

Chapter 17

MANUFACTURING

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Chapter 17

MANUFACTURING

Despite a decline in relative importance over the past decade, manufacturing remains one of the main contributors to the Tasmanian economy. It accounts for almost 20 per cent of the State's gross domestic product at factor cost, second to the government-dominated public administration, defence and community sector. Manufacturing employs around 17 per cent of Tasmania's employees.

Since 1977-78 the value added by manufacturing has risen from \$18 470 per employee, to \$50 750 per employee in 1986-87. This is 25 per cent more than the increase paid in wages and salaries, indicating increased productivity over the period.

17.1 KEY AGGREGATES PER EMPLOYEE: MANUFACTURING (\$)

Year	Wages and salaries	Turnover	Value added
1977-78	9 580	46 210	18 470
1978-79	10 210	53 770	21 080
1979-80	11 400	63 310	24 990
1980-81	13 060	70 380	26 890
1981-82	14 340	73 540	27 630
1982-83	16 100	81 730	28 860
1983-84	16 910	90 640	34 200
1984-85	18 090	98 920	38 290
1986-87 (a)	21 640	125 380	50 750
1987-88	22 700	130 600	n.a.
1988-89	24 100	142 400	n.a.

(a) No census 1985-86; 1986-87 was the latest year of full manufacturing census.

(Source: ABS Catalogue No. 8221.6.)

Over the same interval, turnover per employee has increased by 171 per cent from \$46 210 to \$125 380. This figure rose to \$142 400 in 1988-89.



The Froe Range of furniture.

Photo: Uffe Schultz of Concept Photographics

Over the period, employment in the Tasmanian manufacturing industry has fallen by nine per cent, from 27 000 to 24 800 in 1987-88. Since 1982-83 the downward trend in employment levels appears to have stabilised at around the 24 400 persons level. The fall in employment levels has been general across all divisions. For 1988-89 there was an increase of eight per cent (26 933) on last year's employment figure (24 828).

17.2 EMPLOYMENT IN MANUFACTURING (a)

Year ended 30 June	At 30 June	Average over the whole year
1984	24 692	24 497
1985	24 573	24 494
1987	24 371	24 327
1988	r 24 828	n.a.
1989	26 933	n.a.

(a) Excludes establishments employing fewer than four persons.

(Source: ABS Catalogue No. 8221.6).

17.1 MANUFACTURING ACTIVITY

Three industry subdivisions account for the lion's share of manufacturing in Tasmania: food and beverages; wood, wood products and furniture; and paper, paper products, printing and publishing. Together they account for over 60 per cent of manufacturing turnover and just over 57 per cent of all employment in the sector.

17.3 MANUFACTURING ACTIVITY (a) BY INDUSTRY SUBDIVISION, TASMANIA

ASIC subdivision	1988-89		1986-87
	Employment ('000)	Turnover (\$'000)	Value added (\$m)
Food, beverages and tobacco	6.5	1 003.0	289.2
Textiles	1.4	119.8	n.p.
Clothing and footwear	0.7	28.6	13.5
Wood, wood products and furniture	3.9	522.7	163.6
Paper, paper products, printing and publishing	5.0	796.1	326.8
Chemical, petroleum and coal products	n.p.	n.p.	n.p.
Non-metallic mineral products	0.9	158.0	48.4
Basic metal products	n.p.	n.p.	n.p.
Fabricated metal products	1.9	185.4	51.7
Transport equipment	1.2	56.2	25.8
Other machinery and equipment	0.9	79.1	30.7
Miscellaneous manufacturing	0.6	51.2	17.1
Total	26.9	3 834.7	1 236.5

(a) Excludes establishments employing fewer than four persons.

(Source: ABS Catalogue No. 8221.6).

In 1988-89, the food, beverages and tobacco subdivision accounted for over 23 per cent of manufacturing employment. Vegetable processing, abattoirs and meat processing, brewing and confectionery are the main manufacturing activities within this subdivision.

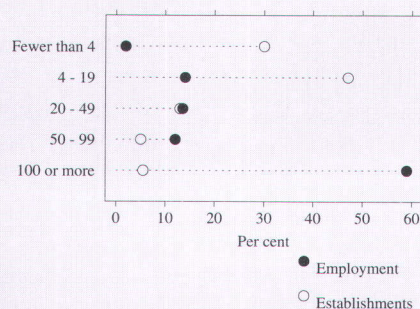
The paper, paper products and printing subdivision accounted for almost 19 per cent of employment in the manufacturing sector, but employment in this subdivision was dominated by paper manufacture; 62 per cent of all employment is in paper manufacture.

The wood, wood products and furniture subdivision was appreciably smaller in terms of employment and turnover. As with the other two subdivisions, there is a concentration on particular industries, in this case on sawmilling, timber and woodchips.

17.2 CONCENTRATION OF MANUFACTURING

Manufacturing in Tasmania is dominated by a few large manufacturing establishments. In 1989, five establishments (less than one per cent of the total establishments) accounted for 23 per cent of persons employed at 30 June 1989, 32 per cent of wages and salaries paid during 1988-89 and 34 per cent of manufacturing turnover.

MANUFACTURING INDUSTRY, TASMANIA, 1988-89
DISTRIBUTION OF EMPLOYMENT AND ESTABLISHMENTS
BY EMPLOYMENT SIZE GROUP



17.1.1 Food and Beverages

Cadbury Schweppes Australia Ltd (Claremont). In 1921, an association of three British confectioners established their Australian plant at Claremont, near Hobart. Today, the company is wholly owned by a single UK parent. The plant is the largest cocoa and confectionery factory in Australia and employs about 1000 people. Production specialises in moulded chocolate blocks, fancy boxed assortments, cocoa, drinking chocolate, the well-known Flake, Turkish Delight Bars and Twirl.

Approximately 30 million litres of fresh Tasmanian milk are used each year, most of which is collected and processed at Cadbury's Burnie dairy factory. The company is investing \$44.8 million over the next three years to upgrade its Claremont factory.



*Cadbury-Schweppes factory production line.
Photo: The Mercury*

Cascade Group of Companies (Statewide). Cascade is the oldest manufacturing company in Australia and is firmly established in the beverage industry at manufacturing, wholesale and retail levels. The company manufactures alcoholic beverages at Esk Breweries, Launceston (Boags) and Cascade Brewery, Hobart (Cascade). Cascade has a capacity of 55 million litres. New owners Wilson Neill Ltd are focusing on interstate and overseas markets, especially for Cascade Premium brand.

The Cascade Fruit Juices Division manufactures alcoholic cider under the brand names Mercury and Van Dieman and also Apple Isle non-alcoholic cider, Ultra-C blackcurrant vitamin C syrup, soft drinks, pure fruit juices, fruit juice syrups, berry fruit pulps and concentrations for local and export distribution.

Cascade is installing a new packer and conveyor system. The company owns hotels spread throughout the State and has a joint venture with Elders IXL to operate hotels in Queensland.

Edgell-Birds Eye Division of Petersville Industries Ltd (Devonport, Ulverstone and Scottsdale). Edgell-Birds Eye is Tasmania's leading processor of frozen and canned vegetables. An annual volume of approximately 207 000 tonnes of raw materials is processed by the Devonport, Ulverstone and Scottsdale factories. Crops processed include potatoes, green peas, green beans and carrots.

McCain Foods (Aust.) Pty Ltd (Smithton). The Canadian-parented McCain purchased the Smithton factory of General Jones in June 1984.

The factory produces frozen vegetables, of which the main brands are Copper Kettle, Pict and McCain. A french fry section opened in April 1989. Capacity is expected to be increased by a further 25 per cent to meet increasing demand for frozen vegetables in a \$5 million upgrade to be completed in the early 1990s. McCain employs 300 full-time staff with up to 300 part-time staff in peak periods.

United Milk Tasmania Ltd (Smithton, Wynyard, Devonport, Legerwood). UMT is Tasmania's largest manufacturer of dairy products and processes 200 million litres of milk a year. UMT produces butter (salted and unsalted), cheese (cheddar), milk powders (skim, full cream and buttermilk) and milk concentrates. UMT operates retail produce/hardware stores and a farm machinery business servicing rural areas.

In 1989, UMT, through a joint venture with Tasmanian businesses, expanded its range to shelf stable beverages and foods. In 1990-91, a major upgrade of manufacturing facilities was undertaken, including installation of an edible lactose plant, replacement of cheese vats and expansion of the reverse osmosis plant.

Lactos. After commencing operations in Tasmania in 1953, Lactos was acquired by the French company, Bongrain, in 1981. A renewed



*Lactos packaging section.
Photo: The Examiner*

Of the major employing industry subdivisions, the most even spread occurs in the wood, wood products and furniture subdivision where the smaller establishments (those employing fewer than 20) accounted for just over 30 per cent of employment. In the paper, paper products and printing subdivision four pulp and paper establishments were responsible for 62 per cent of employment. In the same subdivision 14 per cent of establishments accounted for over 84 per cent of employment and almost 92 per cent of turnover.

17.4 NUMBER OF ESTABLISHMENTS BY EMPLOYMENT SIZE: 30 JUNE 1989 (a)

Employment category	Establishments		Employment (b)	
	No.	Per cent	No.	Per cent
< 20	453	67.0	3 735	13.9
20 < 50	123	18.2	3 729	13.9
50 < 100	47	7.0	3 258	12.1
100 < 200	30	4.4	4 222	15.7
200 < 500	15	2.2	4 546	16.9
500 and over	8	1.2	7 428	27.6
Total	676	100.0	26 918	100.0

(a) Excludes establishments employing fewer than four persons.

(b) Employment at 30 June.

(Source: ABS Catalogue No. 8221.6).

17.3 GEOGRAPHICAL DISTRIBUTION

The geographic distribution of Tasmania's manufacturing activity, as to be expected, corresponds to the population distribution.

The Greater Hobart Statistical Division is the major centre of manufacturing. In 1988-89 this region accounted for 35 per cent of employment, 29 per cent of wages and salaries paid and 35 per cent of turnover generated by manufacturing. The main manufacturing activities in this region included paper manufacture, metal refining, confectionery, brewing, printing, clothing, textile and footwear.

The Greater Launceston Statistical Subdivision, which stretches north along each side of the Tamar River, had 28 per cent of the State's

manufacturing employment at the end of 1988-89. Important industries in the area included alumina smelting, textiles and clothing, woodchip production, sawn timber and printing.

The other main industry concentration is along the north-west coastal strip from Latrobe to Wynyard. Major industries in this area include paper manufacture, food processing (particularly vegetables), timber processing and furniture. The food processing and paper manufacturing industries account for almost 56 per cent of industry employment in this region.

17.5 REGIONAL MANUFACTURING 1988-89 (a)

Statistical division	Employment 30 June	Turnover (\$m)
Greater Hobart	9 574	1 359
Southern	1 039	165
Northern	8 732	1 080
Mersey-Lyell	8 187	1 257
Tasmania	27 532	3 861

(a) Includes single establishment enterprises employing fewer than four persons.

(Source: ABS Catalogue No. 8221.6).

Other timber-based industries (sawn timber, veneer manufacture and furniture) account for a further 11 per cent of manufacturing employment in the Burnie-Devonport statistical subdivision.

17.4 NATIONAL COMPARISON

Over the period 1981-82 to 1986-87 (the latest year of a fully detailed manufacturing census), the Tasmanian manufacturing sector has out-performed the total Australian sector. Nationally, over the period, manufacturing employment fell by 12 per cent, while in Tasmania the fall was just under six per cent. In terms of value added per employee (at current prices) Tasmanian manufacturing registered an increase of 84 per cent, while nationally the rise was only 65 per cent. The percentage increases in total value added were: Tasmania 73 per cent and Australia 45 per cent.

focus by management on marketing and product development has led Lactos away from 'hard' cheese markets to high quality specialty 'soft' products and in the process secured a financial turnaround. Bongrain opened a soft, ripened cheese factory at Burnie in 1985. In 1989, these operations were extended at a cost of \$2 million, doubling soft-ripened cheese production to 600 tonnes per annum.

Lactos has 50 per cent of the Australian soft cheese market. Export markets to Japan, Malaysia, Indonesia, United States and the French speaking Tahitians and Noumeans have developed.

The company is expanding its product line of nine specialty cheeses with the introduction of a mild brie tagged 'Heart of Brie' targeted at Australian tastes, 'Tasmanian True Blue' a blue vein cheese and whipped cream cheese for the Japanese market.

17.1.2 Textiles, Clothing and Footwear

Coats Patons (Aust.) Ltd (Launceston). Coats Patons first produced yarns in Tasmania over 60 years ago. The factory produces knitting yarns, both wool and synthetic. Annual production is approximately 1.5 million kilograms.



Sheridan Textiles. Photo: Textile Industries Australia

Sheridan Textile Industries Australia (Derwent Park). The mill commenced operations in 1948. Under Textile Industries Australia Limited's ownership since 1986, its production now includes textile printing and finishing of 100 per cent cotton and polyester cotton/percale fabrics along with some commission printing. A full range of premium quality bed linen products for both Australian and export market distribution is also manufactured on site.



Blundstone Boots. Photo: Blundstone Pty Ltd

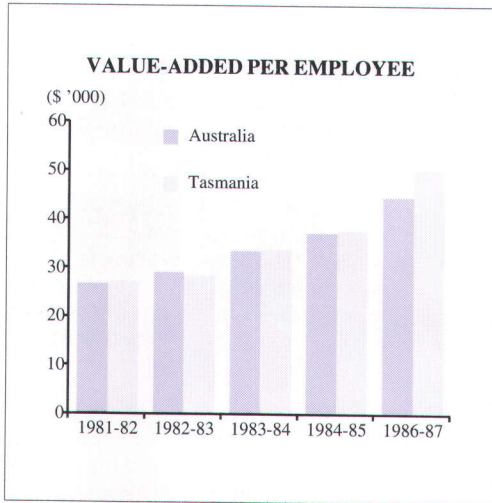
Blundstone Pty Ltd (Moonah). Manufacturers of industrial, work, safety, and bushwalking footwear for interstate and overseas markets, mainly the Pacific basin and Europe. Founded in 1870 in Hobart, the company moved to its present location at Moonah in 1980. Blundstone Pty Ltd has two subsidiary companies. One manufactures gumboots and the other is a tannery. The company has won a design award for specially designed spike soled forestry safety boots as well as an export award for excellence in expansion of export sales.

Bonds Weaving Mills (Devonport). Bonds Weaving Mills specialises in the manufacture of terry towelling. In 1989, the company was reported to have spent \$5.2 million in expanding and upgrading its Devonport Plant. The mill has now incorporated the latest computer technology, including a nappy machine imported from Japan. The developments are part of the company's transfer of its establishment operation from Victoria and the creation of 220 jobs.

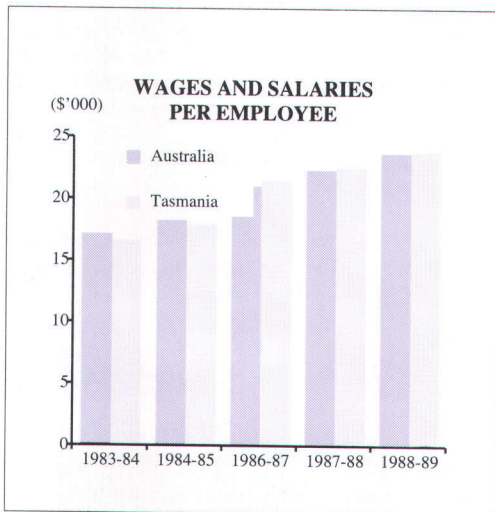
17.1.3 Wood, Wood Products, Paper, Paper Products

Associated Pulp and Paper Mills (Burnie, Wesley Vale, Long Reach, Triabunna). APPM is a wholly-owned subsidiary of North Broken Hill Holdings Ltd. It is Australia's principal producer of fine printing and writing papers, magazine papers and coated papers. In Tasmania, the company operates major manufacturing complexes at five centres:

Burnie - Paper production commenced at Burnie in 1938. Present annual capacity of the Burnie pulp and paper plant is 130 000 tonnes. A veneer production facility and sawmill is also based at Burnie.



Tasmanian manufacturing value added per employee in 1986-87 was \$50 830 compared with an Australian figure of \$44 920, or 13 per cent higher. In 1988-89, the wages and salaries paid per employee in Tasmania had risen to \$24 060, marginally above the Australian figure of \$23 920.



In terms of industry structure one of the more noticeable differences between Tasmanian and Australian manufacturing is the importance of the sectors based primarily on utilisation of timber resources. Nationally, in 1986-87, the wood, wood products and furniture and paper, paper products, printing and publishing subdivisions accounted for around 17 per cent of the value added by manufacturing and 18 per cent of employment in manufacturing. In Tasmania,

these two industry subdivisions are responsible for almost 40 per cent of value added by manufacturing and 31 per cent of employment. Another considerable difference in industry structure is the limited contribution made by the transport sector to Tasmanian manufacturing. In 1986-87 this sector contributed only two per cent to total value added and was responsible for around three per cent of manufacturing employment.

Nationally, the subdivision, which includes the motor car production industry, accounted for nine per cent of value added by manufacturing and almost 11 per cent of manufacturing employment.

Around 28 per cent of persons employed in the manufacturing industry nation-wide are women. The proportion of women employed in manufacturing has increased by around three percentage points over the period 1981-82 to 1988-89. In Tasmania, the proportion of women in the manufacturing workforce is much lower than the national average. In 1988-89 the proportion was about 22 per cent. However, this is four percentage points higher than the proportion in 1981-82.

Australian Newsprint Mills Secured Paper Contract in Hong Kong

Australian Newsprint Mills, Boyer, secured a contract worth \$3 million to supply paper for the Hong Kong telephone directory. The order, which was a great boon to the company, was for 3500 tonnes of both white and yellow paper. During the past five years, ANM has spent \$250 million to diversify and upgrade the mill. Although the major sales component from the mills production was newsprint, ANM hope to be able to expand the production of specialty grades of paper to between 20 000 and 30 000 tonnes per year.



Photo: ANM

Investment of \$10 million will modernise operations from November 1991, \$16 million is being spent on cut ream capacity.

Wesley Vale - Opened in 1970, the Wesley Vale site is an integrated pulp and paper complex. The plant has an annual capacity of about 65 000 tonnes of paper. Most of the production at Wesley Vale is for magazine papers. A particle board factory also operates at Wesley Vale, annual production is about 15 million square metres.

An investment of \$16 million has been made to develop high brightness pulp technology and \$8 million on a sludge treatment plant.

Long Reach - A woodchip plant was opened at Long Reach in 1972. The company has long-term contracts for the export of woodchips to Japan.

Triabunna - APPM operates a woodchip export mill at Triabunna and also has long-term contracts with Japan.

Australian Newsprint Mills Ltd. (Boyer). ANM began operations in 1941. Annual newsprint capacity is now 220 000 tonnes. The company is jointly owned by Fletcher Challenge and News Corporation. ANM also operates a newsprint mill at Albury in New South Wales with an output of 180 000 tonnes per annum. ANM is Australia's only producer of newsprint and currently supplies approximately 55 per cent of Australia's requirement. At the Boyer plant, \$100 million is being spent to upgrade equipment and improve environmental controls.



ANM Boyer, General Manager with export product.

Photo: The Mercury

17.1.4 Non-Metallic Mineral Products

Goliath Portland Cement Co. Ltd (Railton). Goliath has been involved in cement production in Tasmania since 1928. In 1980, a new plant was installed, making Goliath one of the most efficient producers of cement in Australia. Goliath operates its own 4000 tonne ship the *M V Goliath*, to transport bulk cement to mainland markets. There are plans to introduce a new vessel in the near future. Goliath has also been exporting palletised bagged cement to Papua New Guinea and other Pacific Island destinations since 1970.

In 1989, a joint venture company owned by CSR and Pioneer took control of Goliath. The plant is now expected to operate at its full capacity of one million tonnes per annum. Goliath also operates Besser Bricks and the Cornwall Coal Mine.

17.1.5 Basic Metal Products

Comalco Aluminium (Bell Bay) Ltd (George Town). Australia's first aluminium smelter commenced production in 1955 at Bell Bay, with an annual capacity of 12 000 tonnes of metal. In 1961, the plant and facilities were acquired by Comalco Aluminium (Bell Bay) and the capacity increased in stages to 117 000 tonnes per annum. Products made include rolling block, extrusion billet, foundry alloy ingot, T-bar alloy and primary metal as ingot, T-bar and granules.

Comalco Aluminium Powder produces aluminium powder, aluminium paste and high alloy metal powder briquettes.

**17.6 COMPARISON OF TASMANIAN AND AUSTRALIAN MANUFACTURING (a)
PROPORTION OF TOTAL
(Per Cent)**

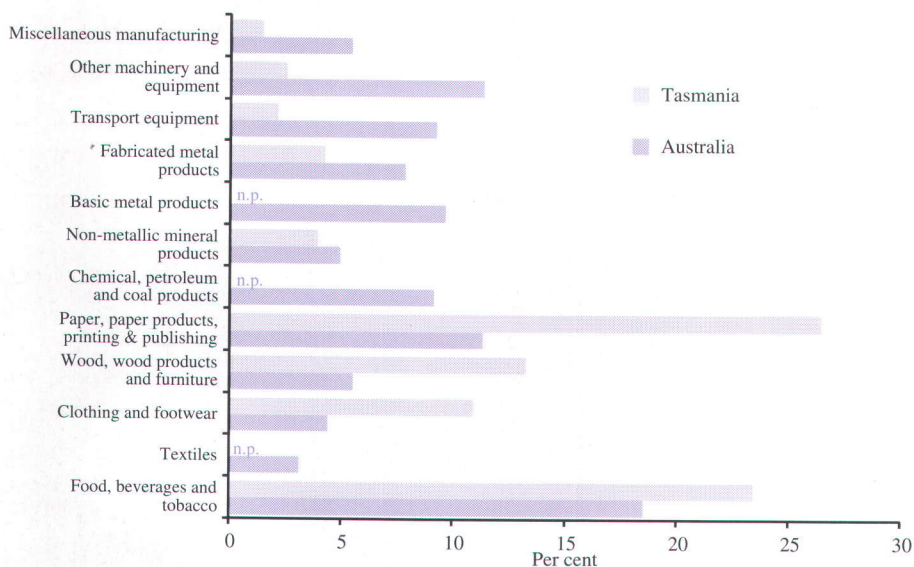
ASIC sub-division	Tasmania			Australia		
	1988-89		1986-87	1988-89		1986-87
	Employment (b)	Turnover	Value added	Employment (b)	Turnover	Value added
Food, beverages and tobacco	24.1	27.1	23.4	16.5	20.6	18.5
Textiles	4.8	2.8	n.p.	3.0	2.7	3.1
Clothing and footwear	2.6	1.0	10.9	7.0	3.6	4.4
Wood, wood products and furniture	14.4	13.6	13.2	7.8	5.2	5.5
Paper, paper products, printing and publishing	18.9	20.6	26.4	10.4	8.7	11.3
Chemical, petroleum and coal products	n.p.	n.p.	n.p.	4.9	9.0	9.1
Non-metallic mineral products	3.3	4.1	3.9	4.0	4.8	4.9
Basic metal products	n.p.	n.p.	n.p.	6.7	12.8	9.6
Fabricated metal products	7.0	4.7	4.2	9.8	7.7	7.8
Transport equipment	4.4	1.4	2.1	10.9	9.6	9.2
Other machinery and equipment	3.3	2.0	2.5	12.9	10.0	11.3
Miscellaneous manufacturing	2.2	1.3	1.4	6.1	5.3	5.4

(a) Excludes establishments fewer than four persons.

(b) At 30 June.

(Source: ABS Catalogue No. 8221.6).

MANUFACTURING 1986-87: VALUE ADDED



Pasminco Metals - EZ (Risdon and Rosebery). Established in 1916, the factory at Risdon is the largest producer of zinc in Australia and the second largest electrolytic zinc plant in the world. It exports an extensive range of zinc and zinc alloys to over 30 countries. The Risdon plant has the capacity to produce more than 600 tonnes of zinc per day.

Apart from the zinc and zinc alloys, EZ also produces cadmium, sulphuric acid, superphosphate and ammonium sulphate. The zinc plant supplies a large proportion of Australia's total requirements. The company has commenced a major modernisation program to be completed by 1992. In 1989, the Risdon plant received its first load of Hellyer zinc concentrate. Mine production capacity at the company's west coast mines at Rosebery is 650 000 tonnes of silver-lead-zinc-copper-gold ore per annum. The associated concentrating mill at Rosebery has the capacity to treat 850 000 tonnes of ore per annum, including treatment of ore from the Que River Mine.

Tasmanian Electro-Metallurgical Co. Pty Ltd (Bell Bay). In 1962, BHP transferred its major alloy making from Newcastle to Bell Bay. Expansion, in 1976, gave export capacity and added ferro-silicon and manganese ore sinter to the existing product range of high carbon ferro-manganese and silico-manganese. A significant proportion of production is being exported to steelmakers and foundries in South East Asia, the Middle East, Japan, the United States of America and New Zealand. TEMCO completed a \$57 million capital works program in 1987 to increase output by 40 per cent.

17.1.6 Fabricated Metal Products

Humes Ltd (Statewide). Humes operates three divisions in Tasmania: Humes Concrete, producing pre-cast concrete; Humes Plastics, manufacturing UPVC and high-density polythene pipes and fittings for a wide range of uses; and Humes-ARC, producing prefabricated reinforcement mesh and rod.

ACL Bearing Company (Launceston). This factory was established in 1949 to manufacture engine bearings for the Australian spare parts trade. The factory has since expanded and diversified its range of products and is now the only automotive bearing manufacturing company in Australia. ACL also undertakes the manufacture of sintered products using powder metallurgy techniques.



Pasminco Metals - EZ, Risdon.

Photo: John Hays

17.1.7 Transport Equipment

International Catamarans Pty Ltd (Hobart). International Catamarans specialises in commercial aluminium catamarans. The craft are mainly used as passenger ferries, although utility vessels such as oil rig tenders, light defence and patrol craft are also in service.

The success of their design led to licensing of yards in other States and in Asia, as well as the sale and exchange of related technology in Europe and North America. Local production extended to larger, higher quality vessels for export, including two 470-passenger ferries for the UK market. The local workforce includes full-time sub-contractors and apprentices. Hobart is seen as an ideal base from which developments can be tested and improved.

In July 1989, International Catamarans opened a new boat-yard at Prince of Wales Bay in Hobart. The facility is large enough for three large catamarans to be built simultaneously.

Ansair Kingston. Ansair Kingston is owned by Ansett Transport Industries. Ansair has a bus plant at Kingston, manufacturing bus bodies and components. In 1989, the company won a Government two year contract to produce 49 buses for \$9 million. The company is looking to win contracts to supply a new mini-bus design for New Zealand and interstate markets.

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Manufacturing Production, Australia: Building Materials and Fittings, (8361.0), monthly.

Manufacturing Production, Australia: Plastics, Rubber, Paints, Detergents and Industrial Chemicals, Australia, (8362.0), monthly.

Manufacturing Production, Australia: Transport Equipment, (8363.0), monthly.

Wine Production, Australia and States, (8366.0), annual.

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