (D) 20.9 (D) 34.8 (D) E1 18 3 6 3 .3 G .6 (D) (D) (D) Ë G (D) (D) (D) (D) (D) (NA) 41.4 7.6 (D) (D) Mississippi\_\_\_\_\_ E1 10 .6 E 10.5 1.0 21.3 49.8 73.3 E E 4 3 2 (D) (D) .0 (D) (D) 1.1 2.4 Missouri New Hampshire New Jersey New York (D) (D) 9 (D) (D) (D) (D (D) (D) (D) (D) 5 С (NA) 1.1 F2 29 13 29 ğ 264 15 15.9 498 487 98.5 3.6 2.5 E1 55 2.2 48.8 1.7 29.3 84.0 66.6 150.3 95.6 2.1 (D) (D) 1.3 .2 (D) 13.1 (D) 9.3 2.2 (D) (D) (NA) North Carolina \_\_\_\_\_ 9 19 (D) 17.6 (D) (D) 1.3 (D) 1.0 .3 (D) 47.9 (D) 41.2 (D) 88.8 F 4 5 2 7 2 F .8 C .7 Ohio \_\_\_\_\_ ./ (D) Pennsylvania \_\_\_\_\_ South Carolina \_\_\_\_\_ (D) 13.8 3.4 (D) 24.0 7.3 (D) 53.6 15.6 (NA) 5 (D) E1 (D) (NA) 19 3 .6 .1 30.0 8.6 (NA) 15.8 (D) 13.0 Texas\_\_\_\_\_ 15 3 12 .6 (D) 1.1 (D) 11.4 33.6 35.1 68.1 31.5 9 2 8 .7 C .5 .4 (D) 9.2 (D) 35.7 (D) 39.8 (D) 75.3 (D) (D) (NÄ) (NA) 29.3 Virginia\_\_\_\_\_ Wisconsin \_\_\_\_\_ INDUSTRY 2676, SANITARY PAPER PRODUCTS United States ..... 150 125 40.5 1 451.1 32.7 68.1 1 095.2 8 220.4 7 369.9 15 622.7 418.5 38.4 6 309.3 (D) (D) 502.9 (D) (D) 528.5 (D) (D) Alabama \_\_\_\_\_ Ģ 2 22 (D) (D) (D) (D) (D) (D) (D) (D) F Arkansas \_\_\_\_\_ \_ 465.0 California 14 11 2.4 86.8 6<u>5</u>. 1 044. 2.6 (D) (D) (D) (D) (D) (D) 2 1 G G (D) G laware \_\_\_\_\_ (D) (D) (D) (D) (D) 88.3 (D) 28.3 Florida \_\_\_\_\_ 3 7 F (D) 105.3 (D) 2.5 (D) 5.0 (D) \_ 4 (D) (D) FGEF 1 411 3 . 2.9 701.3 710.4 Georgia ..... (D) (D) \_ (D) (D) 14.0 (D) (D) (D) (D) 8.1 (D) (D) 79.7 (D) (D) 117.5 (D) (D) 6.6 Idaho \_\_\_\_\_ F (D) (D) Illinois\_\_\_\_\_ 1 3 Kentucky \_\_\_\_\_ 4 .5 .8 40.4 (NA) (NA) 1.2 E F C .3 1.0 (D) (D) (D) 2.0 (D) (D) (D) Maine \_\_\_\_\_ Massachusetts \_\_\_\_\_ 3 4 34.4 26.7 109.5 107.5 217.5 1.3 F 117.6 33223 (D) (D) (D) (D) (D) (D) (D) (D) 7.9 (D) (D) (D) (D) (D) (D) (D) (D) (D) 47.5 (D) (D) (D) (D) (D) (NA) Michigan ..... 5 2 3 Minnesota (NA) Mississippi\_\_\_\_\_ 29.8 75.8 (NA) (NA)

See footnotes at end of table

#### 26C–14 CONVERTED PAPER AND PAPERBOARD PRODUCTS

MANUFACTURES—INDUSTRY SERIES

#### Industry Statistics for Selected States: 1992 and 1987-Con. Table 2.

[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] 1992 1987 All establishments All employees Production workers New Industry and geographic area With 20 Value added Value added capital by manufacemploy-ees of by manufac Cost of Value of expend-itures All employ-ees<sup>2</sup> (1,000) materials (million dollars) shipments (million dollars) Payroll (million Wages (million ture (million) ture (million Number<sup>2</sup> Total Number Hours (million more E<sup>1</sup> (no.) (no.) (1,000)dollars) (1,000) (millions) dollars) dollars) dollars) dollars) **INDUSTRY 2676, SANITARY** PAPER PRODUCTS-Con (D) (D) (D) 203.5 (D) (NA) (D) 265.5 (D) (D) (D) 1.9 G (NA) F Missouri \_\_\_\_\_ G C F (D) (D) (D) 27.5 (D) (D) (D) 319.3 (D) (D) (D) 12.2 (D) (D) (D) (D) (D) (D) (D) (D) (D) 3 2 2 3 2 2 Nevada \_\_\_\_\_ New Hampshire \_\_\_\_\_ \_ New Jersey\_\_\_\_\_ New York \_\_\_\_\_ 10 8 1.7 75.8 42.3 115.6 3.1 1.7 1.2 16 13 1.5 2.7 29.9 152.0 172.6 322.1 158.9 North Carolina 2 4 С (D) 2 3 4 E2 Ohio \_\_\_\_\_ Oklahoma \_\_\_\_\_ 1Ì.Ć 46.4 52.0 96.8 8.3 EGF .4 G (D) (D) 7.4 (D) (D) 878.3 (D) (D) 56.8 (D) (D) 188.1 (D) (D) 3.8 (D) (D) 1 172.1 (D) (D) 2 067.1 (D) Oregon \_\_\_\_\_ Pennsylvania \_\_\_\_\_ (D) (D) 143.7 2 12 2 10 (NA) 4.6 (D) (D) (D) (NA) (D) South Carolina 2 3 4 (D) (D) 41.6 (D) (D) 33.4 (D) (D) 289.6 (D) (D) 403.1 2 3 3 1 F (D) (D) (D) (D) 2.4 (D) 1.1 (D) (D) G F (D) (D) (D) (D) 1.9 Fennessee \_\_\_\_\_ Texas\_\_\_\_\_ Utah \_\_\_\_\_ Vermont\_\_\_\_\_ E1 116.3 1.1 F `.9 (D) (D) 181.4 (D) 13.9 (D) 10.4 (D) 122.2 (D) 59.5 (NA) .7 1.3 7.6 .6 1.1 5.9 34 Vermont\_\_\_\_\_ Washington\_\_\_\_\_ 258.6 1 131.0 452.0 1 474.2 661.5 2 815.7 51.2 277.4 2.3 12.2 202.3 1 337.9 1.3 7.7 15 14 49.8 Wisconšin \_\_\_\_\_ 209.7 INDUSTRY 2677. **ENVELOPES** United States \_\_\_\_\_ E1 283 207 24.9 672.3 19.0 39.0 445.1 1 361.7 1 488.4 2 854.1 55.3 27.6 1 192.9 (D) 42.2 6.6 (D) 1.6 (D) 3.3 Arizona \_\_\_\_\_ 3 2 F (D (D) (D) (D) (D) 4.5 (NA) (D) California 138.6 22.6 163.1 18.1 306.2 40.7 131.4 17.8 F2 35 6 24 3 2.1 65 2.6 10.6 Colorado .6 (D) 1.4 .4 C .3 (D) 7 (D) (NA) F Connecticut\_\_\_\_\_ (D) (D) (D) 21.0 (D) 15.4 (D) 35.4 (D (D) 49.0 12 8 .8 85 2 (D) 1.5 (D) 38.1 (D) 223.7 (D) 99.6 8 F (D) (D) (D) 109.8 E2 (D) 2.6 F Georgia \_\_\_\_\_ Illinois\_\_\_\_\_ Indiana\_\_\_\_\_ E1 21 16 2.0 5à.7 à.4 113.5 2.8 2.4 (D) .3 .4 .0 E .4 .5 (D) .7 .7 (D) 7.6 8.8 (D) 24.6 26.8 (D) 29.2 27.9 (D) 53.9 54.6 20.8 18.2 (D) (D) 9.6 (D) 344 3 4 4 E3 .3 E lowa \_\_\_\_\_ (D) Kansas\_\_\_\_\_ 11.5 Kentucky \_\_\_\_\_ Maryland \_\_\_\_\_ Massachusetts \_\_\_\_\_ Michigan \_\_\_\_\_ Minnesota \_\_\_\_\_ (D) 19.9 70.5 10.5 (D) 44.2 .3 (D) 1.2 .6 (D) 2.5 6.9 (D) 30.2 26.5 (D) 82.5 26.6 (D) 100.6 52.4 (D) 182.2 E .4 2.0 6 3 43 .4 E 1.1 (D) 5.0 E1 10 15 1.6 .5 1.5 10 57 .4 .8 10 1 .3 .6 54 197 184 38.1 (D) 1.4 .4 F 15.3 E5 10 28.5 18.0 44.4 54.5 98.7 (D) (D) 61.5 (D) 1.2 (D) 2.4 2 F (D) 28.3 (D) 87.1 Mississippi\_\_\_\_\_ 1 (D) 42.2 (D) 79.9 (D) F Missouri Missouri \_\_\_\_\_ Nebraska\_\_\_\_\_ E2 12 3 12 29 10 2 9 1.6 C 166.7 2.0 . 15 (D) 1.2 4.0 (D) 2.0 (D) 23.4 42.1 (D) (D) 58.8 (D) (D) (D) 59.4 (D) 136.9 (NA) New Jersey\_\_\_\_\_ New York \_\_\_\_\_ 1.3 36.1 .9 1.8 1.3 3.8 18 61.6 3.6 118.4 125.9 246 7 157.3 North Carolina \_\_\_\_\_ 2 2 10 C 1.2 .2 E 1.6 (D) 31.1 (D) 1.0 (D) 2.0 (D) 20.8 (D) 58.8 (D) 85.2 (D) 144.9 (D) 1.2 (D) (D) 4.1 (NA) (D) 51.0 E1 Ohio \_\_\_\_\_ Oklahoma \_\_\_\_\_ 14 7 6.5 (D) 42.8 13.3 (D) 107.9 (NA) (D) 74.0 3 3 10 39 12 0 254 (NA) (D) 1.2 (D) 2.5 (D) 26.3 Oregon \_\_\_\_\_ Pennsylvania \_\_\_\_\_ 3 13 (D) 89.3 (D) 196.3 E1 1.6 37.5 55.1 (D) (D) 33.1 1.2 1.7 1.2 3.9 2.9 (D) .9 1.3 Tennessee \_\_\_\_\_ 5 5 12 .9 18 2 12.5 57.8 42.3 997 .7 .8 .6 .2 .5 67.0 37.1 15 1.1 26.8 17.7 57.9 125.5 Texas\_\_\_\_\_ Virginia\_\_\_\_\_ Washington\_\_\_\_\_ 13.4 6 6 5 5 4 .8 38.4 75.0 F3 .3 93 .4 .9 66 18.8 20.5 394 (NA) й 19.6 12.8 37.1 45.1 81.6 2.0 6 Wisconsin \_\_\_\_\_ INDUSTRY 2678, STATIONERY PRODUCTS United States \_\_\_\_\_ E1 220.9 13.6 138.1 694.7 730.7 1 423.7 520.7 177 79 9.5 7.0 28.0 11.2 (D) (D) (NA) (D) 14.3 Alabama ..... E3 (D) (D) (D) (D) (D) 53.3 (D) 130.0 (D (NA) 3 24 3 7 California \_\_\_\_\_ Connecticut \_\_\_\_\_ Georgia \_\_\_\_\_ 25.0 7Ż.: 2.6 (D (D (D .9 C E E (D) (NA) E F (D) (D) (D) (D) (D) (D) (D) (D) (D) E6 2 2 3 (D) (D) 4 5 E5 Illinois\_\_\_\_\_ (D) (NA) (D) (D) Indiana\_\_\_\_\_ 5 2 16 8.0 .5 (D) 4.8 12.4 12.7 25.2 (D) (D) Е 3 2 6 3 4 .4 C .8 E .2 .3 (D) 53.2 (D) 13.0 Louisiana (D) 19.4 (D) (D) 11.8 (D) 40.0 (D) 93.0 (NA) E5 .6 (D) .8 (D) 1.8 (D) .3 (NA) (NA) Michigan \_\_\_\_\_ Minnesota \_\_\_\_\_ (D) 5.3 (D) 3.0 (D) 14.0 (D) 27.0 6 (NĀ) (D) 2.4 7.6 (D) 22.9 (D) (D) 40.0 (NA) 82.9 (D) 5.6 (D) 12.7 (D) (D) 1.1 Ģ (D) (D) (D) (D) Missouri \_\_\_\_\_ 5 7 G 4 3 5 3 6 .3 .6 C 1.7 New Jersey\_\_\_\_\_ New York \_\_\_\_\_ 1Ò.3 23.2 .3 12.5 (D) 35.0 29.9 (D) 89.3 29.4 (D) 120.5 E4 22 59.5 1.0(D) 1.2 .9 (D) 2.1 E1 (NA) Ohio \_\_\_\_\_ 5 11 (D) 212.3 3.9 Pennsylvania ..... 1.7 C .4 C .3 (D) (D) (D) (D) 4.8 (D) 4.2 (D) 37.7 (D) 25.1 (D) 25.9 (D) 64.0 (NA) (D) (D) (NA) Tennessee \_\_\_\_\_ (D) (D) (D) 1.0 1 5 2 3 12 3 6 7.2 (D) 6.9 Texas\_\_\_\_\_ .3 (D) .5 (D) Virginia\_\_\_\_\_ Wisconsin \_\_\_\_\_ (D) 18.0 (D) 43.9 (NA)(NA) (D)

See footnotes at end of table.

MANUFACTURES-INDUSTRY SERIES

CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-15

TIPS UPF [APS\_PSB,C\_BROOKS] 6/12/95 15:21:59 EPCV23 TLP:26C.BTI;60 6/12/95 13:55:28 DATA:NONE UPF:92MFFLPUBS:26CDAT.UPF PAGE: 7 TSF:26C\_92.DAT;2 6/12/95 13:55:49 UTF:26C\_93.DAT;8 6/12/95 15:19:25 META:TIPS96-09131893.DAT;1 6/12/95 15:21:29

#### Table 2. Industry Statistics for Selected States: 1992 and 1987-Con.

1992 1987 All establishments All employees Production workers New Industry and geographic area With 20 Value added Value added capital employ-ees or by manufac Cost of Value of expend-itures All by manufacemploy-ees<sup>2</sup> (1,000) materials (million dollars) shipments (million dollars) Payroll (million Wages (million ture (million) ture (million Total Number<sup>2</sup> Number Hours (million more E<sup>1</sup> (no.) (no.) (1,000)dollars) (1,000)(millions) dollars) dollars) dollars) dollars) INDUSTRY 2679, CONVERTED PAPER PRODUCTS, N.E.C. United States \_\_\_\_\_ E1 802.9 48.7 514.7 2 167.7 2 294.1 4 437.2 1 796.3 790 311 31.6 23.6 148.5 29.6 .8 7. 3.5 Alabama ..... 21 76 58.4 36.3 96.0 2.0 (D)5 117 4 F .5 5. 2.1 12.7 55.9 9.1 39.6 29.1 156.1 42.1 153.6 70.1 304.5 1.2 12.4 (NA) 109.8 12 92 7 (NA) Arizona \_\_\_\_\_ California \_\_\_\_\_ E2 24 1.6 Connecticut\_\_\_\_\_ E1 13 7 5 .3 .4 8.9 .3 .3 .6 .6 6.1 4.9 26.8 29.1 54.0 1.4 1.4 (NA) (D) (D) É Florida \_\_\_\_\_ E1 31 8.5 17.5 19.6 37.3 1.2 1.2 1.8 F .4 1.9 2.0 2.5 21.1 23.2 25.2 11.2 2.6 12.2 29.1 34.7 71.2 120.4 Georgia \_\_\_\_\_ 24 38 11 19 1.0 67.9 138.9 .9 1.2 1.2 G E 48.6 E3 Illinois\_\_\_\_\_ Indiana\_\_\_\_\_ E1 .9 1.3 86.9 205.8 88.9 14 3 5 F4 19 41 3 109.9 121.0 234.9 131.1 (D) 7.7 (D) .4 (D) .7 (D) 5.7 (D) 85.1 (D) (D) 6 8 (D) 26.3 (D) 59.7 (D) (D) ------Kentucky \_\_\_\_\_ (D) (D) (NA) 54.2 4.0 (D) 2.5 .2 (D) 2.8 (D) 1.6 1.5 (D) .4 4.0 F2 6 3 7 6 2 4 17 0 Louisiana \_\_\_\_\_ .2 F 3 13.7 30.6 (NA) (D) (D 7.1 (D) 9.0 (D) 15.8 Maine \_\_\_\_\_\_ Maryland \_\_\_\_\_\_ Massachusetts \_\_\_\_\_\_ Michigan \_\_\_\_\_ E3 (NA) `.ź 2.5 1.4 .1 1.2 1.6 38.3 27 14 15 26.5 75.2 70.4 144.6 1.1 F1 31 .9 21.9 .6 13.3 53.1 46.9 99.3 3.8 F (D) .3 (D) (D) 3.6 9.2 Minnesota\_\_\_\_\_ 2.6 (D) 2.5 .2 (D) 1.5 (D) 1.7 6.1 (D) 6.4 7.1 (D) 7.5 (NA) (D) (NA) 95.0 E3 11 .1 (D) 13.2 (NA) 3 2 2 .1 F Mississippi Missouri New Jersey New York 5 (D) 14.3 E5 (NA) 1.9 2.7 .1 .9 1.7 . 35 80 14 27 1.3 2.3 35.1 58.0 1.8 3.5 21.7 37.4 72.5 149.8 100.4 166.6 172.1 312.2 E1 131.5 (D) 82.8 (NA) 138.0 North Carolina \_\_\_\_\_ 36 16 15 2 26 1.4 3.2 54 E5 10 237 .7 1.5 148 64 9 66.7 131.6 F Ohio \_\_\_\_\_ Oklahoma \_\_\_\_\_ 41 2.0 55.1 37.6 127. 145.8 271.5 9.1 (NA) 2.7 E8 11.6 .1 1.9 .2 3.8 1.1 34.4 4.9 161.0 6.4 167.2 .3 9.5 Pennsylvania \_\_\_\_\_ Rhode Island \_\_\_\_\_ 2.5 59.0 46 325.5 5 2 Ē (D) (D) (D) (D) (D) (D) (D) (D) Е (D) 1.0 15.2 3.3 .5 2.4 .6 6.4 1.1 76.0 292.2 67.4 12.6 214.6 South Carolina 14 14 5 7 .4 4.3 9.9 .3 3.2 5.8 29.7 104.4 .2 3.5 Tennessee \_\_\_\_\_ Texas \_\_\_\_\_ 93.0 58.3 230.2 528.2 E5 .6 (D) .5 38 11 20.8 11.1 52.1 117.2 (D) .8 C .7 (D) 1.3 (D) 11.8 (D) 37.6 (D) 60.4 (D) 98.0 (NA) .6 (NA) 27.8 10 13 (D) 18.7 Utah \_\_\_\_\_ Virginia\_\_\_\_\_ 1 9 (D) (D) 8.1 .8 (D) 1.1 Washington\_\_\_\_\_ 15 2 30 33.7 21.3 9 2 .5 E .8 11.7 3 71 36.7 69.5 .4 E .8 (D) 11.3 (D) 56.9 (D) 78.5 (D) 42.7 (D) 20.0 (D) (D) 133.1 10 Wisconsin \_\_\_\_\_ E1

[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]

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

<sup>1</sup>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. <sup>2</sup>Statistics for some producing States have been withheld to avoid disclosing data for individual companies. However, for States with 100 employees more, number of establishments is cange is indicated by one of the following symbols: C-100 to 249 employees; E-250 to 499 employees; L-50,000 to 99,999 employees; M-100,000 employees or more.

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

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

Item	Paper coated and laminated, packaging (SIC 2671)	Paper coated and laminated, n.e.c. (SIC 2672)	Bags: plastics, laminated, and coated (SIC 2673)	Bags: uncoated paper and multiwall (SIC 2674)	Die-cut paper and board (SIC 2675)	Sanitary paper products (SIC 2676)	Envelopes (SIC 2677)	Stationery products (SIC 2678)	Converted paper products, n.e.c. (SIC 2679)
Companiesnumber	156	385	458	79	355	80	192	160	725
All establishmentsnumber	204 68 75 61	453 211 150 92	521 215 190 116	143 20 57 66	381 218 126 37	150 25 45 80	283 76 112 95	177 98 54 25	790 479 244 67
Employment and labor costs: Employeesndo	17.3 671.3 533.9 137.4	32.4 1 318.9 1 041.6 277.3	38.7 1 230.4 988.7 241.7	18.6 561.9 438.3 123.5	15.6 474.6 375.2 99.3	40.5 1 864.5 1 451.1 413.4	24.9 838.7 672.3 166.3	9.5 281.1 220.9 60.2	31.6 1 011.7 802.9 208.8
paymentsmil dol Employer voluntary paymentsmil dol	56.3 81.1	113.4 163.9	103.4 138.4	53.1 70.4	41.0 58.4	146.5 266.8	76.7 89.6	26.9 33.3	89.4 119.4
Production workers: Average for year1,000 March1,000 May1,000 August1,000 November1,000	12.9 12.8 12.9 12.9 12.9	22.1 21.8 22.0 22.4 22.1	30.5 30.2 30.4 30.8 30.7	15.5 15.6 15.4 15.5 15.6	12.4 12.3 12.3 12.6 12.6	32.7 32.6 32.9 32.9 32.5	19.0 19.2 19.2 19.0 18.8	7.0 7.1 7.4 7.2 6.3	23.6 23.2 23.6 24.4 23.4
Hours millions	27.8	47.9	64.7	32.0	25.0	68.1	39.0	13.6	48.7
Wagesmil dol	348.1	623.1	673.7	325.1	248.1	1 095.2	445.1	138.1	514.7

See footnotes at end of table

#### 26C-16 CONVERTED PAPER AND PAPERBOARD PRODUCTS

#### MANUFACTURES-INDUSTRY SERIES

#### Table 3a. Summary Statistics for the Industry: 1992–Con.

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

· · · · · · · · · · · · · · · · · · ·			11.1.1.1.1						
Item	Paper coated and laminated, packaging (SIC 2671)	Paper coated and laminated, n.e.c. (SIC 2672)	Bags: plastics, laminated, and coated (SIC 2673)	Bags: uncoated paper and multiwall (SIC 2674)	Die-cut paper and board (SIC 2675)	Sanitary paper products (SIC 2676)	Envelopes (SIC 2677)	Stationery products (SIC 2678)	Converted paper products, n.e.c. (SIC 2679)
Cost of materials <sup>1</sup> mil dol Materials, parts, containers, etc., consumed <sup>2</sup> mil dol Resalesmil dol Fuelsmil dol Purchased electricitymil dol Contract workmil dol	2 068.8 1 975.5 25.6 16.4 40.9 10.4	4 144.1 3 866.7 127.4 48.0 69.2 32.9	2 871.4 2 574.6 140.2 14.5 117.7 24.4	1 824.0 1 716.2 75.7 5.8 23.9 2.3	1 168.1 1 060.4 80.8 3.9 14.1 9.0	7 369.9 7 087.0 131.8 24.0 95.4 31.8	1 488.4 1 273.8 132.0 6.3 39.3 37.1	730.7 646.1 69.4 2.3 8.4 4.5	2 294.1 1 978.3 168.6 37.4 73.0 36.8
Quantity of electric energy used for heat and power: Purchased mil kWh Generated less sold mil kWh	748.1	1 210.8 (Z)	2 077.3 (D)	451.9 -	207.0	2 227.2 (D)	571.3 -	132.7	1 260.0 (Z)
Total value of shipmentsmil dol	3 508.0	7 688.3	5 708.2	2 846.0	2 011.1	15 622.7	2 854.1	1 423.7	4 437.2
Value addedmil dol	1 427.4	3 551.2	2 853.7	1 024.3	845.4	8 220.4	1 361.7	694.7	2 167.7
Inventories by stage of fabrication: Beginning of 1992mil dol Finished goodsmil dol Work in processmil dol Materials and suppliesmil dol	480.5 242.4 68.5 169.6	765.3 263.0 186.6 315.7	603.1 279.9 53.0 270.2	395.3 126.0 24.7 244.6	241.1 107.0 22.5 111.6	1 006.4 591.8 60.7 353.8	303.6 148.9 27.0 127.7	275.8 172.7 25.4 77.7	668.4 378.7 50.7 239.1
End of 1992mil dol Finished goodsmil dol Work in processmil dol Materials and suppliesmil dol mil dolmil dol	462.6 232.6 66.5 163.5	774.4 266.2 190.4 317.8	627.3 294.7 55.2 277.4	395.2 128.2 24.9 242.2	243.4 106.9 25.1 111.4	944.7 557.6 62.5 324.6	294.8 145.5 26.4 122.9	281.5 175.2 24.7 81.6	711.1 402.2 51.8 257.1

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

<sup>1</sup>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. <sup>2</sup>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	Paper coated and laminated, packaging (SIC 2671)	Paper coated and laminated, n.e.c. (SIC 2672)	Bags: plastics, laminated, and coated (SIC 2673)	Bags: uncoated paper and multiwall (SIC 2674)	Die-cut paper and board (SIC 2675)	Sanitary paper products (SIC 2676)	Envelopes (SIC 2677)	Stationery products (SIC 2678)	Converted paper products, n.e.c. (SIC 2679)
Gross book value of depreciable assets:									
Total: Beginning of year New capital expenditures <sup>1</sup> Used capital expenditures Retirements End of year	1 277.3 129.4 9.9 23.5 1 393.0	2 666.2 270.1 8.4 101.5 2 843.1	2 453.9 185.6 23.0 75.2 2 587.4	769.2 55.1 7.8 16.6 815.4	498.5 52.6 8.4 10.2 549.3	5 182.9 418.5 36.5 188.4 5 449.5	859.7 55.3 12.0 23.6 903.4	363.2 28.0 6.7 7.0 390.9	1 344.7 148.5 15.2 32.2 1 476.2
Buildings and other structures: Beginning of year New capital expenditures Used capital expenditures Retirements End of year	236.2 18.6 .5 3.9 251.5	495.4 21.0 2.4 12.4 506.4	438.6 26.6 3.6 4.3 464.5	172.7 4.8 .8 .9 177.3	119.9 11.5 (D) 132.4	912.1 35.8 3.3 3.3 947.9	172.4 8.8 .8 1.8 180.2	86.5 2.8 (D) (D) 89.2	309.5 24.6 1.7 5.9 329.9
Machinery and equipment: Beginning of year New capital expenditures <sup>1</sup> Used capital expenditures Retirements End of year	1 041.0 110.8 9.3 19.6 1 141.5	2 170.7 249.1 6.0 89.1 2 336.7	2 015.3 159.1 19.4 70.9 2 122.9	596.5 50.3 7.0 15.7 638.1	378.6 41.1 (D) (D) 416.9	4 270.7 382.8 33.2 185.1 4 501.7	687.3 46.5 11.2 21.8 723.2	276.7 25.2 (D) (D) 301.6	1 035.2 123.9 13.5 26.3 1 146.3
Depreciation charges during 1992: Total Buildings and other structures Machinery and equipment	93.5 8.9 84.6	200.4 21.4 179.1	181.4 15.5 165.9	49.8 5.9 43.9	33.6 5.0 28.6	336.9 33.2 303.7	61.8 8.4 53.4	24.9 3.5 21.4	91.1 12.8 78.3
Rental payments: Total Buildings and other structures Machinery and equipment	18.1 9.1 9.1	39.7 20.5 19.2	44.2 26.6 17.6	17.6 8.5 9.1	20.6 11.5 9.1	45.0 24.5 20.4	29.6 19.2 10.4	14.1 7.4 6.7	51.6 28.7 23.0

<sup>1</sup>Data on new machinery and equipment expenditures by type are provided in table 3c.

#### MANUFACTURES-INDUSTRY SERIES

#### CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-17

#### 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]

	Paper co laminated, (SIC :		Paper coa laminate (SIC 2	d, n.e.c.	Bags: plastics, laminated, and coated (SIC 2673)		Bags: uncoated paper and multiwall (SIC 2674)	
Item	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)
Purchased services: Cost of purchased services for the repair of– Buildings and other structures	4.0 85.3 20.9 88.9	(X) (X) (X)	7.2 88.9 108.6 90.7	XX XX XX XX	5.0 81.6 67.7 82.5	(X) (X) (X) (X)	4.1 91.4 23.3 87.0	(X) (X) (X)
Other purchased services: Communications	83.6 1.7 83.5 1.0 84.5 .9 82.0	828888888888888888888888888888888888888	13.6 85.4 4.1 88.2 2.9 83.8 15.2 81.9 8.6 83.0 20.1 90.4	828888888888888888888888888888888888888	8.4 78.7 4.5 80.5 3.5 80.9 6.9 80.5 4.9 79.0 5.7 79.5	888888888888888888888888888888888888888	3.9 87.8 91.4 4.3 90.5 7 90.6 7 92.2 2.7 91.4	838383838888888888888888888888888888888
New machinery and equipment expenditures Automobiles, trucks, etc., for highway use Computers and peripheral data processing equipment All other Adjustment ratio <sup>3</sup>	110.8 .4 3.7 106.7 1.1	(X) 22 17 1 (X)	249.1 .8 9.4 238.9 1.3	(X) 14 13 1 (X)	159.1 1.6 6.8 150.7 1.3	(X) 19 7 1 (X)	50.3 .7 1.3 48.3 1.2	(X) 39 3 1 (X)
Cost of materials, components, parts, etc., used Materials purchased or transferred from foreign sources <sup>4</sup> Materials purchased or transferred from domestic sources Adjustment ratio <sup>3</sup>	1 975.5 66.2 1 909.2 1.6	(X) 48 3 (X)	3 866.7 (S) (S) (S)	(X) (X) (X) (X)	2 574.6 46.2 2 528.4 1.5	(X) 23 1 (X)	1 716.2 24.2 1 692.0 1.3	(X) 5 1 (X)

	Die-cut p bo (SIC	ard	Sanitary par (SIC	ary paper products Envelopes (SIC 2676) Stationery products (SIC 2677)		products 2678)	Converted paper products, n.e.c. (SIC 2679)			
Item	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)
Purchased services: Cost of purchased services for the repair of– Buildings and other structures	2.9 72.7 13.8 76.0	XXXX XXXXX	16.1 95.4 59.0 96.4	(X) (X) (X) (X)	2.5 82.5 29.8 84.8	8888	1.6 77.8 8.4 80.5	XXXX	7.1 78.1 38.9 75.3	(X) (X) (X) (X)
Other purchased services: Communications Response coverage ratio (percent) <sup>2</sup> Legal Response coverage ratio (percent) <sup>2</sup> Accounting and bookkeeping Response coverage ratio (percent) <sup>2</sup> Advertising Response coverage ratio (percent) <sup>2</sup> Software and other data processing Response coverage ratio (percent) <sup>2</sup> Refuse removal, including hazardous waste Response coverage ratio (percent) <sup>2</sup>	4.8 70.0 1.7 75.8 3.1 77.2 4.3 72.3 1.0 74.8 3.0 74.2	888888888888888888888888888888888888888	14.1 90.3 6.3 92.7 1.5 92.3 70.3 94.3 11.8 93.6 14.8 94.8	8888888888888888888	7.4 85.8 2.4 85.8 1.9 84.0 4.3 84.2 1.5 83.2 2.1 85.1	XXXXXXXXXXXX	1.6 80.5 .4 80.5 .6 77.0 9 77.8 1.6 77.0 .7 80.5	XXXXXXXXXXXXX	7.2 78.6 3.0 79.4 8.8 79.4 1.9 75.4 5.3 80.4	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
New machinery and equipment expenditures Automobiles, trucks, etc., for highway use Computers and peripheral data processing equipment All other Adjustment ratio <sup>3</sup>	41.1 .7 1.7 38.7 1.2	(X) 56 10 2 (X)	382.8 .4 10.1 372.3 1.1	(X) 1 1 (X)	46.5 .5 2.8 43.2 1.4	(X) 23 9 1 (X)	25.2 .6 2.5 22.1 1.8	(X) 35 35 5 (X)	123.9 1.7 3.9 118.2 1.4	(X) 34 13 1 (X)
Cost of materials, components, parts, etc., used Materials purchased or transferred from foreign sources <sup>4</sup> Materials purchased or transferred from domestic sources Adjustment ratio <sup>3</sup>	1 060.4 17.2 1 043.2 1.1	(X) 32 1 (X)	7 087.0 225.0 6 861.9 1.2	(X) 1 1 (X)	1 273.8 .8 1 273.0 1.6	(X) 5 1 (X)	646.1 12.8 633.3 1.6	(X) 6 1 (X)	1 978.3 36.8 1 941.5 1.7	(X) 19 1 (X)

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

<sup>1</sup>For description of relative standard error of estimate, see Qualifications of the Data in appendixes. <sup>2</sup>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. <sup>3</sup>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.) <sup>4</sup>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.

### 26C-18 CONVERTED PAPER AND PAPERBOARD PRODUCTS

#### MANUFACTURES-INDUSTRY SERIES

### 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]

		All	All emp	bioyees	Pro	duction worl	kers	Value added by	_		New capital	End ر
Industry and employment size class	E1	estab- lish- ments (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	expend- itures (million dollars)	inv to (mil doll
DUSTRY 2671, PAPER COATED AND AMINATED, PACKAGING												
Total	-	204	17.3	533.9	12.9	27.8	348.1	1 427.4	2 068.8	3 508.0	129.4	46
ablishments with an average of -	E9	30	1	1.2	(7)	1	.8	2.0	4.9	7.9	2	
to 4 employees to 9 employees	E4	20 18	.1 .1 .3	1.3 3.3 6.7	(Z) .1 .2	.1 .2	.0 1.7 4.1	3.0 7.7 17.2	4.9 11.1 27.3	18.7 44.9	.3 .5 1.2	
0 to 19 employees 0 to 49 employees		38	1.3	37.9	1.0	.3 2.2	24.2	97.4	165.1	267.4	5.6	
0 to 99 employees 00 to 249 employees		37 45	2.6 7.0	80.2 217.6	1.9 5.1	4.1 11.1	48.4 137.2	222.5 625.0	338.3 874.7	551.9 1 510.6	29.3 54.6	1
50 to 499 employees 00 to 999 employees		14 2	<u>5.9</u> (D)	186.9 (D)	$\frac{4.6}{(D)}$	<u>9.9</u> (D)	131.7 (D)	454.5 (D)	647.4 (D)	1 106.5 (D)	37.9 (D)	<u>1</u>
ered by administrative records <sup>2</sup>	1 1	35	.1	2.1	.1	.1	1.3	4.6	7.5	12.1	.4	
DUSTRY 2672, PAPER COATED AND AMINATED, N.E.C.												
Total	_	453	32.4	1 041.6	22.1	47.9	623.1	3 551.2	4 144.1	7 688.3	270.1	7
ablishments with an average of -		05										
to 9 employees	E5	65 65	.1	3.1 11.0	.1 .3	.2 .6	1.8 6.7	11.2 34.7	14.3 41.7	25.2 76.9	.8 2.4	
) to 19 employees ) to 49 employees	E4 E2	81 93	1.2 3.0	32.2 86.7	.8 2.0	1.7 4.3	18.4 48.4	95.7 246.3	122.8 299.3	218.8 545.0	7.4 13.8	
0 to 99 employees 00 to 249 employees	E1	57 62	3.9 9.2	111.2 306.2	2.7 6.1	5.7 13.2	65.5 177.4	320.9 853.1	407.3 1 261.3	720.6	17.0 85.7	:
50 to 499 employees	-	19	6.3	190.5	4.0	7.9	102.2	464.7	583.5	1 050.6	142.9	
00 to 999 employees000 to 2,499 employees	-	10 1	8.2 (D)	300.7 (D)	6.1 (D)	14.3 (D)	202.6 (D)	<u>1 524.5</u> (D)	<u>1 413.9</u> (D)	2 947.2 (D)	(D) (D)	
ered by administrative records <sup>2</sup>	E9	82	.3	5.4	.2	.4	3.3	15.6	16.7	32.4	1.4	
DUSTRY 2673, BAGS: PLASTICS, AMINATED, AND COATED												
Total	-	521	38.7	988.7	30.5	64.7	673.7	2 853.7	2 871.4	5 708.2	185.6	e
ablishments with an average of— to 4 employees	E8	76	.2	3.9	.1	.2	2.8	12.8	12.9	25.7	.8	
to 9 employees	E6	55	.4	7.7	.1 .3 .9	.6	5.4	22.9	22.4	45.3	1.3	
0 to 19 employees 0 to 49 employees	E2 E1	84 101	1.2 3.4	26.8 80.0	.9 2.6 4.7	1.9 5.5	16.7 48.8	69.6 217.0	78.3 216.9	147.5 433.5	3.7 10.4	
0 to 99 employees 00 to 249 employees	-	89 82	6.1 12.3	149.6 306.4	4.7 9.6	9.8 20.8	91.1 203.2	380.8 907.1	401.1 882.1	784.8 1 780.0	21.4 66.3	:
50 to 499 employees		24 9	12.3 7.9	205.0	6.4	13.4	153.5	527.9	585.5	1 107.4 1 384.1	33.6	
00 to 999 employees 000 to 2,499 employees		9 1	7.2 (D)	209.3 (D)	<u>5.9</u> (D)	<u>12.4</u> (D)	152.2 (D)	715.6 (D)	672.1 (D)	(D)	48.1 (D)	-
rered by administrative records <sup>2</sup>	E9	117	.5	9.6	.4	.8	6.9	25.6	25.1	50.7	1.9	
DUSTRY 2674, BAGS: UNCOATED												
Total	-	143	18.6	438.3	15.5	32.0	325.1	1 024.3	1 824.0	2 846.0	55.1	:
ablishments with an average of -	50	-	(7)		(7)	(7)		-	4.5		10	
to 9 employees		5 5	(Z) (Z)	.3 .6	(Z) (Z)	(Z) (Z) .2	.2 .4	.7 .9	1.5 2.1	2.2 2.9	1.3 (D) (D)	
0 to 19 employees 0 to 49 employees		10 34	.1 1.2	3.2 25.3	.1 .9	.2 1.8	1.9 17.2	5.8 77.1	15.6 162.5	20.9 239.3	(D) 2.2	
) to 99 employees 00 to 249 employees		23 43	1.7 7.2	41.8 161.8	1.3 5.9	2.8 12.4	28.1 119.8	139.8 365.2	209.4 713.7	349.5 1 075.6	3.2 14.7	
00 to 999 employees		19 4	6.2 2.2	147.7 57.6	5.4 1.9	11.1	119.2 38.2	309.5 125.2	586.9 132.3	896.5 259.1	16.8 16.9	
ered by administrative records <sup>2</sup>		8	(Z)	.9	(Z)	.1	.7	1.4	3.1	4.5	.1	
DUSTRY 2675, DIE-CUT PAPER AND DARD												
Total	_	381	15.6	375.2	12.4	25.0	248.1	845.4	1 168.1	2 011.1	52.6	1
ablishments with an average of-											_	
to 9 employees	E6	86 71	.2 .5 .9	3.4 9.7	.1 .4	.3 .7	2.2 6.5	7.1 19.0	7.5 20.7	14.6 39.9	.2 .5	
0 to 19 employees 0 to 49 employees	E1 E1	61 80	2.5	21.7 57.2	.6 1.9	1.2 3.7	11.8 34.7	44.3 115.5	43.2 114.0	87.3 228.4	3.3 12.0	
0 to 99 employees 00 to 249 employees	E1	46 25	3.2 3.7	83.9 89.0	2.5 2.9	5.1 5.9	47.4 61.1	179.4 227.4	276.5 403.2	457.1 629.1	6.4 13.9	
50 to 499 employees	-	11	3.7 <u>4.7</u> (D)	110.3	4.0	5.9 <u>8.1</u> (D)	84.5	252.7	303.1	<u>554.7</u>	16.4	
.000 to 2,499 employees	-	1	(D)	(D)	(D)	(D) .9	(D)	(D)	(D)	(D)	(D)	
ered by administrative records <sup>2</sup>		133	6.	10.0	.5		6.5	20.6	21.3	41.9	.6	

MANUFACTURES-INDUSTRY SERIES

CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-19

#### Table 4. Industry Statistics by Employment Size of Establishment: 1992–Con.

			All emp	ployees	Pro	duction wor	kers	Value			New	End-of-
Industry and employment size class	E1	All estab- lish- ments (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	added by manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	capital expend- itures (million dollars)	year inven- tories (million dollars)
INDUSTRY 2676, SANITARY PAPER PRODUCTS												
Total	-   -	150	40.5	1 451.1	32.7	68.1	1 095.2	8 220.4	7 369.9	15 622.7	418.5	944.7
Establishments with an average of –           1 to 4 employees           5 to 9 employees           20 to 49 employees           50 to 99 employees           100 to 249 employees           250 to 499 employees           250 to 499 employees           260 to 499 employees           250 to 249 employees           250 to 249 employees           250 to 499 employees           250 to 499 employees           1,000 to 2,499 employees	- E8 - E1 - E3 - E1  	8 13 4 22 23 29 22 22 22 7	(Z) .1 .7 1.7 4.6 8.0 15.2 10.2	.5 2.1 2.2 18.5 38.5 123.3 255.8 598.7 411.6	(Z) .1 (Z) .5 1.3 3.6 6.7 12.3 8.2	(Z) .1 1.1 2.6 7.3 14.1 26.2 16.6	.3 1.4 1.0 12.1 25.0 87.6 201.1 452.3 314.3	2.4 11.0 7.0 75.4 159.3 533.2 1 423.8 3 223.9 2 784.2	2.0 10.5 7.4 95.8 189.2 625.6 1 402.9 3 035.3 2 001.1	4.5 21.5 14.3 168.0 350.5 1 160.3 2 837.8 6 269.2 4 796.7	.1 <u>6.0</u> (D) 6.0 8.1 56.2 60.4 157.0 124.7	1.3 1.2 192 37.5 88.5 185.7 388.0 223.0
Covered by administrative records <sup>2</sup>	- E9	5	(Z)	.3	(Z)	(Z)	.2	1.3	1.2	2.5	.1	.2
INDUSTRY 2677, ENVELOPES												
Total	- E1	283	24.9	672.3	19.0	39.0	445.1	1 361.7	1 488.4	2 854.1	55.3	294.8
Establishments with an average of— 1 to 4 employees	- E7 - E4 - E1 - E2 - E1 - E1 	22 22 32 49 63 77 15 3	(Z) .2 .4 1.6 4.6 12.1 4.4 1.6 .4	1.1 3.6 9.3 43.7 123.0 338.0 117.1 36.7 6.5	(Z) .1 .3 1.1 3.5 9.3 3.5 1.2 .3	.1 .3 .6 2.4 7.3 19.4 6.7 2.2 .5	.7 2.5 5.8 27.3 80.9 226.1 80.7 21.0 4.3	2.2 5.0 17.6 86.5 257.6 709.4 222.6 60.8 10.5	2.9 9.2 19.6 95.3 263.4 800.1 221.1 76.9 14.0	5.0 14.1 37.1 183.7 522.6 1 510.2 445.7 135.6 24.5	.1 .3 1.0 4.4 12.4 29.0 <u>8.1</u> (D) .5	.6 1.9 4.4 15.7 55.5 156.1 45.0 15.6 2.8
INDUSTRY 2678, STATIONERY PRODUCTS												
Total	_ E1	177	9.5	220.9	7.0	13.6	138.1	694.7	730.7	1 423.7	28.0	281.5
Establishments with an average of –           1 to 4 employees           5 to 9 employees           20 to 49 employees           50 to 99 employees           100 to 249 employees           250 to 49 employees           250 to 49 employees           250 to 499 employees           500 to 999 employees           500 to 999 employees           500 to 999 employees           500 to 999 employees	- E6 - E4 - E1 - E3 - E1 - E1 - E1 	44 17 37 35 19 18 5 2 49	.1 .5 1.1 1.5 3.2 <u>3.0</u> (D) .2	1.9 3.0 10.2 24.5 37.3 72.5 <u>71.5</u> (D) 3.0	.1 .3 .8 1.0 2.4 <u>2.3</u> (D)	.1 .2 .6 1.6 2.1 4.7 (D) .2	1.2 1.9 5.4 14.1 20.9 46.3 <u>48.4</u> (D) 1.9	5.4 6.9 20.0 68.3 120.9 278.8 <u>194.4</u> (D) 7.9	5.8 7.1 18.9 104.1 123.3 217.7 <u>253.8</u> (D) 8.3	11.1 13.9 39.0 174.1 243.9 496.3 <u>445.4</u> (D) 16.2	.5 .4 1.2 3.8 5.6 8.9 <u>7.6</u> (D) .6	2.2 2.9 6.9 24.9 40.7 98.0 <u>105.9</u> (D) 3.4
INDUSTRY 2679, CONVERTED PAPER PRODUCTS, N.E.C.												
Total	- E1	790	31.6	802.9	23.6	48.7	514.7	2 167.7	2 294.1	4 437.2	148.5	711.1
Establishments with an average of — 1 to 4 employees	- E5 - E2 - E2 - E1 - E1 	226 116 137 155 89 46 15 5 1	.4 .8 1.9 5.0 6.1 6.8 5.4 <u>5.3</u> (D)	8.2 16.1 41.1 120.5 146.4 178.1 139.3 <u>153.2</u> (D)	.3 .6 1.3 3.5 4.5 5.1 4.5 <u>3.9</u> (D)	.6 1.2 2.6 7.3 9.5 10.4 9.0 <u>8.2</u> (D)	5.5 11.2 24.9 69.4 89.4 114.0 105.7 <u>94.5</u> (D)	23.6 40.0 100.1 312.9 415.7 475.8 348.1 <u>451.5</u> (D)	25.8 50.8 122.8 416.6 508.7 550.6 287.5 331.3 (D)	49.4 90.8 221.7 728.1 912.4 1 026.8 625.4 <u>782.6</u> (D)	2.4 3.3 7.0 18.3 35.8 33.1 25.5 <u>23.1</u> (D)	6.8 11.1 28.0 85.1 119.8 159.7 108.8 <u>191.8</u> (D
Covered by administrative records <sup>2</sup>	_ E9	219	.6	11.5	.5	.9	7.7	33.0	35.4	68.4	3.2	10.1

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

<sup>1</sup>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. <sup>2</sup>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.

#### 26C-20 CONVERTED PAPER AND PAPERBOARD PRODUCTS

#### MANUFACTURES-INDUSTRY SERIES

### 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; 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]

ratios.	For meaning of abbreviations and symbols, see introductory	text. For ex	planation of	f terms, see	appendixes	]					
Indus- try or			All emp	ployees	Pro	oduction work	kers	Value			New
prod- uct class code	Industry or primary product class	All estab- lish- ments (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	added by manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	capital expend- itures (million dollars)
2671	Paper coated and laminated, packaging: All establishments in industry	204	17.3	533.9	12.9	27.8	348.1	1 427.4	2 068.8	3 508.0	129.4
26711	Establishments with this product class primary: Single-web paper, coated rolls and sheets, including waxed, for packaging uses	40	4.1	132.3	3.0	6.6	82.7	354.0	601.7	954.1	42.0
26712	Single-web film, coated rolls and sheets, including	_									
26713	coextruded, for packaging uses Paper/ paper multiweb laminated rolls and sheets for	31	4.4	139.9	3.3	6.8	89.0	387.7	444.6	835.6	25.2
26714	packaging uses Multiweb laminated rolls and sheets, except paper/	7	.6	21.0	.4	.9	12.2	66.4	94.8	160.8	4.5
	paper and foil, for packaging uses	56	7.3	217.6	5.5	12.1	149.1	560.6	824.8	1 396.2	53.4
2672	Paper coated and laminated, n.e.c.: All establishments in industry	453	32.4	1 041.6	22.1	47.9	623.1	3 551.2	4 144.1	7 688.3	270.1
26721	Establishments with this product class primary: Printing paper coated at establishments other than										
26722	where paper was produced Gummed products	18 12	.9 1.7	26.6 46.0	.6 .9	1.3 2.0	17.2 24.7	101.0 91.9	112.4 164.1	213.7 255.9	3.7 4.0
26723 26724	Pressure-sensitive products Other coated and processed papers, except for	149	20.2	671.9	13.8	30.3	400.6	2 408.1	2 629.2	5 027.3	194.5
20724	packaging uses	55	5.2	179.7	3.7	7.9	110.9	604.3	889.8	1 498.4	40.3
2673	Bags: plastics, laminated, and coated: All establishments in industry	521	38.7	988.7	30.5	64.7	673.7	2 853.7	2 871.4	5 708.2	185.6
26731 26732	Establishments with this product class primary: Specialty bags and liners, single-web paper, coated Specialty bags and liners, single-web film	29 256	2.1 28.6	45.6 744.7	1.7 22.7	3.5 48.5	31.8 511.7	132.1 2 282.6	124.3 2 114.1	251.8 4 385.9	2.3 149.1
26733	Specialty bags and liners, multiweb laminations and foil	23	3.5	96.1	2.5	5.2	59.9	167.5	263.8	431.6	15.4
2674	Bags: uncoated paper and multiwall: All establishments in industry	143	18.6	438.3	15.5	32.0	325.1	1 024.3	1 824.0	2 846.0	55.1
26741	Establishments with this product class primary: Grocers' bags and sacks and variety and shopping										
26742	bags, uncoated paperShipping sacks and multiwall bags, all materials	59	6.7	167.7	5.5	11.3	124.1	375.1	871.7	1 245.6	14.3
20142	except textiles	66	11.5	264.0	9.7	20.0	196.0	638.9	930.5	1 568.6	40.2
2675	Die-cut paper and board: All establishments in industry	381	15.6	375.2	12.4	25.0	248.1	845.4	1 168.1	2 011.1	52.6
26751 26752	Establishments with this product class primary: Die-cut paper and paperboard office supplies	75	8.1	187.8	6.6	13.2	133.5	420.5	486.4	907.1	22.1
	Die-cut paper and paperboard products, except office supplies	37	1.2	26.8	.9	1.9	15.0	56.1	61.4	117.4	2.8
26753	Pasted, lined, laminated, or surface-coated paperboard	37	2.5	80.5	1.9	4.1	49.1	229.0	508.1	734.8	22.0
2676	Sanitary paper products: All establishments in industry	150	40.5	1 451.1	32.7	68.1	1 095.2	8 220.4	7 369.9	15 622.7	418.5
26761	Establishments with this product class primary: Sanitary napkins and tampons	14	5.0	166.2	3.6	7.2	95.3	1 059.2	397.5	1 450.8	48.9
26763 26764	Disposable diapers, except adult, including disposable training pants Sanitary tissue paper products	24 79	10.9 23.8	421.5 838.6	9.3 19.1	20.3 39.2	343.2 639.2	2 803.8 4 236.5	2 481.9 4 374.2	5 298.5 8 636.6	171.0 191.3
2677	Envelopes: All establishments in industry	283	24.9	672.3	19.0	39.0	445.1	1 361.7	1 488.4	2 854.1	55.3
2678	Stationery products: All establishments in industry	177	9.5	220.9	7.0	13.6	138.1	694.7	730.7	1 423.7	28.0
	Establishments with this product class primary:	'''	5.5	220.9	1.0	15.0	130.1	034.7	130.7	1 423.7	20.0
26781 26782	Stationery Tablets, pads, and related products	25 63	1.9 6.2	41.7 152.7	1.3 4.7	2.7 9.0	22.2 98.7	112.6 513.3	88.9 571.9	202.6 1 082.5	3.4 17.8
2679	Converted paper products, n.e.c.: All establishments in industry	790	31.6	802.9	23.6	48.7	514.7	2 167.7	2 294.1	4 437.2	148.5
26791 26792 26793	Establishments with this product class primary: Wallcoverings Gift wrap paper Paper supplies for business machines and other miscellaneous unprinted paper office supplies,	44 15	4.0 4.8	128.7 120.5	2.9 3.4	6.5 6.6	91.0 65.5	314.8 342.7	290.3 284.3	601.9 625.8	12.9 18.6
26794 26795	n.e.c. Molded pulp goods Molded pulp goods Other converted paper and paperboard products	29 20 245	2.1 3.0 12.1	46.5 87.0 289.1	1.6 2.5 8.9	3.2 5.9 17.6	30.1 71.7 169.7	191.2 246.4 704.8	278.3 109.4 973.8	465.2 353.4 1 667.6	11.3 (D) 38.9
	1	· · · · · ·									

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

#### MANUFACTURES-INDUSTRY SERIES

#### CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-21

### 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 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 2671, PAPER COATED AND LAMINATED, PACKAGING			
Total value of shipments	3 508.0	2 416.0	(NA)
Primary products value of shipments Secondary products value of shipments	3 006.8 456.4	2 029.1 355.8	(NA) (NA)
Total miscellaneous receipts	44.8	31.1	(NA)
Value of resales	35.2	21.2	(NA) (NA)
Contract receipts Other miscellaneous receipts	2.4 7.2	4.4 5.5	(NA) (NA)
Sales of scrap and refuse	2.4	2.2	(NA)
Receipts for research and development Other miscellaneous receipts	5.0	(NA) 3.3	(NA) (NA)
Other miscellaneous receipts, n.s.k.	(Z)	(NA)	(NA)
Primary products specialization ratio	87	85	(NA)
			(144)
Value of primary products shipments made in all industries	3 530.0	2 460.1	(NA)
Value of primary products shipments made in this industry Value of primary products shipments made in other industries	3 006.8 523.3	2 029.1 431.0	(NA) (NA)
Coverage ratio	85	82	(NA)
INDUSTRY 2672, PAPER COATED AND LAMINATED, N.E.C.			
Total value of shipments	7 688.3	5 891.7	(NA)
Primary products value of shipments Secondary products value of shipments	6 566.0 912.4	4 762.3 741.0	(NA) (NA)
Total miscellaneous receipts	209.9	388.4	(NA)
Value of resales Contract receipts	177.8 23.7	354.7 27.0	(NA) (NA)
Other miscellaneous receipts	8.4	6.7	(NA)
Sales of scrap and refuse	1.5	(D)	(NA)
Receipts for research and development Other miscellaneous receipts	(D) (D)	(NA) (D)	(NA) (NA)
Other miscellaneous receipts, n.s.k.	(D)	(ŇĀ)	(NA)
Primary products specialization ratio	88	87	(NA)
Value of primary products shipments made in all industries	7 420.3	5 497.7	(NA)
Value of primary products shipments made in this industry	6 566.0	4 762.3	(NA) (NA)
Value of primary products shipments made in other industries	854.3	735.4	(NA)
Coverage ratio	88	87	(NA)
INDUSTRY 2673, BAGS: PLASTICS, LAMINATED, AND COATED			
Total value of shipments	5 708.2	4 576.9	(NA)
Primary products value of shipments	4 777.1	3 573.2	(NA)
Secondary products value of shipments Total miscellaneous receipts	769.9 161.2	835.5 168.1	(NA) (NA)
Value of resales	135.2	155.0	(NA)
Contract receipts	15.5	2.8	(NA) (NA)
Other miscellaneous receiptsSales of scrap and refuse	10.6 5.0	10.3	(NA) (NA)
Receipts for research and development	(D)	(NA)	(NA)
Other miscellaneous receipts	4.1 (D)	2.8 (NA)	(NA) (NA)
Primary products specialization ratio	86	81	(NA)
Value of primary products shipments made in all industries Value of primary products shipments made in this industry	5 385.0 4 777.1	3 936.5 3 573.2	(NA) (NA)
Value of primary products shipments made in other industries	607.9	363.3	(NA)
Coverage ratio	89	91	(NA)
INDUSTRY 2674, BAGS: UNCOATED PAPER AND MULTIWALL			
Total value of shipments	2 846.0	2 448.0	(NA)
Primary products value of shipments	2 501.3	2 231.1	(NA)
Secondary products value of shipments Total miscellaneous receipts	240.5 104.2	153.6 63.4	(NA) (NA)
Value of resales	93.8	46.5	(NA)
Contract receipts	(D) (D)	.5	(NA) (NA)
Other miscellaneous receipts Sales of scrap and refuse	(D) 7.1	16.4	(NA) (NA)
Receipts for research and development	-	(NA)	(NA)
Other miscellaneous receipts Other miscellaneous receipts, n.s.k	(D) (D)	2.3 (NA)	(NA) (NA)
Primary products specialization ratio	91	94	(NA)
Value of primary products shipments made in all industries Value of primary products shipments made in this industry	2 614.7 2 501.3	2 360.6 2 231.1	(NA) (NA)
Value of primary products shipments made in this industry Value of primary products shipments made in other industries		2 231.1 129.5	(NA) (NA)
value of primary products shipments made in other industries	113.4	123.5	
Coverage ratio		95	(NA)

26C–22 CONVERTED PAPER AND PAPERBOARD PRODUCTS

MANUFACTURES-INDUSTRY SERIES

### 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 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 2675, DIE-CUT PAPER AND BOARD			
Total value of shipments	2 011.1	1 749.3	1 680.1
Primary products value of shipmentsSecondary products value of shipments	1 693.1 99.0	1 496.2 167.6	1 457.5 146.8
Total miscellaneous receipts	219.0	85.5	75.8
Value of resales Contract receipts	118.2 97.2	58.9 18.7	49.3 22.9
Other miscellaneous receipts	3.6	7.9	3.6
Sales of scrap and refuse	1.7	6.8	1.4
Receipts for research and development	1.5	(NA) 1.1	(D) (D)
Other miscellaneous receipts, n.s.k.	.3	(NA)	(D)
Primary products specialization ratio	94	90	91
Value of primary products shipments made in all industries	1 942.2	1 701.1	1 605.1
Value of primary products shipments made in this industry Value of primary products shipments made in other industries	1 693.1 249.1	1 496.2 204.9	1 457.5 147.6
Coverage ratio	87	88	91
INDUSTRY 2676, SANITARY PAPER PRODUCTS			
Total value of shipments Primary products value of shipments	15 622.7 14 681.5	11 698.4 11 092.1	9 086.0 8 223.9
Secondary products value of shipments	668.7	456.9	493.7
Total miscellaneous receipts	272.5	149.4	368.4
Value of resales	260.2 (D)	131.6 6.8	359.2 (D)
Other miscellaneous receipts	(D)	11.1	(D) (D)
Sales of scrap and refuse Receipts for research and development	5.9	8.2 (NA)	8.2
Other miscellaneous receipts	(D)	2.9	(D) (D)
Other miscellaneous receipts, n.s.k.	(D)	(NA)	(D)
Primary products specialization ratio	96	96	94
Value of primary products shipments made in all industries	14 939.7	11 171.7	8 373.5
Value of primary products shipments made in this industry Value of primary products shipments made in other industries	14 681.5 258.2	11 092.1 79.7	8 223.9 149.6
		00	00
Coverage ratio	98	99	98
INDUSTRY 2677, ENVELOPES			
Total value of shipments	2 854.1	2 598.1	1 771.3
Primary products value of shipments Secondary products value of shipments	2 555.4 96.1	2 398.6 48.1	1 643.3 37.7
Total miscellaneous receipts	202.6	151.5	90.3
Value of resales	141.4 13.4	104.1 8.7	54.5 7.5
Contract receipts Other miscellaneous receipts	47.7	38.6	28.3
Sales of scrap and refuse	40.7	35.3	23.9
Receipts for research and development Other miscellaneous receipts	5.4	(NA) 3.3	(D) 3.4
Other miscellaneous receipts, n.s.k.	1.6	(NA)	(D)
Primary products specialization ratio	96	98	98
Value of primary products shipments made in all industries	2 657.4	2 499.5	1 751.6
Value of primary products shipments made in this industry	2 555.4	2 398.6	1 643.3
Value of primary products shipments made in other industries	102.0	100.9	108.2
Coverage ratio	96	96	94
INDUSTRY 2678, STATIONERY PRODUCTS			
Total value of shipments	1 423.7	1 216.4	1 034.0
Primary products value of shipments	1 050.7	829.0	701.3
Secondary products value of shipments Total miscellaneous receipts	271.6 101.3	295.4 92.1	185.7 146.9
Value of resales	90.1	86.2	142.8
Contract receipts Other miscellaneous receipts	5.1 6.1	3.1 2.8	1.1 3.0
Sales of scrap and refuse	4.2	2.4	2.3
Receipts for research and development	(D) (D)	(NA)	(D)
Other miscellaneous receipts Other miscellaneous receipts, n.s.k	(D) (D)	(NĂ)	(D) (D)
Primary products specialization ratio	79	74	79
Value of primary products shipments made in all industries	1 277.9	1 115.2	959.2
Value of primary products shipments made in this industry Value of primary products shipments made in other industries	1 050.7 227.1	829.0 286.3	701.3 257.9
		74	73
Coverage ratio	82	74	73

MANUFACTURES-INDUSTRY SERIES

#### CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-23

TIPS UPF [APS\_PSB,C\_BROOKS] 6/12/95 15:21:59 EPCV23 TLP:26C.BTI;60 6/12/95 13:55:28 DATA:NONE UPF:92MFFL\_PUBS:26CDAT.UPF PAGE: 15 TSF:26C\_92.DAT;2 6/12/95 13:55:49 UTF:26C\_93.DAT;8 6/12/95 15:19:25 META:TIPS96-09131893.DAT;1 6/12/95 15:19:29

### 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 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 2679, CONVERTED PAPER PRODUCTS, N.E.C.			
Total value of shipments         Primary products value of shipments         Secondary products value of shipments         Total miscellaneous receipts         Value of resales         Contract receipts         Other miscellaneous receipts         Sales of scrap and refuse         Receipts for research and development         Other miscellaneous receipts         Other miscellaneous receipts         Other miscellaneous receipts	4 437.2 3 656.2 442.7 338.4 241.6 83.6 13.2 9.5 (D) 1.7 (D)	3 570.1 3 001.9 285.5 282.6 235.8 29.4 17.5 3.9 (NA) 13.6 (NA)	2 637.7 2 195.8 312.5 129.4 110.7 12.7 6.0 (D) - (D) 1.1
Primary products specialization ratio	89	91	88
Value of primary products shipments made in all industries Value of primary products shipments made in this industry Value of primary products shipments made in other industries	4 152.9 3 656.2 496.7	3 385.5 3 001.9 383.6	2 678.4 2 195.8 482.6
Coverage ratio	88	89	82

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]

			1992			1987	
Product code	Product	Number of companies with	Product s	hipments <sup>1</sup>	Number of companies with	Product s	hipments <sup>1</sup>
		shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)
2671	PAPER COATING AND LAMINATING, PACKAGING						
	Total	(NA)	(X)	3 530.0	(NA)	(X)	<sup>3</sup> 2 460.1
26711	Single-web paper, coated rolls and sheets, including waxed, for packaging uses	(NA)	(X)	822.7	(NA)	(X)	474.4
26711 11	Plastics-coated1,000 tons	23	177.4	336.0	26	*91.2	168.5
26711 15	Other 1,000 tons	s	*190.6	463.2	34	156.1	285.1
26711 00	Single-web paper, coated rolls and sheets, including waxed, for packaging uses, n.s.k.		(X)	23.5	(NA)	(X)	20.7
26712	Single-web film, coated rolls and sheets, including coextruded, for packaging uses		(X)	993.4	(NA)	(X)	879.1
26712 11	Single-web film, coated1,000 tons		(S)	506.7	54	*197.4	483.4
26712 12	Coextruded film1,000 tons		(S)	453.3	20	110.7	343.1
26712 00	Single-web film, coated rolls and sheets, including coextruded, for packaging uses, n.s.k.	-	(C) (X)	33.3	(NA)	(X)	52.5
26713	Paper/ paper multiweb laminated rolls and sheets for packaging uses	(NA)	(X)	189.3	(NA)	(X)	249.1
26713 13	Polyethylene laminations: Coated1,000		(0)		10		405.0
26713 14	tons Uncoated1,000	s	(S)	66.3	12	(S)	105.8
26713 20	tons Other laminations1,000	s	- 94.8	90.8	_ 6	44.8	46.4
26713 00	tons Paper/paper multiweb laminated rolls and sheets for packaging uses, n.s.k.	-	(X)	32.1	L (NA) (NA)	*69.9 (X)	62.4 34.6
26714	Multiweb laminated rolls and sheets, except paper/			4 949 9			057.0
26714 11	paper and foil, for packaging uses Film/ paper multiweb laminations1,000	s	(X)	1 349.9	(NA)	(X)	857.6
26714 12	tons Film/ film multiweb laminations: Polypropylene/ polypropylene1,000	s	(S)	141.0	15	31.0	95.3
26714 15	tons Metalized film/ film laminates1,000	s	*98.7	466.0	20	42.4	205.9
26714 17	tons Cellophane/ other film1,000	s	30.3	151.0	19	14.6	72.3
26714 21	tons Other film/ film laminates1,000	20 s	*9.9	45.0	(NA)	(NA)	24.5
26714 00	Multiweb laminated rolls and sheets, except paper/		77.3	394.8	27	99.9	364.1
2	paper and foil, for packaging uses, n.s.k.	(NA)	(X)	152.1	(NA)	(X)	95.4

See footnotes at end of table.

#### 26C-24 CONVERTED PAPER AND PAPERBOARD PRODUCTS

#### MANUFACTURES—INDUSTRY SERIES

# 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]

		1992			1987		
		Number of Product shipments <sup>1</sup>		Number of Product shipments <sup>1</sup>			
Product code	Product	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)
2671	PAPER COATING AND LAMINATING, PACKAGING-Con.						
26710 26710 00 26710 02	Paper coating and laminating, packaging, n.s.k. Paper coating and laminating, packaging, n.s.k. <sup>4</sup> Paper coating and laminating, packaging, n.s.k. <sup>5</sup>	(NA) (NA) (NA)	(X) (X) (X)	174.7 162.6 12.1	(NA) (NA) (NA)	(X) (X) (X)	(3) (3) (3)
2672	PAPER COATING AND LAMINATING, N.E.C.						
	Total	(NA)	(X)	7 420.3	(NA)	(X)	<sup>3</sup> 5 497.7
26721	Printing paper coated at establishments other than where paper was produced	(NA)	(X)	238.6	(NA)	(X)	464.5
26721 13	Coated, one side (for labels and similar uses)	23	(S)	99.6	38	(S)	301.7
26721 53	Coated, two sides (for printing of magazines, directories, catalogs, and similar uses)1,000 s tons	15	(S)	133.3	19	(S)	156.8
26721 00	Printing paper coated at establishments other than where paper was produced, n.s.k.	(NA)	(S) (X)	5.8	(NA)	(S) (X)	5.9
26722	Gummed products	(NA)	(X)	236.7	(NA)	(X)	218.4
26722 12 26722 30	Gummed sealing tape, paper base and reinforced base, used for sealing and securing Other gummed products, including flat gummed papers, unprinted stock labels, corrugators' kraft	10	(X)	156.4	(NA)	(X)	(NA)
26722 00	tapes, etc Gummed products, n.s.k	10 (NA)	(X) (X)	61.8 18.5	(NA) (NA)	(X) (X)	(NA) (NA)
26723	Pressure-sensitive products Pressure-sensitive tape, excluding surgical tapes and rubber-backed tapes:	(NA)	(X)	4 756.0	(NA)	(X)	3 100.0
26723 13 26723 33 26723 43 26723 45	Single-faced tape: Paper backing, excluding electrical Cloth backing, excluding electrical Film backing, excluding electrical Electrical all backings	24 12 28 12	(X) (X) (X) (X)	544.2 127.7 1 192.1 202.8	(NA) (NA) (NA) (NA)	XXXXX XXXXX	(NA) (NA) (NA) (NA)
26723 53 26723 59	Electrical, all backings Reinforced and laminated tape, all backings Other single-faced tape, exluding surgical and rubber-backed tape	12	(X)	120.0	(NA) (NA)		(NA)
26723 61 26723 75	Double-faced tape Pressure-sensitive labels, unprinted Pressure-sensitive base stock:	12 12 29	(X) (X) (X)	228.4 253.3	(NA) (NA)	(X) (X) (X)	(NA) (NA) (NA)
26723 81 26723 85 26723 98 26723 00	For labels For other than labels Other pressure-sensitive products, n.e.c., unprinted Pressure-sensitive products, n.s.k.	42 10 23 (NA)	(X) (X) (X)	1 219.7 98.0 322.7 339.8	(NA) (NA) (NA) (NA)	(X) (X) (X) (X)	(NA) (NA) (NA) (NA)
26724	Other coated and processed papers, except for packaging uses	(NA)	(X)	1 516.0	(NA)	(X)	1 200.0
26724 45	Processed paper (embossed, leatherette, etc.)1,000 s tons	(147)	(X) (S)	52.3	(117)	53.2	64.2
26724 53	Waxed and wax-laminated paper for nonpackaging uses, including household1,000 s tons	12	71.7	122.8	11	(S)	104.0
26724 56	Plastics-coated paper1,000 s tons	14	(S)	70.5	7	(B)	( <sup>6</sup> )
26724 55	Carbonless paper1,000 s tons	6			4	(D)	( <sup>6</sup> )
26724 69	Other coated and processed paper, including oiled, soap impregnated, treated, etc., but excluding sensitized paper1,000 s tons	54	- (S)	1 152.7	- (NA)	(NA)	<sup>6</sup> 963.9
26724 00	Other coated and processed papers, except for packaging uses, n.s.k.	(NA)	(X)	117.7	(NA)	(X)	68.0
26720	Paper coating and laminating, n.e.c., n.s.k. Paper coating and laminating, n.e.c., n.s.k.	(NA)		672.9	(NA)		<sup>3</sup> 514.7
26720 00 26720 02	Paper coating and laminating, n.e.c., n.s.k. <sup>4</sup> Paper coating and laminating, n.e.c., n.s.k. <sup>5</sup>	(NA) (NA)	(X) (X) (X)	641.2 31.7	(NA) (NA)	(X) (X)	<sup>3</sup> 339.5 <sup>3</sup> 175.2
2673- —	BAGS: PLASTICS, LAMINATED, AND COATED						
	Total	(NA)	(X)	5 385.0	(NA)	(X)	<sup>7</sup> 3 936.5
26731 26731 00	Specialty bags and liners, single-web paper, coated Specialty bags and liners, single-web paper, coated1,000 s tons	(NA)	(X)	258.9	(NA)	(X)	262.4 262.4
26732	tons Specialty bags and liners, single-web film	42 (NA)	(S) (X)	258.9 4 166.6	34 (NA)	(S) (X)	262.4 2 856.9
26732 11	Polyethylene: Grocery and variety1,000 s	(191)	(74)	. 100.0	(193)	(77)	2 000.0
26732 12	tons Refuse1,000 s	55	(S)	724.0	52	*265.5	485.8
26732 13	tons Produce1,000 s	46	*682.9	1 146.8	57	567.5	878.3
26732 14	tons Textile and clothing1,000 s	34	(S)	124.9	31	*63.2	109.9
26732 15	tons Drum and box liners1,000 s tons	42 35	*129.1 *108.2	216.1 129.6	40 36	*77.5 *71.8	116.2 118.1

See footnotes at end of table.

#### MANUFACTURES-INDUSTRY SERIES

#### CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-25

# 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]

			1992		1987			
		Number of	Product s	hipments <sup>1</sup>	Number of	Product s	hipments <sup>1</sup>	
Product code	Product	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	
2673- —	BAGS: PLASTICS, LAMINATED, AND COATED-Con.							
26732	Specialty bags and liners, single-web film-Con.							
26732 16	Polyethylene-Con. Shipping sacks1,000 s		(0)	70.4	10	*00.7	00.0	
26732 17	tons Household food storage (sandwich and freezer)1,000 s tons	14 16	(S) 136.8	70.1 384.0	19 22	*20.7 (S)	29.6 350.6	
26732 18	Other 1,000 s tons	82	**276.8	475.2	67	(S)	268.0	
26732 21	Coextruded film1,000 s	21	**184.5	364.3	16	(S)	148.9	
26732 23	Other film1,000 s tons	29		145.7	14	(S)	106.1	
26732 00	Specialty bags and liners, single-web film, n.s.k.	(NA)	(S) (X)	386.0	(NA)	(X)	245.5	
26733 26733 11	Specialty bags and liners, multiweb laminations and foil Paper combinations, except paper/ foil 1,000 s tons	(NA) 12	(X) *35.2	486.2 67.4	(NA) 8	(X) (S)	387.7 59.0	
26733 12	Foil and foil combinations1,000 s tons	12	*18.2	53.4	13	(S)	39.0	
26733 14	Other multiweb laminations1,000 s	28	**58.6	351.1	10	(S)	276.7	
26733 00	Specialty bags and liners, multiweb laminations and foil, n.s.k.	(NA)	(X)	14.2	(NA)	(X)	12.5	
26730		(NA)	(X)	473.3	(NA)	(X)	7429.6	
26730 00 26730 02	Bags: plastics, laminated, and coated, n.s.k Bags: plastics, laminated, and coated, n.s.k. <sup>4</sup> Bags: plastics, laminated, and coated, n.s.k. <sup>5</sup>	(NA) (NA)	(X) (X)	422.6 50.7	(NA) (NA)	(X) (X)	<sup>7</sup> 261.7 <sup>7</sup> 167.9	
2674- —	BAGS: UNCOATED PAPER AND MULTIWALL							
	Total	(NA)	(X)	2 614.7	(NA)	(X)	<sup>7</sup> 2 360.6	
26741	Grocers' bags and sacks and variety and shopping bags, uncoated paper	(NA)	(X)	1 126.5	(NA)	(X)	1 141.8	
26741 11	Grocers' bags and sacks, uncoated paper1,000 s	18	*1 143.2	765.2	19	1 403.6	916.4	
26741 12	Variety bags (merchandise), uncoated paper1,000 s	18	*71.2	89.6	13	123.1	106.7	
26741 13	Shopping bags, uncoated paper1,000 s tons	8	(S)	110.1	5	35.1	60.8	
26741 15	Other uncoated paper bags, n.e.c., including uncoated specialty bags, mothproof bags, etc1,000 s tons	24	(S)	139.8	9	(S)	24.7	
26741 00	Grocers' bags and sacks and variety and shopping bags, uncoated paper, n.s.k.	(NA)	(S) (X)	21.8	(NA)	(X)	33.3	
26742	Shipping sacks and multiwall bags, all materials except			4 450.0			1 100 0	
26742 11	textiles Single and double wall	(NA) 28	(X) **197.1	1 452.9 242.9	(NA) 32	(X) *347.2	1 196.6 374.9	
26742 12	Multiwall (three plies or more)1,00 s	20	1 039.5	1 175.9	25	**787.5	792.9	
26742 00	Shipping sacks and multiwall bags, all materials except textiles, n.s.k.	(NA)	(X)	34.1	(NA)	(X)	28.8	
26740	Bags: uncoated paper and multiwall, n.s.k.	(NA)	(X)	35.3	(NA)	(X)	722.1	
26740 00 26740 02	Bags: uncoated paper and multiwall, n.s.k. <sup>8</sup> Bags: uncoated paper and multiwall, n.s.k. <sup>9</sup>	(NA) (NA)	(X) (X)	30.9 4.4	(NA) (NA)	(X) (X)	( <sup>7</sup> ) 22.1	
2675- —	DIE-CUT PAPER AND PAPERBOARD							
	Total	(NA)	(X)	1 942.2	(NA)	(X)	1 701.1	
26751	Die-cut paper and paperboard office supplies File folders, all types and materials:	(NA)	(X)	912.0	(NA)	(X)	892.7	
26751 10 26751 11 26751 12	Hanging foldersmil units Expanding file folders, including walletsmil units Other file folders, including file jackets and file	22 18	*1 019.7 *102.2	170.9 95.0	(NA) (NA)	(NA) (NA)	(NA) (NA)	
26751 20 26751 30	pockets mil units Tabulating cards, single-cut mil units Other paper and paperboard office supplies, including	47 11	*3 594.5 (S)	347.6 33.0	(NA) (NA)	(NA) (NA)	(NA) (NA)	
26751 00	index cards, guide cards, presentation and report covers, etc mil units Die-cut paper and paperboard office supplies, n.s.k	77 (NA)	*2 098.2 (X)	223.1 42.3	(NA) (NA)	(NA) (X)	(NA) (NA)	
26752	Die-cut paper and paperboard products, except office	. ,		100.0	(NIA)		164 4	
26752 61 26752 71	supplies Cards, die-cut and designed, not printed Automotive board products (for panel, trim, etc.)	(NA) 14 5	(X) (X)	123.8 36.7	(NA) 21 Г 7		164.4 48.0 ( <sup>10</sup> )	
26752 97	Other, including fillers and flats for egg cases (except molded pulp), bottle caps, closures and lids; excluding labels	39	- (X)	81.4	- 31	(X) (X)	<sup>10</sup> 112.7	
26752 00	Die-cut paper and paperboard products, except office supplies, n.s.k	(NA)	(X)	5.7	L (NA)	(X)	3.7	
26753 26753 00	Pasted, lined, laminated, or surface-coated paperboard Pasted, lined, laminated, or surface-coated	(NA) (NA)	(X) (X)	730.6	(NA) (NA)	(X) (X)	457.6	
	paperboard1,000 s tons	47	*900.1	730.6	42	*633.1	457.6	

See footnotes at end of table.

# 26C-26 CONVERTED PAPER AND PAPERBOARD PRODUCTS

# 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]

			1992		1987			
		Number of	Product sh	nipments <sup>1</sup>	Number of Product s		nipments <sup>1</sup>	
Product code	Product	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	
2675	DIE-CUT PAPER AND PAPERBOARD-Con.							
26750 26750 00 26750 02	Die-cut paper and paperboard, n.s.k Die-cut paper and paperboard, n.s.k. <sup>11</sup> Die-cut paper and paperboard, n.s.k. <sup>12</sup>	(NA) (NA) (NA)	(X) (X) (X)	175.8 134.7 41.1	(NA) (NA) (NA)	(X) (X) (X)	186.4 92.7 93.8	
2676- —	SANITARY PAPER PRODUCTS							
	Total	(NA)	(X)	14 939.7	(NA)	(X)	11 171.7	
26761 26761 14 26761 51 26761 00	Sanitary napkins and tampons	(NA) 10 3 (NA)	(X) - 16 805.7 (X)	1 673.1 1 660.2 12.8	-[ (NA) 9 4 (NA)	(X) 12 598.8 2 861.0 (X)	1 350.0 1 074.3 269.3 6.5	
26763 26763 00	Disposable diapers, except adult, including disposable training pants Disposable diapers, except adult (usually containing	(NA)	(X)	4 146.3	(NA)	(X)	3 202.9	
	pulp or cellulose fibers), including disposable training pants millions	13	18 895.9	4 146.3	12	15 248.9	3 202.9	
26764 26764 11	Sanitary tissue paper products Facial tissues and handkerchiefs, including sputum	(NA)	(X)	8 887.8	(NA)	(X)	6 503.2	
26764 25	wipes1,000 s Table napkins, including plain, creped, and facial tissue type: Industrial (bulk and dispenser type): Regular type, single-ply: Bulk1,000 s	12	301.2	773.0	13	310.7	729.8	
26764 25	tons1,000 s	13	177.6	225.1	10	*147.3	200.5	
26764 33	tons Facial tissue type, 2-ply or more1,000 s	10	219.8	307.3	7	185.0	230.7	
26764 35	tons Retail packages (resale): Regular type, single-ply1,000 s	8	103.7	169.2	8	120.9	167.5	
26764 37	tons Facial tissue type, 2-ply or more1,000 s	11	129.3	233.1	9	123.3	156.3	
	Toilet tissue: Rolls and ovals: Industrial:	11	161.9	363.2	13	121.7	202.4	
26764 41 26764 43	Facial tissue type, 2-ply or more1,000 s tons Regular type, single-ply1,000 s	14	*391.9	566.6	14	*259.7	319.6	
20704 43	Retail packages (resale):	15	332.1	458.1	9	342.2	450.0	
26764 45	Facial tissue type, 2-ply or more1,000 s	15	699.3	1 152.1	(NA)	980.6	1 439.1	
26764 47 26764 55	Regular type, single-ply1,000 s tons Interfolded and flat package1,000 s	14	693.1	1 448.5				
20704 55	Towels (rolled, folded, or interfolded):	3	(13)	(13)	2	(D)	(14)	
26764 71	Industrial1,000 s tons	16	*754.1	891.2	16	473.5	525.5	
26764 76	Retail packages (resale): Single-ply1,000 s tons	11	431.0	627.8	8	486.8	544.3	
26764 77	2-ply or more1,000 s tons	15	633.2	1 329.3	11	747.5	803.0	
26764 81	Wipers (windshield, industrial, and lithographic plate), except nonwoven1,000 s							
26764 99	tons Other sanitary paper products, including absorbent pads, toilet seat covers, bibs, headrests, tray covers, etc1,000 s	7	73.2	108.6	8	98.2	220.4	
26764 00	tons Sanitary tissue paper products, n.s.k.	21 (NA)	<sup>13</sup> 177.0 (X)	<sup>13</sup> 180.9 53.9	18 (NA)	(S) (X)	<sup>14</sup> 131.4 382.8	
26760 26760 00 26760 02	Sanitary paper products, n.s.k Sanitary paper products, n.s.k. <sup>15</sup> Sanitary paper products, n.s.k. <sup>16</sup>	(NA) (NA) (NA)	(X) (X) (X)	232.5 230.1 2.5	(NA) (NA) (NA)	(X) (X) (X)	115.6 92.5 23.2	
2677- —	ENVELOPES							
	Total	(NA)	(X)	2 657.4	(NA)	(X)	2 499.5	
26770 26770 10	Envelopes, commercial, all types and materials Clasp and string-and-button types, including mailing mil units Mailing envelopes, except clasp and string-and-button	(NA) 30	(X) 2 257.9	2 657.4 100.6	(NA) (NA)	(X) (NA)	2 499.5 (NA)	
26770 21 26770 22 26770 40	types: White or colored mailing envelopes mil units Kraft mailing envelopes mil units All other compression envelopes including pedded	87 58	121 613.1 *10 054.2	1 627.0 231.9	(NA) (NA)	(NA) (NA)	(NA) (NA)	
26770 40 26770 00	All other commercial envelopes, including padded shipping envelopes	45 (NA)	*13 811.3 (X)	289.7 383.7	(NA) (NA)	(NA) (X)	(NA) (NA)	
26770 02	Envelopes, n.s.k. <sup>5</sup>	(NA)	(X)   (X)	24.5	(NA)	(X)	76.7	

#### MANUFACTURES-INDUSTRY SERIES

# CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-27

TIPS UPF [APS\_PSB,C\_BROOKS] 6/12/95 15:21:59 EPCV23 TLP:26C.BTI:60 6/12/95 13:55:28 DATA:NONE UPF:92MFFL\_PUBS:26CDAT.UPF PAGE: 19 TSF:26C\_92.DAT;2 6/12/95 13:55:49 UTF:26C\_93.DAT;8 6/12/95 15:19:25 META:TIPS96-09131893.DAT;1 6/12/95 15:19:29

# 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]

			1992		1987			
		Number of	Product s	hipments <sup>1</sup>	Number of Product shipments <sup>1</sup>			
Product code	Product	companies with			companies with			
		shipments of \$100,000		Value	shipments of \$100,000		Value	
		or more	Quantity <sup>2</sup>	(million dollars)	or more	Quantity <sup>2</sup>	(million dollars)	
2678- —	STATIONERY, TABLETS, AND RELATED PRODUCTS							
	Total	(NA)	(X)	1 277.9	(NA)	(X)	1 115.2	
26781 26781 11	Stationery Boxed stationery and portfolios	(NA) 31	(X) (X)	333.3 106.9	(NA) (NA)	(X) (X)	283.2 (NA)	
26781 13	Wedding and social announcements, paper, cards, and envelopes	15	(X)	84.5	(NA)	(X)	(NA)	
26781 21	All other, including packaged paper and envelopes, noncommercial	22		106.0	(NA)	(X)	(NA)	
26781 00	Stationery, n.s.k.	(NA)	(X) (X)	36.0	(NA)	(X)	(NA)	
26782	Tablets, pads, and related products Tablets and pads:	(NA)	(X)	818.5	(NA)	(X)	705.9	
26782 12	8 1/2 inches by 11 inches, and 8 1/2 inches by 14 inches, except columnar mil units	22	(S)	66.1	(NA)	(NA)	(NA)	
26782 13 26782 21 26782 35	Columnar, including bound and wire bound mil units All other, tablets and pads mil units Notebooks, bound with wire (except columnar), staples, plastics, etc. (including composition, memo,	9 40	(S) (S) (S)	19.2 137.9	(NA) (NA)	(NA) (NA)	(NA) (NA)	
26782 45	and stenographic) mil units mil units tooseleaf fillers, school and commercial types	34	(S)	222.4	(NA)	(NA)	(NA)	
26782 51	(quantity is on 100-sheet basis) mil units Wrapped ream paper (exclude looseleaf fillers, sensitized photographic and photocopy paper, and	17	(S)	101.1	(NA)	(NA)	(NA)	
26782 98	paper for fax machines) mil units mil units there are a second to the second	13 20	*73.2	87.4 25.7	(NA) (NA)	(NA) (NA)	(NA) (NA)	
26782 00	Tablets, pads, and related products, n.s.k.	(NA)	(S) (X)	158.6	(NA)	(X)	(NA)	
26780 26780 00 26780 02	Stationery, tablets, and related products, n.s.k. Stationery, tablets, and related products, n.s.k. <sup>15</sup> Stationery, tablets, and related products, n.s.k. <sup>16</sup>	(NA) (NA) (NA)	(X) (X) (X)	126.1 109.9 16.2	(NA) (NA) (NA)	(X) (X) (X)	126.1 76.8 49.4	
2679- —	CONVERTED PAPER PRODUCTS, N.E.C.							
	Total	(NA)	(X)	4 152.9	(NA)	(X)	3 385.5	
26791 26791 22	Wallcoverings Paper with less than 2 mils of coating Paperbacked, coated, or laminated with 2 mils or more of plastics:	(NA) 16	(X) (X)	460.1 143.8	(NA) (NA)	(X) (X)	530.2 214.0	
26791 26 26791 28	Prepasted Nonpasted Fabric-backed, coated, or laminated:	7 16	(X) (X)	48.0 21.9	6 13	(X) (X)	38.2 23.8	
26791 34 26791 36	Woven Nonwoven	11 9	(X) (X)	131.7 92.4	]			
26791 41	Other wallcoverings, including scenic and panel decorations, but excluding those that contain no		0.0		- (NA)	(X)	222.4	
26791 00	paper and/ or fabrics Wallcoverings, n.s.k	6 (NA)	(X) (X)	3.8 18.5	(NA)	(X)	31.8	
26792	Gift wrap paper Retail counter items, all types and weights:	(NA)	(X)	602.2	(NA)	(X)	591.7	
26792 82	Rolls1,000 s	9	(S)	252.7	25	(S)	479.1	
26792 91	Folds 1,000 s tons	8	(S)	183.5	13	(S)	91.2	
26792 96	Other paper gift wrapping, including counter rolls and flat sheets for stores' own use1,000 s	, i i i i i i i i i i i i i i i i i i i	.,	10010			0.112	
26792 00	tons Gift wrap paper, n.s.k	8 (NA)	(S) (X)	153.5 12.6	5 (NA)	3.5 (X)	19.0 2.4	
26793	Paper supplies for business machines and other miscellaneous unprinted paper office supplies, n.e.c.			442.2			220.0	
26793 11	Rolls for adding and other business machines, except rolls for facsimile and photocopy machines	(NA) 18	(X) (S)	413.2 182.4	(NA)	(X)	228.6	
26793 31	Other, including safety paper, facsimile paper, manifold carbon paper sets, teletype paper, etc.	18	(3) (X)	162.3	- 39	(X)	228.6	
26793 00	Paper supplies for business machines and other miscellaneous unprinted paper office supplies, n.e.c., n.s.k.	(NA)	(X) (X)	68.5			220.0	
26794	Molded pulp goods Molded pulp goods, including egg cartons, florist pots,	(NA)	(X)	354.4	(NA)	(X)	272.9	
26794 00	food trays, etc.	12	(X)	354.4	14	(X)	272.9	
26795 26795 21	Other converted paper and paperboard products Party and holiday goods and accessories (novelties, decorations (except crepe paper), party hats,	(NA)	(X)	1 672.3	(NA)	(X)	1 227.7	
26795 31	displays, etc.) Cellulose insulation	21 32	(X) (X)	149.0 56.9	(NA) 28	(X) (X)	169.5 58.4	
26795 41	Miscellaneous paper products: Doilies, place mats, and tray doilies (or tray covers)	12	**20.1	54.3	5	(9)	44.8	
26795 48	Folders and mounts, all types, except file folders Paper filters:	17	(X)	67.3	11	(S) (X)	44.0	
26795 51 26795 55	Coffee All other	6 11	(X) (X)	97.9 18.5	5 4	(X) (X)	65.0 10.9	
26795 61	Paper wrapping products, not elsewhere classified, including creped wadding and crepe paper (except fine crepe paper)	30	(X)	82.1	18	(X)	61.8	

See footnotes at end of table.

# 26C-28 CONVERTED PAPER AND PAPERBOARD PRODUCTS

# 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]

			1992		1987			
		Number of	Product shipments <sup>1</sup>		Number of companies	Product shipments <sup>1</sup>		
Product code	Product	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	
2679- —	CONVERTED PAPER PRODUCTS, N.E.C Con.							
26795 26795 98	Other converted paper and paperboard products—Con. Miscellaneous paper products—Con. Other misc. paper and board products, including fine crepe paper, laminated and tiled wallboard,							
26795 00	unprinted tags, etc Other converted paper and paperboard products,	201	(X)	1 007.3	(NA)	(X)	666.3	
	n.s.k	(NA)	(X)	139.1	(NA)	(X)	110.9	
26790 26790 00 26790 02	Converted paper products, n.e.c., n.s.k. Converted paper products, n.e.c., n.s.k. <sup>11</sup> Converted paper products, n.e.c., n.s.k. <sup>12</sup>	(NA) (NA) (NA)	(X) (X) (X)	650.8 582.4 68.4	(NA) (NA) (NA)	(X) (X) (X)	534.4 392.3 142.2	
		1	1	1	1	1	r	

<sup>1</sup>Data reported by all producers, not just those with shipments of \$100,000 or more. <sup>2</sup>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). <sup>3</sup>Data for 1987 are not completely comparable at the four-digit product level due to the 1987 Standard Industrial Classifications (SIC) change which split old Industry 2641, Paper Coating and Glazing, into new industries 2671 and 2672. The "n.s.k." for industries 2671 and 2672 is included in industry 2672 since the information needed to correctly classify the "n.s.k." is not available. <sup>4</sup>Typically for establishments with 15 employees or more. <sup>5</sup>Typically for establishments with 15 employees. <sup>6</sup>For 1987, product codes 26724 55 and 26724 56 were included in product code 26724 69. <sup>7</sup>Data for 1987 are not completely comparable at the four-digit product level due to the 1987 Standard Industrial Classification (SIC) change which split old Industry 2643, Bags, Except Texitle Bags, into new industries 2673 and 2674. The "n.s.k." for industries 2673 and 2674 is included in industry 2673 since the information needed to correctly classify the "n.s.k." is not available.

available. <sup>8</sup>Typically for establishments with 20 employees or more.

<sup>6</sup> Lypically for establishments with 20 employees or more.
 <sup>9</sup> Typically for establishments with less than 20 employees.
 <sup>10</sup> For 1987, product code 26752 71 is included with product code 26752 97.
 <sup>11</sup> Typically for establishments with 5 employees or more.
 <sup>13</sup> For 1992, product code 26764 55 is included with product code 26764 99.
 <sup>14</sup> For 1997, product code 26764 55 is included with product code 26764 99.
 <sup>15</sup> Typically for establishments with 10 employees or more.

<sup>16</sup>Typically for establishments with less than 10 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
26711, SINGLE-WEB PAPER, COATED ROLLS AND SHEETS, INCLUDING WAXED, FOR PACKAGING USES			26712, SINGLE-WEB FILM, COATED ROLLS AND SHEETS, INCLUDING COEXTRUDED, FOR PACKAGING USES—Con.		
United States	822.7	474.4	Wisconsin	318.2	(NA)
California Illinois Michigan New Jersey	14.5 33.7 59.6 27.3	14.5 17.0 27.1 14.2	26713, PAPER/ PAPER MULTIWEB LAMINATED ROLLS AND SHEETS FOR PACKAGING USES		
Ohio	52.7	32.6	United States	189.3	249.1
Pennsylvania Wisconsin	16.3 231.2	28.3 170.6	Missouri	6.1	(NA)
26712, SINGLE-WEB FILM, COATED ROLLS AND SHEETS, INCLUDING COEXTRUDED, FOR PACKAGING USES			26714, MULTIWEB LAMINATED ROLLS AND SHEETS, EXCEPT PAPER/PAPER AND FOIL, FOR PACKAGING USES		
United States	993.4	879.1	United States	1 349.9	857.6
United States			California	40.9	31.9
California	46.9 46.4	11.3	Illinois	159.8 56.9	87.0
Illinois Indiana	40.4	160.0	Minnesota New Jersey	43.9	(NA) 46.8
Missouri	20.2	18.8	New York	8.7	(NA)
New Jersey	13.0	38.2	Pennsylvania	77.8	56.5
New York	24.1	40.4	Texas	73.1	(NA)
Ohio	28.8	(NA)	Wisconsin	234.3	70.3

#### MANUFACTURES-INDUSTRY SERIES

#### CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-29

TIPS UPF [APS\_PSB\_C\_BROOKS] 6/12/95 15:21:59 EPCV23 TLP:26C.BTI;60 6/12/95 13:55:28 DATA:NONE UPF:92MFFL\_PUBS:26CDAT.UPF PAGE: 21 TSF:26C\_92.DAT;2 6/12/95 13:55:49 UTF:26C\_93.DAT;8 6/12/95 15:19:25 META:TIPS96-09131893.DAT;1 6/12/95 15:21:29

# 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	Product class and geographic area	1992 value of product shipments	1987 value of product shipments
26721, PRINTING PAPER COATED AT ESTABLISHMENTS OTHER THAN WHERE PAPER WAS PRODUCED			26733, SPECIALTY BAGS AND LINERS, MULTIWEB LAMINATIONS AND FOIL	400.0	007.7
United States	_ 238.6	464.5	United States	486.2	387.7
		()	California	6.5 86.1	(NA) 19.8
CaliforniaIndiana		(NA) (NA)	Missouri	22.3	(NA)
Wisconsin	- 100.2	108.5	New Jersey New York	13.2	22.6 (NA)
			Pennsylvania Wisconsin	45.6 5.8	(NA) (NA)
26722, GUMMED PRODUCTS				5.0	
United States	- 236.7	218.4	26741, GROCERS' BAGS AND SACKS AND		
Wisconsin	67.5	81.4	VARIETY AND SHOPPING BAGS,		
	-		UNCOATED PAPER		
26723, PRESSURE-SENSITIVE PRODUCTS			United States	1 126.5	1 141.8
United States	4 756.0	3 100.0	California	48.7	64.2
United States	- 4750.0	5 100.0	Florida	57.3 90.6	108.8 (NA)
California		123.4 388.2	New Jersey	90.2	(NA)
Indiana	_ 239.7	32.9	New York Oregon	76.2	(NA) 45.9
Massachusetts Michigan		114.6 (NA)	Texas	93.0	87.1
-					
Missouri New Jersey		(NA) 144.2	26742, SHIPPING SACKS AND MULTIWALL BAGS, ALL MATERIALS EXCEPT TEXTILES		
New York Ohio	_ 156.3	121.2 316.0	United States	1 452.9	1 196.6
Pennsylvania	_ 359.5	264.3	United States	1 452.9	1 190.0
Tennessee Texas		26.4	Arkansas Florida	263.9 58.6	188.8 (NA)
Wisconsin		47.3	Georgia	109.5	100.1
			Illinois Missouri	97.2 108.0	94.3 73.6
26724, OTHER COATED AND PROCESSED PAPERS, EXCEPT FOR PACKAGING USES			North Carolina	33.7	(NA)
United States	- 1 516.0	1 200.0	26751, DIE-CUT PAPER AND PAPERBOARD OFFICE SUPPLIES		
California		66.9	United States	912.0	892.7
Illinois Massachusetts		39.6 151.2			
Missouri New York		(NA) 31.8	California	116.1 53.7	145.8
North Carolina	- 15.4	(NA) 38.5	Illinois Maryland	90.6 6.7	47.3 (NA)
Ohio Rhode Island	_ 20.4	(NA)	Minnesota	70.0	(NA)
Washington	- 16.3	(NA)	New Jersey	28.9	81.8
			New York	41.3 89.1	85.3 47.8
26731, SPECIALTY BAGS AND LINERS, SINGLE-WEB PAPER, COATED			Ohio Pennsylvania	47.2	44.5
United States	258.9	262.4	Texas Wisconsin	51.4 32.8	58.3 25.9
California	- 18.9 - 35.3	14.8 (NA)	26752, DIE-CUT PAPER AND PAPERBOARD		
New York	- 21.1	58.1	PRODUCTS, EXCEPT OFFICE SUPPLIES		
Texas	- 24.5	8.4	United States	123.8	164.4
26732, SPECIALTY BAGS AND LINERS,			California	17.4	17.3
SINGLE-WEB FILM			Illinois	4.7	15.6
United States	4 166.6	2 856.9	Ohio Pennsylvania	11.1 6.6	(NA) 12.8
			Rhode Island	6.6	(NA)
California		282.9 57.3			
Georgia Illinois	_ 307.2	297.9 248.4	26753, PASTED, LINED, LAMINATED, OR SURFACE-COATED PAPERBOARD		
Indiana		122.8			
lowa	_ 33.0	(NA)	United States	730.6	457.6
Kansas	- 42.0	(NA)	Georgia	86.4	64.3
Kentucky Louisiana		90.1 23.8	Michigan	15.1	(NA) (NA)
Maryland		(NA)	New York Texas	20.5	8.5 (NA)
Massachusetts		67.3	10/40	23.2	
Michigan Minnesota	- 64.9	(NA) 51.3	26761, SANITARY NAPKINS AND TAMPONS		
Missouri	_ 91.3	(NA)	United States	1 673.1	1 350.0
New Jersey	- 203.8	191.7		1 0/3.1	1 330.0
New York	- 264.5	244.9			
North Carolina Ohio	_ 126.0	82.5 47.9	26763, DISPOSABLE DIAPERS, EXCEPT		
Pennsylvania South Carolina	- 162.7	83.3 (NA)	ADULT, INCLUDING DISPOSABLE TRAINING PANTS		
Tennessee	- 67.2	64.9			
Texas Washington	- 326.3 - 56.7	246.8 45.1	United States	4 146.3	3 202.9
Wisconsin			California	539.1	457.0

See footnotes at end of table.

## 26C-30 CONVERTED PAPER AND PAPERBOARD PRODUCTS

# 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	Product class and geographic area	1992 value of product shipments	1987 value of product shipments
26764, SANITARY TISSUE PAPER PRODUCTS United States	<b>8 887.8</b> 446.3	<b>6 503.2</b> 366.7	26793, PAPER SUPPLIES FOR BUSINESS MACHINES AND OTHER MISCELLANEOUS UNPRINTED PAPER OFFICE SUPPLIES, N.E.C.		
Michigan Minnesota	34.6 8.4	(NA) (NA)	United States	413.2	228.6
New York Ohio Washington	240.8 6.4 610.0	220.8 7.3 550.0	California Massachusetts Pennsylvania	46.0 25.4 16.0	10.8 12.2 9.2
Wisconsin	2 119.8	1 832.3	Texas	30.9	12.4
26781, STATIONERY			26794, MOLDED PULP GOODS		
United States	333.3	283.2	United States	354.4	272.9
California Illinois Massachusetts	31.8 28.8 18.3	14.5 56.7 20.3	Wisconsin	4.5	(NA)
Michigan New York	6.7 5.1	(NA) 5.2	26795, OTHER CONVERTED PAPER AND PAPERBOARD PRODUCTS		
Ohio Texas	21.9 4.8	5.4 14.3	United States	1 672.3	1 227.7
26782, TABLETS, PADS, AND RELATED PRODUCTS United States	818.5	705.9	California Connecticut Florida Georgia	79.0 34.6 16.3 86.9	127.4 (NA) 10.9 61.0
California	41.9	47.1	Illinois	123.6 41.5	112.3 (NA)
Maryland Masyland New Jersey New York	2.7 54.0 18.1 40.6	8.1 71.3 26.3 38.0	Indiana Iowa Kansas Kentucky Louisiana	41.5 5.9 49.6 17.0 22.3	(NA) (NA) 52.5 3.7 (NA)
Pennsylvania Wisconsin	79.3 33.9	86.0 35.5	Maryland Massachusetts	8.9 70.8	(NA) (NA) 48.9
26791, WALLCOVERINGS			Michigan Minnesota	73.4 18.3	49.1 (NA)
United States	460.1	530.2	New Hampshire	7.4	(NA)
Florida Illinois New Jersey Pennsylvania	5.9 7.9 43.7 56.0	5.6 18.3 104.2 60.1	New Jersey New York North Carolina Ohio Pennsylvania	66.1 94.8 47.3 123.7 195.0	35.8 79.2 29.7 144.1 146.0
26792, GIFT WRAP PAPER			South Carolina Texas	85.4 18.8	(NA) 21.3
United States	602.2	591.7	Virginia Washington	80.5	56.2 24.2
Tennessee	226.0	151.2		133.9	56.7

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

# 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 <sup>1</sup>	1990 <sup>1</sup>	1989 <sup>1</sup>	1988 <sup>1</sup>	1987	1982	1977
<b>2671-</b> 26711	Paper coating and laminating, packaging Single-web paper, coated rolls and sheets, including waxed, for	3 530.0	3 069.6	2 979.9	2 850.1	2 712.6	2 460.1	1 329.2	(NA)
26712	packaging uses Single-web film, coated rolls and sheets, including coextruded, for	822.7	626.3	637.1	644.4	610.3	474.4	433.9	(NA)
	packaging uses	993.4	1 001.4	1 010.8	1 020.6	904.2	879.1	168.2	(NA)
26713	Paper/paper multiweb laminated rolls and sheets for packaging uses	189.3	241.9	235.4	207.4	228.5	249.1	182.3	(NA)
26714	Multiweb laminated rolls and sheets, except paper/paper and foil,		-		-		-		. ,
26710	for packaging uses Paper coating and laminating, packaging, n.s.k	1 349.9 174.7	1 075.7 124.3	976.1 120.7	920.8 56.9	965.9 3.6	857.6 (NA)	544.8 (NA)	(NA) (NA)
<b>2672-</b> 26721	Paper coating and laminating, n.e.c.	7 420.3	6 933.2	6 678.3	6 674.1	6 148.2	5 497.7	3 574.0	(NA)
26721 26722 26723 26724 26720	Printing paper coated at establishments other than where paper was produced	238.6 236.7 4 756.0 1 516.0 672.9	360.3 246.2 4 151.7 1 509.5 665.5	453.6 249.2 3 882.3 1 463.6 629.5	485.7 245.3 3 896.3 1 380.2 666.6	413.7 230.6 3 642.9 1 300.9 560.1	464.5 218.4 3 100.0 1 200.0 514.7	241.6 211.9 1 867.6 900.3 352.6	172.0 187.6 1 177.7 (NA) (NA)
<b>2673-</b> 26731 26732 26733 26733	Bags: plastics, laminated, and coated Specialty bags and liners, single-web paper, coated Specialty bags and liners, single-web film Specialty bags and liners, multiweb laminations and foil Bags: plastics, laminated, and coated, n.s.k	<b>5 385.0</b> 258.9 4 166.6 486.2 473.3	<b>4 806.4</b> 282.0 3 684.0 331.4 509.0	<b>5 127.8</b> 335.5 3 834.8 428.9 528.4	<b>5 117.3</b> 354.9 3 836.7 405.8 519.9	<b>4 557.5</b> 271.5 3 413.0 424.7 448.2	<b>3 936.5</b> 262.4 2 856.9 387.7 429.6	<b>2 762.6</b> 205.5 1 964.0 222.1 371.0	(NA) (NA) (NA) (NA)
<b>2674-</b> 26741	Bags: uncoated paper and multiwall Grocers' bags and sacks and variety and shopping bags, uncoated	2 614.7	2 527.9	2 621.3	2 638.8	2 574.2	2 360.6	2 010.3	(NA)
26741 26742 26740	paper	1 126.5 1 452.9 35.3	1 045.1 1 432.9 49.9	1 175.4 1 398.2 47.8	1 249.4 1 352.7 36.7	1 167.2 1 375.2 31.9	1 141.8 1 196.6 22.1	1 163.8 846.5 (NA)	(NA) 672.6 (NA)
2675-	Die-cut paper and paperboard	1 942.2	2 206.6	2 093.2	1 962.0	1 866.2	1 701.1	1 605.1	1 034.3

See footnotes at end of table.

#### MANUFACTURES-INDUSTRY SERIES

#### CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-31

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

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

Product code	Product class	1992	1991 <sup>1</sup>	1990 <sup>1</sup>	1989 <sup>1</sup>	1988 <sup>1</sup>	1987	1982	1977
<b>2675-</b> 26751 26752 26753 26750	Die-cut paper and paperboard – Con. Die-cut paper and paperboard office supplies Die-cut paper and paperboard products, except office supplies Pasted, lined, laminated, or surface-coated paperboard Die-cut paper and paperboard, n.s.k.	912.0 123.8 730.6 175.8	945.9 221.2 646.3 393.2	926.7 199.3 629.4 337.8	891.0 202.0 565.3 303.6	947.5 183.8 529.8 205.1	892.7 164.4 457.6 186.4	597.9 199.4 684.8 123.0	- 484.9 438.4 111.0
<b>2676-</b> 26761 26763	Sanitary paper products	<b>14 939.7</b> 1 673.1	<b>14 755.7</b> 1 421.2	<b>14 007.5</b> 1 360.5	<b>13 637.2</b> 1 313.7	<b>11 853.4</b> 1 262.2	<b>11 171.7</b> 1 350.0	<b>8 373.5</b> 915.1	<b>4 562.6</b> 588.7
26764 26760	pants Sanitary tissue paper products Sanitary paper products, n.s.k.	4 146.3 8 887.8 232.5	4 686.6 8 562.1 85.8	4 105.9 8 449.0 92.1	3 952.4 8 262.1 108.9	3 223.8 7 249.9 117.5	3 202.9 6 503.2 115.6	2 158.5 5 259.8 40.1	- 3 948.3 25.6
<b>2677-</b> 26770	Envelopes Envelopes, commercial, all types and materials	<b>2 657.4</b> 2 657.4	<b>2 492.3</b> 2 492.3	<b>2 602.4</b> 2 602.4	<b>2 603.7</b> 2 603.7	<b>2 650.2</b> 2 650.2	<b>2 499.5</b> 2 499.5	<b>1 751.6</b> 1 751.6	<b>980.6</b> 980.6
<b>2678-</b> 26781 26782 26780	Stationery, tablets, and related products Stationery Tablets, pads, and related products Stationery, tablets, and related products, n.s.k	<b>1 277.9</b> 333.3 818.5 126.1	<b>1 237.1</b> 398.4 732.8 105.8	<b>1 197.2</b> 342.3 748.9 105.9	<b>1 156.8</b> 307.1 747.6 102.0	<b>1 166.1</b> 304.2 735.7 126.2	<b>1 115.2</b> 283.2 705.9 126.1	<b>959.2</b> 261.8 603.1 94.4	<b>630.5</b> 141.2 425.5 63.8
<b>2679-</b> 26791 26792 26793	Converted paper products, n.e.c. Wallcoverings Gift wrap paper Paper supplies for business machines and other miscellaneous	<b>4 152.9</b> 460.1 602.2	<b>4 122.0</b> 557.6 626.4	<b>3 963.8</b> 547.7 621.0	<b>3 626.9</b> 517.7 591.4	<b>3 685.9</b> 533.8 571.1	<b>3 385.5</b> 530.2 591.7	<b>2 678.4</b> 396.9 389.6	<b>1 988.4</b> 306.5
26794 26795 26790	Molded pulp goods of the supplies, n.e.c. Molded pulp goods Other and paperboard products Other converted paper and paperboard products Converted paper products, n.e.c., n.s.k.	413.2 354.4 1 672.3 650.8	347.5 391.2 1 532.8 666.5	366.8 370.2 1 490.2 568.1	339.9 326.1 1 364.3 487.6	255.8 288.4 1 475.8 561.0	228.6 272.9 1 227.7 534.4	221.8 242.3 1 082.6 345.2	239.6 <sup>2</sup> (NA) 242.7

<sup>1</sup>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. <sup>2</sup>For 1977, product class 26795 was included with product classes 26792 and 26793.

# Table 7. Materials Consumed by Kind: 1992 and 1987

[Includes quantity and 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]

		19	92	19	987
Material code	Material	Quantity <sup>1</sup>	Delivered cost (million dollars)	Quantity <sup>1</sup>	Delivered cost (million dollars)
	INDUSTRY 2671, PAPER COATED AND LAMINATED, PACKAGING				
	Materials, ingredients, containers, and supplies	(X)	1 975.5	(X)	1 359.1
262108 282104	Paper1,000 s tons Plastics resins consumed in the form of granules, pellets,	*515.9	506.0	463.0	366.8
308007	powders, liquids, etcmil lb Plastics products consumed in the form of sheets, rods,	*525.3	330.6	**520.9	223.3
335335 339915	tubes, and other shapes Aluminum foil, plainmil lb_	(X) 30.8 (X)	513.0 47.8 ( <sup>2</sup> )	(X) **25.9 (X)	312.5 34.9 ( <sup>3</sup> )
289101 289301 265001	Glues and adhesives	(X) (S) (X)	47.4 99.3 29.2	(X) (S) (X)	35.8 63.9 15.9
970099 971000	All other materials and components, parts, containers, and supplies Materials, ingredients, containers, and supplies, n.s.k. <sup>4</sup>	(X) (X)	<sup>2</sup> 273.0 129.2	(X) (X)	<sup>3</sup> 207.4 98.6
	INDUSTRY 2672, PAPER COATED AND LAMINATED, N.E.C.				
	Materials, ingredients, containers, and supplies	(X)	3 866.7	(X)	2 676.3
262108 282104	Paper1,000 s tons Plastics resins consumed in the form of granules, pellets,	**1 421.9	1 526.0	(S)	1 059.9
308007	powders, liquids, etcmil lb Plastics products consumed in the form of sheets, rods,	(S)	192.4	(S)	134.5
335335 339915	Aluminum foil, plainmil lb	(X) (S) (X)	178.3 22.4 ( <sup>2</sup> )	(X) (S) (X)	97.7 5.7 ( <sup>3</sup> )
289101 289301 265001	Glues and adhesives	(X) (S) (X)	329.0 33.2 90.5	(X) (S) (X)	243.5 23.8 84.1
970099 971000	All other materials and components, parts, containers, and supplies Materials, ingredients, containers, and supplies, n.s.k. <sup>4</sup>	(X) (X)	<sup>2</sup> 1 015.5 479.3	(X) (X)	<sup>3</sup> 646.9 380.2
S	ee footnotes at end of table.				

#### 26C-32 CONVERTED PAPER AND PAPERBOARD PRODUCTS

# Table 7. Materials Consumed by Kind: 1992 and 1987-Con.

[Includes quantity and 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]

		19	92	1987		
Material code	Material	Quantity <sup>1</sup>	Delivered cost (million dollars)	Quantity <sup>1</sup>	Delivered co (milli dolla	
	INDUSTRY 2673, BAGS: PLASTICS, LAMINATED, AND COATED					
	Materials, ingredients, containers, and supplies	(X)	2 574.6	(X)	2 128	
2108 2104	Paper 1,000 s tons Plastics resins consumed in the form of granules, pellets,	(S)	107.8	(S)	16	
8007	powders, liquids, etcmil lb Plastics products consumed in the form of sheets, rods	*3 453.5	1 200.6	*2 762.2	1 05	
5335 9915	tubes, and other shapes	(X) **10.0 (X)	325.3 20.5 ( <sup>2</sup> )	(X) (D) (X)	15	
9101 9301 5001	Glues and adhesives Printing inks (complete formulations)mil Ib Paperboard containers, boxes, and corrugated paperboard	(X) (S) (X)	39.0 69.8 182.6	(X) **37.1 (X)	2 { 1	
0099 1000	All other materials and components, parts, containers, and supplies	(X) (X)	<sup>2</sup> 239.2 389.9	(X) (X)	<sup>3</sup> 22 31	
	INDUSTRY 2674, BAGS: UNCOATED PAPER AND MULTIWALL					
	Materials, ingredients, containers, and supplies	(X)	1 716.2	(X)	1 51	
2108	Paper 1,000 s tons	*2 384.0	1 316.4	2 529.7	1 20	
2104	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc	*227.0	91.5	244.0	7	
8007	Plastics products consumed in the form of sheets, rods, tubes, and other shapes	(X)	43.7	(X)	2	
5335 9915	Metal powdersmil ib	(X)	(2)	(D) (X)		
9101 9301 5001	Glues and adhesives Printing inks (complete formulations)mil Ib Paperboard containers, boxes, and corrugated paperboard	(X) *39.7 (X)	43.9 63.8 25.5	(X) **31.3 (X)		
0099 1000	All other materials and components, parts, containers, and supplies Materials, ingredients, containers, and supplies, n.s.k. <sup>4</sup>	(X) (X)	<sup>2</sup> 95.7 35.6	(X) (X)	3	
	INDUSTRY 2675, DIE-CUT PAPER AND BOARD					
	Materials, ingredients, containers, and supplies	(X)	1 060.4	(X)	1 0	
0003 8100	Paper and paperboard, except boxes and containers 1,000 s tons Plastics film and sheets, unsupported	*1 249.7	727.2	(NA)	7.	
2188 9101	Glassine film Glues and adhesives mil lb_	(X) (X) (S) (X)	47.6 2.2 13.8	(X) (X) (S) (X)		
5001 0099	Paperboard containers, boxes, and corrugated paperboard	(X)	29.7	(X)		
1000	Supplies Materials, ingredients, containers, and supplies, n.s.k. <sup>4</sup>	(X) (X)	112.5 127.4	(X) (X)	3 1	
	INDUSTRY 2676, SANITARY PAPER PRODUCTS					
	Materials, ingredients, containers, and supplies	(X)	7 087.0	(X)	5 2	
2108 1105 1131	Paper	4 357.7 1 274.9	3 340.8 654.7	*3 776.4 *857.2	2 5 4	
2015	Wood chips, slabs, cores, sawdust, bark, and mill residues 1,000 s tons	(D) (D)	( <sup>5</sup> ) ( <sup>5</sup> )	(NA) (NA)		
005	Wastepaper, all types 1,000 s tons	446.7	64.7	(NA)		
101 104	Glues and adhesivesmil lb Plastics resins consumed in the form of granules, pellets, powders, liquids, etcmil lb	176.7 149.6	149.8 176.0	*120.6 (S)	1	
007	Plastics products consumed in the form of sheets, rods, tubes, and other shapes	(X)	333.0	(3) (X)	2	
710	Nonwoven fabrics mil sq yd Packaging paper and plastics film, coated, laminated,	*11 196.8	483.6	**5 095.0	2	
001 099	printed, etc. Paperboard containers, boxes, and corrugated paperboard All other materials and components, parts, containers, and	(X) (X)	371.1 437.7	(X) (X)	4	
000	supplies Materials, ingredients, containers, and supplies, n.s.k. <sup>4</sup>	(X) (X)	<sup>5</sup> 925.2 150.4	(X) (X)	3c 1	
	INDUSTRY 2677, ENVELOPES					
	Materials, ingredients, containers, and supplies	(X)	1 273.8	(X)	1 2	
003 100	Paper and paperboard, except boxes and containers 1,000 s tons Plastics film and sheets, unsupported	**1 111.2 (X)	788.3 34.6	(NA) (X)	8	
2188 9101	Glassine film Glues and adhesives mil lb	(X) (X) (S) (X)	17.1 36.5	(X) *73.7		
5001	Paperboard containers, boxes, and corrugated paperboard All other materials and components, parts, containers, and	(X)	72.0	(X)		
0099	Supplies Materials, ingredients, containers, and supplies, n.s.k. <sup>4</sup>	(X) (X)	102.6	(X) (X)	<sup>3</sup> 1	

See footnotes at end of table.

## MANUFACTURES-INDUSTRY SERIES

## CONVERTED PAPER AND PAPERBOARD PRODUCTS 26C-33

TIPS UPF [APS\_PSB,C\_BROOKS] 6/12/95 15:21:59 EPCV23 TLP:26C.BTI:60 6/12/95 13:55:28 DATA:NONE UPF:92MFFL\_PUBS:26CDAT.UPF PAGE: 25 TSF:26C\_92.DAT;2 6/12/95 13:55:49 UTF:26C\_93.DAT;8 6/12/95 15:19:25 META:TIPS96-09131893.DAT;1 6/12/95 15:21:29

# Table 7. Materials Consumed by Kind: 1992 and 1987-Con.

[Includes quantity and 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]

		19	92	1987		
Material code	Material	Quantity <sup>1</sup>	Delivered cost (million dollars)	Quantity <sup>1</sup>	Delivered cost (million dollars)	
	INDUSTRY 2678, STATIONERY PRODUCTS					
	Materials, ingredients, containers, and supplies	(X)	646.1	(X)	610.5	
260003 190005 289101 289301 229508 265001 970099 971000	Paper and paperboard, except boxes and containers 1,000 s tons Wastepaper, all types 1,000 s tons Glues and adhesives Printing inks (complete formulations) Coated or laminated fabrics, including vinyl coated Paperboard containers, boxes, and corrugated paperboard All other materials and components, parts, containers, and supplies Materials, ingredients, containers, and supplies, n.s.k.4	**594.2 (D) (X) (X) (X) (X) (X) (X) (X)	396.4 (6) 4.7 4.0 4.6 21.7 ¢46.1 168.7	*644.0 (NA) (X) (X) (X) (X) (X) (X)	420.3 (3) 2.3 2.5 (3) 30.7 345.9 108.8	
	INDUSTRY 2679, CONVERTED PAPER PRODUCTS, N.E.C.					
	Materials, ingredients, containers, and supplies	(X)	1 978.3	(X)	1 527.4	
260003 190005 289101 289301 229508 265001 970099	Paper and paperboard, except boxes and containers 1,000 s tons Wastepaper, all types 1,000 s tons Glues and adhesives Printing inks (complete formulations) Coated or laminated fabrics, including vinyl coated Paperboard containers, boxes, and corrugated paperboard All other materials and components, parts, containers, and	(6) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5	863.5 57.2 11.1 46.3 24.3 49.1	(NA) (S) (X) (X) (X) (X)	654.6 39.5 12.5 44.6 ( <sup>3</sup> ) 53.5	
971000	Supplies Materials, ingredients, containers, and supplies, n.s.k. <sup>4</sup>	(X) (X)	423.5 503.4	(X) (X)	<sup>3</sup> 258.5 464.2	

<sup>1</sup>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). <sup>2</sup>For 1992, material code 339915 was included with material code 970099. <sup>3</sup>For 1987, data for this material code were included in material code 970099. <sup>4</sup>Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form. <sup>5</sup>For 1992, material code 190005 was included with material code 970099. <sup>6</sup>For 1992, material code 190005 was included with material code 970099.

#### 26C-34 CONVERTED PAPER AND PAPERBOARD PRODUCTS

# 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 linesupervisor 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 companyowned 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 geographicallybased 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 singleestablishment 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-toyear 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 singleestablishment 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 baseyear 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, completecoverage 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, completecoverage 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 completecoverage 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	a Product	Codes That C	nanged:	1992 to 1987
1992	1987	1992	1987	1992	1987	1992	1987
26113 35	26113 00	26217 30	26217 00	26314 45	26314 00	26751 10	26751 00
26113 43	26113 00	26217 50 26217 60	26217 00 26217 00	26314 46 26314 50	26314 00 26314 00	26751 11 26751 12 26751 20	26751 00 26751 00
26114 32	26114 00	26217 68	26217 00	26314 81	26314 00	26751 20	26751 00
26114 66 26114 72	26114 00 26114 00			26314 82	26314 00 26314 00	26751 30	26751 00
26114 72	26114 00	26218 30 26218 50	26218 00	26314 88	26314 00	00770 40	00770 00
26114 78	26114 00	26218 50	26218 00	00500.00		26770 10	26770 00 26770 00
26212 15	26212 00	26218 60 26218 64	26218 00 26218 00 26218 00 26218 00	26530 98	26530 00	26770 21 26770 22	26770 00
26212 19	26212 00	26218 68	26218 00	00500 40	00500 44	26770 40	26770 00
26212 27	26212 00	26218 83	26218 00	26563 19 26563 19	26563 14 26563 16	00704.44	20704 20
26212 15	26213 00	2621 \ 11	26214 00	20303 13	20303 10	26781 11 26781 13	26781 00 26781 00
26213 15	26213 00	2621A 11 2621A 30	2621A 00	26713 20	26713 18	26781 21	26781 00
26213 15 26213 16 26213 20	26213 00	2621A 51	2621A 00 2621A 00 2621A 00	26713 20	26713 21		
26213 29	26213 00	2621A 60 2621A 73 2621A 78	2621A 00 2621A 00 2621A 00 2621A 00			26782 12	26782 00
26214 31	26214 00	2621A 73	2621A 00 2621A 00	26714 17	26714 13 26714 14	26782 13 26782 21	26782 00 26782 00
26214 32	26214 00	2621A 81	2621A 00	26714 17	26714 14	26782 35	26782 00
26214 32 26214 37 26214 41	26214 00 26214 00	2621A 88	2621A 00	26714 21	26714 16	26782 45 26782 51	26782 00
26214 41	26214 00	00045 00	00015.00	00700 40		26782 51	26782 00
26214 47 26214 48 26214 54	26214 00 26214 00	2621B 22 2621B 28	2621B 00 2621B 00	26722 12 26722 30	26722 00 26722 00	26782 98	26782 00
26214 54	26214 00	20210 20	20210 00	20122 30	20722 00	26791 22	26791 21
26214 55	26214 00	26311 10	26311 00	26722 12	26723 00	26791 22 26791 22	26791 23
26214 56	26214 00 26214 00	26311 88	26311 00	26723 13 26723 33	26723 00 26723 00	26791 34 26791 34	26791 32 26791 35
26214 60	26214 00 26214 00	26312 10	26312 00	26723 43	26723.00	26791 34 26791 36	26791 35 26791 33
26214 55 26214 55 26214 56 26214 60 26214 71 26214 73	26214 00	26312 40	26312 00	26723 45	26723 00 26723 00 26723 00 26723 00	26791 36	26791 35
26214 89	26214 00	26312 40 26312 61	26312 00	26723 53 26723 59	26723 00		
	00015.00	26312 62	26312 00	26723 61	26723 00	26793 11	26793 00
26215 31 26215 32	26215 00 26215 00	26312 63 26312 88	26312 00 26312 00	26723 75	26723 00	26793 31	26793 00
26215 32	26215 00	20312 00	20312 00	26723 81	26723 00	26795 21	26795 22
26215 58	26215 00	26314 10	26314 00	26723 85 26723 98	26723 00 26723 00	26795 21 26795 98	26795 23 26795 11
	00010.00	26314 20	26314 00	20123 30	20723-00	26795 98	26795 11
26216 11 26216 19	26216 00 26216 00	26314 30 26314 43	26314 00 26314 00	26724 69	26724 51	26795 98 26795 98	26795 35 26795 45
26216 19	26216 00	26314 43	26314 00	26724 69	26724 51 26724 59	26795 98	26795 45 26795 69
	20210 00		2001100	20121.00	28.2.50		20.00 00

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

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

1987	1992	1987	1992	1987	1992	1987	1992	
26113 00	26113 35	26217 00	26217 30	26314 00	26314 45	26751 00	26751 10	
26113 00	26113 43	26217 00	26217 50	26314 00	26314 46	26751 00	26751 11	
	20110 40	26217 00	26217 60	26314 00	26314 50	26751 00	26751 12	
6114 00	26114 32	26217 00	26217 68	26314 00	26314 81	26751 00	26751 20	
26114 00	26114 66	20217 00	20217 00	26314 00	26314 82	26751 00	26751 20	
6114 00	26114 72	26218 00	26218 30	26314 00	26314 88	20/31 00	20751 30	
				26314 00	20314 88	00770.00	00770 40	
6114 00	26114 78	26218 00	26218 50			26770 00	26770 10	
		26218 00	26218 60	26530 00	26530 98	26770 00	26770 21	
6212 00	26212 15	26218 00	26218 64			26770 00	26770 22	
26212 00	26212 19	26218 00	26218 68	26563 14	26563 19	26770 00	26770 40	
6212 00	26212 27	26218 00	26218 83	26563 16	26563 19			
				20003 10	20203 19	26781 00	26781 11	
6213 00	26213 15	2621A 00	2621A 11			26781 00	26781 13	
6213 00	26213 16	2621A 00	2621A 30	26713 18	26713 20	26781 00	26781 21	
6213 00	26213 20	2621A 00	2621A 51	26713 21	26713 20			
6213 00	26213 29	2621A 00	2621A 60			26782 00	26782 12	
0210 00	20210 20	2621A 00	2621A 73			26782 00	26782 13	
6214 00	26214 31	2621A 00	2621A 78	26714 13	26714 17	26782 00	26782 21	
26214 00	26214 32	2621A 00	2621A 81	26714 14	26714 17	26782 00	26782 35	
6214 00	26214 32	2621A 00	2621A 88	26714 16	26714 21	26782 00	26782 45	
26214 00	26214 37	2021A 00	2021A 00			26782 00	26782 51	
	26214 47	2621B 00	2621B 22	26722 00	26722 12	26782 00	26782 98	
6214 00						26782 00	20/02 90	
6214 00	26214 48	2621B 00	2621B 28	26722 00	26722 30	00704.04	00704.00	
6214 00	26214 54					26791 21	26791 22	
6214 00	26214 55	26311 00	26311 10	26723 00	26723 13	26791 23	26791 22	
6214 00	26214 56	26311 00	26311 88	26723 00	26723 33	26791 32	26791 34	
6214 00	26214 60			26723 00	26723 43	26791 33	26791 36	
6214 00	26214 71	26312 00	26312 10	26723 00	26723 45	26791 35	26791 34	
6214 00	26214 73	26312 00	26312 40	26723 00	26723 53	26791 35	26791 36	
6214 00	26214 89	26312 00	26312 61					
		26312 00	26312 62	26723 00	26723 59	26793 00	26793 11	
6215 00	26215 31	26312 00	26312 63	26723 00	26723 61	26793 00	26793 31	
6215 00	26215 32	26312 00	26312 88	26723 00	26723 75			
6215 00	26215 37	200.2.00	20012 00	26723 00	26723 81	26795 11	26795 98	
6215 00	26215 58	26314 00	26314 10	26723 00	26723 85	26795 22	26795 21	
0210 00	20210 00	26314 00	26314 10	26723 00	26723 98	26795 23	26795 21	
6216 00	26216 11	26314 00	26314 20			26795 35	26795 98	
				20724 54	20724 00	20/90 30		
6216 00	26216 19	26314 00	26314 43	26724 51	26724 69	26795 45	26795 98	
26216 00	26216 27	26314 00	26314 44	26724 59	26724 69	26795 69	26795 98	

## MANUFACTURES-INDUSTRY SERIES

## APPENDIX C C-1

TIPS [UPF] BATCH\_1674 [APS\_PPGB,C\_BROOKS] APS-PPGB 1/ 6/95 8:19 AM MACHINE: MCVX26 DATA:NONE TAPE: NOreel FRAME: 1 TSF:TIPS92-08174591.DAT;1 1/ 6/95 08:17:57 UTF:TIPS93-08174591.DAT;1 1/ 6/95 08:17:58 META:TIPS96-08174591.DAT;1 1/ 6/95 08:19:04

# Part 3. Current Industrial Reports by Product Code

[Not applicable for this report]

# **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.