MANUFACTURING INDUSTRY

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- For further information about these and related statistics, contact John Ridley on Sydney 029268 4541, or any ABS office shown on the back cover of this publication.


## NOTES

ANNUAL MANUFACTURING INDUSTRY COLLECTION

ABOUT THIS ISSUE

DATA TO BE RELEASED IN OTHER PUBLICATIONS

SYMBOLS AND OTHER USAGES

The 1996-97 collection was a census of manufacturing businesses. It is the first census of the manufacturing sector since 1993-94. All manufacturing businesses were requested to provide data on employment, wages and salaries, turnover, purchases and whether their products were exported. Samples of businesses provided additional information related to detailed structural and performance data, environmental protection expenditure and the value of sales for commodities produced.

Data in this publication have been adjusted for all known deficiencies in the number of businesses recorded on the Australian Bureau of Statistics (ABS) business register. The nature of these various adjustments and the reasons for making them are described in paragraphs 10-12 of the Explanatory Notes. Because of these adjustments, comparison of data in this publication with data previously published should be undertaken with caution. Other adjusted data for earlier periods are available on request.

This publication presents data relating to the operations of both manufacturing establishments and manufacturing locations. Details on employment, wages and salaries, turnover, Industry Gross Product (IGP) and direct exports are presented as appropriate. This publication also contains a table for New South Wales showing industry subdivision data by statistical division and a map displaying the boundaries of each New South Wales statistical division

More detailed manufacturing industry statistics for each State are being released progressively in a series of publications Manufacturing Industry, [State], 1996-97 (Cat. nos $8221.1-8221.6$ ). For 1996-97, all of these publications contain a table showing industry subdivision data by statistical division.

Commodity data will be released in Manufacturing Production, Commodities Produced, Australia, 1996-97 (Cat. no. 8365.0), to be released in December 1998

Management unit data and a wide range of manufacturing related ABS data, as well as data from other sources, will be presented in the compendium publication Manufacturing, Australia, 1998 (Cat. no. 8225.0), to be released in December 1998.

| ABS | Australian Bureau of Statistics |
| :--- | :--- |
| ANZSIC | Australian and New Zealand Standard Industrial Classification |
| ASIC | Australian Standard Industrial Classification |
| IGP | Industry Gross Product |
| mfg | manufacturing |
| n.e.c. | not elsewhere classified |
| n.p. | not available for publication but included in totals where applicable |
| . . | not applicable |
| - | nil or rounded to zero |

Gregory W. Bray
Regional Director

## NEW SOUTH WALES

## OVERVIEW

Turnover for the year 1996-97 by manufacturing establishments operating in New South Wales was $\$ 68,211 \mathrm{~m}$, which resulted in an Industry Gross Product (IGP) for the year of $\$ 21,048 \mathrm{~m}$. These establishments employed 310,300 persons at the end of June 1997 and paid $\$ 11,228 \mathrm{~m}$ in wages and salaries in 1996-97.

The percentage of Australian manufacturing employment in New South Wales at the end of June 1997 was $32.8 \%$, the same proportion as reported at the end of June 1996. The New South Wales industry subdivisions which made a significant contribution to national manufacturing employment at the end of June 1997 at the industry subdivision level were Printing, publishing and recorded media (40.9\%), Metal product manufacturing (35.8\%) and Petroleum, coal, chemical and associated product manufacturing (34.9\%).

The percentage contribution by New South Wales to total Australian manufacturing turnover and IGP in 1996-97 was $32.7 \%$ and $33.0 \%$ (respectively). This represents a decrease of 0.4 percentage points for turnover and 0.9 percentage points for IGP on the contribution reported in 1995-96. The New South Wales industry subdivisions which made a significant contribution to national manufacturing turnover and IGP in 1996-97 at the industry subdivision level were also Printing, publishing and recorded media ( $45.6 \%$ and $44.9 \%$ respectively), Metal product manufacturing (both $36.8 \%$ ) and Petroleum, coal, chemical and associated product manufacturing ( $36.7 \%$ and $34.9 \%$ respectively).

## STATE COMPARISON

For the first time since the commencement of integrated economic statistics with the 1968-69 collection, the contribution to Australian turnover for 1996-97 by New South Wales manufacturers ( $\$ 68,211 \mathrm{~m}$ ) fell below that of manufacturers located in Victoria ( $\$ 68,420 \mathrm{~m}$ ). However, more people are still employed in manufacturing in New South Wales (310,300 persons) than in Victoria (306,600 persons).

IGP (see the Glossary for its definition) is very similar to the national accounting measure gross product at factor cost, which is the official statistical measure of production. IGP for $1996-97$ was $\$ 21,048 \mathrm{~m}$. This represents a $1.7 \%$ decrease, in current price terms, on the $\$ 21,410 \mathrm{~m}$ recorded for $1995-96$ and a $13.1 \%$ increase, in current price terms, on the $\$ 18,615 \mathrm{~m}$ recorded for 1992-93.

IGP per person employed at the end of June followed this trend, with a $1.8 \%$ decrease (to $\$ 67,800$ ) for $1996-97$ over the $\$ 69,100$ recorded for $1995-96$ and a $14.8 \%$ increase over the $\$ 59,100$ recorded for $1992-93$.

Total manufacturing IGP decreased by $1.7 \%$, in current price terms, between 1995-96 and 1996-97. Seven industry subdivisions recorded a decrease while two recorded an increase. The industry subdivision to record the largest percentage decrease in IGP between 1995-96 and 1996-97 also recorded the largest dollar decrease. This was Metal product manufacturing (down $5.3 \%-\$ 4,315 \mathrm{~m}$ to $\$ 4,085 \mathrm{~m}$ ). Other subdivisions to record large percentage decreases between 1995-96 and 1996-97 were Non-metallic mineral product manufacturing (down $4.6 \%-\$ 889 \mathrm{~m}$ to $\$ 848 \mathrm{~m}$ ) and Food, beverage and tobacco manufacturing (down $4.1 \%-\$ 3,282 \mathrm{~m}$ to $\$ 3,148 \mathrm{~m}$ ). The industry subdivisions to record

NEW SOUTH WALES continued

INDUSTRY GROSS PRODUCT continued
an increase were Printing, publishing and recorded media (up 4.3\%) and Textile, clothing, footwear and leather manufacturing (up $0.2 \%$ ). The Non-metallic mineral product manufacturing (down $7.7 \%$ ) and Food, beverage and tobacco manufacturing (down 2.8\%) subdivisions were the only subdivisions to record a decrease, in current price terms, in IGP between 1992-93 and 1996-97. The largest percentage increase, in current price terms, in IGP between 1992-93 and 1996-97 was recorded by Printing, publishing and recorded media (up $40.2 \%$ ).

DISTRIBUTION OF IGP AND EMPLOYMENT


The New South Wales manufacturing industry employed 310,300 persons at the end of June 1997 and paid $\$ 11,228 \mathrm{~m}$ in wages and salaries in 1996-97. This represents an average of $\$ 36,200$ paid in annual wages and salaries per person employed at the end of June 1997.

EMPLOYMENT


Employment in the New South Wales manufacturing industry has declined over the five years to June 1997. Employment increased marginally between June 1996

## EMPLOYMENT AND WAGES continued

(310,000 persons) and June 1997 (310,300 persons) but fell by 3.6\% over the five years from June 1992 (321,800 persons) to June 1997. Between June 1996 and June 1997, employment increased in five of the nine manufacturing industry subdivisions, remained steady in one subdivision and decreased in the other three subdivisions. The industry subdivision with the largest percentage increase was Printing, publishing and recorded media (up 7.8\%) followed by Other manufacturing (up 3.1\%). The industry subdivisions with the decreases were Wood and paper product manufacturing (down 8.0\%), Petroleum, coal, chemical and associated product manufacturing (down 3.9\%) and Machinery and equipment manufacturing (down 3.7\%).

Average wages and salaries paid per person employed at the end of June rose in all nine manufacturing industry subdivisions between 1995-96 and 1996-97. Generally, the industry subdivisions recording the largest percentage falls in employment corresponded with the subdivisions recording the largest percentage increases in average wages and salaries paid. The converse also generally applied. The main exception was the Non-metallic mineral product manufacturing subdivision which had the fourth largest percentage increase in employment (up $1.7 \%$ ) and second largest percentage increase in wages and salaries paid per person employed (up 10.0\%).

The industry subdivisions to record the largest percentage increases in wages and salaries paid per person employed were:

- Wood and paper product manufacturing (up $11.2 \%-\$ 29,600$ to $\$ 32,900$ ), where 8 (out of 12) industry classes recorded an increase, with the largest being:
- Corrugated paperboard container manufacturing (ANZSIC Class 2333) (up $34.0 \%-\$ 40,200$ to $\$ 53,900$ );
- Solid paperboard container manufacturing (ANZSIC Class 2332) (up $27.9 \%-\$ 38,000$ to $\$ 48,600$ ); and
- Plywood and veneer manufacturing (ANZSIC Class 2321) (up $24.9 \%-\$ 26,400$ to $\$ 33,000$ ).
- Non-metallic mineral product manufacturing (up $10.0 \%-\$ 34,000$ to $\$ 37,400$ ) where 9 (out of 11) industry classes recorded an increase, with the largest (where publishable) being:
- Ceramic tile and pipe manufacturing (ANZSIC Class 2623) (up $59.9 \%-\$ 27,500$ to $\$ 44,000$ ); and
- Plaster product manufacturing (ANZSIC Class 2632) (up $29.5 \%-\$ 35,400$ to $\$ 45,800$ ).

The industry subdivisions to record the smallest percentage increases between 1995-96 and 1996-97 in wages and salaries paid per person employed at the end of June were:

- Printing, publishing and recorded media (up marginally- $\$ 37,100$ to $\$ 37,200$ ), even though four of the seven industry classes recorded an increase. The main influences on the subdivision result were Newspaper printing or publishing (ANZSIC Class 2421) and Printing (ANZSIC Class 2412) where substantial increases in employment
( $13.5 \%$ and $24.3 \%$ respectively) were not matched by increases in total wages and salaries paid ( $11.6 \%$ and $19.1 \%$ respectively). Between them, these two ANZSIC classes accounted for just over two thirds of employment in the subdivision.
- Metal product manufacturing (up $1.1 \%$ - $\$ 39,100$ to $\$ 39,500$ ), where twelve industry classes recorded increases and eight recorded decreases. The small increase in this subdivision was most influenced by Fabricated metal product manufacturing n.e.c. (ANZSIC Class 2769) (which had $15.7 \%$ of subdivision employment) because it experienced a much greater increase in employment (up 26.8\%) than it did in total wages and salaries paid (up 19.1\%). Also influential in producing a small increase in wages and salaries paid per person employed at the subdivision level was Basic iron and steel manufacturing (ANZSIC Class 2711) (23.8\% of employment for the subdivision), which experienced a marginally greater fall in total wages and salaries paid (down 3.8\%) than it did in employment (down 3.1\%).

Industry classes (where publishable) belonging to other industry subdivisions and which had the largest percentage increases in wages and salaries paid per person employed between 1995-96 and 1996-97 were Pump and compressor manufacturing (ANZSIC Class 2866) (up $35.8 \%-\$ 32,700$ to $\$ 44,500$ ) and Sleepwear, underwear and infant clothing manufacturing (ANZSIC Class 2243) (up 35.0\%-\$23,900 to $\$ 32,300$ ).

## TURNOVER

Turnover rose, in current price terms, by $\$ 1,246 \mathrm{~m}$ to $\$ 68,211 \mathrm{~m}$ for $1996-97$. This represents a $1.9 \%$ increase on the $\$ 66,965 \mathrm{~m}$ recorded for $1995-96$.

Six of the nine manufacturing industry subdivisions recorded an increase in turnover between 1995-96 and 1996-97. Metal product manufacturing and Food, beverage and tobacco manufacturing remain the largest contributors to total New South Wales manufacturing turnover. The largest percentage increases between 1995-96 and 1996-97 were recorded by Printing, publishing and recorded media (up 6.9\%) and Other manufacturing (up 5.6\%). Wood and paper product manufacturing (down 1.9\%) and Machinery and equipment manufacturing (down $1.5 \%$ ) were the industry subdivisions to record the largest falls in turnover.

The industry classes (where publishable) with the largest percentage increases between 1995-96 and 1996-97 were:

- Mattress manufacturing (except rubber) (ANZSIC Class 2923) (up $67.8 \%$ or $\$ 58 \mathrm{~m}$ );
- Prefabricated metal building manufacturing (ANZSIC Class 2911) (up $56.9 \%$ or $\$ 35 \mathrm{~m}$ ); and
- Railway equipment manufacturing (ANZSIC Class 2823) (up $49.0 \%$ or $\$ 123 \mathrm{~m}$ ).

The industry classes (where publishable) with the largest dollar increases between 1995-96 and 1996-97 were:

- Newspaper printing or publishing (ANZSIC Class 2421) (up \$397m or 23.4\%);
- Fabricated metal product manufacturing n.e.c. (ANZSIC Class 2769) (up $\$ 258 \mathrm{~m}$ or $32.1 \%$ ); and
- Structural steel fabricating (ANZSIC Class 2741) (up $\$ 233 \mathrm{~m}$ or $26.0 \%$ ).

The industry classes (where publishable) with the largest percentage decreases between 1995-96 and 1996-97 were:

- Photographic and optical good manufacturing (ANZSIC Class 2831) (down $57.6 \%$ or $\$ 59 \mathrm{~m}$ ); and
- Textile product manufacturing n.e.c. (ANZSIC Class 2229) (down $56.8 \%$ or $\$ 53 \mathrm{~m}$ ).

The industry classes with the largest dollar decreases between 1995-96 and 1996-97 were:

- Other periodical publishing (ANZSIC Class 2422) (down $\$ 227 \mathrm{~m}$ or $25.0 \%$ );
- Telecommunication, broadcasting and transceiving equipment manufacturing (ANZSIC Class 2842) (down $\$ 165 \mathrm{~m}$ or 20.1\%); and
- Aluminium rolling, drawing, extruding (ANZSIC Class 2731) (down \$151m or 20.2\%).

Over the four year period from 1992-93 to 1996-97, the industry class which advanced the most number of places (when ranked by turnover) was Computer and business machine manufacturing (ANZSIC Class 2841) which progressed from the 80th rank position (out of 151 ANZSIC classes with data classified to them) to the 42 nd rank position.

## EXPORTS

For 1996-97, New South Wales manufacturers directly exported $\$ 7,923 \mathrm{~m}$ of the goods that they produced. This represents a $3.9 \%$ increase on the $\$ 7,629 \mathrm{~m}$ recorded for 1995-96. The percentage of the total sales and transfers out of goods produced that were exported has marginally increased (from $12.6 \%$ for $1995-96$ to $12.7 \%$ for 1996-97).

Between 1995-96 and 1996-97, manufacturers' direct exports increased in five industry subdivisions and decreased in the other four. The Metal product manufacturing subdivision's decrease of $\$ 297 \mathrm{~m}$ or $9.7 \%$ (from $\$ 3,075 \mathrm{~m}$ for $1995-96$ to $\$ 2,778 \mathrm{~m}$ for 1996-97) was, by far, the largest dollar decrease. The industry subdivisions to record the largest dollar increases in direct exports between 1995-96 and 1996-97 were Food, beverage and tobacco manufacturing ( $\$ 333 \mathrm{~m}$ or $23.1 \%-\$ 1,443 \mathrm{~m}$ to $\$ 1,776 \mathrm{~m}$ ), Petroleum, coal, chemical and associated product manufacturing ( $\$ 137 \mathrm{~m}$ or $13.6 \%$ - $\$ 1,013 \mathrm{~m}$ to $\$ 1,150 \mathrm{~m}$ ) and Machinery and equipment manufacturing ( $\$ 124 \mathrm{~m}$ or $10.8 \%-\$ 1,152 \mathrm{~m}$ to $\$ 1,276 \mathrm{~m}$ ).

## REGIONAL ACTIVITY

As in previous census years, Sydney Statistical Division dominated manufacturing activity in New South Wales in 1996-97. It contributed $71.8 \%$ of all locations at 30 June 1997, $71.6 \%$ of employment at the end of June 1997 and $70.3 \%$ of turnover for 1996-97. The only other statistical divisions to contribute significantly were Hunter ( $6.6 \%$ of locations, $8.2 \%$ of employment and $9.4 \%$ of turnover) and Illawarra ( $4.3 \%$ of locations, $5.8 \%$ of employment and $8.1 \%$ of turnover).

The Sydney Statistical Division was also the leading contributor, by far, in all nine industry subdivisions. However, the Hunter Statistical Division (with 10,647 persons employed and $\$ 3,717 \mathrm{~m}$ in turnover) and the Illawarra Statistical Division

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REGIONAL ACTIVITY continued
(with 10,477 persons employed and $\$ 4,249 \mathrm{~m}$ in turnover) also made significant contributions to Metal product manufacturing.

For the nine remaining statistical divisions, a common feature was that Food, beverage and tobacco manufacturing generally dominated total manufacturing in that area. Of these, the statistical division that had the highest percentage contribution by Food, beverage and tobacco manufacturing for their region was Murrumbidgee (73.1\%).

## AUSTRALIAN CAPITAL TERRITORY

Turnover for the year 1996-97 by manufacturing establishments operating in the Australian Capital Territory was $\$ 555.4 \mathrm{~m}$. This represents a $1.3 \%$ increase, in current price terms, from the $\$ 548.3 \mathrm{~m}$ for the year $1995-96$. Manufacturing employment at the end of June 1997 was 3,593 persons, a decrease of $9.2 \%$ from the 3,959 persons recorded 12 months earlier. The percentage contribution by the Australian Capital Territory to total Australian manufacturing turnover in 1996-97 was $0.3 \%$ and to employment at the end of June 1997 was $0.4 \%$, which are both the same as 12 months earlier.

In the Australian Capital Territory, Printing, publishing and recorded media continued to be the largest contributor, by far, to total manufacturing employment at the end of June 1997 (42.4\%) and annual turnover (38.6\%). Machinery and equipment manufacturing ( $16.4 \%$ and $17.8 \%$ respectively) is now the second largest contributor (instead of Food, beverage and tobacco manufacturing which was the second largest contributor for 1995-96). The smallest contributors to employment and turnover continued to be Petroleum, coal, chemical and associated product manufacturing ( $0.8 \%$ and $0.5 \%$ respectively) and Textile, clothing, footwear and leather manufacturing ( $3.4 \%$ and $1.5 \%$ respectively).

Six of the nine industry subdivisions recorded decreases in the level of employment between June 1996 and June 1997. Likewise, six of the industry subdivisions recorded decreases in the level of turnover between 1995-96 and 1996-97.

Food, beverage and tobacco manufacturing (down $30.4 \%-470$ persons to 327 persons) and Other manufacturing (down $21.2 \%$ - 416 persons to 328 persons) recorded the largest percentage decreases in employment in the 12 months to the end of June 1997. Printing, publishing and recorded media recorded the largest decrease in employment in absolute terms (down 247 persons- 1,769 persons to 1,522 persons).

Other manufacturing (down $22.1 \%-\$ 55.7 \mathrm{~m}$ to $\$ 43.4 \mathrm{~m}$ ) recorded the largest percentage and absolute decrease in turnover.

Machinery and equipment manufacturing recorded the largest percentage and absolute increase for both employment ( $26.3 \%-467$ persons to 590 persons) and turnover ( $66.0 \%-\$ 59.6 \mathrm{~m}$ to $\$ 99.0 \mathrm{~m}$ ).

(a) See paragraph 5 of the Explanatory Notes.
(b) For factors affecting comparability of data over the time periods shown, see paragraphs 13-17 of the Explanatory Notes.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors.
(e) Value data are at current prices and, therefore, do not discount the impact of price changes.
(f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.
(g) For 1995-96, excludes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

| INDUSTRY SUBDIVISION |  | Employment at end of June(c) | Wages and salaries(d)(e) | Turnover(e) | Industry gross product(e) | Ratio of wages and salaries to turnover(e) | Turnover per person employed(e)(f) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANZSIC |  |  |  |  |  |  |  |
| code Description |  | '000 | \$m | \$m | \$m | ratio | \$'000 |
|  |  |  |  |  |  |  |  |
| 27 Metal product mfg | 1996-97 | 53.8 | 2127.7 | 13952.3 | 4085.5 | 0.15 | 259.3 |
|  | 1995-96 | 52.3 | (g)2 047.5 | 13972.5 | 4315.3 | 0.15 | 267.0 |
|  | 1994-95 | 56.7 | 2163.7 | 13667.4 |  | 0.16 | 241.2 |
|  | 1993-94 | 57.5 | 2045.4 | 13260.3 |  | 0.15 | 230.6 |
|  | 1992-93 | 58.7 | 2008.0 | 12244.3 | 3734.8 | 0.16 | 208.5 |
|  | 1991-92 | 60.4 | 2070.5 | 12207.0 |  | 0.17 | 202.2 |
| 28 Machinery and equipment mfg | 1996-97 | 64.2 | 2425.3 | 10574.7 | 3757.4 | 0.23 | 164.8 |
|  | 1995-96 | 66.6 | (g) 2311.7 | 10733.9 | 3770.8 | 0.22 | 161.1 |
|  | 1994-95 | 67.2 | 2217.2 | 10458.8 |  | 0.21 | 155.7 |
|  | 1993-94 | 64.3 | 2084.6 | 9788.2 | . | 0.21 | 152.2 |
|  | 1992-93 | 62.1 | 2069.0 | 9208.1 | 3253.4 | 0.22 | 148.2 |
|  | 1991-92 | 65.2 | 2102.0 | 9336.3 |  | 0.23 | 143.1 |
| 29 Other manufacturin | 1996-97 | 16.9 | 426.2 | 1992.8 | 693.2 | 0.21 | 117.7 |
|  | 1995-96 | 16.4 | (g)402.5 | 1887.7 | 693.4 | 0.21 | 114.9 |
|  | 1994-95 | 16.5 | 405.3 | 1852.2 | . . | 0.22 | 112.3 |
|  | 1993-94 | 17.3 | 406.0 | 1864.6 |  | 0.22 | 107.5 |
|  | 1992-93 | 16.7 | 413.2 | $1832.6$ | 618.7 | 0.23 | 110.0 |
|  | 1991-92 | 17.5 | 415.5 | 1860.2 | . . | 0.22 | 106.4 |
| 21-29 Total manufacturing | 1996-97 | 310.3 | 11228.0 | 68210.7 | 21048.2 | 0.16 | 219.8 |
|  | 1995-96 | 310.0 | (g)10 626.5 | 66965.2 | 21410.3 | 0.16 | 216.0 |
|  | 1994-95 | 318.3 | 10600.4 | 65930.3 | .. | 0.16 | 207.1 |
|  | 1993-94 | 316.6 | 10139.8 | 63581.6 | .. | 0.16 | 200.8 |
|  | 1992-93 | 315.0 | 9996.6 | 60097.2 | 18615.2 | 0.17 | 190.8 |
|  | 1991-92 | 321.8 | 10062.5 | 59186.4 | . | 0.17 | 183.9 |

(a) See paragraph 5 of the Explanatory Notes.
(b) For factors affecting comparability of data over the time periods shown, see paragraphs 13-17 of the Explanatory Notes.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors.
(e) Value data are at current prices and, therefore, do not discount the impact of price changes.
(f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.
(g) For 1995-96, excludes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

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| INDUSTRY CLASS | Employment at end of June(b) | Wages and salaries(c) | Turnover | Industry gross product | Turnover per person employed(d) | Industry gross product per person employed(e) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANZSIC |  |  |  |  |  |  |
| code Description | no. | \$m | \$m | \$m | \$'000 | \$'000 |


|  | FOOD, BEVERAGE AND TOBACCO MFG Meat and meat product mfg |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2111 | Meat processing | 8707 | 276.3 | 1610.5 | 369.6 | 185.0 | 42.5 |
| 2112 | Poultry processing | 5699 | 171.8 | 996.9 | 222.9 | 174.9 | 39.1 |
| 2113 | Bacon, ham and smallgood mfg | 1308 | 43.6 | 352.9 | 94.9 | 269.8 | 72.6 |
| 211 | Total | 15714 | 491.7 | 2960.3 | 687.4 | 188.4 | 43.7 |
| Dairy product mfg |  |  |  |  |  |  |  |
| 2121 | Milk and cream processing | 1980 | 73.3 | 780.9 | 138.7 | 394.3 | 70.0 |
| 2122 | Ice cream mfg | 776 | 31.5 | 248.8 | 73.5 | 320.8 | 94.8 |
| 2129 | Dairy product mfg n.e.c. | 1061 | 33.9 | 337.8 | 45.7 | 318.3 | 43.1 |
| 212 | Total | 3818 | 138.7 | 1367.5 | 258.0 | 358.2 | 67.6 |
| 213 | Fruit and vegetable processing | 2490 | 82.0 | 736.3 | 102.4 | 295.8 | 41.1 |
| 214 | Oil and fat mfg | 793 | 37.8 | 270.9 | 52.0 | 341.5 | 65.5 |
| Flour mill and cereal food mfg |  |  |  |  |  |  |  |
| 2151 | Flour mill product mfg | 1384 | 60.9 | 725.8 | 114.5 | 524.4 | 82.7 |
| 2152 | Cereal food and baking mix mfg | 2070 | 82.2 | 1084.0 | 319.2 | 523.8 | 154.2 |
| 215 | Total | 3453 | 143.1 | 1809.8 | 433.7 | 524.0 | 125.6 |
| Bakery product mfg |  |  |  |  |  |  |  |
| 2161 | Bread mfg | 3379 | 111.4 | 424.7 | 138.5 | 125.7 | 41.0 |
| 2162 | Cake and pastry mfg | 2806 | 75.2 | 366.2 | 115.5 | 130.5 | 41.1 |
| 2163 | Biscuit mfg | 1029 | 31.1 | 196.0 | 59.5 | 190.5 | 57.9 |
| 216 | Total | 7215 | 217.7 | 986.9 | 313.5 | 136.8 | 43.5 |
| Other food mfg |  |  |  |  |  |  |  |
| 2171 | Sugar mfg | 496 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2172 | Confectionery mfg | 1718 | 65.9 | 375.0 | 132.9 | 218.3 | 77.4 |
| 2173 | Seafood processing | 573 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2174 | Prepared animal and bird feed mfg | 1561 | 68.7 | 861.3 | 140.1 | 551.9 | 89.7 |
| 2179 | Food mfg n.e.c. | 5443 | 214.3 | 1201.8 | 336.5 | 220.8 | 61.8 |
| 217 | Total | 9790 | 392.1 | 2801.4 | 681.8 | 286.1 | 69.6 |
| Beverage and malt mfg |  |  |  |  |  |  |  |
| 2181 | Soft drink, cordial and syrup mfg | 1740 | 72.9 | 724.5 | 104.4 | 416.4 | 60.0 |
| 2182 | Beer and malt mfg | 852 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2183 | Wine mfg | 1479 | 42.3 | 402.4 | 94.1 | 272.1 | 63.6 |
| 2184 | Spirit mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 218 | Total | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 219 | Tobacco product mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 21 | Total food, beverage and tobacco mfg | 48530 | 1741.2 | 13348.9 | 3148.1 | 275.1 | 64.9 |

(a) See paragraph 5 of the Explanatory Notes.
(b) Includes working proprietors.
(c) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(d) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.
(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

| INDUSTRY CLASS | Employment at end of June(b) | Wages and salaries(c) | Turnover | Industry gross product | Turnover per person employed(d) | Industry gross product per person employed(e) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANZSIC |  |  |  |  |  |  |
| code Description | no. | \$m | \$m | \$m | \$'000 | \$'000 |

TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG

## Textile fibre, yarn and woven fabric mfg

2211 Wool scouring 736
2212 Synthetic fibre textile mfg $\quad 958$
Cotton textile mfg

2214
2215 Textile finishing 384

Total 3662
Textile product $\mathbf{m f g}$

| 2221 | Made-up textile product mfg |
| :--- | :--- |
| 2222 | Textile floor covering mfg |
| 2223 | Rope, cordage and twine mfg |
| 2229 | Textile product mfg n.e.c. |
| 222 | Total |

## Knitting mills

| 1702 | 37.2 | 191.5 | 61.6 | 112.5 | 36.2 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 227 | 8.2 | 55.5 | 13.7 | 244.3 | 60.2 |
| 54 | 2.5 | 12.3 | 3.7 | 230.4 | 68.9 |
| 406 | 10.2 | 40.3 | 16.3 | 99.3 | 40.2 |
| 2388 | 58.1 | 299.6 | 95.3 | 125.5 | 39.9 |

Hosiery mfg
Cardigan and pullover mfg

| n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| ---: | ---: | ---: | ---: | ---: | ---: |
| n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 821 | 27.4 | 217.4 | 52.0 | 264.9 | 63.3 |
| 1663 | 49.2 | 298.0 | 82.8 | 179.2 | 49.8 |

## Clothing mfg

| 2241 | Men's and boys' wear mfg |
| :--- | :--- |
| 2242 | Women's and girls' wear mfg |
| 2243 | Sleepwear, underwear and infant clothing mfg |
| 2249 | Clothing mfg n.e.c. |


| 2653 | 67.0 | 287.4 | 110.2 | 108.3 | 41.5 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 5420 | 129.0 | 890.8 | 261.5 | 164.4 | 48.3 |
| 1582 | 51.1 | 190.3 | 74.9 | 120.3 | 47.3 |
| 4608 | 85.0 | 403.8 | 130.1 | 87.6 | 28.2 |
| 14263 | 332.0 | 1772.2 | 576.7 | 124.3 | 40.4 |
|  |  |  |  |  |  |
| $\mathbf{1 3 1 7}$ | 31.8 | 108.9 | 47.3 | 82.7 | 35.9 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 551 | 17.7 | 172.7 | 23.8 | 313.6 | 43.1 |
| 275 | 5.5 | 26.7 | 8.2 | 96.9 | 29.8 |
| 826 | 23.1 | 199.3 | 32.0 | 241.3 | 38.7 |
|  |  |  |  |  |  |
| $\mathbf{2 4 1 1 9}$ | $\mathbf{6 3 1 . 6}$ | $\mathbf{3 2 7 1 . 3}$ | $\mathbf{1 0 4 8 . 5}$ | $\mathbf{1 3 5 . 6}$ | $\mathbf{4 3 . 5}$ |

## WOOD AND PAPER PRODUCT MFG

Log sawmilling and timber dressing

| 1987 | 48.6 | 212.2 | 79.2 | 106.8 | 39.9 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 269 | 7.8 | 72.8 | 37.2 | 270.9 | 138.3 |
| 1442 | 48.2 | 207.7 | 83.9 | 144.1 | 58.2 |
| 3698 | 104.6 | 492.6 | 200.3 | 133.2 | 54.2 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 379 | 12.5 | 57.8 | 19.3 | 152.4 | 50.9 |
| 1271 | 54.9 | 336.4 | 102.1 | 264.7 | 80.4 |
| 6589 | 171.1 | 817.3 | 256.0 | 124.0 | 38.9 |
| 1854 | 38.2 | 165.9 | 60.7 | 89.5 | 32.7 |
| 10093 | 276.7 | 1377.4 | 438.1 | 136.5 | 43.4 |

## Other wood product mfg

2239 Knitting mill product mfg n.e.c
Total 1663

1663

2322 Fabricated wood mfg
2323 Wooden structural component mfg
2329 Wood product mfg n.e.c. Total
(a) See paragraph 5 of the Explanatory Notes.
(b) Includes working proprietors.
(c) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(d) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.
(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

|  |  |  |  |  |  | Industry gross |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INDUSTRY CLASS | Employment at end of June(b) | Wages and salaries(c) | Turnover | Industry gross produc | Turnover per person employed(d) | product per person employed(e) |



| Paper and paper product mfg |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2331 | Pulp, paper and paperboard mfg | 1359 | 65.0 | 648.9 | 274.8 | 477.3 | 202.1 |
| 2332 | Solid paperboard container mfg | 1019 | 49.5 | 251.9 | 113.3 | 247.3 | 111.2 |
| 2333 | Corrugated paperboard container mfg | 1690 | 91.0 | 467.2 | 159.0 | 276.4 | 94.0 |
| 2334 | Paper bag and sack mfg | 267 | 9.9 | 49.4 | 15.1 | 185.2 | 56.6 |
| 2339 | Paper product mfg n.e.c. | 918 | 30.2 | 235.8 | 66.9 | 256.7 | 72.8 |
| 233 | Total | 5254 | 245.6 | 1653.2 | 629.0 | 314.7 | 119.7 |
| 23 | Total wood and paper product mfg | 19045 | 627.0 | 3523.3 | 267.3 | 185.0 | 66.5 |

PRINTING, PUBLISHING AND RECORDED MEDIA
Printing and services to printing

| 2411 | Paper stationery mfg | 2220 | 75.8 | 303.1 | 110.0 | 136.5 | 49.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2412 | Printing | 15018 | 498.8 | 2074.4 | 822.4 | 138.1 | 54.8 |
| 2413 | Services to printing | 2608 | 89.7 | 275.2 | 141.1 | 105.5 | 54.1 |
| 241 | Total | 19846 | 664.3 | 2652.7 | 1073.5 | 133.7 | 54.1 |
| Publishing |  |  |  |  |  |  |  |
| 2421 | Newspaper printing or publishing | 11554 | 488.3 | 2090.3 | 894.9 | 180.9 | 77.4 |
| 2422 | Other periodical publishing | 3620 | 138.6 | 683.5 | 229.1 | 188.8 | 63.3 |
| 2423 | Book and other publishing | 3196 | 119.1 | 813.0 | 471.1 | 254.4 | 147.4 |
| 242 | Total | 18370 | 746.1 | 3586.8 | 1595.1 | 195.3 | 86.8 |
| 243 | Recorded media manufacturing and publishing | 1352 | 59.8 | 541.1 | 356.7 | 400.2 | 263.8 |
| 24 | Total printing, publishing and recorded media | 39568 | 1470.2 | 6780.5 | 3025.2 | 171.4 | 76.5 |
|  | PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG |  |  |  |  |  |  |
| 251 | Petroleum refining | 1244 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 252 | Petroleum and coal product mfg n.e.c. | 219 | 10.1 | 103.7 | 24.2 | 472.9 | 110.3 |
| Basic chemical mfg |  |  |  |  |  |  |  |
| 2531 | Fertiliser mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2532 | Industrial gas mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2533 | Synthetic resin mfg | 1150 | 65.1 | 655.6 | 171.5 | 570.2 | 149.1 |
| 2534 | Organic industrial chemical mfg n.e.c. | 650 | 36.8 | 561.6 | 129.2 | 863.8 | 198.7 |
| 2535 | Inorganic industrial chemical mfg n.e.c. | 1038 | 59.0 | 429.2 | 130.4 | 413.5 | 125.6 |
| 253 | Total | 3565 | 196.6 | 1849.6 | 512.1 | 518.9 | 143.7 |
| Other chemical product mfg |  |  |  |  |  |  |  |
| 2541 | Explosive mfg | 718 | 34.9 | 226.0 | 81.8 | 314.7 | 114.0 |
| 2542 | Paint mfg | 2163 | 80.8 | 498.3 | 168.3 | 230.3 | 77.8 |
| 2543 | Medicinal and pharmaceutical product mfg | 5764 | 254.3 | 2234.7 | 642.2 | 387.7 | 111.4 |
| 2544 | Pesticide mfg | 593 | 30.6 | 440.3 | 120.7 | 742.7 | 203.7 |
| 2545 | Soap and other detergent mfg | 1825 | 74.7 | 674.7 | 170.0 | 369.7 | 93.2 |
| 2546 | Cosmetic and toiletry preparation mfg | 2329 | 106.9 | 721.5 | 191.7 | 309.7 | 82.3 |
| 2547 | Ink mfg | 228 | 8.6 | 69.2 | 16.2 | 304.3 | 71.0 |
| 2549 | Chemical product mfg n.e.c. | 1553 | 59.0 | 397.4 | 121.1 | 255.9 | 78.0 |
| 254 | Total | 15173 | 649.8 | 5262.1 | 1512.0 | 346.8 | 99.7 |

(a) See paragraph 5 of the Explanatory Notes.
(b) Includes working proprietors.
(c) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(d) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.
(e) Industry gross product divided by the number of persons employed at the end of June.

Includes working proprietors.

|  |  |  |  |  |  | Industry gross |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employment at end | Wages and |  | Industry gross | Turnover per person | product per person |
| INDUSTRY CLASS | of June(b) | salaries(c) | Turnover | product | employed(d) | employed(e) |


| Code Description | no. $\$ \mathrm{~m}$ | $\$ \mathrm{~m}$ | $\$ 000$ |
| :--- | :--- | :--- | :--- | :--- |


|  | Rubber product mfg |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2551 | Rubber tyre mfg | 357 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2559 | Rubber product mfg n.e.c. | 1157 | 32.4 | 130.8 | 46.5 | 113.0 | 40.1 |
| 255 | Total | 1515 | n.p. | n.p. | n.p. | n.p. | n.p. | Plastic foam product mfg Plastic injection moulded product mfg Total


| 1307 | 48.3 | 265.6 | 83.6 | 203.3 | 64.0 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 1263 | 41.8 | 241.4 | 75.9 | 191.1 | 60.1 |
| 1780 | 71.6 | 415.3 | 151.3 | 233.3 | 85.0 |
| 963 | 29.4 | 139.0 | 43.8 | 144.4 | 45.5 |
| 755 | 27.3 | 169.0 | 49.4 | 223.9 | 65.5 |
| 4773 | 147.3 | 627.4 | 236.2 | 131.4 | 49.5 |
| 10840 | 365.7 | 1857.7 | 640.1 | 171.4 | 59.0 |product mfg

$32556 \quad 1347.8 \quad 12047.4 \quad 3174.6 \quad 370.1 \quad 97.5$

NON-METALLIC MINERAL PRODUCT MFG

## Ceramic mfg

2623 Ceramic tile and pipe mfg Ceramic product mfg n.e.c Total

| 1188 | 43.4 | 205.9 | 84.7 | 173.3 | 71.3 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 803 | 33.2 | 142.2 | 39.9 | 177.2 | 49.7 |
| 175 | 7.7 | 41.8 | 21.0 | 239.2 | 120.3 |
| 640 | 21.4 | 86.9 | 52.3 | 135.8 | 81.7 |
| 2806 | 105.6 | 476.9 | 198.0 | 170.0 | 70.5 |

Cement, lime, plaster and concrete product mfg Cement and lime mfg

| 588 | n.p. | n.p. | n.p. | n.p. | n.p. |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 534 | 24.5 | 154.6 | 71.1 | 289.6 | 133.3 |
| 1731 | 57.4 | 683.8 | 82.8 | 395.0 | 47.8 |
| 440 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2140 | 64.3 | 439.0 | 145.2 | 205.1 | 67.8 |
| 5433 | 194.1 | 1571.3 | 414.2 | 289.2 | 76.2 |
|  |  |  |  |  |  |
| $1 \mathbf{7 1 4}$ | 61.7 | 351.3 | 126.3 | 205.0 | 73.7 |
|  |  |  |  |  |  |
| $\mathbf{1 1 5 2 4}$ | $\mathbf{4 3 1 . 0}$ | $\mathbf{2 7 1 9 . 5}$ | $\mathbf{8 4 8 . 3}$ | $\mathbf{2 3 6 . 0}$ | $\mathbf{7 3 . 6}$ |

METAL PRODUCT MFG
Iron and steel mfg

| 2711 | Basic iron and steel mfg | 12808 | 704.1 | 5203.8 | 1352.5 | 406.3 | 105.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2712 | Iron and steel casting and forging | 1781 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2713 | Steel pipe and tube mfg | 1053 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 271 | Total | 15642 | 830.5 | 5929.2 | 1593.9 | 379.0 | 101.9 |
| Basic non-ferrous metal mfg |  |  |  |  |  |  |  |
| 2721 | Alumina production | - | - | - | - | - |  |
| 2722 | Aluminium smelting | 1839 | 96.4 | 1327.3 | 400.7 | 721.8 | 217.9 |
| 2723 | Copper, silver, lead and zinc smelting, refining | 514 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2729 | Basic non-ferrous metal mfg n.e.c. | 40 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 272 | Total | 2393 | 122.2 | 1585.4 | 450.3 | 662.5 | 188.2 |

(a) See paragraph 5 of the Explanatory Notes.
(b) Includes working proprietors.
(c) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(d) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.
(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

|  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
|  |  |  | Industry gross |  |  |
| INDUSTRY CLASS |  |  |  |  |  |

ANZSIC
code Description

| Non-ferrous basic metal product mfg |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2731 | Aluminium rolling, drawing, extruding | 1737 | 83.6 | 595.4 | 144.3 | 342.8 | 83.1 |
| 2732 | Non-ferrous metal rolling, drawing, extruding n.e.c. | 1165 | 47.3 | 746.0 | 107.8 | 640.4 | 92.6 |
| 2733 | Non-ferrous metal casting | 239 | 6.9 | 21.8 | 9.3 | 91.0 | 38.7 |
| 273 | Total | 3141 | 137.7 | 1363.2 | 261.4 | 433.9 | 83.2 |
| Structural metal product mfg |  |  |  |  |  |  |  |
| 2741 | Structural steel fabricating | 5493 | 194.2 | 1125.7 | 360.9 | 204.9 | 65.7 |
| 2742 | Architectural aluminium product mfg | 3907 | 109.9 | 547.2 | 165.4 | 140.1 | 42.3 |
| 2749 | Structural metal product mfg n.e.c. | 2002 | 55.7 | 329.6 | 122.8 | 164.6 | 61.3 |
| 274 | Total | 11402 | 359.9 | 2002.4 | 649.1 | 175.6 | 56.9 |


| 2751 | Metal container mfg | 1385 | 53.3 | 317.9 | 102.5 | 229.5 | 74.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2759 | Sheet metal product mfg n.e.c. | 4899 | 160.3 | 700.5 | 262.3 | 143.0 | 53.5 |


| 6284 | 213.6 | 1018.3 | 364.9 | 162.0 | 58.1 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Fabricated metal product mfg

| 2761 | Hand tool and general hardware mfg | 594 | 17.3 | 65.1 | 29.0 | 109.5 | 48.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2762 | Spring and wire product mfg | 2264 | 91.8 | 504.1 | 144.6 | 222.7 | 63.9 |
| 2763 | Nut, bolt, screw and rivet mfg | 450 | 13.8 | 72.3 | 27.0 | 160.5 | 59.9 |
| 2764 | Metal coating and finishing | 2343 | 67.3 | 235.7 | 106.7 | 100.6 | 45.5 |
| 2765 | Non-ferrous pipe fitting mfg | 864 | 27.4 | 114.9 | 51.3 | 133.1 | 59.4 |
| 2769 | Fabricated metal product mfg n.e.c. | 8435 | 246.1 | 1061.7 | 407.4 | 125.9 | 48.3 |
| 276 | Total | 14950 | 463.8 | 2053.7 | 765.9 | 137.4 | 51.2 |
| 27 | Total metal product mfg | 53813 | 2127.7 | 13952.3 | 4085.5 | 259.3 | 75.9 |
|  | MACHINERY AND EQUIPMENT MFG Motor vehicle and part mfg |  |  |  |  |  |  |
| 2811 | Motor vehicle mfg | - | - | - | - | - | - |
| 2812 | Motor vehicle body mfg | 1555 | 43.3 | 182.1 | 59.3 | 117.1 | 38.1 |
| 2813 | Automotive electrical and instrument mfg | 972 | 30.4 | 112.1 | 43.0 | 115.4 | 44.2 |
| 2819 | Automotive component mfg n.e.c. | 3990 | 140.9 | 646.6 | 252.2 | 162.1 | 63.2 |
| 281 | Total | 6517 | 214.6 | 940.9 | 354.4 | 144.4 | 54.4 |
| Other transport equipment mfg |  |  |  |  |  |  |  |
| 2821 | Shipbuilding | 1912 | 78.3 | 384.9 | 138.5 | 201.3 | 72.4 |
| 2822 | Boatbuilding | 890 | 19.6 | 70.1 | 26.6 | 78.8 | 29.9 |
| 2823 | Railway equipment mfg | 1595 | 69.7 | 375.6 | 135.0 | 235.5 | 84.6 |
| 2824 | Aircraft mfg | 5761 | 313.4 | 764.4 | 397.3 | 132.7 | 69.0 |
| 2829 | Transport equipment mfg n.e.c. | 123 | 2.6 | 11.1 | 2.8 | 90.6 | 23.0 |
| 282 | Total | 10281 | 483.5 | 1606.2 | 700.2 | 156.2 | 68.1 |
| Photographic and scientific equipment mfg |  |  |  |  |  |  |  |
| 2831 | Photographic and optical good mfg | 331 | 10.3 | 43.4 | 19.3 | 131.1 | 58.3 |
| 2832 | Medical and surgical equipment mfg | 2030 | 69.4 | 251.4 | 101.1 | 123.8 | 49.8 |
| 2839 | Professional and scientific equipment mfg n.e.c. | 1400 | 48.7 | 181.2 | 63.6 | 129.4 | 45.4 |
| 283 | Total | 3761 | 128.4 | 476.0 | 183.9 | 126.6 | 48.9 |

(a) See paragraph 5 of the Explanatory Notes.
(b) Includes working proprietors.
(c) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(d) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.
(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

|  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
| INDUSTRY CLASS | Employment |  | Industry gross |  |
|  | at end | Wages and |  | Industry | | Turnover |
| ---: |
| product |


| ANZSIC |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| code | Description | no. | $\$ \mathrm{~m}$ | $\$ \mathrm{~m}$ | $\$ \mathrm{~m}$ |


| Electronic equipment mfg |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2841 | Computer and business machine mfg | 1149 | 50.0 | 567.3 | 129.9 | 493.7 | 113.0 |
| 2842 | Telecommunication, broadcasting and transceiving equipment mfg | 2886 | 124.0 | 657.7 | 215.5 | 227.9 | 74.7 |
| 2849 | Electronic equipment mfg n.e.c. | 6291 | 246.2 | 1125.7 | 421.2 | 178.9 | 67.0 |
| 284 | Total | 10326 | 420.3 | 2350.7 | 766.5 | 227.6 | 74.2 |
| Electrical equipment and appliance mfg |  |  |  |  |  |  |  |
| 2851 | Household appliance mfg | 5089 | 164.2 | 796.3 | 237.5 | 156.5 | 46.7 |
| 2852 | Electric cable and wire mfg | 2240 | 105.6 | 647.6 | 162.3 | 289.1 | 72.4 |
| 2853 | Battery mfg | 305 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2854 | Electric light and sign mfg | 2398 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2859 | Electrical equipment mfg n.e.c. | 6356 | 228.7 | 922.8 | 356.7 | 145.2 | 56.1 |
| 285 | Total | 16389 | 577.2 | 2707.8 | 862.1 | 165.2 | 52.6 |
| Industrial machinery and equipment mfg |  |  |  |  |  |  |  |
| 2861 | Agricultural machinery mfg | 1380 | 39.0 | 188.8 | 55.4 | 136.8 | 40.2 |
| 2862 | Mining and construction machinery mfg | 1664 | 60.9 | 337.9 | 96.0 | 203.1 | 57.7 |
| 2863 | Food processing machinery mfg | 484 | 19.0 | 83.6 | 29.4 | 172.6 | 60.8 |
| 2864 | Machine tool and part mfg | 2630 | 89.7 | 295.4 | 138.3 | 112.3 | 52.6 |
| 2865 | Lifting and material handling equipment mfg | 3948 | 159.3 | 634.3 | 206.0 | 160.7 | 52.2 |
| 2866 | Pump and compressor mfg | 1154 | 51.3 | 203.0 | 75.5 | 176.0 | 65.5 |
| 2867 | Commercial space heating and cooling equipment mfg | 1152 | 34.2 | 179.6 | 48.7 | 155.9 | 42.3 |
| 2869 | Industrial machinery and equipment mfg n.e.c. | 4493 | 148.0 | 570.6 | 240.8 | 127.0 | 53.6 |
| 286 | Total | 16905 | 601.4 | 2493.1 | 890.3 | 147.5 | 52.7 |
| 28 | Total machinery and equipment mfg | 64178 | 2425.3 | 10574.7 | 3757.4 | 164.8 | 58.5 |

## OTHER MANUFACTURING

Prefabricated building mfg
457
101
13.0

| 96.7 | 26.6 | 211.6 | 58.1 |
| ---: | ---: | ---: | ---: |
| 20.4 | 7.0 | 201.2 | 68.7 |
| 117.1 | 33.5 | 209.7 | 60.0 |
|  |  |  |  |
| 726.2 | 259.5 | 98.6 | 35.2 |
| 227.2 | 78.8 | 134.9 | 46.8 |
| 143.6 | 48.8 | 152.6 | 51.8 |
| 204.0 | 85.2 | 106.4 | 44.4 |
| 1301.1 | 472.3 | 109.3 | 39.7 |

Furniture mfg

| Wooden furniture and upholstered seat mfg | 7362 | 171.8 | 726.2 | 259.5 | 98.6 | 35.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sheet metal furniture mfg | 1685 | 51.0 | 227.2 | 78.8 | 134.9 | 46.8 |
| Mattress mfg (except rubber) | 941 | 26.7 | 143.6 | 48.8 | 152.6 | 51.8 |
| Furniture mfg n.e.c. | 1917 | 48.8 | 204.0 | 85.2 | 106.4 | 44.4 |
| Total | 11906 | 298.4 | 1301.1 | 472.3 | 109.3 | 39.7 |
| Miscellaneous manufacturing |  |  |  |  |  |  |
| Jewellery and silverware mfg | 926 | 22.8 | 135.6 | 33.6 | 146.4 | 36.3 |
| Toy and sporting good mfg | 702 | 15.8 | 81.5 | 25.9 | 116.1 | 36.9 |
| Manufacturing n.e.c. | 2845 | 73.1 | 357.6 | 127.9 | 125.7 | 44.9 |
| Total | 4473 | 111.7 | 574.7 | 187.4 | 128.5 | 41.9 |
| otal other manufacturing | 16937 | 426.2 | 1992.8 | 693.2 | 117.7 | 40.9 |
| OTAL MANUFACTURING | 310269 | 11228.0 | 68210.7 | 21048.2 | 219.8 | 67.8 |

(a) See paragraph 5 of the Explanatory Notes.
(b) Includes working proprietors.
(c) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(d) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.
(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

INDUSTRY SUBDIVISION
1992-93 TO 1996-97.

| ANZSIC |  | 1992-93 to | 1995-96 | Percentage | Change in IGP per person |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Description | 1995-96 | 1996-97 | movement | employed(c) |
| . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |  |  |  |  |
| 21 | Food, beverage and tobacco mfg | 1.4 | -4.1 | -2.8 | 1.0 |
| 22 | Textile, clothing, footwear and leather mfg | 14.8 | 0.2 | 15.1 | 18.1 |
| 23 | Wood and paper product mfg | 22.5 | -1.2 | 21.0 | 22.2 |
| 24 | Printing, publishing and recorded media | 34.3 | 4.3 | 40.2 | 28.4 |
| 25 | Petroleum, coal, chemical and associated product mfg | 18.1 | -1.8 | 16.0 | 21.4 |
| 26 | Non-metallic mineral product mfg | -3.2 | -4.6 | -7.7 | 1.9 |
| 27 | Metal product mfg | 15.5 | -5.3 | 9.4 | 19.4 |
| 28 | Machinery and equipment mfg | 15.9 | -0.4 | 15.5 | 11.8 |
| 29 | Other manufacturing | 12.1 | - | 12.0 | 10.2 |
| 21-29 | Total manufacturing | 15.0 | -1.7 | 13.1 | 14.8 |

(a) See paragraph 5 of the Explanatory Notes.
(b) Percentage changes are calculated using current price data and, therefore, do not discount the impact of price changes. For factors affecting comparability of data over the time periods shown, see paragraphs 13-17 of the Explanatory Notes.
(c) Based on employment at the end of June of the reference year. Includes working proprietors.

4
MANUFACTURING ESTABLISHMENTS(a), Summary of Operations-
Employment size(b): NSW

|  | Employment at end of June(c).. |  | Wages and salaries(d)(e). |  | Turnover(e).................. |  | Industry gross product(e)....... |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment size group(f) | no. | \% | \$m | \% | \$m | \% | \$m | \% |
| FOOD, BEVERAGE AND TOBACCO MANUFACTURING |  |  |  |  |  |  |  |  |
| 0-4 persons | 969 | 2.0 | 18.8 | 1.1 | 154.4 | 1.2 | 35.6 | 1.1 |
| 5-9 persons | 1596 | 3.3 | 32.7 | 1.9 | 214.4 | 1.6 | 49.1 | 1.6 |
| 10-19 persons | 2458 | 5.1 | 57.5 | 3.3 | 426.5 | 3.2 | 92.9 | 3.0 |
| 20-49 persons | 4660 | 9.6 | 127.8 | 7.4 | 1255.0 | 9.5 | 272.9 | 8.8 |
| 50-99 persons | 4588 | 9.5 | 161.5 | 9.4 | 1456.9 | 11.0 | 292.6 | 9.4 |
| Total less than 100 persons | 14271 | 29.4 | 398.2 | 23.1 | 3507.1 | 26.4 | 743.1 | 23.9 |
| 100-199 persons | 6654 | 13.7 | 227.9 | 13.2 | 2078.2 | 15.7 | 473.4 | 15.2 |
| 200-499 persons | 14060 | 29.0 | 588.1 | 34.2 | 4935.6 | 37.2 | 1217.3 | 39.1 |
| 500-999 persons | 7523 | 15.5 | 271.0 | 15.7 | 1679.2 | 12.7 | 384.3 | 12.3 |
| 1000 or more persons | 6022 | 12.4 | 236.5 | 13.7 | 1065.2 | 8.0 | 294.3 | 9.5 |
| Total 100 or more persons | 34259 | 70.6 | 1323.4 | 76.9 | 9758.2 | 73.6 | 2369.3 | 76.1 |
| Total | 48530 | 100.0 | 1721.7 | 100.0 | 13265.4 | 100.0 | 3112.4 | 100.0 |

TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING

| 0-4 persons | 3205 | 13.3 | 50.9 | 8.1 | 271.4 | 8.4 | 105.1 | 10.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-9 persons | 2771 | 11.5 | 51.6 | 8.3 | 260.7 | 8.1 | 96.0 | 9.3 |
| 10-19 persons | 3175 | 13.2 | 64.8 | 10.4 | 337.5 | 10.4 | 119.9 | 11.6 |
| 20-49 persons | 4021 | 16.7 | 97.9 | 15.7 | 604.6 | 18.7 | 175.3 | 16.9 |
| 50-99 persons | 3446 | 14.3 | 107.0 | 17.1 | 668.7 | 20.7 | 180.4 | 17.4 |
| Total less than 100 persons | 16619 | 68.9 | 372.2 | 59.5 | 2142.9 | 66.3 | 676.7 | 65.4 |
| 100-199 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 200-499 persons | 3635 | 15.1 | 128.2 | 20.5 | 448.1 | 13.9 | 194.5 | 18.8 |
| 500-999 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 1000 or more persons | - | - | - | - | - | - | - | - |
| Total 100 or more persons | 7501 | 31.1 | 253.1 | 40.5 | 1088.9 | 33.7 | 358.5 | 34.6 |
| Total | 24119 | 100.0 | 625.3 | 100.0 | 3231.8 | 100.0 | 1035.3 | 100.0 |

WOOD AND PAPER PRODUCT MANUFACTURING

| 0-4 persons | 2167 | 11.4 | 39.6 | 6.4 | 190.7 | 5.4 | 65.7 | 5.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-9 persons | 2184 | 11.5 | 49.2 | 7.9 | 233.0 | 6.6 | 72.8 | 5.8 |
| 10-19 persons | 2819 | 14.8 | 75.5 | 12.1 | 355.6 | 10.1 | 125.8 | 10.0 |
| 20-49 persons | 2890 | 15.2 | 83.1 | 13.4 | 421.2 | 12.0 | 135.9 | 10.8 |
| 50-99 persons | 1876 | 9.9 | 59.7 | 9.6 | 438.0 | 12.5 | 213.9 | 17.0 |
| Total less than 100 persons | 11936 | 62.7 | 307.1 | 49.4 | 1638.4 | 46.7 | 614.0 | 48.7 |
| 100-199 persons | 2709 | 14.2 | 98.8 | 15.9 | 517.9 | 14.8 | 183.0 | 14.5 |
| 200-499 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 500-999 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 1000 or more persons | - | - | - | - | - | - | - | - |
| Total 100 or more persons | 7109 | 37.3 | 314.1 | 50.6 | 1868.7 | 53.3 | 646.9 | 51.3 |
| Total | 19045 | 100.0 | 621.2 | 100.0 | 3507.1 | 100.0 | 1260.9 | 100.0 |

(a) See paragraph 5 of the Explanatory Notes.
(b) See paragraph 20 of the Explanatory Notes for an explanation of the impact of unincorporated joint ventures on these estimates.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1996-97 but were not operating at 30 June 1997. See paragraph 19 of the Explanatory Notes.
(f) See paragraph 18 of the Explanatory Notes.

4
MANUFACTURING ESTABLISHMENTS(a), Summary of Operations-
Employment size(b): NSW continued

|  | Employment at end of June(c). |  | Wages and salaries(d)(e). |  | Turnover(e)................. |  | Industry gross product(e). |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment size group(f) | no. | \% | \$m | \% | \$m | \% | \$m | \% |
| PRINTING, PUBLISHING AND RECORDED MEDIA |  |  |  |  |  |  |  |  |
| 0-4 persons | 2895 | 7.3 | 65.7 | 4.5 | 303.2 | 4.5 | 133.9 | 4.5 |
| 5-9 persons | 3541 | 8.9 | 94.3 | 6.5 | 363.1 | 5.4 | 159.2 | 5.3 |
| 10-19 persons | 4057 | 10.3 | 123.6 | 8.5 | 453.5 | 6.7 | 209.5 | 7.0 |
| 20-49 persons | 5638 | 14.2 | 195.9 | 13.5 | 710.4 | 10.6 | 303.2 | 10.1 |
| 50-99 persons | 5232 | 13.2 | 210.2 | 14.4 | 1082.7 | 16.1 | 566.6 | 18.9 |
| Total less than 100 persons | 21364 | 54.0 | 689.7 | 47.4 | 2912.9 | 43.3 | 1372.5 | 45.7 |
| 100-199 persons | 5406 | 13.7 | 199.8 | 13.7 | 955.0 | 14.2 | 355.9 | 11.9 |
| 200-499 persons | 5349 | 13.5 | 211.4 | 14.5 | 974.3 | 14.5 | 389.5 | 13.0 |
| 500-999 persons | 3479 | 8.8 | 139.6 | 9.6 | 860.2 | 12.8 | 451.9 | 15.1 |
| 1000 or more persons | 3970 | 10.0 | 214.7 | 14.8 | 1027.4 | 15.3 | 430.4 | 14.3 |
| Total 100 or more persons | 18204 | 46.0 | 765.4 | 52.6 | 3816.8 | 56.7 | 1627.8 | 54.3 |
| Total | 39568 | 100.0 | 1455.1 | 100.0 | 6729.8 | 100.0 | 3000.3 | 100.0 |

PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING

| 0-4 persons | 931 | 2.9 | 23.2 | 1.8 | 157.5 | 1.3 | 45.8 | 1.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-9 persons | 1399 | 4.3 | 39.6 | 3.0 | 228.4 | 1.9 | 73.3 | 2.4 |
| 10-19 persons | 2495 | 7.7 | 82.1 | 6.3 | 464.4 | 4.0 | 122.8 | 4.0 |
| 20-49 persons | 4495 | 13.8 | 150.0 | 11.5 | 1165.2 | 9.9 | 395.8 | 12.8 |
| 50-99 persons | 6457 | 19.8 | 266.2 | 20.3 | 1950.1 | 16.6 | 571.2 | 18.4 |
| Total less than 100 persons | 15776 | 48.5 | 561.2 | 42.8 | 3965.6 | 33.7 | 1208.8 | 39.0 |
| 100-199 persons | 8206 | 25.2 | 347.0 | 26.5 | 2583.1 | 22.0 | 809.1 | 26.1 |
| 200-499 persons | 8573 | 26.3 | 401.8 | 30.7 | 5206.3 | 44.3 | 1078.5 | 34.8 |
| 500-999 persons | - | - | - | - | - | - | - | - |
| 1000 or more persons | - | - | - | - | - | - | - | - |
| Total 100 or more persons | 16780 | 51.5 | 748.8 | 57.2 | 7789.4 | 66.3 | 1887.6 | 61.0 |
| Total | 32556 | 100.0 | 1310.0 | 100.0 | 11755.0 | 100.0 | 3096.4 | 100.0 |

NON-METALLIC MINERAL PRODUCT MANUFACTURING

| 0-4 persons | 803 | 7.0 | 15.5 | 3.6 | 80.0 | 3.0 | 24.8 | 2.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-9 persons | 831 | 7.2 | 23.4 | 5.4 | 114.0 | 4.2 | 31.7 | 3.8 |
| 10-19 persons | 1041 | 9.0 | 31.5 | 7.3 | 172.7 | 6.4 | 48.8 | 5.8 |
| 20-49 persons | 1585 | 13.8 | 56.6 | 13.2 | 352.4 | 13.0 | 115.6 | 13.7 |
| 50-99 persons | 1882 | 16.3 | 72.6 | 16.9 | 435.7 | 16.1 | 143.8 | 17.0 |
| Total less than 100 persons | 6143 | 53.3 | 199.7 | 46.5 | 1154.9 | 42.6 | 364.7 | 43.2 |
| 100-199 persons | 2614 | 22.7 | 116.2 | 27.0 | 884.6 | 32.6 | 279.8 | 33.1 |
| 200-499 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 500-999 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 1000 or more persons | - | - | - | - | - | - | - | - |
| Total 100 or more persons | 5382 | 46.7 | 229.9 | 53.5 | 1555.6 | 57.4 | 480.3 | 56.8 |
| Total | 11524 | 100.0 | 429.6 | 100.0 | 2710.5 | 100.0 | 845.0 | 100.0 |

(a) See paragraph 5 of the Explanatory Notes.
(b) See paragraph 20 of the Explanatory Notes for an explanation of the impact of unincorporated joint ventures on these estimates.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1996-97 but were not operating at 30 June 1997. See paragraph 19 of the Explanatory Notes.
(f) See paragraph 18 of the Explanatory Notes.

4
MANUFACTURING ESTABLISHMENTS(a), Summary of Operations-
Employment size(b): NSW continued

|  | Employment at end of June(c). |  | Wages and salaries(d)(e)............ |  | Turnover(e).................. |  | Industry gross product(e)..... |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment size group(f) | no. | \% | \$m | \% | \$m | \% | \$m | \% |
| METAL PRODUCT MANUFACTURING |  |  |  |  |  |  |  |  |
| 0-4 persons | 3939 | 7.3 | 86.1 | 4.1 | 1344.4 | 9.7 | 737.0 | 18.1 |
| 5-9 persons | 4560 | 8.5 | 117.4 | 5.6 | 513.6 | 3.7 | 196.4 | 4.8 |
| 10-19 persons | 5735 | 10.7 | 167.0 | 7.9 | 746.4 | 5.4 | 263.0 | 6.5 |
| 20-49 persons | 7448 | 13.8 | 237.1 | 11.2 | 1340.9 | 9.7 | 434.4 | 10.7 |
| 50-99 persons | 6178 | 11.5 | 220.1 | 10.4 | 1290.9 | 9.4 | 359.6 | 8.8 |
| Total less than 100 persons | 27859 | 51.8 | 827.7 | 39.2 | 5236.2 | 37.9 | 1990.4 | 49.0 |
| 100-199 persons | 7705 | 14.3 | 307.1 | 14.5 | 2203.7 | 16.0 | 595.7 | 14.7 |
| 200-499 persons | 5144 | 9.6 | 244.6 | 11.6 | 1674.3 | 12.1 | 456.0 | 11.2 |
| 500-999 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 1000 or more persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| Total 100 or more persons | 25954 | 48.2 | 1285.9 | 60.8 | 8561.6 | 62.1 | 2075.6 | 51.0 |
| Total | 53813 | 100.0 | 2113.7 | 100.0 | 13797.7 | 100.0 | 4066.0 | 100.0 |

## MACHINERY AND EQUIPMENT MANUFACTURING

| 0-4 persons | 3841 | 6.0 | 84.2 | 3.5 | 364.7 | 3.5 | 138.8 | 3.7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-9 persons | 4497 | 7.0 | 122.9 | 5.1 | 499.4 | 4.7 | 187.2 | 5.0 |
| 10-19 persons | 5869 | 9.1 | 185.2 | 7.7 | 710.4 | 6.7 | 277.7 | 7.4 |
| 20-49 persons | 6987 | 10.9 | 230.1 | 9.5 | 1041.2 | 9.9 | 396.5 | 10.6 |
| 50-99 persons | 6612 | 10.3 | 243.8 | 10.1 | 1191.2 | 11.3 | 366.1 | 9.8 |
| Total less than 100 persons | 27805 | 43.3 | 866.3 | 35.8 | 3806.9 | 36.1 | 1366.2 | 36.5 |
| 100-199 persons | 8451 | 13.2 | 326.5 | 13.5 | 1822.8 | 17.3 | 505.1 | 13.5 |
| 200-499 persons | 11095 | 17.3 | 454.7 | 18.8 | 2045.7 | 19.4 | 752.8 | 20.1 |
| 500-999 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 1000 or more persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| Total 100 or more persons | 36373 | 56.7 | 1552.6 | 64.2 | 6741.1 | 63.9 | 2381.5 | 63.5 |
| Total | 64178 | 100.0 | 2418.8 | 100.0 | 10548.0 | 100.0 | 3747.7 | 100.0 |

OTHER MANUFACTURING

| 0-4 persons | 3211 | 19.0 | 55.0 | 13.1 | 271.1 | 13.8 | 96.8 | 14.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-9 persons | 3074 | 18.1 | 67.4 | 16.1 | 290.2 | 14.7 | 104.0 | 15.1 |
| 10-19 persons | 3108 | 18.4 | 76.9 | 18.3 | 350.9 | 17.8 | 115.4 | 16.8 |
| 20-49 persons | 3531 | 20.8 | 96.4 | 23.0 | 433.1 | 22.0 | 157.1 | 22.8 |
| 50-99 persons | 1660 | 9.8 | 51.0 | 12.2 | 251.4 | 12.8 | 93.6 | 13.6 |
| Total less than 100 persons | 14583 | 86.1 | 346.7 | 82.7 | 1596.7 | 81.1 | 566.8 | 82.4 |
| 100-199 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 200-499 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 500-999 persons | - | - | - | - | - | - | - | - |
| 1000 or more persons | - | - | - | - | - | - | - | - |
| Total 100 or more persons | 2353 | 13.9 | 72.3 | 17.3 | 371.3 | 18.9 | 121.2 | 17.6 |
| Total | 16937 | 100.0 | 419.1 | 100.0 | 1967.9 | 100.0 | 688.0 | 100.0 |

(a) See paragraph 5 of the Explanatory Notes.
(b) See paragraph 20 of the Explanatory Notes for an explanation of the impact of unincorporated joint ventures on these estimates.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1996-97 but were not operating at 30 June 1997. See paragraph 19 of the Explanatory Notes.
(f) See paragraph 18 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a), Summary of Operations-
Employment size(b): NSW continued
Employment at Wages and Industry gross
end of June(c).
no. \%
salaries(d)(e)
\$m

Turnover(e)
\$m
\% product(e)..
\$m \%

## TOTAL MANUFACTURING

| 0-4 persons | 21959 | 7.1 | 439.1 | 4.0 | 3137.3 | 4.6 | 1383.6 | 6.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-9 persons | 24453 | 7.9 | 598.5 | 5.4 | 2716.7 | 4.0 | 969.6 | 4.6 |
| 10-19 persons | 30757 | 9.9 | 864.1 | 7.8 | 4017.9 | 6.0 | 1375.8 | 6.6 |
| 20-49 persons | 41254 | 13.3 | 1275.0 | 11.5 | 7324.0 | 10.8 | 2386.6 | 11.4 |
| 50-99 persons | 37931 | 12.2 | 1392.0 | 12.5 | 8765.6 | 13.0 | 2787.8 | 13.4 |
| Total less than 100 persons | 156355 | 50.4 | 4568.8 | 41.1 | 25961.5 | 38.5 | 8903.4 | 42.7 |
| 100-199 persons | 46143 | 14.9 | 1767.6 | 15.9 | 11831.6 | 17.5 | 3401.1 | 16.3 |
| 200-499 persons | 53715 | 17.3 | 2297.0 | 20.7 | 17016.5 | 25.2 | 4702.4 | 22.6 |
| 500-999 persons | 23592 | 7.6 | 923.2 | 8.3 | 5052.5 | 7.5 | 1651.4 | 7.9 |
| 1000 or more persons | 30463 | 9.8 | 1557.9 | 14.0 | 7651.0 | 11.3 | 2193.7 | 10.5 |
| Total 100 or more persons | 153914 | 49.6 | 6545.7 | 58.9 | 41551.7 | 61.5 | 11948.6 | 57.3 |
| Total | 310269 | 100.0 | 11114.4 | 100.0 | 67513.2 | 100.0 | 20852.0 | 100.0 |

(a) See paragraph 5 of the Explanatory Notes.
(b) See paragraph 20 of the Explanatory Notes for an explanation of the impact of unincorporated joint ventures on these estimates.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1996-97 but were not operating at 30 June 1997. See paragraph 19 of the Explanatory Notes.
(f) See paragraph 18 of the Explanatory Notes.

| INDUSTRY SUBDIVISION |  | Sales and transfers out of goods produced by this establishment | Amount exported by this business or its agent | Exports as a proportion of sales of goods produced |
| :---: | :---: | :---: | :---: | :---: |
| ANZSIC |  |  |  |  |
| code | Description | \$m | \$m | \% |
| 0-49 PERSONS |  |  |  |  |
| 21 | Food, beverage and tobacco mfg | 1961.4 | 142.9 | 7.3 |
| 22 | Textile, clothing, footwear and leather mfg | 1337.5 | 65.1 | 4.9 |
| 23 | Wood and paper product mfg | 1146.2 | 19.5 | 1.7 |
| 24 | Printing, publishing and recorded media | 1605.1 | 36.5 | 2.3 |
| 25 | Petroleum, coal, chemical and associated product mfg | 1941.2 | 168.0 | 8.7 |
| 26 | Non-metallic mineral product mfg | 656.3 | 12.3 | 1.9 |
| 27 | Metal product mfg | 3681.4 | 914.4 | 24.8 |
| 28 | Machinery and equipment mfg | 2246.4 | 194.6 | 8.7 |
| 29 | Other manufacturing | 1234.3 | 29.9 | 2.4 |
| 21-29 | Total manufacturing | 15810.0 | 1583.1 | 10.0 |


|  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
| 21 | Food, beverage and tobacco mfg |  |  |  |
| 22 | Textile, clothing, footwear and leather mfg | 1386.1 | 140.7 | 10.2 |
| 23 | Wood and paper product mfg | 610.4 | 120.8 | 19.8 |
| 24 | Printing, publishing and recorded media | 429.9 | 54.7 | 12.7 |
| 25 | Petroleum, coal, chemical and associated product mfg | 965.6 | 220.2 | 2.8 |
| 26 | Non-metallic mineral product mfg | 1876.3 | 172.7 | 9.2 |
| 27 | Metal product mfg | 427.6 | 21.1 | 4.9 |
| 28 | Machinery and equipment mfg | 1179.1 | 80.0 | 6.8 |
| 29 | Other manufacturing | 1062.6 | 183.8 | 17.3 |
|  |  | 231.8 | 11.6 | 5.0 |
| $21-29$ | Total manufacturing | 8169.3 | 1005.6 | 12.3 |

## 100 OR MORE PERSONS

| 21 | Food, beverage and tobacco mfg | 9506.2 | 1492.4 | 15.7 |
| :--- | :--- | ---: | ---: | ---: |
| 22 | Textile, clothing, footwear and leather mfg | 1003.3 | 175.0 | 17.4 |
| 23 | Wood and paper product mfg | 1822.8 | 67.6 | 3.7 |
| 24 | Printing, publishing and recorded media | 2218.2 | 43.7 | 2.0 |
| 25 | Petroleum, coal, chemical and associated product mfg | 7694.3 | 809.6 | 10.5 |
| 26 | Non-metallic mineral product mfg | 1488.4 | 36.2 | 2.4 |
| 27 | Metal product mfg | 8397.7 | 1783.5 | 21.2 |
| 28 | Machinery and equipment mfg | 5696.0 | 897.7 | 15.8 |
| 29 | Other manufacturing | 349.9 | 28.9 | 8.2 |
|  |  | 38176.9 | 5334.7 | 14.0 |


| TOTAL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 21 | Food, beverage and tobacco mfg | 12853.7 | 1776.1 | 13.8 |
| 22 | Textile, clothing, footwear and leather mfg | 2951.3 | 360.9 | 12.2 |
| 23 | Wood and paper product mfg | 3398.9 | 141.8 | 4.2 |
| 24 | Printing, publishing and recorded media | 4788.9 | 300.3 | 6.3 |
| 25 | Petroleum, coal, chemical and associated product mfg | 11511.9 | 1150.2 | 10.0 |
| 26 | Non-metallic mineral product mfg | 2572.3 | 69.6 | 2.7 |
| 27 | Metal product mfg | 13258.2 | 2777.9 | 21.0 |
| 28 | Machinery and equipment mfg | 9005.0 | 1276.2 | 14.2 |
| 29 | Other manufacturing | 1816.0 | 70.3 | 3.9 |
| 21-29 | Total manufacturing | 62156.2 | 7923.3 | 12.7 |

(a) See paragraph 5 of the Explanatory Notes.
(b) See paragraphs 22-24 of the Explanatory Notes.
(c) This table excludes those manufacturing establishments which operated during 1996-97 but were not operating at

30 June 1997. See paragraph 19 of the Explanatory Notes. Also, see paragraph 20 of the Explanatory Notes for an explanation of the impact of unincorporated joint ventures on these estimates.

| INDUSTRY SUBDIVISION | Employment at <br> end of June(c) | Wages and <br> salaries(d) | Industry gross <br> product |
| :--- | :--- | :--- | :--- |
| ANZSIC    <br> code Description $\%$ $\%$ |  |  |  |

## ESTABLISHMENTS THAT DO NOT EXPORT

| 21 | Food, beverage and tobacco mfg | 48.6 | 47.4 | 40.3 | 39.9 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 22 | Textile, clothing, footwear and leather mfg | 62.8 | 54.8 | 57.1 | 59.1 |
| 23 | Wood and paper product mfg | 76.4 | 72.2 | 64.9 | 66.7 |
| 24 | Printing, publishing and recorded media | 78.4 | 76.8 | 70.1 | 70.8 |
| 25 | Petroleum, coal, chemical and associated product mfg | 40.3 | 36.1 | 26.9 | 28.2 |
| 26 | Non-metallic mineral product mfg | 69.3 | 67.8 | 69.2 | 66.0 |
| 27 | Metal product mfg | 48.6 | 36.7 | 28.6 | 31.3 |
| $\mathbf{2 8}$ | Machinery and equipment mfg | 51.2 | 51.1 | 44.6 | 48.2 |
| $\mathbf{2 9}$ | Other manufacturing | 80.0 | 76.4 | 73.4 | 75.1 |
|  |  |  |  |  | $\mathbf{4 7 . 2}$ |

ESTABLISHMENTS WITH EXPORTS UP TO AND INCLUDING 50\% OF SALES OF GOODS THAT THEY PRODUCED

| 21 | Food, beverage and tobacco mfg | 40.3 | 42.3 | 48.5 | 51.2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 22 | Textile, clothing, footwear and leather mfg | 30.4 | 34.9 | 31.2 | 30.7 |
| 23 | Wood and paper product mfg | 22.9 | 27.0 | 33.4 | 30.8 |
| 24 | Printing, publishing and recorded media | 21.0 | 22.5 | 25.5 | 21.2 |
| 25 | Petroleum, coal, chemical and associated product mfg | 58.5 | 62.6 | 72.1 | 70.5 |
| 26 | Non-metallic mineral product mfg | 29.7 | 31.1 | 30.2 | 33.5 |
| 27 | Metal product mfg | 47.1 | 58.0 | 60.0 | 58.7 |
| 28 | Machinery and equipment mfg | 42.7 | 42.1 | 47.9 | 44.3 |
| 29 | Other manufacturing | 18.3 | 21.8 | 24.3 | 23.4 |
|  |  |  |  |  | $\mathbf{4 6 . 2}$ |

ESTABLISHMENTS WITH EXPORTS OF MORE THAN 50\% OF SALES OF GOODS THAT THEY PRODUCED

| 21 | Food, beverage and tobacco mfg | 11.1 | 10.3 | 11.2 | 8.9 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | Textile, clothing, footwear and leather mfg | 6.8 | 10.3 | 11.7 | 10.2 |
| 23 | Wood and paper product mfg | 0.7 | 0.8 | 1.7 | 2.5 |
| 24 | Printing, publishing and recorded media | 0.6 | 0.7 | 4.4 | 8.0 |
| 25 | Petroleum, coal, chemical and associated product mfg | 1.2 | 1.3 | 1.0 | 1.2 |
| 26 | Non-metallic mineral product mfg | 1.0 | 1.1 | 0.6 | 0.6 |
| 27 | Metal product mfg | 4.4 | 5.3 | 11.4 | 10.0 |
| 28 | Machinery and equipment mfg | 6.1 | 6.9 | 7.6 | 7.5 |
| 29 | Other manufacturing | 1.7 | 1.9 | 2.4 | 1.6 |
| 21-29 | Total manufacturing | 4.7 | 5.1 | 7.0 | 6.7 |

(a) See paragraph 5 of the Explanatory Notes.
(b) See paragraphs 22-24 of the Explanatory Notes.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

| INDUSTRY CLASS |  | Employment at end of June(c) | Wages and salaries(d) | Turnover | Industry gross product | Turnover per person employed(e) | Industry gross product per person employed(f) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANZSIC |  |  |  |  |  |  |  |
| code | Description | no. | \$m | \$m | \$m | \$'000 | \$'000 |
| 21 | Food, beverage and tobacco mfg | 327 | 10.9 | 64.8 | 19.2 | 198.2 | 58.7 |
| 216 | Bakery product mfg | 238 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2161 | Bread mfg | 210 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2162 | Cake and pastry mfg | 28 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 22 | Textile, clothing, footwear and leather mfg | 123 | 1.7 | 8.3 | 3.7 | 67.2 | 30.3 |
| 222 | Textile product mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2221 | Made-up textile product mfg | 8 | 0.1 | 0.5 | 0.2 | 61.7 | 28.2 |
| 224 | Clothing mfg | 107 | 1.5 | 7.6 | 3.4 | 71.2 | 32.2 |
| 2249 | Clothing mfg n.e.c. | 35 | 0.4 | 1.6 | 0.5 | 46.4 | 14.3 |
| 23 | Wood and paper product mfg | 255 | 8.8 | 43.9 | 11.7 | 172.0 | 45.9 |
| 231 | Log sawmilling and timber dressing | 101 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 232 | Other wood product mfg | 154 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2323 | Wooden structural component mfg | 122 | 5.0 | 29.0 | 7.1 | 237.8 | 58.3 |
| 2329 | Wood product mfg n.e.c. | 32 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 24 | Printing, publishing and recorded media | 1522 | 50.6 | 214.5 | 119.7 | 140.9 | 78.6 |
| 241 | Printing and services to printing | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2412 | Printing | 672 | 19.7 | 72.8 | 30.3 | 108.3 | 45.1 |
| 242 | Publishing | 778 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2421 | Newspaper printing or publishing | 520 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2422 | Other periodical publishing | 239 | 10.9 | 67.7 | 49.3 | 283.3 | 206.4 |
| 2423 | Book and other publishing | 20 | 0.6 | 3.0 | 1.7 | 153.5 | 87.8 |
| 25 | Petroleum, coal, chemical and associated product mfg | 27 | 0.7 | 2.7 | 1.0 | 98.0 | 38.2 |
| 26 | Non-metallic mineral product mfg | 136 | 3.8 | 45.1 | 7.0 | 331.3 | 51.6 |
| 263 | Cement, lime, plaster and concrete product mfg | 114 | 3.7 | 44.6 | 6.9 | 391.3 | 60.6 |
| 2633 | Concrete slurry mfg | 68 | 2.2 | 33.5 | 3.2 | 492.5 | 46.5 |
| 27 | Metal product mfg | 285 | 8.4 | 33.8 | 10.5 | 118.6 | 36.9 |
| 274 | Structural metal product mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2742 | Architectural aluminium product mfg | 108 | 2.8 | 14.1 | 3.8 | 131.3 | 35.7 |
| 2749 | Structural metal product mfg n.e.c. | 26 | 0.8 | 3.1 | 0.5 | 118.8 | 19.4 |
| 275 | Sheet metal product mfg | 38 | 1.6 | 4.2 | 1.8 | 111.1 | 48.1 |
| 2759 | Sheet metal product mfg n.e.c. | 38 | 1.6 | 4.2 | 1.8 | 111.1 | 48.1 |
| 276 | Fabricated metal product mfg | 59 | 1.3 | 4.3 | 1.6 | 73.5 | 27.8 |
| 2769 | Fabricated metal product mfg n.e.c. | 41 | n.p. | n.p. | n.p. | n.p. | n.p. |

(a) See paragraph 5 of the Explanatory Notes.
(b) ANZSIC subdivisions plus those ANZSIC groups and ANZSIC classes with data available for publication have been shown in this table. Data for ANZSIC groups and ANZSIC classes that are not available for publication (due to confidentiality restrictions) have generally been excluded from this table, as have those categories to which no units were classified.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(e) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.
(f) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

MANUFACTURING ESTABLISHMENTS(a), Summary of Operations(b)—ACT

continued

| INDUSTRY CLASS |  | Employment at end of June(c) | Wages and salaries(d) | Turnover | Industry gross product | Turnover per person employed(e) | Industry gross product per person employed(f) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANZSIC |  |  |  |  |  |  |  |
| code | Description | no. | \$m | \$m | \$m | \$'000 | \$'000 |
|  |  |  |  |  |  |  |  |
| 28 | Machinery and equipment mfg | 590 | 18.5 | 99.0 | 37.9 | 167.9 | 64.2 |
| 281 | Motor vehicle and part mfg | 34 | 0.9 | 3.1 | 1.4 | 91.8 | 41.2 |
| 282 | Other transport equipment mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2824 | Aircraft mfg | 87 | 2.8 | 14.7 | 3.8 | 168.7 | 43.1 |
| 283 | Photographic and scientific equipment mfg | 59 | 1.3 | 4.1 | 1.9 | 70.2 | 33.0 |
| 2832 | Medical and surgical equipment mfg | 40 | 0.8 | 2.7 | 1.2 | 68.5 | 29.7 |
| 2839 | Professional and scientific equipment mfg n.e.c. | 19 | 0.5 | 1.4 | 0.8 | 73.9 | 39.9 |
| 284 | Electronic equipment mfg | 236 | 6.7 | 49.0 | 15.8 | 207.7 | 67.2 |
| 2849 | Electronic equipment mfg n.e.c. | 38 | 1.0 | 3.0 | 1.6 | 80.4 | 42.3 |
| 285 | Electrical equipment and appliance mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2854 | Electric light and sign mfg | 14 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 286 | Industrial machinery and equipment mfg | 52 | 2.3 | 12.9 | 6.3 | 247.4 | 120.5 |
| 29 | Other manufacturing | 328 | 9.6 | 43.4 | 13.9 | 132.3 | 42.5 |
| 291 | Prefabricated building mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2919 | Prefabricated building mfg n.e.c. | 3 | - | 0.4 | 0.1 | 127.8 | 42.0 |
| 292 | Furniture mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2921 | Wooden furniture and upholstered seat mfg | 140 | 3.0 | 12.6 | 4.3 | 90.2 | 30.8 |
| 294 | Miscellaneous manufacturing | 169 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2941 | Jewellery and silverware mfg | 140 | 5.8 | 28.0 | 8.4 | 199.8 | 60.1 |
| 2942 | Toy and sporting good mfg | 2 | - | - | - | 7.4 | 2.1 |
| 2949 | Manufacturing n.e.c. | 26 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 21-29 | TOTAL MANUFACTURING | 3593 | 113.0 | 555.4 | 224.7 | 154.6 | 62.5 |

(a) See paragraph 5 of the Explanatory Notes.
(b) ANZSIC subdivisions plus those ANZSIC groups and ANZSIC classes with data available for publication have been shown in this table. Data for ANZSIC groups and ANZSIC classes that are not available for publication (due to confidentiality restrictions) have generally been excluded from this table, as have those categories to which no units were classified.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.
(e) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.
(f) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

|  | Locations at <br> 30 June | Employment <br> at end <br> of June(c) | Wages and <br> salaries(d) | Turnover |
| :--- | ---: | ---: | ---: | ---: |
| INDUSTRY SUBDIVISION | no. | no. | \$m | \$m |

## SYDNEY STATISTICAL DIVISION

| 21 | Food, beverage and tobacco mfg | 685 | 26871 | 1039.1 | 8142.1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | Textile, clothing, footwear and leather mfg | 2042 | 18466 | 479.3 | 2468.9 |
| 23 | Wood and paper product mfg | 979 | 10798 | 378.1 | 2128.9 |
| 24 | Printing, publishing and recorded media | 2112 | 34079 | 1319.0 | 6258.6 |
| 25 | Petroleum, coal, chemical and associated product mfg | 944 | 28833 | 1208.4 | 11271.6 |
| 26 | Non-metallic mineral product mfg | 440 | 7915 | 302.9 | 1974.3 |
| 27 | Metal product mfg | 2240 | 28394 | 969.3 | 5352.3 |
| 28 | Machinery and equipment mfg | 2472 | 50136 | 1969.8 | 8411.2 |
| 29 | Other manufacturing | 1710 | 13786 | 372.7 | 1681.2 |
| 21-29 | Total manufacturing | 13624 | 219278 | 8038.6 | 47689.0 |

## HUNTER STATISTICAL DIVISION

| 21 | Food, beverage and tobacco mfg | 97 | 3948 | 108.2 | 833.7 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | Textile, clothing, footwear and leather mfg | 75 | 1263 | 38.0 | 168.5 |
| 23 | Wood and paper product mfg | 121 | 1051 | 26.9 | 116.1 |
| 24 | Printing, publishing and recorded media | 96 | 1108 | 35.3 | 116.6 |
| 25 | Petroleum, coal, chemical and associated product mfg | 74 | 1164 | 54.1 | 412.7 |
| 26 | Non-metallic mineral product mfg | 78 | 588 | 18.9 | 143.8 |
| 27 | Metal product mfg | 330 | 10647 | 515.3 | 3717.0 |
| 28 | Machinery and equipment mfg | 251 | 4703 | 171.7 | 845.9 |
| 29 | Other manufacturing | 132 | 571 | 10.9 | 53.9 |
| 21-29 | Total manufacturing | 1254 | 25044 | 979.3 | 6408.2 |

## ILLAWARRA STATISTICAL DIVISION

| 21 | Food, beverage and tobacco mfg | 43 | 634 | 20.7 | 206.9 |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 22 | Textile, clothing, footwear and leather mfg | 61 | 779 | 19.7 | 98.7 |
| 23 | Wood and paper product mfg | 94 | 1037 | 35.2 | 209.5 |
| 24 | Printing, publishing and recorded media | 73 | 613 | 18.3 | 52.5 |
| 25 | Petroleum, coal, chemical and associated product mfg | 35 | 524 | 16.0 | 109.9 |
| 26 | Non-metallic mineral product mfg | 53 | 1266 | 53.4 | 276.5 |
| 27 | Metal product mfg | 212 | 10477 | 523.0 | 4248.9 |
| 28 | Machinery and equipment mfg | 141 | 1926 | 63.4 | 256.0 |
| 29 | Other manufacturing | 104 | 402 | 8.2 | 30.5 |
|  |  |  |  | 17658 | 757.8 |
| $21-29$ | Total manufacturing | 816 | 589.4 |  |  |

## RICHMOND-TWEED STATISTICAL DIVISION

| 326.4 |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 21 | Food, beverage and tobacco mfg | 66 | 1972 | 59.4 | 37.5 |
| 22 | Textile, clothing, footwear and leather mfg | 56 | 295 | 5.2 | 4.8 |
| 23 | Wood and paper product mfg | 81 | 608 | 13.9 | 43.4 |
| 24 | Printing, publishing and recorded media | 53 | 509 | 16.7 | 25.8 |
| 25 | Petroleum, coal, chemical and associated product mfg | 31 | 218 | 4.9 | 23.8 |
| 26 | Non-metallic mineral product mfg | 35 | 164 | 4.1 | 36.5 |
| 27 | Metal product mfg | 79 | 373 | 8.0 | 36.2 |
| 28 | Machinery and equipment mfg | 85 | 430 | 10.1 | 18.7 |
| 29 | Other manufacturing | 77 | 258 | 4.1 | 613.1 |

(a) See paragraph 8 of the Explanatory Notes.
(b) See paragraphs 25-28 of the Explanatory Notes.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors. Includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

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| INDUSTRY SUBDIVISION |  | Locations at 30 June | Employment at end of June(c) | Wages and salaries(d) | Turnover |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ANZSIC |  |  |  |  |  |
| code | Description | no. | no. | \$m | \$m |
| MID-NORTH COAST STATISTICAL DIVISION |  |  |  |  |  |
| 21 | Food, beverage and tobacco mfg | 47 | 1949 | 71.2 | 615.3 |
| 22 | Textile, clothing, footwear and leather mfg | 50 | 436 | 10.5 | 59.5 |
| 23 | Wood and paper product mfg | 152 | 1427 | 34.5 | 167.6 |
| 24 | Printing, publishing and recorded media | 51 | 542 | 14.5 | 45.9 |
| 25 | Petroleum, coal, chemical and associated product mfg | 18 | 83 | 1.4 | 5.7 |
| 26 | Non-metallic mineral product mfg | 50 | 287 | 8.3 | 43.2 |
| 27 | Metal product mfg | 109 | 944 | 26.7 | 127.2 |
| 28 | Machinery and equipment mfg | 102 | 1333 | 39.2 | 156.5 |
| 29 | Other manufacturing | 93 | 330 | 6.0 | 22.7 |
| 21-29 | Total manufacturing | 672 | 7331 | 212.3 | 1243.7 |

## NORTHERN STATISTICAL DIVISION

| 21 | Food, beverage and tobacco mfg | 38 | 1866 | 56.7 | 417.0 |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 22 | Textile, clothing, footwear and leather mfg | 23 | 198 | n.p. | n.p. |
| 23 | Wood and paper product mfg | 53 | 384 | 9.4 | n. |
| 24 | Printing, publishing and recorded media | 42 | n.p. | n.p. | n.p. |
| 25 | Petroleum, coal, chemical and associated product mfg | 10 | 398 | 14.8 | 55.0 |
| 26 | Non-metallic mineral product mfg | 36 | 199 | 5.4 | 26.8 |
| 27 | Metal product mfg | 71 | 405 | 10.3 | 53.9 |
| 28 | Machinery and equipment mfg | 61 | 526 | 13.9 | 52.9 |
| 29 | Other manufacturing | 45 | n.p. | n.p. | n.p. |
|  |  |  |  |  |  |
| $21-29$ | Total manufacturing | 379 | 489 | 128.5 | 745.2 |

## NORTH WESTERN STATISTICAL DIVISION

| 21 | Food, beverage and tobacco mfg | 34 | n.p. | n.p. | n.p. |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 22 | Textile, clothing, footwear and leather mfg | 11 | n.p. | n.p. | n.p. |
| 23 | Wood and paper product mfg | 21 | 146 | 3.5 | 15.4 |
| 24 | Printing, publishing and recorded media | 26 | 309 | 10.5 | 35.1 |
| 25 | Petroleum, coal, chemical and associated product mfg | 15 | 69 | 2.3 | 14.7 |
| 26 | Non-metallic mineral product mfg | 19 | 145 | 4.6 | 25.0 |
| 27 | Metal product mfg | 38 | 252 | 6.7 | 78.8 |
| 28 | Machinery and equipment mfg | 35 | 329 | 8.6 | 36.8 |
| 29 | Other manufacturing | 25 | 180 | 4.6 | 22.3 |
|  |  |  |  |  | 449.1 |

## CENTRAL WEST STATISTICAL DIVISION

| 21 | Food, beverage and tobacco mfg | 46 | 2769 | 111.7 | 786.6 |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 22 | Textile, clothing, footwear and leather mfg | 21 | 677 | 22.2 | 165.1 |
| 23 | Wood and paper product mfg | 43 | 778 | 30.0 | 151.6 |
| 24 | Printing, publishing and recorded media | 32 | 345 | 10.3 | 29.9 |
| 25 | Petroleum, coal, chemical and associated product mfg | 6 | 56 | 1.5 | 8.1 |
| 26 | Non-metallic mineral product mfg | 31 | 329 | 12.4 | 97.9 |
| 27 | Metal product mfg | 81 | 712 | 25.5 | 121.3 |
| 28 | Machinery and equipment mfg | 43 | 1939 | 59.8 | 279.9 |
| 29 | Other manufacturing | 45 | 210 | 4.0 | 15.5 |
|  |  |  |  | 7815 | 277.5 |
| $21-29$ | Total manufacturing | 348 | 1655.8 |  |  |

(a) See paragraph 8 of the Explanatory Notes.
(b) See paragraphs 25-28 of the Explanatory Notes.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors. Includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

|  | Locations at <br> 30 June | Employment <br> at end <br> of June(c) | Wages and <br> salaries(d) | Turnover |
| :--- | ---: | ---: | ---: | ---: |
| INDUSTRY SUBDIVISION | no. | no. | \$m | \$m |

## SOUTH EASTERN STATISTICAL DIVISION

| 21 | Food, beverage and tobacco mfg | 43 | 1038 | 30.7 |
| :--- | :--- | ---: | ---: | ---: |
| 22 | Textile, clothing, footwear and leather mfg | 27 | 509 | 12.8 |
| 23 | Wood and paper product mfg | 66 | 559 | 15.4 |
| 24 | Printing, publishing and recorded media | 44 | 475 | 108.4 |
| 25 | Petroleum, coal, chemical and associated product mfg | 8 | 35.1 |  |
| 26 | Non-metallic mineral product mfg | 32 | 228 | 1.5 |
| 27 | Metal product mfg | 99 | 689 | 11.0 |
| 28 | Machinery and equipment mfg | 64 | 405 | 60.7 |
| 29 | Other manufacturing | 64 | 365 | 9.3 |
|  |  |  | 7.8 | 41.0 |
| $21-29$ | Total manufacturing | 447 | 4329 | 115.4 |

## MURRUMBIDGEE STATISTICAL DIVISION

| 21 | Food, beverage and tobacco mfg | 67 | 3859 | 134.4 |
| :--- | :--- | ---: | ---: | ---: |
| 22 | Textile, clothing, footwear and leather mfg | 1224.1 |  |  |
| 23 | Wood and paper product mfg | 16 | 393 | n.p. |
| 24 | Printing, publishing and recorded media | 35 | 1038 | 39.3 |
| 25 | Petroleum, coal, chemical and associated product mfg | 35 | 605 | 15.2 |
| 26 | Non-metallic mineral product mfg | 10 | 127 | 39.8 |
| 27 | Metal product mfg | 24 | 176 | n.p. |
| 28 | Machinery and equipment mfg | 55 | 336 | n.p. |
| 29 | Other manufacturing | 49 | 260 | 8.2 |
|  |  | 44 | 283 | 56.7 |
| $21-29$ | Total manufacturing | 335 | 7077 | 23.3 |

## MURRAY STATISTICAL DIVISION

| 31 | Food, beverage and tobacco mfg | 32 | 861 | 32.1 |
| :--- | :--- | ---: | ---: | ---: |
| 22 | Textile, clothing, footwear and leather mfg | 11 | n.p. | n.p. | n.p.

## FAR WEST STATISTICAL DIVISION

| 21 | Food, beverage and tobacco mfg | 2 | n.p. | n.p. | n.p. |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 22 | Textile, clothing, footwear and leather mfg | 2 | n.p. | n.p. | n.p. |
| 23 | Wood and paper product mfg | 2 | n.p. | n.p. | n.p. |
| 24 | Printing, publishing and recorded media | 4 | n.p. | n.p. | n.p. |
| 25 | Petroleum, coal, chemical and associated product mfg | - | - | - | n.p. |
| 26 | Non-metallic mineral product mfg | 3 | 22 | n.p. | 1.4 |
| 27 | Metal product mfg | 6 | 29 | 0.7 | 4.1 |
| 28 | Machinery and equipment mfg | 8 | 35 | 1.5 | n.p. |
| 29 | Other manufacturing | 3 | n.p. | n.p. |  |
| $21-29$ | Total manufacturing | 30 | 271 | 8.8 | 28.9 |

(a) See paragraph 8 of the Explanatory Notes
(b) See paragraphs 25-28 of the Explanatory Notes
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors. Includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

|  | Locations at <br> 30 June | Employment <br> at end <br> of June(c) | Wages and <br> salaries(d) | Turnover |
| :--- | ---: | ---: | ---: | ---: |
| INDUSTRY SUBDIVISION | no. | no. | \$m | \$m |

NEW SOUTH WALES EXCLUDING SYDNEY STATISTICAL DIVISION

| 21 | Food, beverage and tobacco mfg | 515 | 20420 | 666.8 | 5174.4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | Textile, clothing, footwear and leather mfg | 353 | 5214 | 146.2 | 765.8 |
| 23 | Wood and paper product mfg | 701 | 7780 | 238.4 | 1322.5 |
| 24 | Printing, publishing and recorded media | 483 | 5269 | 153.8 | 481.5 |
| 25 | Petroleum, coal, chemical and associated product mfg | 223 | 3224 | 120.7 | 790.3 |
| 26 | Non-metallic mineral product mfg | 378 | 3454 | 122.3 | 738.8 |
| 27 | Metal product mfg | 1127 | 25400 | 1158.8 | 8620.9 |
| 28 | Machinery and equipment mfg | 902 | 13108 | 425.9 | 1982.7 |
| 29 | Other manufacturing | 666 | 2912 | 55.7 | 260.6 |
| 21-29 | Total manufacturing | 5348 | 86781 | 3088.6 | 20137.5 |

21-29 Total manufacturing $\quad 5348 \quad 86781 \quad 3088.6 \quad 20137.5$

## NEW SOUTH WALES

| 21 | Food, beverage and tobacco mfg | 1200 | 47291 | 1705.8 | 13316.5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | Textile, clothing, footwear and leather mfg | 2395 | 23680 | 625.5 | 3234.6 |
| 23 | Wood and paper product mfg | 1680 | 18578 | 616.5 | 3451.4 |
| 24 | Printing, publishing and recorded media | 2595 | 39348 | 1472.7 | 6740.1 |
| 25 | Petroleum, coal, chemical and associated product mfg | 1167 | 32057 | 1329.1 | 12061.9 |
| 26 | Non-metallic mineral product mfg | 818 | 11369 | 425.2 | 2713.1 |
| 27 | Metal product mfg | 3367 | 53794 | 2128.1 | 13973.1 |
| 28 | Machinery and equipment mfg | 3374 | 63244 | 2395.7 | 10393.9 |
| 29 | Other manufacturing | 2376 | 16698 | 428.4 | 1941.9 |
| 21-29 | TOTAL MANUFACTURING | 18972 | 306059 | 11127.1 | 67826.5 |

(a) See paragraph 8 of the Explanatory Notes.
(b) See paragraphs 25-28 of the Explanatory Notes.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors. Includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

1 This publication presents final statistics for New South Wales (and the Australian Capital Territory in the case of table 7) compiled from a census of manufacturing establishments for 1996-97, with some comparative statistics for New South Wales relating to preceding years. The emphasis of this publication is on the release of statistics for the main data items included in the census.

2 The manufacturing collection is conducted on an annual basis. For the 1996-97 collection, all manufacturing businesses were requested to provide data on employment, wages and salaries, turnover, purchases and whether their products were exported. Data on IGP are also available from this collection. In addition, a variety of samples was selected to produce data on a range of other variables. The next manufacturing census will be conducted in respect of 2001-02, with sample surveys conducted for the next four years.

3 All data in this publication, with the exception of IGP estimates, have been compiled from the full census population. Estimates of IGP were compiled using data from this census population and a sample of approximately 7,000 establishments nationally which were asked to provide detailed structural and performance data. These 7,000 establishments were also asked to supply value of sales for commodities produced. (These commodity data will be released in the publication Manufacturing Production, Commodities Produced, Australia, 1996-97 (Cat. no. 8365.0).) A sample of approximately 5,300 manufacturing management units nationally was asked the detailed information required to derive operating profit before tax. A separate sample of 5,000 manufacturing management units nationally was asked for information related to waste management and environmental protection. Information from this sample will be published in Environment Protection Expenditure, Australia, 1995-96 and 1996-97 (Cat. no. 4603.0). Selected data from the census and sample populations as well as data from other collections will be included in the compendium publication Manufacturing, Australia, 1998 (Cat. no. 8225.0).
4 Manufacturing, as specified in Division C of the Australian and New Zealand Standard Industrial Classification (ANZSIC), broadly relates to the physical or chemical transformation of materials or components into new products, whether the work is performed by power-driven machines or by hand.

SCOPE AND COVERAGE
5 The main business unit for which statistics are presented in this publication is the establishment. A manufacturing establishment is one predominantly engaged in manufacturing activities, but the data collected for it cover all activities of the establishment (including non-manufacturing activities). Conversely, there are some establishments predominantly engaged in non-manufacturing activities which also undertake limited manufacturing activities and which are excluded.

6 A small number of manufacturing establishments engage, in a significant way, in a variety of activities which are normally carried out by different industries. For example, a predominantly manufacturing establishment may also undertake significant amounts of wholesaling. Similarly, a manufacturing establishment may produce significant volumes of a variety of goods which are normally produced in different manufacturing industries. In such cases, the original establishment is 'split' into a separate establishment for each significant activity which belongs to a separate industry. For the 1996-97 manufacturing collection, 'significant' was defined as $\$ 7.3$ million or more.

7 The statistics in this publication exclude some very small manufacturers. Those excluded are manufacturers not employing staff at 30 June of the reference year (such as sole proprietorships or family partnerships) which had not registered as group employers with the Australian Taxation Office. Though a substantial number, these businesses would contribute only marginally to aggregate data were they to be included. In addition, the ABS attempts to obtain data for those businesses which ceased operation during the year, but it is not possible to obtain data for all of them.

## STANDARD UNITS

## RELIABILITY OF ESTIMATES

8 For the definition of the standard units now in use, see the Glossary.

9 For information on this subject, see the Technical Note.
DATA ADJUSTED
10 As was done for the 1993-94 to 1995-96 (inclusive) issues of this publication, data have been adjusted to allow for lags in processing new businesses to the ABS business register, and the omission of some businesses from the business register. First, adjustments have been made to allow for new businesses which had commenced operations but for which details had not been processed to the ABS business register in time for inclusion in the annual manufacturing industry collection. Adjustments of this type will continue to be applied in future periods. Second, adjustments have been made for businesses which had been in existence for several years, but, for various reasons, were not previously added to the ABS business register. In this issue of this publication, a further set of adjustments have been made to allow for omissions not previously identified. In respect of this further set of adjustments, actual data have been collected for 1996-97 and adjustment factors have been applied for each year back to 1991-92. For more information on these various adjustments, please refer to the Information Paper: Improvements to ABS Economic Statistics, 1997 (Cat. no. 1357.0).

11 The majority of businesses affected by these lags and omissions, and to which both types of adjustments apply, are small in size. The effect of these adjustments on 1996-97 turnover for New South Wales is an increase of $2.1 \%$ while the effect on employment is an increase of $4.2 \%$. Most industries were affected to a similar degree. The exceptions are Other manufacturing (for which the adjustments are $8.4 \%$ and $10.6 \%$ respectively) and Textile, clothing, footwear and leather manufacturing (for which the adjustments are $5.2 \%$ and $8.4 \%$ respectively). The corresponding figures for the Australian Capital Territory are $2.5 \%$ and $4.8 \%$. The exceptions in the Australian Capital Territory are Petroleum, coal, chemical and associated product manufacturing (for which the adjustments are $20.9 \%$ and $23.0 \%$ respectively) and Textile, clothing, footwear and leather manufacturing (for which the adjustments are $8.0 \%$ and $23.3 \%$ respectively). However, both of these industries are small in absolute terms.

12 At the same time as these adjustments have been applied to the time series statistics in this publication, some revisions have been made to the underlying data previously published, as a result of further processing and/or additional information becoming available.

## COMPARABILITY WITH PREVIOUS STATISTICS

13 Commencing with the 1993-94 manufacturing collection, manufacturers not employing staff at 30 June of the reference year (such as sole proprietorships or family partnerships) which had registered as group employers with the Australian Taxation Office are included in the manufacturing collection. Data in respect of these 'non-employers' were excluded from the scope of the manufacturing collection for the 1988-89 to 1992-93 (inclusive) reference years. However, the inclusion of these types of businesses has only had a marginal affect on statistical aggregates.

14 Commencing with the 1994-95 manufacturing collection, multi-establishment management units have been 'collapsed' for reporting purposes into single establishment management units, unless they had significant activity in more than one industry and/or State or Territory. The effect of this process is that most manufacturing businesses which previously reported for more than one establishment were asked to combine operations by those establishments into a single reporting unit. The effect of this on manufacturing statistics as contained in this publication has been minimal.

15 As explained above, about 7,000 establishments included in the 1996-97 collection were asked to supply value of sales for commodities produced. A similar sampling procedure was followed for the 1993-94 to 1995-96 (inclusive) collections. The availability of this fine level commodity/activity data for these units has enabled ABS survey processing staff to better identify those establishments which were actually in the scope of the manufacturing collection and those which should not be included in the manufacturing collection, because (for example) they were actually wholesalers or retailers. These fine level commodity/activity data have also enabled an objective industry code to be determined for the responding units in the samples, compared to the more subjective industry coding which occurred for all units in each of the 1990-91 to 1992-93 (inclusive) manufacturing collections. The industry code for the units not responding or not included in any of these commodity samples has continued to be a subjectively determined code.

16 For the 1996-97 collection, provision expenses for employee entitlements are included in wages and salaries, as was the case prior to 1995-96. For the 1995-96 collection, these provision expenses were excluded from wages and salaries.

17 Data in this publication have been subjected to various adjustments (see paragraphs 10-12). As a result, they are not on a comparable basis to previously published data. Comparable data for earlier periods are available from the ABS. A charge is made for providing such information.

18 The two smallest employment size categories used in table 4 in this publication have been changed to accord with standard ABS size ranges. That is, the categories now used are 0-4 and 5-9 persons employed instead of the 0-3 and 4-9 persons employed previously used. However, as the 1996-97 collection is a census, it may be possible (depending on confidentiality constraints) to, on request, construct data on the previous basis. From the 1997-98 collection onwards, the sample design used will only deliver reliable data in accordance with the standard ABS size ranges.

19 Summary of operations data at the industry subdivision level classified by employment size are presented in table 4. Similarly, exports of goods produced data at the industry subdivision level classified by broad employment size are presented in table 5. The statistics in these two tables relate only to those manufacturing establishments operating at 30 June 1997. As such, the figures presented may differ slightly from those presented in the other tables from the manufacturing collection. These other tables include data for those manufacturing establishments which operated at any time during 1996-97.
20 The treatment of unincorporated joint ventures according to the ABS's standard units definitions has an effect on the data when the data are classified by employment size. This is because joint venture participants report details of turnover, but often have few or no employees or operating expenses. The labour for such operations is usually employed and paid for by the joint venture operator. Similarly, the operating expenses are usually reported by the joint venture operator. On the other hand, the operator does not report any details of turnover (unless it also happens to be a participant). If each of these joint venture operations were to be treated as a single business unit in the statistics, it is highly probable that the Metal product manufacturing industry would reflect a similar dominance pattern to the other manufacturing industries.

21 The two smallest employment size categories used in table 4 in this publication have been changed. See paragraph 18 for details.

22 All establishments included in the manufacturing census were asked whether they exported and, if so, what percentage of their sales of goods produced plus transfers out of goods produced by the establishment for sale were exported by their business or an agent on their behalf. The data presented in table 5 are derived by applying the percentage of exports reported for each exporting unit and then aggregating that figure. The data in table 5 exclude those manufacturing establishments which operated during 1996-97 but were not operating at 30 June 1997.

23 The statistics presented in table 5 for the value of exports by manufacturers or their agents are not intended to be the same as the value of exports classified by manufacturing industry of origin as published by the ABS in international trade statistics. These latter statistics are intended to measure total exports regardless of which business or organisation does the exporting (and to identify the probable industry from which the goods originated), whereas the statistics in tables 5 and 6 only include exports directly undertaken by the manufacturer or by its agent.

24 The data in table 5 showing exports by manufacturers or their agents can be expected to show a much lower value than the exports data from the international trade series. The main reason is that for many exports of goods manufactured in Australia, the actual exporting activity is undertaken by a business other than the manufacturer. Also, the value of goods produced on a commission or fee basis for non-manufacturing businesses and which are then exported is not included in the data in tables 5 and 6 . Examples of relevant commission work are the 'slaughtering fee' charged by an abattoir for processing livestock owned by a meat exporter and the 'tolling fee' charged by an aluminium smelter to process ores owned by other (e.g. mining) businesses. Also excluded from tables 5 and 6 are any exports by manufacturers of goods which were not produced by that manufacturer. These and other goods exported (e.g. re-exports) are included in the international trade data. Finally, differences in valuation of exports arise because the value of exports in the international trade series would include the value to the manufacturer plus profit margins for the exporter and for any intermediaries between the manufacturer and the exporter.

25 The location data presented in table 8 are based on additional data collected in the 1996-97 census. The extra data requested were the activity carried out at the location, the number of persons employed and the address of the location.

26 Employment data shown in this table are based on reported employment, but in the case of wages and salaries and turnover data they do not reflect reported data in all cases. This is because in those circumstances where an establishment operates at more than one location or where small multi-establishment management units have been 'collapsed' for reporting purposes into single establishment management units (see paragraph 14), the data have been synthesised to derive location-level wages and salaries and turnover data. (However, it should be noted that most establishments operate at only the one location.) The location-level synthesised data were derived by using the location data collected on activity and employment, and then pro-rating wages and salaries and turnover based on the reported employment.

27 As indicated in paragraph 5, a manufacturing establishment covers all activities of the establishment, including any non-manufacturing activities. In table 8, the non-manufacturing locations of manufacturing establishments have been excluded. For this reason, the State industry subdivision totals (for location data) in table 8 may be less than those shown in the other tables (for establishment data). However, it is also possible for State industry subdivision totals in table 8 to be greater than those shown in the other tables, as a result of individual locations of establishments being allocated a different industry classification to that of the 'parent' establishment.
28 A map displaying the boundaries of each statistical division in New South Wales can be found on page 43 of this publication. The statistical division structure is based on the Australian Standard Geographical Classification (ASGC) (Cat. no. 1216.0), 1996 edition.

## ACKNOWLEDGMENT

29 The 1992-93 manufacturing survey introduced the ANZSIC into the annual manufacturing collection. This classification replaced the Australian Standard Industrial Classification (ASIC) previously used. All time series statistics contained in this publication are ANZSIC-based. Corresponding ANZSIC-based data for years prior to 1989-90 are not available, except for constant prices data (see paragraph 35). Similarly, ASIC-based data are not available from 1992-93.

30 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the Census and Statistics Act 1905.

## INFORMATION PAPER

31 The Information Paper: Availability of Statistics Related to Manufacturing (Cat. no. 8205.0) outlines the vast amount of published and unpublished data available from the annual manufacturing industry collection, as well as data from other ABS collections.

## RELATED PUBLICATIONS

32 A series of publications Manufacturing Industry, [State], 1996-97 (Cat. nos 8221.1-8221.6) will be produced for each State. For 1996-97, all of these publications contain a table showing industry subdivision data by statistical division. These publications are being released progressively.

33 Users may also wish to refer to the following publications:

- Australian Standard Geographical Classification (ASGC) (Cat. no. 1216.0), 1996 edition-Annual publication
- Business Operations and Industry Performance, Australia, 1996-97 (Cat. no. 8140.0), to be released in January 1999—Annual publication
- Business Operations and Industry Performance, Australia, Preliminary, 1996-97 (Cat. no. 8142.0), released on 29 May 1998-Annual publication
- Environment Protection Expenditure, Australia, 1995-96 and 1996-97 (Cat. no. 4603.0), to be released in March 1999—Annual publication
- Indexes of Industrial Production, Australia (Cat. no. 8125.0)—Quarterly publication (Discontinued with release of December quarter 1997 issue)
- Information Paper: Availability of Statistics Related to Manufacturing, 1996 (Cat. no. 8205.0), released on 21 March 1996-Irregular publication
- Information Paper: Availability of Statistics Related to Manufacturing, 1997 (Cat. no. 8205.0), released on 16 January 1998-Irregular publication
- Information Paper: Improvements to ABS Economic Statistics, 1997 (Cat. no. 1357.0), released on 22 August 1997—Irregular publication
- Labour Force, Australia (Cat. no. 6203.0)—Monthly publication
- Manufacturing, Australia, 1998 (Cat. no. 8225.0), to be released in December 1998—Annual publication
- Manufacturing Industry, Australia, Preliminary, 1997-98 (Cat. no. 8201.0), to be released in March 1999—Annual publication
- Manufacturing Production, Commodities Produced, Australia, 1996-97 (Cat. no. 8365.0), to be released in December 1998-Annual publication

34 A range of manufacturing industry statistics publications is available for previous years. As well, a considerable amount of data from the annual manufacturing collection exists in unpublished form. More detailed information to satisfy individual user requirements may be available on request. In general, unpublished data consist of finer industry dissections of the published data. A charge is made for providing such information. The Information Paper (Cat. no. 8205.0) referred to in paragraphs 31 and 33 provides more details.

35 In particular, constant price estimates of gross product at factor cost on an ANZSIC basis are available back to 1984-85. However, constant price estimates on a true ANZSIC basis are only available from 1989-90. Nevertheless, an exercise has been undertaken to convert estimates for earlier years onto an ANZSIC basis using the relationships that applied between ASIC and ANZSIC in the years 1990-91 and 1991-92. These estimates are available at both the Australian and State and Territory levels back to 1984-85. It should be noted that the relationships that applied in 1990-91 and 1991-92 are less likely to apply the earlier the reference year. Also, annual constant price estimates of gross product at factor cost for the period 1989-90 to 1996-97 (inclusive) by ANZSIC class are available as unpublished data. All of these data can be purchased from the ABS in Canberra by contacting Paul Curran on 0262526801.

## ROUNDING

36 Where figures have been rounded, discrepancies may occur between totals and the sums of the component items. Due to data being adjusted for lags in processing new businesses to the ABS business register (see paragraph 10), this 'rounding rule' also applies to employment counts and to counts of locations (in table 8).

37 Proportions, ratios and other calculated figures shown in this publication have been calculated using unrounded estimates and may be different from, but are more accurate than, calculations based on the rounded estimates.

The 1996-97 manufacturing collection comprised a census component and a sample component. All manufacturing establishments were requested to provide data on employment, wages and salaries, turnover, purchases and whether their products were exported. A sample of approximately 7,000 manufacturing establishments nationally were asked to provide additional structural and performance data.

As the data items listed above were collected from the full 1996-97 census population, they are not subject to sampling variability. Estimates of IGP on the other hand were compiled using data from both the census and sample components. As such, IGP data are subject to sampling variability; that is, they may differ from the figures that would have been produced if all the components of IGP had been obtained from all manufacturers in the census population.

However, as turnover and purchases (two of the major components in calculating IGP) are collected from the census population, the variability due to sampling, especially at the industry subdivision level, is minimal.

All data for 1991-92 and 1993-94 as contained in this publication were obtained from a census and, as such, are not subject to sampling variability.

All data for 1992-93, 1994-95 and 1995-96 as contained in this publication were obtained from samples of manufacturers and are, therefore, subject to sampling variability. For further information, see these issues of this publication.

The imprecision due to sampling variability should not be confused with inaccuracies that may occur because of inadequacies in available sources from which the population frame was compiled, imperfections in reporting by providers, errors made in collection such as in recording and coding data, and errors made in processing data. Inaccuracies of this kind are referred to collectively as non-sampling error and they may occur in any enumeration, whether it be a full census or a sample.

While it is not possible to quantify non-sampling error, every effort is made to reduce it to a minimum. Collection forms are designed to be easy to complete and assist businesses to report accurately. Efficient and effective operating procedures and systems are used to compile the statistics. In addition, the ABS has undertaken a program of upgrading the business register. This upgrade has resulted in improvements in the quality of the statistical series whose population frames are drawn from the register.

Amount of goods produced by this establishment (or for it on commission) that are exported by this business or its agent

ANZSIC
ASIC
Capital work done for own use

Change in stocks

## Closing stocks

## Employment at end of June

Enterprise group

Establishment

Establishments that do not export

Establishments with exports of more than $\mathbf{5 0 \%}$ of sales

Establishments with exports up to and including 50\% of sales

## Australian Bureau of Statistics

This represents the sales value of goods produced by an establishment (or for it on commission), including the value of manufactured goods transferred to other establishments of the business for sale, that are exported (or are intended for export) outside Australia by the business or its agent.

Australian and New Zealand Standard Industrial Classification
Australian Standard Industrial Classification
The value of work done by the employees or proprietors of an establishment for the business' own use, or for rental or lease. This item includes the capitalised value of the cost of the materials and the wages and salaries involved.

The value of total closing stocks minus total opening stocks.
The value of all stocks of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the end of the reference period.

The number of working proprietors, working partners, permanent, part-time, temporary and casual employees, and managerial and executive employees working for an establishment during the last pay period ending in June each year. Employees absent on paid or prepaid leave are included, as are employees on workers' compensation who continue to be paid through the payroll system. Non-salaried directors, self-employed persons such as consultants, contractors and persons paid solely by commission without a retainer, and volunteer workers are excluded.

A unit covering all the operations in Australia of one or more legal entities under common ownership and/or control. It covers all the operations in Australia of legal entities which are related in terms of the current Corporations Law (as amended by the Corporations Legislation Amendment Act 1991). These may be legal entities such as trusts and partnerships as well as companies. Majority ownership is not required for control to be exercised.

The establishment is the smallest accounting unit of a business, within a State or Territory, controlling its productive activities and maintaining a specified range of detailed data enabling value added to be calculated. In general, an establishment covers all operations at a physical location, but may consist of a group of locations provided they are within the same State or Territory. The majority of establishments operate at one location only.

Establishments that reported no exports (either by their business or for them by an agent) of goods that they produced.

Establishments that reported exports (either by their business or for them by an agent) of more than $50 \%$ of sales and transfers out of goods for sale that they produced.

Establishments that reported exports (either by their business or for them by an agent) of up to and including $50 \%$ of sales and transfers out of goods for sale that they produced.

Exports as a proportion of sales of goods produced

## (Table 5)

## Income from services

Industry class

For an individual establishment, this represents the percentage of the total sales and transfers out of goods for sale produced by the establishment (or for it on commission) which are exported (or are intended for export) outside Australia by the business or its agent. In table 5, the ratio is calculated by dividing the total value of goods exported by the total value of sales and transfers out of goods for sale produced by all establishments, not just the aggregated value for those units which exported.

Income received from service activities. This income includes: repair, maintenance and service income and fees; income from work done on a commission basis; delivery and/or installation charges separately invoiced to customers; advertising income; and management fees/charges from related and unrelated businesses. Excluded are rent, leasing and hiring income, interest income and royalties income.

Within ANZSIC, there is a structure comprising four levels ranging from industry division (broadest level) to the industry class (finest level). At the industry class level, the activities are narrowly defined and recognised by a four-digit code, e.g. industry class 2331 for Pulp, paper and paperboard manufacturing. Usually, an activity is primarily confined to one class. However, some activities may be primary to more than one class.

Industry gross product (IGP) IGP is very similar to the national accounting measure gross product at factor cost which is the official statistical measure of production. IGP for an industry is a measure of the value which is added by the industry's production processes to the raw materials and services which are input to those processes. Another way of describing IGP is the value of an industry's output minus the value of intermediate inputs.

The formula used to calculate IGP is as follows-definitions of the relevant component items also appear in this Glossary.

| Calculation of IGP | $=$ Turnover |
| ---: | :--- |
|  | + Change in stocks |
|  | - Purchases, transfers in and selected expenses |
|  | $=$ Establishment value added |
|  | - Fringe benefits tax |
|  | - Payroll tax |
|  | - Other operating expenses |
|  | $=$ Industry Gross Product |

IGP of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year.

Industry group This is the intermediate level within the manufacturing industry division of ANZSIC and is recognised by a three-digit code, e.g. industry group 233 for Paper and paper product manufacturing. It gives more detail than the industry subdivision and is created in a way that groups like industry classes together.

## Industry subdivision

This is the broadest level category within the manufacturing industry division of ANZSIC and is recognised by a two-digit code, e.g. industry subdivision 23 for Wood and paper product manufacturing. Industry subdivisions are built up from industry groups which, in turn, are built up from industry classes. The following list gives the manufacturing industry subdivision codes and their descriptions:

21 Food, beverage and tobacco mfg
22 Textile, clothing, footwear and leather mfg
23 Wood and paper product mfg
24 Printing, publishing and recorded media
25 Petroleum, coal, chemical and associated product mfg
26 Non-metallic mineral product mfg
27 Metal product mfg
28 Machinery and equipment mfg
29 Other manufacturing

Location A location is a physical unit of the establishment. It consists usually of an unbroken physical area or site, occupied by an establishment, at which, or from which, the establishment engages in productive activity on a relatively permanent basis. An establishment can consist of one or more locations. In specified circumstances, non-contiguous sites occupied by the same establishment can be combined to form a location.

Locations at 30 June

## Management unit

Manufacturing establishment

## Manufacturing location

## Manufacturing management

The number of locations in operation at 30 June in the year of a given reference period.

The management unit is the highest-level unit within a business, having regard to industry homogeneity, for which accounts are maintained; in nearly all cases, it coincides with the legal entity owning the business (that is, company, partnership, trust, sole operator, etc.). In the case of large diversified businesses, however, there may be more than one management unit, each coinciding with a 'division' or 'line of business'. A division or line of business is recognised where separate and comprehensive accounts are compiled for it.

An establishment predominantly engaged in manufacturing activities. The data collected for such establishments cover all activities of the establishment (including non-manufacturing activities). Conversely, there are some establishments predominantly engaged in non-manufacturing activities which also undertake limited manufacturing activities and which are excluded.

A location predominantly engaged in manufacturing activities.

A management unit predominantly engaged in manufacturing activities. The data collected for such management units cover all activities of the management unit (including in respect of non-manufacturing activities). Conversely, there are some management units predominantly engaged in non-manufacturing activities which have establishments engaged in manufacturing activities and which are excluded.

## Opening stocks

Other operating expenses

The value of all stocks of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the beginning of the reference period

Includes operating expenses such as management fees and charges paid to related and unrelated businesses, office supplies and printing costs, rates, telephone and postage charges, travelling and entertainment expenses, accounting and legal expenses, advertising costs and land tax. Excludes income and sales taxes, and extraordinary expenses.

| Own account capital work | The value of work done by the employees or proprietors of an establishment for <br> the business' own use, or for rental or lease. This item includes the capitalised <br> value of the cost of the materials and the wages and salaries involved. |
| :---: | :--- |
| Purchases | Purchase of materials, components, containers, packaging, fuels, electricity and <br> water, and of finished goods for resale. The purchase of parts and fuel for motor <br> vehicles is excluded. |
| Purchases, transfers in |  |
| and selected expenses | Purchase of materials, components, containers, packaging, fuels, electricity <br> and water, and of finished goods for resale, plus transfers in of goods from other <br> establishments of the same business for further processing, assembly, installation <br> or for sale or resale, plus commission expenses (including sales commission |
|  | expenses), repair and maintenance expenses, freight and cartage expenses, motor <br> vehicle running expenses, and rent, leasing and hiring expenses. Transfers in are |
| valued, for statistical purposes, at prices commensurate with the prices which |  |
| would have been paid if the establishments concerned had been under separate |  |
| ownership, i.e. at commercial selling price. |  |


#### Abstract

\section*{Turnover}

Turnover per person employed

Value added

Wages and salaries

Wages and salaries to turnover ratio

Sales (exclusive of excise and sales tax) of goods whether produced by the establishment or not, plus transfers out of goods to other establishments of the same business, plus bounties and subsidies on production, plus all other operating income from outside the establishment (such as commission income, repair and service income, and rent, leasing and hiring income), plus capital work done by an establishment's own employees for the business' own use, or for rental or lease. Receipts from interest, royalties, dividends and the sale of fixed tangible assets are excluded.

Note: Transfers to other establishments of the same business referred to in the definition of turnover are valued, for statistical purposes, at prices commensurate with the prices which would have been received if the establishments concerned had been under separate ownership, i.e. at commercial selling price. A significant proportion of the commodities manufactured by some industries is manufactured on commission for non-manufacturing businesses from materials owned and supplied by those businesses. As a consequence, the turnover figures do not reflect the gross value of those commodities but only the commission earned relating to them.

Turnover of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year.

Turnover, plus the increase (or less the decrease) in the value of stocks, less purchases, transfers in and selected expenses.

The gross wages and salaries (including capitalised wages and salaries) of all employees of the establishment. The item includes severance, termination and redundancy payments, but excludes reimbursements or allowances to employees for travel, entertainment, etc. For the 1995-96 collection only, provisions for employee entitlements (e.g. provisions for annual leave and leave bonus, long service leave, sick leave, and severance, termination and redundancy payments) are excluded. The drawings of working proprietors are also excluded.

The wages and salaries paid by manufacturing establishments which operated during the year ended 30 June as a proportion of the turnover of manufacturing establishments which operated during the same year.


NEW SOUTH WALES—STATISTICAL DIVISIONS, 1996 EDITION


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