

General Explanations

1. INTRODUCTION

This volume includes all the information relative to the production and shipments of individual products published in the 81 separate industry reports and in Volume II, "Statistics by Industry," of the 1947 Census of Manufactures. In addition to product statistics, the industry reports present information on such subjects as employment, pay rolls, cost of materials, inventories, and capital expenditures, together with a brief description of the industries covered. Since the present volume was reproduced from the plates for these earlier reports, there are occasional references to the descriptive material or to another table in the industry report.

The 1947 Census is the first to be taken since 1939. The first Census of Manufactures covered the year 1809 and a census was taken at 10-year intervals in connection with the Decennial Census of Population up to and including 1899, with the exception of 1829. It was conducted at 5-year intervals from 1904 through 1919, and every other year from 1921 through 1939, but was suspended during the war period. Present legislation provides for a Census of Manufactures to cover the year 1953 and every fifth year thereafter.

2. ESTABLISHMENTS COVERED IN THE CENSUS

The 1947 Census covered all establishments primarily engaged in manufacturing as defined in the Standard Industrial Classification Manual, Volume I, dated November 1945. The following types of activities are defined as nonmanufacturing by the Standard Industrial Classification and so are excluded from the Census of Manufactures whether or not they are associated with the production of commodities of a kind ordinarily produced in factories:

Manufacturing activities of certain establishments which sell most of their products at retail on the premises, e. g., single-shop retail bakeries.

Fabricating operations performed at the site of construction by contractors.

Production by public utilities of electric light and power or of heating, cooking, and illuminating gas distributed through mains.

Custom work to the individual order of household consumers, such as custom tailoring or woodworking.

Repair and other service activities except specified services performed "for the trade." Machine shops engaged exclusively or almost exclusively in repair work and railroad repair shops are also excluded.

To the extent that establishments of this type produce a significant proportion of the total national production of a commodity, the data presented in the following pages are too low. This qualification is important in only a few instances, notably: bakery products; dried fruit; prepared feeds; Venetian blinds; awnings; and millwork.

While the 1947 report forms were distributed and for the most part returned by mail, manufacturers who did not send in a report or whose reports were incomplete or otherwise inadequate were reached by telephone or personal visit from the Field Offices of the Bureau. After the canvass was completed, however, the Bureau undertook an intensive enumeration in representative sample areas in order to get some measure of the degree of coverage achieved. Preliminary results of this coverage check indicate that for the country as a whole the census included in its tabulations reports from establishments accounting for over 98 percent of all manufacturing employees as defined for census purposes. A large proportion of the employees not covered were found to be employed in small establishments which also engaged at the same location in retail trade, custom work, repair services, construction, or other nonmanufacturing activities. Because of the "marginal" character of such establishments either they were not included in the mailing lists used or when the reports were received they did not contain adequate information and so were classified as nonmanufacturing.

3. THE CENSUS REPORT FORM

The early censuses used a single report form and the published information was limited to such general statistics as employment, pay rolls, capital invested, total value of products and cost of materials. In more recent censuses, however, the majority of manufacturers have received report forms containing preprinted list of products in order to assure uniform reporting and so permit the publication of product information in the detail needed by industry or governmental agencies. In 1947, specially-designed report forms, numbering about 200, were sent to manufacturers in all but 26 out of 453 industries. These 26 industries accounted for less than one percent of

total employment in that year. For these industries the product information is usually restricted to a single value figure.

In addition, a short report form was used by some 40,000 smaller establishments in a large number of industries. Although the establishments reporting on this form accounted for less than one percent of total manufacturing employment, they were of considerably greater importance in some industries and account for a significant proportion of the residual or "not classified by kind" items in the product tables for such industries. Other sources of these items were combined entries in the product sections of the industry forms and those instances in which establishments described in their own words their secondary products, i.e., their shipments of products normally produced in other industries and not specifically listed on their industry form.

4. PRODUCTS

Most manufacturers were asked to report their shipments and, in many cases, their production of a specified list of products known to be produced by a significant number of establishments in their industry. The list of products was prepared for each industry after intensive study of the 1939 reports, and review and approval by a number of Inter-Agency Committees set up within the Federal Government. In developing the product sections of the 1947 report forms, the Bureau benefited from the advice of trade association officials in nearly all industries. In addition, preliminary drafts of the form were mailed to selected manufacturers in every industry, and, where feasible, the form was revised in accordance with their suggestions.

In all, about 6,500 individual product items were specified on the various forms. The term "products," as used in the Census of Manufactures, may have a broader or narrower content than in common usage. For example, automotive gasoline was reported as a single item. On the other hand, cotton broad-woven goods were distributed into nearly 200 individual "products" according to type of weave, width of fabric, and other specifications. For some items, e.g., bearings, it would have been desirable to obtain product information in much greater detail than that actually requested, but the extent to which the production of individual types and sizes is concentrated in one or two individual companies would have made it impossible to publish detailed data, without revealing the operations of these companies. Thus the 6,500 individual products included on the forms merely represent the number of items for which it was considered practical to publish census information.

Of the 6,500 items included on the forms, data were actually published for approximately 6,100.

The balance were eliminated because their publication would involve disclosure of the activities of individual companies or because it turned out that a number of important producers could not report products in the detail requested; in all such cases the product data were combined with that for a similar item or included in an "all other" category. In this respect 1947 experience compares favorably with that for 1939 when of approximately the same number of items included, only about 4,000 could be shown. The principal reason for this difference seems to have been that in 1947, a large number of products were eliminated from the forms because they were of very limited economic importance; in general, a product was not included if its 1939 production was valued at less than \$2 million. In 1939 the loss of product detail owing to disclosure or poor reporting was particularly heavy in products of this magnitude. On the other hand, product items which were reported in large volume by a large number of establishments in 1939 were split up in 1947 into a number of products, where feasible.

In designing the 1947 product inquiries more weight was given to current industry practice and requirements than to comparability with 1939. In consequence, at the individual product level 1939 data are available for only about 1,500 product items. In many instances, however, comparable 1939 value and sometimes quantity data are available for the sum of two or more 1947 product items; on this basis, 1939 data are shown for about 2,500 of the 1947 products. Comparable 1939 data are more often available for basic materials such as steel and textiles than for finished manufactures such as machinery or apparel.

5. ABBREVIATIONS

The following abbreviations and symbols recur frequently both in the tables and footnotes:

n. a.	not available
n. e. c.	not elsewhere classified
M	thousand
mil.	million
bil.	billion
std.	standard
lin.	linear
b. m.	board measure
equiv.	equivalent
-----	zero or not applicable
(d)	withheld to avoid disclosing figures for individual companies

Other abbreviations, such as lb., gal., yd., doz., bbl., are used in the customary sense. Where the term tons only is used, it refers to short tons of 2,000 lbs. Where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as long tons or gross tons.