

## CHAPTER 22

# MANUFACTURING INDUSTRY

Further detail on the subjects dealt with in this chapter is contained in the annual printed bulletins *Manufacturing Industry* and *Manufacturing Commodities*. Information is also published, as soon as the data can be prepared, in a series of thirty-five annual mimeographed bulletins, *Manufacturing Industries*, each relating to a particular industry or group of industries. Details of the industries covered are contained in the list of Statistical and other official publications of Australia in the Miscellaneous chapter. Advance annual information is published in mimeographed form in *A Summary of Principal Statistics of Factories* and in *Principal Factory Products*. Current information on factory products is available in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, and the *Monthly Bulletin of Production Statistics*. A preliminary annual statement (*Factory Statistics*) and a monthly statement (*Production Statistics*) are also issued.

In addition to the above-mentioned publications, there is also a series of fifty-two *Monthly Production Summaries*, each relating to the production of a particular commodity or group of commodities (see reference above to Statistical publications).

The annual mimeographed bulletin *Indexes of Factory Production* deals comprehensively with this subject, which is treated only in summarised fashion on pages 729-30.

### **Economic censuses, 1968-69**

In respect of the year 1968-69, the Commonwealth Bureau of Census and Statistics has conducted the annual census of manufacturing industry as part of a programme of fully integrated economic censuses covering manufacturing and mining industries, and retail and wholesale trade. For a detailed description of the purposes served by this project, and of the new concepts and methods adopted, the reader is referred to the special article on the censuses, which appears as Chapter 31 of this Year Book.

The integrated economic censuses have been a major undertaking involving the development of new concepts, definitions and procedures. Inevitably there has been a considerable delay in finalising the results of the censuses and, for this chapter on manufacturing industry, it has not been possible to provide more up to date statistics than those for 1967-68 which were included in the previous issue. In view of this, the detailed tables showing statistics for individual industries, included in the previous issue, on pages 1075-95, have not been repeated. Results of the 1968-69 censuses will be available in a set of special bulletins.

## Introduction

A complete statistical account of the growth of the manufacturing industry in Australia cannot be given, as the necessary statistics were not collected by the several States on a definite and uniform basis prior to 1906. A standard classification of manufacturing industries was formulated at a conference of Australian statisticians in 1902 and adopted by all States in 1906, and figures on this basis were prepared for 1907 and subsequent years.

An historical summary of the development of the manufacturing industry in Australia since 1901 is contained in earlier issues of the Year Book (see No. 51, pages 143-4).

### **Decentralisation of manufacturing industries**

The decentralisation of secondary industries, and the steps taken by Commonwealth and State Governments towards its development, are referred to in previous issues of the Year Book (see No. 51, page 144).

### **Bounties on manufacture**

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum

amount of bounty payable, and require the bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate, or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards. (See Chapter 18, Public Finance for products on which bounties are paid.)

### **Standardisation**

*The Commonwealth Scientific and Industrial Research Organization* has functions concerned with the improvement of efficiency in industrial operations. For further particulars see the chapter Education, Cultural Activities, and Research of this Year Book.

*The Standards Association of Australia* is the organisation responsible for industrial standardisation on a national basis. It issues Australian standards for materials and products and standard codes of practice.

Formed as the Australian Commonwealth Engineering Standards Association in 1922, it was reconstituted as the Standards Association of Australia in 1929, and was incorporated by Royal Charter in 1950. It is an independent body having the full recognition and support of the Commonwealth and State Governments and of industry. Approximately half its funds are provided by Commonwealth Government grant, the remainder coming primarily from membership subscriptions and from sale of publications. Organisations, companies, and individuals are eligible for subscribing membership.

The Association is controlled by a Council comprising representatives from Commonwealth and State Governments and their departments, from associations of manufacturing and commercial interests, and from professional institutions. Standards are prepared by committees composed of expert representatives from the interests associated with the subjects under consideration. This assistance is on a voluntary basis.

Preparation of standards is undertaken in response to requests from industrial associations or firms or from government departments. Standards may relate to one or more of several aspects of industrial practice such as terminology, test methods, dimensions, specifications of performance and quality of products, and safety or design codes. In general, standards derive authority from voluntary adoption based on their intrinsic merit, but in special cases where safety of life or property is involved, they may have compulsory application through statutory reference.

The Association is the owner of a registered certification trade mark covering conformity of products to standards. Manufacturers of products covered by Australian standards may obtain a licence to use the Australian Standard Mark, under conditions established by the Association.

The Association has international affiliations and is a member, representing Australia, of the International Organization for Standardization (ISO) and of the International Electrotechnical Commission (IEC). Close links are maintained with overseas standards organisations, and the Association acts as Australian agent for the procurement of ISO and IEC publications and the standards of other countries.

The Association has two specialised libraries, one in Sydney and one in Melbourne, containing the national standards of all countries with standards organisations. These libraries provide necessary material for committee work and a free information service to those concerned with standards.

The headquarters office of the Association is in Sydney, and there is a major branch office in Melbourne. Branch offices are located also in other capital cities and at Newcastle, New South Wales.

*The National Association of Testing Authorities* organises testing facilities throughout Australia to serve private and governmental needs.

Membership is open to authorities whose testing laboratories conform to the standards of staffing and operation defined by the Association. Testing authorities may register their laboratories voluntarily. The Association assesses the competence of the laboratories and ensures that their standards of competence are maintained. Certificates of test issued by registered laboratories may be endorsed in the name of the Association. NATA endorsed test certificates are generally accepted by governmental, industrial and commercial interests.

Laboratories are registered for performance of specific tests in the fields of metrology, mechanical testing, electrical testing, optics and photometry, non-destructive testing, heat and temperature measurement, chemical testing, biological testing, and acoustic and vibration measurement. In June 1970 766 laboratories held NATA registration. A further 52 laboratories had been nominated for registration.

*The Industrial Design Council of Australia* was established in June 1958 for the purpose of encouraging better design in Australian-made goods and fostering an appreciation of good design throughout the community. The Council is fully representative of industry, commerce and government, together with designers and educationists. Its activities are financed by donations from industry

and commerce, and by Commonwealth and State grants. IDCA has established Australian design centres in Adelaide, Melbourne and Sydney. These centres display Australian products of approved design and present changing exhibitions relating to design in manufactured articles. IDCA is also responsible for the Australian Design Index which provides a detailed, illustrated record of well-designed Australian products.

The Design Delegate scheme enables regular contact to be maintained with senior executives of manufacturing companies, departmental officers and designers wishing to participate actively in IDCA's programme of lectures, information, and guidance on all aspects of industrial design. Services to design delegates are administered by IDCA through its design centres.

A Record of Designers has been set up to register information about industrial designers and their work. The Council, which has its headquarters in Melbourne, is also concerned with raising the standard of training in industrial design in co-operation with education authorities. For further particulars see Year Book No. 51, page 145.

### Definitions in factory statistics

For the purposes of this Chapter, statistical definitions refer to the basis on which the statistics were compiled up to and including 1967-68. Important changes were introduced in the 1968-69 census (see page 709). The reader should refer to Chapter 31 for a detailed discussion of these new definitions and procedures, which will apply to 1968-69 statistics.

The statistics relating to factories have been compiled from tabulations made by the Deputy Commonwealth Statisticians in the several States from returns supplied to them annually by manufacturers in accordance with the statistical Acts of the States and the Commonwealth. A return must be supplied in respect of every *factory*, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing process. This definition includes factories in educational and charitable institutions, reformatories, and other public institutions (except penitentiaries), but does not cover smallgoods makers, laundries, photography studios, florists and seedsmen, or most abattoirs.

If a manufacturing business is conducted in conjunction with any other activity, particulars relating to the manufacturing section only are included in the statistics. Where two or more industries are conducted in the same establishment, a separate return is obtained for each industry wherever practicable.

Manufacturers are requested to state in their returns particulars of the number, age, etc., of their employees, salaries and wages paid, the value of premises and equipment, the horse-power of machinery, the value of raw materials (including containers), tools replaced, etc., the values and in most cases the quantities of fuel used, and quantities and values of principal materials used and articles produced. The returns obtained from manufacturers are not intended to show a complete record of the income and expenditure of factories nor to show the profits or losses of factories collectively or individually.

*Persons employed* in the manufacturing activities of the factory only are counted as factory employees. The figures relating to employment therefore include working proprietors as well as out-workers, but *exclude* all those engaged in selling and distribution such as salesmen, travellers, collectors, carters engaged solely on outward delivery of manufactured goods, and retailing storemen.

The *average number of persons employed* is quoted on two different bases, the average during the period of operation and the average over the whole year. Of these, the former is simply the aggregate of the average number of persons employed in each factory during its period of operation (whether the whole or only part of the year). This average is used only in respect of details relating to classification according to the number of persons employed. The latter, which is used in all other instances, is calculated by reducing the average number working in the factories (irrespective of period of operation) to the equivalent number working for a full year.

*Working proprietors* are included in all employment figures other than those relating to monthly employment and age dissections, but salaries and wages paid in all cases exclude drawings by working proprietors.

*Value of materials used* includes also the value of stores used, containers, tools replaced, and materials used in repairs to plant.

*Value of fuel, etc., used* includes also the cost of power and light used, lubricants and water.

The *value of factory output* is the value of the goods manufactured or their value after passing through the particular process of manufacture concerned, and includes the amount received for repair work, work done on commission and receipts for other factory work. The basis of valuation of the output is the selling value of the finished articles at the factory, exclusive of all delivery costs and charges and excise duties, but inclusive of bounty and subsidy payments to the manufacturer. In

the special case of government factories and workshops the value of output is, in most cases, estimated by adding ten per cent to the value of materials and fuel used and other factory costs, including salaries and wages paid.

The *value of production* is the value added to materials by the process of manufacture. It is calculated by deducting from the value of factory output the value (at the factory) of the materials used, containers and packing, power, fuel and light used, tools replaced, and materials used in repairs to plant (but not depreciation charges). In the process of manufacture many goods are treated in several industries, the output from one becoming the material for another, so that such commodities are counted more than once in the aggregate value of output and of materials. Examples are raw sugar passing from the mills to the refinery, metals from the smelters which become materials in establishments concerned in the production of metal goods, timber from the sawmills used in furniture factories and in joinery, and synthetic resins from chemical works used to make plastic products. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason, the value of production, and not the value of output, is used as a measure of activity in the manufacturing industries as a whole.

Statistics relating to factory activity in the Australian Capital Territory and Northern Territory are included in the figures contained in this chapter as from 1 July 1964, unless otherwise indicated.

A standard classification of manufacturing industries is used in compiling statistical data relating to factories in Australia. It is designed in accordance with decisions of the 1945 Conference of Statisticians, and represents a revision and extension of a classification which was introduced in 1930-31, replacing the revised versions of the original classification formulated in 1902.

Owing to limitations of space, details published in general tables in this chapter are confined either to the sixteen classes of industry or to total factory activity. Some particulars of certain of the sub-classes shown below were published in the latter portion of Chapter 26 of Year Book No. 55, and full details for all sub-classes may be found in the bulletin *Manufacturing Industry* (previously entitled *Secondary Industries, Part I—Factory and Building Operations*).

The classes and sub-classes in the current classification of factories are as follows.

#### CLASSIFICATION OF FACTORIES

##### CLASS 1. TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS

1. Coke works
2. Briquetting and pulverised coal
3. Carbide
4. Lime, plaster of paris, asphalt
5. Fibrous plaster and products
6. Marble, slate, etc.
7. Cement, portland
8. Asbestos cement sheets and mouldings
9. Other cement goods
10. Other

##### CLASS 2. BRICKS, POTTERY, GLASS, ETC.

1. Bricks and tiles
2. Earthenware, china, porcelain, and terracotta
3. Glass (other than bottles)
4. Glass bottles
5. Other

##### CLASS 3. CHEMICALS, DYES, EXPLOSIVES, PAINTS, OILS, GREASE

1. Industrial and heavy chemicals and acids
2. Pharmaceutical and toilet preparations
3. Explosives (including fireworks)
4. White lead, paints and varnish
5. Oils, vegetable
6. Oils, mineral
7. Oils, animal
8. Boiling-down, tallow refining
9. Soap and candles
10. Chemical fertilisers
11. Inks, polishes, etc.
12. Matches
13. Other

##### CLASS 4. INDUSTRIAL METALS, MACHINES, CON- VEYANCES

1. Smelting, converting, refining, rolling of iron and steel
2. Foundries (ferrous)
3. Plant, equipment and machinery, including machine tools
4. Other engineering
5. Extracting and refining of other metals; alloys
6. Electrical machinery, cables and apparatus
- 7-16. Construction and repair of vehicles (10 groups)
- 17, 18. Ship and boat building and repairing, marine engineering (government and other)
19. Cutlery and small hand tools
20. Agricultural machines and implements
- Non-ferrous metals—
21. Rolling and extrusion
22. Founding, casting, etc.
24. Sheet metal working, pressing and stamping
25. Pipes, tubes and fittings—Ferrous
26. Wire and wire working (including nails)
27. Stoves, ovens and ranges
28. Gas fittings and meters
29. Lead mills
30. Sewing machines
31. Arms, ammunition (excluding explosives)
32. Wireless and amplifying apparatus
33. Other metal works

##### CLASS 5. PRECIOUS METALS, JEWELLERY, PLATE

1. Jewellery
2. Watches and clocks (including repairs)
3. Electroplating (gold, silver, chromium, etc.)

## CLASS 6. TEXTILES AND TEXTILE GOODS (NOT DRESS)

1. Cotton ginning
2. Cotton spinning and weaving
3. Wool—Carding, spinning, weaving
4. Hosiery and other knitted goods
5. Silk, natural
6. Rayon, acrylics and other synthetic fibres
7. Flax mills
8. Rope and cordage
9. Canvas goods, tents, tarpaulins, etc.
10. Bags and sacks
11. Textile dyeing, printing and finishing
12. Other

## CLASS 7. SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR)

1. Furriers and fur-dressing
2. Woollscouring and fellmongery
3. Tanning, currying and leather-dressing
4. Saddlery, harness and whips
5. Machine belting (leather or other)
6. Bags, trunks and other goods of leather and leather substitutes

## CLASS 8. CLOTHING (EXCEPT KNITTED)

1. Tailoring and ready-made clothing
2. Waterproof and oilskin clothing
3. Dressmaking, hemstitching
4. Millinery
5. Shirts, collars, underclothing
6. Foundation garments
7. Handkerchiefs, ties and scarves
8. Hats and caps
9. Gloves
10. Boots and shoes (not rubber)
11. Boot and shoe repairing
12. Boot and shoe accessories
13. Umbrellas and walking sticks
14. Dyeworks and cleaning (including renovating and repairing)
15. Other

## CLASS 9. FOOD, DRINK AND TOBACCO

1. Flour-milling
2. Cereal foods and starch
3. Animal and bird foods
4. Chaffcutting and corncrushing
5. Bakeries (including cakes and pastry)
6. Biscuits
7. Sugar mills
8. Sugar refining
9. Confectionery (including chocolate and icing sugar)
10. Jam, fruit and vegetable canning
11. Pickles, sauces, vinegar
12. Bacon curing
13. Butter factories
14. Cheese factories
15. Condensed and dried milk factories
16. Margarine
17. Meat and fish preserving
18. Condiments, coffee, spices
19. Ice and refrigerating
20. Salt
21. Aerated waters, cordials, etc.
22. Breweries
23. Distilleries
24. Winemaking
25. Cider and perry
26. Malting
27. Bottling

28. Tobacco, cigars, cigarettes, snuff
29. Dehydrated fruit and vegetables
30. Ice cream
31. Sausage casings
32. Arrowroot
33. Other

## CLASS 10. SAWMILLS, JOINERY, BOXES, ETC., WOOD TURNING AND CARVING

1. Sawmills
2. Plywood mills (including veneers)
3. Bark mills
4. Joinery
5. Cooperage
6. Boxes and cases
7. Woodturning, woodcarving, etc.
8. Basketware and wickerware (including sea-grass and bamboo furniture)
9. Perambulators (including pushers and strollers)
10. Wall and ceiling boards (not plaster or cement)
11. Other

## CLASS 11. FURNITURE OF WOOD, BEDDING, ETC.

1. Cabinet and furniture making (including billiard tables and upholstery)
2. Bedding and mattresses (not wire)
3. Furnishing drapery
4. Picture frames
5. Blinds

## CLASS 12. PAPER, STATIONERY, PRINTING, BOOK-BINDING, ETC.

1. Newspapers and periodicals  
Printing—
2. Government
3. General, including bookbinding
4. Manufactured stationery
5. Stereotyping, electrotyping
6. Process and photo engraving
7. Cardboard boxes, cartons and containers
8. Paper bags
9. Paper making
10. Pencils, penholder, chalks, crayons
11. Other

## CLASS 13. RUBBER

1. Rubber goods (including tyres made)
2. Tyre retreading and repairing

## CLASS 14. MUSICAL INSTRUMENTS

1. Gramophones and gramophone records
2. Pianos, piano-players, organs
3. Other

## CLASS 15. MISCELLANEOUS PRODUCTS

1. Linoleum, leather-cloth, oil-cloth, etc.
2. Bone, horn, ivory, and shell
3. Plastic moulding and products
4. Brooms and brushes
5. Optical instruments and appliances
6. Surgical and other scientific instruments and appliances
7. Photographic material (including developing and printing)
8. Toys, games and sports requisites
9. Artificial flowers
10. Other

## CLASS 16. HEAT, LIGHT, AND POWER

- 1-3. Electric light and power
- 4-6. Gas works

## Factory development since 1901, Australia

## FACTORIES: AUSTRALIA(a), 1901 TO 1967-68

Year	Factories	Employment(b)	Value of—					
			Salaries and wages paid(c)	Materials and fuel used	Output	Production (d)	Land and buildings (e)	Plant and machinery (e)
	No.	'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1901	11,143	198	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1911	14,455	312	55,056	163,526	266,044	102,518	65,402	63,032
1920-21	17,113	367	125,864	427,118	647,986	220,868	121,662	137,310
1930-31	21,751	339	124,910	344,978	581,598	236,620	224,422	248,996
1940-41	27,300	650	275,838	773,762	1,289,590	515,828	288,188	322,712
1950-51	43,147	969	983,436	2,613,926	4,301,670	1,687,744	605,570	673,230
1960-61	57,782	1,145	2,289,230	6,115,930	10,465,765	4,349,835	2,389,140	2,785,565
1963-64	59,375	1,210	2,651,620	7,372,682	12,642,686	5,270,003	3,204,685	3,480,673
1964-65	61,042	1,269	2,993,709	8,140,600	14,037,355	5,896,754	3,505,859	3,766,253
1965-66	61,686	1,294	3,162,769	8,437,958	14,689,819	6,251,861	3,776,590	4,154,652
1966-67	62,500	1,309	3,407,683	9,015,844	15,892,845	6,877,001	4,061,193	4,706,843
1967-68	62,954	1,331	3,665,902	9,663,217	17,094,070	7,430,853	4,303,156	4,962,203

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (b) 1901 and 1911—average employment during period of operation. Later years relate to average employment over whole year. Working proprietors are included in all years. (c) Excludes amounts drawn by working proprietors. (d) Value added in process of manufacture (i.e. value of output less value of materials and fuel, etc. used). (e) Depreciated or book values at 30 June. Includes estimated values of rented premises and machinery.

## Number of factories

## Number in each State and Territory

## FACTORIES: NUMBER, STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust. (a)
1963-64 . . .	23,642	17,597	5,955	5,826	4,609	1,746	n.a.	n.a.	59,375
1964-65 . . .	24,368	17,925	5,962	5,887	4,734	1,805	174	187	61,042
1965-66 . . .	24,531	17,980	6,010	6,065	4,906	1,792	185	217	61,686
1966-67 . . .	24,849	18,053	6,013	6,222	5,167	1,771	187	238	62,500
1967-68 . . .	24,884	18,030	6,154	6,255	5,404	1,797	188	242	62,954

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## Number by class of industry

The next tables show the number of factories in Australia classified to the industrial classes agreed upon by the Conference of Statisticians in 1930.

## FACTORIES: NUMBER, BY CLASS OF INDUSTRY, AUSTRALIA(a) 1963-64 TO 1967-68

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	1,517	1,557	1,611	1,615	1,635
2. Bricks, pottery, glass, etc.	692	689	678	676	659
3. Chemicals, dyes, explosives, paints, oils, grease	1,303	1,325	1,354	1,379	1,379
4. Industrial metals, machines, conveyances	25,415	26,665	27,549	28,424	29,213
5. Precious metals, jewellery, plate	927	980	970	975	984
6. Textiles and textile goods (not dress)	1,358	1,373	1,360	1,329	1,332
7. Skins and leather (not clothing or footwear)	645	639	631	616	603
8. Clothing (except knitted)	7,447	7,450	7,271	7,141	6,965
9. Food, drink and tobacco	7,034	7,060	6,938	6,834	6,689
10. Sawmills, joinery, boxes, etc., wood turning and carving	5,422	5,454	5,402	5,414	5,336
11. Furniture of wood, bedding, etc.	2,181	2,210	2,200	2,260	2,275
12. Paper, stationery, printing, bookbinding, etc.	2,828	2,937	2,971	3,052	3,085
13. Rubber	674	705	711	685	648
14. Musical instruments	82	76	73	69	70
15. Miscellaneous products	1,494	1,575	1,627	1,701	1,746
<i>Total, classes 1 to 15.</i>	<i>59,019</i>	<i>60,695</i>	<i>61,346</i>	<i>62,170</i>	<i>62,619</i>
16. Heat, light and power	356	347	340	330	335
<b>Total, all classes</b>	<b>59,375</b>	<b>61,042</b>	<b>61,686</b>	<b>62,500</b>	<b>62,954</b>

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## FACTORIES: NUMBER, BY CLASS OF INDUSTRY, STATES AND TERRITORIES, 1967-68

Class of industry	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1. Treatment of non-metalliferous mine and quarry products	532	478	154	210	173	58	17	13	1,635
2. Bricks, pottery, glass, etc.	298	172	53	61	47	21	1	6	659
3. Chemicals, dyes, explosives, paints, oils, grease	638	404	99	109	92	31	5	1	1,379
4. Industrial metals, machines, conveyances	11,692	7,683	2,793	3,294	2,824	698	103	126	29,213
5. Precious metals, jewellery, plate	389	255	44	177	94	19	..	6	984
6. Textiles and textile goods (not dress)	432	742	33	64	37	24	..	..	1,332
7. Skins and leather (not clothing or footwear)	282	213	42	37	24	5	..	..	603
8. Clothing (except knitted)	3,157	2,331	532	511	327	82	7	18	6,965
9. Food, drink and tobacco	2,319	1,834	889	697	629	279	23	19	6,689
10. Sawmills, joinery, boxes, etc., wood turning and carving	1,887	1,371	711	442	479	403	15	28	5,336
11. Furniture of wood, bedding, etc.	830	641	303	209	218	65	2	7	2,275
12. Paper, stationery, printing, book-binding, etc.	1,292	1,120	238	202	167	50	4	12	3,085
13. Rubber	239	166	111	52	49	19	6	6	648
14. Musical instruments	33	16	5	9	7	..	..	..	70
15. Miscellaneous products	781	559	92	149	145	20	..	..	1,746
<i>Total, classes 1 to 15</i>	<i>24,801</i>	<i>17,985</i>	<i>6,099</i>	<i>6,223</i>	<i>5,312</i>	<i>1,774</i>	<i>183</i>	<i>242</i>	<i>62,619</i>
16. Heat, light and power	83	45	55	32	92	23	5	..	335
<b>Total, all classes</b>	<b>24,884</b>	<b>18,030</b>	<b>6,154</b>	<b>6,255</b>	<b>5,404</b>	<b>1,797</b>	<b>188</b>	<b>242</b>	<b>62,954</b>

## Classification of factories by number of persons employed

The classification of factories by size in the following tables on page 716 is based on the average weekly number of persons employed during the period of operation (including working proprietors).

**FACTORIES: NUMBER OF FACTORIES AND PERSONS EMPLOYED, BY SIZE OF FACTORY STATES AND TERRITORIES, 1967-68**

<i>Persons employed</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>NUMBER OF FACTORIES</b>									
Under 4	10,363	5,896	2,103	3,068	2,558	728	67	72	24,855
4	1,935	1,535	616	472	482	162	20	29	5,251
5 to 10	5,680	4,384	1,591	1,207	1,126	430	63	63	14,544
11 to 20	3,033	2,564	831	681	559	225	25	46	7,964
21 to 50	2,217	1,994	569	459	440	156	10	23	5,868
51 to 100	829	825	229	193	151	44	3	5	2,279
101 to 200	447	462	114	99	54	28	..	1	1,205
201 to 300	140	156	53	21	18	12	..	2	402
301 to 400	74	73	14	17	5	1	..	..	184
401 to 500	42	44	15	11	5	2	..	..	119
501 to 750	54	54	10	9	3	2	..	1	133
751 to 1,000	25	16	4	6	1	3	..	..	55
Over 1,000	45	27	5	12	2	4	..	..	95
<b>Total</b>	<b>24,884</b>	<b>18,030</b>	<b>6,154</b>	<b>6,255</b>	<b>5,404</b>	<b>1,797</b>	<b>188</b>	<b>242</b>	<b>62,954</b>
<b>NUMBER EMPLOYED DURING PERIOD OF OPERATION</b>									
Under 4	19,155	11,624	4,274	5,483	4,796	1,380	123	160	46,995
4	7,740	6,140	2,464	1,888	1,928	648	80	116	21,004
5 to 10	39,384	30,744	11,077	8,363	7,758	2,949	429	415	101,119
11 to 20	44,256	37,579	12,208	9,960	7,999	3,248	345	678	116,273
21 to 50	69,720	62,871	17,715	14,452	13,616	5,004	356	719	184,453
51 to 100	57,837	57,913	15,937	13,550	10,711	3,183	201	348	159,680
101 to 200	62,719	65,227	16,221	13,983	7,511	3,911	..	106	169,678
201 to 300	33,409	38,070	12,727	5,185	4,270	2,722	..	483	96,866
301 to 400	25,902	25,405	4,982	5,766	1,648	360	..	..	64,063
401 to 500	18,609	19,832	6,719	4,828	2,177	881	..	..	53,046
501 to 750	32,993	32,850	6,648	5,219	1,798	1,084	..	708	81,300
751 to 1,000	21,595	13,610	3,268	5,072	835	2,595	..	..	46,975
Over 1,000	100,417	50,996	7,204	28,322	3,743	7,471	..	..	198,153
<b>Total</b>	<b>533,736</b>	<b>452,861</b>	<b>121,444</b>	<b>122,071</b>	<b>68,790</b>	<b>35,436</b>	<b>1,534</b>	<b>3,733</b>	<b>1,339,605</b>
Average per factory	21.45	25.12	19.73	19.52	12.73	19.72	8.16	15.43	21.28

**Classes of industry**
**FACTORIES: NUMBER OF FACTORIES AND PERSONS EMPLOYED, BY SIZE OF FACTORY AND CLASS OF INDUSTRY, AUSTRALIA, 1967-68**

<i>Class of industry</i>	<i>Factories employing on the average—</i>							
	<i>20 and under</i>		<i>21 to 100</i>		<i>101 and upwards</i>		<i>Total</i>	
	<i>Factories</i>	<i>Persons employed</i>	<i>Factories</i>	<i>Persons employed</i>	<i>Factories</i>	<i>Persons employed</i>	<i>Factories</i>	<i>Persons employed</i>
1. Treatment of non-metalliciferous mine and quarry products	1,425	7,594	163	6,822	47	12,418	1,635	26,834
2. Bricks, pottery, glass, etc.	406	3,227	195	8,941	58	15,075	659	27,243
3. Chemicals, dyes, explosives, paints, oils, grease	939	5,979	310	14,238	130	34,983	1,379	55,200
4. Industrial metals, machines, conveyances	25,267	128,471	3,035	125,830	911	374,652	29,213	628,953
5. Precious metals, jewellery, plate	926	3,708	54	1,791	4	664	984	6,163
6. Textiles and textile goods (not dress)	780	5,661	379	17,333	173	51,237	1,332	74,231
7. Skins and leather (not clothing or footwear)	462	2,898	124	5,370	17	3,230	603	11,498
8. Clothing (except knitted)	5,699	29,175	1,084	45,930	182	37,159	6,965	112,264
9. Food, drink and tobacco	5,500	30,258	897	39,821	292	76,389	6,689	146,468
10. Sawmills, joinery, boxes, etc., wood turning and carving	4,674	27,888	603	23,354	59	9,854	5,336	61,096
11. Furniture of wood, bedding, etc.	1,965	10,217	285	11,046	25	4,053	2,275	25,316
12. Paper, stationery, printing, bookbinding, etc.	2,290	16,848	640	27,114	155	46,816	3,085	90,778
13. Rubber	558	2,974	54	2,240	36	15,928	648	21,142
14. Musical instruments	60	279	8	346	2	207	70	832
15. Miscellaneous products	1,419	8,960	267	11,680	60	15,052	1,746	35,692
<i>Total, classes 1 to 15</i>	<i>52,370</i>	<i>284,137</i>	<i>8,098</i>	<i>341,856</i>	<i>2,151</i>	<i>697,717</i>	<i>62,619</i>	<i>1,323,710</i>
16. Heat, light and power	244	1,254	49	2,277	42	12,364	335	15,895
<b>Total, all classes</b>	<b>52,614</b>	<b>285,391</b>	<b>8,147</b>	<b>344,133</b>	<b>2,193</b>	<b>710,081</b>	<b>62,954</b>	<b>1,339,605</b>



### Employment in factories

#### Number employed

All persons employed in the manufacturing activities of a factory are counted as factory employees. The figures relating to employment, therefore, exclude all those engaged in selling and distribution, such as salesmen, travellers, collectors, carters engaged solely on delivery of manufactured goods, and retailing storemen. The figures, however, do include proprietors who work in their own business, as well as 'out-workers' (see page 719). From 1960-61 the occupational groupings collected have been—(i) working proprietors; (ii) managerial and clerical staff including salaried managers and working directors; (iii) chemists, draughtsmen and other laboratory and research staff; and (iv) foremen and overseers, workers in factory and others, in which were amalgamated the three former groups—(iv) foremen and overseers; (v) skilled and unskilled workers; (vi) carters (excluding delivery only), messengers, and persons working regularly at home.

Statistics of factory employment represent the equivalent average number employed over a full year of fifty-two weeks except for the classification of factories according to size (see page 716), which is based on the average number employed during the period of operation.

Particulars of the numbers employed in Australia are given in the table below.

FACTORIES: EMPLOYMENT, AUSTRALIA<sup>(a)</sup>  
1963-64 TO 1967-68

Year	Males	Females	Persons
1963-64	918,130	291,790	1,209,920
1964-65	957,261	311,674	1,268,935
1965-66	973,411	320,412	1,293,823
1966-67	982,907	326,301	1,309,208
1967-68	998,674	332,473	1,331,147

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The following table shows the average number of persons employed in manufacturing industries; the percentage for each State and Territory of the total number employed in factories in Australia; and the number so employed per thousand of mean population in each State and Australia.

FACTORIES: EMPLOYMENT, STATES AND TERRITORIES, 1963-64 TO 1967-68

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
Average number employed during full year (fifty-two weeks)—									
1963-64	487,753	413,120	110,696	110,813	55,705	31,833	n.a.	n.a.	1,209,920
1964-65	508,979	432,413	116,246	116,183	58,097	32,580	1,210	3,227	1,268,935
1965-66	519,364	439,149	117,581	118,343	60,282	34,315	1,294	3,495	1,293,823
1966-67	524,054	445,307	117,937	118,220	63,757	34,879	1,423	3,631	1,309,208
1967-68	531,185	449,945	120,852	121,417	67,335	35,178	1,519	3,716	1,331,147
Percentage of Australian total—									
1963-64	40.31	34.14	9.15	9.16	4.60	2.63	n.a.	n.a.	100
1964-65	40.11	34.08	9.16	9.15	4.58	2.57	0.10	0.25	100
1965-66	40.14	33.94	9.09	9.15	4.66	2.65	0.10	0.27	100
1966-67	40.03	34.01	9.01	9.03	4.87	2.66	0.11	0.28	100
1967-68	39.91	33.80	9.08	9.12	5.06	2.64	0.11	0.28	100
Per 1,000 of population—									
1963-64	120	134	69	108	70	88	n.a.	n.a.	111
1964-65	123	138	71	110	71	89	23	38	113
1965-66	123	137	71	109	72	93	23	38	113
1966-67	123	137	70	107	74	93	25	36	112
1967-68	122	136	70	108	75	93	25	34	112

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## Persons employed, by class of industry

**FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED, BY CLASS OF  
INDUSTRY, AUSTRALIA(a), 1963-64 TO 1967-68**

<i>Class of industry</i>	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	24,704	25,683	26,011	26,104	26,685
2. Bricks, pottery, glass, etc.	25,656	27,002	27,177	26,974	27,171
3. Chemicals, dyes, explosives, paints, oils, grease	49,023	51,498	53,111	54,629	55,053
4. Industrial metals, machines, conveyances	552,795	588,022	601,637	611,614	626,280
5. Precious metals, jewellery, plate	5,543	5,900	5,926	5,990	6,108
6. Textiles and textile goods (not dress)	73,076	75,281	74,708	73,036	73,804
7. Skins and leather (not clothing or footwear)	12,209	12,026	11,807	11,355	11,458
8. Clothing (except knitted)	108,909	110,613	111,793	111,909	111,040
9. Food, drink and tobacco	134,487	138,768	142,153	143,510	144,441
10. Sawmills, joinery, boxes, etc., wood turning and carving	57,650	59,815	60,642	59,976	60,274
11. Furniture of wood, bedding, etc.	22,545	23,251	23,740	24,390	25,055
12. Paper, stationery, printing, bookbinding, etc.	79,250	83,692	87,129	89,192	90,563
13. Rubber	20,261	20,813	20,416	20,198	21,111
14. Musical instruments	779	785	764	824	831
15. Miscellaneous products	27,422	30,057	31,154	33,431	35,469
<i>Total, classes 1 to 15</i>	<i>1,194,309</i>	<i>1,253,206</i>	<i>1,278,168</i>	<i>1,293,132</i>	<i>1,315,343</i>
16. Heat, light and power	15,611	15,729	15,655	16,076	15,804
<b>Total all classes</b>	<b>1,209,920</b>	<b>1,268,935</b>	<b>1,293,823</b>	<b>1,309,208</b>	<b>1,331,147</b>

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED, BY CLASS OF  
INDUSTRY, STATES AND TERRITORIES, 1967-68**

<i>Class of industry(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment non-metal. mine, etc. products	10,388	7,560	3,116	2,255	2,129	888	127	222	26,685
2. Bricks, etc.	13,168	7,692	1,979	2,013	1,796	359	12	152	27,171
3. Chemicals, etc.	27,318	17,892	2,431	3,253	3,209	920	23	7	55,053
4. Industrial metals, machines, etc.	267,936	192,073	47,703	72,643	31,694	12,155	870	1,206	626,280
5. Jewellery, etc.	2,376	2,218	365	572	288	47	..	242	6,108
6. Textiles, etc.	20,997	43,077	2,157	2,829	758	3,986	..	..	73,804
7. Skins, leather, etc.	5,074	3,715	1,078	994	549	48	..	..	11,458
8. Clothing, etc.	44,418	49,027	8,489	5,162	3,015	726	22	181	111,040
9. Food, drink, etc.	44,357	44,143	28,420	12,264	9,340	5,413	193	311	144,441
10. Sawmills, etc.	19,629	15,724	9,036	5,546	6,084	3,919	78	258	60,274
11. Furniture, etc.	9,805	7,167	3,249	2,261	1,840	672	14	47	25,055
12. Paper, stationery, etc.	36,222	30,991	7,477	5,724	3,722	5,314	60	1,053	90,563
13. Rubber	8,202	8,503	1,983	1,724	508	139	15	37	21,111
14. Musical instruments	540	216	22	24	29	..	..	..	831
15. Miscellaneous	15,652	15,060	1,256	2,329	1,010	162	..	..	35,469
<i>Total, classes 1 to 15</i>	<i>526,082</i>	<i>445,058</i>	<i>118,761</i>	<i>119,593</i>	<i>65,971</i>	<i>34,748</i>	<i>1,414</i>	<i>3,716</i>	<i>1,315,343</i>
16. Heat, light and power	5,103	4,887	2,091	1,824	1,364	430	105	..	15,804
<b>Total all classes</b>	<b>531,185</b>	<b>449,945</b>	<b>120,852</b>	<b>121,417</b>	<b>67,335</b>	<b>35,178</b>	<b>1,519</b>	<b>3,716</b>	<b>1,331,147</b>

(a) For full titles see table above.

## Persons employed, by occupational grouping

## FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED, BY OCCUPATIONAL GROUPING STATES AND TERRITORIES, 1967-68

State or Territory	Average number of persons employed				Total
	Working proprietors	Managerial and clerical staff, etc.	Chemists, draughtsmen, etc.	Foremen and overseers, workers in factory and others(a)	
New South Wales . . . . .	13,825	78,755	12,183	426,422	531,185
Victoria . . . . .	12,025	63,164	10,189	364,567	449,945
Queensland . . . . .	4,690	15,216	1,704	99,242	120,852
South Australia . . . . .	3,997	16,206	2,787	98,427	121,417
Western Australia . . . . .	3,455	7,706	914	55,260	67,335
Tasmania . . . . .	975	4,204	715	29,284	35,178
Northern Territory . . . . .	88	238	4	1,189	1,519
Australian Capital Territory . . . . .	156	629	27	2,904	3,716
Total males . . . . .	32,906	114,791	25,447	825,530	998,674
Total females . . . . .	6,305	71,327	3,076	251,765	332,473
Total persons . . . . .	39,211	186,118	28,523	1,077,295	1,331,147

(a) Includes persons working regularly at home.

The term 'outworker' or 'homeworker' has acquired a special meaning in connection with manufacturing industries, and includes only persons to whom work is given out by factories to be done at home. Persons working regularly at home for factories are included in the group foremen, overseers, workers in factory, and others, and separate details are not available.

## Distribution of employees according to age

The following table shows the number of each sex employed in Australia in each age group on the last pay day in June.

FACTORIES: DISTRIBUTION OF EMPLOYEES, BY AGE AND SEX, AUSTRALIA(a)  
JUNE 1964 TO JUNE 1968  
EXCLUDING WORKING PROPRIETORS

June—	Males			Females			Persons		
	Under 16 years	16 and under 21 years	21 years and over	Under 16 years	16 years under 21 years	21 years and over	Under 16 years	16 and under 21 years	21 years and over
1964 . . . . .	8,632	100,164	792,711	7,130	55,533	228,170	15,762	155,697	1,020,881
1965 . . . . .	7,614	104,477	821,711	5,920	57,226	245,437	13,534	161,703	1,067,148
1966 . . . . .	6,690	105,902	827,971	5,364	56,104	251,428	12,054	162,006	1,079,399
1967 . . . . .	5,703	107,285	842,097	5,005	54,727	262,494	10,708	162,012	1,104,591
1968 . . . . .	4,963	105,691	862,678	4,387	52,546	270,786	9,350	158,237	1,133,464

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## Distribution of sexes in factories

Average number of males and females employed

**FACTORIES: MALES AND FEMALES EMPLOYED, STATES AND TERRITORIES  
1963-64 TO 1967-68**

<i>State or Territory</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>	<i>1967-68</i>
<b>MALES</b>					
New South Wales . . . . .	366,250	379,672	387,181	390,087	395,838
Victoria . . . . .	295,440	307,006	310,303	314,017	316,108
Queensland . . . . .	91,123	95,328	96,150	96,082	98,027
South Australia . . . . .	90,933	94,690	96,194	96,076	98,929
Western Australia . . . . .	48,163	50,065	51,464	53,981	56,835
Tasmania . . . . .	26,221	26,768	28,041	28,364	28,550
Northern Territory . . . . .	n.a.	1,098	1,182	1,308	1,380
Australian Capital Territory . . . . .	n.a.	2,634	2,896	2,992	3,007
<b>Australia(a) . . . . .</b>	<b>918,130</b>	<b>957,261</b>	<b>973,411</b>	<b>982,907</b>	<b>998,674</b>
<b>FEMALES</b>					
New South Wales . . . . .	121,503	129,307	132,183	133,967	135,347
Victoria . . . . .	117,680	125,407	128,846	131,290	133,837
Queensland . . . . .	19,573	20,918	21,431	21,855	22,825
South Australia . . . . .	19,880	21,493	22,149	22,144	22,488
Western Australia . . . . .	7,542	8,032	8,818	9,776	10,500
Tasmania . . . . .	5,612	5,812	6,274	6,515	6,628
Northern Territory . . . . .	n.a.	112	112	115	139
Australian Capital Territory . . . . .	n.a.	593	599	639	709
<b>Australia(a) . . . . .</b>	<b>291,790</b>	<b>311,674</b>	<b>320,412</b>	<b>326,301</b>	<b>332,473</b>
<b>MASCULINITY(b) OF PERSONS EMPLOYED</b>					
New South Wales . . . . .	301	294	293	291	292
Victoria . . . . .	251	245	241	239	236
Queensland . . . . .	466	456	449	440	429
South Australia . . . . .	457	441	434	434	440
Western Australia . . . . .	639	623	584	552	541
Tasmania . . . . .	467	461	447	435	431
Northern Territory . . . . .	n.a.	980	1,055	1,137	993
Australian Capital Territory . . . . .	n.a.	444	483	468	424
<b>Australia(a) . . . . .</b>	<b>315</b>	<b>307</b>	<b>304</b>	<b>301</b>	<b>300</b>

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (b) Number of males per 100 females.

**Employment of females in particular industries**

The majority of females in manufacturing industries are employed in four classes, namely: 4, Industrial metals, machines, etc.; 6, Textiles; 8, Clothing; and 9, Food, drink and tobacco. In 1967-68 these industries accounted for 76.75 per cent of all females in factories. In two classes only did the number of females exceed the number of males—in Class 6, Textiles, where there were 137 females to every 100 males, and in Class 8, Clothing, with 300 females to every 100 males. The following table shows the average number of males and females employed in each of the four classes.

**MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES  
STATES AND TERRITORIES, 1967-68**

<i>Class of industry</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<b>Males—</b>									
Industrial metals, etc.	228,877	162,487	43,729	64,263	29,495	11,357	807	1,100	542,115
Textiles and textile goods (not dress)	9,024	17,696	915	1,313	368	1,772	..	..	31,088
Clothing (except knitted)	10,295	12,731	1,970	1,656	767	281	13	56	27,769
Food, drink and tobacco	29,623	28,826	22,507	7,940	6,515	3,651	158	216	99,436
All other classes	118,019	94,368	28,906	23,757	19,690	11,489	402	1,635	298,266
<i>Total males</i>	<i>395,838</i>	<i>316,108</i>	<i>98,027</i>	<i>98,929</i>	<i>56,835</i>	<i>28,550</i>	<i>1,380</i>	<i>3,007</i>	<i>998,674</i>
<b>Females—</b>									
Industrial metals, etc.	39,059	29,586	3,974	8,380	2,199	798	63	106	84,165
Textiles and textile goods (not dress)	11,973	25,381	1,242	1,516	390	2,214	..	..	42,716
Clothing (except knitted)	34,123	36,296	6,519	3,506	2,248	445	9	125	83,271
Food, drink and tobacco	14,734	15,317	5,913	4,324	2,825	1,762	35	95	45,005
All other classes	35,458	27,257	5,177	4,762	2,838	1,409	32	383	77,316
<i>Total females</i>	<i>135,347</i>	<i>133,837</i>	<i>22,825</i>	<i>22,488</i>	<i>10,500</i>	<i>6,628</i>	<i>139</i>	<i>709</i>	<i>332,473</i>

**Salaries and wages paid, value of materials used, output, and production**

In all tables relating to salaries and wages paid in factories the amounts drawn by working proprietors are excluded.

The gross value of factory output for 1967-68 was \$17,094 million, of which \$9,104 million (53.3 per cent) was the value of the materials used, including containers, etc., tools replaced, and repairs to plant and buildings, and \$559 million the value of the power, fuel, light, water, and lubricating oil used. The difference between the sum of the last two amounts and the gross value of output, namely, \$7,431 million, represents the net value of factory production, defined as 'the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production'. Depreciation, however, is not deducted (see page 727). The gross value of factory output and the value of materials used each contain inherent elements of duplication, as the output of some factories becomes the materials used in other factories.

**Salaries and wages paid**

*By class and industry*

**FACTORIES: SALARIES AND WAGES PAID, BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1967-68  
(\$'000)**

<i>Class of industry(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment non-metal, mine, etc. products	34,510	23,989	9,560	6,654	6,202	2,727	424	873	84,938
2. Bricks, etc.	40,807	23,275	5,878	5,818	5,334	1,044	(b)	(b)	82,699
3. Chemicals, etc.	88,894	59,759	7,551	10,039	10,524	3,269	(b)	(b)	180,180
4. Industrial metals, machines, etc.	801,962	570,717	124,210	209,538	85,426	35,538	2,919	3,515	1,833,825
5. Jewellery, etc.	5,148	5,493	726	1,049	529	88	..	924	13,956
6. Textiles, etc.	49,189	99,945	4,305	6,444	1,560	8,859	..	..	170,302
7. Skins, leather, etc.	12,030	9,070	2,617	2,675	1,296	121	..	..	27,810
8. Clothing, etc.	82,053	96,531	12,980	8,564	4,340	1,223	47	348	206,086
9. Food, drink, etc.	117,308	118,363	76,920	29,242	22,575	13,591	592	814	379,405
10. Sawmills, etc.	50,812	40,307	20,130	12,794	15,402	9,655	250	781	150,131
11. Furniture, etc.	24,338	16,809	6,891	4,563	3,886	1,329	(b)	(b)	57,964
12. Paper, stationery, etc.	107,501	92,314	20,102	15,440	10,044	16,543	185	3,292	265,422
13. Rubber	24,068	26,085	4,992	5,590	1,352	355	48	112	62,601
14. Musical instruments	1,388	581	36	36	55	..	..	..	2,097
15. Miscellaneous	41,256	43,390	2,870	5,267	2,042	304	..	..	95,130
<i>Total, classes 1 to 15</i>	<i>1,481,266</i>	<i>1,226,628</i>	<i>299,768</i>	<i>323,713</i>	<i>170,567</i>	<i>94,646</i>	<i>4,673</i>	<i>11,285</i>	<i>3,612,546</i>
16. Heat, light and power	16,801	17,588	6,187	6,347	4,534	1,590	310	..	53,357
<b>Total, all classes</b>	<b>1,498,067</b>	<b>1,244,216</b>	<b>305,955</b>	<b>330,060</b>	<b>175,100</b>	<b>96,236</b>	<b>4,983</b>	<b>11,285</b>	<b>3,665,902</b>

(a) For full titles see table on page 723.

(b) Not available for publication.

*Totals and averages.* The following table shows the total amount of salaries and wages paid, and the average amount paid, according to sex, per employee in each State and Territory. The figures exclude working proprietors and the amounts drawn by them.

In comparing the figures in the following table regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, there are a large number of employees in Class 8, Clothing, comprising a relatively high percentage of women and children.

**FACTORIES: TOTAL AND AVERAGE SALARIES AND WAGES PAID  
STATES AND TERRITORIES, 1963-64 TO 1967-68**

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
<b>MALES</b>									
Total amount paid (\$'000)—									
1963-64 . . .	927,806	747,177	196,484	215,127	99,978	63,007	n.a.	n.a.	2,249,580
1964-65 . . .	1,034,044	840,704	226,329	245,565	110,368	68,183	3,298	7,854	2,536,347
1965-66 . . .	1,092,517	877,256	239,885	252,260	123,022	73,932	3,666	8,819	2,671,358
1966-67 . . .	1,174,476	949,745	251,545	266,640	140,114	80,685	4,146	9,306	2,876,656
1967-68 . . .	1,258,255	1,011,261	272,301	295,065	159,487	85,329	4,721	9,968	3,096,386
Average per male employee (\$)—									
1963-64 . . .	2,618	2,621	2,254	2,457	2,201	2,491	n.a.	n.a.	2,542
1964-65 . . .	2,812	2,833	2,476	2,689	2,337	2,644	3,242	3,091	2,746
1965-66 . . .	2,913	2,921	2,600	2,720	2,538	2,730	3,333	3,172	2,843
1966-67 . . .	3,105	3,120	2,725	2,880	2,755	2,939	3,354	3,238	3,028
1967-68 . . .	3,277	3,299	2,888	3,092	2,974	3,085	3,623	3,462	3,206
<b>FEMALES</b>									
Total amount paid (\$'000)—									
1963-64 . . .	173,214	165,247	22,278	25,188	8,537	7,575	n.a.	n.a.	402,040
1964-65 . . .	195,912	187,788	26,029	28,659	9,609	8,332	185	848	457,362
1965-66 . . .	211,163	199,977	28,160	30,691	11,149	9,030	192	1,047	491,411
1966-67 . . .	225,270	217,693	30,664	32,466	13,483	10,071	203	1,177	531,027
1967-68 . . .	239,812	232,956	33,654	34,995	15,613	10,908	263	1,317	569,516
Average per female employee (\$)—									
1963-64 . . .	1,448	1,432	1,182	1,312	1,163	1,367	n.a.	n.a.	1,406
1964-65 . . .	1,537	1,526	1,290	1,372	1,228	1,454	1,799	1,469	1,496
1965-66 . . .	1,623	1,584	1,369	1,420	1,295	1,457	1,904	1,806	1,565
1966-67 . . .	1,708	1,691	1,462	1,502	1,411	1,567	1,972	1,904	1,660
1967-68 . . .	1,798	1,773	1,538	1,592	1,522	1,668	2,051	1,933	1,746
<b>PERSONS</b>									
Total amount paid (\$'000)—									
1963-64 . . .	1,101,021	912,424	218,762	240,315	108,515	70,582	n.a.	n.a.	2,651,620
1964-65 . . .	1,229,957	1,028,492	252,358	274,225	119,978	76,515	3,483	8,702	2,993,709
1965-66 . . .	1,303,680	1,077,234	268,046	282,951	134,171	82,963	3,859	9,866	3,162,769
1966-67 . . .	1,399,746	1,167,437	282,209	299,105	153,597	90,756	4,349	10,483	3,407,683
1967-68 . . .	1,498,067	1,244,216	305,955	330,060	175,100	96,236	4,983	11,285	3,665,902
Average per employee (\$)—									
1963-64 . . .	2,323	2,278	2,064	2,251	2,057	2,290	n.a.	n.a.	2,265
1964-65 . . .	2,484	2,450	2,262	2,444	2,180	2,427	3,110	2,791	2,435
1965-66 . . .	2,581	2,525	2,376	2,474	2,351	2,493	3,213	2,936	2,523
1966-67 . . .	2,744	2,696	2,491	2,619	2,543	2,678	3,248	3,002	2,684
1967-68 . . .	2,896	2,841	2,634	2,811	2,741	2,814	3,482	3,170	2,838

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

The following table shows, by class of industry, the amounts paid to managerial and clerical staff, including salaried managers and working directors, chemists, draughtsmen and other laboratory and research staff, and those paid to other employees. Amounts drawn by working proprietors are excluded in all cases.

**FACTORIES: SALARIES AND WAGES PAID TO MANAGERS, CLERICAL STAFF, ETC.  
AND OTHER EMPLOYEES, BY CLASS OF INDUSTRY, AUSTRALIA, 1967-68**

Class of industry	Managers, clerical staff, chemists, draughtsmen, etc.		All other employees	
	Males	Females	Males	Females
	\$'000	\$'000	\$'000	\$'000
1. Treatment of non-metalliferous mine and quarry products	14,226	2,394	67,937	381
2. Bricks, pottery, glass, etc.	10,203	2,165	67,141	3,190
3. Chemicals, dyes, explosives, paints, oils, grease	48,357	10,655	108,349	12,819
4. Industrial metals, machines, conveyances	327,091	63,546	1,355,680	87,507
5. Precious metals, jewellery, plate	2,076	640	9,876	1,364
6. Textiles and textile goods (not dress)	19,465	7,602	76,938	66,297
7. Skins and leather (not clothing or footwear)	3,383	911	17,711	5,806
8. Clothing (except knitted)	17,597	9,290	52,285	126,914
9. Food, drink and tobacco	59,682	18,718	243,914	57,092
10. Sawmills, joinery, boxes, etc., wood turning and carving	19,062	4,241	124,002	2,826
11. Furniture of wood, bedding, etc.	7,157	2,743	41,075	6,989
12. Paper, stationery, printing, bookbinding, etc.	41,502	12,664	181,969	29,287
13. Rubber	10,878	2,396	43,473	5,853
14. Musical instruments	256	103	1,404	335
15. Miscellaneous products	17,982	5,817	52,692	18,638
<i>Total, classes 1 to 15</i>	<i>598,918</i>	<i>143,883</i>	<i>2,444,446</i>	<i>425,299</i>
16. Heat, light and power	6,044	275	46,978	59
<b>Total, all classes</b>	<b>604,963</b>	<b>144,158</b>	<b>2,491,423</b>	<b>425,358</b>
Average paid per employee	\$ 4,314	\$ 1,938	\$ 3,018	\$ 1,690

**Power, fuel and light used***Value by class of industry*

**FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED(a), BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1967-68**  
(\$'000)

Class of industry(b)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1. Treatment non-metalliferous mine, etc. products	12,714	6,628	3,021	2,272	1,883	1,131	27	53	27,728
2. Bricks, etc.	10,416	6,622	1,811	1,749	2,034	435	(c)	(c)	23,268
3. Chemicals, etc.	28,234	21,313	3,512	4,779	5,360	1,083	(c)	(c)	64,375
4. Industrial metals, etc.	125,799	34,950	11,244	27,512	7,153	9,304	74	61	216,098
5. Jewellery, etc.	397	467	51	116	80	6	..	186	1,304
6. Textiles, etc.	4,039	7,268	278	532	161	659	..	..	12,938
7. Skins, leather, etc.	843	942	218	278	152	12	..	..	2,444
8. Clothing, etc.	2,223	2,578	429	342	198	85	5	26	5,886
9. Food, drink, etc.	15,722	16,624	8,962	3,392	3,162	1,747	146	78	49,834
10. Sawmills, etc.	3,389	2,280	1,428	960	947	954	8	17	9,984
11. Furniture, etc.	593	421	136	120	84	34	(c)	(c)	1,391
12. Paper, stationery, etc.	5,463	8,174	1,341	2,039	701	3,699	14	171	21,602
13. Rubber	2,491	3,370	512	588	147	42	8	17	7,173
14. Musical instruments	85	27	2	1	1	..	..	..	115
15. Miscellaneous	2,572	4,142	144	287	116	12	..	..	7,272
<i>Total, classes 1 to 15</i>	<i>214,979</i>	<i>115,808</i>	<i>33,086</i>	<i>44,967</i>	<i>22,180</i>	<i>19,206</i>	<i>359</i>	<i>830</i>	<i>451,414</i>
16. Heat, light and power	37,661	27,278	18,785	11,238	11,381	279	798	..	107,421
<b>Total, all classes</b>	<b>252,639</b>	<b>143,086</b>	<b>51,871</b>	<b>56,205</b>	<b>33,561</b>	<b>19,485</b>	<b>1,157</b>	<b>830</b>	<b>558,834</b>

(a) Includes value of lubricants and water.

(b) For full titles see table above.

(c) Not available for publication.

**FACTORIES: TOTAL VALUE OF POWER, FUEL AND LIGHT USED(a)  
BY CLASS OF INDUSTRY, AUSTRALIA(b), 1963-64 TO 1967-68  
(\$'000)**

<i>Class of industry</i>	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products . . . . .	24,245	26,575	26,455	26,987	27,728
2. Bricks, pottery, glass, etc. . . . .	19,761	20,552	20,337	21,128	23,268
3. Chemicals, dyes, explosives, paints, oils, grease . . . . .	45,500	50,468	52,557	57,864	64,375
4. Industrial metals, machines, conveyances . . . . .	158,843	171,268	180,606	199,444	216,098
5. Precious metals, jewellery, plate . . . . .	851	1,052	1,132	1,190	1,304
6. Textiles and textile goods (not dress) . . . . .	10,840	11,271	11,630	12,059	12,938
7. Skins and leather (not clothing or footwear) . . . . .	2,428	2,424	2,358	2,321	2,444
8. Clothing (except knitted) . . . . .	5,227	5,452	5,545	5,770	5,886
9. Food, drink and tobacco . . . . .	41,577	43,967	46,025	47,545	49,834
10. Sawmills, joinery, boxes, etc., wood turning and carving . . . . .	8,553	9,257	9,373	9,539	9,984
11. Furniture of wood, bedding, etc. . . . .	1,096	1,156	1,218	1,285	1,391
12. Paper, stationery, printing, bookbinding, etc. . . . .	15,843	17,280	18,551	20,550	21,602
13. Rubber . . . . .	6,285	6,386	6,550	6,838	7,173
14. Musical instruments . . . . .	96	95	91	105	115
15. Miscellaneous products . . . . .	4,672	5,304	5,577	6,314	7,272
<i>Total, classes 1 to 15</i> . . . . .	<i>345,818</i>	<i>372,506</i>	<i>388,007</i>	<i>418,940</i>	<i>451,414</i>
16. Heat, light and power . . . . .	91,335	94,127	99,337	103,360	107,421
<b>Total, all classes</b> . . . . .	<b>437,153</b>	<b>466,633</b>	<b>487,343</b>	<b>522,300</b>	<b>558,834</b>

(a) Includes value of lubricants and water. (b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

*Total value*

**FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED(a), STATES AND TERRITORIES  
1963-64 TO 1967-68  
(\$'000)**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.(b)</i>
1963-64 . . . . .	210,157	114,648	37,462	34,772	23,749	16,364	n.a.	n.a.	437,153
1964-65 . . . . .	217,548	125,161	38,749	39,295	26,045	18,327	865	644	466,633
1965-66 . . . . .	223,517	127,858	43,791	44,066	27,314	19,181	856	760	487,343
1966-67 . . . . .	238,113	134,399	46,949	51,302	30,031	19,826	946	735	522,300
1967-68 . . . . .	252,639	143,086	51,871	56,205	33,561	19,485	1,157	830	558,834

(a) Includes value of lubricants and water. (b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

*Value of items*

**FACTORIES: VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED(a)  
STATES AND TERRITORIES, 1967-68  
(\$'000)**

<i>Item of power, fuel, etc.</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Coal, black . . . . .	39,219	2,444	21,977	(b)7,416	5,540	564	..	94	77,254
brown . . . . .	2	19,760	..	(c)	..	..	..	..	19,763
Brown coal briquettes . . . . .	10	9,937	..	(c)	..	(c)	..	(c)	9,947
Coke . . . . .	47,620	1,106	1,159	12,684	632	686	..	..	63,887
Wood . . . . .	675	542	379	460	582	85	2	(c)	2,726
Fuel oil . . . . .	32,160	27,480	8,823	13,512	13,035	5,191	838	179	101,219
Tar (fuel) . . . . .	2,653	163	14	117	47	14	29	2	3,038
Electricity . . . . .	77,657	63,558	14,549	16,014	8,935	11,366	219	486	192,784
Gas . . . . .	23,545	4,710	527	2,105	267	92	(c)	(c)	31,247
Other (charcoal, etc.) . . . . .	13,912	3,122	767	1,083	2,554	653	3	7	22,101
Water . . . . .	10,928	7,249	2,458	1,806	1,219	546	32	35	24,273
Lubricating oils . . . . .	4,259	3,014	1,217	1,009	749	287	35	26	10,595
<b>Total</b> . . . . .	<b>252,639</b>	<b>143,086</b>	<b>51,871</b>	<b>56,205</b>	<b>33,561</b>	<b>19,485</b>	<b>1,157</b>	<b>830</b>	<b>558,834</b>

(a) Includes value of lubricants and water. (b) Includes \$5,815,603 the value of 2,078,280 tons of sub-bituminous Leigh Creek coal. (c) Less than \$500.



## Quantities of fuel used

## FACTORIES: QUANTITIES OF FUEL USED, STATES AND TERRITORIES, 1967-68

Fuel		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Coal, black	'000 tons	8,118	241	2,802	(a)2,235	912	56	..	6	14,370
.. brown	..	1	18,190	..	(b)	..	..	..	..	18,191
Brown coal										
briquettes	..	1	855	..	(b)	..	(b)	..	(b)	856
Coke	..	2,821	45	32	598	23	19	..	..	3,537
Wood	..	138	133	94	235	158	35	(b)	(b)	792
Fuel oil	'000 gal	459,771	375,696	119,532	190,774	189,613	67,314	8,483	1,306	1,412,489
Tar (fuel)	'000 tons	164	8	1	10	1	1	3	(b)	190

(a) Includes 2,078,280 tons of Leigh Creek coal. (b) Less than 500 tons.

## Value of materials used

By class of industry. The value of materials used includes the value of containers, packing, etc., the cost of tools replaced, and repairs to plant.

FACTORIES: VALUE OF MATERIALS USED, BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1967-68  
(\$'000)

Class of industry(a)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1. Treatment non-metalliferous mine, etc. products	136,295	63,703	22,813	17,981	18,342	5,978	1,549	3,586	270,249
2. Bricks, etc.	40,768	25,138	5,334	5,956	3,849	700	(b)	(b)	82,482
3. Chemicals, etc.	445,473	320,707	75,981	63,339	98,854	9,342	(b)	(b)	1,014,123
4. Industrial metals, etc.	1,758,591	946,395	319,829	450,916	158,212	71,091	3,313	4,234	3,712,583
5. Jewellery, etc.	6,681	5,815	729	877	392	72	..	1,463	16,030
6. Textiles, etc.	119,996	238,882	9,254	11,949	4,959	19,200	..	..	404,240
7. Skins, leather, etc.	30,343	19,170	5,081	10,006	1,653	686	..	..	66,939
8. Clothing, etc.	138,787	139,926	14,511	10,127	4,467	1,048	29	219	309,113
9. Food, drink, etc.	531,204	596,795	503,808	131,253	111,632	61,749	1,411	2,559	1,940,410
10. Sawmills, etc.	116,588	80,082	38,989	26,809	29,298	23,978	423	1,321	317,488
11. Furniture, etc.	48,123	34,615	14,646	9,212	8,903	2,702	(b)	(b)	118,581
12. Paper, stationery, etc.	200,791	186,814	35,322	26,666	15,775	28,862	99	1,695	496,025
13. Rubber	49,466	54,136	10,725	9,197	3,254	732	97	420	128,027
14. Musical instruments	2,855	694	36	15	14	..	..	..	3,614
15. Miscellaneous	69,753	87,290	5,410	10,218	3,423	195	..	..	176,289
Total, classes 1 to 15	3,695,714	2,800,162	1,062,468	784,522	463,028	226,337	7,581	16,382	9,056,193
16. Heat, light and power	17,181	13,262	10,076	3,496	2,526	1,236	414	..	48,190
Total, all classes	3,712,895	2,813,424	1,072,543	788,018	465,554	227,573	7,995	16,382	9,104,383

(a) For full titles see table below. (b) Not available for publication.

FACTORIES: VALUE OF MATERIALS USED, BY CLASS OF INDUSTRY, AUSTRALIA(a)  
1963-64 TO 1967-68  
(\$'000)

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	193,603	219,634	232,826	245,768	270,249
2. Bricks, pottery, glass, etc.	59,540	69,275	69,239	75,127	82,482
3. Chemicals, dyes, explosives, paints, oils grease	726,437	802,349	850,221	933,329	1,014,123
4. Industrial metals, machines, conveyances	2,713,241	3,102,783	3,213,745	3,422,377	3,712,583
5. Precious metals, jewellery, plate	11,459	14,195	14,405	14,911	16,030
6. Textiles and textile goods (not dress)	355,503	374,764	370,844	394,860	404,240
7. Skins and leather (not clothing or footwear)	75,641	72,518	73,642	73,288	66,939
8. Clothing (except knitted)	265,805	280,195	282,823	304,160	309,113
9. Food, drink and tobacco	1,560,847	1,652,933	1,728,394	1,837,269	1,940,410
10. Sawmills, joinery, boxes, etc., wood turning and carving	255,936	282,792	286,639	299,345	317,488
11. Furniture of wood, bedding, etc.	94,283	104,177	104,168	109,226	118,581
12. Paper, stationery, printing, bookbinding, etc.	367,028	409,999	431,037	462,333	496,025
13. Rubber	109,355	119,250	118,436	119,819	128,027
14. Musical instruments	3,031	3,336	3,161	3,797	3,614
15. Miscellaneous products	105,742	122,921	126,339	151,070	176,289
Total, classes 1 to 15	6,897,451	7,631,121	7,905,917	8,446,680	9,056,193
16. Heat, light and power	38,078	42,847	44,698	46,864	48,190
Total, all classes	6,935,530	7,673,967	7,950,615	8,493,544	9,104,383

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## Total amount

**FACTORIES: VALUE OF MATERIALS USED, STATES AND TERRITORIES  
1963-64 TO 1967-68  
(\$'000)**

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust(a)
1963-64	2,859,622	2,190,398	812,924	599,658	300,798	172,130	n.a.	n.a.	6,935,530
1964-65	3,212,677	2,425,961	824,681	668,946	329,740	195,972	4,550	11,440	7,673,967
1965-66	3,266,347	2,469,372	924,427	698,996	362,634	209,794	5,497	13,349	7,950,615
1966-67	3,466,134	2,671,315	982,896	728,094	399,406	223,566	7,214	14,918	8,493,544
1967-68	3,712,895	2,813,424	1,072,543	788,018	465,554	227,573	7,995	16,382	9,104,383

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

## Value of output

*By class of industry.* The value of the output of factories in the various classes in each State and Territory in 1967-68 is shown in the following table. It represents the selling value at the factory (excluding delivery costs and charges) of goods made or processed during the year, including by-products. In addition, it includes the amount received for other work done, such as repair work, assembling and making up for customers. The difference between the sum of the values of the materials and of the power, fuel and light used, and the value of output, is the net value of factory production (see page 727).

**FACTORIES: VALUE OF OUTPUT, BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1967-68  
(\$'000)**

Class of industry(a)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1. Treatment non-metal, mine, etc. products	226,700	124,125	48,919	39,197	39,125	15,221	2,824	5,553	501,664
2. Bricks, etc.	130,585	78,438	18,990	19,154	17,168	3,134	(b)	(b)	269,138
3. Chemicals, etc.	812,247	550,678	123,581	106,828	151,640	19,614	(b)	(b)	1,765,495
4. Industrial metals, etc.	3,297,441	1,903,178	562,325	838,189	324,668	148,969	7,879	9,663	7,092,313
5. Jewellery, etc.	16,948	16,362	1,930	3,084	1,680	233	..	3,451	43,688
6. Textiles, etc.	223,550	426,636	17,722	23,392	8,134	32,762	..	..	732,196
7. Skins, leather, etc.	52,394	35,767	9,841	14,506	4,036	871	..	..	117,414
8. Clothing, etc.	293,983	300,436	38,376	25,692	12,187	3,465	91	909	675,075
9. Food, drink, etc.	864,475	907,400	688,461	203,335	168,359	88,500	2,877	4,321	2,927,728
10. Sawmills, etc.	214,317	149,536	77,926	50,895	60,248	42,894	783	2,593	599,192
11. Furniture, etc.	93,467	65,287	26,668	17,790	16,638	5,044	(b)	(b)	225,584
12. Paper, stationery, etc.	440,823	381,686	73,546	61,523	36,186	65,207	386	7,243	1,066,600
13. Rubber	89,951	108,131	21,716	19,765	6,267	1,571	249	795	248,446
14. Musical instruments	9,927	1,362	103	78	98	..	..	..	11,768
15. Miscellaneous	149,658	171,665	12,146	21,839	7,811	653	..	..	363,772
<i>Total, classes 1 to 15</i>	<i>6,916,466</i>	<i>5,220,888</i>	<i>1,722,249</i>	<i>1,445,204</i>	<i>854,246</i>	<i>428,138</i>	<i>16,300</i>	<i>36,583</i>	<i>16,640,075</i>
16. Heat, light and power	180,050	130,422	60,018	30,909	33,126	16,938	2,531	..	453,995
<b>Total, all classes</b>	<b>7,096,517</b>	<b>5,351,311</b>	<b>1,782,267</b>	<b>1,476,113</b>	<b>887,372</b>	<b>445,076</b>	<b>18,831</b>	<b>36,583</b>	<b>17,094,070</b>

(a) For full titles see table on page 727. (b) Not available for publication.

**FACTORIES: VALUE OF OUTPUT, BY CLASS OF INDUSTRY, AUSTRALIA<sup>(a)</sup>**  
**1963-64 TO 1967-68**  
**(\$'000)**

<i>Class of industry</i>	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products . . . . .	366,053	413,235	427,652	459,415	501,664
2. Bricks, pottery, glass, etc. . . . .	193,031	221,894	225,147	242,627	269,138
3. Chemicals, dyes, explosives, paints, oils, grease . . . . .	1,221,410	1,357,619	1,445,480	1,618,841	1,765,495
4. Industrial metals, machines, conveyances . . . . .	5,046,075	5,760,129	6,042,120	6,534,706	7,092,313
5. Precious metals, jewellery, plate . . . . .	31,062	37,024	38,424	40,857	43,688
6. Textiles and textile goods (not dress) . . . . .	618,816	665,617	665,227	709,976	732,196
7. Skins and leather (not clothing or footwear) . . . . .	119,037	117,092	119,112	119,703	117,414
8. Clothing (except knitted) . . . . .	552,447	587,946	607,336	651,432	675,075
9. Food, drink and tobacco . . . . .	2,302,914	2,454,023	2,592,748	2,777,071	2,927,728
10. Sawmills, joinery, boxes, etc., wood turning and carving . . . . .	470,768	524,043	536,796	565,434	599,192
11. Furniture of wood, bedding, etc. . . . .	171,290	189,742	195,992	210,182	225,584
12. Paper, stationery, printing, book-binding, etc. . . . .	762,610	854,204	909,061	986,199	1,066,600
13. Rubber . . . . .	201,343	214,692	215,194	226,126	248,446
14. Musical instruments . . . . .	8,028	9,300	9,285	10,801	11,768
15. Miscellaneous products . . . . .	221,084	252,569	261,887	316,179	363,772
<i>Total, classes 1 to 15</i> . . . . .	<i>12,285,964</i>	<i>13,659,129</i>	<i>14,291,460</i>	<i>15,469,550</i>	<i>16,640,075</i>
16. Heat, light and power . . . . .	356,722	378,225	398,360	423,295	453,995
<b>Total, all classes</b> . . . . .	<b>12,642,686</b>	<b>14,037,355</b>	<b>14,689,819</b>	<b>15,892,845</b>	<b>17,094,070</b>

<sup>(a)</sup> Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

*Total value*

**FACTORIES: VALUE OF OUTPUT, STATES AND TERRITORIES, 1963-64 TO 1967-68**  
**(\$'000)**

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.(a)</i>
1963-64 . . . . .	5,337,695	4,054,822	1,292,260	1,061,786	555,058	341,065	n.a.	n.a.	12,642,686
1964-65 . . . . .	5,951,702	4,500,786	1,341,853	1,206,830	616,422	381,549	12,068	26,145	14,037,355
1965-66 . . . . .	6,154,835	4,624,915	1,511,214	1,270,539	678,751	404,581	13,456	31,528	14,689,819
1966-67 . . . . .	6,632,474	5,041,051	1,622,451	1,343,160	765,224	437,964	16,007	34,514	15,892,845
1967-68 . . . . .	7,096,517	5,351,311	1,782,267	1,476,113	887,372	445,076	18,831	36,583	17,094,070

<sup>(a)</sup> Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**Value of production**

*By class of industry.* The value of production for any industry was defined at the Conference of Statisticians at Sydney in 1925 as 'the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production'.

In accordance with this definition, it was agreed that a deduction consisting of the costs of raw material, containers, power, fuel, light, lubricants, water, tools replaced, repairs to plant and depreciation should be made from the 'value of output'. Because of the difficulty experienced in securing accurate figures for depreciation, however, it was subsequently decided that no deduction should be made on this account. All the deductions mentioned above, with the exception of depreciation, are included in the items 'value of materials used' and 'value of fuel used' as defined above. The net value of production as given in the following tables is obtained, therefore, by deducting only 'value of materials used' and 'value of fuel used' from the 'value of output'. The value of factory production, therefore, approximates 'net value added' in the manufacturing process.

Only certain selected items of costs are recorded in the annual census of production. It must not, therefore, be inferred that when wages and salaries are deducted from the value of production the whole of the 'surplus' is available for interest and profit, as many miscellaneous expenses such as taxation, insurance, advertising, and other overhead charges, as well as depreciation, also have to be taken into account.

The following table shows the value of production in each State and Territory for the various classes of industry.

**FACTORIES: VALUE OF PRODUCTION, BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1967-68**  
(\$'000)

<i>Class of industry(a)</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1. Treatment non-metal, mine, etc. products . . . . .	77,691	53,794	23,085	18,944	18,900	8,112	1,248	1,914	203,687
2. Bricks, etc. . . . .	79,400	46,678	11,845	11,449	11,284	1,999	(b)	(b)	163,388
3. Chemicals, etc. . . . .	338,540	208,658	44,089	38,710	47,426	9,189	(b)	(b)	686,997
4. Industrial metals, etc. . . . .	1,413,051	921,834	231,252	359,761	159,303	68,573	4,491	5,367	3,163,632
5. Jewellery, etc. . . . .	9,870	10,080	1,149	2,091	1,207	155	..	1,801	26,355
6. Textiles, etc. . . . .	99,514	180,486	81,90	10,911	3,015	12,902	..	..	315,017
7. Skins, leather, etc. . . . .	21,208	15,655	4,542	4,222	2,230	173	..	..	48,031
8. Clothing, etc. . . . .	152,973	157,932	23,436	15,160	7,523	2,332	57	664	360,076
9. Food, drink, etc. . . . .	317,550	293,980	175,692	68,689	53,565	25,004	1,321	1,684	937,484
10. Sawmills, etc. . . . .	94,340	67,173	37,509	23,126	30,003	17,962	352	1,254	271,719
11. Furniture, etc. . . . .	44,752	30,251	11,886	8,458	7,651	2,307	(b)	(b)	105,612
12. Paper, stationery, etc. . . . .	234,570	186,698	36,884	32,818	19,709	32,646	273	5,376	548,973
13. Rubber . . . . .	37,994	50,626	10,480	9,980	2,866	797	144	359	113,245
14. Musical instruments . . . . .	6,988	841	66	62	83	..	..	..	8,040
15. Miscellaneous . . . . .	77,334	80,234	6,592	11,333	4,273	445	..	..	180,211
<i>Total, classes 1 to 15</i>	<i>3,005,773</i>	<i>2,304,919</i>	<i>626,696</i>	<i>615,715</i>	<i>369,037</i>	<i>182,596</i>	<i>8,360</i>	<i>19,372</i>	<i>7,132,468</i>
16. Heat, light and power . . . . .	125,209	89,882	31,157	16,174	19,220	15,423	1,320	..	298,384
<b>Total, all classes</b>	<b>3,130,982</b>	<b>2,394,801</b>	<b>657,853</b>	<b>631,890</b>	<b>388,257</b>	<b>198,019</b>	<b>9,680</b>	<b>19,372</b>	<b>7,430,853</b>

(a) For full titles see table below. (b) Not available for publication.

**FACTORIES: VALUE OF PRODUCTION, BY CLASS OF INDUSTRY AUSTRALIA(a)**  
**1963-64 TO 1967-68**  
(\$'000)

<i>Class of industry</i>	<i>1963-64</i>	<i>1964-65</i>	<i>1965-66</i>	<i>1966-67</i>	<i>1967-68</i>
1. Treatment of non-metalliferous mine and quarry products . . . . .	148,204	167,026	168,371	186,660	203,687
2. Bricks, pottery, glass, etc. . . . .	113,729	132,067	135,571	146,372	163,388
3. Chemicals, dyes, explosives, paints, oils, grease . . . . .	449,473	504,802	542,702	627,647	686,997
4. Industrial metals, machines, conveyances . . . . .	2,173,990	2,486,078	2,647,768	2,912,885	3,163,632
5. Precious metals, jewellery, plate . . . . .	18,752	21,777	22,886	24,756	26,355
6. Textiles and textile goods (not dress) . . . . .	252,473	279,582	282,753	303,057	315,017
7. Skins and leather (not clothing or footwear). . . . .	40,968	42,150	43,111	44,093	48,031
8. Clothing (except knitted) . . . . .	281,415	302,300	318,968	341,502	360,076
9. Food, drink and tobacco . . . . .	700,489	757,122	818,329	892,257	937,484
10. Sawmills, joinery, boxes, etc., wood turning and carving . . . . .	206,278	231,995	240,785	256,551	271,719
11. Furniture of wood, bedding, etc. . . . .	75,911	84,409	90,606	99,671	105,612
12. Paper, stationery, printing, bookbinding, etc. . . . .	379,738	426,925	459,473	503,315	548,973
13. Rubber . . . . .	85,704	89,057	90,208	99,469	113,245
14. Musical instruments . . . . .	4,901	5,868	6,032	6,899	8,040
15. Miscellaneous products . . . . .	110,670	124,344	129,971	158,795	180,211
<i>Total, classes 1 to 15</i>	<i>5,042,695</i>	<i>5,655,502</i>	<i>5,997,536</i>	<i>6,603,930</i>	<i>7,132,468</i>
16. Heat, light and power . . . . .	227,308	241,251	254,325	273,072	298,384
<b>Total, all classes</b>	<b>5,270,003</b>	<b>5,896,754</b>	<b>6,251,861</b>	<b>6,877,001</b>	<b>7,430,853</b>

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

*Total and average values.* The value of production and the amount per person employed and per head of population are shown in the following table.

**FACTORIES: VALUE OF PRODUCTION—TOTALS AND AVERAGES  
STATES AND TERRITORIES, 1963-64 TO 1967-68**

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
<b>Total value (\$'000)—</b>									
1963-64 . . . . .	2,267,917	1,749,776	441,873	427,356	230,511	152,571	n.a.	n.a.	5,270,003
1964-65 . . . . .	2,521,476	1,949,665	478,423	498,588	260,637	167,251	6,654	14,060	5,896,754
1965-66 . . . . .	2,664,771	2,027,685	542,996	527,477	288,803	175,606	7,103	17,418	6,251,861
1966-67 . . . . .	2,928,227	2,235,337	592,607	563,764	335,788	194,571	7,847	18,860	6,877,001
1967-68 . . . . .	3,130,982	2,394,801	657,853	631,890	388,257	198,019	9,680	19,372	7,430,853
<b>Average per person employed (\$)—</b>									
1963-64 . . . . .	4,650	4,236	3,992	3,857	4,138	4,793	n.a.	n.a.	4,356
1964-65 . . . . .	4,954	4,509	4,116	4,291	4,486	5,134	5,499	4,357	4,647
1965-66 . . . . .	5,131	4,617	4,618	4,457	4,791	5,117	5,489	4,984	4,854
1966-67 . . . . .	5,588	5,020	5,025	4,769	5,267	5,578	5,514	5,194	5,261
1967-68 . . . . .	5,894	5,322	5,443	5,204	5,766	5,629	6,373	5,213	5,582

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

### Indexes of Factory Production

The tables following contain annual indexes of factory production for the years 1949-50 to 1967-68. They present indexes, on 1955-56 and 1959-60 bases respectively, for classes and combinations of classes of manufacturing industry. The indexes are designed to provide broad measures of growth in manufacturing industry over the period.

The indexes have been compiled by methods which are commonly adopted, the indexes for classes and combinations of classes comprising in fact indexes of the output of factory sub-classes at constant prices combined by the use of base period value-added weights. Indexes of this type are subject to a number of limitations, and can be compiled only on the basis of many assumptions and approximations. An understanding of the basis of the indexes is therefore essential if inappropriate use of the indexes is to be avoided. For a comprehensive treatment of concepts, sources, and methods, reference should be made to the annual mimeographed bulletin *Indexes of Factory Production*. This bulletin also contains indexes for a considerable number of individual factory sub-classes.

#### INDEXES OF FACTORY PRODUCTION(a): AUSTRALIA(b), 1949-50 TO 1959-60

(Base of each index: year 1955-56 = 100)

Class of Industry	Pro- portion of total value added(c) 1955-56	1949-	1950-	1951-	1952-	1953-	1954-	1955-	1956-	1957-	1958-	1959-
		50	51	52	53	54	55	56	57	58	59	60
per cent												
1. Treatment non-metal, mine, etc. products . . . . .	2.3	63	72	76	73	81	94	100	104	112	121	141
2. Bricks, etc. . . . .	2.1	76	78	86	78	89	96	100	92	96	103	117
3. Chemicals, etc. . . . .	7.9	51	59	61	58	69	85	100	111	123	132	146
4. Industrial metals, etc. . . . .	39.8	63	74	78	75	83	93	100	102	114	122	137
6. Textiles, etc. . . . .	5.5	83	89	79	78	99	97	100	111	116	114	132
7. Skins, leather, etc. . . . .	1.1	106	101	97	98	103	104	100	100	99	105	105
8. Clothing, etc. . . . .	6.8	87	93	89	84	96	97	100	99	102	104	109
9. Food, drink, etc. . . . .	13.2	87	89	89	90	95	98	100	103	104	109	111
10. Sawmills, etc. . . . .	5.2	79	85	89	79	89	98	100	96	93	102	110
11. Furniture, etc. . . . .	1.7	83	95	89	78	87	97	100	102	113	119	136
12. Paper, stationery, etc. . . . .	6.6	71	74	72	64	79	90	100	108	111	124	140
13. Rubber . . . . .	1.7	66	74	73	58	84	96	100	102	111	118	127
Other (Classes 5, 14, 15)(d) . . . . .	2.6	64	76	72	71	81	93	100	109	111	120	144
Classes 1 to 15 (combined) . . . . .	96.5	71	78	80	76	86	94	100	103	110	117	130
16. Heat, light and power . . . . .	3.5	62	68	73	76	83	92	100	108	116	123	132
All classes (combined) . . . . .	100.0	71	78	79	76	85	94	100	104	110	118	130

(a) The indexes in this table are combinations of sub-class indexes of value of output as estimated at constant prices. Indexes for all sub-classes within the respective groupings have been combined according to the value-added weights of 1955-56. (b) Excludes factories in Northern Territory and Australian Capital Territory. (c) Value of production—see page 712 and 727. (d) Combination of Class 5, Precious metals, jewellery, plate; Class 14, Musical instruments; and Class 15, Miscellaneous products.

## INDEXES OF FACTORY PRODUCTION(a): AUSTRALIA(b), 1959-60 TO 1967-68

(Base of each index: year 1959-60 = 100)

Class of industry	Proportion										
	of total value added(c) 1959-60	1959- 60	1960- 61	1961- 62	1962- 63	1963- 64	1964- 65	1965- 66	1966- 67	1967- 68	
	per cent										
1. Treatment of non-metalliferous mine and quarry products . . .	2.5	100	113	114	122	137	149	153	157	166	
2. Bricks, pottery, glass, etc. . .	2.2	100	101	97	104	116	129	127	135	143	
3. Chemicals, dyes, explosives, paints, oils, grease . . .	8.6	100	104	113	123	136	151	158	173	188	
4. Industrial metals, machines, conveyances . . .	40.9	100	104	102	116	130	143	149	157	167	
6. Textiles and textile goods (not dress) . . .	5.2	100	98	100	111	121	128	130	138	140	
7. Skins and leather (not clothing or footwear) . . .	0.9	100	94	95	100	99	102	98	94	97	
8. Clothing (except knitted) . . .	5.7	100	103	105	111	116	121	125	132	134	
9. Food, drink and tobacco . . .	12.5	100	103	108	113	118	127	133	141	144	
10. Sawmills, joinery, boxes, etc. . .	4.7	100	100	96	100	107	117	119	121	127	
11. Furniture of wood, bedding, etc. . .	1.6	100	97	100	105	112	121	126	132	140	
12. Paper, stationery, printing, etc. . .	7.2	100	107	106	117	129	146	151	158	169	
13. Rubber . . .	1.6	100	102	99	115	126	132	132	140	151	
Other (classes 5, 14 and 15)(d) . . .	2.5	100	102	106	120	139	157	168	199	229	
Classes 1 to 15 (combined) . . .	96.1	100	103	104	115	126	138	142	151	160	
16. Heat, light and power . . .	3.9	100	107	112	127	135	149	158	170	181	
All classes (combined) . . .	100.0	100	104	105	115	126	138	143	152	161	

(a) The indexes in this table are combinations of sub-class indexes of value of output as estimated at constant prices. Indexes for all sub-classes within the respective groupings have been combined according to the value-added weights of 1959-60. (b) Excludes factories in Northern Territory and Australian Capital Territory. (c) Value of production—see page 712 and 727. (d) Combination of Class 5, Precious metals, jewellery, plate; Class 14, Musical instruments; and Class 15, Miscellaneous products.

## Value of land, buildings, plant and machinery

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation, but they include estimates of the capital value of premises and plant rented. Consequently, the totals shown in the table do not represent the actual amount of capital invested in the items specified.

## Value of land and buildings

FACTORIES: VALUE OF LAND AND BUILDINGS(a), STATES AND TERRITORIES  
1963-64 TO 1967-68  
(\$'000)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(b)
1963-64 . . .	1,454,527	1,020,794	211,520	230,627	118,813	168,403	n.a.	n.a.	3,204,685
1964-65 . . .	1,539,169	1,105,712	237,443	256,536	131,739	209,010	5,668	20,583	3,505,859
1965-66 . . .	1,658,597	1,176,942	273,559	276,531	151,047	211,923	6,100	21,891	3,776,590
1966-67 . . .	1,785,172	1,254,455	294,662	293,351	170,308	233,983	6,482	22,779	4,061,193
1967-68 . . .	1,866,071	1,318,004	315,497	310,019	198,640	263,364	8,150	23,410	4,303,156

(a) Depreciated or book values at 30 June, including estimated value of rented premises. (b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

FACTORIES: VALUE OF LAND AND BUILDINGS(a), BY CLASS OF INDUSTRY  
AUSTRALIA(b), 1963-64 TO 1967-68  
(\$'000)

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-ferrous mine and quarry products	72,616	76,489	82,525	86,126	90,486
2. Bricks, pottery, glass, etc.	68,470	73,402	79,323	86,770	89,650
3. Chemicals dyes, explosives, paints, oils, grease	219,212	231,170	247,653	263,840	274,346
4. Industrial metals, machines, conveyances	1,188,289	1,320,522	1,419,339	1,532,902	1,649,345
5. Precious metals, jewellery, plate	11,657	16,597	16,584	17,443	18,254
6. Textiles and textile goods (not dress)	130,425	132,770	137,174	144,923	152,328
7. Skins and leather (not clothing or footwear)	23,322	24,495	25,427	25,478	27,129
8. Clothing (except knitted)	135,959	147,996	156,895	164,304	170,698
9. Food, drink and tobacco	392,089	428,224	465,596	494,778	524,896
10. Sawmills, joinery, boxes, etc., wood turning and carving	90,956	100,165	107,406	115,475	120,701
11. Furniture of wood, bedding, etc.	44,142	49,601	52,594	57,401	63,003
12. Paper, stationery, printing, bookbinding, etc.	198,860	227,332	250,587	265,348	288,746
13. Rubber	50,595	52,322	58,796	64,271	64,101
14. Musical instruments	1,550	1,640	1,730	1,836	3,135
15. Miscellaneous products	64,090	69,571	74,873	85,761	92,875
<i>Total, classes 1 to 15</i>	<i>2,692,232</i>	<i>2,952,295</i>	<i>3,176,504</i>	<i>3,406,654</i>	<i>3,629,694</i>
16. Heat, light and power	512,453	553,565	600,087	654,539	673,462
<b>Total, all classes</b>	<b>3,204,685</b>	<b>3,505,859</b>	<b>3,776,590</b>	<b>4,061,193</b>	<b>4,303,156</b>

(a) Depreciated or book values at 30 June, including estimated value of rented premises. (b) Before 1 July 1964 excludes Northern Territory and Australian Capital Territory.

FACTORIES: VALUE OF LAND AND BUILDINGS(a), BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1967-68  
(\$'000)

Class of industry(b)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust
1. Treatment non-metal. mine, etc. products	31,463	29,637	7,675	10,134	8,283	2,133	443	718	90,486
2. Bricks, etc.	46,359	26,472	5,234	5,639	3,907	1,448	(c)	(c)	89,650
3. Chemicals, etc.	144,388	84,898	11,555	10,912	18,335	3,871	(c)	(c)	274,346
4. Industrial metals, etc.	708,693	528,358	113,125	165,471	85,865	37,716	3,715	6,402	1,649,345
5. Jewellery, etc.	6,398	5,168	739	1,506	767	154	..	3,522	18,254
6. Textiles, etc.	47,899	90,487	2,874	4,770	1,493	4,805	..	..	152,328
7. Skins, leather, etc.	13,336	10,163	1,068	1,408	1,097	58	..	..	27,129
8. Clothing, etc.	73,891	72,832	9,534	7,368	4,459	1,779	141	694	170,698
9. Food, drink, etc.	159,930	187,945	81,563	39,166	32,316	20,851	1,544	1,582	524,896
10. Sawmills, etc.	45,195	37,893	11,156	11,084	7,674	6,284	445	970	120,701
11. Furniture, etc.	24,188	21,084	6,825	4,882	4,015	1,531	(c)	(c)	63,003
12. Paper, stationery, etc.	118,335	101,056	17,773	17,541	10,516	15,218	197	8,111	288,746
13. Rubber	24,291	26,880	5,924	4,234	1,410	796	137	429	64,101
14. Musical instruments	2,323	573	62	85	92	..	..	..	3,135
15. Miscellaneous	39,522	43,190	2,536	4,341	2,798	487	..	..	92,875
<i>Total, classes 1 to 15</i>	<i>1,486,211</i>	<i>1,266,635</i>	<i>277,643</i>	<i>288,541</i>	<i>183,026</i>	<i>97,129</i>	<i>7,098</i>	<i>23,410</i>	<i>3,629,694</i>
16. Heat, light and power	379,859	51,368	37,855	21,478	15,615	166,235	1,052	..	673,462
<b>Total, all classes</b>	<b>1,866,071</b>	<b>1,318,004</b>	<b>315,497</b>	<b>310,019</b>	<b>198,640</b>	<b>263,364</b>	<b>8,150</b>	<b>23,410</b>	<b>4,303,156</b>

(a) Depreciated or book values at 30 June 1968, including estimated value of rented premises. (b) For full titles see table above. (c) Not available for publication.

## Value of plant and machinery

**FACTORIES: VALUE OF PLANT AND MACHINERY<sup>(a)</sup>, STATES AND TERRITORIES  
1963-64 TO 1967-68  
(\$'000)**

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(b)
1963-64	1,504,195	1,040,724	308,307	330,281	155,514	141,651	n.a.	n.a.	3,480,673
1964-65	1,564,408	1,127,948	350,318	388,932	163,526	155,336	6,103	9,682	3,766,253
1965-66	1,672,719	1,209,046	477,459	423,458	197,210	158,672	5,953	10,134	4,154,652
1966-67	1,837,287	1,361,994	601,393	468,959	250,858	169,159	6,825	10,368	4,706,843
1967-68	1,962,069	1,367,251	631,231	503,591	296,659	184,683	6,696	10,023	4,962,203

(a) Depreciated or book values at 30 June, including estimated value of rented plant and machinery. (b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.

**FACTORIES: VALUE OF PLANT AND MACHINERY<sup>(a)</sup>, BY CLASS OF INDUSTRY  
AUSTRALIA<sup>(b)</sup>, 1963-64 TO 1967-68  
(\$'000)**

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	155,387	171,063	197,365	206,403	220,318
2. Bricks, pottery, glass, etc.	70,476	76,841	84,789	90,183	97,623
3. Chemicals, dyes, explosives, paints, oils, grease	459,429	455,567	521,872	610,518	613,373
4. Industrial metals, machines, conveyances	1,187,576	1,311,045	1,418,984	1,617,467	1,774,241
5. Precious metals, jewellery, plate	3,454	7,060	7,197	7,632	7,870
6. Textiles and textile goods (not dress)	106,160	113,469	121,398	125,448	129,706
7. Skins and leather (not clothing or footwear)	9,472	10,206	10,215	10,357	10,880
8. Clothing (except knitted)	46,489	51,361	53,749	57,221	60,400
9. Food, drink and tobacco	383,922	438,152	499,512	534,232	561,607
10. Sawmills, joinery, boxes, etc., wood turning and carving	71,548	75,441	78,321	85,107	85,320
11. Furniture of wood, bedding, etc.	11,137	12,020	12,902	13,450	14,141
12. Paper, stationery, printing, bookbinding, etc.	209,705	231,722	256,681	278,596	300,637
13. Rubber	36,532	41,208	54,194	60,281	59,765
14. Musical instruments	603	581	658	681	1,076
15. Miscellaneous products	46,137	54,444	59,571	64,713	71,713
<i>Total, classes 1 to 15</i>	<i>2,798,027</i>	<i>3,050,180</i>	<i>3,377,406</i>	<i>3,762,288</i>	<i>4,008,671</i>
16. Heat, light and power	682,646	716,072	777,245	944,555	953,531
<b>Total, all classes</b>	<b>3,480,673</b>	<b>3,766,253</b>	<b>4,154,652</b>	<b>4,706,843</b>	<b>4,962,203</b>

(a) Depreciated or book values at 30 June, including estimated value of rented plant and machinery. (b) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory.



**FACTORIES: VALUE OF PLANT AND MACHINERY(a), BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1967-68  
(\$'000)**

Class of industry(b)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1. Treatment non-metal, mine, etc., products . . .	111,216	53,985	16,937	18,195	9,948	8,749	372	916	220,318
2. Bricks, etc. . . . .	44,130	30,582	7,347	7,279	5,806	1,316	(c)	(c)	97,623
3. Chemicals, etc. . . . .	282,452	185,775	58,176	33,899	44,721	7,356	(c)	(c)	613,373
4. Industrial metals, etc. . .	797,855	377,782	165,587	262,850	110,287	57,898	1,159	823	1,774,241
5. Jewellery, etc. . . . .	1,690	1,517	248	485	227	43	..	3,660	7,870
6. Textiles, etc. . . . .	41,372	72,178	2,620	4,222	1,729	7,583	..	..	129,706
7. Skins, leather, etc. . . .	4,268	3,816	1,066	1,204	492	34	..	..	10,880
8. Clothing, etc. . . . .	22,360	27,504	3,929	3,980	1,694	632	46	255	60,400
9. Food, drink, etc. . . . .	132,160	166,705	185,469	32,195	24,556	18,944	881	697	561,607
10. Sawmills, etc. . . . .	29,776	18,294	11,925	9,892	8,229	6,848	132	224	85,320
11. Furniture, etc. . . . .	5,711	3,765	1,864	1,383	1,007	378	(c)	(c)	14,141
12. Paper, stationery, etc. . .	106,312	101,008	21,492	32,028	14,623	22,908	157	2,109	300,637
13. Rubber . . . . .	21,282	28,551	2,436	5,683	1,286	323	72	131	59,765
14. Musical instruments . . .	796	249	10	13	7	..	..	..	1,076
15. Miscellaneous . . . . .	25,197	38,746	2,450	3,131	1,830	360	..	..	71,713
<i>Total, classes 1 to 15</i>	<i>1,626,578</i>	<i>1,110,458</i>	<i>481,555</i>	<i>416,441</i>	<i>226,442</i>	<i>133,371</i>	<i>3,804</i>	<i>10,022</i>	<i>4,008,671</i>
16. Heat, light and power . .	335,491	256,793	149,675	87,150	70,218	51,312	2,892	..	953,531
<b>Total, all classes</b>	<b>1,962,069</b>	<b>1,367,251</b>	<b>631,231</b>	<b>503,591</b>	<b>296,659</b>	<b>184,683</b>	<b>6,696</b>	<b>10,022</b>	<b>4,962,203</b>

(a) Depreciated or book values at 30 June 1968, including estimated value of rented plant and machinery. (b) For full titles, see table on page 732. (c) Not available for publication.

**Depreciation of land and buildings and plant and machinery**

The following table shows, by class of industry, the allowance made for the depreciation of land and buildings and plant and machinery used in connection with the manufacturing industries in each State and Territory as recorded by factory proprietors at the annual census of factory production.

**FACTORIES: ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND  
PLANT AND MACHINERY, BY CLASS OF INDUSTRY  
STATES AND TERRITORIES, 1967-68  
(\$'000)**

Class of industry (a)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1. Treatment non-metal, mine, etc., products . . .	13,026	8,639	2,406	1,898	1,245	509	95	110	27,927
2. Bricks, etc. . . . .	4,553	3,402	785	862	658	131	(c)	(c)	10,491
3. Chemicals, etc. . . . .	36,776	32,812	5,900	4,406	6,188	1,331	(c)	(c)	87,483
4. Industrial metals, etc. . .	92,629	46,501	12,467	31,805	7,768	3,497	121	82	194,870
5. Jewellery, etc. . . . .	180	144	19	55	23	3	..	192	618
6. Textiles, etc. . . . .	5,864	11,531	517	804	234	1,038	..	..	19,988
7. Skins, leather, etc. . . .	457	467	97	215	76	3	..	..	1,316
8. Clothing, etc. . . . .	2,078	2,548	297	295	159	69	5	25	5,475
9. Food, drink, etc. . . . .	16,309	20,675	17,096	3,701	3,560	2,327	78	118	63,864
10. Sawmills, etc. . . . .	3,209	1,975	1,265	1,267	1,093	792	9	31	9,640
11. Furniture, etc. . . . .	643	402	216	161	112	39	(c)	(c)	1,575
12. Paper, stationery, etc. . .	11,882	12,964	2,675	2,818	1,537	3,009	22	260	35,166
13. Rubber . . . . .	4,152	4,856	479	644	201	57	13	13	10,451
14. Musical instruments . . .	115	17	1	(b)	1	..	..	..	135
15. Miscellaneous . . . . .	3,939	6,203	278	485	194	12	..	..	11,111
<i>Total, classes 1 to 15</i>	<i>195,812</i>	<i>153,136</i>	<i>44,498</i>	<i>49,416</i>	<i>23,048</i>	<i>12,817</i>	<i>408</i>	<i>939</i>	<i>480,074</i>
16. Heat, light and power . .	28,041	22,383	8,626	5,711	4,940	2,357	490	..	72,548
<b>Total, all classes</b>	<b>223,853</b>	<b>175,519</b>	<b>53,124</b>	<b>55,127</b>	<b>27,988</b>	<b>15,175</b>	<b>898</b>	<b>939</b>	<b>552,621</b>

(a) For full titles see table on page 732. (b) Less than \$500. (c) Not available for publication.

**Land and buildings, plant and machinery—values, additions and replacements, depreciation**

The following table summarises the recorded totals for Australia and also includes particulars of additions and replacements.

**FACTORIES: VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY  
AUSTRALIA(a), 1963-64 TO 1967-68  
(\$'000)**

Year	Book values at 30 June(b)		Additions and replacements during year(b)		Depreciation allowed during year	
	Land and buildings	Plant and machinery	Land and buildings	Plant and machinery	Land and buildings	Plant and machinery
1963-64 . . . . .	3,204,685	3,480,673	192,419	564,958	39,711	336,929
1964-65 . . . . .	3,505,859	3,766,253	249,779	666,490	46,095	366,702
1965-66 . . . . .	3,776,590	4,154,652	272,052	773,322	51,895	407,388
1966-67 . . . . .	4,061,193	4,706,843	284,951	1,030,889	52,440	450,146
1967-68 . . . . .	4,303,156	4,962,203	270,762	760,894	58,412	494,210

(a) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (b) Includes estimated values of rented premises, plant and machinery.

**Principal factory products**

The factory production of certain commodities is shown in the monthly and quarterly publications of this Bureau, in the series *Manufacturing Industries*, and in the bulletin *Manufacturing Commodities*, formerly *Secondary Industries, Part II.—Materials Used and Articles Produced in Factories*.

The following table shows the total recorded production of some of the principal articles (i.e. of those for which production can be represented in quantitative terms) manufactured in Australia. A more complete list, together with values, where available, is published in the aforementioned bulletin and in the mimeographed statement *Principal Factory Products*. Because of revisions, figures for some items for the year 1967-68 in the following table may differ from corresponding figures in earlier publications.

**QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA(a)  
1964-65 TO 1967-68**

Article	1964-65	1965-66	1966-67	1967-68
<b>Acid (in terms of 100%)—</b>				
Hydrochloric . . . . . tons	4,491	5,447	6,765	7,918
Nitric . . . . . „	24,817	25,522	31,009	35,033
Sulphuric . . . . . '000 tons	1,635	1,781	1,991	1,892
Aerated and carbonated waters . . . . . '000 gal	99,062	105,381	112,937	126,933
<b>Air-conditioning equipment—</b>				
Room air conditioners (refrigerated) . . . . . No.	6,027	18,217	22,217	30,509
Room air coolers (evaporative coolers) . . . . . „	2,886	6,000	10,414	18,363
Package unit air conditioners . . . . . „	2,306	2,047	3,491	4,654
Asbestos cement building sheets (finished) . . . . . '000 sq yd	32,477	32,364	32,609	36,251
<b>Bags, leather, fibre, etc.—</b>				
<b>Handbags—</b>				
Leather . . . . . No.	529,133	534,121	501,762	492,736
Plastic . . . . . '000	2,392	1,993	1,938	2,294
Other . . . . . No.	410,190	393,037	392,798	396,281
Hessian and calico bags . . . . . '000 doz	3,095	3,601	3,808	3,973
Suitcases, kitbags and trunks . . . . . '000	1,506	1,515	1,551	1,592
All other(b) . . . . . „	2,187	2,128	2,057	1,988
<b>Bath heaters—</b>				
Electric . . . . . No.	14,087	13,524	11,701	11,777
Gas . . . . . „	11,348	9,971	9,026	8,648
Solid fuel . . . . . „	16,120	13,963	12,446	11,820

(a) Excludes Northern Territory and Australian Capital Territory. (b) Excludes canvas water bags.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES  
AUSTRALIA(a), 1964-65 TO 1967-68—continued

Article		1964-65	1965-66	1966-67	1967-68
Bathing suits . . . . .	doz	240,090	261,190	301,723	299,825
Baths—					
C.I.P.E. . . . .	No.	84,852	85,447	74,489	74,527
Other . . . . .	„	67,523	67,068	79,987	87,419
Batteries, wet cell type—					
Auto (S.L.I.) 6 volts . . . . .	'000	503	470	481	465
„ 12 volts . . . . .	„	1,257	1,312	1,488	1,653
Radio, homelighter, fencer . . . . .	No. of 2 volt cells	158,381	136,173	117,445	106,525
Traction, plant and other . . . . .	„	63,717	78,066	99,537	70,518
Beer (excluding waste beer) . . . . .	'000 gal	274,895	279,503	293,714	309,775
Biscuits . . . . .	'000 lb	208,945	223,678	230,118	233,383
Blankets . . . . .	'000	2,079	1,701	1,724	1,654
Boots and shoes (see Footwear)					
Bran (wheaten) . . . . .	tons (2,000 lb)	228,746	206,127	202,183	195,862
Brandy . . . . .	'000 proof gal	1,400	1,371	791	872
Brassieres . . . . .	doz	673,551	719,739	792,015	815,130
Bread (2 lb loaf equivalent) . . . . .	'000	781,317	787,841	802,936	805,679
Breakfast food, cereal (ready to eat) . . . . .	cwt	878,533	904,040	900,231	935,523
Bricks, clay . . . . .	mil.	1,353	1,360	1,361	1,440
Briquettes, brown coal . . . . .	'000 tons	1,893	1,883	1,820	1,745
Butter . . . . .	'000 lb	454,878	460,433	489,217	432,313
Cardigans, sweaters, etc. . . . .	'000 doz	1,418	1,432	1,436	1,378
Cement, Portland . . . . .	'000 tons	3,746	3,688	3,661	3,805
Cheese (green weight) . . . . .	'000 lb	138,008	131,300	153,834	155,385
Cigarettes and cigars . . . . .	„	49,544	47,543	50,384	51,517
Cloth (including mixtures)—					
Cotton(b) . . . . .	'000 sq yd	56,667	55,701	57,573	59,043
Rayon and acetate . . . . .	„	32,016	32,985	35,692	37,226
Synthetic (non-cellulosic) . . . . .	„	22,491	20,805	23,530	27,904
Wool . . . . .	„	35,300	32,588	30,635	32,599
Coke—					
Metallurgical . . . . .	'000 tons	3,118	3,179	3,365	3,678
Other . . . . .	tons	632,501	599,301	551,326	507,253
Concrete, ready mixed . . . . .	'000 cu yd	6,060	6,736	7,000	7,955
Confectionery—					
Chocolate . . . . .	'000 lb	95,634	104,312	104,934	98,984
Other . . . . .	„	106,274	107,856	111,796	112,848
Copper, refined(c) . . . . .	tons	53,441	91,588	74,313	71,952
Coppers (wash boilers)—					
Electric . . . . .	No.	11,051	9,113	8,011	9,462
Gas . . . . .	„	7,503	5,740	4,949	6,464
Inserts . . . . .	„	18,213	19,074	9,047	(e)
Cordials and syrups . . . . .	'000 gal	7,295	9,144	9,160	9,776
Corsets and corselets . . . . .	doz	342,336	380,835	393,231	418,145
Cycles (complete) . . . . .	No.	67,874	63,641	69,365	90,671
Dentifrices (toothpaste) . . . . .	'000 lb	9,799	9,774	10,773	10,324
Electric generators—					
Non-automatic—Alternating current . . . . .	No.	1,480	1,676	1,763	2,111
Direct current . . . . .	„	1,139	1,022	708	632
Electricity . . . . .	mil. kWh	35,641	38,279	41,484	44,531
Electrodes for manual welding . . . . .	'000 lb	47,654	43,555	45,656	45,124
Engines, internal combustion(d) . . . . .	'000	306	245	288	258
Essences, flavouring—					
Domestic . . . . .	gal	130,532	134,011	100,460	90,861
Industrial . . . . .	„	587,753	599,426	733,289	840,894
Face powder . . . . .	lb	310,586	285,870	376,236	298,233
Fans, electric . . . . .	No.	204,285	223,409	321,600	360,346
Fish, canned (including fish loaf) . . . . .	'000 lb	10,910	11,849	13,713	17,403

(a) Excludes Northern Territory and Australian Capital Territory. (b) Excludes tyre-cord fabric. (c) Primary origin only. (d) Petrol and diesel. Excludes car, motor cycle, truck, tractor, aero, and marine engines. (e) Not available for publication.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES  
AUSTRALIA(a), 1964-65 TO 1967-68—continued

Article		1964-65	1965-66	1966-67	1967-68
<b>Floorboards—</b>					
Australian timber . . . . .	'000 super ft	160,165	162,710	154,286	151,812
Imported timber . . . . .	"	798	721	324	463
<b>Floor coverings—</b>					
Textile . . . . .	'000 sq yd	11,542	11,692	12,624	12,758
Smooth surface . . . . .	"	11,869	14,041	12,150	14,524
Underfelts, underlays, etc. . . . .	"	11,158	11,067	(h)14,802	(h)16,613
Floor polishers, electric . . . . .	No.	105,077	89,193	88,840	72,657
<b>Flour—</b>					
Self-raising . . . . .	'000 cwt	902	864	832	804
Wheaten(b) . . . . .	'000 tons (2,000 lb)	1,553	1,414	1,392	1,419
<b>Footwear (not rubber)—</b>					
Boots, shoes and sandals . . . . .	'000 pairs	35,306	34,949	37,080	38,076
Slippers . . . . .	"	5,512	4,609	4,454	4,298
<b>Fruit juices, natural—</b>					
Single strength . . . . .	'000 gal	10,106	10,727	13,674	14,630
Concentrated(c) . . . . .	"	753	815	1,139	971
Gas (town) . . . . .	mil. cubic ft	55,260	55,742	56,743	58,070
<b>Gloves—</b>					
Dress . . . . .	doz pairs	28,299	26,163	27,761	30,913
<b>Work—</b>					
Sewn(d) . . . . .	'000 doz pairs	407	382	358	371
Dipped . . . . .	"	1,195	1,309	1,343	1,539
Glucose . . . . .	'000 lb	57,444	60,779	65,422	61,945
Golf clubs . . . . .	doz	28,635	33,145	40,680	38,082
<b>Handkerchiefs—</b>					
Men's . . . . .	'000 doz	2,089	1,901	1,664	1,971
Women's . . . . .	"	1,603	1,507	1,371	1,205
<b>Heaters, room—</b>					
Solid fuel . . . . .	No.	47,883	37,967	31,606	24,558
Radiators and electric fires . . . . .	"	749,889	706,943	600,294	623,950
Gas fires and space heaters, domestic . . . . .	"	30,858	31,185	38,764	38,268
Ice . . . . .	tons	205,545	198,701	190,274	187,306
Ice cream . . . . .	'000 gal	25,019	30,026	34,974	37,423
Infants' and invalids' milk-based health beverages(e) . . . . .	'000 lb	45,179	45,280	49,348	48,234
<b>Ink, printing—</b>					
News . . . . .	"	14,948	14,900	16,190	17,401
Other . . . . .	"	13,545	13,971	14,782	15,440
<b>Iron and steel—</b>					
Pig iron . . . . .	'000 tons	3,936	4,380	4,893	5,209
Steel ingots, open hearth and electric . . . . .	"	5,131	5,561	6,114	6,287
Blooms and slabs . . . . .	"	4,503	4,823	4,978	5,372
Irons, electric (hand, domestic) . . . . .	No.	430,326	450,230	507,882	465,501
Jams (including conserves, jellies, etc.) . . . . .	'000 lb	89,362	97,149	90,761	83,917
Lard . . . . .	"	5,356	5,853	6,670	6,475
<b>Lawn mowers—</b>					
Petrol, rotary . . . . .	No.	201,125	176,396	219,826	184,908
Other types(f) . . . . .	"	10,799	11,403	11,235	11,688
Lead refined(g) . . . . .	tons	199,032	188,197	192,429	186,908
<b>Leather—</b>					
<b>Dressed or finished—</b>					
Chrome tanned (including retanned) . . . . .	'000 sq ft	85,900	83,175	71,953	72,214
Vegetable tanned, by weight . . . . .	'000 lb	19,865	15,326	12,883	11,296
Vegetable tanned, by measurement . . . . .	'000 sq ft	4,036	3,956	4,009	3,303
Tanned or dressed skins with hair or wool retained . . . . .	doz	88,592	117,778	82,018	110,381

(a) Excludes Northern Territory and Australian Capital Territory. (b) Includes wheatmeal for baking and sharps and atta flour. (c) Excludes grape must. (d) Excludes fabric liners for dipped gloves but includes moulded or heat sealed work gloves. (e) Includes malted milk and milk sugar (lactose). (f) Petrol cylinder, electric and hand. (g) Includes lead content of lead only from primary sources, but excludes lead-silver bullion produced for export. (h) New basis—Needled (or bonded) felts of jute or jute/hair mixtures (for all purposes) as from July 1966.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES  
AUSTRALIA(a), 1964-65 TO 1967-68—continued

Article		1964-65	1965-66	1966-67	1967-68
Lime—					
Crushed . . . . .	tons	200,040	219,912	249,807	253,755
Hydrated . . . . .	"	89,840	96,566	97,544	95,539
Quick . . . . .	"	133,957	143,311	155,173	179,536
Lipstick . . . . .	lb	65,458	70,104	74,842	72,323
Malt (excluding extract) . . . . .	'000 bus	12,328	13,444	14,239	13,776
Margarine—					
Table . . . . .	'000 lb	50,937	53,698	48,356	35,576
Other . . . . .	"	69,060	67,884	76,138	89,285
Mattresses and bed bases—					
Box spring . . . . .	No.	64,699	80,319	100,362	118,883
Inner spring . . . . .	"	727,248	705,702	682,587	659,452
Woven wire, link mesh and spring . . . . .	"	510,492	557,344	638,726	626,534
Other . . . . .	"	294,074	273,040	302,882	304,533
Meat, canned(b) . . . . .	'000 lb	115,578	114,098	100,849	106,957
Meters—					
Electric (domestic)(c) . . . . .	No.	302,532	302,511	296,571	304,905
Gas . . . . .	"	50,010	41,443	37,884	37,831
Water . . . . .	"	127,316	141,042	146,915	148,839
Milk, condensed, concentrated and evaporated—					
Full cream, sweetened . . . . .	'000 lb	102,479	73,985	61,510	47,316
Full cream, unsweetened . . . . .	"	89,390	88,482	91,700	87,946
Skim . . . . .	"	21,936	21,196	24,974	18,932
Milk powder—					
Full cream . . . . .	"	43,669	45,060	48,018	47,272
Skim . . . . .	"	107,823	112,342	188,584	196,029
Buttermilk or mixed skim and buttermilk . . . . .	"	20,885	25,900	32,518	33,592
Motors, electric . . . . .	'000	2,585	2,510	2,667	2,911
Motor vehicles, finished—					
Cars . . . . .	No.	250,477	235,326	238,720	270,963
Station wagons . . . . .	"	83,992	58,334	57,534	59,047
Utilities . . . . .	"	25,661	33,038	33,909	31,174
Panel vans . . . . .	"	12,972	14,427	14,013	14,687
Truck and truck-type vehicles . . . . .	"	1,220	766	768	1,137
Motor vehicles, partly finished—					
Cars, station wagons, utilities, vans . . . . .	"	1,825	1,666	1,381	1,663
Trucks and truck-type vehicles . . . . .	"	27,029	20,851	21,747	21,857
Motor vehicle safety belts . . . . .	"	437,189	426,847	835,162	962,851
Nails . . . . .	tons	26,802	23,414	23,830	22,925
Neckties . . . . .	doz	494,107	496,989	490,677	498,503
Oatmeal and rolled oats—					
For porridge, etc. . . . .	cwt	319,950	313,987	340,781	314,319
Other . . . . .	"	536,211	397,401	308,712	116,034
Oils, vegetable, crude . . . . .	'000 lb	87,676	87,903	84,519	95,033
Paints, etc.—					
Paints (not water) and enamels ready for use . . . . .	'000 gal	16,260	15,188	16,037	16,473
in paste form . . . . .	'000 lb	2,926	3,158	2,589	2,238
Lacquers (nitro-cellulose) . . . . .	'000 gal	1,563	1,437	1,427	1,427
Tinting colours, packaged ready for sale . . . . .	"	57	54	57	68
Stains and clear varnishes packaged ready for sale . . . . .	"	899	845	913	875
Water paints—					
Emulsion type . . . . .	"	3,710	4,321	4,193	4,357
In powder form . . . . .	'000 lb	1,053	943	870	745
Thinners . . . . .	'000 gal	4,163	4,018	4,031	4,231
Paper—					
Newsprint . . . . .	tons	93,142	93,211	97,255	92,648
Other . . . . .	"	341,642	351,303	389,223	385,567

(a) Excludes Northern Territory and Australian Capital Territory. (b) Excludes poultry and baby food. (c) New basis—electricity consumption meters from 1 July 1965.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES  
AUSTRALIA(a), 1964-65 TO 1967-68—continued

Article		1964-65	1965-66	1966-67	1967-68
Paperboard . . . . .	tons	296,387	317,553	329,496	334,660
Perambulators, pushers and strollers . . . . .	No.	135,621	132,499	133,018	139,082
Petrol—					
For blending and refining . . . . .	million gal	52	45	1,832	50
Other (all types) . . . . .	"	1,495	1,609		
Plaster of paris . . . . .	tons	277,445	265,553	261,054	278,225
Plaster sheets . . . . .	'000 sq yd	29,937	29,917	30,601	32,809
Plywood, $\frac{3}{8}$ inch basis . . . . .	'000 sq ft	217,059	187,258	200,451	230,018
Pollard . . . . .	tons (2,000 lb)	326,418	303,162	284,628	305,468
Preserves—					
Fruit—					
Canned or bottled . . . . .	'000 lb	513,713	579,619	611,552	659,700
Pulp and puree—single strength . . . . .	'000 cwt	86	62	51	44
Vegetables—					
Canned or bottled . . . . .	'000 lb	152,117	180,098	194,834	182,051
Quick frozen . . . . .	"	77,254	93,885	118,216	100,862
Pyjamas—					
Men's and boys' (suits only) . . . . .	doz	430,589	480,396	422,640	420,563
Women's and girls' (incl. nightdresses) . . . . .	"	711,139	627,711	722,519	746,779
Racquet frames (all types) . . . . .	"	16,190	15,308	16,866	15,798
Radio receiving sets (including radiograms) . . . . .	No.	455,970	392,526	445,766	522,394
Records (phonograph)—					
Single play (78 and 45 rpm) . . . . .	'000	4,198	4,295	4,727	5,296
Extended play . . . . .	"	1,474	1,486	2,103	1,869
Long play . . . . .	"	4,459	5,086	6,714	6,847
Refrigerators, domestic . . . . .	No.	227,728	213,870	232,200	245,138
Resins, plastic and synthetic, for all purposes . . . . .	'000 cwt	2,123	2,434	2,854	3,349
Rice, polished, unpolished and broken . . . . .	"	1,969	2,080	2,373	(b)
Ropes and cables (excluding wire) . . . . .	cwt	140,770	133,355	130,845	117,670
Rugs . . . . .	'000	201	175	191	170
Sauce . . . . .	'000 pints	38,271	46,111	42,213	43,692
Semolina . . . . .	tons (2,000 lb)	16,532	18,744	20,777	24,287
Shirts (men's and boys') . . . . .	'000 doz	2,146	2,226	2,214	2,226
Sink heaters, electric . . . . .	No.	12,155	10,646	10,174	9,941
Sinks, steel . . . . .	"	219,370	219,333	226,076	212,752
Soap, for personal toilet use . . . . .	'000 cwt	465	478	483	500
Socks and stockings—					
Men's and youths' . . . . .	'000 doz pairs	1,707	1,690	1,815	1,910
Women's and maids' . . . . .	"	4,440	4,563	4,971	5,257
Children's and infants' . . . . .	"	1,025	903	1,045	1,004
Soup—					
Canned . . . . .	'000 pints	63,077	72,032	78,985	67,201
Dry-mix . . . . .	'000 lb	7,291	8,226	8,803	9,127
Starch . . . . .	"	147,184	161,555	165,563	183,800
Stearine (stearic acid) . . . . .	"	11,538	9,647	10,722	11,780
Steel, constructional, fabricated . . . . .	tons	509,121	542,267	567,342	584,791
Stoves, ovens and ranges, domestic cooking—					
Electric(c) . . . . .	No.	180,541	188,132	192,655	193,627
Gas(d) . . . . .	"	84,503	71,265	75,482	73,127
Solid fuel . . . . .	"	23,612	20,859	18,785	14,921
Sugar—					
Raw (94 net titre) . . . . .	'000 tons	1,950	1,953	2,343	2,334
Refined . . . . .	"	592	609	613	614
Sulphate of ammonia . . . . .	tons	108,275	118,387	110,246	87,007
Superphosphate . . . . .	'000 tons	(e)3703	(f)4,265	(f)4,430	(f)3,935
Talcum powder . . . . .	'000 lb	7,835	6,870	8,134	8,975

(a) Excludes Northern Territory and Australian Capital Territory. (b) Not available for publication. (c) Includes wall ovens but excludes cooking tops and portable units. (d) Upright and elevated (with oven) including wall ovens, but excluding hotplates, stovettes, etc. (e) Source: Department of Primary Industry, Figures from June 1964 to June 1965 include double and triple superphosphate and ammonium phosphate expressed in terms of single phosphate, i.e. 22% P<sub>2</sub>O<sub>5</sub> equivalent. (f) From 1 July 1965 excludes ammonium phosphate.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES  
AUSTRALIA(a), 1964-65 TO 1967-68—continued

Article		1964-65	1965-66	1966-67	1967-68
<b>Tallow (including dripping), rendering—</b>					
Edible . . . . .	'000 lb	161,967	148,628	150,789	148,099
Inedible . . . . .	"	391,152	345,104	361,588	353,901
Television sets . . . . .	No.	308,737	276,586	254,811	253,247
Television picture tubes . . . . .	"	400,675	361,534	368,517	342,159
<b>Tiles, roofing—</b>					
Cement . . . . .	'000	87,744	82,921	88,509	96,831
Terracotta . . . . .	"	52,984	51,258	47,101	46,972
<b>Timber—</b>					
From native logs—					
Hardwood, etc. . . . .	'000 super ft	1,203,705	1,185,831	1,151,369	1,173,931
Softwood . . . . .	"	329,509	329,532	317,591	307,683
From imported logs . . . . .	"	36,346	27,892	25,771	32,379
Toasters, electric (domestic) . . . . .	No.	321,042	329,626	366,972	331,717
Tobacco . . . . .	'000 lb	8,993	8,407	7,595	7,463
Tomato juice . . . . .	'000 gal	987	1,927	2,627	2,463
" paste and puree . . . . .	'000 pints	16,373	22,428	22,776	11,546
" pulp . . . . .	'000 cwt	168	133	181	193
Towels . . . . .	'000 doz	895	960	992	892
Toilet cisterns . . . . .	No.	359,944	340,895	352,791	370,346
Transformers, chokes and ballasts, for distribution of power and light, etc. . . . .	"	22,308	19,361	16,823	15,892
Tubes, pneumatic(b) . . . . .	'000	3,651	3,823	4,051	4,351
Twine (all types) . . . . .	cwt	195,461	174,646	248,825	185,966
Tyres, pneumatic(b) . . . . .	'000	5,530	5,613	5,806	6,762
<b>Umbrellas, street and general purpose</b> . . . . .	No.	764,510	716,987	825,032	930,266
Underwear (men's, women's, children's) . . . . .	'000 doz	6,231	6,305	6,179	6,612
<b>Vacuum cleaners (domestic)</b> . . . . .	No.	181,326	181,691	156,307	163,613
<b>Wash basins—</b>					
C.I.P.E. . . . .	"	71,430	64,126	58,040	52,919
Earthenware . . . . .	"	149,257	140,652	146,546	159,480
Pressed steel . . . . .	"	56,126	62,852	78,893	91,796
Washing machines, household, electric . . . . .	"	264,001	240,189	231,601	278,348
<b>Weatherboards—</b>					
Australian timber . . . . .	'000 super ft	20,599	20,307	19,025	18,799
Imported timber . . . . .	"	3,094	2,583	1,857	2,175
Wheatmeal for stock feed . . . . .	tons (2,000 lb)	207,696	284,474	228,872	283,589
Wheelbarrows (metal) . . . . .	No.	111,366	116,838	123,291	118,797
<b>Wine, beverage—</b>					
Fortified . . . . .	'000 gal	11,137	9,678	12,401	11,534
Unfortified . . . . .	"	8,697	8,663	12,020	14,562
Wood pulp . . . . .	tons	317,435	330,625	357,665	351,268
Wool, scoured or carbonised . . . . .	'000 lb	158,832	156,113	154,119	157,860
Wool tops, pure . . . . .	"	45,835	45,798	44,535	42,439
<b>Yarn (including mixtures)—</b>					
Cotton . . . . .	"	59,092	59,021	60,792	60,849
Woollen . . . . .	"	30,647	30,534	32,641	34,596
Wool worsted . . . . .	"	23,532	21,519	18,781	18,896
Rayon and acetate, spun . . . . .	"	6,218	5,970	6,771	9,213
Synthetic (non-cellulosic) fibres spun . . . . .	"	6,387	6,720	8,843	9,542
<b>Zinc, refined(c)</b> . . . . .	tons	189,395	196,534	197,030	187,565

(a) Excludes Northern Territory and Australian Capital Territory. origin only—includes small quantities of zinc dust.

(b) Excludes bicycle and 'other'.

(c) Primary

## Overseas participation in Australian manufacturing industry

### Introduction

Any attempt to provide statistical information on the extent of overseas participation in local industry involves difficult problems of statistical concept and measurement. Broadly, there are two ways in which overseas participation may be measured. One is to examine the financial accounts of Australian companies and compare the value of *assets* of companies in which there is significant overseas investment with those of other Australian companies. The other is to examine the *operations* (as expressed in terms of production, wages and salaries, output, etc.) of establishments of Australian companies in which there is significant overseas investment and compare their operations with those of establishments of other Australian companies. The second method has been adopted for a series of studies in overseas participation in Australian manufacturing industry.

### Scope of the statistics

The statistics relate to Australian manufacturing industry and are derived from data collected from the Annual Factory Census. For the purpose of the census a 'factory' is defined as an establishment in which four or more persons are employed or where power (other than manual) is used in any manufacturing process.

### Classification of companies

The extent of overseas participation in the manufacturing industry is measured by the operations of the establishments of companies in which there is direct investment from overseas (as determined by the annual survey of overseas investments). These are defined as follows.

- (i) Companies in Australia in which at least 50 per cent of the ordinary shares (or voting stock) is held by individual shareholders or companies resident in one overseas country, or where 25 per cent or more of the ordinary shares (or voting stock) is held by one company, or a group of companies, incorporated in one overseas country.
- (ii) Branches of companies incorporated overseas and registered in Australia as foreign companies.
- (iii) Wholly and partly owned subsidiaries and sub-subsidiaries, etc., of companies included in (i) and (ii) above.

Investment in ordinary shares (or voting stock) of Australian companies (including companies in which there is direct investment from overseas) where the proportion of shares held in a single country falls below the percentages specified in (i) above is defined as portfolio investment. Because of the difficulties encountered in determining the proportion of ordinary shares (or voting stock) of individual Australian companies held by portfolio investors overseas, *the figures for overseas participation in the manufacturing industry exclude participation by way of portfolio investment.*

### Further information available

In the following tables the degree of overseas participation is expressed in terms of value of production only. Further details in terms of value of salaries and wages, and average number of persons employed, as well as the value of production, may be found in Parts I and II of the mimeographed bulletin *Overseas Participation in Australian Manufacturing Industry 1962-63 and 1966-67.*

## OVERSEAS OWNERSHIP AND CONTROL

In analysing the extent of overseas participation in local industry it is usual to distinguish between two aspects, overseas ownership and overseas control.

### Overseas ownership

Statistics which give a general indication of the degree of overseas ownership in terms of the value of production of Australian manufacturing establishments are presented in the two following tables. In the compilation of these statistics the data for an establishment of a company in which there is no direct investment from overseas are allocated wholly to Australian ownership. The data relating to an establishment of a company in which there is direct investment from overseas are *apportioned* to overseas and Australian ownership according to the proportion of the ordinary shares (or voting stock) of the company that is held by the direct overseas investors.



## MANUFACTURING: VALUE OF PRODUCTION APPORTIONED TO AUSTRALIAN AND DIRECT OVERSEAS OWNERSHIP, BY INDUSTRY, 1962-63 AND 1966-67

Industry and ownership	Value (\$'000)		Proportion Australian and overseas (per cent)	
	1962-63	1966-67	1962-63	1966-67
Treatment of non-metalliferous mine and quarry products—				
Australian(a)	120,015	169,108	92.4	90.6
Overseas	9,941	17,552	7.6	9.4
Bricks, pottery, glass, etc —				
Australian(a)	91,228	130,971	91.1	89.5
Overseas	8,272	15,401	8.9	10.5
Chemicals, dyes, explosives, paints, oils, grease—				
Australian(a)	157,972	221,640	38.4	35.3
Overseas	253,403	406,007	61.6	64.7
Industrial metals, machines, conveyances—				
Australian(a)	1,531,996	2,216,312	78.4	76.1
Overseas	422,707	696,573	21.6	23.9
Textile and textile goods (not dress)—				
Australian(a)	206,948	262,120	88.5	86.5
Overseas	26,837	40,937	11.5	13.5
Skins and leather (not clothing or footwear)—				
Australian(a)	38,432	42,161	95.5	95.6
Overseas	1,828	1,932	4.5	4.4
Clothing (except knitted)—				
Australian(a)	255,406	327,200	95.9	95.8
Overseas	10,931	14,302	4.1	4.2
Food, drink and tobacco—				
Australian(a)	510,609	686,974	80.2	77.0
Overseas	126,308	205,284	19.8	23.0
Sawmills, joinery, boxes, etc, wood turning and carving—				
Australian(a)	182,861	244,473	96.1	95.3
Overseas	7,496	12,078	3.9	4.7
Furniture of wood, bedding, etc —				
Australian(a)	69,262	96,734	99.0	97.1
Overseas	726	2,937	1.0	2.9
Paper, stationery, printing, book-binding, etc —				
Australian(a)	317,968	449,253	90.6	89.3
Overseas	32,945	54,062	9.4	10.7
Rubber—				
Australian(a)	67,316	77,264	85.9	77.7
Overseas	11,006	22,205	14.1	22.3
Other(b)—				
Australian(a)	307,368	426,194	92.5	91.9
Overseas	24,861	37,328	7.5	8.1
Total manufacturing—				
Australian(a)	3,857,381	5,350,403	80.4	77.8
Overseas	937,860	1,526,599	19.6	22.2
Grand total	4,795,241	6,877,001	100.0	100.0

(a) Includes ownership by overseas portfolio investors, and miscellaneous products.

(b) Includes musical instruments, heat, light and power.

## Overseas control

The statistics in the following tables provide an indication of the relative importance of manufacturing establishments of companies in which there is direct overseas investment. The concept of direct overseas investment is directly related to the concept of overseas control, and the statistics in these tables provide a measure of the value of production of manufacturing establishments of companies which can be regarded as subject to a degree of overseas control. The statistics have been derived by allocating data relating to each manufacturing establishment *wholly* to either one or the other of the following categories: (i) establishments of direct overseas investment companies; (ii) other establishments.

**MANUFACTURING: VALUE OF PRODUCTION ATTRIBUTED TO AUSTRALIAN AND  
DIRECT OVERSEAS CONTROL, BY INDUSTRY, 1962-63 AND 1966-67**

<i>Industry and category of control</i>	<i>Value (\$'000)</i>		<i>Proportion Australian and overseas (per cent)</i>	
	1962-63	1966-67	1962-63	1966-67
<b>Treatment of non-metalliferous mine and quarry products—</b>				
Australian . . . . .	118,762	165,200	91.4	88.5
Overseas . . . . .	11,194	21,460	8.6	11.5
<b>Bricks, pottery, glass etc.—</b>				
Australian . . . . .	90,414	131,557	90.3	89.9
Overseas . . . . .	9,686	14,815	9.7	10.1
<b>Chemicals, dyes, explosives, paints, oils, grease—</b>				
Australian . . . . .	132,409	169,599	32.2	27.0
Overseas . . . . .	278,966	458,048	67.8	73.0
<b>Industrial metals, machines, conveyances—</b>				
Australian . . . . .	1,468,819	2,077,181	75.1	71.3
Overseas . . . . .	485,884	835,704	24.9	28.7
<b>Textiles and textile goods (not dress)—</b>				
Australian . . . . .	203,805	255,994	87.2	84.5
Overseas . . . . .	29,980	47,063	12.8	15.5
<b>Skins and leather (not clothing or footwear)—</b>				
Australian . . . . .	38,264	42,009	95.0	95.3
Overseas . . . . .	1,996	2,084	5.0	4.7
<b>Clothing (except knitted)—</b>				
Australian . . . . .	251,049	320,760	94.3	93.9
Overseas . . . . .	15,288	20,742	5.7	6.1
<b>Food, drink and tobacco—</b>				
Australian . . . . .	484,635	636,959	76.1	71.4
Overseas . . . . .	152,282	255,299	23.9	28.6
<b>Sawmills, joinery, boxes, etc, wood turning and carving—</b>				
Australian . . . . .	182,413	242,801	95.8	94.6
Overseas . . . . .	7,944	13,750	4.2	5.4
<b>Furniture of wood, bedding, etc.—</b>				
Australian . . . . .	69,154	95,021	98.8	95.3
Overseas . . . . .	834	4,650	1.2	4.7
<b>Paper, stationery, printing, book-binding, etc.—</b>				
Australian . . . . .	309,717	433,923	88.3	86.2
Overseas . . . . .	41,196	69,392	11.7	13.8
<b>Rubber—</b>				
Australian . . . . .	66,274	76,510	84.6	76.9
Overseas . . . . .	12,048	22,959	15.4	23.1
<b>Other(a)</b>				
Australian . . . . .	303,087	419,983	91.2	90.6
Overseas . . . . .	29,142	43,539	8.8	9.4
<b>Total manufacturing—</b>				
Australian . . . . .	3,718,801	5,067,497	77.6	73.7
Overseas . . . . .	1,076,440	1,809,504	22.4	26.3
<b>Grant total . . . . .</b>	<b>4,795,241</b>	<b>6,877,001</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes musical instruments, heat, light and power, and miscellaneous products.

**MANUFACTURING: VALUE OF PRODUCTION APPORTIONED TO DIRECT OVERSEAS  
AND AUSTRALIAN OWNERSHIP, 1962-63 AND 1966-67, BY PERCENTAGE OF  
DIRECT OVERSEAS EQUITY**

<i>Proportion of direct overseas equity(a)</i>	<i>Value (\$'000)</i>		<i>Proportion (per cent)</i>	
	<i>1962-63</i>	<i>1966-67</i>	<i>1962-63</i>	<i>1966-67</i>
25 per cent but less than 50 per cent . . . . .	47,432	80,187	1.0	1.2
50 per cent but less than 75 per cent . . . . .	115,451	233,256	2.4	3.4
75 per cent and over . . . . .	774,977	1,213,156	16.2	17.6
<b>Total apportioned to direct overseas ownership . . . . .</b>	<b>937,860</b>	<b>1,526,599</b>	<b>19.6</b>	<b>22.2</b>
<b>Total apportioned to Australian ownership(b) . . . . .</b>	<b>3,857,381</b>	<b>5,350,403</b>	<b>80.4</b>	<b>77.8</b>
<b>Grand total . . . . .</b>	<b>4,795,241</b>	<b>6,877,001</b>	<b>100.0</b>	<b>100.0</b>

(a) Percentage of direct equity for all overseas countries. (b) Includes ownership by overseas portfolio investors.

For a discussion of some of the problems associated with the measurement of overseas control reference should be made to *Overseas Participation in Australian Mining Industry* in the chapter Mineral Industry.

**MANUFACTURING: VALUE OF PRODUCTION ATTRIBUTED TO DIRECT OVERSEAS AND  
AUSTRALIAN CONTROL 1962-63 AND 1966-67, BY PERCENTAGE OF DIRECT  
OVERSEAS EQUITY**

<i>Proportion of direct overseas equity(a)</i>	<i>Value (\$'000)</i>		<i>Proportion (per cent)</i>	
	<i>1962-63</i>	<i>1966-67</i>	<i>1962-63</i>	<i>1966-67</i>
25 per cent but less than 50 per cent . . . . .	84,438	152,655	1.7	2.2
50 per cent but less than 75 per cent . . . . .	200,950	406,327	4.2	5.9
75 per cent and over . . . . .	791,052	1,250,522	16.5	18.2
<b>Total apportioned to overseas control . . . . .</b>	<b>1,076,440</b>	<b>1,809,504</b>	<b>22.4</b>	<b>26.3</b>
<b>Total apportioned to Australian control . . . . .</b>	<b>3,718,801</b>	<b>5,067,497</b>	<b>77.6</b>	<b>73.7</b>
<b>Grand total . . . . .</b>	<b>4,795,241</b>	<b>6,877,001</b>	<b>100.0</b>	<b>100.0</b>

(a) Percentage of direct equity for all overseas countries.

