

Directions

I Census of Manufactures

1. Purpose of the Census

The Census of Manufactures (hereafter referred to as the Census) is intended to determine current developments of manufacturing industry in Japan.

2. Legal Framework

The Census represents 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 Manufactures (Ordinance No. 81 of the Ministry of International Trade and Industry of 1951).

3. Date of Survey

The date of survey of the 2002 Census is December 31, 2002.

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 Management and Coordination Agency). 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 4 or more employees.

5. Method of Survey

For the purpose of the Census, the Census of Manufactures Form A applies to establishments with 30 or more employees (except head offices not directly engaged in manufacturing, processing or repair of industrial products), while Form B applies to those with 29 or fewer employees (except head offices not directly engaged in manufacturing, processing or repair of industrial products). The Census is based on entries in these forms filled by managers or administrators of applicable establishments.

6. Publication

The 2002 Census compiles its findings by "industry", "commodity", "city, town and village", "industrial district", "industrial site and water", and by "enterprise".

The Report by Industrial District tallies up findings on major items surveyed with regard to establishments with 4 or more employees by prefecture and by industrial district. The Report by Industry classifies establishments with 4 or more employees by the Standard Industrial Classification for Japan according to their major activities and tallies up major items surveyed by industry. The Report by Commodity tallies up goods manufactured and processed by establishments with 4 or more employees by commodity. The Report by City, Town and Village tallies up findings on major items surveyed with regard to establishments with 4 or more employees by city, town and village. The Report by Industrial Site and Water tallies up findings on survey items concerning industrial site and water, with regard to establishments with 30 or more employees, representing the status of the use of industrial site and industrial water. The Report by Enterprise tallies up findings of survey with regard to establishments with 4 or more employees by establishment after recompiling them by enterprise.

II Report by Industrial District of the 2002 Census

1. Tabulation of Report by Industrial District

The Report by Industrial District tallies up findings in the Census of Manufactures Form A and B of the 2002 Census of establishments with 4 or more employees, by prefecture and industrial district, and major 236 districts were selected based on districts covered by the survey for suitable site for a factory, which was conducted by the Ministry of Economy, Trade and Industry in 2002.

In addition, [3. Statistical Tables by Industrial District and Industry, in order of Number of Establishments Weight] represent industry of up to top 60 industries, in order of increasing number of establishments, and [4. Statistical Tables by Industrial District and Industry, in order of Value of Manufactured goods Shipments Weight], in order of increasing value of manufactured goods shipments, respectively.

2. Industrial Classification for the Census

The industrial classification for the Census was revised in 2002.

(1) The Industrial Classification for the Census conforms in principle to the Standard Industrial Classification for Japan.

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) Inside classification "19 plastic product manufacturing industry (except for mentioned elsewhere)." About mentioned elsewhere, it is as follows.

Product	Industry	Product	Industry
Furniture	1499	Musical instruments	3221~3229
Plastic plates	1641	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

3. Criteria for Classification of Establishments

Establishments are classified by industry with the following criteria of classification.

(1) Common method

With respect to establishments manufacturing a single type of products, industry is classified based on upper four digits of the six-digits commodity number.

On the other hand, concerning establishments engaged in manufacturing of two or more types of products, total shipment values of products sharing the upper two-digits number (major group) are compared, and final two-digits major group classification is collectively represented by the product registering the largest shipment value. Then, three-digits group and four-digits industry classifications are determined in the same way as for two-digits major group classification to come up with the final industrial classification.

(2) Special method

Other than the above, in some cases, industrial classification is determined based on raw materials, work process, and mechanical installations involved.

Such industries are represented by 11 industries classified in "the major group 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".

4. Items of Statistical Tables

(1) Number of establishments

The 2002 Census represents the number of establishments as of December 31, 2002.

These establishments cover factories, works, plants, etc. engaged in manufacture or processing of industrial products in individual sites.

(2) Number of employees

The 2002 Census represents a total number of regular workers, sole proprietors and unpaid family workers as of December 31, 2002.

"Regular workers" refer to persons who:

- a. are employed on the indefinite or longer than-a-month labor contract,
- b. were 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. are dispatched by temporary employment agencies, and are loaned workers from a parent company, to whom the same rules mentioned above (a,b) are applicable,
- d. work full time and receive monthly remuneration as directors, executives, etc., and
- e. are the family of a solo proprietor and work for him, earning monthly salaries or wages.

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

(3) Value of total cash wages and salaries

Total amount of salaries (basic wages plus allowances), special allowances (year-end bonus, etc.) paid to regular workers and other allowances during 2002.

Other allowances include retirement allowances and severance pay on advance notice to regular employees, and wages paid to casual or daily hires.

(4) Value of raw materials, fuels and electricity consumed, and subcontracting expenses for consigned production

Payments for annual raw materials, fuels and electricity consumed, and subcontracting expenses for consigned production during 2002, including consumption tax.

"The value of raw materials consumed" represents total consumption on major raw materials, auxiliary supplies, purchased components and parts, containers, packing materials, plant maintenance materials, consumables, etc., including coal, petroleum, etc. used as raw materials, and the value of raw materials supplied to subcontractors on consigned production.

"The value of electricity consumed" represents total payments for power supply by vendors, excluding private power generation.

"The subcontracting expenses for consigned production" represent payments made and accounts payable to subcontractors for consigned production and/or processing, supplying raw materials or semi-manufactured goods to them.

(5) Value of manufactured goods shipments

Total value of annual income in 2002 from manufactured goods shipment, Processing fees received, Repair fees received, Shipments for scraps and salable refuse from manufacturing process, etc., including internal tax on consumption and consumption tax.

"Manufactured goods shipment" refers to the case where products manufactured by an establishment using its

own raw materials (including material-supplied subcontract processing) are delivered by the establishment in 2002, including the following.

- a. Products delivered to other establishments owned by the same enterprise,
- b. Private consumption (consumed by the establishment as end products), and
- c. Shipped on consigned sale (including those shipped but unsold, but excluding those returned in 2002).

"The value of manufactured goods shipments" represents ex-factory shipment price, with following exceptions.

- a. Tax-included ex-factory shipment value in case internal tax on consumption and consumption tax are levied, and
- b. Ex-factory shipment value, less sales discounts or allowances applicable.

"The value of processing fees received" represents payments received and / or receivable against manufacture of end products using client-owned raw materials or against processing or treatment of products or semi-manufactured products owned by the client, during 2002.

"The value of other receipt" refers to proceeds from cold storage, advertisement, sale of privately-generated surplus power, etc.

(6) Value added (Gross value added) is calculated as follows:

Formula:

Value added = Value of production (*1) - (internal tax on consumption (*2) + estimated consumption tax (*3)) - Value of raw materials, fuels and electricity consumed, and subcontracting expenses for consigned production - Value of depreciation

An establishment with 30 or more employees

Calculating based on the above formula. (An "internal tax on consumption + estimated consumption tax" was "domestic consumption tax" until 2000.)

An establishment with less than 29 employees

(1) From 1998 to 1999

(a) An establishment with 10 to 29 employees

Formula:

Value added = Value of manufactured goods shipments - domestic consumption tax
- Value of raw materials, fuels and electricity consumed, and subcontracting expenses of consigned production - Value of depreciation

(b) An establishment with 4 to 9 employees

Formula:

Gross value added = Value of manufactured goods shipments - domestic consumption tax
- Value of raw materials, fuels and electricity consumed, and subcontracting expenses of consigned production

(2) 2000

(a) An establishment with 10 to 29 employees

Formula:

Value added = Value of production - domestic consumption tax - Value of raw materials, fuels and electricity consumed, and subcontracting expenses of consigned production
- Value of depreciation

(b) An establishment with 4 to 9 employees

Formula:

Gross value added = Value of manufactured goods shipments - domestic consumption tax
- Value of raw materials, fuels and electricity consumed, and subcontracting expenses of consigned production

(3) 2001 or later

(a) An establishment with 4 to 29 employees

Formula:

Gross value added = Value of manufactured goods shipments - (internal tax on consumption + estimated consumption tax) - Value of raw materials, fuels and electricity consumed, and subcontracting expenses of consigned production

- *1: Value of production = Value of manufactured goods shipments + (Value of manufactured goods inventory at end of the year - Value of manufactured goods inventory at beginning of the year) + (Value of semi-manufactured goods and work in progress at end of the year - Value of semi-manufactured goods and work in progress at beginning of the year)
- *2: The value of internal tax on consumption is the total tax amount paid or payable as liquor tax, tobacco tax, gasoline tax and local road tax.
- *3: Estimated consumption tax is calculated excluding the direct export.

(7) Calculation of ratios

Employees / population ratio

Formula:

Employees / population ratio = (Number of employees) / (Population of prefecture (district))

Composition ratio of Value of manufactured goods shipments by industry

Formula:

Composition ratio of Value of manufactured goods shipments by industry = (Value of manufactured goods shipments by industry of prefecture (district)) / (Total value of manufactured goods shipments of prefecture (district))

Value of manufactured goods shipments per employee

Formula:

Value of manufactured goods shipments per employee = {(Value of manufactured goods shipments - (internal tax on consumption + estimated consumption tax))} / (Number of employees)

Specialization coefficient by industry

Formula:

Specialization coefficient by industry = {(Value of manufactured goods shipments of industry B in district A) / (Value of manufactured goods shipments in district A)} / {(Value of manufactured goods shipments of industry B throughout country) / (Value of manufactured goods shipments throughout country)}

Capital / equipment ratio (establishments with 30 or more employees)

Formula:

Capital / equipment ratio = (Actual value of tangible fixed assets at end of the year (*1)) / (Average number of regular workers (*2))

*1: Actual value of tangible fixed assets at end of the year = Actual value of tangible fixed assets at beginning of the year + Value of acquisition - Value of elimination - Value of depreciation

*2: Average number of regular workers: Annual monthly average number of regular workers

Value added productivity

Formula:

Value added productivity = (Value added) / (Number of employees)

Establishment concentration coefficient

Formula:

Establishment concentration coefficient = {(Number of establishments of industry B in district A) / (Total number of establishments in district A)} / {(Number of establishments of industry B throughout country) / (Total number of establishments throughout country)}

5. Selection of Industrial Districts

- (1) The following are 236 districts represented in the statistical tables by industrial district for the Census of Manufactures.

Industrial districts with 200 or more establishments within the districts covered by the Survey for Suitable Site for a Factory, which was conducted by the Ministry of Economy, Trade and Industry in 2002.

Twenty-three wards in Tokyo and Osaka city, of districts designated as a relocation promotion area under the Industrial Relocation Promotion Law (Law No. 73 of 1972).

- (2) The selection of industrial districts are reviewed every 10 years, and present industrial districts have been applied since the survey conducted in 2001.

Also changes (consolidation, addition, deletion, etc.) of industrial districts in municipality are also made at the end of December, every year.

6. Representation

- (1) The area (unit: km²) of prefectures (industrial districts) is based on the Statistical reports of Administrative Area (To, Do, Fu, Ken, Shi, Ku, Machi and Mura) by Geographical Survey Institute of the Ministry of Land, Infrastructure and Transport. The area of prefectures in this Report, however, does not match the area of prefectures published by Geographical Survey Institute, as the area of prefectures used in this Report were prepared by accumulating areas of cities, wards, towns and villages, and Geographical Survey Institute processes lakes and lands with undefined borders in a different manner. In addition, the areas of Kunashiri and Etorofu Islands, Habomai Group Islands, Shikotan Island, and Takeshima Island are not included.
- (2) Populations used for calculating population ratios are from the Tables of Population and Households, and Vital Statistics of Japan, Prepared based on the Basic Resident Registers by Local Administration Bureau of the Ministry of Management, Home Affairs, Posts and Telecommunication.
- (3) In [3. Statistical Tables by Industrial District and Industry, in order of Number of Establishments Weight], of the top 60 industries, industries to be kept confidential (refer to 7. Symbols and notes) are not represented.
- (4) In [4. Statistical Tables by Industrial District and Industry, in order of Value of Manufactured goods Shipments Weight], ranking and numbers of industrial classification of industries to be kept confidential, of the top 60 industries, are represented under each district. For respective industry numbers, refer to page 34 to 46 of Industrial Classification Tables.

7. Symbols and Notes

- (1) In this statistical table, the symbol [-] is used where there is no relevant value, and the numerical symbol [0] represents fractions of a unit rounded off, and the symbol [], negative figures. The symbol [] represents figures relating to one or two establishments. Relevant figures are intentionally represented by this symbol to keep individual applicants business secrets confidential to the public. With respect to establishments of three or more, too, numerals relating to three or more factories are represented by this symbol are treated in the same way.
- (2) Values are represented in millions of yen and fractions less than a unit were rounded off, and in thousands of yen with regard to figures in [5. Statistical Table per Establishment and per Employees].

III Special Instructions

1. If these statistical figures are utilized on a chronological basis, it should be noted that the number of manufacturing establishments was identified and amended through the 1998 Census.
2. Any person who intends to release these figures in other publications should state the source of information as follows:

The Census of Manufactures (2002 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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The Report by Industrial District of the Census of Manufactures

1. Statistical Tables by Prefecture (2-digit industrial classification)

Prefectures and industries	Number of establishments	Number of employees		Value of manufactured goods shipments				Total cash wages and salaries (mil. yen)
		Actual number	Population ratio	Amount	Composition ratio	Amount per employees	Specialization coefficient by industry	
		(persons)	(%)	(mil. yen)	(%)	(thou. yen)		

Value of tangible fixed assets of establishments with 30 or more employees		Value added (Gross value added for establishments with 29 or fewer employees)		Code of Prefectures and industries
Actual value at end of the year (mil. yen)	Capital/equipment ratio (thou. yen)	Amount (mil. yen)	Value added productivity (thou. yen)	

This is a double-page table.

For industrial classification, refer to page 34.

2. Statistical Tables by Industrial District (2-digit industrial classification)

Industrial districts and industries	Number of establishments	Number of employees		Value of manufactured goods shipments				Total cash wages and salaries (mil. yen)
		Actual number	Population ratio	Amount	Composition ratio	Amount per employees	Specialization coefficient by industry	
		(persons)	(%)	(mil. yen)	(%)	(thou. yen)		

Value of tangible fixed assets of establishments with 30 or more employees		Value added (Gross value added for establishments with 29 or fewer employees)	
Actual value at end of the year (mil. yen)	Capital/equipment ratio (thou. yen)	Amount (mil. yen)	Value added productivity (thou. yen)

This is a single-page table.

For industrial classification, refer to page 34.

3. Statistical Tables by Industrial District and Industry, in order of Number of Establishments Weight (4-digit industrial subclassification)

Industrial districts and Industries	Number of establishments			Number of employees		Value of manufactured goods shipments		Total cash wages and salaries (mil. yen)
	Actual number	Composition ratio (%)	Concentration coefficient	Actual number (persons)	Composition ratio (%)	Amount (mil. yen)	Composition ratio (%)	

Value added (Gross value added for establishments with 29 or fewer employees)	
Amount (mil. yen)	Composition ratio (%)

This is a single-page table.

For industrial classification, refer to page 34.

4. Statistical Tables by Industrial District and Industry, in order of Value of Manufactured goods Shipments Weight (4-digit industrial subclassification)

Industrial districts and Industries	Number of establishments		Number of employees		Value of manufactured goods shipments			Total cash wages and salaries (mil. yen)	Value of raw materials, fuels and electricity consumed, and subcontracting expenses for consigned production (mil. yen)
	Actual number	Composition ratio (%)	Actual number (persons)	Composition ratio (%)	Amount (mil. yen)	Composition ratio (%)	Specification coefficient by industry		

Value added (Gross value added for establishments with 29 or fewer employees) (mil. yen)

This is a single-page table.

For industrial classification, refer to page 34.