



1992-93

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# Manufacturing Industry

## Tasmania



**MANUFACTURING INDUSTRY  
TASMANIA  
1992-93**

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<b>INQUIRIES</b>	<ul style="list-style-type: none"> <li>▪ <i>for further information about statistics in this publication and the availability of related unpublished statistics</i>, contact John Ridley on Sydney (02) 9268 4541 or any other ABS office.</li> <li>▪ <i>for information about other ABS statistics and services</i> please refer to the back page of this publication.</li> </ul>
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## 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 Tasmania 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 5. 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 10 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 factor cost (at average 1989-90 prices) by industry subdivision are contained in table 5 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 Tasmania for 1992-93, where establishment value added amounted to \$1.5 billion while establishment industry gross product amounted to \$1.2 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 Tasmanian manufacturing is approximately 3% for 1992-93 turnover and 6% 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.

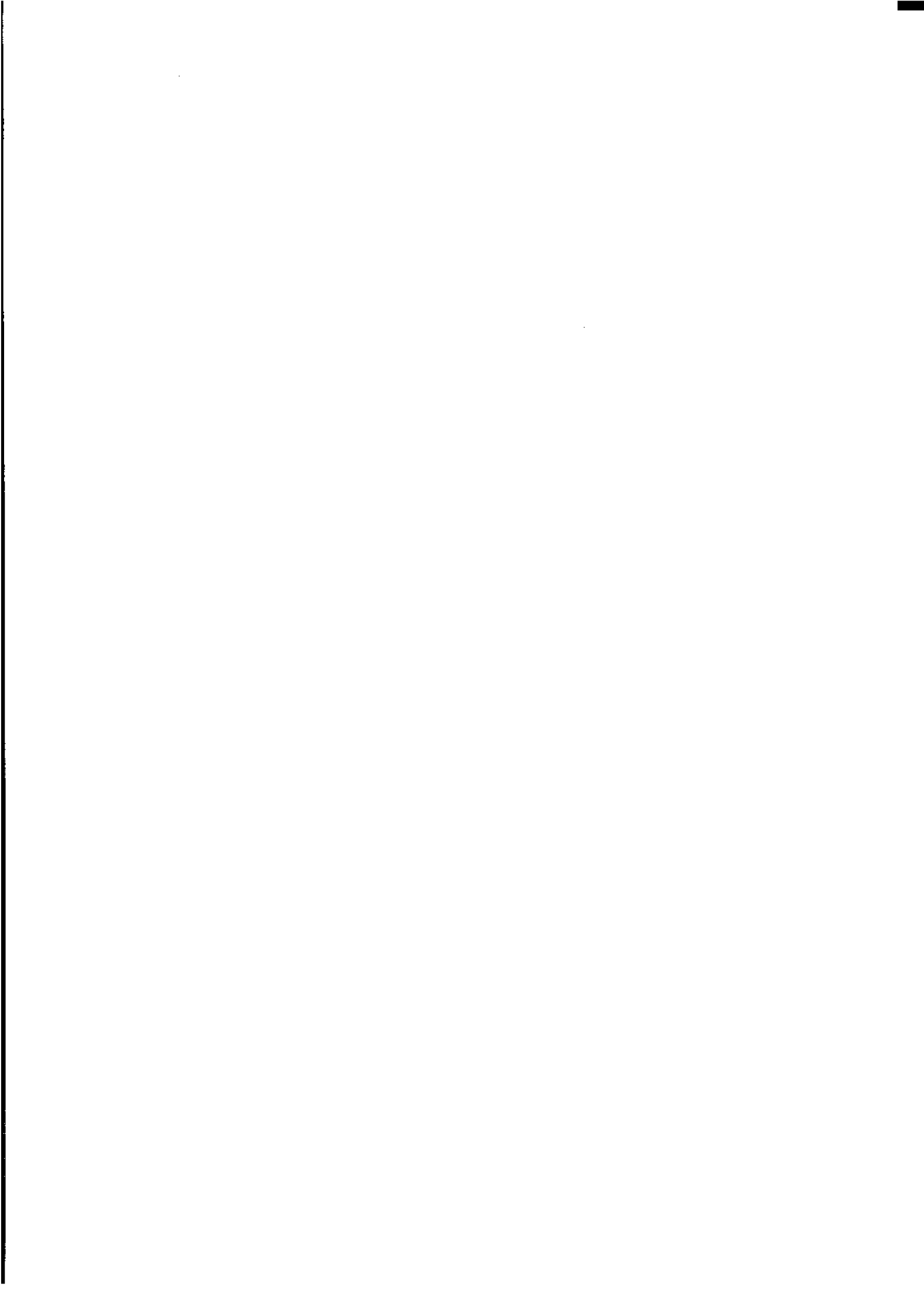




TABLE 1. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION  
TASMANIA, 1989-90 TO 1992-93 (b)

Industry subdivision			Employment	Wages and	Turnover	Persons	Turnover	
ANZSIC	Description	Establishments	at end of	salaries	(f)	employed per	per person	
code		at 30 June	June	(e)(f)	(f)	establishment	employed	
		(c)	(d)	(\$m)	(\$m)	(No.)	(\$'000)	
		(No.)	('000)				(f)(g)	
21	Food, beverage and tobacco mfg	1992-93	118	5.8	146.8	1,215.1	49	208.9
		1991-92	128	6.0	153.4	1,173.0	47	194.2
		1990-91	130	6.1	149.2	1,167.0	47	192.0
		1989-90	131	6.5	147.8	1,112.3	50	171.9
22	Textile, clothing, footwear and leather mfg	1992-93	33	1.8	41.9	182.9	54	101.8
		1991-92	32	1.8	39.5	177.3	56	99.6
		1990-91	36	1.8	37.9	182.2	49	103.1
		1989-90	29	1.9	40.7	181.4	64	97.3
23	Wood and paper product mfg	1992-93	150	4.4	170.8	942.0	29	215.6
		1991-92	157	5.0	206.5	965.6	32	193.3
		1990-91	173	5.5	192.3	1,111.2	32	200.4
		1989-90	182	6.1	178.1	1,123.6	33	184.7
24	Printing, publishing and recorded media	1992-93	58	1.5	41.6	122.6	26	81.3
		1991-92	72	1.7	42.5	128.3	24	74.4
		1990-91	62	1.7	42.4	124.4	27	73.4
		1989-90	65	1.8	39.1	117.1	27	66.8
25	Petroleum, coal, chemical and associated product mfg	1992-93	41	0.8	29.0	214.5	20	260.9
		1991-92	46	0.9	31.5	208.3	19	240.0
		1990-91	37	0.9	43.2	231.6	24	259.7
		1989-90	45	1.2	38.6	238.5	27	197.7
26	Non-metallic mineral product mfg	1992-93	43	0.8	25.4	188.7	19	232.1
		1991-92	50	0.9	26.6	159.6	18	182.4
		1990-91	40	0.9	25.3	151.4	21	176.6
		1989-90	45	0.9	20.8	152.2	19	178.8
27	Metal product mfg	1992-93	130	4.0	148.4	826.9	31	206.6
		1991-92	131	4.3	147.2	815.1	33	189.2
		1990-91	140	4.6	153.1	894.7	33	196.0
		1989-90	140	4.7	152.0	903.7	34	191.6
28	Machinery and equipment mfg	1992-93	120	1.9	45.9	178.5	16	95.2
		1991-92	130	1.8	47.2	201.5	14	114.3
		1990-91	137	2.2	54.1	196.3	16	88.8
		1989-90	133	2.2	52.0	186.6	16	86.4
29	Other manufacturing	1992-93	79	0.7	14.1	53.0	9	77.6
		1991-92	91	0.8	16.4	58.0	9	74.7
		1990-91	94	0.9	19.3	63.1	10	68.4
		1989-90	103	1.1	21.5	77.3	11	69.1
21-29	Total manufacturing	1992-93	772	21.7	663.9	3,924.2	28	180.9
		1991-92	837	23.1	710.8	3,886.6	28	168.0
		1990-91	849	24.5	716.6	4,121.9	29	168.0
		1989-90	873	26.2	690.6	4,092.5	30	156.1

(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): NUMBER OF ESTABLISHMENTS BY INDUSTRY CLASS  
TASMANIA, 30 JUNE 1993**

Industry class		Establishments at 30 June (b) (No.)	Industry class		Establishments at 30 June (b) (No.)
ANZSIC code	Description		ANZSIC code	Description	
<b>FOOD, BEVERAGE AND TOBACCO MFG—</b>			<b>TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG—<i>continued</i></b>		
Meat and meat product mfg—			Clothing mfg—		
2111	Meat processing	9	2241	Men's and boys' wear mfg	2
2112	Poultry processing	2	2242	Women's and girls' wear mfg	—
2113	Bacon, ham and smallgood mfg	5	2243	Sleepwear, underwear and infant clothing mfg	1
211	<i>Total</i>	16	2249	Clothing mfg n.e.c.	1
Dairy product mfg—			224	<i>Total</i>	4
2121	Milk and cream processing	3	225	Footwear mfg	4
2122	Ice cream mfg	1	Leather and leather product mfg—		
2129	Dairy product mfg n.e.c.	9	2261	Leather tanning and fur dressing	2
212	<i>Total</i>	13	2262	Leather and leather substitute product mfg	—
213	<i>Fruit and vegetable processing</i>	9	226	<i>Total</i>	2
214	<i>Oil and fat mfg</i>	—	22	<b>Total textile, clothing, footwear and leather mfg</b>	33
Flour mill and cereal food mfg—			<b>WOOD AND PAPER PRODUCT MFG—</b>		
2151	Flour mill product mfg	3	Log sawmilling and timber dressing—		
2152	Cereal food and baking mix mfg	1	2311	Log sawmilling	62
215	<i>Total</i>	4	2312	Wood chipping	7
Bakery product mfg—			2313	Timber resawing and dressing	15
2161	Bread mfg	18	231	<i>Total</i>	84
2162	Cake and pastry mfg	17	Other wood product mfg—		
2163	Biscuit mfg	—	2321	Plywood and veneer mfg	1
216	<i>Total</i>	35	2322	Fabricated wood mfg	1
Other food mfg—			2323	Wooden structural component mfg	38
2171	Sugar mfg	—	2329	Wood product mfg n.e.c.	20
2172	Confectionery mfg	2	232	<i>Total</i>	60
2173	Seafood processing	19	Paper and paper product mfg—		
2174	Prepared animal and bird feed mfg	4	2331	Pulp, paper and paperboard mfg	2
2179	Food mfg n.e.c.	5	2332	Solid paperboard container mfg	—
217	<i>Total</i>	30	2333	Corrugated paperboard container mfg	1
Beverage and malt mfg—			2334	Paper bag and sack mfg	2
2181	Soft drink, cordial and syrup mfg	4	2339	Paper product mfg n.e.c.	1
2182	Beer and malt mfg	4	233	<i>Total</i>	6
2183	Wine mfg	3	23	<b>Total wood and paper product mfg</b>	150
2184	Spirit mfg	—	PRINTING, PUBLISHING AND RECORDED MEDIA—		
218	<i>Total</i>	11	Printing and services to printing—		
219	<i>Tobacco product mfg</i>	—	2411	Paper stationery mfg	4
21	<b>Total food, beverage and tobacco mfg</b>	118	2412	Printing	28
<b>TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG—</b>			2413	Services to printing	9
Textile fibre, yarn and woven fabric mfg—			241	<i>Total</i>	41
2211	Wool scouring	—	Publishing—		
2212	Synthetic fibre textile mfg	2	2421	Newspaper printing or publishing	11
2213	Cotton textile mfg	3	2422	Other periodical publishing	4
2214	Wool textile mfg	2	2423	Book and other publishing	2
2215	Textile finishing	1	242	<i>Total</i>	17
221	<i>Total</i>	8	243	<i>Recorded media manufacturing and publishing</i>	—
Textile product mfg—			24	<b>Total printing, publishing and recorded media</b>	58
2221	Made-up textile product mfg	10	PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG—		
2222	Textile floor covering mfg	2	251	<i>Petroleum refining</i>	—
2223	Rope, cordage and twine mfg	—	252	<i>Petroleum and coal product mfg n.e.c.</i>	—
2229	Textile product mfg n.e.c.	1			
222	<i>Total</i>	13			
Knitting mills—					
2231	Hosiery mfg	—			
2232	Cardigan and pullover mfg	1			
2239	Knitting mill product mfg n.e.c.	1			
223	<i>Total</i>	2			

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS (a): NUMBER OF ESTABLISHMENTS BY INDUSTRY CLASS  
TASMANIA, 30 JUNE 1993—continued

Industry class		Establishments at 30 June (b)	Industry class		Establishments at 30 June (b)
ANZSIC code	Description	(No.)	ANZSIC code	Description	(No.)
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG—continued			METAL PRODUCT MFG—continued		
Basic chemical mfg—			2731	Non-ferrous basic metal product mfg	—
2531	Fertiliser mfg	1	2732	Aluminium rolling, drawing, extruding	—
2532	Industrial gas mfg	2		Non-ferrous metal rolling, drawing, extruding n.e.c.	—
2533	Synthetic resin mfg	—	2733	Non-ferrous metal casting	2
2534	Organic industrial chemical mfg n.e.c.	1	273	Total	2
2535	Inorganic industrial chemical mfg n.e.c.	4		Structural metal product mfg—	
253	Total	8	2741	Structural steel fabricating	23
Other chemical product mfg—			2742	Architectural aluminium product mfg	17
2541	Explosive mfg	1	2749	Structural metal product mfg n.e.c.	2
2542	Paint mfg	1	274	Total	42
2543	Medicinal and pharmaceutical product mfg	2		Sheet metal product mfg—	
2544	Pesticide mfg	—	2751	Metal container mfg	3
2545	Soap and other detergent mfg	2	2759	Sheet metal product mfg n.e.c.	12
2546	Cosmetic and toiletry preparation mfg	—	275	Total	15
2547	Ink mfg	1		Fabricated metal product mfg—	
2549	Chemical product mfg n.e.c.	3	2761	Hand tool and general hardware mfg	2
254	Total	10	2762	Spring and wire product mfg	3
Rubber product mfg—			2763	Nut, bolt, screw and rivet mfg	—
2551	Rubber tyre mfg	2	2764	Metal coating and finishing	7
2559	Rubber product mfg n.e.c.	4	2765	Non-ferrous pipe fitting mfg	2
255	Total	6	2769	Fabricated metal product mfg n.e.c.	34
Plastic product mfg—			276	Total	48
2561	Plastic blow moulded product mfg	1		Total metal product mfg	130
2562	Plastic extruded product mfg	3	27	MACHINERY AND EQUIPMENT MFG—	
2563	Plastic bag and film mfg	—		Motor vehicle and part mfg	
2564	Plastic product, rigid fibre reinforced, mfg	1	2811	Motor vehicle mfg	1
2565	Plastic foam product mfg	2	2812	Motor vehicle body mfg	7
2566	Plastic injection moulded product mfg	10	2813	Automotive electrical and instrument mfg	—
256	Total	17	2819	Automotive component mfg n.e.c.	7
25	Total petroleum, coal, chemical and associated product mfg	41	281	Total	15
NON-METALLIC MINERAL PRODUCT MFG—				Other transport equipment mfg—	
261	Glass and glass product mfg	5	2821	Shipbuilding	2
Ceramic mfg—			2822	Boatbuilding	10
2621	Clay brick mfg	3	2823	Railway equipment mfg	—
2622	Ceramic product mfg	1	2824	Aircraft mfg	2
2623	Ceramic tile and pipe mfg	—	2829	Transport equipment mfg n.e.c.	—
2629	Ceramic product mfg n.e.c.	3	282	Total	14
262	Total	7		Photographic and scientific equipment mfg—	
Cement, lime, plaster and concrete product mfg			2831	Photographic and optical good mfg	5
2631	Cement and lime mfg	1	2832	Medical and surgical equipment mfg	15
2632	Plaster product mfg	1	2839	Professional and scientific equipment mfg n.e.c.	5
2633	Concrete slurry mfg	13	283	Total	25
2634	Concrete pipe and box culvert mfg	2		Electronic equipment mfg—	
2635	Concrete product mfg n.e.c.	7	2841	Computer and business machine mfg	2
263	Total	24	2842	Telecommunication, broadcasting and transceiving equipment mfg	1
264	Non-metallic mineral product mfg n.e.c.	7	2849	Electronic equipment mfg n.e.c.	9
26	Total non-metallic mineral product mfg	43	284	Total	12
METAL PRODUCT MFG—				Electrical equipment and appliance mfg—	
Iron and steel mfg—			2851	Household appliance mfg	4
2711	Basic iron and steel mfg	8	2852	Electric cable and wire mfg	—
2712	Iron and steel casting and forging	2	2853	Battery mfg	—
2713	Steel pipe and tube mfg	1	2854	Electric light and sign mfg	3
271	Total	11	2859	Electrical equipment mfg n.e.c.	5
Basic non-ferrous metal mfg—			285	Total	12
2721	Alumina production	—		Electrical equipment and appliance mfg—	
2722	Aluminium smelting	1		Household appliance mfg	4
2723	Copper, silver, lead and zinc smelting, refining	1		Electric cable and wire mfg	—
2729	Basic non-ferrous metal mfg n.e.c.	—		Battery mfg	—
272	Total	2		Electric light and sign mfg	3
				Electrical equipment mfg n.e.c.	5

For footnotes see end of table.

**TABLE 2. MANUFACTURING ESTABLISHMENTS (a): NUMBER OF ESTABLISHMENTS BY INDUSTRY CLASS  
TASMANIA, 30 JUNE 1993—continued**

Industry class		Establishments at 30 June (b) (No.)	Industry class		Establishments at 30 June (b) (No.)
ANZSIC code	Description		ANZSIC code	Description	
<b>MACHINERY AND EQUIPMENT MFG—continued</b>			<b>OTHER MANUFACTURING—continued</b>		
Industrial machinery and equipment mfg—			Furniture mfg—		
2861	Agricultural machinery mfg	6	2921	Wooden furniture and upholstered seat mfg	42
2862	Mining and construction machinery mfg	5	2922	Sheet metal furniture mfg	2
2863	Food processing machinery mfg	2	2923	Mattress mfg (except rubber)	3
2864	Machine tool and part mfg	3	2929	Furniture mfg n.e.c.	3
2865	Lifting and material handling equipment mfg	10	292	<i>Total</i>	47
2866	Pump and compressor mfg	—	<b>Miscellaneous manufacturing—</b>		
2867	Commercial space heating and cooling equipment mfg	3	2941	Jewellery and silverware mfg	1
2869	Industrial machinery and equipment mfg n.e.c.	13	2942	Toy and sporting good mfg	3
286	<i>Total</i>	42	2949	Manufacturing n.e.c.	17
			294	<i>Total</i>	21
<b>28</b>	<b>Total machinery and equipment mfg</b>	<b>120</b>	<b>29</b>	<b>Total other manufacturing</b>	<b>79</b>
<b>OTHER MANUFACTURING—</b>			<b>21-29 TOTAL MANUFACTURING</b>		
Prefabricated building mfg—					
2911	Prefabricated metal building mfg	8			
2919	Prefabricated building mfg n.e.c.	3			
291	<i>Total</i>	11			

(a) See paragraph 8 of the Explanatory Notes. (b) See paragraphs 5 to 11 of the Explanatory Notes.

TABLE 3. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
TASMANIA, 1992-93

Industry class		Employment at end of June	Wages and salaries	Turnover	Total purchases, transfers in and selected expenses	Value added
ANZSIC code	Description	(b) (No.)	(c) (\$m)	(\$m)	(\$m)	(\$m)
FOOD, BEVERAGE AND TOBACCO MFG—						
Meat and meat product mfg—						
2113	Bacon, ham and smallgood mfg	179	4.4	30.4	21.4	9.8
211	Total (d)	1,043	25.0	196.7	146.7	50.0
Dairy product mfg—						
2129	Dairy product mfg n.e.c.	477	12.0	140.4	87.3	55.5
212	Total (d)	658	17.8	207.3	137.5	72.3
213	Fruit and vegetable processing	n.p.	n.p.	n.p.	n.p.	n.p.
214	Oil and fat mfg	—	—	—	—	—
Flour mill and cereal food mfg—						
2151	Flour mill product mfg	56	1.4	28.9	18.7	10.3
215	Total (d)	n.p.	n.p.	n.p.	n.p.	n.p.
Bakery product mfg—						
2161	Bread mfg	519	10.4	45.9	21.8	24.2
2162	Cake and pastry mfg	202	3.2	11.8	6.6	5.2
216	Total (d)	721	13.6	57.8	28.4	29.4
Other food mfg—						
2173	Seafood processing	771	14.4	171.3	115.0	53.9
217	Total (d)	1,750	42.4	360.8	224.8	132.6
Beverage and malt mfg—						
2181	Soft drink, cordial and syrup mfg	145	n.p.	n.p.	n.p.	n.p.
2182	Beer and malt mfg	178	n.p.	n.p.	n.p.	n.p.
2183	Wine mfg	6	n.p.	n.p.	n.p.	n.p.
218	Total (d)	329	10.3	97.8	51.9	45.2
219	Tobacco product mfg	—	—	—	—	—
21	Total food, beverage and tobacco mfg	5,817	146.8	1,215.1	774.5	441.9
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG—						
Textile fibre, yarn and woven fabric mfg—						
2213	Cotton textile mfg	286	n.p.	n.p.	n.p.	n.p.
221	Total (d)	872	22.2	93.8	50.4	45.4
Textile product mfg—						
2221	Made-up textile product mfg	301	n.p.	n.p.	n.p.	n.p.
222	Total (d)	n.p.	n.p.	n.p.	n.p.	n.p.
223	Knitting mills	n.p.	n.p.	n.p.	n.p.	n.p.
224	Clothing mfg	27	n.p.	n.p.	n.p.	n.p.
225	Footwear mfg	361	n.p.	n.p.	n.p.	n.p.
226	Leather and leather product mfg	n.p.	n.p.	n.p.	n.p.	n.p.
22	Total textile, clothing, footwear and leather mfg	1,797	41.9	182.9	98.9	85.7
WOOD AND PAPER PRODUCT MFG—						
Log sawmilling and timber dressing—						
2311	Log sawmilling	672	18.6	92.2	38.4	56.1
2312	Wood chipping	336	n.p.	n.p.	n.p.	n.p.
2313	Timber resawing and dressing	714	n.p.	n.p.	n.p.	n.p.
231	Total	1,722	53.0	366.1	200.9	170.3

For footnotes see end of table.

**TABLE 3. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
TASMANIA, 1992-93—continued**

Industry class		Employment	Wages and	Turnover	Total	Value
ANZSIC		at end of	salaries		purchases,	added
code	Description	June	(c)	(\$m)	transfers in	(\$m)
		(b)	(\$m)	(\$m)	and selected	(\$m)
		(No.)			expenses	
					(\$m)	
	Other wood product mfg—					
2323	Wooden structural component mfg	264	5.0	19.8	11.0	9.1
2329	Wood product mfg n.e.c.	134	2.0	7.3	3.8	3.6
232	Total (d)	n.p.	n.p.	n.p.	n.p.	n.p.
233	Paper and paper product mfg	n.p.	n.p.	n.p.	n.p.	n.p.
<b>23</b>	<b>Total wood and paper product mfg</b>	<b>4,370</b>	<b>170.8</b>	<b>942.0</b>	<b>544.7</b>	<b>403.4</b>
	PRINTING, PUBLISHING AND					
	RECORDED MEDIA—					
	Printing and services to printing—					
2411	Paper stationery mfg	48	1.2	3.9	2.3	1.7
2412	Printing	440	10.2	34.9	15.3	20.5
2413	Services to printing	72	1.5	3.9	1.4	2.5
241	Total	560	12.9	42.6	18.9	24.7
	Publishing—					
2421	Newspaper printing or publishing	911	27.9	77.0	26.0	51.5
242	Total (d)	949	28.6	80.0	27.4	53.0
243	Recorded media manufacturing and publishing		—	—	—	—
<b>24</b>	<b>Total printing, publishing and recorded media</b>	<b>1,509</b>	<b>41.6</b>	<b>122.6</b>	<b>46.4</b>	<b>77.7</b>
	PETROLEUM, COAL, CHEMICAL AND					
	ASSOCIATED PRODUCT MFG—					
251	Petroleum refining	—	—	—	—	—
252	Petroleum and coal product mfg n.e.c.		—	—	—	—
253	Basic chemical mfg	364	15.3	131.8	86.0	45.4
	Other chemical product mfg—					
2549	Chemical product mfg n.e.c.	12	n.p.	n.p.	n.p.	n.p.
254	Total (d)	170	7.3	43.0	20.4	23.8
255	Rubber product mfg	39	1.2	5.6	3.8	1.7
	Plastic product mfg—					
2562	Plastic extruded product mfg	80	1.6	18.5	9.4	9.1
256	Total (d)	249	5.2	34.1	18.6	15.6
<b>25</b>	<b>Total petroleum, coal, chemical and associated product mfg</b>	<b>822</b>	<b>29.0</b>	<b>214.5</b>	<b>128.7</b>	<b>86.6</b>
	NON-METALLIC MINERAL PRODUCT MFG—					
261	Glass and glass product mfg	n.p.	n.p.	n.p.	n.p.	n.p.
	Ceramic mfg—					
2621	Clay brick mfg	82	n.p.	n.p.	n.p.	n.p.
2629	Ceramic product mfg n.e.c.	n.p.	0.2	0.3	0.1	0.2
262	Total (d)	n.p.	n.p.	n.p.	n.p.	n.p.
	Cement, lime, plaster and concrete product mfg—					
2633	Concrete slurry mfg	108	2.9	37.2	26.5	10.6
2635	Concrete product mfg n.e.c.	128	n.p.	n.p.	n.p.	n.p.
263	Total (d)	464	16.1	142.4	81.5	58.0
264	Non-metallic mineral product mfg n.e.c.	87	2.3	16.6	9.8	6.8
<b>26</b>	<b>Total non-metallic mineral product mfg</b>	<b>813</b>	<b>25.4</b>	<b>188.7</b>	<b>104.6</b>	<b>81.4</b>

For footnotes see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
TASMANIA, 1992-93—continued

Industry class		Employment at end of June (b)	Wages and salaries (c)	Turnover	Total purchases, transfers in and selected expenses	Value added
ANZSIC code	Description	(No.)	(\$m)	(\$m)	(\$m)	(\$m)
<b>METAL PRODUCT MFG—</b>						
271	Iron and steel mfg	n.p.	n.p.	n.p.	n.p.	n.p.
272	Basic non-ferrous metal mfg	n.p.	n.p.	n.p.	n.p.	n.p.
273	Non-ferrous basic metal product mfg	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Structural metal product mfg—</b>						
2741	Structural steel fabricating	281	7.9	33.9	22.5	11.6
274	Total (d)	526	13.7	63.6	41.5	22.8
<b>Sheet metal product mfg—</b>						
2751	Metal container mfg	112	n.p.	n.p.	n.p.	n.p.
2759	Sheet metal product mfg n.e.c.	177	n.p.	n.p.	n.p.	n.p.
275	Total	289	7.1	34.5	15.4	18.9
<b>Fabricated metal product mfg—</b>						
2764	Metal coating and finishing	59	1.0	3.3	1.3	2.0
2769	Fabricated metal product mfg n.e.c.	268	5.4	20.4	10.4	10.0
276	Total (d)	439	10.0	33.9	15.9	18.0
27	<b>Total metal product mfg</b>	<b>4,002</b>	<b>148.4</b>	<b>826.9</b>	<b>569.3</b>	<b>241.4</b>
<b>MACHINERY AND EQUIPMENT MFG—</b>						
<b>Motor vehicle and part mfg—</b>						
2812	Motor vehicle body mfg	50	0.9	3.9	2.8	1.2
281	Total (d)	630	16.4	48.6	17.7	31.4
<b>Other transport equipment mfg—</b>						
2822	Boatbuilding	69	0.9	3.0	0.9	2.0
282	Total (d)	392	n.p.	n.p.	n.p.	n.p.
<b>Photographic and scientific equipment mfg—</b>						
2831	Photographic and optical good mfg	30	0.6	3.2	1.7	1.5
2832	Medical and surgical equipment mfg	45	n.p.	n.p.	n.p.	n.p.
2839	Professional and scientific equipment mfg n.e.c.	10	0.2	0.9	0.4	0.5
283	Total	85	n.p.	n.p.	n.p.	n.p.
<b>Electronic equipment mfg—</b>						
2849	Electronic equipment mfg n.e.c.	n.p.	2.2	8.0	4.1	4.3
284	Total (d)	112	n.p.	n.p.	n.p.	n.p.
<b>Electrical equipment and appliance mfg—</b>						
2854	Electric light and sign mfg	25	n.p.	n.p.	n.p.	n.p.
285	Total (d)	177	4.0	15.4	8.6	6.8
<b>Industrial machinery and equipment mfg—</b>						
2861	Agricultural machinery mfg	34	0.7	3.3	2.0	1.4
2864	Machine tool and part mfg	18	0.3	1.0	0.4	0.6
2865	Lifting and material handling equipment mfg	219	6.0	22.9	9.8	13.3
2867	Commercial space heating and cooling equipment mfg	11	n.p.	n.p.	n.p.	n.p.
286	Total (d)	480	12.4	47.3	19.7	28.2
28	<b>Total machinery and equipment mfg</b>	<b>1,876</b>	<b>45.9</b>	<b>178.5</b>	<b>89.5</b>	<b>81.9</b>

For footnotes see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
TASMANIA, 1992-93 -continued

Industry class		Employment at end of June (b) (No.)	Wages and salaries (c) (\$m)	Turnover (Sm)	Total purchases, transfers in and selected expenses (Sm)	Value added (Sm)
ANZSIC code	Description					
OTHER MANUFACTURING—						
Prefabricated building mfg—						
2911	Prefabricated metal building mfg	108	n.p.	n.p.	n.p.	n.p.
2919	Prefabricated building mfg n.e.c.	26	0.4	1.6	0.8	0.7
291	<i>Total</i>	134	n.p.	n.p.	n.p.	n.p.
Furniture mfg—						
2921	Wooden furniture and upholstered seat mfg	404	7.3	24.4	12.8	11.9
292	<i>Total (d)</i>	462	8.7	30.5	16.8	14.0
Miscellaneous manufacturing—						
2949	Manufacturing n.e.c.	69	1.2	3.5	1.5	1.9
294	<i>Total (d)</i>	87	n.p.	n.p.	n.p.	n.p.
29	<i>Total other manufacturing</i>	683	14.1	53.0	30.9	21.6
21-29	<b>TOTAL MANUFACTURING</b>	<b>21,687</b>	<b>663.9</b>	<b>3,924.2</b>	<b>2,387.5</b>	<b>1,521.7</b>

(a) See paragraph 8 of the Explanatory Notes. (b) Includes working proprietors. (c) Excludes the drawings of working proprietors. (d) The total shown is that for all ANZSIC classes within this industry group. Data for other ANZSIC classes within the industry group are either not available for publication (due to confidentiality restrictions) or there are no units classified to those ANZSIC classes.



TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, TASMANIA, 1989-90 AND 1992-93

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)(e) (\$'000)		Ratio of Value added to turnover		Ratio of 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
<b>FOOD, BEVERAGE AND TOBACCO MFG—</b>														
Meat and meat product mfg—														
2111		Meat processing	69	n.p.	208.2	n.p.	64.3	n.p.	24.9	n.p.	0.31	n.p.	0.39	n.p.
2113		Bacon, ham and smallgoods mfg	n.p.	36	n.p.	155.1	n.p.	50.1	n.p.	22.6	n.p.	0.3	n.p.	0.45
211		Total (f)	60	65	189.6	191.7	61.4	48.7	23.1	24.5	0.32	0.2	0.37	0.50
Dairy product mfg—														
2129		Dairy product mfg n.e.c.	50	53	271.8	282.5	179.5	111.7	23.5	24.2	0.66	0.40	0.13	0.22
212		Total (f)	47	51	283.4	306.7	159.6	106.9	24.3	26.4	0.56	0.35	0.15	0.25
213		Fruit and vegetable processing	n.p.	n.p.	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	n.p.	n.p.	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	n.p.	19	n.p.	506.8	n.p.	181.2	n.p.	25.3	n.p.	0.36	n.p.	0.14
215		Total (f)	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Bakery product mfg—														
2161		Bread mfg	34	29	81.2	87.0	47.5	45.8	19.9	23.1	0.59	0.53	0.41	0.43
2162		Cake and pastry mfg	14	12	53.1	58.5	25.2	25.7	15.7	17.6	0.47	0.44	0.59	0.62
216		Total (f)	22	21	70.7	79.1	39.2	40.2	18.4	21.5	0.55	0.51	0.46	0.46
Other food mfg														
2173		Seafood processing	n.p.	41	n.p.	217.7	n.p.	68.5	n.p.	18.4	n.p.	0.31	n.p.	0.27
2174		Prepared animal and bird feed mfg	9	n.p.	558.8	n.p.	101.2	n.p.	28.1	n.p.	0.18	n.p.	0.26	n.p.
2179		Food mfg n.e.c.	4	n.p.	55.5	n.p.	23.0	n.p.	20.3	n.p.	0.41	n.p.	0.81	n.p.
217		Total (f)	48	58	196.4	206.5	73.0	73.9	24.8	24.4	0.37	0.37	0.54	0.32
Beverage and malt mfg—														
2181		Soft drink, cordial and syrup mfg	n.p.	36	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2182		Beer and malt mfg	n.p.	45	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2183		Wine mfg	5	2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
218		Total (f)	34	30	215.7	276.1	104.8	127.8	21.1	29.5	0.49	0.46	0.20	0.20
219		Tobacco product mfg	—	—	—	—	—	—	—	—	—	—	—	—
21		Total food, beverage and tobacco mfg	50	49	178.1	208.4	76.6	75.8	23.8	25.7	0.43	0.36	0.31	0.33

For footnotes see end of table.

TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, TASMANIA, 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	Wages and salaries to value added
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG—													
Textile fibre, yarn and woven fabric mfg—													
2213	Cotton textile mfg	n.p.	95	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2214	Wool textile mfg	184	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
221	Total (f)	173	109	108.2	107.0	58.3	51.9	22.6	25.5	0.54	0.48	0.59	0.49
Textile product mfg—													
2221	Made-up textile product mfg	10	30	60.7	n.p.	24.8	n.p.	19.0	n.p.	0.41	n.p.	0.77	n.p.
222	Total (f)	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
223	Knitting mills	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
224	Clothing mfg	7	7	39.6	n.p.	18.6	n.p.	15.3	n.p.	0.47	n.p.	0.72	n.p.
225	Footwear mfg	120	90	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
226	Leather and leather product mfg	8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
22	Total textile, clothing, footwear and leather mfg	64	54	94.0	103.7	49.3	48.6	21.2	24.0	0.52	0.47	0.43	0.49
WOOD AND PAPER PRODUCT MFG													
Log sawmilling and timber dressing—													
2311	Log sawmilling	14	11	84.5	130.8	47.8	79.6	21.1	29.0	0.57	0.61	0.41	0.33
2312	Wood chipping	85	48	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	50	48	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
231	Total	24	21	168.5	206.5	70.4	96.0	25.7	31.1	0.42	0.47	0.35	0.31
Other wood product mfg—													
2323	Wooden structural component mfg	7	7	74.5	78.7	34.6	35.9	20.8	24.3	0.46	0.46	0.54	0.56
2329	Wood product mfg n.e.c.	6	7	61.7	65.5	27.5	32.8	16.3	23.3	0.45	0.50	0.53	0.56
232	Total (f)	10	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
233	Paper and paper product mfg	330	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
23	Total wood and paper product mfg	33	29	179.5	208.3	67.3	89.2	29.1	38.9	0.37	0.43	0.42	0.42

For footnotes see end of table.

TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, TASMANIA, 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	1989-90	1992-93
<b>PRINTING, PUBLISHING AND RECORDED MEDIA—</b>													
<b>PRINTING AND SERVICES TO PRINTING</b>													
2411	Paper stationery mfg	n.p.	12	n.p.	74.0	n.p.	32.8	n.p.	24.4	n.p.	0.44	n.p.	0.72
2412	Printing	14	16	73.7	80.9	39.7	47.5	22.8	25.0	0.54	0.59	0.54	0.50
2413	Services to printing	n.p.	8	n.p.	56.7	n.p.	37.1	n.p.	26.2	n.p.	0.65	n.p.	0.60
241	Total	14	14	72.2	77.4	39.6	44.9	23.1	25.1	0.55	0.58	0.56	0.52
<b>PUBLISHING</b>													
2421	Newspaper printing or publishing	94	83	n.p.	84.4	n.p.	56.4	n.p.	30.7	n.p.	0.67	n.p.	0.54
242	Total (f)	74	56	67.4	84.1	49.1	55.8	24.0	30.5	0.73	0.66	0.49	0.54
243	Recorded media manufacturing and publishing	—	—	—	—	—	—	—	—	—	—	—	—
24	Total printing, publishing and recorded media	27	26	69.4	81.6	45.2	51.8	23.6	28.6	0.65	0.63	0.51	0.53
<b>PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG—</b>													
<b>PETROLEUM REFINING</b>													
251	Petroleum refining	n.p.	—	n.p.	—	n.p.	—	n.p.	—	n.p.	—	n.p.	—
252	Petroleum and coal product mfg n.e.c.	—	—	—	—	—	—	—	—	—	—	—	—
<b>BASIC CHEMICAL MFG—</b>													
2535	Inorganic industrial chemical mfg n.e.c.	129	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
253	Total (f)	77	46	270.6	352.3	112.1	121.5	38.3	40.8	0.41	0.34	0.34	0.34
<b>OTHER CHEMICAL PRODUCT MFG—</b>													
2549	Chemical product mfg n.e.c.	n.p.	4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
254	Total (f)	15	17	127.3	250.1	58.7	138.5	26.0	42.5	0.46	0.53	0.43	0.31
<b>RUBBER PRODUCT MFG</b>													
2551	Rubber product mfg	13	n.p.	131.8	n.p.	78.2	n.p.	23.5	n.p.	0.59	n.p.	0.29	n.p.
255	Rubber tyre mfg	n.p.	7	n.p.	136.9	n.p.	41.9	n.p.	30.5	n.p.	0.31	n.p.	0.71
<b>PLASTIC PRODUCT MFG—</b>													
2562	Plastic extruded product mfg	40	27	137.2	214.7	50.3	105.9	26.0	18.5	0.37	0.49	0.52	0.18
256	Total (f)	19	15	96.4	134.7	45.1	61.8	23.0	21.6	0.47	0.46	0.50	0.33
25	Total petroleum, coal, chemical and associated product mfg	27	20	192.4	255.3	81.8	103.1	31.3	35.1	0.43	0.40	0.38	0.34

For footnotes see end of table.

TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, TASMANIA, 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	1989-90
<b>NON-METALLIC MINERAL PRODUCT MFG—</b>												
261	Glass and glass product mfg	21	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Ceramic mfg—</b>												
2621	Clay brick mfg	n.p.	27	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.	3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
262	Total (f)	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Cement, lime, plaster and concrete product mfg—</b>												
2633	Concrete slurry mfg	6	8	362.3	347.2	124.4	99.4	28.2	27.5	0.34	0.29	0.21
2635	Concrete product mfg n.e.c.	n.p.	18	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
263	Total (f)	23	19	206.2	301.1	93.1	122.7	24.3	34.7	0.45	0.41	0.26
264	Non-metallic mineral product mfg n.e.c.	n.p.	12	n.p.	195.0	n.p.	79.5	n.p.	28.1	n.p.	0.41	n.p.
26	Total non-metallic mineral product mfg	19	19	178.4	232.7	86.7	100.4	24.9	32.4	0.49	0.43	0.28
<b>METAL PRODUCT MFG—</b>												
271	Iron and steel mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
272	Basic non-ferrous metal mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Non-ferrous basic metal product mfg—</b>												
2733	Non-ferrous metal casting	52	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
273	Total (f)	52	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Structural metal product mfg—</b>												
2741	Structural steel fabricating	n.p.	12	n.p.	110.5	n.p.	37.7	n.p.	26.7	n.p.	0.34	n.p.
2742	Architectural aluminium product mfg	9	n.p.	110.0	n.p.	31.8	n.p.	20.7	n.p.	0.29	n.p.	0.62
274	Total (f)	13	13	98.2	115.2	41.3	41.3	21.9	25.8	0.42	0.36	0.52
<b>Sheet metal product mfg—</b>												
2751	Metal container mfg	n.p.	37	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2759	Sheet metal product mfg n.e.c.	n.p.	8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
275	Total	9	12	115.8	116.0	47.1	63.3	20.0	24.9	0.41	0.55	0.40
<b>Fabricated metal product mfg—</b>												
2764	Metal coating and finishing	7	8	55.8	60.7	32.4	36.7	20.0	21.4	0.58	0.60	0.54
2769	Fabricated metal product mfg n.e.c.	n.p.	8	n.p.	78.0	n.p.	38.2	n.p.	22.8	n.p.	0.49	n.p.
276	Total (f)	10	9	71.2	74.3	29.2	39.3	21.5	23.3	0.41	0.53	0.55
27	Total metal product mfg	34	31	193.1	201.9	76.0	58.9	33.0	36.8	0.39	0.29	0.43

For footnotes see end of table.

TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, TASMANIA, 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	1989-90	1992-93
<b>MACHINERY AND EQUIPMENT MFG—</b>														
2812		Motor vehicle and part mfg	n.p.		n.p.		n.p.		n.p.					
281		Motor vehicle body mfg	38	7	79.3	83.1	41.1	26.0	29.4	22.0	n.p.	0.31	n.p.	0.74
		Total (f)		42		77.1		49.8		26.4		0.52	0.65	0.70
2822		Other transport equipment mfg—	n.p.	7	n.p.	51.2	n.p.	34.7	n.p.	19.4	n.p.	n.p.	0.68	n.p.
282		Boatbuilding	23	28	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
		Total (f)												0.44
2831		Photographic and scientific equipment mfg	8	6	53.1	104.3	28.8	48.6	21.0	20.4	0.54	0.47	0.73	0.42
2832		Photographic and optical good mfg	n.p.	3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2839		Medical and surgical equipment mfg	n.p.	1	n.p.	73.3	n.p.	42.9	n.p.	27.6	n.p.	0.50	0.59	0.54
283		Professional and scientific equipment mfg n.e.c.	4	1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
		Total												
2841		Electronic equipment 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.
2849		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.	0.30
284		Electronic equipment mfg n.e.c.	8	9	70.1	n.p.	37.4	n.p.	19.7	n.p.	n.p.	0.54	n.p.	0.51
		Total (f)										0.53	n.p.	0.45
2851		Electrical equipment and appliance mfg	15	n.p.	71.3	n.p.	38.1	n.p.	18.9	n.p.	n.p.	0.53	n.p.	0.49
2854		Household appliance mfg	n.p.	8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
285		Electric light and sign mfg	11	15	77.3	83.3	38.7	36.5	20.2	21.8	n.p.	0.50	0.44	0.50
		Total (f)												
2861		Industrial machinery and equipment mfg—	5	6	79.5	100.9	39.5	42.0	18.0	21.9	0.50	0.42	0.41	0.47
2864		Agricultural machinery mfg	n.p.	6	n.p.	56.7	n.p.	33.5	n.p.	26.2	n.p.	0.59	n.p.	0.57
2865		Machine tool and part mfg	20	22	102.7	105.5	44.4	61.3	25.8	27.9	0.43	0.58	0.58	0.45
2867		Lifting and material handling equipment mfg	—	4	—	n.p.	—	n.p.	n.p.	n.p.	—	n.p.	n.p.	n.p.
286		Commercial space heating and cooling equipment mfg	13	11	81.3	98.6	39.2	58.8	23.2	26.6	0.48	0.60	0.58	0.44
		Total (f)												
28		Total machinery and equipment mfg	16	16	93.2	96.5	56.5	44.3	26.8	25.7	0.61	0.46	0.46	0.56

For footnotes see end of table.

TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATING RATIOS BY INDUSTRY CLASS, TASMANIA, 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)(f)		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	Wages and salaries to value added
<b>OTHER MANUFACTURING—</b>													
	Prefabricated building mfg—												
2911	Prefabricated metal building mfg	n.p.	14	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2919	Prefabricated building mfg n.e.c.	n.p.	9	n.p.	64.7	n.p.	30.3	n.p.	17.4	n.p.	0.47	n.p.	0.55
291	Total	17	12	112.6	n.p.	46.6	n.p.	27.5	n.p.	0.41	n.p.	0.56	n.p.
<b>Furniture mfg—</b>													
2921	Wooden furniture and upholstered seat mfg	n.p.	10	n.p.	62.6	n.p.	30.6	n.p.	21.7	n.p.	0.49	n.p.	0.61
292	Total (f)	13	10	63.5	68.6	32.2	31.4	19.2	22.3	0.51	0.46	0.56	0.62
<b>Miscellaneous manufacturing—</b>													
2942	Toy and sporting good mfg (g)												
2949	Manufacturing n.e.c. (g)	5	n.p.	47.4	n.p.	23.4	n.p.	17.2	n.p.	0.49	n.p.	0.68	n.p.
294	Total (f)	5	4	47.3	n.p.	23.3	n.p.	17.2	n.p.	0.49	n.p.	0.68	n.p.
29	Total other manufacturing	11	9	67.0	78.3	32.6	31.9	19.9	23.6	0.49	0.41	0.57	0.65
21-29	TOTAL MANUFACTURING	30	28	157.1	179.3	67.3	69.5	27.0	31.1	0.43	0.39	0.39	0.44

(a) See paragraph 8 of the Explanatory Notes. (b) Number of persons employed at the 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. (d) Includes working proprietors. (e) Value data are at current prices and, therefore, do not discount the impact of price changes. (f) Based on average number of employees over the whole year. (g) Excludes working proprietors and their drawings. (h) The total shown is that for all ANZSIC classes within this industry group. Data for other ANZSIC classes within the industry group are either not available for publication (due to confidentiality restrictions) or there are no units classified to those ANZSIC classes. (i) Data for 1989-90 for ANZSIC classes 2942 and 2949 have been combined.

TABLE 5. MANUFACTURING ESTABLISHMENTS (a): PERCENTAGE CHANGE IN GROSS PRODUCT AT FACTOR COST (AVERAGE 1989-90 PRICES) (b)  
BY INDUSTRY SUBDIVISION, TASMANIA, 1989-90 TO 1992-93

Industry subdivision ANZSIC code	Description	1989-90 to 1992-93 (%)				Change in gross product per person employed (c)
		1989-90 to 1990-91	1990-91 to 1991-92	1991-92 to 1992-93	Percentage movement	
21	Food, beverage and tobacco mfg	1.5	1.7	-2.2	-2.4	4.5
22	Textile, clothing, footwear and leather mfg	2.7	2.3	0.1	4.8	4.1
23	Wood and paper product mfg	6.8	12.1	0.2	18.2	13.2
24	Printing, publishing and recorded media	-1.7	3.9	-7.5	-12.6	1.8
25	Petroleum, coal, chemical and associated product mfg	5.0	11.6	2.4	13.9	27.0
26	Non-metallic mineral product mfg	-7.8	3.2	14.6	9.1	14.8
27	Metal product mfg	2.9	4.7	-6.2	1.1	15.5
28	Machinery and equipment mfg	1.4	10.4	21.8	-12.5	5.2
29	Other manufacturing	-25.0	-12.1	-6.9	38.6	4.5
<b>21-29</b>	<b>Total manufacturing</b>	<b>-1.7</b>	<b>-2.1</b>	<b>-3.4</b>	<b>-7.0</b>	<b>10.6</b>

(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 6. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, TASMANIA, 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)		Ratio of (e)—	
	(No.)	(%)	(No.)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$'000)	Value added to turnover	Wages and salaries to value added	
FOOD, BEVERAGE AND TOBACCO MFG																
0-3 persons	12	10.2	27	0.5	0.6	0.4	5.7	0.5	2.3	0.5	—	—	39.3	0.41	0.27	
4-9 persons	43	36.4	273	4.7	5.0	3.4	53.3	4.4	14.1	3.2	1.0	1.3	46.7	0.26	0.36	
10-19 persons	12	10.2	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.	
20-49 persons	18	15.3	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.	
50-99 persons	18	15.3	1,274	21.9	31.5	21.6	259.9	21.4	108.0	24.5	3.4	4.4	88.4	0.42	0.29	
Total less than 100 persons	103	87.3	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.	
100-199 persons	9	7.6	1,236	21.2	28.1	19.2	237.6	19.6	73.5	16.6	3.4	4.5	61.5	0.31	0.38	
200-499 persons	5	4.2	1,326	22.8	37.3	25.5	274.4	22.6	105.1	23.8	46.0	60.8	76.2	0.38	0.36	
500-999 persons	1	0.8	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.	
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total 100 or more persons	15	12.7	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.	
<b>Total</b>	<b>118</b>	<b>100.0</b>	<b>5,817</b>	<b>100.0</b>	<b>146.3</b>	<b>100.0</b>	<b>1,212.4</b>	<b>100.0</b>	<b>441.4</b>	<b>100.0</b>	<b>75.6</b>	<b>100.0</b>	<b>76.0</b>	<b>0.36</b>	<b>0.33</b>	
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG																
0-3 persons	8	24.2	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.	
4-9 persons	10	30.3	64	3.6	1.5	3.5	7.7	4.2	3.1	3.7	—	1.9	45.3	0.40	0.47	
10-19 persons	3	9.1	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.	
20-49 persons	4	12.1	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.	
50-99 persons	2	6.1	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 less than 100 persons	26	78.8	403	22.4	9.0	21.5	38.5	21.1	17.0	19.9	0.3	13.3	41.8	0.44	0.53	
100-199 persons	4	12.1	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.	
200-499 persons	3	9.1	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total 100 or more persons	7	21.2	1,394	77.6	32.9	78.5	144.4	78.9	68.7	80.1	1.9	86.7	50.6	0.48	0.48	
<b>Total</b>	<b>33</b>	<b>100.0</b>	<b>1,797</b>	<b>100.0</b>	<b>41.9</b>	<b>100.0</b>	<b>182.9</b>	<b>100.0</b>	<b>85.7</b>	<b>100.0</b>	<b>2.2</b>	<b>100.0</b>	<b>48.6</b>	<b>0.47</b>	<b>0.49</b>	

For footnotes see end of table.



TABLE 6. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, TASMANIA, 1992-93--continued

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d)(e)		Turnover (f)		Value added (g)		Net capital expenditure (h)		Value added per person employed (i)(j)(k)		Ratio of (e)--	
	(No.)	(%)	(No.)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$'000)	(c)/(e)(k)	Value added to turnover	Wages and salaries to value added
WOOD AND PAPER PRODUCT MFG																
0-3 persons	47	31.3	118	2.7	1.4	0.8	5.6	0.6	2.9	0.7	—	—	24.8	0.52	0.52	0.48
4-9 persons	60	40.0	326	7.5	5.9	3.5	22.8	2.4	11.5	2.9	0.1	0.3	36.9	0.51	0.51	0.52
10-19 persons	18	12.0	222	5.1	8.1	4.9	58.6	6.3	33.3	8.3	2.8	9.3	139.3	0.57	0.57	0.24
20-49 persons	10	6.7	362	8.3	8.6	5.1	46.8	5.0	17.9	4.4	1.0	3.5	56.4	0.38	0.38	0.48
50-99 persons	6	4.0	528	12.1	18.8	11.2	144.3	15.5	80.0	19.9	3.8	12.6	141.5	0.55	0.55	0.24
Total less than 100 persons	141	94.0	1,555	35.6	42.8	25.6	278.1	29.9	145.6	36.1	7.7	25.7	93.8	0.52	0.52	0.29
100-199 persons	7	4.7	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.	n.p.
200-499 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
500-999 persons	1	0.7	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.	n.p.
1000 or more persons	1	0.7	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.	n.p.
Total 100 or more persons	9	6.0	2,815	64.4	124.7	74.4	652.1	70.1	257.2	63.9	22.3	74.3	88.5	0.39	0.39	0.48
<b>Total</b>	<b>150</b>	<b>100.0</b>	<b>4,370</b>	<b>100.0</b>	<b>167.5</b>	<b>100.0</b>	<b>930.2</b>	<b>100.0</b>	<b>402.9</b>	<b>100.0</b>	<b>30.0</b>	<b>100.0</b>	<b>90.4</b>	<b>0.43</b>	<b>0.43</b>	<b>0.42</b>
PRINTING, PUBLISHING AND RECORDED MEDIA																
0-3 persons	13	22.4	30	2.0	0.4	1.0	1.8	1.4	1.0	1.3	—	—	31.6	0.56	0.56	0.41
4-9 persons	20	34.5	128	8.5	2.4	5.8	7.2	5.8	4.6	5.9	0.2	7.8	37.2	0.64	0.64	0.53
10-19 persons	14	24.1	180	11.9	3.8	9.2	13.0	10.6	7.7	9.9	0.4	13.0	42.6	0.59	0.59	0.50
20-49 persons	5	8.6	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.	n.p.
50-99 persons	3	5.2	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.	n.p.
Total less than 100 persons	55	94.8	661	43.8	14.8	35.5	48.2	39.4	27.8	35.7	1.9	60.1	42.5	0.58	0.58	0.53
100-199 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
200-499 persons	3	5.2	848	56.2	26.8	64.5	74.4	60.6	50.0	64.3	1.2	39.9	58.8	0.67	0.67	0.54
500-999 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total 100 or more persons	3	5.2	848	56.2	26.8	64.5	74.4	60.6	50.0	64.3	1.2	39.9	58.8	0.67	0.67	0.54
<b>Total</b>	<b>58</b>	<b>100.0</b>	<b>1,509</b>	<b>100.0</b>	<b>41.6</b>	<b>100.0</b>	<b>122.6</b>	<b>100.0</b>	<b>77.7</b>	<b>100.0</b>	<b>3.1</b>	<b>100.0</b>	<b>51.8</b>	<b>0.63</b>	<b>0.63</b>	<b>0.53</b>

For footnotes see end of table.

TABLE 6. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, TASMANIA, 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)(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	13	31.7	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.	n.p.
4-9 persons	9	22.0	64	7.8	1.8	6.3	12.7	5.9	6.4	7.3	0.3	1.2	100.6	0.50	0.29	n.p.
10-19 persons	8	19.5	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.	n.p.
20-49 persons	8	19.5	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.	n.p.
50-99 persons	2	4.9	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.	n.p.
Total less than 100 persons	40	97.6	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.	n.p.
100-199 persons	1	2.4	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.	n.p.
200-499 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
500-999 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total 100 or more persons	1	2.4	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.	n.p.
<b>Total</b>	<b>41</b>	<b>100.0</b>	<b>822</b>	<b>100.0</b>	<b>28.9</b>	<b>100.0</b>	<b>214.3</b>	<b>100.0</b>	<b>86.5</b>	<b>100.0</b>	<b>24.0</b>	<b>100.0</b>	<b>103.7</b>	<b>0.40</b>	<b>0.33</b>	<b>0.33</b>
NON-METALLIC MINERAL PRODUCT MFG																
0-3 persons	17	39.5	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.	n.p.
4-9 persons	9	20.9	56	6.9	1.3	5.3	9.8	5.2	3.7	4.5	0.9	1.2	64.4	0.38	0.37	n.p.
10-19 persons	9	20.9	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.	n.p.
20-49 persons	6	14.0	190	23.4	5.7	22.5	45.4	24.0	22.0	27.0	1.4	1.9	114.1	0.49	0.26	n.p.
50-99 persons	1	2.3	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.	n.p.
Total less than 100 persons	41	95.3	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.	n.p.
100-199 persons	2	4.7	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.	n.p.
200-499 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
500-999 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total 100 or more persons	2	4.7	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.	n.p.
<b>Total</b>	<b>43</b>	<b>100.0</b>	<b>813</b>	<b>100.0</b>	<b>25.4</b>	<b>100.0</b>	<b>188.7</b>	<b>100.0</b>	<b>81.4</b>	<b>100.0</b>	<b>76.1</b>	<b>100.0</b>	<b>100.4</b>	<b>0.43</b>	<b>0.31</b>	<b>0.31</b>

For footnotes see end of table.

TABLE 6. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, TASMANIA, 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)(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	32	24.6	71	1.8	1.2	0.8	6.7	0.8	2.8	1.2	0.5	1.0	36.1	0.41	0.42	
4-9 persons	49	37.7	288	7.2	6.2	4.2	30.0	3.7	12.5	5.2	0.7	1.7	43.2	0.42	0.50	
10-19 persons	26	20.0	355	8.9	8.2	5.6	38.5	4.7	13.5	5.6	0.4	1.0	39.9	0.35	0.61	
20-49 persons	15	11.5	379	9.5	9.4	6.4	42.6	5.2	20.8	8.7	0.3	0.7	48.9	0.49	0.45	
50-99 persons	5	3.8	344	8.6	9.8	6.7	42.4	5.2	18.2	7.6	1.1	2.4	48.8	0.43	0.54	
Total less than 100 persons	126	96.9	1,436	35.9	34.7	23.6	160.2	19.5	67.8	28.3	3.0	6.8	46.6	0.42	0.51	
100-199 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
200-499 persons	2	1.5	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.	
500-999 persons	1	0.8	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.	
1000 or more persons	1	0.8	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 100 or more persons	4	3.1	2,566	64.1	112.4	76.4	661.1	80.5	171.9	71.7	41.1	93.2	65.9	0.26	0.65	
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>4,002</b>	<b>100.0</b>	<b>147.1</b>	<b>100.0</b>	<b>821.4</b>	<b>100.0</b>	<b>239.7</b>	<b>100.0</b>	<b>44.1</b>	<b>100.0</b>	<b>59.0</b>	<b>0.29</b>	<b>0.61</b>	
MACHINERY AND EQUIPMENT MFG																
0-3 persons	47	39.2	100	5.3	2.0	4.4	6.9	3.9	4.5	5.5	—	2.8	42.0	0.65	0.45	
4-9 persons	42	35.0	250	13.3	4.9	10.7	18.2	10.2	10.4	12.8	0.5	29.7	41.8	0.58	0.47	
10-19 persons	18	15.0	256	13.6	6.5	14.2	22.7	12.7	11.6	14.2	0.5	30.3	45.0	0.51	0.56	
20-49 persons	9	7.5	310	16.5	7.1	15.4	31.2	17.5	16.5	20.1	0.4	22.3	55.7	0.53	0.43	
50-99 persons	2	1.7	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	118	98.3	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.	
100-199 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
200-499 persons	2	1.7	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.	
500-999 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total 100 or more persons	2	1.7	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.	
<b>Total</b>	<b>120</b>	<b>100.0</b>	<b>1,876</b>	<b>100.0</b>	<b>45.9</b>	<b>100.0</b>	<b>178.5</b>	<b>100.0</b>	<b>81.9</b>	<b>100.0</b>	<b>1.6</b>	<b>100.0</b>	<b>44.3</b>	<b>0.46</b>	<b>0.56</b>	

For footnotes see end of table.

TABLE 6. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, TASMANIA, 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)(f)		Ratio of (e)—		
	(No.)	(%)	(No.)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	Value added to turnover	Wages and salaries to value added	
OTHER MANUFACTURING																	
0-3 persons	33	41.8	—	—	0.9	6.5	3.7	6.9	1.7	7.9	0.1	11.6	25.7	0.47	0.53		
4-9 persons	25	31.6	162	23.7	2.7	19.2	12.6	23.8	5.3	24.4	0.3	47.7	33.1	0.42	0.51		
10-19 persons	10	12.7	130	19.0	2.6	18.5	8.4	15.8	4.2	19.6	0.1	10.0	35.2	0.51	0.62		
20-49 persons	11	13.9	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.		
50-99 persons	1	1.3	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	79	100.0	683	100.0	14.1	100.0	53.0	100.0	21.6	100.0	0.6	100.0	31.9	0.41	0.65		
100-199 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
200-499 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
500-999 persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Total 100 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
<b>Total</b>	<b>79</b>	<b>100.0</b>	<b>683</b>	<b>100.0</b>	<b>14.1</b>	<b>100.0</b>	<b>53.0</b>	<b>100.0</b>	<b>21.6</b>	<b>100.0</b>	<b>0.6</b>	<b>100.0</b>	<b>31.9</b>	<b>0.41</b>	<b>0.65</b>		
TOTAL MANUFACTURING																	
0-3 persons	220	28.5	477	2.2	8.1	1.2	42.7	1.1	18.0	1.2	1.1	0.4	33.8	0.42	0.45		
4-9 persons	266	34.5	1,610	7.4	31.8	4.8	174.1	4.5	71.5	4.7	4.0	1.6	44.1	0.41	0.45		
10-19 persons	117	15.2	1,609	7.4	40.3	6.1	247.5	6.3	107.1	7.1	6.9	2.7	67.1	0.43	0.38		
20-49 persons	86	11.1	2,632	12.1	62.6	9.5	448.7	11.5	175.7	11.6	27.8	10.8	68.4	0.39	0.36		
50-99 persons	40	5.2	2,971	13.7	85.8	13.0	556.2	14.2	262.7	17.3	11.5	4.5	87.8	0.47	0.33		
Total less than 100 persons	729	94.4	9,299	43.9	228.7	34.7	1,469.3	37.6	635.0	41.8	51.3	20.0	68.2	0.43	0.36		
100-199 persons	23	3.0	3,260	15.0	90.5	13.7	616.4	15.8	218.7	14.4	81.3	31.6	69.4	0.35	0.41		
200-499 persons	15	1.9	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.		
500-999 persons	3	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	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.		
Total 100 or more persons	43	5.6	12,588	57.1	430.0	65.3	2,434.6	62.4	883.9	58.2	295.8	80.0	70.9	0.36	0.49		
<b>Total</b>	<b>772</b>	<b>100.0</b>	<b>21,687</b>	<b>100.0</b>	<b>658.7</b>	<b>100.0</b>	<b>3,903.9</b>	<b>100.0</b>	<b>1,518.9</b>	<b>100.0</b>	<b>257.2</b>	<b>100.0</b>	<b>69.8</b>	<b>0.39</b>	<b>0.43</b>		

(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 7. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)  
BY INDUSTRY CLASS, TASMANIA, 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				
211	FOOD, BEVERAGE AND TOBACCO MFG— Meat and meat product mfg	587	0.3	n.p.	n.p.
2129	Dairy product mfg— Dairy product mfg n.e.c.	76	0.1	—	—
212	Total (c)	158	0.1	—	—
213	Fruit and vegetable processing	n.p.	n.p.	n.p.	n.p.
214	Oil and fat mfg	—	—	—	—
215	Flour mill and cereal food mfg	n.p.	n.p.	n.p.	n.p.
216	Bakery product mfg	17	—	—	—
2173	Other food mfg - Seafood processing	259	0.2	n.p.	n.p.
217	Total (c)	426	0.1	523	2.3
218	Beverage and malt mfg	89	0.1	—	—
219	Tobacco product mfg	—	—	—	—
21	<b>Total food, beverage and tobacco mfg</b>	<b>2,597</b>	<b>0.2</b>	<b>n.p.</b>	<b>n.p.</b>
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG—					
221	Textile fibre, yarn and woven fabric mfg	49	0.1	—	—
2221	Textile product mfg— Made-up textile product mfg	40	n.p.	—	—
222	Total (c)	n.p.	n.p.	—	—
223	Knitting mills	n.p.	n.p.	—	—
224	Clothing mfg	—	—	—	—
225	Footwear mfg	n.p.	n.p.	—	—
226	Leather and leather product mfg	—	—	—	—
22	<b>Total textile, clothing, footwear and leather mfg</b>	<b>120</b>	<b>0.1</b>	<b>—</b>	<b>—</b>
WOOD AND PAPER PRODUCT MFG—					
2311	Log sawmilling and timber dressing— Log sawmilling	190	0.2	n.p.	n.p.
231	Total (c)	691	0.2	667	4.9
2323	Other wood product mfg— Wooden structural component mfg	15	0.1	n.p.	n.p.
232	Total (c)	n.p.	n.p.	n.p.	n.p.
233	Paper and paper product mfg	n.p.	n.p.	n.p.	n.p.
23	<b>Total wood and paper product mfg</b>	<b>4,175</b>	<b>0.4</b>	<b>2,316</b>	<b>7.0</b>

For footnotes see end of table.

TABLE 7. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)  
BY INDUSTRY CLASS, TASMANIA, 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 (%)
PRINTING, PUBLISHING AND RECORDED MEDIA—					
Printing and services to printing—					
2412	Printing	3	—	—	—
241	Total (c)	3	—	—	—
242	Publishing	39	—	—	—
243	Recorded media manufacturing and publishing	—	—	—	—
24	<b>Total printing, publishing and recorded media</b>	<b>42</b>	<b>—</b>	<b>—</b>	<b>—</b>
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG—					
251	Petroleum refining	—	—	—	—
252	Petroleum and coal product mfg n.e.c.	—	—	—	—
253	Basic chemical mfg	8,047	6.1	n.p.	n.p.
254	Other chemical product mfg	n.p.	n.p.	n.p.	n.p.
255	Rubber product mfg	n.p.	n.p.	—	—
256	Plastic product mfg	23	0.1	—	—
25	<b>Total petroleum, coal, chemical and associated product mfg</b>	<b>8,268</b>	<b>3.9</b>	<b>760</b>	<b>3.1</b>
NON-METALLIC MINERAL PRODUCT MFG—					
261	Glass and glass product mfg	n.p.	n.p.	—	—
262	Ceramic mfg	n.p.	n.p.	—	—
Cement, lime, plaster and concrete product mfg—					
2633	Concrete slurry mfg	15	—	n.p.	n.p.
263	Total (c)	n.p.	n.p.	4,187	6.0
264	Non-metallic mineral product mfg n.e.c.	n.p.	n.p.	—	—
26	<b>Total non-metallic mineral product mfg</b>	<b>55</b>	<b>—</b>	<b>4,187</b>	<b>5.5</b>
METAL PRODUCT MFG—					
271	Iron and steel mfg	n.p.	n.p.	n.p.	n.p.
272	Basic non-ferrous metal mfg	n.p.	n.p.	n.p.	n.p.
273	Non-ferrous basic metal product mfg	—	—	—	—
274	Structural metal product mfg	72	0.1	—	—
275	Sheet metal product mfg	33	0.1	—	—
276	Fabricated metal product mfg	15	—	n.p.	n.p.
27	<b>Total metal product mfg</b>	<b>3,055</b>	<b>0.4</b>	<b>22,013</b>	<b>49.3</b>

For footnotes see end of table.

TABLE 7. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)  
BY INDUSTRY CLASS, TASMANIA, 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				
281	MACHINERY AND EQUIPMENT MFG— Motor vehicle and part mfg	n.p.	n.p.	—	—
282	Other transport equipment mfg	—	—	—	—
283	Photographic and scientific equipment mfg	14	n.p.	—	—
284	Electronic equipment mfg	n.p.	n.p.	—	—
285	Electrical equipment and appliance mfg	49	0.3	—	—
286	Industrial machinery and equipment mfg	17	—	—	—
28	<b>Total machinery and equipment mfg</b>	<b>99</b>	<b>0.1</b>	—	—
291	OTHER MANUFACTURING— Prefabricated building mfg	n.p.	n.p.	—	—
2921	Furniture mfg— Wooden furniture and upholstered seat mfg	20	0.1	—	—
292	Total (c)	n.p.	n.p.	n.p.	n.p.
294	Miscellaneous manufacturing	n.p.	n.p.	—	—
29	<b>Total other manufacturing</b>	<b>24</b>	—	<b>n.p.</b>	<b>n.p.</b>
21-29	<b>TOTAL MANUFACTURING</b>	<b>18,435</b>	<b>0.5</b>	<b>30,199</b>	<b>11.0</b>

(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. (c) The total shown is that for all ANZSIC classes within this industry group. Data for other ANZSIC classes within the industry group are either not available for publication (due to confidentiality restrictions) or there are no units classified to those ANZSIC classes.

TABLE 8. MANUFACTURING ESTABLISHMENTS (a): EXPORTS OF GOODS PRODUCED BY BROAD EMPLOYMENT SIZE (b) BY INDUSTRY SUBDIVISION  
TASMANIA, 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 (%)	Amount exported by this business or its agent (\$m)	Exports as a proportion of sales of goods produced (%)
21	Food, beverage and tobacco mfg	n.p.	n.p.	n.p.	n.p.	94.8	14.5	n.p.	n.p.
22	Textile, clothing, footwear and leather mfg	n.p.	n.p.	n.p.	n.p.	13.5	9.6	13.9	7.9
23	Wood and paper product mfg	n.p.	n.p.	n.p.	n.p.	83.4	13.0	218.6	24.0
24	Printing, publishing and recorded media	n.p.	n.p.	n.p.	n.p.	n.p.	---	n.p.	n.p.
25	Petroleum, coal, chemical and associated product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	35.3	17.8
26	Non-metallic mineral product mfg	n.p.	n.p.	---	---	---	---	n.p.	n.p.
27	Metal product mfg	n.p.	n.p.	n.p.	---	n.p.	n.p.	417.3	52.3
28	Machinery and equipment mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	46.4	30.5
29	Other manufacturing	0.3	0.7	---	---	---	---	0.3	0.6
<b>21-29</b>	<b>Total manufacturing</b>	<b>113.1</b>	<b>13.4</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>942.4</b>	<b>25.6</b>

(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 9. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS (IN PERCENTAGE TERMS) BY PROPORTION OF EXPORTS (b) BY INDUSTRY SUBDIVISION  
TASMANIA, 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	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
22	Textile, clothing, footwear and leather mfg	52.0	51.4	56.8	50.9	48.0	48.6	43.2	49.1	n.p.	n.p.	n.p.	
23	Wood and paper product mfg	56.4	41.5	46.2	40.8	36.3	48.2	32.5	37.6	7.3	10.3	21.6	
24	Printing, publishing and recorded media	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
25	Petroleum, coal, chemical and associated product mfg	60.0	46.4	58.2	60.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
26	Non-metallic mineral product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
27	Metal product mfg	56.2	45.7	36.5	40.8	2.3	1.4	0.9	1.2	41.5	52.9	58.0	
28	Machinery and equipment mfg	72.9	72.6	63.5	83.9	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
29	Other manufacturing	96.9	98.0	98.3	97.4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
<b>21-29</b>	<b>Total manufacturing</b>	<b>62.4</b>	<b>54.7</b>	<b>52.0</b>	<b>53.9</b>	<b>22.5</b>	<b>26.2</b>	<b>22.4</b>	<b>26.1</b>	<b>15.1</b>	<b>19.1</b>	<b>20.0</b>	

(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 10. MANUFACTURING ESTABLISHMENTS (a): RELATIVE STANDARD ERRORS (b) FOR SELECTED DATA ITEMS BY INDUSTRY SUBDIVISION  
TASMANIA, 1992-93  
(%)

Industry subdivision ANZSIC code	Description	Employment at end of June (c)	Wages and salaries (d)	Turnover	Purchases	Value added	Own account capital work	Acquisition of plant, machinery and equipment
21	Food, beverage and tobacco mfg	1.1	0.8	0.8	0.8	0.8	—	0.2
22	Textile, clothing, footwear and leather mfg (e)	—	—	—	—	—	—	—
23	Wood and paper product mfg	0.9	0.6	0.3	0.3	0.4	1.9	2.8
24	Printing, publishing and recorded media	2.3	1.8	1.9	2.1	1.8	—	13.3
25	Petroleum, coal, chemical and associated product mfg	1.2	0.7	0.4	0.4	0.5	—	0.2
26	Non-metallic mineral product mfg	0.2	0.1	—	—	0.1	—	—
27	Metal product mfg	0.7	0.5	0.3	0.3	0.5	0.1	0.4
28	Machinery and equipment mfg	1.5	1.4	1.4	1.5	1.4	2.1	3.2
29	Other manufacturing	5.4	4.2	3.1	2.9	4.4	—	8.9
<b>21-29</b>	<b>Total manufacturing</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>

(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. (e) All establishments classified to this industry were included in the 1992-93 manufacturing collection.

TABLE 11. MANUFACTURING ESTABLISHMENTS (a); SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, TASMANIA, 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	1990-91	1991-92	1989-90	
<b>FOOD, BEVERAGE AND TOBACCO MFG—</b>									
<b>Meat and meat product mfg</b>									
2111	Meat processing	0.8	n.p.	n.p.	162.8	n.p.	n.p.	50.2	
2113	Bacon, ham and smallgoods mfg	n.p.	0.1	0.2	n.p.	21.6	25.1	n.p.	
211	Total (f)	1.1	1.1	1.1	167.2	188.2	184.1	67.1	
<b>Dairy product mfg—</b>									
2121	Milk and cream processing	n.p.	n.p.	0.1	n.p.	n.p.	n.p.	n.p.	
2129	Dairy product mfg n.e.c.	0.5	0.5	0.6	135.6	139.2	156.0	89.6	
212	Total (f)	0.7	0.8	n.p.	189.6	204.3	223.3	106.7	
213	Fruit and vegetable processing	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
214	Oil and fat mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
215	Flour mill and cereal food mfg	n.p.	0.1	0.1	n.p.	41.9	35.9	n.p.	
<b>Bakery product mfg—</b>									
2161	Bread mfg	0.5	0.4	0.4	38.0	31.8	27.4	22.2	
2162	Cake and pastry mfg	0.3	0.3	n.p.	14.8	14.7	n.p.	7.0	
216	Total (f)	0.8	0.7	0.6	52.7	46.5	42.4	29.2	
<b>Other food mfg—</b>									
2172	Confectionery mfg	n.p.	0.7	0.9	n.p.	n.p.	n.p.	n.p.	
2173	Seafood processing	n.p.	0.8	0.7	n.p.	131.6	133.5	n.p.	
2174	Prepared animal and bird feed mfg	—	n.p.	n.p.	24.6	n.p.	n.p.	4.5	
2179	Food mfg n.e.c.	—	n.p.	n.p.	0.7	n.p.	n.p.	0.3	
217	Total (f)	1.8	1.7	1.7	456.4	358.0	343.9	132.4	
<b>Beverage and malt mfg—</b>									
2181	Soft drink, cordial and syrup mfg	n.p.	0.1	0.1	n.p.	38.3	n.p.	n.p.	
2183	Wine mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
218	Total (f)	0.4	n.p.	0.4	60.8	n.p.	n.p.	44.1	
219	Tobacco product mfg	—	—	—	—	—	—	—	
21	Total food, beverage and tobacco mfg	6.5	6.7	6.0	1,123.3	1,167.0	1,173.0	478.3	

Four figures see unit of table.

TABLE 11. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, TASMANIA, 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	
<b>TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG—</b>								
Textile fibre, yarn and woven fabric mfg—								
2213	Cotton textile mfg	n.p.	0.4	0.4	n.p.	n.p.	n.p.	n.p.
2214	Wool textile mfg	0.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
221	Total (f)	1.2	0.8	0.9	134.7	82.7	84.8	72.2
Textile product mfg								
2221	Made-up textile product mfg	0.1	n.p.	n.p.	3.4	n.p.	n.p.	1.4
2222	Textile floor covering mfg	n.p.	n.p.	0.2	n.p.	n.p.	15.4	n.p.
222	Total (f)	n.p.	0.6	0.5	n.p.	69.0	58.5	n.p.
223	Knitting mills	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
224	Clothing mfg	—	0.1	n.p.	1.3	n.p.	n.p.	0.6
225	Footwear mfg	0.2	n.p.	0.3	n.p.	n.p.	n.p.	n.p.
226	Leather and leather product mfg	—	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
22	Total textile, clothing, footwear and leather mfg	1.9	1.8	1.8	181.4	182.2	177.3	95.0
<b>WOOD AND PAPER PRODUCT MFG</b>								
Log sawmilling and timber dressing—								
2311	Log sawmilling	1.2	0.8	0.8	106.9	75.7	77.7	60.5
2312	Wood chipping	0.7	0.5	0.4	n.p.	n.p.	n.p.	n.p.
2313	Timber resawing and dressing	0.5	0.7	0.5	n.p.	n.p.	n.p.	n.p.
231	Total	2.4	2.0	1.7	417.0	367.4	347.5	174.3
Other wood product mfg—								
2323	Wooden structural component mfg	0.3	0.3	0.3	25.6	24.0	23.7	11.9
2329	Wood product mfg n.e.c.	0.1	0.1	0.1	6.6	6.9	7.8	3.0
232	Total (f)	0.7	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Paper and paper product mfg								
2331	Pulp, paper and paperboard mfg	n.p.	2.7	n.p.	n.p.	n.p.	n.p.	n.p.
233	Total (f)	3.0	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
23	Total wood and paper product mfg	6.1	5.5	5.0	1,123.6	1,111.2	965.6	421.2

For footnotes see end of table.

TABLE 11. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, TASMANIA, 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	1991-92
<b>PRINTING, PUBLISHING AND RECORDED MEDIA—</b>								
Printing and services to printing—								
2412	Printing	0.5	0.5	0.5	32.9	34.6	17.7	
241	Total (f)	0.7	0.6	0.6	49.9	39.6	27.4	
Publishing—								
2421	Newspaper printing or publishing	1.0	1.1	1.1	n.p.	86.1	n.p.	
242	Total (f)	1.0	1.1	1.1	67.2	88.6	48.9	
243	Recorded media manufacturing and publishing	—	—	—	—	—	—	
<b>24</b>	<b>Total printing, publishing and recorded media</b>	<b>1.8</b>	<b>1.7</b>	<b>1.7</b>	<b>117.1</b>	<b>128.3</b>	<b>76.3</b>	
<b>PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG—</b>								
251	Petroleum refining	n.p.	—	—	n.p.	—	n.p.	
252	Petroleum and coal product mfg n.e.c.	—	—	—	—	—	—	
2535	Basic chemical mfg—	0.5	n.p.	n.p.	n.p.	n.p.	n.p.	
253	Inorganic industrial chemical mfg n.e.c.	0.6	0.4	0.3	168.9	159.1	69.9	
254	Other chemical product mfg	0.2	0.1	0.1	20.7	n.p.	9.6	
2551	Rubber product mfg—	0.1	n.p.	n.p.	6.9	n.p.	4.1	
2559	Rubber tyre mfg	n.p.	n.p.	n.p.	n.p.	2.2	n.p.	
255	Rubber product mfg n.e.c.	n.p.	—	0.1	n.p.	n.p.	n.p.	
2562	Plastic product mfg—	0.1	n.p.	0.1	20.2	n.p.	7.4	
2566	Plastic extruded product mfg	n.p.	0.2	n.p.	n.p.	9.8	n.p.	
256	Plastic injection moulded product mfg	0.4	0.3	0.3	35.8	31.5	16.8	
<b>25</b>	<b>Total petroleum, coal, chemical and associated product mfg</b>	<b>1.2</b>	<b>0.9</b>	<b>0.9</b>	<b>238.5</b>	<b>231.6</b>	<b>101.4</b>	

For footnotes see end of table.

TABLE 11. MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, TASMANIA, 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	1991-92	
<b>NON-METALLIC MINERAL PRODUCT MFG--</b>								
261	Glass and glass product mfg	0.1	n.p.	0.2	n.p.	n.p.	n.p.	n.p.
<b>Ceramic mfg--</b>								
2621	Clay brick mfg	n.p.	0.1	n.p.	n.p.	n.p.	n.p.	n.p.
2629	Ceramic product mfg n.e.c.	—	n.p.	n.p.	n.p.	0.6	n.p.	n.p.
262	Total (f)	n.p.	n.p.	0.1	n.p.	n.p.	n.p.	n.p.
<b>Cement, lime, plaster and concrete product mfg--</b>								
2633	Concrete slurry mfg	0.1	0.1	0.1	27.5	33.2	9.5	
2635	Concrete product mfg n.e.c.	n.p.	0.1	0.1	n.p.	n.p.	n.p.	
263	Total (f)	0.5	0.5	0.5	102.9	111.6	46.5	
264	Non-metallic mineral product mfg n.e.c.	n.p.	0.1	0.1	n.p.	16.7	n.p.	
26	Total non-metallic mineral product mfg	0.9	0.9	0.9	152.2	159.6	74.0	
<b>METAL PRODUCT MFG--</b>								
<b>Iron and steel mfg--</b>								
2711	Basic iron and steel mfg	n.p.	0.4	0.4	n.p.	n.p.	n.p.	
271	Total (f)	n.p.	n.p.	0.5	n.p.	n.p.	n.p.	
272	Basic non-ferrous metal mfg	n.p.	2.5	n.p.	n.p.	n.p.	n.p.	
<b>Non-ferrous basic metal product mfg--</b>								
2733	Non-ferrous metal casting	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	
273	Total (f)	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	
<b>Structural metal product mfg--</b>								
2741	Structural steel fabricating	n.p.	n.p.	0.3	n.p.	36.8	n.p.	
2742	Architectural aluminium product mfg	0.2	0.2	n.p.	17.8	n.p.	5.2	
274	Total (f)	0.6	0.5	0.5	56.9	58.6	24.0	
<b>Sheet metal product mfg--</b>								
2751	Metal container mfg	n.p.	n.p.	0.1	n.p.	17.4	n.p.	
2759	Sheet metal product mfg n.e.c.	n.p.	n.p.	0.2	n.p.	23.1	n.p.	
275	Total	0.3	0.3	0.4	34.5	40.5	14.0	
<b>Fabricated metal product mfg--</b>								
2762	Spring and wire product mfg	n.p.	n.p.	—	n.p.	1.1	n.p.	
2764	Metal coating and finishing	—	n.p.	n.p.	2.3	n.p.	1.4	
2769	Fabricated metal product mfg n.e.c.	n.p.	0.3	n.p.	19.4	n.p.	n.p.	
276	Total (f)	0.5	0.5	0.4	39.7	32.6	16.3	
27	Total metal product mfg	4.7	4.6	4.3	903.7	815.1	355.6	

For footnotes see end of table.

TABLE 11. MANUFACTURING ESTABLISHMENTS (a); SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, TASMANIA, 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	
<b>MACHINERY AND EQUIPMENT MFG—</b>							
2819	Motor vehicle and part mfg	n.p.	n.p.	0.5	n.p.	n.p.	n.p.
281	Automotive component mfg n.e.c.	0.8	0.9	0.6	65.8	43.7	34.0
	Total (f)					49.3	
<b>Other transport equipment mfg—</b>							
2821	Shipbuilding	n.p.	n.p.	0.3	n.p.	n.p.	n.p.
2822	Boatbuilding	n.p.	n.p.	—	n.p.	2.0	n.p.
282	Total (f)	0.5	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Photographic and scientific equipment mfg—</b>							
2831	Photographic and optical good mfg	—	—	—	3.3	3.0	1.0
2839	Professional and scientific equipment mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	0.2
283	Total (f)	0.1	0.1	n.p.	7.9	n.p.	n.p.
<b>Electronic equipment mfg—</b>							
2841	Computer and business machine mfg	n.p.	n.p.	n.p.	n.p.	n.p.	0.3
284	Total (f)	0.1	n.p.	0.1	5.4	n.p.	2.9
<b>Electrical equipment and appliance mfg</b>							
2851	Household appliance mfg	0.1	0.1	n.p.	6.9	n.p.	3.7
285	Total (f)	0.2	0.2	0.1	13.9	13.5	7.2
<b>Industrial machinery and equipment mfg—</b>							
2861	Agricultural machinery mfg	—	—	—	2.5	2.6	1.2
2862	Mining and construction machinery mfg	n.p.	—	n.p.	5.6	n.p.	n.p.
2865	Lifting and material handling equipment mfg	0.1	0.2	0.2	17.2	22.9	5.2
2869	Industrial machinery and equipment mfg n.e.c.	n.p.	0.2	n.p.	n.p.	n.p.	n.p.
286	Total (f)	0.5	0.5	0.5	50.9	46.7	19.0
28	<b>Total machinery and equipment mfg</b>	2.2	2.2	1.8	196.3	201.5	113.0

For footnotes see end of table.

TABLE 11: MANUFACTURING ESTABLISHMENTS (a): SELECTED OPERATIONAL STATISTICS BY INDUSTRY CLASS, TASMANIA, 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	
OTHER MANUFACTURING—								
291	Prefabricated building mfg	0.2	0.1	0.2	15.9	15.4	16.2	6.6
Furniture mfg—								
2921	Wooden furniture and upholstered seat mfg		0.6	n.p.	n.p.	33.7	n.p.	n.p.
292	Total (f)		0.7	0.5	53.7	44.0	37.4	26.9
Miscellaneous manufacturing—								
2942	Toy and sporting good mfg		—	n.p.	8.2	0.4	n.p.	4.0
2949	Manufacturing n.e.c.		n.p.	0.1	n.p.	n.p.	3.5	
294	Total (f)	0.2	0.1	0.1	8.3	3.8	4.3	4.1
29	Total other manufacturing	1.1	0.9	0.8	77.3	63.1	58.0	37.6
21-29	TOTAL MANUFACTURING	26.2	24.5	23.1	4,092.5	4,121.9	3,886.6	1,752.5

(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. (f) The total shown is that for all ANZSIC classes within this industry group. Data for other ANZSIC classes within the industry group are either not available for publication (due to confidentiality restrictions) or there are no units classified in those ANZSIC classes.



## 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 Tasmania 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 3% or less for Tasmanian estimates, as can be seen from the relative standard errors for the indicative data items contained in table 10 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 6 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 5 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 6. Similarly, exports of goods produced data at the industry subdivision level classified by broad employment size are presented in table 8. 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 7 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 8 and 9. 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 8 are derived by applying the percentage of exports reported for each exporting unit and then aggregating that figure. The data in table 8 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 10 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 11 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
..	not applicable
—	nil or rounded to zero (incl. null cells)

## GLOSSARY

<b>ABS</b>	Australian Bureau of Statistics
<b>Acquisition of dwellings, other buildings and structures</b>	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.
<b>Acquisition of other (including land and intangible assets)</b>	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.
<b>Acquisition of plant, machinery and equipment</b>	Capital expenditure incurred in acquiring plant, machinery and other equipment. Note that this category includes the purchase of motor vehicles.
<b>Amount of goods produced by this establishment (or for it on commission) that are exported by this business or its agent</b>	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.
<b>Australian National Accounts (ANA)</b>	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.
<b>ANZSIC</b>	Australian and New Zealand Standard Industrial Classification
<b>ASIC</b>	Australian Standard Industrial Classification
<b>Average employees</b>	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)).
<b>Average employment</b>	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.
<b>Balance of turnover</b>	The sum of income from services, rent, leasing and hiring income, total government subsidies and the value of own account capital work.
<b>Capital expenditure</b>	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).
<b>Capital expenditure to abate pollution</b>	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.

<b>Capital expenditure to abate pollution as a proportion of total capital expenditure</b>	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.
<b>Capital work done for own use</b>	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.
<b>Change in stocks</b>	The value of total closing stocks minus total opening stocks.
<b>Closing stocks</b>	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.
<b>Contract, subcontract and commission expenses</b>	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.
<b>Current expenditure on environmental protection</b>	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.
<b>Current expenditure on environmental protection as a proportion of total turnover</b>	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.
<b>Employment at end of June</b>	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.
<b>Enterprise group</b>	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.

<b>Establishment</b>	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.
<b>Establishments at 30 June</b>	The number of establishments in operation at 30 June in the year of a given reference period.
<b>Establishments that do not export</b>	Establishments that reported no exports (either by their business or for them by an agent) of goods that they produced.
<b>Establishments with exports of more than 50% of sales</b>	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.
<b>Establishments with exports up to and including 50% of sales</b>	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.
<b>Exports as a proportion of sales of goods produced (Table 8)</b>	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 8, 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.
<b>Gross Domestic Product (GDP)</b>	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.
<b>Gross product at factor cost</b>	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.
<b>Gross product per person employed</b>	Gross product at factor cost divided by average employment over the whole year.
<b>Income from services</b>	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.



<b>Industry class</b>	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.																		
<b>Industry group</b>	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.																		
<b>Industry subdivision</b>	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:																		
	<table border="0"> <tr><td>21</td><td>Food, beverage and tobacco mfg</td></tr> <tr><td>22</td><td>Textile, clothing, footwear and leather mfg</td></tr> <tr><td>23</td><td>Wood and paper product mfg</td></tr> <tr><td>24</td><td>Printing, publishing and recorded media</td></tr> <tr><td>25</td><td>Petroleum, coal, chemical and associated product mfg</td></tr> <tr><td>26</td><td>Non-metallic mineral product mfg</td></tr> <tr><td>27</td><td>Metal product mfg</td></tr> <tr><td>28</td><td>Machinery and equipment mfg</td></tr> <tr><td>29</td><td>Other manufacturing</td></tr> </table>	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
21	Food, beverage and tobacco mfg																		
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26	Non-metallic mineral product mfg																		
27	Metal product mfg																		
28	Machinery and equipment mfg																		
29	Other manufacturing																		
<b>Management unit</b>	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.																		
<b>Manufacturing establishment</b>	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.																		
<b>Motor vehicle running expenses</b>	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.																		
<b>Net capital expenditure</b>	The value of total capital expenditure less total revenue from the disposal of assets.																		
<b>Opening stocks</b>	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.																		

<b>Outward freight and cartage expenses</b>	Costs associated with freight and delivery of goods, excluding the cost of delivery by an establishment's own vehicles and employees.
<b>Own account capital work</b>	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.
<b>Persons employed per establishment</b>	Employment at the last pay period ending in June divided by the number of establishments in operation at 30 June of the same year.
<b>Purchases</b>	Purchases of materials, components, containers, packaging, fuels, electricity and water, and purchases of goods for resale.
<b>Purchases and transfers in</b>	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.
<b>Rent, leasing and hiring expenses</b>	Includes payments on operating leases, but excludes finance lease payments and expenses associated with motor vehicles.
<b>Rent, leasing and hiring income</b>	Includes royalties from mineral leases and revenue from operating leases, but excludes income from finance leases and payments received under hire purchase arrangements.
<b>Repair and maintenance expenses</b>	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.
<b>Sales and transfers out of goods produced by the establishment</b>	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.
<b>Sales and transfers out of goods not produced by the establishment</b>	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.
<b>Selected expenses</b>	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.
<b>Service income</b>	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.

<b>Total government subsidies</b>	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.
<b>Total purchases, transfers in and selected expenses</b>	Purchases 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, plus 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. 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.
<b>Total sales of goods and transfers out</b>	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.
<b>Turnover</b>	(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.
<b>Turnover per person employed (based on average employment)</b>	Turnover of manufacturing establishments which operated during the year ended 30 June divided by the average number of persons employed over the whole year.
<b>Turnover per person employed (based on end of June employment)</b>	Turnover of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year.
<b>Value added</b>	(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.

<b>Value added per person employed (based on average employment)</b>	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.
<b>Value added to turnover ratio</b>	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.
<b>Wages and salaries</b>	The gross wages and salaries of all employees of the establishment. The drawings of working proprietors are excluded.
<b>Wages and salaries per employee (based on average employees)</b>	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.
<b>Wages and salaries to value added ratio</b>	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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