

## General Information

### I Census of Manufacture

#### 1. Purpose of the Census

The Census of Manufacture (hereafter referred to as the Census) is intended to provide detailed figures on the current developments in Japan's manufacturing industry.

#### 2. Legal Framework

The Census represents a designated statistics survey (Designated Statistics No. 10) based on the Statistics Law (Law No. 18 of 1947) and is implemented according to the Regulations for the Census of Manufacture (Ordinance No. 81 of the Ministry of International Trade and Industry of 1951).

#### 3. Reference Period

The reference period of the 2007 Census is the calendar year 2007 (as of December 31, 2007).

#### 4. Scope of the Census

The Census covers all establishments (excluding those belonging to the government) falling under [Division F - Manufacturing Industry] listed in the Standard Industrial Classification for Japan (2002 Announcement No. 139 of the Ministry of Internal Affairs and Communications). The Census is conducted on all establishments in years ending with 0, 3, 5 and 8 of the Western calendar year. For other years, the Census covers establishments with four or more employees.

#### 5. Forms

Questionnaires are distributed to establishments by enumerators, except for cases with enterprises with branches, of which questionnaires are sent to the enterprise headquarters by the Minister of Economy, Trade and Industry. Form A covers establishments with 30 or more employees, while Form B is for those with 29 or fewer employees in both cases excluding head offices not directly engaged in the manufacturing, processing or repair of industrial products. The Census is based on entries in these forms filled by managers or administrators of applicable establishments, or representatives of the enterprises as in the case of questionnaires being sent to the headquarters.

#### 6. Publication

The 2007 Census findings are compiled from various categories such as by "industry", "commodity", "city, town and village", "industrial district", "**industrial site and water**", and by "enterprise".

The Report by Industrial Site and Water covers establishments with 30 or more employees, showing the status of the utilization of industrial sites and industrial water.

The Report by Industry focuses establishments with four or more employees to provide a portrait of the manufacturing activities by industry. These establishments are classified pursuant to the Standard Industrial Classification for Japan according to their principal activities so that their activities are to be tallied up by industry.

The Report by Commodity covers detailed figures on goods manufactured/processed by establishments with four or more employees on a commodity basis.

The Report by City, Town and Village shows findings with regard to establishments with four or more employees by city, town and village, whereas the Report by Industrial district shows findings by prefecture and by industrial district.

The Report by Enterprise provides findings with regard to establishments with four or more employees after

recompiling the data by the enterprise to which these establishments belong.

## Details of the Report by Industrial Site and Water of the 2007 Census

### 1. Revision of the Data Items

For the purpose of figuring out the current status of the manufacturing industries more precisely, from the 2007 Census, the whole activities of the establishments were covered so that activities other than manufacturing could also be reported. Specifically, subset data items such as "other revenue," and "expenses related to outsourcing of support functions" and "purchases of goods for resale," were newly included in "value of manufactured goods shipments," and "cost of raw materials consumed" respectively. Subsequently, the calculation of the "value of production" was changed. As a consequence, the data on "value of manufactured good shipments," are inconsistent with those of the previous year's.

### 2. Tabulation of Report by Industrial Site and Water

The Report by Industrial Site and Water provides findings in the Census of Manufacture Form A of the 2007 Census of establishments with 30 or more employees.

Data items on industrial sites and water were first incorporated in the Census in 1958 as an approved form of supplemental statistics, pursuant to the Statistical Report Coordination Law (Law No. 148 of 1952). Since 1963, given the importance of the impact of the results on policy measures of both central and prefectural governments, and their close relationship with the results of the Census itself, they have become designated data items.

### 3. Industrial Classification for the Census

- (1) The Industrial Classification for the Census conforms in principle to the Standard Industrial Classification for Japan. The exception is as follows.

Industrial classification for the Census of Manufactures	Standard industrial classification for Japan
1521 Paper and machine-made Japanese paper, integrating paper (1521) and machine-made Japanese paper (1523)	1521 Paper 1523 Machine-made Japanese paper

- (2) The following is a list of products as mentioned elsewhere in Division 19 " plastic product manufacturing industry (except for mentioned elsewhere)".

Product	Industry	Product	Industry
Furniture	1499	Musical instruments	3221-3229
Plastic plates	1621	Toys, gears for toys, and bearings for toys	3231
Photographic films, including dry plates	1795	Dolls	3232
Footwear and findings	2022	Sporting and athletic goods	3234
Luggage	2161	Office supplies	3241-3249
Small leather cases	2171	Costume jewelry and costume accessories	3251
Handbags	2172	Buttons	3253
Gears, except gears for watches, clocks and toys	2675	Wigs of human hair	3255
Bearings, except bearings for watches, clocks and toys, ball bearings and roller bearings	2675	Lacquer ware	3261
Bearings (ball and roller bearings)	2694	Straw-mats "tatami"	3272
Resistors for distribution boards	2713	Japanese-style fans	3273
Capacitors, except for telecommunication equipment	2719	Brooms and brushes	3274
Resistors and capacitors for telecommunication equipment	2914	Umbrellas, parasols and parts	3275
Ophthalmic goods	3161	Smoking accessories and supplies	3277
Gears and bearings for watches and clocks	3171	Thermos bottles	3278
Watch cases	3172	Signboards and signs	3292
		Pallets for transportation	3293
		Models and patterns	3294
		Pattern manufactured for industrial use	3295
		Records	3296

### 4. Criteria for Classification of Establishments

Establishments are classified by industry with the following criteria.

#### (1) Common method

With respect to establishments manufacturing a single type of products, the industry in which the establishments are classified is determined based on the upper four digits (class code) of the six-digit

commodity number of the products.

Concerning establishments engaged in manufacturing of several types of products, the “top-down method” is applied. Firstly, the appropriate classification division (two digits) is determined based on the largest total shipment values of products. Then, the three-digits group and the four-digit class classifications are determined in the same way.

(2) Special method

In some cases, the industrial classification of an establishment is determined based on its raw materials, work process, and mechanical installations involved.

Specifically, the special method is applied to the following 11 industries classified in Division 23 "Manufacture of iron and steel " including "Iron industries, with blast furnaces," "Steel manufactured, including converters and electric furnaces and with rolling facilities", "Hot rolling," "Cold rolling, "Cold rolled steel shapes", "Steel pipes and tubes", "Re-rolled steel products", "Cold finished steel bars", "Pipes and tubes drawing", "Wire drawing", "Miscellaneous steel materials, except made by smelting furnaces and steel works with rolling facilities, except coated steel".

## 5. Definition of Variables

(1) Number of establishments

The 2007 Census provides the number of establishments as of December 31, 2007.

These establishments are defined as a factory, works or plant, etc., mainly engaged in the manufacture or processing of industrial products at a single location.

(2) Number of persons employed

The 2007 Census provides the number of persons employed as a total number of "sole proprietors and unpaid family workers," and "regular workers" as of December 31, 2007. It excludes temporary workers.

"Sole proprietors and unpaid family workers" are defined as working proprietors and their families working full time for them without remuneration. Accordingly, inactive proprietors and families providing no more than casual help are not included in this definition.

"Regular workers" are classified into "full-time workers," "part-time workers" and "workers supplied by other companies," and are those who fall either one of the following categories:

- a. those who are employed for an indefinite-period or for longer than a month,
- b. those who are employed for 18 days or longer during the previous and current months out of casual hires on a daily or less-than-monthly basis,
- c. those who are supplied by employment agencies, and are leased workers from a parent company, to whom the same rules mentioned above a. and b. are applicable,
- d. those who work full time and receive monthly remuneration as directors, executives, etc., and
- e. those who are full-time family workers and receive monthly salaries or wages for work performed.
  - a) "Full-time workers" are employed workers who are generally called "regular employees" or "regular officials" excluding those who are dispatched to other companies.
  - b) "Part-time workers" are those who are generally called "part-time workers" or the like.
  - c) "Workers supplied by other companies" are those who are leased or supplied by other companies, or employment agencies.

"Temporary workers" refer to persons other than regular workers, and who are employed on agreements shorter than a month or on daily agreements.

(3) Value of manufactured goods shipments

The value of manufactured goods shipments is defined as the total value of annual income in 2007 from manufactured goods shipments, receipts for production done to others, and other revenue, including internal tax on consumption and general consumption tax. Thus, the value of manufactured goods shipments in this report may not be consistent with the ones in the report that measure the value of commodities.

"Manufactured goods shipment" refers to the case where products manufactured by an establishment using its own raw materials (including products transformed by others on material-supplied subcontract) are shipped by the establishment in 2007, including the following.

- a. Products transferred to other establishments of the same enterprise,
- b. Consumption of own production (consumed as final products by the establishment itself), and
- c. Shipped on consigned sales (including those shipped but unsold, but excluding those returned in 2007).

"Receipts for production done to others" represents payments received and / or receivable against production activities such as processing, transforming, assembling or fabricating of principal-owned materials as ordered during 2007.

"Other revenue" refers to receipts other than i. And ii., including the value of sale of goods purchased/received for resale in the same condition as received, receipt for maintenance service, receipt for cold storage, and sale of privately-generated surplus power.

#### (4) Industrial Site

Site area of establishments refers to the entire area used by establishments, including those rented as of December 31, 2007. However, areas used for mining, housing, dormitories, playgrounds, warehouses, and other welfare facilities, etc. are excluded, providing the areas where manufacturing facilities are located can be clearly separated either by borders such as roads (public roads), walls, fences, etc., or in any other way. In addition, areas adjacent to an establishment, which are expected to be used for future expansion and are exclusively occupied by an establishment, are included.

Building area of establishments refers to the entire area in which all the buildings in the site of an establishment are located.

Areas where buildings are under construction as of December 31, 2007, are also included, if they have already been recorded in the construction process accounts.

Total floor area of establishments refers to the entire floor area of all buildings located in an establishment.

#### (5) Industrial Water

Fresh water

##### a. Amount of water used by source

- 1) Public water refers to water drawn from industrial water-supply systems or waterworks that are operated by a prefecture or municipality.
  - a) Industrial water refers to water drawn from water-supply systems (industrial water-supply systems), which supply industrial water inadequate for drinking.
  - b) Waterworks refers to the general water supply obtained from the water supply (waterworks), which supply drinking water.
- 2) Well water refers to water drawn from a shallow well, deep well or water spring.
- 3) Other fresh water refers to other than 1) Public water, 2) Well water, and 4) Water recovered, etc. It includes water drawn from rivers, lakes or storage reservoirs (surface water), water drawn from infiltration galleries within river terraces and old river areas (underflow water), and water from agricultural water supplies, water from other establishments, etc.
- 4) Water recovered refers to water circulated after the use in an establishment, whether or not it has gone through recovery systems, such as a cooling tower, a backwater pond, a settling pond, and / or a circulation system.

##### b. Amount of water used by use

- 1) Boiler water is water used to generate steam within a boiler.
- 2) Raw material water is water used as raw materials in the process of manufacturing, or water used additionally as part of raw materials for manufacturing.
- 3) Product processing and cleaning water refers to water used to be applied to physical processes, such as immersion or dissolution of raw materials, semi-manufactured goods, finished goods, etc., or water used to clean facilities, or raw materials and finished products, at a factory.
- 4) Cooling and heating water: Cooling water refers to water used to cool facilities, or raw materials and finished goods, at a factory.

Water for heating or cooling refers to water used to adjust temperature or moisture within a factory.

- 5) Other water refers to drinking water or water for miscellaneous use, other than above items from 1) through 4) .

Salt water refers to seawater, and including water taken from the tidewater of rivers.

#### (6) Industrial district

The 236 districts shown in the statistical tables of this Report by Industrial Site and Water are consistent with those in the Report by Industrial District, so that both Reports are comparable, including the following:

- Industrial districts in which 200 or more establishments are located, covered by the Survey for Suitable Sites for Factories, conducted by the Ministry of Economy, Trade and Industry in 2002.
- The 23 wards in Tokyo and Osaka city, of districts designated as relocation promotion areas under the Industrial Relocation Promotion Law (Law No. 73 of 1972).

The selection of industrial districts are reviewed every 10 years, and the present industrial districts have been applied since the Census 2001.

Also changes such as consolidations, additions, deletions, etc. of municipalities in industrial districts are also reviewed and corrected at the end of December, every year. Refer to the range of districts in pages 5 to 11 regarding the names and ranges of the industrial districts.

## 6. Representation

In the Outline of this Report, the names of industries are abbreviated as follows.

Formal name of manufacture	Abbreviation	Formal name of manufacture	Abbreviation
09 Manufacture of food	Food	23 Manufacture of iron and steel	Iron & steel
10 Manufacture of beverages, tobacco and feed	Beverages	24 Manufacture of non-ferrous metals and products	Non-ferrous metals
11 Manufacture of textile mill products	Textile	25 Manufacture of fabricated metal products	Fabricated metal
12 Manufacture of apparel and other finished products made from fabrics and similar materials	Apparel	26 Manufacture of general machinery	General machinery
13 Manufacture of lumber and wood products	Lumber	27 Manufacture of electrical machinery, equipment and supplies	Electrical machinery
14 Manufacture of furniture and fixtures	Furniture	28 Manufacture of information and communication electronics equipment	Information machinery
15 Manufacture of pulp, paper and paper products	Paper & pulp	29 Manufacture of electronic parts and device	Electronic parts
16 Publishing, printing and allied industries	Printing	30 Manufacture of transportation equipment	Transportation equipment
17 Manufacture of chemical and allied products	Chemical	31 Manufacture of precision instruments and machinery	Precision instruments
18 Manufacture of petroleum and coal products	Petroleum	32 Miscellaneous manufacturing industries	Miscellaneous
19 Manufacture of plastic products	Plastic		
20 Manufacture of rubber products	Rubber		
21 Manufacture of leather tanning, leather products and fur skins	Leather		
22 Manufacture of ceramic, stone and clay products	Ceramic		

## 7. Symbols and Notes

- (1) Symbols used in this report are as follows:

[-] : no relevant value

[0] : fractions of a unit rounded off

[ ] : negative figures

The symbol [ ] means confidential. When the number of respondent establishment(s) is either one or two, the data are suppressed. Some other data may be suppressed even the number of respondents is three or more, when there is a risk of the disclosure of individual information. However, the number of persons employed was no longer suppressed after August 2005.

- (2) The unit of value is millions of yen, and fractions less than a unit are rounded off.

## III Special instructions

- In case of using the time-series data, it should be noted that the list of establishments for the 2007 Census was reviewed in comparison with the list of manufacturing establishments for the Establishment and Enterprise Census.

2. Any person who intends to release these figures in other publications should state the source of information as follows:

**Report by Industrial Site and Water, the Census of Manufacture (2007 edition) compiled by the Research and Statistics Department, Economic and Industrial Policy Bureau, Ministry of Economy, Trade and Industry.**

3. Address your questions or inquiries on this statistics table to:

Industrial Statistics Office, Research and Statistics Department,  
Economic and Industrial Policy Bureau, Ministry of Economy, Trade and Industry.  
1-3-1, Kasumigaseki, Chiyoda-ku, Tokyo 〒100-8902  
Phone (03) 3501-9929 or 9945 (dial-in)  
URL access for statistical information: <http://www.meti.go.jp/english/statistics/>

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