

1992-93

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Manufacturing Industry

Western Australia



**MANUFACTURING INDUSTRY
WESTERN AUSTRALIA
1992-93**

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INQUIRIES

- *for further information about statistics in this publication and the availability of related unpublished statistics, contact John Ridley on Sydney (02) 9268 4541 or any other ABS office.*
- *for information about other ABS statistics and services please refer to the back cover of this publication.*

INTRODUCTION

ABOUT THIS ISSUE

This publication contains detailed industry statistics compiled from a survey of manufacturing establishments (see paragraphs 8 and 9 of the Explanatory Notes) conducted in respect of 1992-93, with some comparative statistics for earlier years. It expands and updates the information for Western Australia which was published in *Manufacturing Industry, Australia, 1992-93, Preliminary* (8201.0), which was released on 25 August 1994 and *Manufacturing Industry, Australia, 1992-93* (8221.0), which was released on 12 March 1996. All previous manufacturing collections were conducted on a census basis.

For the 1992-93 manufacturing collection, a sample of approximately 21,000 manufacturing businesses, nationally, was approached to provide detailed information on employment, wages and salaries paid, income, expenses, and assets and liabilities. In addition to this 'traditional' output, this publication also presents data on gross product at factor cost (average 1989-90 prices) in table 4. Conversely, no sub-State data are contained in this publication. This is a direct result of the 1992-93 collection being a sample survey and not a census. These data will be next available in respect of the 1993-94 reference year.

New industry classification

This publication introduces the new industry classification to a broad range of annual manufacturing statistics. The new classification is the Australian and New Zealand Standard Industrial Classification (ANZSIC), which replaces the Australian Standard Industrial Classification (ASIC) used prior to the 1992-93 reference year. Manufacturing collections dating back to the 1989-90 reference year have been coded using both industry classifications. All time series comparisons in this publication are made on a consistent ANZSIC basis. More information on this industry classification can be found in the introduction to table 9 in the 1991-92 issue of this publication and in the *Australian and New Zealand Standard Industrial Classification, 1993* (1292.0).

New industry gross product measure

Industry gross product is a measure which closely approximates the National Accounting data item 'gross product at factor cost'. Data for gross product (at average 1989-90 prices) by industry subdivision are contained in table 4 of this publication. The data item industry gross product is used widely in the range of economic statistics produced by the ABS. Adoption of industry gross product for manufacturing statistics will facilitate comparison of net production by the manufacturing industry with net production of other industries, as well as providing a better net production measure for the manufacturing industry.

In terms of definition, the difference between value added and industry gross product is that industry gross product takes into account more of the operating expenses which are incurred by manufacturers in the production, marketing and distribution processes. However, industry gross product for an industry should not be interpreted as profit or surplus for that industry. There are several important expense items which are not included in the calculation.

An indicator of the difference is given by total manufacturing in Western Australia for 1992-93, where establishment value added amounted to \$4.8 billion while establishment industry gross product amounted to \$3.7 billion. Estimates for 1992-93 establishment industry gross product for individual manufacturing industries are available on request.

ADJUSTED FIGURES IN FUTURE
ISSUES OF THIS PUBLICATION

Recent investigations have shown that not all manufacturers falling within the scope of the 1992-93 manufacturing survey were recorded on the ABS business register at the time that the sample was selected. It has not been feasible to adjust the detailed information contained in this publication to allow for the operations of these excluded manufacturers. The shortfall for total Western Australian manufacturing is approximately 4% for 1992-93 turnover and 7% for employment at the end of June 1993.

Adjustments to allow for the shortfall in 1992-93 data will be carried out as soon as feasible. Adjusted data for broad aggregates for the year 1992-93 will appear in the 1993-94 issue of this publication, which will also contain an explanation of the adjustment process. In the interim, further information concerning the adjustments is available from the ABS (see 'Inquiries' on page iii) or by reference to paragraphs 13 and 14 of the Explanatory Notes to the 1993-94 issue of *Manufacturing Industry, Australia, Preliminary* (8201.0).

UNPUBLISHED DATA

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. Further details can be obtained by contacting the NSW Office of the ABS — see page iii for contact details.



**TABLE 1. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION
WESTERN AUSTRALIA, 1989-90 TO 1992-93 (b)**

Industry subdivision			Employment				Turnover	
ANZSIC		Establishments	at end of	Wages and	Turnover	Persons	per person	
code	Description	at 30 June	June	salaries	(f)	employed per	employed	
		(c)	(d)	(e)(f)	(\$m)	establishment	(f)(g)	
		(No.)	('000)	(\$m)		(No.)	(\$'000)	
21	Food, beverage and tobacco mfg	1992-93	354	11.4	324.0	2,593.2	32	228.4
		1991-92	345	11.4	314.2	2,586.6	33	227.3
		1990-91	343	12.3	308.7	2,533.8	36	206.1
		1989-90	355	12.5	300.4	2,385.5	35	191.3
22	Textile, clothing, footwear and leather mfg	1992-93	163	3.0	68.2	260.9	19	86.4
		1991-92	181	3.0	68.7	254.4	17	84.5
		1990-91	182	3.2	70.9	263.2	18	81.1
		1989-90	174	3.5	71.0	255.8	20	73.1
23	Wood and paper product mfg	1992-93	285	4.3	114.8	629.5	15	145.1
		1991-92	288	4.0	103.5	582.3	14	144.3
		1990-91	294	4.2	107.9	571.5	14	137.2
		1989-90	293	4.6	110.3	579.9	16	126.1
24	Printing, publishing and recorded media	1992-93	339	5.2	148.2	589.6	15	113.2
		1991-92	351	5.6	143.6	575.6	16	103.4
		1990-91	338	5.9	149.1	568.4	18	95.9
		1989-90	338	6.1	148.1	584.1	18	96.5
25	Petroleum, coal, chemical and associated product mfg	1992-93	200	5.1	182.8	2,722.1	25	536.5
		1991-92	226	5.4	183.2	2,792.4	24	516.8
		1990-91	216	5.5	185.2	2,688.2	25	493.2
		1989-90	204	5.6	175.2	2,457.5	28	437.5
26	Non-metallic mineral product mfg	1992-93	192	4.6	133.5	876.0	24	189.0
		1991-92	200	4.6	136.0	766.5	23	167.4
		1990-91	179	4.3	131.0	712.7	24	167.7
		1989-90	179	4.7	137.5	845.6	26	181.8
27	Metal product mfg	1992-93	632	13.9	487.8	3,872.1	22	278.1
		1991-92 r	628	13.4	462.1	3,730.5	21	278.2
		1990-91	604	13.8	442.2	4,205.4	23	305.0
		1989-90	595	14.6	449.3	4,363.3	25	299.1
28	Machinery and equipment mfg	1992-93	763	9.8	272.7	1,332.6	13	136.4
		1991-92 r	801	9.7	275.0	1,184.5	12	122.5
		1990-91	766	10.1	275.5	1,148.8	13	114.0
		1989-90	761	11.7	308.3	1,308.0	15	112.0
29	Other manufacturing	1992-93	498	4.8	102.3	439.3	10	92.0
		1991-92	553	4.9	101.7	423.9	9	87.2
		1990-91	541	4.8	101.0	416.8	9	86.6
		1989-90	542	5.6	113.8	500.4	10	89.4
21-29	Total manufacturing	1992-93	3,426	62.1	1,834.4	13,315.2	18	214.4
		1991-92 r	3,573	61.9	1,788.1	12,896.6	17	208.3
		1990-91	3,463	64.0	1,771.4	13,108.6	18	204.8
		1989-90	3,442	68.8	1,813.9	13,280.2	20	193.2

(a) See paragraph 8 of the Explanatory Notes. (b) For comparability of data over the time periods shown, see paragraph 15 of the Explanatory Notes. (c) See paragraphs 5 to 11 of the Explanatory Notes. (d) Includes working proprietors. (e) Excludes the drawings of working proprietors. (f) Value data are at current prices and, therefore, do not discount the impact of price changes. (g) Turnover divided by the number of persons employed at the end of June.

TABLE 2. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93

Industry class ANZSIC code	Description	Establishments at 30 June (b) (No.)	Employment at end of June (c) (No.)	Wages and salaries (d) (\$m)	Turnover			Purchases and transfers in (\$m)	Selected expenses (\$m)	Opening stocks (\$m)	Closing stocks (\$m)	Value added (\$m)	Net capital expenditure (\$m)
					Total sales of goods and transfers out (\$m)	Balance of turnover (\$m)	Total (\$m)						
FOOD, BEVERAGE AND TOBACCO MFG—													
Meat and meat product mfg													
2111	Meat processing	56	2,614	82.7	546.2	19.9	566.1	352.1	26.3	18.1	19.7	189.3	10.8
2112	Poultry processing	9	582	11.9	126.1	0.1	126.2	86.5	5.9	8.0	8.2	34.0	1.9
2113	Bacon, ham and smallgoods mfg	18	708	19.0	126.1	1.4	127.5	71.0	5.1	7.8	7.3	50.8	2.8
211	Total	83	3,904	113.6	798.4	21.4	819.8	509.7	37.3	33.9	35.2	274.1	15.5
Dairy product mfg—													
2121	Milk and cream processing	5	443	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2122	Ice cream mfg	4	130	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2129	Dairy product mfg n.e.c.	9	195	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
212	Total	18	767	29.0	295.7	23.9	319.5	177.7	11.2	20.0	20.2	160.8	6.8
213	Fruit and vegetable processing	17	913	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
214	Oil and fat mfg	7	137	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Flour mill and cereal food mfg													
2151	Flour mill product mfg	9	206	7.0	74.3	0.1	74.4	41.7	3.8	6.6	8.3	30.6	1.1
2152	Cereal food and baking mix mfg	9	121	3.5	31.1	0.3	31.5	15.6	4.6	4.1	3.7	10.9	0.8
215	Total	18	327	10.5	105.4	0.5	105.9	57.3	8.4	10.7	12.0	41.5	1.9
Bakery product mfg—													
2161	Bread mfg	46	1,143	30.3	121.1	0.2	121.2	54.5	11.2	2.0	2.0	55.6	2.8
2162	Cake and pastry mfg	37	922	17.7	66.6	0.6	67.2	28.5	5.0	1.7	2.1	34.0	2.0
2163	Biscuit mfg	—	—	—	—	—	—	—	—	—	—	—	—
216	Total	83	2,064	48.1	187.6	0.8	188.4	83.1	16.2	3.7	4.1	89.6	4.7
Other food mfg—													
2171	Sugar mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2172	Confectionery mfg	10	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2173	Seafood processing	27	1,042	23.6	340.7	6.2	346.9	222.0	22.9	49.5	35.4	87.9	4.5
2174	Prepared animal and bird feed mfg	28	326	8.6	134.7	1.2	135.9	99.4	9.3	10.0	13.0	30.2	1.0
2179	Food mfg n.e.c.	31	417	13.2	55.5	0.8	56.3	23.3	3.5	3.2	3.0	29.3	2.1
217	Total	98	1,924	48.8	362.9	8.1	371.1	364.5	38.0	63.2	52.1	157.5	8.1

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93—continued

Industry class ANZSIC code	Description	Establishments at 30 June (No.)	Employment at end of June (c) (No.)	Wages and salaries (d) (\$m)	Turnover			Purchases and transfers in (\$m)	Selected expenses (\$m)	Opening stocks (\$m)	Closing stocks (\$m)	Value added (\$m)	Net capital expenditure (\$m)
					Total sales of goods and transfers out (\$m)	Balance of turnover (\$m)	Total (\$m)						
Beverage and malt mfg—													
2181	Soft drink, cordial and syrup mfg	6	706	24.9	188.9	2.1	191.0	118.3	17.1	18.3	20.4	57.7	5.7
2182	Beer and malt mfg	4	559	26.8	239.8	0.8	240.6	134.5	11.1	18.5	16.3	92.9	13.1
2183	Wine mfg	32	563	9.9	58.8	1.1	59.9	27.1	4.4	26.9	31.6	33.1	3.8
2184	Spirit mfg	—	—	—	—	—	—	—	—	—	—	—	—
218	Total	42	1,828	61.6	487.6	4.0	491.5	279.9	32.6	63.7	68.3	183.7	22.6
219	Tobacco product mfg	—	—	—	—	—	—	—	—	—	—	—	—
21	Total food, beverage and tobacco mfg	354	11,356	324.0	2,533.9	59.3	2,593.2	1,538.1	151.1	205.4	206.3	904.9	63.2
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG—													
Textile fibre, yarn and woven fabric mfg—													
2211	Wool scouring	5	209	6.9	5.7	14.1	19.7	5.4	2.1	1.4	1.8	12.7	2.1
2212	Synthetic fibre textile mfg	4	16	0.2	0.6	n.p.	0.6	0.2	—	—	—	0.4	n.p.
2213	Cotton textile mfg	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2214	Wool textile mfg	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2215	Textile finishing	3	n.p.	0.5	2.3	n.p.	2.3	1.0	0.3	0.1	0.1	1.0	0.4
221	Total	14	379	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Textile product mfg—													
2221	Made-up textile product mfg	28	1,010	20.9	96.2	1.0	97.2	55.1	10.8	10.2	10.1	31.3	1.2
2222	Textile floor covering mfg	5	26	0.6	2.3	—	2.3	0.9	0.2	0.3	0.4	1.2	0.2
2223	Rope, cordage and twine mfg	3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2229	Textile product mfg n.e.c.	10	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
222	Total	46	1,118	22.9	103.5	1.2	104.7	57.9	11.5	11.0	11.0	35.3	1.4
Knitting mills—													
2231	Hosiery mfg	—	—	—	—	—	—	—	—	—	—	—	—
2232	Cardigan and pullover mfg	63	63	1.5	4.7	0.1	4.8	2.0	0.5	0.6	0.6	2.2	0.1
2239	Knitting mill product mfg n.e.c.	28	28	0.3	4.1	0.0	4.1	2.7	0.7	0.2	0.2	0.6	0.1
223	Total	8	91	1.8	8.8	0.1	8.8	4.8	1.3	0.8	0.8	2.8	0.2
Clothing mfg—													
2241	Men's and boys' wear mfg	14	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2242	Women's and girls' wear mfg	25	172	3.0	8.6	1.6	10.2	3.2	1.8	0.9	1.1	5.5	n.p.
2243	Sleepwear, underwear and infant clothing mfg	4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2249	Clothing mfg n.e.c.	26	285	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
224	Total	69	794	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93—continued

Industry class ANZSIC code	Description	Establishments at 30 June (No.)	Employment at end of June (c) (No.)	Wages and salaries (d) (\$m)	Turnover		Purchases and transfers in (\$m)	Selected expenses (\$m)	Opening stocks (\$m)	Closing stocks (\$m)	Value added (\$m)	Net capital expenditure (\$m)
					Total sales of goods and transfers out (\$m)	Balance of turnover (\$m)						
225	Footwear mfg	9	208	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
	Leather and leather product mfg—											
2261	Leather tanning and fur dressing	13	160	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2262	Leather and leather substitute product mfg	4	68	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
226	Total	17	228	5.6	26.3	15.2	1.9	5.0	5.6	10.0	3.9	n.p.
22	Total textile, clothing, footwear and leather mfg	163	3,018	68.2	236.9	120.9	25.4	31.1	34.5	118.0	7.5	n.p.
	WOOD AND PAPER PRODUCT MFG—											
	Log sawmilling and timber dressing											
2311	Log sawmilling	42	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2312	Wood chipping	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2313	Timber resawing and dressing	10	368	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
231	Total	53	1,327	39.6	223.6	100.1	17.0	58.6	54.7	104.0	11.3	n.p.
	Other wood product mfg											
2321	Plywood and veneer mfg	3	519	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2322	Fabricated wood mfg	144	1,087	22.4	98.6	47.0	6.7	6.9	6.6	44.5	0.6	n.p.
2323	Wooden structural component mfg	73	540	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2329	Wood product mfg n.e.c.	221	2,115	31.5	269.2	145.1	14.5	29.3	24.7	105.1	3.5	n.p.
232	Total											
	Paper and paper product mfg—											
2331	Pulp, paper and paperboard mfg	3	104	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2332	Solid paperboard container mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2333	Corrugated paperboard container mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2334	Paper bag and sack mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2339	Paper product mfg n.e.c.	2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
233	Total	11	697	23.8	134.3	87.1	9.0	12.4	14.5	41.4	16.2	n.p.
23	Total wood and paper product mfg	285	4,339	114.8	623.4	332.2	40.4	100.3	94.0	250.5	31.0	n.p.
	PRINTING, PUBLISHING AND RECORDED MEDIA											
	Printing and services to printing											
2411	Paper stationery mfg	21	416	11.4	35.4	12.1	2.3	6.3	5.2	20.2	1.3	n.p.
2412	Printing	167	1,716	47.0	189.2	80.7	21.6	13.5	13.5	90.0	6.8	n.p.
2413	Services to printing	55	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
241	Total	244	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93—continued

Industry class ANZSIC code	Description	Establishments at 30 June (No.)	Employment at end of June (c) (No.)	Wages and salaries (d) (\$m)	Turnover			Purchases and transfers in (\$m)	Selected expenses (\$m)	Operating stocks (\$m)	Closing stocks (\$m)	Value added (\$m)	Net capital expenditure (\$m)
					Total sales of goods and transfers out (\$m)	Balance of turnover (\$m)	Total						
Publishing													
2421	Newspaper printing or publishing	56	2,468	73.9	96.6	205.3	301.9	34.0	15.5	16.6	188.0	7.9	
2422	Other periodical publishing	22	142	3.5	13.4	1.2	14.6	1.7	0.7	0.8	7.7	2.7	
2423	Book and other publishing	16	120	3.0	11.6	7.5	19.2	1.3	1.3	1.2	13.3	0.2	
242	Total	94	2,730	80.4	121.7	214.0	335.7	37.0	17.5	18.6	209.0	10.9	
243	Recorded media manufacturing and publishing	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
24	Total printing, publishing and recorded media	339	5,210	148.2	370.4	219.2	589.6	64.2	37.8	38.0	334.7	20.8	
PETROLIUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG—													
Petroleum refining													
251		1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
252	Petroleum and coal product mfg n.e.c.	1	1	1.7			10.3	1.9	0.1	0.1	4.8	0.1	
Basic chemical mfg													
2531	Fertiliser mfg	4	474	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2532	Industrial gas mfg	3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2533	Synthetic resin mfg	5	133	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2534	Organic industrial chemical mfg n.e.c.	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2535	Inorganic industrial chemical mfg n.e.c.	14	960	37.7	358.6	1.8	360.3	44.8	46.6	54.4	125.0	10.1	
253	Total	27	1,687	67.2	610.5	6.4	616.9	65.9	88.5	104.1	235.0	26.4	
Other chemical product mfg													
2541	Explosive mfg	3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2542	Paint mfg	13	364	12.7	105.5	2.7	108.2	6.5	7.8	9.0	60.7	0.8	
2543	Medicinal and pharmaceutical product mfg	7	303	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2544	Pesticide mfg	4	74	2.4	66.5	0.2	66.7	1.1	13.3	13.1	21.3	0.5	
2545	Soap and other detergent mfg	10	144	4.3	22.8	1.7	22.8	1.7	2.3	2.5	13.1	0.6	
2546	Cosmetic and toiletry preparation mfg	—	—	—	—	—	—	—	—	—	—	—	
2547	Ink mfg	—	—	—	—	—	—	—	—	—	—	—	
2549	Chemical product mfg n.e.c.	12	105	3.5	24.7	0.2	24.9	0.9	1.8	1.7	9.2	0.2	
254	Total	49	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Rubber product mfg													
2551	Rubber tyre mfg	7	158	3.8	25.4	—	25.4	1.5	3.6	3.4	9.6	0.4	
2559	Rubber product mfg n.e.c.	17	145	4.5	15.8	2.1	17.9	0.9	3.1	2.6	6.7	0.2	
255	Total	24	303	8.3	41.2	2.1	43.3	2.5	6.7	6.0	16.2	0.6	

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93—continued

Industry class ANZSIC code	Description	Establishments at 30 June (No.)	Employment at end of June (c) (No.)	Wages and salaries (d) (\$m)	Turnover			Purchases and transfers in (\$m)	Selected expenses (\$m)	Opening stocks (\$m)	Closing stocks (\$m)	Value added (\$m)	Net capital expenditure (\$m)
					Total sales of goods and transfers out (\$m)	Balance of turnover (\$m)	Total (\$m)						
Plastic product mfg—													
2561	Plastic blow moulded product mfg	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2562	Plastic extruded product mfg	11	323	11.8	74.0	0.4	74.4	2.8	9.2	11.2	33.8	5.0	
2563	Plastic bag and film mfg	7	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2564	Plastic product, rigid fibre reinforced, mfg	8	76	1.6	8.9	—	9.0	2.3	0.4	0.4	3.3	0.1	
2565	Plastic foam product mfg	4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2566	Plastic injection moulded product mfg	61	483	11.0	63.0	2.1	65.1	8.0	3.9	4.0	28.3	1.8	
256	Total	93	1,401	39.6	331.5	2.7	234.2	18.9	22.0	24.5	101.8	17.1	
25	Total petroleum, coal, chemical and associated product mfg	200	5,074	182.8	2,589.7	132.4	2,722.1	143.1	265.4	276.0	947.9	123.0	
NON-METALLIC MINERAL PRODUCT MFG													
261	Glass and glass product mfg	31	386	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Ceramic mfg													
2621	Clay brick mfg	9	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2622	Ceramic product mfg	5	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2623	Ceramic tile and pipe mfg	6	134	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2629	Ceramic product mfg n.e.c.	20	278	5.7	12.5	0.2	12.7	1.4	4.1	5.1	9.4	0.6	
263	Total	40	1,527	44.0	195.9	13.0	208.9	32.9	46.0	42.2	115.1	9.3	
Cement, lime, plaster and concrete product mfg—													
2631	Cement and lime mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2632	Plaster product mfg	12	235	7.7	48.7	2.9	51.6	4.6	3.0	3.3	23.8	0.7	
2633	Concrete slurry mfg	20	489	13.9	159.1	15.4	174.5	33.5	3.0	3.1	41.7	5.3	
2634	Concrete pipe and box culvert mfg	3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2635	Concrete product mfg n.e.c.	51	1,010	27.0	153.0	1.1	154.1	28.2	15.3	15.9	72.1	6.3	
263	Total	87	2,196	64.4	464.7	19.9	484.6	80.9	33.5	33.1	187.2	14.3	
264	Non-metallic mineral product mfg n.e.c.	14	525	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
26	Total non-metallic mineral product mfg	192	4,635	133.5	840.3	35.7	876.0	129.3	98.8	95.5	397.4	29.3	
METAL PRODUCT MFG—													
Iron and steel mfg													
2711	Basic iron and steel mfg	24	464	14.8	158.1	6.6	164.7	8.5	18.0	16.8	37.2	1.5	
2712	Iron and steel casting and forging	15	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2713	Steel pipe and tube mfg	7	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
271	Total	46	1,275	39.6	272.2	9.4	281.6	16.1	30.2	29.8	96.0	1.5	

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS (B): SUMMARY OF OPERATIONS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93—continued

Industry class ANZSIC code	Description	Establishments at 30 June (No.)	Employment at end of June (c) (No.)	Wages and salaries (d) (\$m)	Turnover			Purchases and transfers in (\$m)	Selected expenses (\$m)	Opening stocks (\$m)	Closing stocks (\$m)	Value added (\$m)	Net capital expenditure (\$m)
					Total sales and transfers out (\$m)	Balance of turnover (\$m)	Total (\$m)						
Basic non-ferrous metal mfg													
2721	Alumina production	7	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2722	Aluminium smelting	—	—	—	—	—	—	—	—	—	—	—	
2723	Copper, silver, lead and zinc smelting, refining	4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2729	Basic non-ferrous metal mfg n.e.c.	11	4,988	232.2	2,543.0	8.6	2,551.5	1,772.1	191.8	334.7	573.9	252.9	
272	Total												
Non-ferrous basic metal product mfg—													
2731	Aluminium rolling, drawing, extruding	3	71	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2732	Non-ferrous metal rolling, drawing, extruding n.e.c.	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2733	Non-ferrous metal casting	5	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
273	Total	9	164	5.0	23.4	3.8	27.1	12.3	1.5	0.9	12.7	4.1	
Structural metal product mfg													
2741	Structural steel fabricating	126	2,376	76.8	355.5	11.2	366.7	185.6	35.9	37.5	147.3	5.7	
2742	Architectural aluminium product mfg	83	1,234	33.1	157.5	5.4	162.9	90.0	15.4	11.2	59.3	1.5	
2749	Structural metal product mfg n.e.c.	35	227	5.7	26.1	5.2	31.3	15.4	3.3	1.6	12.9	0.8	
274	Total	244	3,837	115.6	539.2	21.8	561.0	291.0	54.6	50.3	219.5	8.1	
Sheet metal product mfg													
2751	Metal container mfg	11	267	9.0	90.2	0.1	90.3	59.3	4.2	7.2	27.8	0.6	
2759	Sheet metal product mfg n.e.c.	96	1,159	30.0	120.2	3.1	123.3	61.9	6.9	9.0	56.2	2.5	
275	Total	107	1,426	39.0	210.4	3.2	213.6	121.2	11.1	16.2	83.9	3.1	
Fabricated metal product mfg—													
2761	Hand tool and general hardware mfg	6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2762	Spring and wire product mfg	27	328	8.9	65.8	0.8	66.6	36.8	4.0	6.6	24.8	1.3	
2763	Nut, bolt, screw and rivet mfg	30	176	5.2	18.0	18.0	18.0	9.6	0.7	4.1	7.7	0.3	
2764	Metal coating and finishing	58	485	12.9	24.9	16.3	41.2	11.5	5.1	1.9	24.9	0.3	
2765	Non-ferrous pipe fitting mfg	4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2769	Fabricated metal product mfg n.e.c.	111	1,118	26.6	89.4	12.2	101.6	37.3	14.0	9.4	51.5	2.2	
276	Total	216	2,234	56.5	206.4	30.9	237.2	99.2	25.1	22.5	113.5	2.3	
27	Total metal product mfg	632	13,925	487.8	3,794.4	77.7	3,872.1	2,465.0	300.2	455.4	1,099.5	270.2	

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93—continued

Industry class ANZSIC code	Description	Turnover						Closing stocks (\$m)	Value added (\$m)	Net capital expenditure (\$m)
		Establishments at 30 June (No.)	Employment at end of June (c) (No.)	Wages and salaries (d) (\$m)	Total sales of goods and transfers out (\$m)	Balance of turnover (\$m)	Total (\$m)			
MACHINERY AND EQUIPMENT MFG—										
Motor vehicle and part mfg—										
2811	Motor vehicle mfg	—	—	—	—	—	—	—	—	—
2812	Motor vehicle body mfg	31	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2813	Automotive electrical and instrument mfg	3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2819	Automotive component mfg n.e.c.	90	721	16.1	38.5	19.0	57.5	21.7	3.6	1.3
281	Total	124	1,486	33.9	122.6	40.4	162.9	78.5	19.0	6.4
Other transport equipment mfg										
2821	Shipbuilding	16	907	27.7	54.4	123.1	177.4	122.3	8.0	2.6
2822	Boatbuilding	56	423	12.1	92.4	14.8	107.2	63.2	11.1	1.6
2823	Railway equipment mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2824	Aircraft mfg	28	321	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2829	Transport equipment mfg n.e.c.	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
282	Total	103	1,828	56.1	214.3	164.7	379.0	232.6	28.3	6.1
Photographic and scientific equipment mfg										
2831	Photographic and optical good mfg	9	80	2.1	9.0	0.2	9.1	4.5	2.1	0.1
2832	Medical and surgical equipment mfg	59	268	5.9	17.4	2.5	19.9	4.7	2.0	0.2
2839	Professional and scientific equipment mfg n.e.c.	10	91	1.9	8.8	0.1	8.9	4.2	0.7	0.3
283	Total	78	440	10.0	35.1	2.8	37.9	13.4	4.8	0.2
Electronic equipment mfg										
2841	Computer and business machine mfg	6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2842	Telecommunication, broadcasting and transceiving equipment mfg	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2849	Electronic equipment mfg n.e.c.	8	686	16.6	82.2	7.0	89.2	46.1	12.4	2.7
284	Total	15	996	27.8	115.5	12.6	128.1	61.2	17.0	4.2
Electrical equipment and appliance mfg										
2851	Household appliance mfg	39	407	11.1	60.7	1.9	62.6	30.7	6.0	0.8
2852	Electric cable and wire mfg	5	50	1.3	13.0	0.1	13.1	7.3	0.6	0.3
2853	Battery mfg	—	—	—	—	—	—	—	—	—
2854	Electric light and sign mfg	10	164	4.2	9.5	2.4	11.9	3.2	0.8	0.6
2859	Electrical equipment mfg n.e.c.	56	569	16.7	45.3	11.7	57.0	27.0	7.1	0.8
285	Total	101	1,190	38.4	128.5	16.1	144.6	68.1	14.5	2.2

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93 continued

Industry class ANZSIC code	Description	Establishments at 30 June (No.)	Employment at end of June (No.)	Wages and salaries (d) (\$m)	Turnover			Purchases and transfers in (\$m)	Selected expenses (\$m)	Opening stocks (\$m)	Closing stocks (\$m)	Value added (\$m)	Net capital expenditure (\$m)
					Total sales of goods and transfers out (\$m)	Balance of turnover (\$m)	Total (\$m)						
Industrial machinery and equipment mfg ...													
2861	Agricultural machinery mfg	47	397	9.0	40.3	2.6	43.0	2.9	5.7	5.8	17.0	0.8	
2862	Mining and construction machinery mfg	30	565	19.9	52.2	23.0	75.2	6.4	13.3	18.4	38.0	1.5	
2863	Food processing machinery mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2864	Machine tool and part mfg	40	262	6.4	20.2	1.4	21.6	1.3	3.1	2.9	13.0	0.9	
2865	Lifting and material handling equipment mfg	33	750	21.7	48.7	62.3	110.9	4.6	10.3	11.3	46.3	2.7	
2866	Pump and compressor mfg	10	165	4.8	13.2	6.7	19.9	1.1	3.5	3.3	10.1	0.3	
2867	Commercial space heating and cooling equipment mfg	7	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2869	Industrial machinery and equipment mfg n.e.c.	131	1,422	41.6	148.9	17.0	165.9	11.1	26.1	21.0	78.5	2.2	
286	Total	300	3,826	111.6	363.4	114.7	480.1	29.3	68.2	69.0	222.4	8.9	
28	Total machinery and equipment mfg	763	9,767	272.7	981.4	351.2	1,332.6	86.5	151.8	175.1	586.5	28.1	
OTHER MANUFACTURING													
Prefabricated building mfg ...													
2911	Prefabricated metal building mfg	29	366	9.6	60.4	6.8	67.2	11.4	3.9	5.3	21.7	1.0	
2919	Prefabricated building mfg n.e.c.	7	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
291	Total	36	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Furniture mfg ...													
2921	Wooden furniture and upholstered seat mfg	286	2,654	52.6	186.6	13.9	200.5	19.9	17.8	16.8	87.2	1.8	
2922	Sheet metal furniture mfg	18	272	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2923	Matress mfg (except rubber)	8	225	6.0	33.7	0.2	33.9	1.9	2.9	3.1	13.0	0.5	
2929	Furniture mfg n.e.c.	40	500	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
292	Total	353	3,651	77.1	299.6	15.3	314.9	30.2	38.1	33.5	136.1	2.7	
Miscellaneous manufacturing													
2941	Jewellery and silverware mfg	16	104	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2942	Toy and sporting good mfg	19	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2949	Manufacturing n.e.c.	75	541	10.6	36.8	1.0	37.9	4.2	3.8	4.1	20.0	1.7	
294	Total	109	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
29	Total other manufacturing	498	4,774	102.3	415.4	23.9	439.3	61.4	43.6	42.6	171.1	8.3	
21-29	TOTAL MANUFACTURING	3,426	62,097	1,834.4	12,386.0	929.3	13,315.2	7,523.6	1,001.7	1,389.5	4,810.4	587.2	

(a) See paragraph 8 of the Explanatory Notes. (b) See paragraphs 5 to 11 of the Explanatory Notes. (c) Includes working proprietors. (d) Excludes the drawings of working proprietors.

TABLE 3. MANUFACTURING ESTABLISHMENTS (6): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 AND 1992-93

Industry class ANZSIC code	Description	Persons employed per establishment (a) (No.)		Turnover per person employed (c)(d) (\$'000)		Value added per person employed (c)(f) (\$'000)		Wages and salaries per employee (d)(e) (\$'000)		Ratio of Value added to turnover		Wages and salaries to value added	
		1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93
FOOD, BEVERAGE AND TOBACCO MFG.													
	Meat and meat product mfg.												
2111	Meat processing	43	47	162.6	202.8	63.4	67.8	23.8	29.8	0.40	0.33	0.37	0.44
2112	Poultry processing	55	65	175.5	243.9	60.1	57.6	20.6	20.6	0.34	0.27	0.34	0.35
2113	Bacon, ham and smallgoods mfg.	43	39	157.7	175.8	65.6	70.1	23.2	26.7	0.42	0.40	0.35	0.37
211	Total	44	47	164.0	199.6	63.9	66.7	23.2	28.0	0.39	0.33	0.36	0.41
	Dairy product mfg.												
2121	Milk and cream processing	237	89	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2122	Ice cream mfg.	21	33	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2129	Dairy product mfg. n.e.c.	28	22	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
212	Total	73	43	187.1	97.5	38.2	166.8	20.9	37.1	0.20	0.41	0.54	0.22
213	Fruit and vegetable processing	27	34	101.5	n.p.	30.3	n.p.	22.7	n.p.	0.30	n.p.	0.72	n.p.
214	Oil and fat mfg.	25	34	262.5	n.p.	106.5	n.p.	22.2	n.p.	0.41	n.p.	0.21	n.p.
	Flour mill and cereal food mfg.												
2151	Flour mill product mfg.	29	41	352.3	352.6	111.3	145.1	29.1	33.3	0.32	0.41	0.26	0.23
2152	Cereal food and baking mix mfg.	12	14	135.5	247.8	66.8	85.5	19.9	28.4	0.49	0.35	0.29	0.32
215	Total	20	24	279.5	313.2	96.4	122.7	26.1	31.5	0.34	0.39	0.27	0.25
	Bakery product mfg.												
2161	Bread mfg.	28	25	101.5	103.9	43.7	47.6	23.1	27.6	0.43	0.46	0.52	0.55
2162	Cake and pastry mfg.	n.p.	25	n.p.	75.1	n.p.	37.9	n.p.	20.6	n.p.	0.51	n.p.	0.52
2163	Biscuit 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.
216	Total	27	25	88.6	91.4	40.1	43.5	21.4	24.5	0.45	0.48	0.52	0.54
	Other food mfg.												
2171	Sugar 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.
2172	Confectionery 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.
2173	Seafood processing	42	39	314.7	349.7	119.8	88.6	22.3	24.1	0.38	0.25	0.18	0.27
2174	Prepared animal and bird feed mfg.	15	12	332.4	405.8	87.4	90.2	22.3	27.6	0.26	0.22	0.25	0.28
2179	Food mfg. n.e.c.	n.p.	13	n.p.	133.3	n.p.	69.3	n.p.	32.7	n.p.	0.52	n.p.	0.45
217	Total	25	20	259.2	304.2	96.0	83.9	22.6	26.8	0.37	0.28	0.23	0.31

1 or footnotes see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 AND 1992-93—continued

Industry class ANZSIC code	Description	Persons employed per establishment (b)		Turnover per person employed (c)(d) (\$'000)	Value added per person employed (e)(f) (\$'000)	Wages and salaries per employee (d)(e) (\$'000)		Ratio of—						
		1989-90	1992-93			1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	
	Beverage and malt mfg.—													
2181	Soft drink, cordial and syrup mfg	83	118	272.1	263.4	24.9	34.4	0.44	0.30	0.21	0.43			
2182	Beer and malt mfg	180	140	353.0	422.1	41.2	47.0	0.47	0.39	0.25	0.29			
2183	Wine mfg	15	18	81.6	107.8	17.7	18.9	0.49	0.55	0.41	0.30			
2184	Spirit mfg													
218	Total	47	44	261.0	265.7	29.6	33.9	0.46	0.37	0.24	0.34			
219	Tobacco product mfg													
21	Total food, beverage and tobacco mfg	35	52	184.3	225.3	23.5	28.8	0.38	0.35	0.33	0.36			
	TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG.—													
	Textile fibre, yarn and woven fabric mfg													
2211	Wool scouring	26	42	76.4	87.7	27.6	31.5	0.52	0.65	0.69	0.54			
2212	Synthetic fibre textile mfg	4	4	29.8	35.8	16.3	15.4	0.60	0.60	0.92	0.59			
2213	Cotton textile mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.			
2214	Wool textile mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.			
2215	Textile finishing	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.			
221	Total	33	41	99.5	123.5	26.4	26.9	0.44	0.45	0.60	0.48			
	Textile product mfg.—													
2221	Made-up textile product mfg	30	36	87.0	102.7	22.0	22.4	0.52	0.32	0.48	0.67			
2222	Textile floor covering mfg	8	5	n.p.	73.9	n.p.	19.8	n.p.	0.53	n.p.	0.46			
2223	Rope, cordage and twine mfg	11	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.			
2229	Textile product mfg n.e.c.	10	n.p.	70.7	n.p.	15.8	n.p.	0.42	n.p.	0.51	n.p.			
222	Total	23	24	89.5	98.7	21.6	22.2	0.49	0.34	0.49	0.65			
	Knitting mills													
2231	Hosiery mfg													
2232	Cardigan and pullover mfg	n.p.	16	n.p.	77.0	n.p.	23.8	n.p.	0.46	n.p.	0.66			
2239	Knitting mill product mfg n.e.c.	n.p.	7	n.p.	150.3	n.p.	13.1	n.p.	0.15	n.p.	0.51			
223	Total	34	11	n.p.	99.3	n.p.	20.9	n.p.	0.32	n.p.	0.62			
	Clothing mfg.—													
2241	Men's and boys' wear mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.			
2242	Women's and girls' wear mfg	11	7	47.0	65.3	18.6	22.2	0.53	0.54	0.72	0.54			
2243	Sleepwear, underwear and infant clothing mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.			
2249	Clothing mfg n.e.c.	5	11	75.8	n.p.	17.9	n.p.	0.49	n.p.	0.44	n.p.			
224	Total	15	12	42.7	n.p.	17.2	n.p.	0.58	n.p.	0.68	n.p.			

For footnotes see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 AND 1992-93—continued

Industry class ANZSIC	Description	Persons employed per establishment (b) (No.)		Turnover per person employed (c)(d) (\$'000)		Value added per person employed (e)(f) (\$'000)	Wages and salaries per employee (g)(h) (\$'000)		Ratio of—		
		1989-90	1992-93	1989-90	1992-93		1989-90	1992-93	Value added to turnover	Wages and salaries to value added	
225	Footwear mfg	19	23	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
	Leather and leather product mfg										
2261	Leather tanning and fur dressing	14	12	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2262	Leather and leather substitute product mfg	14	17	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
226	Total	14	13	104.1	116.8	46.4	21.3	26.1	0.45	0.38	0.43
22	Total textile, clothing, footwear and leather mfg	20	19	72.4	89.2	35.9	20.5	24.3	0.50	0.45	0.56
	WOOD AND PAPER PRODUCT MFG										
	Log sawmilling and timber dressing—										
2311	Log sawmilling	35	n.p.	101.2	n.p.	52.7	24.1	n.p.	0.52	n.p.	0.45
2312	Wood chipping	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2313	Timber resawing and dressing	n.p.	37	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
231	Total	40	29	130.2	157.1	56.7	24.4	27.7	0.44	0.46	0.38
	Other wood product mfg—										
2321	Plywood and veneer mfg	--	--	--	--	--	--	--	--	--	--
2322	Fabricated wood mfg	n.p.	173	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2323	Wooden structural component mfg	n.p.	7	n.p.	98.1	44.3	n.p.	24.8	0.47	0.45	0.50
2329	Wood product mfg n.e.c.	7	7	87.5	n.p.	52.4	20.4	n.p.	0.60	n.p.	0.36
232	Total	9	10	n.p.	130.7	n.p.	n.p.	27.0	n.p.	0.39	0.49
	Paper and paper product mfg—										
2331	Pulp, paper and paperboard mfg	n.p.	35	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2332	Solid paperboard container mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2333	Corrugated paperboard container mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2334	Paper bag and sack mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2339	Paper product mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
233	Total	50	63	n.p.	188.5	57.7	n.p.	33.1	n.p.	0.31	0.57
23	Total wood and paper product mfg	16	15	122.0	149.6	53.5	24.2	28.3	0.44	0.40	0.46
	PRINTING, PUBLISHING AND RECORDED MEDIA—										
	Printing and services to printing										
2411	Paper stationery mfg	20	20	83.0	89.4	38.6	22.9	28.8	0.47	0.57	0.57
2412	Printing	12	10	87.7	109.3	41.7	24.2	27.7	0.48	0.47	0.52
2413	Services to printing	8	n.p.	66.7	n.p.	43.0	28.1	n.p.	0.65	n.p.	0.63
241	Total	12	n.p.	83.6	n.p.	41.2	24.4	n.p.	0.49	n.p.	0.57

For footnotes see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 AND 1992-93—continued

Industry class ANZSIC code	Description	Persons employed per establishment (b) (No.)		Turnover per person employed (c)(d) (\$'000)		Value added per person employed (c)(d) (\$'000)		Wages and salaries per employee (d)(e) (\$'000)		Ratio of			
		1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93		
Publishing													
2421	Newspaper printing or publishing	52	44	110.1	122.1	61.9	76.0	25.4	30.3	0.56	0.62	0.41	0.39
2422	Other periodical publishing	4	6	87.5	107.2	56.1	56.8	30.7	28.6	0.64	0.53	0.54	0.46
2423	Book and other publishing	n.p.	8	n.p.	158.5	n.p.	109.8	n.p.	26.4	n.p.	0.69	n.p.	0.22
242	Total	n.p.	29	n.p.	123.0	n.p.	76.6	n.p.	30.0	n.p.	0.62	n.p.	0.38
243	Recorded media manufacturing and publishing	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
24	Total printing, publishing and recorded media	18	15	95.5	112.8	50.8	64.0	24.8	29.1	0.53	0.57	0.48	0.44
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG.													
<i>Petroleum refining</i>													
		n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
	<i>Petroleum and coal product mfg n.e.c.</i>	n.p.	10	n.p.	184.6	n.p.	84.9	n.p.	30.9	n.p.	0.46	n.p.	0.35
Basic chemical mfg.													
2531	Fertiliser mfg	122	119	n.p.	n.p.	n.p.	n.p.	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.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2533	Synthetic resin mfg	n.p.	27	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2534	Organic industrial chemical mfg n.e.c.	13	n.p.	213.4	n.p.	84.4	n.p.	21.8	n.p.	0.40	n.p.	0.26	n.p.
2535	Inorganic industrial chemical mfg n.e.c.	132	69	n.p.	374.2	n.p.	129.8	n.p.	39.2	n.p.	0.35	n.p.	0.30
253	Total	73	62	303.9	361.8	141.3	130.8	35.8	39.6	0.46	0.36	0.25	0.30
Other chemical product mfg.													
2541	Explosive mfg	68	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2542	Paint mfg	30	28	179.2	247.1	82.8	138.5	26.8	29.0	0.46	0.56	0.32	0.21
2543	Medicinal and pharmaceutical product mfg	n.p.	43	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2544	Pesticide mfg	22	19	746.3	866.5	313.1	277.2	38.3	30.6	0.42	0.32	0.12	0.11
2545	Soap and other detergent mfg	15	14	160.0	160.7	57.7	92.2	31.7	31.2	0.36	0.57	0.55	0.33
2546	Cosmetic and toiletry preparation 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.
2547	Ink 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.
2549	Chemical product mfg n.e.c.	10	9	207.9	237.2	75.7	87.3	23.4	33.8	0.36	0.37	0.30	0.38
254	Total	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Rubber product mfg													
2551	Rubber tyre mfg	57	23	184.7	164.9	57.1	62.0	23.2	24.8	0.31	0.38	0.40	0.40
2559	Rubber product mfg n.e.c.	10	9	102.8	118.2	44.2	44.2	23.9	31.3	0.43	0.37	0.52	0.67
255	Total	23	13	159.5	141.8	53.1	53.2	23.4	28.0	0.33	0.38	0.43	0.51

For footnotes see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 AND 1992-93—continued

Industry class ANZSIC code	Description	Persons employed per establishment (b) (No.)		Turnover per person employed (c)(d) (\$'000)		Value added per person employed (e)(d) (\$'000)		Wages and salaries per employee (f)(e) (\$'000)		Ratio of—	
		1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93
	Plastic product mfg										
2561	Plastic blow moulded product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2562	Plastic extruded product mfg	33	29	232.0	236.9	81.9	107.7	27.8	37.7	0.35	0.34
2563	Plastic bag and film mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2564	Plastic product, rigid fibre reinforced, mfg	5	10	120.5	110.5	56.1	40.3	18.8	21.3	0.43	0.32
2565	Plastic foam product mfg	19	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2566	Plastic injection moulded product mfg	7	8	95.0	139.9	40.8	60.8	21.4	25.0	0.43	0.50
256	Total	14	15	134.7	171.7	61.9	74.6	24.5	29.7	0.40	0.39
25	Total petroleum, coal, chemical and associated product mfg	28	25	443.0	530.2	156.8	184.6	31.8	36.0	0.35	0.20
261	NON-METALLIC MINERAL PRODUCT MFG Glass and glass product mfg	21	12	154.4	n.p.	101.7	n.p.	31.5	n.p.	0.66	0.30
2621	Ceramic mfg— Clay brick mfg	104	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2622	Ceramic product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2623	Ceramic tile and pipe mfg	22	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2629	Ceramic product mfg n.e.c.	17	14	53.2	46.0	36.9	33.9	23.8	22.3	0.69	0.62
262	Total	44	38	109.2	137.8	69.8	75.9	26.9	29.5	0.64	0.38
2631	Cement, lime, plaster and concrete product mfg— Cement and lime mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2632	Plaster product mfg	20	24	219.6	401.1	82.2	96.0	27.7	32.2	0.18	0.33
2633	Concrete slurry mfg	11	24	453.1	401.1	82.2	96.0	27.7	32.2	0.24	0.33
2634	Concrete pipe and box culvert mfg	38	n.p.	124.1	n.p.	68.3	n.p.	31.3	n.p.	0.55	0.46
2635	Concrete product mfg n.e.c.	18	20	162.6	157.0	86.6	73.4	28.3	28.3	0.53	0.32
263	Total	20	25	229.6	231.0	92.0	89.2	29.6	31.2	0.40	0.37
264	Non-metallic mineral product mfg n.e.c.	21	15	219.1	n.p.	99.4	n.p.	31.5	n	0.45	0.31
26	Total non-metallic mineral product mfg	26	24	174.8	195.1	84.7	88.5	28.9	30	0.48	0.34
2711	METAL PRODUCT MFG— Iron and steel mfg	21	19	349.3	392.1	81.3	88.5	27.2	36.0	0.23	0.33
2712	Basic iron and steel mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2713	Iron and steel casting and forging	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
271	Steel pipe and tube mfg	24	28	209.1	231.0	64.5	78.7	29.1	32.8	0.31	0.45
271	Total	24	28	209.1	231.0	64.5	78.7	29.1	32.8	0.31	0.45

For footnotes see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 AND 1992-93 continued

Industry class ANZSIC code	Description	Persons employed per establishment (b) (No.)		Turnover per person employed (c)(d) (\$'000)		Value added per person employed (e)(d) (\$'000)		Wages and salaries per employee (d)(e) (\$'000)		Ratio of		
		1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	Value added to turnover
Basic non-ferrous metal mfg.												
2721	Alumina production	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2722	Aluminium smelting	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2723	Copper, silver, lead and zinc smelting, refining	157	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2729	Basic non-ferrous metal mfg n.e.c.	363	453	638.1	510.2	330.5	114.8	40.4	46.4	n.p.	0.52	n.p.
272	Total										0.22	0.40
Non-ferrous basic metal product mfg.												
2731	Aluminium rolling, drawing, extruding	n.p.	24	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2732	Non-ferrous metal rolling, drawing, extruding n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2733	Non-ferrous metal casting	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
273	Total	29	78	240.3	170.7	132.4	80.0	27.2	31.9	n.p.	0.55	0.39
Structural metal product mfg.												
2741	Structural steel fabricating	22	19	158.9	172.2	56.8	69.2	31.3	36.8	n.p.	0.36	0.54
2742	Architectural aluminium product mfg	19	15	115.8	133.0	43.9	48.4	22.5	27.6	n.p.	0.38	0.50
2749	Structural metal product mfg n.e.c.	11	6	93.6	133.9	31.3	55.3	21.0	27.7	n.p.	0.33	0.64
274	Total	79	76	740.2	756.3	50.7	61.2	27.7	33.1	n.p.	0.36	0.53
Sheet metal product mfg.												
2751	Metal container mfg	27	24	n.p.	340.8	n.p.	104.8	n.p.	34.1	n.p.	n.p.	0.32
2759	Sheet metal product mfg n.e.c.	14	12	n.p.	110.1	n.p.	50.2	n.p.	27.5	n.p.	n.p.	0.53
275	Total	75	73	729.8	754.2	56.2	60.6	24.0	28.8	n.p.	0.43	0.42
Fabricated metal product mfg.												
2761	Hand tool and general hardware mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2762	Spring and wire product mfg	16	12	141.3	193.1	56.8	71.8	24.6	26.8	n.p.	0.40	0.43
2763	Nut, bolt, screw and rivet mfg	8	18	114.8	101.4	63.1	43.5	22.8	30.7	n.p.	0.55	0.34
2764	Metal coating and finishing	14	8	79.1	86.9	48.6	57.5	26.5	28.5	n.p.	0.61	0.53
2765	Non-ferrous pipe fitting mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2769	Fabricated metal product mfg n.e.c.	13	10	86.4	93.0	43.8	47.2	22.6	25.9	n.p.	0.51	0.50
276	Total	73	70	93.0	107.0	47.6	51.2	24.2	26.8	n.p.	0.51	0.49
27	Total metal product mfg	25	22	295.5	285.3	141.7	81.0	30.9	36.6	n.p.	0.48	0.21

For footnotes see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 AND 1992-93—continued

Industry class ANZSIC code	Description	Persons employed per establishment (b) (No.)		Turnover per person employed (c)(d) (\$'000)		Value added per person employed (e)(f) (\$'000)		Wages and salaries per employee (d)(g) (\$'000)		Ratio of—		
		1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	Value added to turnover	1989-90	1992-93
MACHINERY AND EQUIPMENT MFG---												
	Motor vehicle and part mfg											
2811	Motor vehicle mfg	n.p.	---	n.p.	---	n.p.	---	n.p.	---	n.p.	---	n.p.
2812	Motor vehicle body mfg	18	n.p.	101.5	n.p.	40.4	n.p.	23.6	n.p.	0.40	n.p.	0.56
2813	Automotive electrical and instrument mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2819	Automotive component mfg n.e.c.	n.p.	8	n.p.	82.0	n.p.	46.0	n.p.	25.1	n.p.	0.56	n.p.
281	Total	12	12	89.2	114.2	37.4	52.1	22.8	35.0	0.42	0.46	0.58
	Other transport equipment mfg											
2821	Shipbuilding	n.p.	57	n.p.	206.1	n.p.	61.0	n.p.	32.2	n.p.	0.30	n.p.
2822	Boatbuilding	7	8	108.1	240.9	40.3	79.0	22.6	28.7	0.37	0.33	0.53
2823	Railway equipment mfg	28	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2824	Aircraft mfg	16	11	96.8	n.p.	56.8	n.p.	26.1	n.p.	0.59	n.p.	0.45
2829	Transport equipment mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
282	Total	18	18	n.p.	210.2	n.p.	75.1	n.p.	31.7	n.p.	0.36	n.p.
	Photographic and scientific equipment mfg											
2831	Photographic and optical good mfg	10	9	99.9	113.8	44.1	47.7	20.1	27.1	0.44	0.41	0.44
2832	Medical and surgical equipment mfg	n.p.	5	n.p.	74.2	n.p.	5.1	n.p.	23.7	0.55	0.70	0.71
2839	Professional and scientific equipment mfg n.e.c.	n.p.	9	n.p.	103.7	n.p.	5.1	n.p.	23.4	n.p.	0.50	n.p.
283	Total	6	6	n.p.	87.6	n.p.	5.1	n.p.	24.2	n.p.	0.58	n.p.
	Electronic equipment mfg											
2841	Computer and business machine mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2842	Telecommunication, broadcasting and transceiving equipment mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2849	Electronic equipment mfg n.e.c.	17	18	80.3	146.5	37.8	70.1	19.4	28.9	0.47	0.48	0.50
284	Total	20	17	86.6	138.0	41.9	70.3	23.9	30.2	0.48	0.51	0.56
	Electrical equipment and appliance mfg---											
2851	Household appliance mfg	21	14	132.9	150.7	50.1	67.1	24.7	26.9	0.38	0.45	0.49
2852	Electric cable and wire mfg	n.p.	10	n.p.	278.8	n.p.	133.3	n.p.	28.1	n.p.	0.48	n.p.
2853	Battery mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2854	Electric light and sign mfg	14	16	n.p.	76.1	n.p.	44.7	n.p.	27.5	n.p.	0.59	n.p.
2859	Electrical equipment mfg n.e.c.	15	10	91.7	97.1	46.4	43.7	27.3	28.4	0.51	0.45	0.58
285	Total	16	12	112.1	119.9	49.5	53.4	26.0	27.7	0.44	0.46	0.52

For footnotes see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 AND 1992-93 - continued

Industry class ANZSIC code	Description	Persons employed per establishment (b)		Turnover per person employed (c)(d)		Value added per person employed (e)(d)		Wages and salaries per employee (d)(e)		Ratio of		
		1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	1989-90	1992-93	Value added to turnover	1989-90	1992-93
	Industrial machinery and equipment mfg---											
2861	Agricultural machinery mfg	11	8	98.0	111.6	46.5	44.2	21.7	25.0	0.47	0.40	0.45
2862	Mining and construction machinery mfg	29	19	149.8	130.6	73.6	66.0	33.1	35.3	0.49	0.51	0.45
2863	Food processing machinery mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2864	Machine tool and part mfg	10	7	77.8	89.1	40.2	53.5	24.0	28.7	0.52	0.60	0.58
2865	Lifting and material handling equipment mfg	31	23	119.6	146.2	58.7	60.9	31.5	28.9	0.49	0.42	0.54
2866	Pump and compressor mfg	18	17	89.2	114.5	38.0	58.0	25.2	27.7	0.43	0.51	0.66
2867	Commercial space heating and cooling equipment mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2869	Industrial machinery and equipment mfg n.e.c.	14	11	115.8	122.6	59.4	58.0	29.6	31.6	0.51	0.47	0.49
386	Total	18	13	119.7	127.9	58.6	59.2	29.1	30.6	0.49	0.46	0.49
28	Total machinery and equipment mfg	15	13	113.6	139.5	52.9	61.4	27.3	29.3	0.47	0.44	0.51
	OTHER MANUFACTURING---											
2911	Prefabricated building mfg	13	13	208.4	183.6	75.0	59.4	27.9	27.8	0.36	0.32	0.36
2919	Prefabricated metal building mfg	9	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
291	Prefabricated building mfg n.e.c.	12	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
	Furniture mfg---											
2921	Wooden furniture and upholstered seat mfg	9	9	64.2	76.2	29.6	33.1	18.9	22.0	0.46	0.43	0.60
2922	Sheet metal furniture mfg	26	15	85.5	n.p.	27.5	n.p.	19.5	n.p.	0.32	n.p.	0.70
2923	Mattress mfg (except rubber)	84	28	70.1	154.1	23.0	58.9	26.4	27.6	0.33	0.38	1.15
2929	Furniture mfg n.e.c.	11	13	74.5	n.p.	36.3	n.p.	20.4	n.p.	0.49	n.p.	0.54
292	Total	11	10	67.8	87.3	29.0	37.7	19.9	23.2	0.43	0.43	0.65
	Miscellaneous manufacturing											
2941	Jewellery and silverware mfg	5	7	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2942	Toy and sporting good mfg (f)	7	n.p.	63.6	n.p.	35.0	n.p.	19.4	n.p.	0.55	0.53	0.50
2949	Manufacturing n.e.c. (f)	6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
294	Total	10	10	86.1	93.1	36.0	36.3	20.6	23.6	0.42	0.39	0.54
29	Total other manufacturing	20	18	190.2	217.1	83.0	78.4	26.5	30.8	0.44	0.36	0.31
21-29	TOTAL MANUFACTURING											

(a) See paragraph 8 of the Explanatory Notes. (b) Number of persons employed at end of June (including working proprietors) divided by the number of establishments in operation at 30 June. (c) Based on average employment over the whole year. Includes working proprietors. (d) Value data are at current prices and, therefore, do not discount the impact of price changes. (e) Based on average number of employees over the whole year. Excludes working proprietors and their drawings. (f) Data for 1989-90 for ANZSIC classes 2942 and 2949 have been combined.

TABLE 4. MANUFACTURING ESTABLISHMENTS (a): PERCENTAGE CHANGE IN GROSS PRODUCT AT FACTOR COST (AVERAGE 1989-90 PRICES) (b)
BY INDUSTRY SUBDIVISION, WESTERN AUSTRALIA, 1989-90 TO 1992-93
(%)

Industry subdivision		1989-90 to 1992-93			Change in gross product per person employed (c)
ANZSIC code	Description	1989-90 to 1990-91	1990-91 to 1991-92	1991-92 to 1992-93	
21	Food, beverage and tobacco mfg	3.1	-0.4	-5.1	9.5
22	Textile, clothing, footwear and leather mfg	1.4	-3.7	0.9	19.2
23	Wood and paper product mfg	7.7	1.5	7.9	10.9
24	Printing, publishing and recorded media	-7.6	-4.1	-1.6	2.1
25	Petroleum, coal, chemical and associated product mfg	5.6	1.8	3.5	20.2
26	Non-metallic mineral product mfg	-22.5	4.6	12.6	-1.6
27	Metal product mfg	3.9	3.5	1.0	-
28	Machinery and equipment mfg	-12.1	2.0	5.3	13.9
29	Other manufacturing	-20.5	-0.1	2.5	0.2
21-29	Total manufacturing	-4.4	-1.0	1.0	8.8

(a) See paragraph 8 of the Explanatory Notes. (b) See paragraphs 17 to 19 of the Explanatory Notes. (c) Based on average employment over the whole year. Includes working proprietors.

TABLE 5. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, WESTERN AUSTRALIA, 1992-93

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d)(e)		Turnover (e)		Value added (e)		Net capital expenditure (e)		Value added per person employed (e)(f)(f)		Ratio of (e)	
	(No.)	(%)	(No.)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$'000)	(e)(f)	Value added to turnover	Wages and salaries to value added
FOOD, BEVERAGE AND TOBACCO MFG																
0-3 persons	80	22.6	185	1.6	2.7	0.8	16.9	0.7	7.0	0.8	0.7	1.0	32.0	0.41	0.58	
4-9 persons	106	29.9	649	5.7	15.0	4.6	87.7	3.4	38.0	4.2	0.5	0.8	46.5	0.43	0.39	
10-19 persons	52	14.7	727	6.4	15.2	4.7	105.1	4.1	34.3	3.8	1.9	2.9	49.2	0.33	0.44	
20-49 persons	58	16.4	1,962	17.3	48.8	15.1	415.9	16.1	145.8	16.1	6.8	10.4	75.1	0.35	0.33	
50-99 persons	34	9.6	2,278	20.1	61.7	19.1	730.1	28.2	226.4	25.0	11.8	18.1	100.0	0.31	0.27	
Total less than 100 persons	330	93.2	5,802	51.1	143.3	44.3	1,335.8	52.4	431.5	50.0	21.8	33.2	76.0	0.33	0.32	
100-199 persons	11	3.1	1,576	13.9	51.5	15.9	304.2	11.7	132.4	14.6	10.6	16.2	86.0	0.44	0.39	
200-499 persons	13	3.7	3,978	35.0	128.7	39.8	929.4	35.9	320.0	35.4	33.1	50.5	79.8	0.34	0.40	
500-999 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total 100 or more persons	24	6.8	5,554	48.9	180.3	55.7	1,233.6	47.6	452.3	50.0	43.7	66.8	81.5	0.37	0.40	
Total	354	100.0	11,356	100.0	323.6	100.0	2,589.4	100.0	903.8	100.0	65.5	100.0	78.7	0.35	0.36	
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG																
0-3 persons	52	31.9	122	4.0	2.2	3.2	11.2	4.3	4.5	3.8	0.2	1.5	35.9	0.40	0.48	
4-9 persons	58	35.6	365	12.1	6.3	9.2	24.4	9.4	11.4	9.6	0.6	4.1	31.7	0.46	0.55	
10-19 persons	24	14.7	298	9.9	5.9	8.6	22.8	8.7	10.9	9.2	0.4	3.0	37.0	0.48	0.54	
20-49 persons	18	11.0	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
50-99 persons	7	4.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total less than 100 persons	159	97.5	1,826	60.5	38.9	57.0	133.8	51.3	68.0	57.7	7.9	58.8	37.8	0.51	0.57	
100-199 persons	3	1.8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
200-499 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
500-999 persons	1	0.6	n.p.	n.p.	n.p.	n.p.	n.p.	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	4	2.5	1,192	39.5	29.4	43.0	127.1	48.7	50.0	42.3	5.6	41.2	44.4	0.39	0.59	
Total	163	100.0	3,018	100.0	68.2	100.0	260.8	100.0	118.0	100.0	13.5	100.0	40.4	0.45	0.58	

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, WESTERN AUSTRALIA
1992-93—continued

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d)(e)		Turnover (e)		Value added (e)		Net capital expenditure (e)		Value added per person employed (e)(f)		Ratio of (e)	
	(No.)	(%)	(No.)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$'000)	Value added to turnover	Wages and salaries to value added	
WOOD AND PAPER PRODUCT MFG																
0-3 persons	91	31.9	200	4.6	3.4	2.9	13.4	2.1	7.0	2.8	0.2	0.5	34.0	0.52	0.48	
4-9 persons	116	40.7	685	15.8	12.8	11.2	58.7	9.3	31.6	12.6	1.1	3.7	49.9	0.54	0.41	
10-19 persons	49	17.2	648	14.9	14.6	12.8	56.1	8.9	28.0	11.2	1.4	4.5	45.1	0.50	0.52	
20-49 persons	16	5.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
50-99 persons	5	1.8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total less than 100 persons	277	97.2	2,344	54.0	54.5	47.5	319.4	50.8	135.8	54.3	4.0	12.8	60.2	0.43	0.40	
100-199 persons	4	1.4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
200-499 persons	3	1.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
500-999 persons	1	0.4	n.p.	n.p.	n.p.	n.p.	n.p.	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	8	2.8	1,995	46.0	60.3	52.5	309.5	49.2	114.3	45.7	27.0	87.2	58.7	0.37	0.53	
Total	285	100.0	4,339	100.0	114.8	100.0	628.9	100.0	250.2	100.0	31.0	100.0	59.5	0.40	0.46	
PRINTING, PUBLISHING AND RECORDED MEDIA																
0-3 persons	112	33.0	264	5.1	3.9	2.6	21.9	3.7	11.1	3.3	1.4	6.8	40.0	0.51	0.35	
4-9 persons	145	42.8	891	17.1	20.6	13.9	79.8	13.5	38.6	11.5	5.5	26.4	44.5	0.48	0.53	
10-19 persons	43	12.7	528	10.1	12.4	8.4	40.1	6.8	21.0	6.3	2.2	10.6	43.5	0.52	0.59	
20-49 persons	28	8.3	837	16.1	25.4	17.2	80.5	13.7	44.5	13.3	3.2	15.3	53.3	0.55	0.57	
50-99 persons	6	1.8	403	7.7	12.4	8.4	49.8	8.4	27.9	8.3	1.3	6.0	66.1	0.56	0.44	
Total less than 100 persons	334	98.5	2,922	56.1	74.7	50.4	272.1	46.2	143.1	42.8	13.6	65.1	49.6	0.53	0.52	
100-199 persons	1	0.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
200-499 persons	2	0.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
500-999 persons	1	0.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
1000 or more persons	1	0.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total 100 or more persons	5	1.5	2,288	43.9	73.5	49.6	317.2	53.8	191.6	57.2	7.3	34.9	82.5	0.60	0.38	
Total	339	100.0	5,210	100.0	148.2	100.0	589.3	100.0	334.7	100.0	20.8	100.0	64.3	0.57	0.44	

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, WESTERN AUSTRALIA
1992-93 continued

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d)(e)		Turnover (e)		Value added (e)		Net capital expenditure (e)		Value added per person employed (c)(e)(f)		Ratio of (e) —	
	(No.)	(%)	(No.)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$'000)	Value added to turnover	Wages and salaries to value added	
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG																
0-3 persons	62	31.0	129	2.5	2.4	1.3	77.7	2.9	53.8	5.7	1.8	1.5	411.8	0.69	0.04	
4-9 persons	52	26.0	290	5.7	6.7	3.7	52.7	1.9	20.6	2.2	1.2	0.9	75.4	0.39	0.33	
10-19 persons	35	17.5	474	9.3	14.5	7.9	89.9	3.3	37.8	4.0	4.9	4.0	77.9	0.42	0.38	
20-49 persons	34	17.0	997	19.6	31.6	17.3	274.5	10.1	120.2	12.7	6.5	5.3	114.2	0.44	0.26	
50-99 persons	6	3.0	446	8.8	14.3	7.8	120.5	4.4	53.0	5.6	8.9	7.2	122.8	0.44	0.27	
Total less than 100 persons	189	94.5	2,336	46.0	69.4	38.1	615.4	22.6	285.3	30.1	23.2	18.8	120.3	0.46	0.24	
100-199 persons	5	2.5	682	13.4	25.7	14.1	231.8	8.5	120.2	12.7	7.2	5.8	179.3	0.52	0.21	
200-499 persons	6	3.0	2,056	40.5	87.2	47.8	1,872.5	68.9	542.1	57.2	92.6	75.3	261.0	0.29	0.16	
500-999 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total (100 or more persons)	11	5.5	2,738	54.0	112.9	61.9	2,104.3	77.4	662.4	69.9	99.8	81.2	241.1	0.31	0.17	
Total	200	100.0	5,074	100.0	182.3	100.0	2,719.6	100.0	947.7	100.0	123.0	100.0	185.1	0.35	0.19	
NON METALLIC MINERAL PRODUCT MFG																
0-3 persons	43	22.4	83	1.8	1.3	1.0	9.0	1.0	4.5	1.1	0.3	1.0	55.1	0.50	0.28	
4-9 persons	60	31.3	368	7.9	7.8	5.8	50.0	5.7	21.4	5.4	0.8	2.8	59.3	0.43	0.36	
10-19 persons	47	24.5	628	13.5	11.3	8.5	52.8	6.0	24.6	6.2	1.7	5.9	42.8	0.47	0.46	
20-49 persons	21	10.9	613	13.2	17.5	13.1	137.4	15.7	37.2	9.4	2.3	7.9	61.5	0.27	0.47	
50-99 persons	9	4.7	603	13.0	19.4	14.5	155.8	17.8	61.2	15.4	4.7	16.0	106.3	0.39	0.32	
Total less than 100 persons	180	93.8	2,295	49.5	57.3	42.9	405.0	46.2	149.0	37.5	9.8	33.5	67.7	0.37	0.38	
100-199 persons	9	4.7	1,205	26.0	39.3	29.4	284.5	32.5	134.4	33.8	10.6	36.1	119.3	0.47	0.29	
200-499 persons	2	1.0	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
500-999 persons	1	0.5	n.p.	n.p.	n.p.	n.p.	n.p.	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)	12	6.3	2,340	50.5	76.2	57.1	470.9	53.8	248.4	62.5	19.5	66.5	108.6	0.53	0.31	
Total	192	100.0	4,635	100.0	133.5	100.0	875.9	100.0	397.4	100.0	29.3	100.0	88.6	0.45	0.34	

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, WESTERN AUSTRALIA
1992-93 continued

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d)(e)		Turnover (e)		Value added (e)		Net capital expenditure (c)		Value added per person employed (c)(e)(f)		Ratio of (e)—	
	(No.)	(%)	(No.)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$'000)	Value added to turnover	Wages and salaries to value added	
METAL PRODUCT MFG																
0-3 persons	148	23.4	322	2.3	5.2	1.1	396.2	10.3	284.6	25.9	16.8	6.2	854.2	0.72	0.02	
4-9 persons	250	39.6	1,532	11.0	39.8	8.2	204.8	5.3	100.9	9.2	2.0	0.7	67.1	0.49	0.39	
10-19 persons	113	17.9	1,542	11.1	40.0	8.2	158.9	4.1	75.9	6.9	3.2	1.2	54.2	0.48	0.53	
20-49 persons	72	11.4	2,111	15.2	61.8	12.7	312.7	8.1	117.3	10.7	-4.5	-1.7	57.6	0.38	0.53	
50-99 persons	36	5.7	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total less than 100 persons	619	97.9	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
100-199 persons	9	1.4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
200-499 persons	2	0.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
500-999 persons	1	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
1000 or more persons	1	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total 100 or more persons	13	2.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total	632	100.0	13,925	100.0	485.5	100.0	3,864.1	100.0	1,097.6	100.0	272.0	100.0	81.1	0.28	0.44	
MACHINERY AND EQUIPMENT MFG																
0-3 persons	259	33.9	529	5.4	10.2	3.7	53.6	4.0	24.0	4.1	0.4	1.6	44.6	0.45	0.42	
4-9 persons	283	37.1	1,677	17.2	36.5	13.4	178.2	13.4	83.5	14.2	4.0	14.2	50.4	0.47	0.44	
10-19 persons	115	15.1	1,537	15.7	38.3	14.0	193.0	14.5	82.0	14.0	5.0	17.8	55.7	0.42	0.47	
20-49 persons	64	8.4	2,063	21.1	59.9	22.0	282.4	21.2	131.1	22.4	2.8	10.1	65.7	0.46	0.46	
50-99 persons	27	3.5	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total less than 100 persons	749	98.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
100-199 persons	12	1.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
200-499 persons	2	0.3	n.p.	n.p.	n.p.	n.p.	n.p.	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	14	1.8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total	763	100.0	9,767	100.0	272.7	100.0	1,332.1	100.0	586.4	100.0	28.1	100.0	61.4	0.44	0.47	

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, WESTERN AUSTRALIA
1992-93 continued

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d)(e)		Turnover (c)		Value added (c)		Net capital expenditure (c)		Value added per person employed (c)(f)(f)		Ratio of (c) —	
	(No.)	(%)	(No.)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	Value added to turnover	Wages and salaries to value added
OTHER MANUFACTURING																
0-3 persons	183	36.7	382	8.0	5.8	5.7	29.9	6.8	13.0	7.6	1.0	11.6	31.9	0.43	0.45	
4-9 persons	178	35.7	1,056	22.1	18.7	18.4	77.2	17.6	37.1	21.6	0.6	7.3	35.6	0.48	0.50	
10-19 persons	91	18.3	1,144	24.0	24.0	23.5	111.5	25.4	44.8	26.2	0.5	5.9	39.7	0.40	0.54	
20-49 persons	32	6.4	993	20.8	24.9	24.4	110.7	25.2	29.8	17.4	3.6	43.4	31.3	0.27	0.83	
50-99 persons	11	2.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total less than 100 persons	495	99.4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
100-199 persons	2	0.4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
200-499 persons	1	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	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	3	0.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total	498	100.0	4,774	100.0	102.0	100.0	438.4	100.0	171.3	100.0	8.3	100.0	36.4	0.39	0.60	
TOTAL MANUFACTURING																
0-3 persons	1,032	30.1	2,216	3.6	37.0	2.0	630.0	4.7	409.6	8.5	22.7	3.8	176.6	0.65	0.09	
4-9 persons	1,249	36.5	7,513	12.1	164.1	9.0	813.6	6.1	383.1	8.0	16.3	2.8	51.0	0.47	0.43	
10-19 persons	568	16.6	7,525	12.1	176.1	9.6	830.2	6.2	359.4	7.5	21.2	3.6	50.2	0.43	0.49	
20-49 persons	343	10.0	10,531	17.0	293.7	16.0	1,717.0	12.9	671.2	14.0	21.6	3.6	64.8	0.39	0.44	
50-99 persons	140	4.1	9,606	15.5	282.2	15.4	2,051.5	15.4	746.6	15.5	57.0	9.6	79.4	0.36	0.38	
Total less than 100 persons	3,332	97.3	37,391	60.2	953.2	52.1	6,042.3	45.4	2,569.9	53.5	138.7	23.5	69.9	0.43	0.37	
100-199 persons	56	1.6	7,590	12.2	254.3	13.9	1,422.1	10.7	660.7	13.7	68.9	11.7	89.8	0.46	0.38	
200-499 persons	31	0.9	9,393	15.1	322.5	17.6	3,959.6	29.8	1,029.0	21.4	208.3	35.2	108.9	0.26	0.31	
500-999 persons	5	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
1000 or more persons	2	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total 100 or more persons	94	2.7	24,706	39.8	877.7	47.9	7,256.3	54.6	2,237.1	46.5	452.7	76.5	91.5	0.31	0.39	
Total	3,426	100.0	62,097	100.0	1,830.8	100.0	13,298.6	100.0	4,807.0	100.0	591.4	100.0	78.5	0.36	0.38	

(a) See paragraphs 8, 16 and 20 of the Explanatory Notes. (b) See paragraphs 5 to 11 of the Explanatory Notes. (c) Includes working proprietors. (d) Excludes the drawings of working proprietors. (e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1992-93 but were not operating at 30 June 1993. See paragraph 20 of the Explanatory Notes. (f) Based on average employment over the whole year.

TABLE 6. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)
BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93

Industry class		Current expenditure on environmental protection		Capital expenditure to abate pollution	
		(\$'000)	Proportion of total turnover (%)	(\$'000)	Proportion of total capital expenditure (%)
ANZSIC code	Description				
FOOD, BEVERAGE AND TOBACCO MFG—					
Meat and meat product mfg					
2111	Meat processing	825	0.1	1,262	11.0
2112	Poultry processing	496	0.4	—	—
2113	Bacon, ham and smallgood mfg	175	0.1	—	—
211	Total	1,495	0.2	1,262	7.7
Dairy product mfg -					
2121	Milk and cream processing	2,606	n.p.	n.p.	n.p.
2122	Ice cream mfg	n.p.	n.p.	—	—
2129	Dairy product mfg n.e.c.	n.p.	n.p.	n.p.	n.p.
212	Total	3,217	1.0	n.p.	n.p.
213	Fruit and vegetable processing	276	n.p.	—	—
214	Oil and fat mfg	147	n.p.	n.p.	n.p.
Flour mill and cereal food mfg—					
2151	Flour mill product mfg	n.p.	n.p.	n.p.	n.p.
2152	Cereal food and baking mix mfg	n.p.	n.p.	n.p.	n.p.
215	Total	90	0.1	n.p.	n.p.
Bakery product mfg—					
2161	Bread mfg	116	0.1	n.p.	n.p.
2162	Cake and pastry mfg	54	0.1	—	—
2163	Biscuit mfg	—	—	—	—
216	Total	170	0.1	n.p.	n.p.
Other food mfg—					
2171	Sugar mfg	n.p.	n.p.	n.p.	n.p.
2172	Confectionery mfg	n.p.	n.p.	—	—
2173	Seafood processing	232	0.1	—	—
2174	Prepared animal and bird feed mfg	n.p.	n.p.	n.p.	n.p.
2179	Food mfg n.e.c.	575	1.0	n.p.	n.p.
217	Total	941	0.2	68	0.6
Beverage and malt mfg—					
2181	Soft drink, cordial and syrup mfg	400	0.2	—	—
2182	Beer and malt mfg	2,530	1.1	n.p.	n.p.
2183	Wine mfg	82	0.1	—	—
2184	Spirit mfg	—	—	—	—
218	Total	3,012	0.6	n.p.	n.p.
219	Tobacco product mfg	—	—	—	—
21	Total food, beverage and tobacco mfg	9,349	0.4	1,844	2.4

For footnotes see end of table.

**TABLE 6. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)
BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93—continued**

Industry class		Current expenditure on environmental protection		Capital expenditure to abate pollution	
ANZSIC code	Description	(\$'000)	Proportion of total turnover (%)	(\$'000)	Proportion of total capital expenditure (%)
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG—					
Textile fibre, yarn and woven fabric mfg—					
2211	Wool scouring	570	2.9	n.p.	n.p.
2212	Synthetic fibre textile mfg	—	—	—	—
2213	Cotton textile mfg	n.p.	n.p.	—	—
2214	Wool textile mfg	—	—	—	—
2215	Textile finishing	—	—	—	—
221	Total	n.p.	n.p.	n.p.	n.p.
Textile product mfg—					
2221	Made-up textile product mfg	n.p.	n.p.	—	—
2222	Textile floor covering mfg	—	—	—	—
2223	Rope, cordage and twine mfg	—	—	—	—
2229	Textile product mfg n.e.c.	n.p.	n.p.	—	—
222	Total	201	0.2	—	—
Knitting mills—					
2231	Hosiery mfg	—	—	—	—
2232	Cardigan and pullover mfg	n.p.	n.p.	—	—
2239	Knitting mill product mfg n.e.c.	—	—	—	—
223	Total	n.p.	n.p.	—	—
Clothing mfg—					
2241	Men's and boys' wear mfg	—	—	—	—
2242	Women's and girls' wear mfg	n.p.	n.p.	—	—
2243	Sleepwear, underwear and infant clothing mfg	—	—	—	—
2249	Clothing mfg n.e.c.	—	—	—	—
224	Total	n.p.	n.p.	—	—
225	Footwear mfg	n.p.	n.p.	—	—
Leather and leather product mfg—					
2261	Leather tanning and fur dressing	173	n.p.	—	—
2262	Leather and leather substitute product mfg	—	—	—	—
226	Total	173	n.p.	—	—
22	Total textile, clothing, footwear and leather mfg	1,051	0.4	n.p.	n.p.
WOOD AND PAPER PRODUCT MFG—					
Log sawmilling and timber dressing—					
2311	Log sawmilling	n.p.	n.p.	n.p.	n.p.
2312	Wood chipping	—	—	—	—
2313	Timber resawing and dressing	n.p.	n.p.	n.p.	n.p.
231	Total	158	0.1	17	0.1
Other wood product mfg—					
2321	Plywood and veneer mfg	—	—	—	—
2322	Fabricated wood mfg	n.p.	n.p.	n.p.	n.p.
2323	Wooden structural component mfg	48	—	—	—
2329	Wood product mfg n.e.c.	n.p.	n.p.	n.p.	n.p.
232	Total	193	0.1	n.p.	n.p.
Paper and paper product mfg—					
2331	Pulp, paper and paperboard mfg	n.p.	n.p.	n.p.	n.p.
2332	Solid paperboard container mfg	—	—	—	—
2333	Corrugated paperboard container mfg	n.p.	n.p.	—	—
2334	Paper bag and sack mfg	n.p.	n.p.	—	—
2339	Paper product mfg n.e.c.	—	—	—	—
233	Total	103	0.1	n.p.	n.p.
23	Total wood and paper product mfg	455	0.1	799	2.3

For footnotes see end of table.

TABLE 6. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)
BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93—continued

Industry class		Current expenditure on environmental protection		Capital expenditure to abate pollution	
		(\$'000)	Proportion of total turnover (%)	(\$'000)	Proportion of total capital expenditure (%)
ANZSIC code	Description				
PRINTING, PUBLISHING AND RECORDED MEDIA—					
Printing and services to printing—					
2411	Paper stationery mfg	9	—	n.p.	n.p.
2412	Printing	105	0.1	197	2.0
2413	Services to printing	n.p.	n.p.	n.p.	n.p.
241	Total	n.p.	n.p.	n.p.	n.p.
Publishing					
2421	Newspaper printing or publishing	26	—	—	—
2422	Other periodical publishing	n.p.	n.p.	n.p.	n.p.
2423	Book and other publishing	—	—	—	—
242	Total	n.p.	n.p.	n.p.	n.p.
243	Recorded media manufacturing and publishing	—	—	—	—
24	Total printing, publishing and recorded media	477	0.1	224	0.9
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG—					
251	Petroleum refining	n.p.	n.p.	n.p.	n.p.
252	Petroleum and coal product mfg n.e.c.	11	0.1	—	—
Basic chemical mfg—					
2531	Fertiliser mfg	n.p.	n.p.	n.p.	n.p.
2532	Industrial gas mfg	—	—	—	—
2533	Synthetic resin mfg	n.p.	n.p.	—	—
2534	Organic industrial chemical mfg n.e.c.	n.p.	n.p.	—	—
2535	Inorganic industrial chemical mfg n.e.c.	1,845	0.5	n.p.	n.p.
253	Total	2,273	0.4	2,105	7.6
Other chemical product mfg—					
2541	Explosive mfg	n.p.	n.p.	n.p.	n.p.
2542	Paint mfg	213	0.2	n.p.	n.p.
2543	Medicinal and pharmaceutical product mfg	n.p.	n.p.	—	—
2544	Pesticide mfg	91	0.1	n.p.	n.p.
2545	Soap and other detergent mfg	n.p.	n.p.	—	—
2546	Cosmetic and toiletry preparation mfg	—	—	—	—
2547	Ink mfg	—	—	—	—
2549	Chemical product mfg n.e.c.	19	0.1	n.p.	n.p.
254	Total	n.p.	n.p.	n.p.	n.p.
Rubber product mfg—					
2551	Rubber tyre mfg	n.p.	n.p.	n.p.	n.p.
2559	Rubber product mfg n.e.c.	—	—	—	—
255	Total	n.p.	n.p.	n.p.	n.p.
Plastic product mfg—					
2561	Plastic blow moulded product mfg	—	—	—	—
2562	Plastic extruded product mfg	n.p.	n.p.	n.p.	n.p.
2563	Plastic bag and film mfg	n.p.	n.p.	—	—
2564	Plastic product, rigid fibre reinforced, mfg	24	0.3	n.p.	n.p.
2565	Plastic foam product mfg	n.p.	n.p.	n.p.	n.p.
2566	Plastic injection moulded product mfg	47	0.1	—	—
256	Total	342	0.1	81	0.4
25	Total petroleum, coal, chemical and associated product mfg	6,733	0.2	36,394	28.7

For footnotes see end of table.

TABLE 6. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)
BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93—continued

Industry class		Current expenditure on environmental protection		Capital expenditure to abate pollution	
ANZSIC code	Description	(\$'000)	Proportion of total turnover (%)	(\$'000)	Proportion of total capital expenditure (%)
NON-METALLIC MINERAL PRODUCT MFG—					
261	Glass and glass product mfg	1,163	n.p.	—	—
Ceramic mfg—					
2621	Clay brick mfg	n.p.	n.p.	—	—
2622	Ceramic product mfg	n.p.	n.p.	—	—
2623	Ceramic tile and pipe mfg	21	n.p.	—	—
2629	Ceramic product mfg n.e.c.	48	0.4	—	—
262	Total	379	0.2	—	—
Cement, lime, plaster and concrete product mfg—					
2631	Cement and lime mfg	n.p.	n.p.	n.p.	n.p.
2632	Plaster product mfg	131	0.3	n.p.	n.p.
2633	Concrete slurry mfg	460	0.3	39	0.7
2634	Concrete pipe and box culvert mfg	n.p.	n.p.	—	—
2635	Concrete product mfg n.e.c.	257	0.2	290	4.3
263	Total	1,635	0.3	n.p.	n.p.
264	Non-metallic mineral product mfg n.e.c.	854	n.p.	n.p.	n.p.
26	Total non-metallic mineral product mfg	4,030	0.5	583	1.7
METAL PRODUCT MFG—					
Iron and steel mfg—					
2711	Basic iron and steel mfg	24	—	n.p.	n.p.
2712	Iron and steel casting and forging	n.p.	n.p.	n.p.	n.p.
2713	Steel pipe and tube mfg	n.p.	n.p.	n.p.	n.p.
271	Total	475	0.2	229	4.8
Basic non-ferrous metal mfg—					
2721	Alumina production	n.p.	n.p.	n.p.	n.p.
2722	Aluminium smelting	—	—	—	—
2723	Copper, silver, lead and zinc smelting, refining	—	—	—	—
2729	Basic non-ferrous metal mfg n.e.c.	n.p.	n.p.	n.p.	n.p.
272	Total	37,198	1.5	42,938	16.9
Non-ferrous basic metal product mfg—					
2731	Aluminium rolling, drawing, extruding	n.p.	n.p.	n.p.	n.p.
2732	Non-ferrous metal rolling, drawing, extruding n.e.c.	—	—	—	—
2733	Non-ferrous metal casting	n.p.	n.p.	—	—
273	Total	260	1.0	n.p.	n.p.
Structural metal product mfg—					
2741	Structural steel fabricating	226	0.1	n.p.	n.p.
2742	Architectural aluminium product mfg	113	0.1	n.p.	n.p.
2749	Structural metal product mfg n.e.c.	7	—	—	—
274	Total	347	0.1	n.p.	n.p.
Sheet metal product mfg—					
2751	Metal container mfg	193	0.2	—	—
2759	Sheet metal product mfg n.e.c.	51	—	—	—
275	Total	243	0.1	—	—
Fabricated metal product mfg—					
2761	Hand tool and general hardware mfg	n.p.	n.p.	—	—
2762	Spring and wire product mfg	36	0.1	n.p.	n.p.
2763	Nut, bolt, screw and rivet mfg	n.p.	n.p.	—	—
2764	Metal coating and finishing	160	0.4	n.p.	n.p.
2765	Non-ferrous pipe fitting mfg	n.p.	n.p.	—	—
2769	Fabricated metal product mfg n.e.c.	59	0.1	n.p.	n.p.
276	Total	273	0.1	28	0.6
27	Total metal product mfg	38,795	1.0	43,228	15.0

For footnotes see end of table.

**TABLE 6. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)
BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93—continued**

Industry class		Current expenditure on environmental protection		Capital expenditure to abate pollution	
		(\$'000)	Proportion of total turnover (%)	(\$'000)	Proportion of total capital expenditure (%)
ANZSIC code	Description				
MACHINERY AND EQUIPMENT MFG -					
Motor vehicle and part mfg—					
2811	Motor vehicle mfg	—	—	—	—
2812	Motor vehicle body mfg	n.p.	n.p.	—	—
2813	Automotive electrical and instrument mfg	n.p.	n.p.	—	—
2819	Automotive component mfg n.e.c.	59	0.1	n.p.	n.p.
281	Total	122	0.1	n.p.	n.p.
Other transport equipment mfg—					
2821	Shipbuilding	83	—	—	—
2822	Boatbuilding	21	—	—	—
2823	Railway equipment mfg	n.p.	n.p.	—	—
2824	Aircraft mfg	n.p.	n.p.	—	—
2829	Transport equipment mfg n.e.c.	—	—	—	—
282	Total	159	—	—	—
Photographic and scientific equipment mfg—					
2831	Photographic and optical good mfg	52	0.6	—	—
2832	Medical and surgical equipment mfg	5	—	—	—
2839	Professional and scientific equipment mfg n.e.c.	11	0.1	—	—
283	Total	68	0.2	—	—
Electronic equipment mfg—					
2841	Computer and business machine mfg	—	—	—	—
2842	Telecommunication, broadcasting and transceiving equipment mfg	n.p.	n.p.	—	—
2849	Electronic equipment mfg n.e.c.	n.p.	n.p.	n.p.	n.p.
284	Total	24	—	n.p.	n.p.
Electrical equipment and appliance mfg—					
2851	Household appliance mfg	58	0.1	—	—
2852	Electric cable and wire mfg	15	0.1	—	—
2853	Battery mfg	—	—	—	—
2854	Electric light and sign mfg	24	0.2	—	—
2859	Electrical equipment mfg n.e.c.	26	—	—	—
285	Total	122	0.1	—	—
Industrial machinery and equipment mfg—					
2861	Agricultural machinery mfg	8	—	—	—
2862	Mining and construction machinery mfg	7	—	—	—
2863	Food processing machinery mfg	—	—	—	—
2864	Machine tool and part mfg	n.p.	n.p.	—	—
2865	Lifting and material handling equipment mfg	54	—	—	—
2866	Pump and compressor mfg	n.p.	n.p.	—	—
2867	Commercial space heating and cooling equipment mfg	n.p.	n.p.	—	—
2869	Industrial machinery and equipment mfg n.e.c.	54	—	—	—
286	Total	163	—	—	—
28	Total machinery and equipment mfg	658	—	n.p.	n.p.

For footnotes see end of table.

**TABLE 6. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)
BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1992-93—continued**

<i>Industry class</i>		<i>Current expenditure on environmental protection</i>		<i>Capital expenditure to abate pollution</i>	
<i>ANZSIC code</i>	<i>Description</i>	<i>(\$'000)</i>	<i>Proportion of total turnover (%)</i>	<i>(\$'000)</i>	<i>Proportion of total capital expenditure (%)</i>
	OTHER MANUFACTURING—				
	Prefabricated building mfg—				
2911	Prefabricated metal building mfg	n.p.	n.p.	—	—
2919	Prefabricated building mfg n.e.c.	—	—	—	—
291	<i>Total</i>	n.p.	n.p.	—	—
	Furniture mfg—				
2921	Wooden furniture and upholstered seat mfg	173	0.1	13	0.3
2922	Sheet metal furniture mfg	21	n.p.	—	—
2923	Mattress mfg (except rubber)	17	0.1	—	—
2929	Furniture mfg n.e.c.	36	n.p.	—	—
292	<i>Total</i>	247	0.1	13	0.3
	Miscellaneous manufacturing—				
2941	Jewellery and silverware mfg	n.p.	n.p.	—	—
2942	Toy and sporting good mfg	n.p.	n.p.	—	—
2949	Manufacturing n.e.c.	15	—	—	—
294	<i>Total</i>	n.p.	n.p.	—	—
29	Total other manufacturing	582	0.1	13	0.1
21-29	TOTAL MANUFACTURING	62,130	0.5	83,130	12.9

(a) See paragraph 8 of the Explanatory Notes. (b) See paragraph 21 of the Explanatory Notes. Establishments which did not respond to the questions are treated as having nil expenditure.

TABLE 7. MANUFACTURING ESTABLISHMENTS (a): EXPORTS OF GOODS PRODUCED BY BROAD EMPLOYMENT SIZE (b) BY INDUSTRY SUBDIVISION
WESTERN AUSTRALIA, 1992-93 (c)

Industry subdivision ANZSIC code Description	Employment size group						Total	
	0-49 persons		50-99 persons		100 or more persons			
	Amount exported by this business or its agent (\$m)	Exports as a proportion of sales of goods produced (%)	Amount exported by this business or its agent (\$m)	Exports as a proportion of sales of goods produced (%)	Amount exported by this business or its agent (\$m)	Exports as a proportion of sales of goods produced (%)		
21 Food, beverage and tobacco mfg	103.2	17.6	179.6	26.5	146.4	12.2	429.3	17.4
22 Textile, clothing, footwear and leather mfg	11.5	13.9	n.p.	n.p.	n.p.	n.p.	15.2	6.5
23 Wood and paper product mfg	n.p.	n.p.	n.p.	n.p.	19.0	6.3	103.4	16.9
24 Printing, publishing and recorded media	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	7.6	2.1
25 Petroleum, coal, chemical and associated product mfg	85.8	18.2	n.p.	n.p.	388.9	19.6	474.7	18.5
26 Non-metallic mineral product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	12.4	1.5
27 Metal product mfg	n.p.	n.p.	25.8	5.7	n.p.	n.p.	1,161.7	31.1
28 Machinery and equipment mfg	97.8	18.2	n.p.	n.p.	n.p.	n.p.	184.6	19.4
29 Other manufacturing	4.9	1.6	0.5	0.8	---	---	5.5	1.3
21-29 Total manufacturing	336.5	9.4	300.7	16.2	1,757.0	26.2	2,394.2	19.7

(a) See paragraph 8 of the Explanatory Notes. (b) See paragraphs 20 and 22 of the Explanatory Notes. (c) This table excludes those manufacturing establishments which operated during 1992-93 but were not operating at 30 June 1993.

**TABLE 8. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS (IN PERCENTAGE TERMS) BY PROPORTION OF EXPORTS (b) BY INDUSTRY SUBDIVISION
WESTERN AUSTRALIA, 1992-93**

Industry subdivision ANZSIC code	Description	Establishments that do not export				Establishments with exports up to and including 50 % of sales of goods that they produced				Establishments with exports of more than 50 % of sales of goods that they produced			
		Employment at end of June (%) (c)	Wages and salaries (d) (%)	Turnover (%)	Value added (%)	Employment at end of June (%) (c)	Wages and salaries (d) (%)	Turnover (%)	Value added (%)	Employment at end of June (%) (c)	Wages and salaries (d) (%)	Turnover (%)	Value added (%)
21	Food, beverage and tobacco mfg	66.6	58.7	52.3	54.2	21.4	26.3	30.8	33.7	12.0	15.1	16.9	12.1
22	Textile, clothing, footwear and leather mfg	n.p.	n.p.	n.p.	n.p.	29.5	36.2	33.5	39.0	n.p.	n.p.	n.p.	n.p.
23	Wood and paper product mfg	57.1	51.2	42.8	43.6	40.7	45.9	44.7	41.8	2.1	2.9	12.5	14.6
24	Printing, publishing and recorded media	92.2	89.7	87.4	90.7	7.8	10.3	12.6	9.3				
25	Petroleum, coal, chemical and associated product mfg	54.8	49.9	27.7	33.8	28.3	31.7	60.7	53.6	16.9	18.3	11.5	12.6
26	Non-metallic mineral product mfg	74.7	72.2	78.7	74.8	24.6	27.3	21.0	24.9	0.6	0.5	0.3	0.4
27	Metal product mfg	64.1	55.7	58.9	51.2	11.2	10.1	5.3	7.9	24.7	34.2	35.8	40.9
28	Machinery and equipment mfg	62.1	59.1	53.6	57.9	30.6	33.3	33.1	30.4	7.3	7.6	13.3	11.8
29	Other manufacturing	n.p.	n.p.	n.p.	n.p.	11.5	13.2	14.7	15.7	n.p.	n.p.	n.p.	n.p.
21-29	Total manufacturing	67.9	61.4	53.3	54.8	21.2	23.2	28.5	28.8	10.9	15.4	18.2	16.4

(a) See paragraph 8 of the Explanatory Notes. (b) See paragraph 22 of the Explanatory Notes. (c) Includes working proprietors. (d) Excludes the drawings of working proprietors.

TABLE 9. MANUFACTURING ESTABLISHMENTS (a): RELATIVE STANDARD ERRORS (b) FOR SELECTED DATA ITEMS BY INDUSTRY SUBDIVISION
WESTERN AUSTRALIA, 1992-93
(%)

Industry subdivision	Employment at end of June (c)	Wages and salaries (d)	Turnover	Purchases	Value added	Own account capital work	Acquisition of plant, machinery and equipment
ANZSIC code Description							
21 Food, beverage and tobacco mfg	1.1	0.9	1.2	1.7	0.9	3.9	0.8
22 Textile, clothing, footwear and leather mfg	1.6	1.5	1.2	1.4	1.3	—	0.6
23 Wood and paper product mfg	2.3	2.2	1.7	1.8	1.7	4.0	2.0
24 Printing, publishing and recorded media	2.4	2.0	1.7	2.8	1.5	—	7.2
25 Petroleum, coal, chemical and associated product mfg	1.0	1.6	0.7	0.5	0.8	6.2	0.3
26 Non-installable mineral product mfg	1.9	1.4	1.3	1.6	1.2	0.3	1.6
27 Metal product mfg	2.2	2.2	1.5	2.1	2.9	5.1	0.7
28 Machinery and equipment mfg	1.9	1.8	3.1	3.7	2.4	8.6	4.8
29 Other manufacturing	3.3	2.9	3.2	3.5	3.8	18.0	6.1
21-29 Total manufacturing	0.7	0.7	0.6	0.8	0.8	2.0	0.5

(a) See paragraph 8 of the Explanatory Notes. (b) See paragraphs 12 to 14 of the Explanatory Notes. (c) Includes working proprietors. (d) Excludes the drawings of working proprietors.

TABLE 10. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 TO 1991-92 (b)

Industry class ANZSIC code	Description	Employment at end of June (c) ('000)				Turnover (d) (\$m)		Value added (e) (\$m)
		1989-90	1990-91	1991-92	1989-90	1991-92	1989-90	
FOOD, BEVERAGE AND TOBACCO MFG—								
Meat and meat product mfg—								
2111	Meat processing	2.6	2.4	2.1	514.5	498.1	482.9	203.6
2112	Poultry processing	0.7	0.7	0.8	129.2	117.2	126.5	44.3
2113	Bacon, ham and smallgoods mfg	0.7	0.7	0.7	108.4	126.5	129.9	45.1
211	Total	4.0	3.9	3.5	752.0	741.8	739.4	292.9
Dairy product mfg—								
2121	Milk and cream processing	0.9	0.8	0.4	n.p.	n.p.	n.p.	n.p.
2122	Ice cream mfg	0.1	0.2	0.3	n.p.	n.p.	n.p.	n.p.
2129	Dairy product mfg n.e.c.	0.3	0.3	0.2	n.p.	n.p.	n.p.	n.p.
212	Total	1.3	1.3	0.9	240.4	282.4	n.p.	49.1
213	Fruit and vegetable processing	0.3	0.4	0.3	29.5	n.p.	n.p.	8.8
214	Oil and fat mfg	0.1	0.1	0.1	34.6	n.p.	n.p.	14.1
Flour mill and cereal food mfg—								
2151	Flour mill product mfg	0.2	0.2	0.2	70.5	72.9	64.6	22.3
2152	Cereal food and baking mix mfg	0.1	0.1	0.1	13.7	9.7	12.1	6.7
215	Total	0.3	0.3	0.3	84.1	82.6	76.6	29.0
Bakery product mfg—								
2161	Bread mfg	1.2	1.3	1.1	123.8	113.3	98.7	53.2
2162	Cake and pastry mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2163	Biscuit mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
216	Total	2.3	2.5	1.9	209.5	217.6	198.7	94.9
Other food mfg—								
2171	Sugar mfg	n.p.	n.p.	0.1	n.p.	n.p.	n.p.	n.p.
2172	Confectionery mfg	n.p.	n.p.	0.1	6.9	2.2	2.5	4.5
2173	Seafood processing	1.2	1.2	1.5	332.3	380.8	408.9	126.5
2174	Prepared animal and bird feed mfg	0.3	0.3	0.3	111.1	112.4	107.5	29.2
2179	Food mfg n.e.c.	n.p.	n.p.	0.6	n.p.	n.p.	n.p.	n.p.
217	Total	2.2	2.3	2.5	542.5	675.0	683.9	209.9
Beverage and malt mfg—								
2181	Soft drink, cordial and syrup mfg	0.7	0.7	0.7	210.0	193.8	181.2	92.9
2182	Beer and malt mfg	0.7	0.6	0.6	249.2	228.3	280.1	116.9
2183	Wine mfg	0.4	0.3	0.4	33.5	31.1	42.4	16.4
2184	Spirit mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
218	Total	1.8	1.6	1.7	492.7	453.2	503.7	236.2

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS (M): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 TO 1991-92 (b) continued

Industry class ANZSIC Code	Description	Employment at end of June (c) ('000)			Turnover (d) (\$m)			Value added (e) (\$m)
		1989-90	1990-91	1991-92	1989-90	1990-91	1991-92	
219	Tobacco product mfg							
21	Total food, beverage and tobacco mfg	12.5	12.3	11.4	2,385.5	2,533.8	2,586.6	916.0
	TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG—							
	Textile fibre, yarn and woven fabric mfg—							
2211	Wool scouring	0.2	0.1	0.2	14.8	n.p.	n.p.	7.7
2212	Synthetic fibre textile mfg				0.1	—	n.p.	0.1
2213	Cotton textile mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2214	Wool textile mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2215	Textile finishing	n.p.	0.1	n.p.	n.p.	6.1	n.p.	n.p.
221	Total	0.6	0.6	0.5	53.2	54.2	54.1	23.3
	Textile product mfg—							
2221	Made-up textile product mfg	1.0	1.1	1.0	86.4	104.6	98.7	44.8
2222	Textile floor covering mfg		0.1	—	n.p.	7.2	2.2	n.p.
2223	Rope, cordage and twine mfg	—	—	n.p.	n.p.	1.1	n.p.	n.p.
2229	Textile product mfg n.e.c.	0.1	0.1	n.p.	6.0	4.8	n.p.	2.6
222	Total	1.2	1.3	1.1	102.8	117.8	107.4	30.1
	Knitting mills—							
2231	Hosiery mfg	—	—	—	—	—	—	—
2232	Cardigan and pullover mfg	n.p.	n.p.	0.1	n.p.	n.p.	n.p.	n.p.
2239	Knitting mill product mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	2.2	n.p.
223	Total	0.2	n.p.	0.1	n.p.	n.p.	n.p.	n.p.
	Clothing mfg							
2241	Men's and boys' wear mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2242	Women's and girls' wear mfg	0.3	0.2	0.2	15.9	11.0	8.8	8.4
2243	Sleepwear, underwear and infant clothing mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2249	Clothing mfg n.e.c.	0.1	0.3	0.2	11.0	17.9	17.7	5.4
224	Total	1.2	0.8	0.8	56.0	49.1	44.8	32.5
225	Footwear mfg	0.2	n.p.	0.2	n.p.	n.p.	n.p.	n.p.
	Leather and leather product mfg—							
2261	Leather tanning and fur dressing	0.1	n.p.	0.2	n.p.	n.p.	21.3	n.p.
2262	Leather and leather substitute product mfg	0.1	n.p.	0.1	n.p.	n.p.	n.p.	n.p.
226	Total	0.1	0.2	0.2	13.0	19.8	n.p.	6.1
22	Total textile, clothing, footwear and leather mfg	3.5	3.2	3.0	255.8	263.2	254.4	127.0

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 TO 1991-92 (b)—continued

Industry class ANZSIC Code	Description	Employment at end of June (c) ('000)				Turnover (d) (\$m)			Value added (e) (\$m)
		1989-90	1990-91	1991-92	1989-90	1990-91	1991-92	1989-90	
WOOD AND PAPER PRODUCT MFG—									
Log sawmilling and lumber dressing									
2311	Log sawmilling	1.3	1.0	1.0	133.2	86.9	72.9	69.3	
2312	Wood chipping	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2313	Timber resawing and dressing	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
231	Total	1.9	1.6	1.4	257.6	201.7	192.5	112.2	
Other wood product mfg—									
2321	Plywood and veneer mfg	—	—	—	—	—	—	—	
2322	Fabricated wood mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2323	Wooden structural component mfg	n.p.	1.3	1.1	107.5	115.8	105.3	50.3	
2329	Wood product mfg n.e.c.	0.5	n.p.	n.p.	43.4	n.p.	n.p.	26.0	
232	Total	2.2	2.1	1.9	n.p.	239.2	249.5	n.p.	
Paper and paper product mfg—									
2331	Pulp, paper and paperboard mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2332	Solid paperboard container mfg	n.p.	n.p.	0.2	n.p.	n.p.	8.7	n.p.	
2333	Corrugated paperboard container mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2334	Paper bag and sack mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2339	Paper product mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	7.6	n.p.	
233	Total	0.5	0.5	0.7	n.p.	130.6	140.3	n.p.	
23	Total wood and paper product mfg	4.6	4.2	4.0	579.9	571.5	582.3	254.6	
PRINTING, PUBLISHING AND RECORDED MEDIA—									
Printing and services to printing—									
2411	Paper stationery mfg	0.7	0.5	0.4	60.2	50.1	40.1	28.0	
2412	Printing	2.0	2.0	1.9	179.0	175.6	194.2	85.1	
2413	Services to printing	0.4	n.p.	0.4	30.6	n.p.	26.5	19.7	
241	Total	3.2	n.p.	2.8	269.7	n.p.	260.8	132.9	
Publishing									
2421	Newspaper printing or publishing	2.8	2.4	2.4	304.3	273.0	276.1	171.0	
2422	Other periodical publishing	—	0.2	0.2	2.1	13.3	12.6	1.4	
2423	Book and other publishing	n.p.	0.4	0.3	n.p.	26.0	26.1	n.p.	
242	Total	n.p.	3.0	2.8	n.p.	312.3	314.9	n.p.	
243	Recorded media manufacturing and publishing	n.p.	n.p.	n.p.	n.p.	n.p.	—	n.p.	
24	Total printing, publishing and recorded media	6.1	5.9	5.6	584.1	568.4	575.6	316.6	

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 TO 1991-92 (b) continued

ANZSIC Code	Industry class Description	Employment at end of June (c) ('000)			Turnover (d) (\$m)		Value added (e) (\$m)		
		1989-90	1990-91	1991-92	1989-90	1990-91	1991-92	1989-90	1991-92
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG.--									
251	<i>Petroleum refining</i>	n.p.	0.6	0.6	n.p.	n.p.	n.p.	n.p.	n.p.
252	<i>Petroleum and coal product mfg n.e.c.</i>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Basic chemical mfg--									
2531	Fertiliser mfg	1.0	0.7	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.	n.p.	n.p.
2533	Synthetic resin mfg	n.p.	0.1	0.1	n.p.	n.p.	n.p.	n.p.	n.p.
2534	Organic industrial chemical mfg n.e.c.	n.p.	n.p.	n.p.	8.3	n.p.	n.p.	n.p.	3.3
2535	Inorganic industrial chemical mfg n.e.c.	0.8	0.8	0.9	n.p.	295.7	322.6	n.p.	n.p.
253	<i>Total</i>	1.9	1.8	n.p.	560.3	624.0	n.p.	n.p.	260.5
Other chemical product mfg--									
2541	Explosive mfg	0.2	0.2	0.2	n.p.	n.p.	n.p.	n.p.	n.p.
2542	Paint mfg	0.4	0.4	0.5	80.8	95.5	92.8	87.3	n.p.
2543	Medicinal and pharmaceutical product mfg	n.p.	n.p.	0.2	n.p.	n.p.	n.p.	n.p.	n.p.
2544	Pesticide mfg	0.1	n.p.	0.1	75.4	n.p.	72.9	31.6	n.p.
2545	Soap and other detergent mfg	0.2	0.2	0.2	25.8	30.4	30.6	9.3	n.p.
2546	Cosmetic and toiletry preparation mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2547	Ink mfg	-	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2549	Chemical product mfg n.e.c.	0.1	0.1	0.1	20.0	23.3	29.3	7.3	n.p.
254	<i>Total</i>	n.p.	n.p.	1.3	n.p.	n.p.	381.7	n.p.	n.p.
Rubber product mfg--									
2551	Rubber tyre mfg	0.3	0.3	0.3	63.9	54.4	23.4	19.8	n.p.
2559	Rubber product mfg n.e.c.	0.2	0.1	0.1	15.8	12.1	16.9	6.8	n.p.
255	<i>Total</i>	0.5	0.4	0.3	79.8	66.6	40.3	26.6	n.p.
Plastic product mfg--									
2561	Plastic blow moulded product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2562	Plastic extruded product mfg	0.4	n.p.	0.3	94.2	n.p.	73.3	33.2	n.p.
2563	Plastic bag and film mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2564	Plastic product, rigid fibre reinforced, mfg	n.p.	0.1	0.1	4.7	10.3	9.4	2.0	n.p.
2565	Plastic foam product mfg	0.1	-	n.p.	n.p.	9.6	n.p.	n.p.	n.p.
2566	Plastic injection moulded product mfg	0.5	0.7	0.5	46.6	82.0	49.2	20.0	n.p.
256	<i>Total</i>	1.1	1.5	1.4	220.3	246.3	272.8	88.2	n.p.
25	Total petroleum, coal, chemical and associated product mfg		5.5	5.4	2,457.5	2,688.2	2,792.4	869.6	

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 TO 1991-92 (b) continued

Industry class ANZSIC Code	Description	Employment at end of June (c) ('000)			Turnover (d) (\$m)			Value added (e) (\$m)
		1989-90	1990-91	1991-92	1989-90	1991-92	1989-90	
261	NON-METALLIC MINERAL PRODUCT MFG Glass and glass product mfg	0.4	0.3	0.3	40.2	n.p.	36.7	
2621	Ceramic mfg	1.2	n.p.	1.0	n.p.	n.p.	n.p.	
2622	Clay brick mfg	n.p.	0.1	0.1	16.0	18.3	n.p.	
2623	Ceramic product mfg	n.p.	n.p.	0.1	n.p.	n.p.	n.p.	
2629	Ceramic tile and pipe mfg	0.3	0.2	0.2	14.9	12.8	10.3	
262	Ceramic product mfg n.e.c.	1.8	1.5	1.6	167.1	188.8	134.6	
263	Total							
2631	Cement, lime, plaster and concrete product mfg--							
2632	Cement and lime mfg	n.p.	n.p.	0.3	n.p.	n.p.	n.p.	
2633	Plaster product mfg	n.p.	0.2	0.2	38.0	39.0	n.p.	
2634	Concrete mfg	0.3	0.3	0.4	131.8	135.1	28.7	
2635	Concrete pipe and box culvert mfg	0.2	n.p.	0.2	n.p.	n.p.	15.5	
263	Concrete product mfg n.e.c.	0.8	0.8	1.0	122.0	132.9	70.1	
264	Total	1.9	1.9	2.1	396.4	397.0	184.8	
264	Non-metallic mineral product mfg n.e.c.	0.6	0.6	0.6	109.0	n.p.	53.6	
26	Total non-metallic mineral product mfg	4.7	4.3	4.6	712.7	766.5	409.7	
	METAL PRODUCT MFG--							
2711	Iron and steel mfg--							
2712	Basic iron and steel mfg	0.4	0.5	0.5	176.0	175.4	32.9	
2713	Iron and steel casting and forging	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
271	Steel pipe and tube mfg	1.0	1.2	1.1	256.6	263.4	66.0	
272	Total							
2721	Basic non-ferrous metal mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2722	Alumina production	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2723	Aluminium smelting	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2729	Copper, silver, lead and zinc smelting, refining	0.9	0.9	0.9	n.p.	n.p.	n.p.	
272	Basic non-ferrous metal mfg n.e.c.	4.7	5.1	5.2	3,043.4	2,669.2	1,542.5	
273	Total							
2731	Non-ferrous basic metal product mfg--							
2732	Aluminium rolling, drawing, extruding	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2733	Non-ferrous metal rolling, drawing, extruding n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
273	Non-ferrous metal casting	n.p.	0.1	0.1	n.p.	n.p.	n.p.	
273	Total	0.3	0.2	0.1	28.4	25.0	35.5	

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 TO 1991-92 (b) - continued

Industry class ANZSIC Code	Description	Employment at end of June (c) ('000)				Turnover (d) (\$m)		Value added (e) (\$m)
		1988-90	1990-91	1991-92	1990-91	1991-92	1989-90	
	Structural metal product mfg--							
2741	Structural steel fabricating	2.8	2.5	2.1	463.5	349.0	283.4	165.8
2742	Architectural aluminium product mfg	1.4	1.1	1.1	170.0	127.5	136.1	64.5
2749	Structural metal product mfg n.e.c.	0.4	0.3	0.3	37.5	30.6	29.6	12.5
274	Total	4.6	3.9	3.5	671.0	507.0	449.1	242.8
	Sheet metal product mfg--							
2751	Metal container mfg	0.2	0.2	0.2	n.p.	65.0	53.1	n.p.
2759	Sheet metal product mfg n.e.c.	1.4	1.1	1.1	n.p.	99.4	118.7	n.p.
275	Total	1.7	1.3	1.3	218.3	164.5	171.8	94.5
	Fabricated metal product mfg--							
2761	Hand tool and general hardware mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2762	Spring and wire product mfg	0.3	0.2	0.3	47.2	27.0	34.9	19.0
2763	Nut, bolt, screw and rivet mfg	0.1	0.2	0.2	8.4	n.p.	28.8	4.6
2764	Metal coating and finishing	0.8	0.6	0.5	58.9	49.2	44.7	36.2
2765	Non-ferrous pipe fitting mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2769	Fabricated metal product mfg n.e.c.	1.1	1.0	1.0	92.4	92.8	90.9	46.9
276	Total	2.4	2.1	2.2	217.4	305.5	210.1	111.4
27	Total metal product mfg	14.6	13.8	13.4	4,363.3	4,205.4	3,730.5	2,092.7
	MACHINERY AND EQUIPMENT MFG--							
	Motor vehicle and part mfg							
2811	Motor vehicle mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2812	Motor vehicle body mfg	0.8	0.6	0.7	82.3	70.2	71.5	32.7
2813	Automotive electrical and instrument mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2819	Automotive component mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
281	Total	1.6	1.4	1.5	146.8	128.8	141.3	61.6
	Other transport equipment mfg							
2821	Shipbuilding	n.p.	0.7	0.7	n.p.	106.9	106.8	n.p.
2822	Boatbuilding	0.4	0.4	n.p.	43.1	48.9	n.p.	16.1
2823	Railway equipment mfg	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2824	Aircraft mfg	0.3	0.4	0.4	30.8	31.4	70.4	18.1
2829	Transport equipment mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
282	Total	1.9	1.7	1.7	n.p.	226.6	265.0	n.p.
	Photographic and scientific equipment mfg--							
2831	Photographic and optical good mfg	0.1	0.1	0.1	8.3	9.1	7.9	3.7
2832	Medical and surgical equipment mfg	n.p.	0.3	0.3	16.8	19.7	16.1	9.3
2839	Professional and scientific equipment mfg n.e.c.	n.p.	0.1	0.1	n.p.	7.5	9.7	n.p.
283	Total	0.5	0.5	0.5	n.p.	36.2	33.7	n.p.

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 TO 1991-92 (b)—continued

Industry class ANZSIC Code	Description	Employment at end of June (c) ('000)				Turnover (d) (\$m)		Value added (e) (\$m)
		1989-90	1990-91	1991-92	1989-90	1991-92		
	Electronic equipment mfg							
2841	Computer and business machine mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2842	Telecommunication, broadcasting and transceiving equipment mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2849	Electronic equipment mfg n.e.c.	0.6	0.5	0.5	48.7	63.9	26.2	
284	Total	1.1	0.9	0.9	86.7	103.6	49.3	
	Electrical equipment and appliance mfg—							
2851	Household appliance mfg	0.6	0.5	0.4	65.9	60.2	30.4	
2852	Electric cable and wire mfg	n.p.	n.p.	n.p.	n.p.	8.8	n.p.	
2853	Battery mfg	n.p.	n.p.	—	n.p.	n.p.	n.p.	
2854	Electric light and sign mfg	0.1	0.1	0.1	n.p.	10.4	n.p.	
2859	Electrical equipment mfg n.e.c.	0.7	0.7	0.6	88.3	59.3	34.3	
285	Total	1.5	1.4	1.2	174.6	138.6	75.6	
	Industrial machinery and equipment mfg —							
2861	Agricultural machinery mfg	"	0.5	0.4	50.7	38.2	27.6	
2862	Mining and construction machinery mfg	"	0.7	0.6	85.6	93.5	69.9	
2863	Food processing machinery mfg	"	n.p.	n.p.	n.p.	n.p.	n.p.	
2864	Machine tool and part mfg	0.	0.3	0.3	23.0	20.1	14.6	
2865	Lifting and material handling equipment mfg	1	0.8	0.7	88.6	105.3	58.4	
2866	Pump and compressor mfg	0.	0.2	n.p.	24.3	n.p.	8.0	
2867	Commercial space heating and cooling equipment mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
2869	Industrial machinery and equipment mfg n.e.c.	1.6	1.5	1.6	173.2	173.8	95.5	
286	Total	5.0	4.3	4.0	495.9	502.2	293.6	
28	Total machinery and equipment mfg	11.7	10.1	9.7	1,148.8	1,184.5	609.4	
	OTHER MANUFACTURING —							
2911	Prefabricated building mfg	0.4	0.3	0.4	60.2	62.4	33.4	
2919	Prefabricated metal building mfg	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	
291	Prefabricated building mfg n.e.c.	0.5	n.p.	n.p.	n.p.	n.p.	n.p.	
291	Total	1.0	0.3	0.4	60.2	62.4	33.4	
	Furniture mfg							
2921	Wooden furniture and upholstered seat mfg	3.1	3.1	2.9	233.7	224.4	94.7	
2922	Sheet metal furniture mfg	0.4	0.3	n.p.	31.9	n.p.	13.0	
2923	Mattress mfg (except rubber)	0.5	0.1	n.p.	11.0	n.p.	11.7	
2929	Furniture mfg n.e.c.	0.3	0.2	0.3	12.8	n.p.	10.4	
292	Total	4.3	3.7	3.6	289.5	288.7	139.8	

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, WESTERN AUSTRALIA, 1989-90 TO 1991-92 (b) - continued

Industry class ANZSIC Code	Description	Employment at end of June (c) ('000)			Turnover (d) (\$m)			Value added (e) (\$m)
		1989-90	1990-91	1991-92	1989-90	1990-91	1991-92	1989-90
	Miscellaneous manufacturing—							
2941	Jewellery and silverware mfg	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2942	Toy and sporting good mfg	0.6	0.1	0.1	42.1	8.0	7.7	23.1
2949	Manufacturing n.e.c.	0.8	0.5	0.6	n.p.	33.1	41.6	n.p.
294	Total		n.p.	n.p.		n.p.	n.p.	
29	Total other manufacturing	5.6	4.8	4.9	500.4	416.8	423.9	209.5
21-29	TOTAL MANUFACTURING	68.8	64.0	61.9	13,280.2	13,108.6	12,896.6	5,798.9

(a) See paragraph 8 of the Explanatory Notes. (b) For comparability of data over the time periods shown, see paragraph 15 of the Explanatory Notes. (c) Includes working proprietors. (d) These data are at current prices and, therefore, do not discount the impact of price changes. (e) Value added data are not available for the years 1990-91 and 1991-92, as the data items necessary to derive them were not collected in these years.

EXPLANATORY NOTES

INTRODUCTION

- 1 This publication presents final statistics compiled from a survey of manufacturing establishments for 1992-93, with some comparative statistics relating to preceding years.
- 2 For the 1992-93 collection, a sample of approximately 21,000 manufacturing businesses, nationally, was approached to provide information. All previous manufacturing collections were conducted by approaching all known manufacturing businesses.
- 3 The manufacturing collection is conducted on an annual basis and businesses are annually requested to provide data on employment, wages and salaries paid and turnover. For the 1992-93 collection, additional information related to detailed structural and performance data, such as value added, stocks, purchases and capital expenditure, and manufacturing exports was collected. To complement the environmental protection data collected in both the 1990-91 and 1991-92 censuses, the 1992-93 survey also collected some data on issues related to environmental protection.
- 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 unit for which statistics are reported in the annual manufacturing collection is the establishment. Prior to the 1988-89 census, this unit covered, in general, all the operations carried on under the ownership of one enterprise (business) at a single physical location.
- 6 The standard units definitions were revised for the 1988-89 census, with the establishment now being generally delineated on the basis of availability of accounting data rather than in terms of a location.
- 7 These new definitions were progressively implemented on the ABS central business register as reporting arrangements with individual businesses were finalised. The new definitions were fully implemented on the ABS central business register in time for the 1990-91 census for those units classified to the manufacturing industry.
- 8 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.
- 9 Some of those establishments predominantly engaged in one activity are 'split' into two or more establishments, when the secondary activity exceeds a specific value. (For 1992-93, this value was \$6.5 million in terms of sales and transfers out of goods and services.) These separate establishments are then classified to the industry appropriate to its activity.

10 Data contained in this publication relate to all manufacturing businesses which operated in Western Australia during the year ended 30 June 1993, except for sole proprietorships or family partnerships not employing staff at the end of June 1993. These businesses contribute only marginally to statistical aggregates (other than number of establishments). In addition, the ABS attempts to obtain data in respect of those businesses which either commenced or ceased operation during the year, but it is not possible to obtain data in respect of them all.

STANDARD UNITS

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

RELIABILITY OF ESTIMATES

12 Data presented in this publication are based on information obtained from a sample of manufacturers and are, therefore, subject to sampling variability; that is, they may differ from the figures that would have been produced if the data had been obtained from all manufacturers in the collection. One measure of the likely difference is given by the standard error, which indicates the extent to which an estimate might have varied by chance because the data were obtained from only a sample of units. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if the data had been obtained from all units, and about 19 chances in 20 that the difference will be less than two standard errors.

13 The standard error can also be expressed as a percentage of the estimate, and this is known as the relative standard error. The relative standard errors for most of the data presented in this publication are 4% or less for Western Australian estimates, as can be seen from the relative standard errors for the indicative data items contained in table 9 of this publication.

14 The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents and errors made in collection and processing of the data. Inaccuracies of this kind are referred to as non-sampling error and they may occur in any collection, whether it be a full count or only a sample. Every effort is made to reduce non-sampling error to a minimum by careful design of forms, editing of data and efficient operating procedures.

COMPARABILITY WITH PREVIOUS STATISTICS

15 As explained above, the standard units definitions were revised for the 1988-89 census and the new definitions were fully implemented on the ABS central business register in time for the 1990-91 census for units classified to the manufacturing industry.

16 As with the last two issues of this publication, this issue makes no distinction in tables presented between those single establishment businesses with less than four persons employed and all other establishments. For users still interested in the dissection between establishments employing less than four persons and establishments employing four or more persons, attention is drawn to table 5 and the employment size category 0-3 persons. This category includes all establishments employing less than four persons. In most cases, data in this employment size category equates to the category used for tabulations from earlier manufacturing industry collections of less than four persons employed (the major exception being subdivision 26). A detailed break up of the differences can be made available on request.

GROSS PRODUCT AT FACTOR COST

17 Table 4 presents data by industry subdivision for the period 1989-90 to 1992-93 (inclusive) related to constant price estimates of gross product at factor cost. The meaning and measurement of production at constant prices and the limitations and qualifications of the estimates are discussed in detail in *Australian National Accounts: Concepts, Sources and Methods* (5216.0).

18 Previously, estimates for this data item have only been published (for total Australia) in *Manufacturing Industry, Australia* (8221.0). The basic approach in compiling these estimates involves extrapolating a base year estimate of gross product (described below) by a measure of output at constant prices. Constant price turnover is used as the output indicator with which to extrapolate the base year gross product. To obtain constant price estimates of turnover, current price estimates at the ANZSIC class level are deflated by components of the price indices contained in *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (6412.0).

19 The base year gross product is estimated for each ANZSIC class using 1989-90 manufacturing census data for value added and adjusted value added. Value added is calculated using turnover, plus the increase (or less the decrease) in the value of stocks, less purchases, transfers in and selected expenses. Adjusted value added is defined as value added less land tax, rates and payroll tax, insurance premiums (other than for workers' compensation) and other business expenses. To conform to the national accounting concept of gross product at factor cost, further adjustments would be necessary using information from other than manufacturing census sources e.g. by the addition of workers' compensation paid less premiums received. However, due to data limitations, these further adjustments can only be made at the ANZSIC subdivision level and are not taken into account in this publication. (This is because the ANZSIC subdivision data contained in this publication are derived from the data calculated at the ANZSIC class level.) The base year gross product values used in this publication are derived by taking establishment based estimates of adjusted value added and applying a stock valuation adjustment. (See Section 8 of *Australian National Accounts: Concepts, Sources and Methods* (5216.0) for an explanation of how this adjustment is undertaken).

EMPLOYMENT SIZE DATA

20 Summary of operations data at the industry subdivision level classified by employment size are presented in table 5. Similarly, exports of goods produced data at the industry subdivision level classified by broad employment size are presented in table 7. The statistics in these two tables relate only to those manufacturing establishments operating at 30 June 1993. As such, the figures presented may differ slightly from those presented in the other tables. These other tables include data for those manufacturing establishments which operated at any time during 1992-93.

ENVIRONMENTAL STATISTICS

21 Data contained in table 6 relate to current and capital expenditure on environmental protection in the year ended 30 June 1993. Establishments which did not respond were treated as if they had no current or capital expenditure on environmental protection.

EXPORT STATISTICS

22 Data relating to the amount of sales and/or transfers out of goods produced which were subsequently exported are presented in tables 7 and 8. This is the first time that these data have been obtained by the annual manufacturing collection. All units selected in the manufacturing survey were asked whether they exported and, if so, what percentage of their sales of goods produced were exported by them or an agent on their behalf. The data presented in table 7 are derived by applying the percentage of exports reported for each exporting unit and then aggregating that figure. The data in table 7 exclude those manufacturing establishments which operated during 1992–93 but were not operating at 30 June 1993.

INTRODUCTION OF ANZSIC

23 The 1992–93 manufacturing survey introduces the Australian and New Zealand Standard Industrial Classification (ANZSIC) into the annual manufacturing collection. This classification replaces the Australian Standard Industrial Classification (ASIC) previously used. For a more detailed explanation, users attention is drawn to the introduction to table 9 in the 1991–92 issue of this publication and to the *Australian and New Zealand Standard Industrial Classification, 1993* (1292.0). All time series statistics contained in this publication are ANZSIC-based. Table 10 of this publication presents selected statistics by ANZSIC class for the years 1989–90 to 1991–92 (inclusive). Corresponding ANZSIC-based data for years prior to 1989–90 are not available.

INFORMATION PAPER

24 The *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (8205.0), outlines the vast amount of data available about the manufacturing industry in both published and unpublished form available from both the annual manufacturing collection and other ABS collections.

RELATED PUBLICATIONS

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

- *Cost of Environment Protection, Australia, 1991–92 and 1992–93* (4603.0), to be released later in 1996.
- *Quarterly Indexes of Industrial Production, Australia* (8125.0).
- *Business Operations and Industry Performance, Australia, 1992–93* (8140.0), released on 22 June 1994.
- *Manufacturing Industry, Australia, Preliminary, 1993–94* (8201.0), released on 13 December 1995.
- *Manufacturing Industry, Australia, 1992–93* (8221.0), released on 12 March 1996.
- *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (8205.0), released on 21 March 1996.
- *Manufacturing Production, Australia: Principal Commodities Produced, 1989–90* (8365.0), released on 4 February 1994.

MONTHLY COMMODITY DATA

26 The monthly publication *Manufacturing Production, Australia* (8301.0) includes data for 63 major commodities.

BACK DATA AND UNPUBLISHED STATISTICS

27 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. A charge would normally be made for providing such information. The Information Paper referred to above provides more details.

28 In particular, constant prices data 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, constant price estimates of gross product at factor cost for the years 1989-90, 1990-91, 1991-92 and 1992-93 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 (06) 252 6801.

ROUNDING

29 Where figures have been rounded, discrepancies may occur between totals and the sums of the component items. Due to the sample nature of the 1992-93 collection, this 'rounding rule' also applies to the 'count' statistics included in this publication.

SYMBOLS AND OTHER USAGES

ANZSIC	Australian and New Zealand Standard Industrial Classification
ASIC	Australian Standard Industrial Classification
n.e.c.	not elsewhere classified
n.p.	not available for publication but included in totals where applicable
r	figure or series revised since previous issue
..	not applicable
—	nil or rounded to zero (incl. null cells)

GLOSSARY

ABS	Australian Bureau of Statistics
Acquisition of dwellings, other buildings and structures	Capital expenditure incurred acquiring dwellings, other buildings and structures. Note that this category includes purchases of both new and second-hand buildings and structures. It also includes purchases of roads, factories, warehouses, offices, bridges, etc..
Acquisition of other (including land and intangible assets)	Capital expenditure incurred acquiring other assets (including land and intangible assets). Intangible asset purchases may include items such as patents, copyrights and licences, but excludes goodwill.
Acquisition of plant, machinery and equipment	Capital expenditure incurred in acquiring plant, machinery and other equipment. Note that this category includes the purchase of motor vehicles.
Amount of goods produced by this establishment (or for it on commission) that are exported by this business or its agent	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, that are exported by the business or its agent.
Australian National Accounts (ANA)	These Accounts are set up to provide a systematic summary of Australia's national economic activity. They have been developed in such a way as to facilitate the practical application of economic theory. National Accounts are summarised to show the key economic flows of the Keynesian system, being: production, income, consumption, investment and saving. They are also designed to show at a more detailed level the statistical picture of the structure of the economy and the detailed processes that make up domestic production and its distribution.
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASIC	Australian Standard Industrial Classification
Average employees	This is derived by taking the average employment for the reference year and then adjusting this figure according to the type of legal organisation (TOLO) that is attributed to the unit. This means that the number of average employees (whole year) is equal to the average employment (whole year) for that unit less 1 (if TOLO = 6 (unit is a sole proprietorship) or less 2 (if TOLO = 7 or 8 (unit is a family partnership or other partnership)).
Average employment	This is derived by summing together the number of working proprietors and the number of employees on the payroll during the last pay period of each month of the financial year. This aggregation is then divided by twelve to derive the average employment over the reference year.
Balance of turnover	The sum of income from services, rent, leasing and hiring income, total government subsidies and the value of own account capital work.
Capital expenditure	Includes all costs incurred in the acquisition of items that are of a capital nature. Included in this are expenses for the acquisition of: dwellings, other buildings and structures; plant, machinery and equipment; and other capital expenditure (including land and intangible assets).
Capital expenditure to abate pollution	Expenditure on new plant, machinery or equipment designed to abate or control pollution by using either end-of-line techniques or change-in-production processes.

Capital expenditure to abate pollution as a proportion of total capital expenditure	This item represents the proportion of total capital expenditure that is utilised in measures designed to abate pollution. Please note that for the data item capital expenditure to abate pollution, establishments which did not respond were treated as if they had no such capital expenditure. However, the ratio is calculated by dividing the reported capital expenditure designed to abate pollution by the total capital expenditure for the ANZSIC class, etc., not just the aggregated capital expenditure for those units which reported capital expenditure to abate pollution.
Capital work done for own use	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 value of the cost of the materials and the wages and salaries involved.
Change in stocks	The value of total closing stocks minus total opening stocks.
Closing stocks	The value of all stocks of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the end of the financial year.
Contract, subcontract and commission expenses	Includes payments to other businesses and self-employed persons for work done, or sales made on a contract or commission basis, plus payments to persons paid by commission without a retainer. Excludes commission paid to persons who receive a retainer, commissions paid to own employees and payments to consultants.
Current expenditure on environmental protection	Expenditure on waste management plus other operational or maintenance costs incurred in protection of the environment from pollution. Included are such expenses as government and council fees, charges and taxes relating to pollution abatement and control, charges to remove and dispose of wastes arising from an establishment's production processes, research and development expenditure on pollution abatement and control, and expenditure on environmental impact assessments and environmental audits.
Current expenditure on environmental protection as a proportion of total turnover	This item represents the current expenditure on environmental protection expressed as a proportion of the total turnover. Please note that for the data item current expenditure on environmental protection, establishments which did not respond were treated as if they had no such current expenditure. However, the ratio is calculated by dividing the reported current expenditure on environmental protection by the total turnover for the ANZSIC class, etc., not just the aggregated turnover for those units which reported current expenditure on environmental protection.
Employment at end of June	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 in June each year. Employees absent on paid or prepaid leave are included. Sole proprietors and partnerships not employing others are excluded.

Enterprise group	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.
Establishment	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 at 30 June	The number of establishments in operation at 30 June in the year of a given reference period.
Establishments that do not export	Establishments that reported no exports (either by their business or for them by an agent) of goods that they produced.
Establishments with exports of more than 50% of sales	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 that they produced.
Establishments with exports up to and including 50% of sales	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 that they produced.
Exports as a proportion of sales of goods produced (Table 7)	For an individual establishment, this represents the percentage of the total sales and transfers out of goods produced by the establishment (or for it on commission) which are exported (outside Australia) by the business or its agent. In table 7, the ratio is calculated by dividing the total value of goods exported by the total value of sales and transfers out of goods produced by all establishments, not just the aggregated value for those units which exported.
Gross Domestic Product (GDP)	Gross domestic product (also referred to as gross domestic product at market prices) is the total market value of goods and services produced in Australia within a given period after deduction of the cost of goods and services used up in the process of production, but before deducting allowances for the consumption of fixed capital. Thus, gross domestic product, as here defined, is 'at market prices'. It is equivalent to gross national expenditure plus exports of goods and services less imports of goods and services.
Gross product at factor cost	Gross product at factor cost is that part of the cost of producing the gross domestic product which consists of gross payments to factors of production (labour, land, capital and enterprise). It represents the value added by these factors in the process of production and is equivalent to gross domestic product less indirect taxes plus subsidies.
Gross product per person employed	Gross product at factor cost divided by average employment over the whole year.

Income from services Income received from service activities. This income includes: repair and service income and fees; contract, subcontract and commission income; installation charges; and management fees/charges from related and unrelated businesses. Excluded are interest and royalties received.

Industry class 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 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 table 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

Management unit 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.

Manufacturing establishment 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.

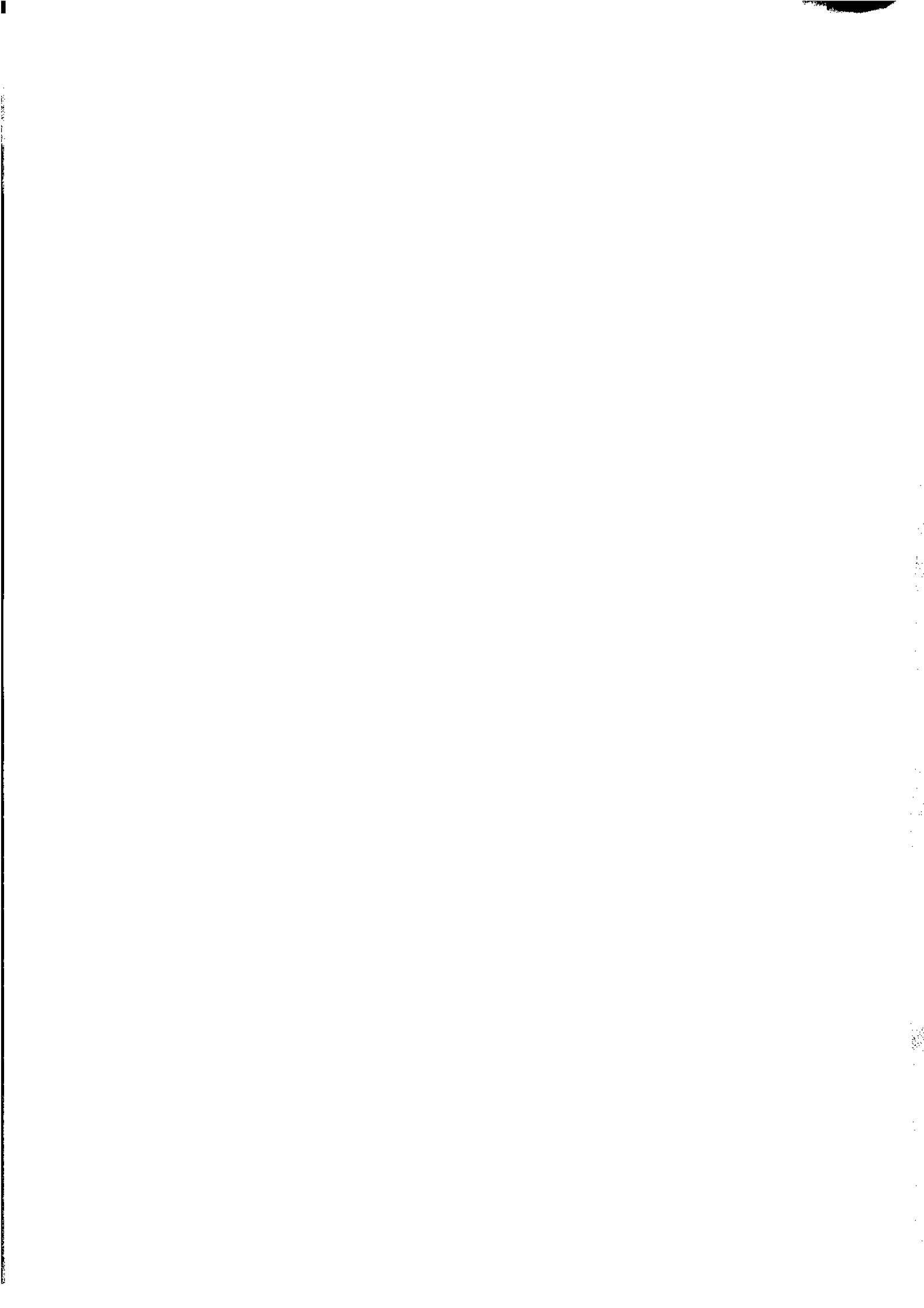
Motor vehicle running expenses Comprises costs associated with operating motor vehicles. These costs include: fuel, registration fees and compulsory third party insurance premiums; rent, leasing and hiring expenses; and repair and maintenance expenses. The costs exclude: expenses for off-road motor vehicles (e.g. forklifts, mobile plant, quarry dump trucks); depreciation; finance lease payments; and comprehensive motor vehicle insurance.

Net capital expenditure	The value of total capital expenditure less total revenue from the disposal of assets.
Opening stocks	The value of all stocks of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the beginning of the financial year.
Outward freight and cartage expenses	Costs associated with freight and delivery of goods, excluding the cost of delivery by an establishment's own vehicles and employees.
Own account capital work	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 value of the cost of the materials and the wages and salaries involved.
Persons employed per establishment	Employment at the last pay period ending in June divided by the number of establishments in operation at 30 June of the same year.
Purchases	Purchases of materials, components, containers, packaging, fuels, electricity and water, and purchases of goods for resale.
Purchases and transfers in	Purchases and transfers in of materials, components, containers, packaging, fuels, electricity and water, and of goods for resale, plus transfers in of goods from other establishments of the same business for further processing, assembly, installation or resale. 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.
Rent, leasing and hiring expenses	Includes payments on operating leases, but excludes finance lease payments and expenses associated with motor vehicles.
Rent, leasing and hiring income	Includes royalties from mineral leases and revenue from operating leases, but excludes income from finance leases and payments received under hire purchase arrangements.
Repair and maintenance expenses	Costs associated with repair and maintenance. These costs exclude repair and maintenance of motor vehicles and wages and salaries paid to an establishment's own employees engaged in repair and maintenance activities.
Sales and transfers out of goods produced by the establishment	Includes sales of goods produced by the establishment (or for it on commission), sales or transfers to related businesses, and progress payments billed on engineering and construction projects. Includes transfers out to other establishments of the same business. Transfers out 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.
Sales and transfers out of goods not produced by the establishment	Sales of goods not produced by the establishment, including sales or transfers to related businesses. Includes transfers out to other establishments of the same business. Transfers out 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.

Selected expenses	Includes contract, subcontract and commission expenses (including sales commission payments), repair and maintenance expenses, outward freight and cartage expenses, motor vehicle running expenses, and rent, leasing and hiring expenses.
Service income	Includes income received from service activities. This income includes: repair and service income and fees; contract, subcontract and commission income; installation charges; and management fees/charges from related and unrelated businesses. Excluded are interest and royalties received.
Total government subsidies	Includes revenue received from government bodies in the form of bounties, subsidies and export grants. It also includes payments for Jobstart and subsidies for apprenticeship schemes. Excludes capital grants payments.
Total sales of goods and transfers out	Includes sales of goods produced by the establishment (or for it on commission) and of goods not produced by the establishment, sales or transfers to related businesses, and progress payments billed on engineering and construction projects. Includes transfers out to other establishments of the same business. Transfers out 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.
Turnover	(See Note below). 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, that is, 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 per person employed (based on average employment)	Turnover of manufacturing establishments which operated during the year ended 30 June divided by the average number of persons employed over the whole year.
Turnover per person employed (based on end of June employment)	Turnover of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year.
Value added	(See Note below). Turnover, plus the increase (or less the decrease) in the value of stocks, less purchases, transfers in and selected expenses.

Note: While value added is the basic measure of an industry's contribution to total production, it cannot be inferred that when wages and salaries are deducted from value added the whole of the surplus is available for profit. There are many miscellaneous expenses (such as depreciation, workers' compensation insurance, other insurance, payroll tax, income tax, rates, advertising, interest on borrowed funds, bad debts and other sundry charges) which are not taken into account when arriving at value added. Value added as calculated in this publication differs from the concept used in National Accounts, where the concept of value added also excludes some administrative expenses and sundry charges, and the change in stocks component which is measured by valuing the physical changes in stocks at average annual current prices. It is not practicable in the annual manufacturing collection to collect data fully in accord with the National Accounts concept of value added.

Value added per person employed (based on average employment)	Value added of manufacturing establishments which operated during the year ended 30 June divided by the average number of persons employed over the whole year.
Value added to turnover ratio	Value added of 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.
Wages and salaries	The gross wages and salaries of all employees of the establishment. The drawings of working proprietors are excluded.
Wages and salaries per employee (based on average employees)	The wages and salaries paid by manufacturing establishments which operated during the year ended 30 June divided by the average number of employees over the whole year.
Wages and salaries to value added ratio	The wages and salaries paid by manufacturing establishments which operated during the year ended 30 June as a proportion of the value added of manufacturing establishments which operated during the same year.



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