

MANUFACTURING

NATURAL RESOURCES AND LOCATION

Natural resources

Victoria's natural resources—a temperate climate, adequate rainfall and water supply, and productive soils—have been used to provide both raw materials and power for industry. For example, clay deposits for brick, tile, and pottery making are worked near Melbourne, Ballarat, Bendigo, Colac, Shepparton, Wangaratta, and in other areas of Victoria. Sand, used in foundries, and concrete and glass works, is obtained in the Port Phillip and west Gippsland districts. Stone and gravel are quarried in many parts of Victoria, but, since large loads are expensive to transport, sites are concentrated within 80 kilometres of the principal market, metropolitan Melbourne. Inside a similar radius, the availability of limestone has attracted the establishment of cement works at Geelong and Traralgon, while the Lilydale deposits are extracted to produce agricultural lime.

Although Victoria's historic gold rush has long since passed, gold is still mined in the Castlemaine, Gaffneys Creek, and Harrietville areas. Victoria's other mineral resources include salt collected from solar evaporation on the western shores of Port Phillip and from the Wimmera and Mallee lakes; gypsum is also found in the north-western Mallee. More detailed information on mining activity can be found on pages 286–90.

Victorian forests provide approximately one quarter of Australia's timber output. The fine vegetation of the Central Highlands forms the basis of important felling activities. The industry is also significant in Gippsland, where paper is manufactured at Maryvale. Other paper mills are situated in Melbourne, which is a major market for all wood and timber products.

Water, needed in large quantities for industry, is available throughout much of Victoria from dams in the catchment areas of the chief rivers (see map on page 478 of the *Victorian Year Book* 1966). In most years Melbourne is well supplied from the storages to its north and north-east in the Plenty, Upper Yarra, Maroondah, and O'Shannassy watersheds. However, severe restrictions were imposed during the 1967-68 and 1972-73 summers because of widespread drought conditions. To meet future demands, construction works are being extended. (See pages 292-6.)

Power supplies and the fuels from which they are derived are basic for industrial development. Victoria's range of carboniferous fuels is not great and, in the past, it was necessary to import significant amounts of black coal from New South Wales. Subsequently, the State Electricity Commission developed the brown coal resources of the La Trobe valley. The open-cut mines of the Yallourn-Morwell region presently produce about 29.4 megatonnes per year for use in the steam-generation of electricity and briquette making. The Commission now delivers the bulk of Victoria's public electricity requirements; the balance is purchased interstate.

The discovery, in February 1965, and subsequent development of sizable offshore reserves of oil and natural gas in the Gippsland basin have augmented Victoria's power and chemical resources. In March 1969, natural gas for commercial use flowed from the Barracouta field and, a month later, the first domestic customers were connected. The Marlin field began to operate in January 1970. Natural gas is now piped from Longford to Melbourne and then to Geelong, Ballarat, and Bendigo. Oil in commercial quantities

has been produced from the Barracouta field since October 1969, from Halibut since March 1970, and from Kingfish since April 1971. Petroleum refining is carried out at Altona, Geelong, and Crib Point, and petrochemical manufacturing at Altona, Geelong, Dandenong, and Footscray.

Location

Victoria's earliest industries were located in Melbourne, the entry port for most of the people and their supplies. As Victoria developed, Melbourne became its most populous centre, major port, the hub of the railway and road network, and major manufacturing centre. At 30 June 1977, 82.0 per cent of Victoria's 8,735 manufacturing establishments owned by multi-establishment enterprises and all single establishment manufacturing enterprises employing four or more persons (see pages 378-9 for further details), and 83.5 per cent of its work force engaged in manufacturing were located in the Melbourne Statistical Division. There are basic reasons for this: Melbourne's function as port and transport focus makes the collection of raw materials and the distribution of manufactured goods relatively easy; the concentration of Victoria's population in the city means a concentration of potential purchasers and potential workers; and by locating their operations in Melbourne, manufacturers can enjoy easy interchange of materials, parts, and services with other manufacturers.

Melbourne's early industrial suburbs grew on the fringes of the city centre in Port Melbourne, South Melbourne, Richmond, Collingwood, Spotswood, Fitzroy, and Footscray. In these suburbs a wide range of manufacturing industry is to be found. The more recent new industrial municipalities are Altona, Broadmeadows, Moorabbin, Oakleigh, and Dandenong, where extensive areas are available for the establishment of new industries.

Apart from smelting and large-scale steel making, most types of secondary industry are to be found in Melbourne. In terms of employment, engineering and metal processing constitute Melbourne's major industries, but a high proportion of Victoria's chemical, textile, paper, furniture, food, and building materials industries are also concentrated there.

Outside the metropolitan area, Geelong is the most important industrial centre, with port facilities, close proximity to the Melbourne market, and rich surrounding rural areas. Industries established in the area include petroleum refining, and the manufacture of agricultural machinery, motor vehicles, aluminium ingots and extruded products, textiles, chemical fertilisers, glass, clothing, carpets, foodstuffs, cement, fertilisers, and sporting ammunition.

The other country areas in which more than 1,000 persons are employed in manufacturing establishments (ranked in order of the number of persons employed in factories) are the Ballarat Statistical District, Bendigo Statistical District, Shepparton-Mooroopna Statistical District, Morwell Shire, Wodonga Rural City, Warrnambool City, Wangaratta City, Portland Town, Maryborough City, and Castlemaine City. The factory population in country areas is engaged in the production of food and textiles from locally produced raw materials, in clothing, and in engineering plants, some of which had their origin in the gold mining era of the nineteenth century, and more recently in decentralised plants with defence significance. In addition, approximately 4,200 persons are engaged by the State Electricity Commission in power generation and ancillary activities. These are not taken into account in the foregoing ranking.

MANUFACTURING ACTIVITY

Sources of information

At the Australian level of aggregation, information on the subjects dealt with in this section of the *Year Book* is contained in the annual *Manufacturing Establishments and Manufacturing Commodities—Principal Articles Produced* issued by the Central Office of the Bureau. At the Victorian level of aggregation, the annual publications issued by the Deputy Commonwealth Statistician, Melbourne, are *Manufacturing establishments: summary of operations by industry class*; *Manufacturing establishments: details of operations*; *Manufacturing establishments: small area statistics*; *Manufacturing*

establishments: usage of electricity and fuels; and Manufacturing establishments: selected items of data classified by industry and employment size (available for 1968-69, 1974-75, and 1975-76). Current information on factory products is available in the *Monthly summary of statistics* and the monthly Victorian publication *Secondary production*.

In addition to the above mentioned publications there is also a monthly series of eight *Production Bulletins*, each relating to the production of a particular group of commodities for Australia.

In respect of the year 1968-69, the Australian Bureau of Statistics conducted the annual census of manufacturing industry as part of a programme of fully integrated economic censuses covering manufacturing, mining, retail, wholesale, and electricity and gas establishments. 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 these censuses on pages 368-89 of the *Victorian Year Book* 1971.

The integrated economic censuses have been a major undertaking involving the development of new concepts, definitions, and procedures, and, inevitably, there were considerable delays in finalising the results of the 1968-69 and 1969-70 censuses, so much so in fact that the 1970-71 census of manufacturing establishments was abandoned. However, the later censuses of manufacturing establishments were completed close to time tables realised in respect of 1967-68 and previous years, and, as far as possible, 1976-77 data appears in this chapter. (See also pages 378-9).

Manufacturing developments during 1977

During 1977, activity in the Victorian manufacturing sector remained at depressed levels with increased under-utilisation of productive capacity, little improvement in demand, increased unit costs, continued import competition, and considerable industrial unrest. For some industries, this resulted in rationalisation and reduced employment. Overall, aggregate industrial activity was marginally below 1976 levels.

In the food and allied products industry there were two developments of note. A \$4m tomato processing plant was built at Echuca in northern Victoria. This plant employs up to ninety persons during the peak tomato processing season. Plans were announced during 1977 by a major international confectionery company to build a \$13m confectionery factory at Ballarat. The factory will employ about 200 persons and will mainly produce confectionery bars. It was expected to be operating by mid 1979.

In the building materials industry, a \$14m particle board plant was built at Portland. This is one of the most advanced Australian plants of its type and was expected to begin operation in early 1978. The plant will aim to produce 12 million square metres of board a year from 50,600 hectares of private and State radiata pine forest.

The light engineering sector experienced depressed consumer demand which in the case of colour television manufacture led to severe price competition and some rationalisation in the industry.

Despite reduced sales of locally produced motor vehicles and trucks, manufacturers continued to announce expanded investment programmes and to plan for new model releases. A major Australian truck and farm machinery manufacturer announced plans for a \$6.5m expansion for its truck manufacturing division at Geelong. Two Japanese car manufacturers commenced construction of 4 cylinder engine plants at Clayton and Altona. Each plant was to cost about \$40m. A \$150m expansion programme incorporating 4 cylinder engine production was commenced at Fishermens Bend. Expansion plans were continued for motor vehicle production facilities at Campbellfield and Geelong.

Market conditions in the textile, clothing, and footwear industries remained depressed. Employment in these industries fell substantially in spite of the continuation of import restraints and extension of tariff quota restrictions to an increased range of items in this area. Closures and contraction of activity continued in the spinning, weaving, and carpet manufacturing industries. In November 1977, the Commonwealth Government announced a three year programme of assistance to the textiles and clothing industry with the aim of maintaining activity and employment levels.

There was a significant rationalisation in heavy engineering industries. Some smaller firms ceased operations and others operated at lower levels of manufacture.

Construction of the 2,050mm hot strip mill at Western Port was completed. Commissioned in 1974 the mill's final cost was \$160m. It was to commence operations in March 1978. On land adjacent to the new strip mill construction commenced on a sheet processing line at an estimated cost of \$5m. This plant was to become operational in 1978 and service Victorian and South Australian customers for black sheet steel.

In the chemical sector, a large manufacturer announced plans to build a polyvinyl chloride plant costing \$36m at Laverton to be operational towards the end of 1979. Production of styrene monomer commenced from a new \$80m plant at West Footscray. Several companies began preliminary investigations regarding expansion of the production capacity for ethylene.

Drilling commenced from the *Mackerel* oil drilling platform and the *Tuna* jacket was set in place. Full production was planned to commence in 1978 and 1979, respectively, at a combined cost of \$180m. Contracts were let for the building of a platform for the *Snapper* gas field to commence in early 1978.

Construction commenced on the Newport intermediate load power station. Major tenders were called and contracts were let for the initial stage of the Loy Yang Power Station planned for commercial service in the 1980s and 1990s at a cost of \$2,000m.

Government activities

Industrial legislation

The *Labour and Industry Act* 1958 represents the development and consolidation of industrial legislation which had its beginnings in 1873. Among other matters, the Act deals with the registration and inspection of factories, guarding of machinery, and conditions of employment. The Act also provides for the appointment of Wages Boards and the Industrial Appeals Court. Further information on these matters may be found on pages 212-4.

Department of State Development, Decentralization and Tourism

The Department of State Development was established in 1971 to promote and co-ordinate the development of primary, secondary, and tertiary industries, including tourism, and to implement the State's decentralisation programme.

In 1978, the State Development, Decentralization and Tourism Act was passed. This Act consolidates previous legislation and also introduces a new function to be performed by the Department—the promotion and development of the export capacity of industry throughout Victoria. In addition, the Act has widened the charter given to the Department in relation to decentralisation activities.

The Department is comprised of five Divisions:

- (1) Investment and Export Promotions Division;
- (2) Research, Policy and Development Division;
- (3) Administration Division;
- (4) Decentralization Division; and
- (5) Tourism Division.

Further details on the Department of State Development, Decentralization and Tourism and in particular, its role in industrial development, can be found on pages 411-3 of the *Victorian Year Book* 1978.

Commonwealth Department of Trade and Resources

The Department is responsible for developing and maintaining Australia's position as a major world trading nation, through international trade and commodity commitments and agreements, development of export markets, and formulation of policy proposals for the Commonwealth Government's international trade policy and trading objectives. It is also responsible for matters related to the commercial development, marketing, and export of minerals, including uranium, and hydrocarbon fuels.

Commonwealth Department of Industry and Commerce

The Department makes policy directed towards the economic development of secondary and tertiary industry (including small business and tourism). It advises the Commonwealth

Government on industry and commerce, including the monitoring of trends and the analysis of economic information.

Commonwealth Department of Productivity

The Department's three main responsibilities are productivity improvement in industry, patents and inventions and registration of trade marks and designs, and the manufacture of goods and provision of services for Defence purposes. The Regional Office (Victoria) participates in planning and operating departmental projects, provides policy advice to Central Office, and develops relations with industry and other State organisations. It also encourages government-industry initiatives and disseminates productivity information.

Prices Justification Tribunal

The Prices Justification Tribunal was established by the Commonwealth Government in August 1973 pursuant to the *Prices Justification Act 1973*. (The Act was subsequently amended in 1974 and 1976). The functions of the Tribunal are outlined in section 16 of the Act and provide that the Tribunal will consider the justification of proposed price increases put to it by companies which are subject to the notification provisions of the Act. Companies, or groups of related companies, are subject to the notification provisions of the Act (unless exempted by the Tribunal) if their receipts for the supply of goods or services exceed \$30m annually. The activities of subsidiary companies with annual receipts of less than \$5m are not taken into account. Following an amendment to the Act in August 1974, the prices charged by companies which are not required to notify price increases may also be examined by the Tribunal. Under the amending Act of 1976 it was provided that in exercising its functions under section 16, the Tribunal should have due regard to the need for the company or companies concerned to achieve a level of profitability that is sufficient to enable the company or companies to maintain an adequate level of investment and employment.

On 18 October 1978, the Minister for Business and Consumer Affairs, on behalf of the Commonwealth Government, announced a change in Commonwealth Government policy relating to the Tribunal. Practically all companies are now exempted from the requirement to notify the Tribunal of proposed increases in prices. Public inquiries into prices may be carried out by the Tribunal but henceforward only with the approval of the Minister. The Tribunal may also now be used to conduct special inquiries or investigations not necessarily directly related to a price or a proposed price increase.

The Tribunal consists of a chairman and such number of other members, full-time, part-time, or associate, as are from time to time appointed by the Governor-General in accordance with the Act. The staff required to assist the Tribunal in the performance of its functions consists of persons appointed or employed under the *Public Service Act 1922*. Further information concerning the Tribunal is contained in its annual reports to the Commonwealth Parliament.

Small Business Development Corporation

This body, established in 1976, brings to small business the expert knowledge which is available to large companies, but which is usually beyond the resources of small businessmen.

Its aim is "to do all things necessary to be done for or in connection with encouraging, promoting, facilitating, and assisting in the establishment, carrying on, expansion and development of small business". The Corporation, which is financed by the Victorian Government, is an independent body which relies greatly on the expertise of specialist advisers both in other Government departments and trade organisations. Since its establishment, the Corporation has been providing a service to small businesses, particularly those adversely affected by the changing economic climate.

Scientific research and standardisation

Commonwealth Scientific and Industrial Research Organisation

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is a statutory body established by the *Science and Industry Research Act 1949*. Under the Act,

the CSIRO replaced the former Council for Scientific and Industrial Research which was established in 1926. Its principal functions under the Act are the carrying out of scientific research in connection with Australian primary and secondary industries or any other matter referred to it by the Minister for Science; the training of scientific research workers and the awarding of studentships; the making of grants in aid of scientific research; the recognition and support of research associations; the maintenance of the national standards of measurement; the dissemination of scientific and technical information; the publication of scientific and technical reports; and acting as a means of liaison between Australia and other countries in matters of scientific research.

Standards Association of Australia

This Association is the officially endorsed national organisation for the promotion of standardisation in Australia. It is an independent body incorporated by Royal Charter, having the full recognition and support of the Commonwealth and State Governments and industry. Formed as the Australian Commonwealth Engineering Standards Association in 1922 it was reconstituted as the Standards Association of Australia in 1929. Approximately 45 per cent of its funds are provided by Commonwealth Government grants, the remainder coming from membership subscriptions and the sale of publications.

A Council composed of representatives of Commonwealth and State Government departments, associations of manufacturing and commercial interests, and professional institutions controls the Association's activities. The technical work of the Association is carried out on a voluntary basis by committees composed of experts in the particular subjects for which standards have been requested.

Australian standards are developed by co-operative effort and negotiation on the part of those most concerned, whether as producers or as users. They are based on what is best in present practice. They do not attempt to attain an ideal which might be too costly to adopt under industrial and commercial conditions. They are constantly revised to take account of new developments and to eliminate outmoded practices.

Industrial associations, firms, or government departments may request standards relating to such things 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 intrinsic merit. It is only in special cases where safety of life and property is involved, that they may have compulsory application. The Association owns a registered certification trade mark which manufacturers may obtain a licence to use.

The Association has international affiliations and maintains close links with overseas standards organisations. It acts as Australian agent for the procurement of overseas publications and the standards of other countries. The headquarters office of the Association is in Sydney, and there is a major office in Melbourne. Branch offices are located in other capital cities and at Newcastle, New South Wales.

National Association of Testing Authorities

This is the Australian organisation for accreditation of testing and measuring facilities. It registers testing and measuring laboratories which can demonstrate their technical and managerial competence. Registration of laboratories is voluntary. Registered laboratories are operated by industrial, governmental, educational, and commercial testing authorities. The Association is recognised by all State Governments, the Commonwealth Government, and industry associations. Registered laboratories have the right to endorse their test documents in the name of the Association.

Industrial Design Council of Australia

The Industrial Design Council of Australia has established its new Victorian headquarters at the Australian Design Centre, 37 Little Collins Street, Melbourne. At the Australian Design Centre there is a small changing exhibition of products which have received the Australian Design Award. The Australian Design Award has been created to give proper recognition to Australian products of high quality and to direct consumer attention to the many Australian products which can compete with products from overseas.

At the Victorian headquarters of the Council, field officers are available to assist manufacturers with new product development. In co-operation with the Victorian Government, the Council may, in certain circumstances, provide financial assistance for new product development. The Council's education officers work with teachers in schools and State Colleges, assisting them to develop programmes which will create an awareness and appreciation of design in primary and secondary students. School groups are welcome to visit the Design Centre.

MANUFACTURING INDUSTRY STATISTICS

Basis of collection

A series of substantially uniform statistics exists from 1901 to 1967-68 when the framework within which manufacturing statistics were collected was changed. The table on page 379 contains a summary of statistics on manufacturing activities in Victoria over that period. More detailed manufacturing statistics in respect of this period have been included in previous editions of the *Victorian Year Book*.

As from the year ended June 1969, the Censuses of Manufacturing, Electricity and Gas have been conducted within the framework of the integrated economic censuses, which include the Censuses of Mining, Retail Trade and Selected Services, and Wholesale Trade. As a result, manufacturing industry statistics for 1968-69 and subsequent years are not directly comparable with previous years. The electricity and gas industries, which were previously included in the annual Factory Census, were the subject of separate censuses. The integration of these economic censuses was designed to increase substantially the usefulness and comparability of economic statistics collected and published by the Bureau and to form a basis for the sample surveys which supply current economic statistics from quarter to quarter, particularly those which provide data for the quarterly national income and expenditure estimates.

The economic censuses of Manufacturing, Mining, and Retail Trade previously conducted in Australia were originally designed and subsequently developed primarily to provide statistics for particular industries on a basis which would best suit the requirements of users interested in statistics of those industries. More recently there has been a growth of interest in statistics describing activity in the economy as a whole—reflected, for example, in the development of employment and earnings statistics, surveys of capital expenditure and stocks, and the whole field of national accounts statistics. For such purposes statistics derived from economic censuses in the past have had serious limitations despite the fact that they covered a broad area of the whole economy. Because of the special requirements of each of the censuses, there were no common definitions of data, there was no common system of reporting units, and, as a standard industrial classification was not used for these censuses, industry boundaries were not defined in ways which would avoid overlapping or gaps occurring between the industrial sectors covered. For these reasons, direct aggregation and comparison of statistics from different censuses were not possible.

The integration of these economic censuses meant that for the first time they were being collected on the basis of a common framework of reporting units and data concepts and in accordance with a standard industrial classification. As a result, the statistics for the industries covered by the censuses are now provided with no overlapping or gaps in coverage, and in such a way that aggregates for certain important economic data such as value added, employment, wages and salaries, fixed capital expenditure, and stocks can be obtained on a consistent basis for all sectors of the economy covered by the censuses. From the 1975-76 Census of Manufacturing Establishments onwards only a limited range of data—employment and wages and salaries—is collected from single establishment manufacturing enterprises with less than four persons employed. This procedure has significantly reduced the statistical reporting obligations of small businesses, while at the same time only marginally affecting statistical aggregates other than the number of establishments. Data in respect of establishments from which the full range of data is collected under the new collection criteria (i.e., all manufacturing establishments owned by multi-establishment enterprises and single establishment manufacturing enterprises with four or more persons employed) is considered to provide reliable information for the

evaluation of trends in the manufacturing sector of the economy. All tables in this and subsequent *Victorian Year Books* will show details collected from all manufacturing establishments owned by multi-establishment enterprises and single establishment manufacturing enterprises employing four or more persons, while for 1974-75 some tables also show data collected from single establishment manufacturing enterprises employing less than four persons.

For a more detailed description of the integrated economic censuses, reference should be made to pages 368-89 of the *Victorian Year Book* 1971.

Summary of factory statistics

Factory statistics compiled for 1967-68 were the last of the old series, and definitions used in the 1967-68 and previous factory censuses were published in the *Victorian Year Book* 1971, pages 394-7. The first publication of statistics from the 1968-69 economic censuses, *Manufacturing establishments and electricity and gas establishments: preliminary statement*, was issued in January 1971 and contained information in respect of twelve industry sub-divisions permitting comparisons to be made between States, but did not permit comparisons to be made between 1968-69 and previous years because of the changes in the definition of the establishment, bases of classification, and forms.

In respect of 1976-77, the four metal products sub-divisions, namely, Basic metal products (sub-division 29), Fabricated metal products (sub-division 31), Transport equipment (sub-division 32), and Other machinery and equipment (sub-division 33), with 169,314 persons or 41.4 per cent of the total employment in manufacturing establishments in 1976-77, employed considerably more persons than any other part of manufacturing industry. Next in order of employment was Food, beverages, and tobacco (sub-division 21-22), with 58,380 or 14.3 per cent, followed by Clothing and footwear (sub-division 24), and Paper, paper products, and printing (sub-division 26) with 46,822 and 32,656, respectively, or 11.4 per cent and 8.0 per cent of the total.

VICTORIA—DEVELOPMENT OF MANUFACTURING ACTIVITY

Year	Manufacturing establishments	Employment (a)	Wages and salaries paid (b)	Value of—			
				Materials and fuel used	Value added	Output	Land, buildings, plant, and machinery
	number	number	\$m	\$m	\$m	\$m	\$m
1901	3,249	66,529	n.a.	n.a.	n.a.	n.a.	25
1911	5,126	111,948	18	51	32	84	28
1920-21	6,532	140,743	43	135	77	212	71
1932-33	8,612	144,428	42	122	82	204	136
1946-47	10,949	265,757	156	368	263	631	244
1953-54	15,533	331,277	472	1,154	817	1,971	679
1960-61	17,173	388,050	776	1,914	1,418	3,332	1,642
1965-66	17,980	439,149	1,077	2,597	2,028	4,625	2,386
1967-68	18,030	449,945	1,244	2,957	2,395	5,351	2,685
1968-69	(c) 11,563	431,651	1,342	(d) 3,861	2,542	(e) 6,336	(f) 278
1969-70	(c) 11,393	445,663	1,497	(d) 4,307	2,799	(e) 6,998	(f) 300
1971-72	(c) 11,408	450,026	1,800	(d) 4,812	3,328	(e) 8,055	(f) 374
1972-73	(c) 11,735	455,029	2,045	(d) 5,392	3,738	(e) 9,078	(f) 438
1973-74	(c) 12,070	469,838	2,524	(d) 6,486	4,546	(e) 10,669	(f) 418
1974-75	(g) 8,924	432,851	2,961	(d) 7,024	5,131	(e) 11,730	(f) 455
	(h) 2,834	5,727	17	(d) 53	48	(e) 100	(f) 2
1975-76 (g)	(c) 8,874	417,131	3,287	(d) 7,564	5,765	(e) 13,222	(f) 462
1976-77 (g)	(c) 8,735	409,196	3,650	(d) 8,696	6,629	(e) 15,040	(f) 495

(a) Average over whole year, including working proprietors.

(b) Excludes drawings of working proprietors.

(c) Number of establishments operating at 30 June.

(d) Purchases, transfers in, and selected expenses.

(e) Turnover.

(f) Fixed capital expenditure.

(g) All manufacturing establishments owned by multi-establishment enterprises and single establishment manufacturing enterprises with four or more persons employed.

(h) Single establishment manufacturing enterprises with less than four persons employed.

NOTE. A line drawn across a column between the figures indicates a break in continuity in the series. No census of manufacturing establishments was conducted for the year ending 30 June 1971.

A comparison between manufacturing activity in Victoria and the other States is shown in the following table:

AUSTRALIA—MANUFACTURING ESTABLISHMENTS (*g*), 1976–77

State or Territory	Establishments (<i>c</i>)	Employment (<i>a</i>)	Wages and salaries paid (<i>b</i>)	Purchases, transfers in, and selected expenses	Value added	Turnover	Fixed capital expenditure
	number	number	\$m	\$m	\$m	\$m	\$m
New South Wales	9,982	438,896	4,027	9,599	7,219	16,433	500
Victoria	8,735	409,196	3,656	8,696	6,637	15,040	495
Queensland	3,001	112,757	982	3,382	1,991	5,261	223
South Australia	2,242	115,394	981	2,280	1,597	3,768	153
Western Australia	2,035	66,750	595	1,809	1,154	2,884	134
Tasmania	617	27,766	246	694	533	1,199	35
Northern Territory	67	1,624	18	84	46	124	4
Australian Capital Territory	101	3,448	31	47	57	104	4
Total	26,780	1,175,831	10,536	26,592	19,234	44,814	1,548

For footnotes see page 379.

The total value added in 1976–77 was \$6,637m. Of this amount the Metal products sub-divisions contributed \$2,708m which represented 40.8 per cent of the total. The Food sub-division followed with \$1,132m or 17.1 per cent, and the next in order were the Paper, paper products, and printing sub-division with \$530m, 8.0 per cent, and the Clothing and footwear sub-division with \$498m, 7.5 per cent.

The following table contains a summary of manufacturing establishments by sub-division of industry in Victoria during the year 1976–77:

VICTORIA—MANUFACTURING ESTABLISHMENTS (*g*) BY SUB-DIVISION OF INDUSTRY, 1976–77

ASIC code	Industry sub-division	Establishments (<i>c</i>)	Employment (<i>a</i>)	Wages and salaries paid (<i>b</i>)	Purchases, transfers in, and selected expenses	Value added	Turnover	Fixed capital expenditure
		number	number	\$m	\$m	\$m	\$m	\$m
21-2	Food, beverages, and tobacco	963	58,380	528	1,998	1,132	3,104	64
23	Textiles	319	21,075	176	407	295	699	15
24	Clothing and footwear	1,141	46,822	331	512	498	1,002	7
25	Wood, wood products, and furniture	1,088	19,640	151	330	285	606	22
26	Paper, paper products, and printing	866	32,656	309	535	530	1,047	57
27	Chemical, petroleum, and coal products	283	20,462	219	670	432	1,076	57
28	Non-metallic mineral products	373	13,580	141	285	312	579	18
29	Basic metal products	173	13,197	141	499	276	744	73
31	Fabricated metal products	1,118	35,830	315	576	547	1,104	33
32	Transport equipment	425	62,171	576	1,355	1,044	2,311	77
33	Other machinery and equipment	1,281	58,116	524	1,001	841	1,811	36
34	Miscellaneous manufacturing	705	27,267	243	528	445	957	35
Total		8,735	409,196	3,656	8,696	6,637	15,040	495

For footnotes see page 379.

The following table shows the number of manufacturing establishments operating in Victoria at 30 June 1973, 1974, 1975, 1976, and 1977, classified according to sub-division of industry:

VICTORIA—NUMBER OF MANUFACTURING ESTABLISHMENTS BY SUB-DIVISION OF INDUSTRY AT 30 JUNE

ASIC code	Industry sub-division	1973	1974	1975		1976 (<i>g</i>)	1977 (<i>g</i>)
				(<i>g</i>)	(<i>h</i>)		
21-2	Food, beverages, and tobacco	1,220	1,205	1,014	165	992	963
23	Textiles	398	420	322	58	332	319
24	Clothing and footwear	1,596	1,613	1,283	189	1,219	1,141
25	Wood, wood products, and furniture	1,488	1,569	1,044	516	1,083	1,088

VICTORIA—NUMBER OF MANUFACTURING ESTABLISHMENTS BY
SUB-DIVISION OF INDUSTRY AT 30 JUNE—*continued*

ASIC code	Industry sub-division	1973	1974	1975		1976 (g)	1977 (g)
				(g)	(h)		
26	Paper, paper products, and printing	1,205	1,238	880	324	875	866
27	Chemical, petroleum, and coal products	363	373	275	73	280	283
28	Non-metallic mineral products	445	472	353	100	367	373
29	Basic metal products	211	219	181	30	176	173
31	Fabricated metal products	1,518	1,553	1,124	420	1,087	1,118
32	Transport equipment	471	507	402	122	427	425
33	Other machinery and equipment	1,717	1,740	1,299	442	1,299	1,281
34	Miscellaneous manufacturing	1,103	1,161	747	395	737	705
	Total	11,735	12,070	8,924	2,834	8,874	8,735

For footnotes see page 379.

The size classification of manufacturing establishments is based on the number of persons employed at 30 June 1977 (including working proprietors). The following table shows the number of manufacturing establishments classified according to the number of persons employed:

VICTORIA—MANUFACTURING
ESTABLISHMENTS (a) CLASSIFIED
ACCORDING TO NUMBER OF
PERSONS EMPLOYED (INCLUDING
WORKING PROPRIETORS)
AT 30 JUNE 1977

Manufacturing establishments employing persons numbering	Number of establish- ments	Number of persons employed (b)
Less than 10	3,747	22,633
10 to 19	1,941	27,330
20 to 49	1,536	47,718
50 to 99	680	48,404
100 to 199	445	61,100
200 to 499	285	79,752
500 to 999	69	46,009
1,000 and over	32	58,885
Total	8,735	391,831

(a) All manufacturing establishments owned by multi-establishment enterprises and single establishment manufacturing enterprises with four or more persons employed. In addition, there were 3,041 single establishment enterprises employing 6,173 persons in the one to three persons employed group.

(b) Excludes persons employed in separately located administrative offices and ancillary units serving more than one establishment, plus those serving only one establishment and which have ten or more employees and are located in a different Local Government Area to the establishment they serve. There were 13,565 persons employed in such separately located administrative offices and ancillary units at 30 June 1977.

The relative importance of large and small manufacturing establishments is illustrated in the preceding table. At 30 June 1977, 3,747 such establishments employing less than ten employees had a total employment of 22,633 persons. 42.9 per cent of manufacturing establishments—those employing less than ten persons—employed 5.8 per cent of the persons engaged. The most numerous of the establishments with less than ten persons were printing, stationery, and bookbinding, furniture (excluding sheetmetal), joinery and wooden structured fittings, and industrial machinery and equipment not elsewhere classified.

A general indication of the geographical distribution of manufacturing establishments in Victoria at 30 June 1977 is shown in the following table where they are classified according to statistical divisions:

**VICTORIA—MANUFACTURING ESTABLISHMENTS (g)
IN STATISTICAL DIVISIONS, 1976-77**

Statistical division	Establishments (c)	Employment (a)	Wages and salaries paid (b)	Purchases, transfers in, and selected expenses	Value added	Turnover	Fixed capital expenditure
	number	number	\$m	\$m	\$m	\$m	\$m
Melbourne	7,159	341,541	3,073	7,088	5,516	12,373	395
Barwon	274	21,439	209	486	387	847	31
South Western	109	4,980	40	163	69	223	12
Central Highlands	199	8,978	71	144	128	263	6
Wimmera	71	1,323	9	17	16	32	1
Northern Mallee	80	1,053	7	25	17	41	1
Loddon-Campaspe	191	9,411	73	189	132	312	5
Goulburn	196	6,129	51	176	99	281	5
North Eastern	117	4,909	42	141	109	244	7
East Gippsland	104	2,196	17	57	36	92	2
Central Gippsland	176	5,802	52	172	108	275	26
East Gippsland	59	1,435	11	38	21	58	4
Total	8,735	409,196	3,656	8,696	6,637	15,040	495

For footnotes see page 379.

Manufacturing establishments in the Melbourne Statistical Division constituted 82.0 per cent of the total number in Victoria at 30 June 1977, 83.5 per cent of the persons employed, and 83.1 per cent of the value added.

The number of manufacturing establishments and persons employed therein, classified according to statistical division, is shown in the table on page 383.

It should be noted that Geelong is located in the Barwon Statistical Division, Bendigo, Castlemaine, and Maryborough in the Loddon-Campaspe Statistical Division, Ballarat in the Central Highlands Statistical Division, Warrnambool in the South Western Statistical Division, Shepparton in the Goulburn Statistical Division, Wangaratta in the North Eastern Statistical Division, and Morwell and Yallourn in the Central Gippsland Statistical Division.

Employment, wages, and salaries

Employment

From 1968-69, all persons employed in a manufacturing establishment and separately located administrative offices and ancillary units serving the establishment (including proprietors working in their own businesses) are included as persons employed. The grouping of occupations comprises (1) working proprietors; (2) administrative, office, sales, and distribution employees; and (3) production and all other employees.

The figures showing employment in manufacturing establishments represent either the average number of persons employed, including working proprietors, over a full year, or the number of persons employed at June each year.

VICTORIA—PERSONS EMPLOYED IN MANUFACTURING ESTABLISHMENTS, 1972-73 TO 1976-77

ASIC code	Industry sub-division	1972-73	1973-74	1974-75		1975-76 (g)	1976-77 (g)
				(g)	(h)		
21-2	Food, beverages, and tobacco	63,847	63,668	60,848	362	59,172	58,380
23	Textiles	28,410	29,337	22,933	127	23,811	21,075
24	Clothing and footwear	60,896	60,096	49,195	403	49,441	46,822
25	Wood, wood products, and furniture	20,340	20,921	19,231	999	19,301	19,640
26	Paper, paper products, and printing	34,476	35,470	34,187	670	32,527	32,656
27	Chemical, petroleum, and coal products	22,566	23,175	21,749	151	20,239	20,462
28	Non-metallic mineral products	14,595	15,659	14,027	202	13,524	13,580
29	Basic metal products	12,829	13,181	12,983	71	12,709	13,197
31	Fabricated metal products	38,205	39,061	37,796	860	35,989	35,830
32	Transport equipment	60,909	64,982	61,663	239	60,391	62,171
33	Other machinery and equipment	66,601	71,297	68,851	876	62,384	58,116
34	Miscellaneous manufacturing	31,355	32,991	29,388	767	27,643	27,267
Total		455,029	469,838	432,851	5,727	417,131	409,196

For footnotes see page 379.

The dominance of the metal fabricating sub-divisions (29-33) (including transport equipment, machinery, and other equipment), Food, beverages, and tobacco sub-division (21-2), and Clothing and footwear sub-division (24) should be noted.

VICTORIA—NUMBER OF MANUFACTURING ESTABLISHMENTS (g) AND PERSONS EMPLOYED (a) IN EACH STATISTICAL DIVISION, CLASSIFIED ACCORDING TO STATISTICAL DIVISION AND INDUSTRY SUB-DIVISION, 1976-77

ASIC code	Industry sub-division	Statistical division											Total	
		Mel-bourne	Barwon	South Western	Central Highlands	Wimmera	North-ern Mallee	Loddon-Campaspe	Goul-burn	North Eastern	East Gipps-land	Central Gipps-land		East Central
NUMBER OF MANUFACTURING ESTABLISHMENTS (g)														
21-2	Food, beverages, and tobacco	555	39	36	33	29	38	52	58	35	21	52	15	963
23	Textiles	270	20	1	6	2	—	4	5	3	1	5	2	319
24	Clothing and footwear	1,056	13	5	13	2	—	18	13	3	1	14	3	1,141
25	Wood, wood products, and furniture	768	45	17	36	8	5	23	40	26	54	44	22	1,088
26	Paper, paper products, and printing	726	24	16	17	8	10	13	15	10	7	13	7	866
27	Chemical, petroleum, and coal products	257	10	3	3	—	—	5	1	1	—	3	—	283
28	Non-metallic mineral products	214	23	11	19	6	13	25	22	14	8	16	2	373
29	Basic metal products	148	9	—	7	—	—	4	2	1	—	1	1	173
31	Fabricated metal products	978	32	9	22	4	5	22	14	8	4	17	3	1,118
32	Transport equipment	363	14	3	19	—	3	9	6	4	2	2	—	425
33	Other machinery and equipment	1,151	35	8	18	9	6	14	14	12	4	6	4	1,281
34	Miscellaneous manufacturing	673	10	—	6	3	—	2	6	—	2	3	—	705
	Total	7,159	274	109	199	71	80	191	196	117	104	176	59	8,735
NUMBER OF PERSONS EMPLOYED (a)														
21-2	Food, beverages, and tobacco	40,946	2,174	2,613	1,307	530	634	2,296	3,646	1,627	598	1,498	511	58,380
23	Textiles	16,336	1,668	n.p.	401	n.p.	n.p.	641	n.p.	n.p.	n.p.	335	n.p.	21,075
24	Clothing and footwear	39,668	1,754	1,012	740	n.p.	n.p.	1,667	365	n.p.	n.p.	846	n.p.	46,822
25	Wood, wood products, and furniture	14,168	687	351	720	105	52	403	663	582	1,111	581	217	19,640
26	Paper, paper products, and printing	28,934	385	185	470	n.p.	132	298	329	257	96	n.p.	159	32,656
27	Chemical, petroleum, and coal products	18,755	1,286	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	20,462
28	Non-metallic mineral products	10,634	1,230	59	574	65	81	268	238	145	n.p.	225	n.p.	13,580
29	Basic metal products	9,475	2,665	n.p.	764	n.p.	n.p.	124	n.p.	n.p.	n.p.	n.p.	n.p.	13,197
31	Fabricated metal products	32,356	801	63	713	23	27	851	258	151	n.p.	367	n.p.	35,830
32	Transport equipment	52,811	n.p.	27	2,272	n.p.	n.p.	1,036	67	78	n.p.	n.p.	121	62,171
33	Other machinery and equipment	51,027	2,893	203	877	176	104	1,560	211	507	96	n.p.	n.p.	58,116
34	Miscellaneous manufacturing	26,431	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	76	n.p.	n.p.	n.p.	n.p.	27,267
	Total	341,541	21,439	4,980	8,978	1,323	1,053	9,411	6,129	4,909	2,196	5,802	1,435	409,196

For footnotes see page 379.

In the following table the number of persons employed in manufacturing establishments in Victoria is classified according to the nature of their employment at the end of June 1973, 1974, 1975, 1976, and 1977:

**VICTORIA—MANUFACTURING ESTABLISHMENTS:
TYPE OF EMPLOYMENT**

At 30 June—	Working proprietors	Administrative, office, sales, and distribution employees	Production and all other employees	Total
1973	7,101	108,364	348,066	463,531
1974	7,459	109,870	359,479	476,808
1975 { (g)	4,358	103,382	313,911	421,651
{ (h)	3,130	922	2,260	6,312
1976 (g)	4,287	102,638	311,746	418,671
1977 (g)	4,318	102,699	297,946	404,963

For footnotes see page 379.

The following table shows the nature of employment in manufacturing establishments at 30 June 1977 classified according to industry sub-division:

**VICTORIA—MANUFACTURING ESTABLISHMENTS (g) : TYPE OF
EMPLOYMENT BY INDUSTRY SUB-DIVISION AT 30 JUNE 1977**

ASIC code	Industry sub-division	Working proprietors	Administrative, office, sales, and distribution employees	Production and all other employees	Total
21-2	Food, beverages, and tobacco	650	15,190	41,760	57,600
23	Textiles	75	4,220	15,755	20,050
24	Clothing and footwear	708	6,182	39,021	45,911
25	Wood, wood products, and furniture	803	3,848	15,207	19,858
26	Paper, paper products, and printing	401	10,161	22,391	32,953
27	Chemical, petroleum, and coal products	58	9,135	11,445	20,638
28	Non-metallic mineral products	135	3,308	10,171	13,614
29	Basic metal products	62	4,593	8,482	13,137
31	Fabricated metal products	527	9,221	26,077	35,825
32	Transport equipment	175	14,115	45,782	60,072
33	Other machinery and equipment	410	16,065	41,636	58,111
34	Miscellaneous manufacturing	314	6,661	20,219	27,194
	Total	4,318	102,699	297,946	404,963

For footnotes see page 379.

Although "production and all other employees" constitute 73.6 per cent of the total number employed in manufacturing establishments, the percentage varies from 85.0 per cent in sub-division 24 to 55.5 per cent in sub-division 27. Sub-division 27 also has the highest percentage of "administrative, office, sales, and distribution employees", 44.3 per cent, compared with the Victorian average of 25.4 per cent.

Where small establishments predominate there is usually a higher proportion of working proprietors than on the average and a smaller than average managerial and clerical staff. This is particularly evident in sub-division 25 where working proprietors comprise 4.0 per cent of the total number employed.

Female workers in manufacturing establishments at 30 June 1977 were 29.3 per cent of the total number employed. Females exceeded males in the Clothing and footwear sub-division (24) where they accounted for 75.2 per cent of the sub-division total; in the Clothing group (242) within this sub-division, 81.9 per cent of the total number employed are females.

In sub-division 29, Basic metal products, the proportion of females to total persons employed is at its lowest, 10.4 per cent.

**VICTORIA—MANUFACTURING ESTABLISHMENTS:
FEMALE EMPLOYMENT AT 30 JUNE**

ASIC code	Industry sub-division	Number at 30 June—					
		1973	1974	1975		1976 (g)	1977 (g)
				(g)	(h)		
21-2	Food, beverages, and tobacco—						
211	Meat products	3,279	3,315	3,101	16	3,093	3,007
213	Fruit and vegetable products	2,193	2,132	1,587	1	1,532	1,376
216	Bread, cakes, and biscuits	3,758	3,979	3,428	64	3,274	3,204
217-8	Sugar and other food products	3,314	4,144	3,482	10	3,424	3,649
	Other	4,755	5,127	4,922	34	4,503	4,215
	Total	17,299	18,697	16,520	125	15,826	15,451
23	Textiles—						
231-2	Textiles, yarns, and woven fabrics	8,977	8,586	6,721	20	6,936	6,106
	Other	3,151	3,384	3,048	34	2,997	2,319
	Total	12,128	11,970	9,769	54	9,933	8,425
24	Clothing and footwear—						
241	Knitting mills	9,987	10,098	8,184	37	8,521	7,887
242	Clothing	29,699	28,748	23,220	175	24,035	21,834
243	Footwear	6,745	5,866	4,944	19	4,600	4,801
	Total	46,431	44,712	36,348	231	37,156	34,522
25	Wood, wood products, and furniture	2,994	3,337	3,015	216	3,049	3,213
26	Paper, paper products, and printing	9,580	10,004	8,899	254	8,714	8,781
27	Chemical, petroleum, and coal products	5,951	6,256	5,617	49	5,188	5,151
28	Non-metallic mineral products	2,026	2,273	1,812	43	1,800	1,760
29	Basic metal products	1,466	1,585	1,400	16	1,417	1,363
31	Fabricated metal products	8,168	8,812	7,353	149	7,639	7,316
32	Transport equipment	9,527	11,788	8,852	45	10,124	9,344
33	Other machinery and equipment—						
332	Appliances and electrical equipment	12,364	13,805	10,894	69	10,061	9,235
333	Industrial machinery and equipment	4,129	4,514	3,868	112	3,620	3,450
	Other	1,781	1,884	1,857	16	1,893	1,855
	Total	18,274	20,203	16,619	197	15,574	14,540
34	Miscellaneous manufacturing	11,250	12,139	9,485	250	9,103	8,599
	Total	145,094	151,776	125,689	1,629	125,523	118,465

For footnotes see page 379.

The numbers of males and females employed in manufacturing establishments, and the proportions of the average male and female population working in these establishments in 1976-77 and earlier years are shown in the following table:

**VICTORIA—MANUFACTURING ESTABLISHMENTS:
EMPLOYMENT (a) OF MALES AND FEMALES, 1901-1977**

Year	Males		Females		Total	
	Number	Average per 10,000 of male population	Number	Average per 10,000 of female population	Number	Average per 10,000 of total population
1901	47,059	778	19,470	325	66,529	553
1911	73,573	1,118	38,375	579	111,948	847
1920-21	96,379	1,283	44,364	574	140,743	923
1932-33	91,899	1,020	52,529	575	144,428	796
1946-47	188,758	1,876	76,999	745	265,757	1,303
1953-54	240,698	1,979	90,579	751	331,277	1,367
1960-61	280,207	1,925	107,843	750	388,050	1,341
1965-66	310,303	1,937	128,846	809	439,149	1,375
1967-68	316,108	1,912	133,837	812	449,945	1,362
1968-69	297,411	1,771	134,240	800	431,651	1,286
1969-70	306,917	1,794	138,746	812	445,663	1,303
1971-72	310,750	1,751	139,276	785	450,026	1,268

VICTORIA—MANUFACTURING ESTABLISHMENTS:
EMPLOYMENT (a) OF MALES AND FEMALES, 1901-1977—*continued*

Year	Males		Females		Total	
	Number	Average per 10,000 of male population	Number	Average per 10,000 of female population	Number	Average per 10,000 of total population
1972-73	314,259	1,744	140,770	782	455,029	1,263
1973-74	320,921	1,758	148,917	816	469,838	1,287
1974-75 (g)	302,234	1,634	130,617	706	432,851	1,170
(h)	4,275	23	1,452	8	5,727	15
1975-76 (g)	291,757	1,565	125,374	671	417,131	1,118
1976-77 (g)	288,743	1,537	120,453	639	409,196	1,087

For footnotes see page 379.

Wages and salaries

The next table gives details of wages paid in the various classes of industry in Victoria in 1976-77. Amounts paid to "administrative, office, sales, and distribution employees" are shown separately from those paid to "production and all other workers". It should be noted that in all tables of salaries and wages paid the amounts drawn by working proprietors are excluded.

VICTORIA—MANUFACTURING ESTABLISHMENTS (g):
WAGES AND SALARIES PAID, 1976-77
(\$m)

ASIC code	Industry sub-division	Paid to—		
		Administrative, office, sales, and distribution employees	Production and all other workers	All employees
21-2	Food, beverages, and tobacco	156	372	528
23	Textiles	45	131	176
24	Clothing and footwear	62	269	331
25	Wood, wood products, and furniture	37	115	151
26	Paper, paper products, and printing	102	207	309
27	Chemical, petroleum, and coal products	110	109	219
28	Non-metallic mineral products	38	103	141
29	Basic metal products	54	87	141
31	Fabricated metal products	100	215	315
32	Transport equipment	171	405	576
33	Other machinery and equipment	171	353	524
34	Miscellaneous manufacturing	72	171	243
	Total	1,119	2,537	3,656

For footnotes see page 379.

Of the total amount of wages and salaries paid in Victoria in 1976-77—\$3,656m—the metal fabricating sub-divisions (29-33) (including transport equipment, machinery, and other equipment), were responsible for \$1,556m or 42.6 per cent; Food, beverages, and tobacco, \$528m or 14.4 per cent; Clothing and footwear, \$331m or 9.1 per cent; and Paper, paper products, and printing, \$309m or 8.5 per cent.

Turnover

The following table shows the value of turnover of manufacturing establishments. The figures include sales of goods whether produced by an establishment or not, transfers out of goods to other establishments of the same enterprise, bounties and subsidies on production, plus all other operating revenue from outside the enterprise, such as commission, repair and service revenue, and the value of capital work done on own account. Rents, leasing revenue, interest, royalties, and receipts from the sale of fixed tangible assets are excluded.

**VICTORIA—MANUFACTURING ESTABLISHMENTS:
TURNOVER BY INDUSTRY SUB-DIVISION
(\$m)**

ASIC code	Industry sub-division	1972-73	1973-74	1974-75		1975-76 (g)	1976-77 (g)
				(g)	(h)		
21-2	Food, beverages, and tobacco	2,168	2,391	2,548	8	2,767	3,104
23	Textiles	505	621	534	2	674	699
24	Clothing and footwear	681	800	799	7	942	1,002
25	Wood, wood products, and furniture	318	393	438	14	521	606
26	Paper, paper products, and printing	617	725	833	11	939	1,047
27	Chemical, petroleum, and coal products	617	751	803	3	904	1,076
28	Non-metallic mineral products	307	369	403	6	487	579
29	Basic metal products	340	467	548	2	577	744
31	Fabricated metal products	620	758	845	15	959	1,104
32	Transport equipment	1,227	1,387	1,648	5	1,909	2,311
33	Other machinery and equipment	1,109	1,315	1,566	16	1,696	1,811
34	Miscellaneous manufacturing	569	693	766	12	845	957
	Total	9,078	10,669	11,730	100	13,222	15,040

For footnotes see page 379.

Purchases, transfers in, and selected items of expense

In the following table the figures include purchases of materials, fuel, power, containers, etc., plus transfers in of goods from other establishments of the enterprise, plus charges for commission and sub-contract work, repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses, and sales commission payments:

**VICTORIA—MANUFACTURING ESTABLISHMENTS: PURCHASES,
TRANSFERS IN, AND SELECTED ITEMS OF EXPENSE
BY INDUSTRY SUB-DIVISION
(\$m)**

ASIC code	Industry sub-division	1972-73	1973-74	1974-75		1975-76 (g)	1976-77 (g)
				(g)	(h)		
21-2	Food, beverages, and tobacco	1,510	1,695	1,763	5	1,808	1,998
23	Textiles	311	402	300	1	391	407
24	Clothing and footwear	371	451	405	3	495	512
25	Wood, wood products, and furniture	175	221	238	7	286	330
26	Paper, paper products, and printing	308	371	438	5	467	535
27	Chemical, petroleum, and coal products	351	422	486	2	514	670
28	Non-metallic mineral products	152	188	197	3	239	285
29	Basic metal products	235	332	389	1	378	499
31	Fabricated metal products	324	423	448	7	497	576
32	Transport equipment	746	848	1,038	2	1,093	1,355
33	Other machinery and equipment	591	737	891	8	938	1,001
34	Miscellaneous manufacturing	316	395	430	7	460	528
	Total	5,392	6,486	7,024	53	7,564	8,696

For footnotes see page 379.

Stocks

The figures in the following tables include all stocks of materials, fuels, etc., finished goods and work-in-progress whether located at the establishment or elsewhere. It should be noted that due to reporting differences on individual returns and variations in the number of establishments from year to year, the closing stocks in one year may differ from the opening stocks in the following year.

**VICTORIA—MANUFACTURING ESTABLISHMENTS:
STOCKS BY INDUSTRY SUB-DIVISION
(\$m)**

ASIC code	Industry sub-division	1972-73	1973-74	1974-75		1975-76 (g)	1976-77 (g)
				(g)	(h)		
		OPENING					
21-2	Food, beverages, and tobacco	252	266	295	1	382	383
23	Textiles	94	105	149	—	126	140
24	Clothing and footwear	105	113	144	1	130	159
25	Wood, wood products, and furniture	41	41	54	1	64	73

VICTORIA—MANUFACTURING ESTABLISHMENTS:
STOCKS BY INDUSTRY SUB-DIVISION—*continued*
(\$m)

ASIC code	Industry sub-division	1972-73	1973-74	1974-75		1975-76 (g)	1976-77 (g)
				(g)	(h)		
26	Paper, paper products, and printing	79	81	104	1	138	133
27	Chemical, petroleum, and coal products	113	119	131	—	189	175
28	Non-metallic mineral products	36	35	41	—	52	57
29	Basic metal products	59	64	79	—	105	131
31	Fabricated metal products	113	118	149	1	180	194
32	Transport equipment	229	220	282	—	379	382
33	Other machinery and equipment	291	295	370	1	475	473
34	Miscellaneous manufacturing	89	95	121	1	144	151
Total		1,502	1,553	1,919	7	2,364	2,451
CLOSING							
21-2	Food, beverages, and tobacco	271	296	376	—	396	409
23	Textiles	100	149	124	—	139	143
24	Clothing and footwear	115	141	129	1	154	167
25	Wood, wood products, and furniture	42	55	62	1	72	83
26	Paper, paper products, and printing	78	100	138	1	134	152
27	Chemical, petroleum, and coal products	119	135	181	—	176	200
28	Non-metallic mineral products	34	44	52	—	57	75
29	Basic metal products	68	81	104	—	130	161
31	Fabricated metal products	120	148	173	1	197	213
32	Transport equipment	217	277	380	—	377	471
33	Other machinery and equipment	294	368	475	1	491	504
34	Miscellaneous manufacturing	94	122	150	1	149	168
Total		1,553	1,915	2,344	6	2,473	2,746

For footnotes see page 379.

Value added

Statistics on value added in the following table have been calculated by adding to turnover the increase (or deducting the decrease) in value of stocks and deducting the value of purchases and selected items of expense:

VICTORIA—MANUFACTURING ESTABLISHMENTS:
VALUE ADDED BY INDUSTRY SUB-DIVISION
(\$m)

ASIC code	Industry sub-division	1972-73	1973-74	1974-75		1975-76 (g)	1976-77 (g)
				(g)	(h)		
21-2	Food, beverages, and tobacco	677	727	866	3	973	1,132
23	Textiles	200	263	209	1	296	295
24	Clothing and footwear	320	377	379	3	471	498
25	Wood, wood products, and furniture	144	186	208	7	244	285
26	Paper, paper products, and printing	309	372	428	6	468	530
27	Chemical, petroleum, and coal products	271	345	368	1	377	432
28	Non-metallic mineral products	153	189	216	2	254	312
29	Basic metal products	113	155	183	1	225	276
31	Fabricated metal products	303	361	421	8	479	547
32	Transport equipment	469	596	709	2	814	1,044
33	Other machinery and equipment	521	651	780	8	775	841
34	Miscellaneous manufacturing	258	325	365	6	390	445
Total		3,738	4,546	5,131	48	5,765	6,637

For footnotes see page 379.

Relation of costs to turnover and value added

Certain costs of production, the value of turnover, movement in stocks, and the balance available for profit, interest, rent, taxation, depreciation, etc., in each sub-division of manufacturing industry during 1976-77 are given in the following tables:

VICTORIA—MANUFACTURING ESTABLISHMENTS (g):
COSTS AND TURNOVER, 1976-77
(\$m)

ASIC code	Industry sub-division	Cost of—		Movement in stocks	Balance between turnover, stocks, and costs (a)	Turnover
		Purchases and selected items of expense	Wages and salaries			
21-2	Food, beverages, and tobacco	1,998	528	+ 26	604	3,104
23	Textiles	407	176	+ 3	119	699
24	Clothing and footwear	512	331	+ 8	167	1,002
25	Wood, wood products, and furniture	330	151	+ 10	135	606
26	Paper, paper products, and printing	535	309	+ 19	222	1,047
27	Chemical, petroleum, and coal products	670	219	+ 24	211	1,076
28	Non-metallic mineral products	285	141	+ 18	171	579
29	Basic metal products	499	141	+ 30	134	744
31	Fabricated metal products	576	315	+ 19	232	1,104
32	Transport equipment	1,355	576	+ 89	469	2,311
33	Other machinery and equipment	1,001	524	+ 31	317	1,811
34	Miscellaneous manufacturing	528	243	+ 17	203	957
	Total	8,696	3,656	+293	2,981	15,040

(a) Balance available to provide for all other costs and overhead expenses such as rent, interest, insurance, pay-roll tax, income tax, depreciation, etc., as well as drawings by working proprietors and profit.

For other footnotes see page 379.

VICTORIA—MANUFACTURING ESTABLISHMENTS (g) : PERCENTAGE OF
SPECIFIED COSTS TO TURNOVER, 1976-77
(per cent)

ASIC code	Industry sub-division	Cost of—		Movement in stocks	Balance between turnover, stocks, and costs (a)	Turnover
		Purchases and selected items of expense	Wages and salaries			
21-2	Food, beverages, and tobacco	64.37	17.01	+0.84	19.46	100.0
23	Textiles	58.23	25.18	+0.43	17.02	100.0
24	Clothing and footwear	51.10	33.03	+0.80	16.67	100.0
25	Wood, wood products, and furniture	54.45	24.92	+1.65	22.28	100.0
26	Paper, paper products, and printing	51.10	29.51	+1.81	21.20	100.0
27	Chemical, petroleum, and coal products	62.27	20.35	+2.23	19.61	100.0
28	Non-metallic mineral products	49.23	24.35	+3.11	29.53	100.0
29	Basic metal products	67.07	18.95	+4.03	18.01	100.0
31	Fabricated metal products	52.18	28.53	+1.72	21.01	100.0
32	Transport equipment	58.64	24.92	+3.85	20.29	100.0
33	Other machinery and equipment	55.28	28.93	+1.71	17.50	100.0
34	Miscellaneous manufacturing	55.18	25.39	+1.78	21.21	100.0
	Total	57.81	24.30	+1.95	19.84	100.0

(a) Balance available to provide for all other costs and overhead expenses such as rent, interest, insurance, pay-roll tax, income tax, depreciation, etc., as well as drawings by working proprietors and profit.

For other footnotes see page 379.

There are considerable variations in the proportions which purchases and selected items of expenditure, and wages and salaries, bear to the turnover in the different sub-divisions. These are, of course, due to the difference in the treatment required to convert materials to their final form. Thus in sub-division 24 the sum paid in wages represents 33.0 per cent and the purchases and selected items of expense 51.1 per cent of the values of the finished articles, while in sub-division 21.22 the expenditure on wages amounts to 17.0 per cent and that on purchases, etc., to 64.4 per cent of the value of turnover.

In the following table specified costs of production, the value of turnover of manufacturing establishments, and the balance available for profit and miscellaneous expenses are compared for each of the years 1972-73, 1973-74, 1974-75, 1975-76, and 1976-77:

VICTORIA—MANUFACTURING ESTABLISHMENTS: SPECIFIED COSTS OF PRODUCTION, ETC., AND TURNOVER
(\\$m)

Year	Cost of—		Movement in stocks	Balance between turnover, stocks, and costs (a)	Turnover
	Purchases and selected items of expense	Wages and salaries			
1972-73	5,392	2,045	+ 51	1,692	9,078
1973-74	6,486	2,524	+ 362	2,021	10,669
1974-75 $\left\{ \begin{array}{l} (g) \\ (h) \end{array} \right.$	7,024	2,961	+ 425	2,170	11,730
	53	17	—	30	100
1975-76 (g)	7,564	3,287	+ 108	2,476	13,222
1976-77 (g)	8,696	3,656	+ 293	2,981	15,040

(a) Balance available to provide for all other costs, such as rent, interest, insurance, pay-roll tax, income tax, depreciation, etc., as well as drawings by working proprietors and profit.

For other footnotes see page 379.

In the following table the components of cost are converted to their respective percentages of the value of turnover:

VICTORIA—MANUFACTURING ESTABLISHMENTS: PERCENTAGE OF SPECIFIED COSTS OF PRODUCTION, ETC., TO TURNOVER
(per cent)

Year	Cost of—		Movement in stocks	Balance between turnover, stocks, and costs (a)	Turnover
	Purchases and selected items of expense	Wages and salaries			
1972-73	59.4	22.5	+ 0.6	18.7	100.0
1973-74	60.8	23.7	+ 3.4	18.9	100.0
1974-75 $\left\{ \begin{array}{l} (g) \\ (h) \end{array} \right.$	60.0	25.2	+ 3.7	18.5	100.0
	53.0	17.0	—	30.0	100.0
1975-76 (g)	57.2	24.7	+ 0.8	18.7	100.0
1976-77 (g)	57.8	24.3	+ 1.9	19.8	100.0

(a) Balance available to provide for all other costs, such as rent, interest, insurance, pay-roll tax, income tax, depreciation, etc., as well as drawings by working proprietors and profit.

For other footnotes see page 379

Fixed capital expenditure and rent and leasing

Fixed capital expenditure is the outlay on new and second-hand fixed tangible assets less disposals. Rent and leasing expense is the amount paid for renting and leasing of premises, vehicles, and equipment.

VICTORIA—MANUFACTURING ESTABLISHMENTS (g) : FIXED CAPITAL EXPENDITURE AND RENT AND LEASING EXPENSES, 1976-77
(\$'000)

ASIC code	Industry sub-division	Fixed capital expenditure			Rent and leasing expenses
		Land, buildings, and other structures	Vehicles, plant, machinery, and equipment	Total	
21-2	Food, beverages, and tobacco	11,322	52,660	63,982	25,396
23	Textiles	-843	15,517	14,674	7,844
24	Clothing and footwear	-558	7,712	7,154	12,435
25	Wood, wood products, and furniture	5,229	16,427	21,656	10,220
26	Paper, paper products, and printing	3,640	53,381	57,021	12,467
27	Chemical, petroleum, and coal products	6,385	51,059	57,444	6,838
28	Non-metallic mineral products	2,258	16,112	18,370	3,042
29	Basic metal products	9,853	62,909	72,762	3,537
31	Fabricated metal products	10,747	22,530	33,277	14,229
32	Transport equipment	10,937	66,385	77,323	12,404
33	Other machinery and equipment	2,986	33,427	36,414	21,266
34	Miscellaneous manufacturing	7,933	27,117	35,050	12,685
	Total	69,890	425,237	495,127	142,363

For footnotes see page 379.

**VICTORIA—MANUFACTURING ESTABLISHMENTS:
FIXED CAPITAL EXPENDITURE
(\$'000)**

ASIC code	Industry sub-division	1972-73	1973-74	1974-75		1975-76 (g)	1976-77 (g)
				(g)	(h)		
21-2	Food, beverages, and tobacco	64,052	76,211	70,690	165	50,694	63,982
23	Textiles	12,248	29,981	19,088	19	14,522	14,674
24	Clothing and footwear	10,815	11,333	7,727	121	8,152	7,154
25	Wood, wood products, and furniture	12,333	15,431	11,860	313	16,072	21,656
26	Paper, paper products, and printing	38,163	33,284	49,453	243	37,093	57,021
27	Chemical, petroleum, and coal products	61,332	32,606	34,598	20	61,343	57,444
28	Non-metallic mineral products	17,564	42,488	30,030	56	42,350	18,370
29	Basic metal products	88,140	21,442	27,750	21	59,370	72,762
31	Fabricated metal products	21,159	20,642	36,387	267	31,782	33,277
32	Transport equipment	56,097	61,758	91,590	89	61,902	77,323
33	Other machinery and equipment	35,613	42,900	45,456	321	45,102	36,414
34	Miscellaneous manufacturing	20,838	30,024	30,163	474	33,765	35,050
	Total	438,354	418,099	454,794	2,108	462,149	495,127

For footnotes see page 379.

Electricity and fuels used

**VICTORIA—MANUFACTURING ESTABLISHMENTS: VALUE OF
ELECTRICITY AND FUELS USED BY INDUSTRY SUB-DIVISION
(\$'000)**

ASIC code	Industry sub-division	1972-73	1973-74	1974-75		1975-76 (g)	1976-77 (g)
				(g)	(h)		
21-2	Food, beverages, and tobacco	21,814	24,517	30,930	180	35,682	38,219
23	Textiles	7,694	8,544	8,740	32	10,226	10,930
24	Clothing and footwear	4,277	4,593	4,857	66	5,595	5,530
25	Wood, wood products, and furniture	2,927	3,508	3,868	120	4,618	5,600
26	Paper, paper products, and printing	10,819	11,827	13,237	104	14,393	13,191
27	Chemical, petroleum, and coal products	12,908	14,863	18,908	30	21,049	25,740
28	Non-metallic mineral products	13,284	15,117	17,066	74	18,232	21,524
29	Basic metal products	13,254	15,715	19,207	28	21,385	24,028
31	Fabricated metal products	7,084	7,842	9,328	200	10,220	11,673
32	Transport equipment	10,897	11,915	14,685	46	14,223	17,342
33	Other machinery and equipment	9,088	10,662	12,698	143	13,509	13,763
34	Miscellaneous manufacturing	8,623	9,584	10,978	132	12,260	13,606
	Total	122,667	138,686	164,502	1,154	181,393	201,146

For footnotes see page 379.

**VICTORIA—MANUFACTURING ESTABLISHMENTS:
VALUE OF ELECTRICITY AND FUELS USED
(\$'000)**

Commodity	1972-73	1973-74	1974-75		1975-76 (g)	1976-77 (g)
			(g)	(h)		
Electricity	76,026	85,853	97,819	931	107,344	117,847
Coal and coke—						
Black coal	471	67	r27	—	53	65
Brown coal	1,207	1,610	r1,314	—	1,568	1,468
Brown coal briquettes	3,500	3,289	3,522	10	3,626	4,111
Coke (including coke breeze)	2,316	2,685	r2,908	9	2,573	3,346
Petroleum fuels (non-gaseous)—						
Light oils, etc.	2,156	2,518	3,031	74	3,391	4,590
Industrial diesel fuel	3,097	3,204	4,280	22	4,835	6,141
Furnace oil and other fuel oil	17,336	18,175	r23,948	29	23,759	19,688
Reticulated gas	11,189	15,841	20,791	40	25,431	35,669
Other fuels	5,369	5,444	6,862	38	8,811	8,220
Total	122,667	138,686	164,502	1,154	181,393	201,146

For footnotes see page 379.

**VICTORIA—MANUFACTURING ESTABLISHMENTS:
QUANTITIES OF FUELS USED**

Commodity	Unit	1972-73	1973-74	1974-75		1975-76 (g)	1976-77 (g)
				(g)	(h)		
Coal and coke—							
Black coal	tonne	36,364	4,068	r1,462	8	1,700	1,470
Brown coal	"	458,882	576,498	r427,889	19	386,547	331,417
Brown coal briquettes	"	449,614	410,401	r403,979	673	345,222	337,738
Coke (including coke breeze)	"	60,266	59,158	r54,161	225	38,376	39,719
Petroleum fuels (non-gaseous)—							
Light oils, etc.	'000 litres	42,421	43,639	32,276	683	29,652	35,103
Industrial diesel fuel	tonne	101,686	94,363	r78,557	398	63,760	74,009
Furnace oil and other fuel oil	"	852,450	746,136	r573,960	577	442,938	310,055

For footnotes see page 379.

Some principal factory products of Victoria and Australia

Annual quantity and value

The following table shows quantities of some of the principal articles manufactured in Victoria, and corresponding figures for Australia during 1976-77 and 1977-78. Owing to the limited number of producers, it is not permissible under statute to publish particulars regarding some articles of manufacture which would otherwise appear.

From February 1976, production statistics have no longer been collected from single establishment manufacturing enterprises employing less than four persons or from establishments predominantly engaged in non-manufacturing activities but which may carry on, in a minor way, some manufacturing activity. However, except for a few commodities, the effect of this modification on production levels and movements is marginal.

VICTORIA AND AUSTRALIA—PRINCIPAL ARTICLES MANUFACTURED (a)

Commodity Code No.	Article	Unit	Victoria		Australia		
			1976-77	1977-78	1976-77	1977-78	
023.18, 20	Bacon and ham—bone-in bone-out	'000 tonnes	3	4	16	16	
023.19, 21		"	13	13	41	46	
027.02-29, 72-77; 023.17	Meat—canned (excluding baby food)	"	32	28	53	49	
051.61		Ice cream	mill litres	72	77	211	216
051.72-73	Milk—powdered: full cream	'000 tonnes	42	66	59	78	
052.20, 24	Butter	"	89	90	118	112	
053.45	Cheese	"	55	60	104	113	
062.01, 32	Flour, plain—wheaten (including sharps)	"	253	241	1,132	1,080	
063.11, 21, 31	Malt	"	205	217	386	436	
064.21	Biscuits	"	53	50	127	125	
074.61, 65	Natural fruit juices	mill litres	32	44	107	134	
076.08, 15, 22	Canned or bottled apricots, peaches and pears	'000 tonnes	71	72	102	104	
076.60	Jam, etc.	"	21	22	27	28	
094.02-47	Vegetables canned or bottled (including pickled)	"	33	32	125	122	
Confectionery—							
104.06-18	Chocolate or containing chocolate	"	25	22	56	53	
104.21-29	Other	"	30	27	60	58	
123.18	Sauce—tomato	mill litres	16	16	22	22	
152.06	Pollard	'000 tonnes	54	54	237	227	
159.01	Canned cat and dog food	"	157	138	170	152	
171.03, 04, 07, 08	Aerated and carbonated waters, canned or bottled (b)	mill litres	226	222	968	988	
242.07-11	Wool-scoured or carbonised	'000 tonnes	24	25	75	72	
261.41	Briquettes—brown coal	"	1,035	1,064	1,035	1,064	
372.22-50	Cloth piece goods woven—woollen or predominantly woollen	'000 sq m	3,565	2,781	10,341	6,404	
372.52-66; 374.51-57	Blankets, bed (c)	'000	1,228	1,027	1,581	1,449	
403.02, 18, 20, 52-96; 404.01-98		Plastics and synthetic resins	'000 tonnes	274	298	469	494
472.01, 03	Bricks—clay		mill	538	451	2,044	1,895
472.12, 475.30	Tiles, roofing	"	67	56	230	203	
475.90	Ready mixed concrete	'000 cub m	2,870	2,868	10,331	10,336	
503.13-32	Electric motors	'000	762	783	3,239	2,762	
581.02-08, 10-16	Finished motor vehicles (d)— Cars	'000	210	191	367	315	

VICTORIA AND AUSTRALIA—PRINCIPAL ARTICLES MANUFACTURED (a)—*continued*

Commodity Code No.	Article	Unit	Victoria		Australia	
			1976-77	1977-78	1976-77	1977-78
582.04-28	Other	'000	29	19	61	49
773.02-35	Shirts (men's and boys') Underwear—	'000 doz	1,262	1,217	2,508	2,722
773.90, 94, 96, 97; 774.01-03, 06, 08, 11, 13, 15, 17, 36-39	Men's and boys'	'000 doz	1,010	1,084	2,382	2,380
774.44, 46, 48, 49, 61, 63, 68-73						
775.01-19	Women's and girls'	'000 doz	2,551	2,310	3,946	3,391
775.51-82, 91-98; 776.01-42	Stockings—women's (e) Socks and stockings—men's, children's, and infants'	'000 doz pairs "	4,768 2,688	3,881 2,507	5,984 3,002	5,198 2,752
793.05, 08, 21, 22, 31, 32, 41, 46, 51, 65, 66	Footwear—boots, shoes, and sandals (f)— Men's and youths'	'000 pairs	5,799	6,078	9,612	9,891
793.06, 09, 24, 33, 34, 42, 47, 52, 68						
793.04, 07, 10, 25, 35, 43, 48, 53, 69	Women's and maids'	'000 pairs	7,925	8,839	11,240	11,886
832.41	Children's (including infants')	"	4,162	4,453	5,673	5,925
844.22-67						
	Footballs—Australian rules	'000	141	127	159	144
	Mattresses—all types	'000	429	392	1,252	1,248

- (a) By all manufacturing establishments owned by multi-establishment enterprises and single establishment manufacturing enterprises with four or more persons employed.
- (b) Includes bulk aerated and carbonated waters.
- (c) Double, three quarter, single cot, bassinet, pram, etc.; wool mixture, and other fibre. From 1 July 1975 includes tufted blankets.
- (d) Excludes vehicles finished by specialist body building works outside the motor vehicle manufacturers' organisation.
- (e) Includes panty hose.
- (f) Excluding wholly of rubber.

Monthly production statistics

The Australian Bureau of Statistics collects monthly production returns and makes available printed tables of Australian production statistics within a few weeks of the month to which they relate. A list of the subjects included in these production bulletins is given in the following table:

AUSTRALIA—PRODUCTION BULLETINS

No.	Subject	No.	Subject
1	Electricity, Gas, and Electrical Appliances	5	Building Materials and Fittings
2	Clothing and Footwear	6	Chemicals and By-Products
3	Food, Drink, and Tobacco	7	Motor Vehicles, Parts, and Accessories
4	Textiles, Bedding, and Floor Coverings	8	Miscellaneous Products

In addition, statistical publications for the meat and dairying industries and minerals and mineral products are issued each month. Australian totals for a greater range of commodities are published in these publications and in production bulletins than are published in the *Monthly bulletin of production statistics*. Victorian figures are published in the Victorian monthly publication *Secondary production*.

Further references: History of manufacturing, *Victorian Year Book* 1961, pp. 531-5; Motor vehicle industry, 1962, pp. 591-4; Chemical industry, 1963, pp. 615-20; Petrochemical industry, 1964, pp. 650-4; Glass industry, 1965, pp. 606-8; Agricultural machinery industry, 1966, pp. 587-9; Aluminium industry, 1967, pp. 415-8; Automation and technical development in industry, 1967, pp. 376-82; Textile industry, 1968, pp. 416-20; Canning of foodstuffs, 1967, pp. 432-5; Butter, cheese and processed milk products, 1970, pp. 431-6; Heavy engineering, 1971, pp. 419-22; Light engineering, 1972, pp. 392-5; Secondary industry and the environment, 1974, pp. 418-21; Concrete pipe industry, 1975, pp. 500-1; Paper industry, 1976, pp. 466-8; Wine industry in Victoria, 1977, pp. 510-11; Timber industry in Victoria, 1978, pp. 434-7

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Manufacturing establishments: details of operations (8201.2)

Manufacturing establishments: selected items of data classified by industry and employment size (8202.2)

Manufacturing establishments: small area statistics (8203.2)

Manufacturing establishments: summary of operations (8205.2)

Manufacturing establishments: usage of electricity and fuels (8204.2)

Secondary production monthly (8301.2)

Central Office

Census of manufacturing establishments—summary of operations by industry sub-division (preliminary statement) (8201.0)

Manufacturing establishments—details of operations by industry class (8203.0)

Manufacturing establishments—summary of operations by industry class (8202.0)

Production bulletins Nos 1 to 8 (see page 393 of this *Year Book*) 8357.0–8364.0