

# PRODUCTS OF MANUFACTURING INDUSTRIES, BY KIND, QUANTITY, VALUE, AND NUMBER OF ESTABLISHMENTS REPORTING: 1929

## INTRODUCTION

This report has been compiled for the use of manufacturers and others, as the result of requests for a commodity report on manufactures, particularly adaptable as an aid in market analyses. It shows in detail the production, in quantity and value, of commodities as classified by the Census of Manufactures, as well as the number of establishments engaged in their production.

This report was prepared under the supervision of Robert J. McFall, chief statistician for distribution, and Le Verne Beales, chief statistician for manufactures.

While the data on which this report is predicated were collected in connection with the Census of Manufactures, 1929, this presentation is a departure from the customary portrayal of Census of Manufactures statistics. The complete list of commodities here presented appears in no other report, although the component parts appear in the industry reports of the Census of Manufactures. The cross-referenced commodity index, which makes this publication particularly convenient for reference, is likewise an innovation. In addition, the report shows the number of establishments engaged in the production of each commodity. These latter data are also supplementary to the information contained in the reports of the Census of Manufactures.

For statistics in regard to wage earners, wages paid, cost of materials, cost of fuel and purchased electric energy, power equipment, value added by manufacture, etc., for each of the 326 industries covered by the census classification, reference should be made to publications of the Census of Manufactures.

## USES OF THE STATISTICS

A list of commodities based on classifications used in connection with the Census of Manufactures, 1927, was compiled and used with considerable success by numerous manufacturers. Trade paper publicity commenting on its value resulted in a concerted demand by many manufacturers and others for a census publication containing a similar presentation, supplemented by the additional features incorporated in this report. The following suggested uses are based on the practical experiences of individuals who have made advantageous use of the list in question.

**Estimating potential market.**—Manufacturers selling to industry may readily ascertain the annual production of the commodities made from or with their products. This report, therefore, gives them facts of use in estimating the actual and potential consumption by other manufacturers of the products which they sell.

**Utilization and consumption of industrial goods.**—The data in this report will afford an aid to research departments of installation and equipment manufacturers in determining the degree of utilization of their products by industrial plants. Primary producers and raw-material distributors can use the information to assist in determining new uses for the commodities they handle or produce, and new articles to be manufactured therefrom, thus expanding their markets.

**Addition of new and related lines of products.**—Assistance is given a manufacturer who has the necessary production capacity or the desire to expand in discovering related lines of goods that can be profitably added to an existing line with slight alteration or addition to present equipment.

Profitable ways may be determined for utilization of what is now factory waste.

**Sales and promotional efforts.**—The value of contemplated sales campaigns or promotional efforts can be enhanced after a study of this report. Should such study disclose an over-developed market in one line, it may be possible to stress related lines, or to add a new line to assist in the sale of old products. A manufacturer can estimate whether his sales represent what he considers his share of the market.

A knowledge of the utilization of products gained through a study of the report will assist in formulating advertising campaigns for making direct appeals to those industries interested, through trade journals, trade organizations, and other industrial groups.

### GENERAL EXPLANATIONS

**Legal provision for biennial census.**—The Census of Manufactures for 1929 was the fifth of a series taken at 2-year intervals beginning with 1921. Legal authority for these censuses is found in section 32 of the Fourteenth Census act and in section 17 of the Fifteenth Census act. Censuses of manufactures were taken every 10 years prior to 1899 and every five years from 1899 to 1919, inclusive.

**1. Area and period covered.**—The canvass covered the 48 States and the District of Columbia. The returns relate to the calendar year 1929, or to the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business within the year.

**2. Establishments covered—type.**—This census was confined, in general, to manufacturing establishments proper, exclusive of the so-called neighborhood, household, and hand industries.

The inquiries have covered a few industries, however, which are not engaged in manufacturing in the sense in which the term is generally understood, the most important example being printing and publishing. The censuses for 1899 and for prior years covered hand trades as well as industries operated on a factory basis. Beginning with the census for 1904, the following classes of establishments have been omitted:

*a.* Establishments which were idle throughout the year or reported products valued at less than \$5,000. (See sec. 3, below.)

*b.* Establishments engaged principally in the performance of work for individual customers, such as custom tailor shops, dressmaking and millinery shops, and repair shops. (This does not apply to large establishments manufacturing to fill special orders.)

*c.* Establishments engaged in the building industries, other than those manufacturing building materials for the general trade.

*d.* Establishments engaged in the so-called neighborhood industries and hand trades, in which little or no power machinery is used, such as carpentry, blacksmithing, harness making, tinsmithing, etc.

*e.* Cotton ginneries.

*f.* Small grain mills (gristmills) engaged exclusively in custom grinding.

*g.* Wholesale and retail stores which incidentally manufacture on a small scale, particularly where it is impossible to obtain separate data for the manufacturing and for the mercantile operations.

*h.* Educational, eleemosynary, and penal institutions engaged in manufacturing.

**3. Establishments covered—size.**—These data have been obtained only from establishments reporting products to the value of \$5,000 or more.

**4. Definition of establishment.**—As a rule, the term "establishment" signifies a single plant or factory.

In some cases, however, it refers to two or more plants operated under a common ownership and located in the same city, or in the same county but in different municipalities or unincorporated places having fewer than 10,000 inhabitants. On the other hand, separate reports are occasionally obtained for different industries carried on in the same plant, in which event a single plant is counted as two or more establishments.

**5. Number of establishments.**—The number of establishments shown represents those producing the specified commodity to the value of \$1,000 or more. It covers establishments in other industries which make the commodity as a secondary product, in addition to those within the industry in which the commodity is made as a primary product.

**6. Classification by industry groups and by industries.**—The census divides manufacturing activity into 326 industry classifications and combines these industries into 16 major groups. In general this plan has been followed in presenting the statistics in this report, but in a few cases commodities or commodity groups represent combinations of industries. (See headnote, p. 6.)

**7. Value of products.**—The amounts under this heading represent, for the majority of the commodities or groups of commodities, the selling values at the factory of all products shipped or delivered, but for the commodities reported by 76 industries (indicated by footnotes), including some of the most important ones, they represent products manufactured, whether sold or not.

With few exceptions, the figures for a given commodity represent the total production of that commodity both in the industry in which it is a primary product and in other industries making it as a secondary product. On the other hand, the "value of products" of the industry in which the commodity normally belongs, as given in other reports of the Census of Manufactures, includes the value of secondary products but does not include the value of the given commodity made as a secondary product in other industries.

A number of industries of lesser importance report on a uniform questionnaire which does not call for separate entries for specified commodities manufactured. For each of these industries only the total value of products, with no breakdown, is shown in the census reports. This value necessarily includes the value of minor or secondary products made within the industry, but does not include the value of commodities normally belonging to the industry which are made as secondary products in other industries. In the majority of cases, these two values roughly counterbalance one another, so that the value of products shown does not differ greatly from the actual value of the specified class of commodities manufactured, regardless of the industry classification of the producing establishments.

The figures given in this report do not cover the value of undesignated, miscellaneous commodities reported by the manufacturers under the general heading of "all other products," nor the amounts received for contract work (labor performed on materials owned by others).