

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS, CANBERRA,
AUSTRALIA.

MANUFACTURING INDUSTRIES.
1953-54.

No. 18. CONFECTIONERY.

PREPARED UNDER INSTRUCTIONS FROM
THE RIGHT HONORABLE THE TREASURER,

BY

S. R. CARVER,
ACTING COMMONWEALTH STATISTICIAN.

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P R E F A C E

1. GENERAL: The Bulletins in the series for 1953-54 are listed on the back of the cover of this Bulletin and incorporate the same range of industries as the 1952-53 series.

Where a number of industries are combined in one Bulletin the introductory paragraph on Page 3 specifies the industries so included.

2. CLASSIFICATION OF FACTORIES: For purposes of industry classification, factories in Australia are classified according to the nature of their product. Where two or more distinct types of industrial activity are carried on in one establishment, a separate return is obtained, wherever practicable, for each activity in order to allow classification on this basis. In cases where this is not practicable, factories are classified according to predominant activity and these cases are encountered most frequently in the Metal Trades, (e.g. General Engineering firms also producing Agricultural Implements or Stoves, etc.), and to a lesser degree in factories concerned with Skins, Leather, Clothing and Wood products.

Each of the summaries in the "Manufacturing Industries" series relates as far as possible to the operations of factories classified to the industry specified. Sometimes articles normally produced in the industry covered by a particular Bulletin are also produced, as subsidiary production, in other industries, and, wherever possible, quantity tables have been extended to show details of production separately for the industry under review and the total in all industries.

3. BASIS OF THE STATISTICS: The scope of the factory statistics is fully explained in the annual Secondary Industries Bulletin.

Briefly, a "factory" is taken to be a manufacturing establishment in which four or more persons are employed or in which power other than hand is used.

All persons employed in the manufacturing activities of the factory are counted as factory employees. The figures relating to employment, therefore, exclude all those engaged in selling and distribution, such as salesmen, travellers, collectors, carters engaged solely on outward delivery of manufactured goods, and retailing storemen. The figures do include, however, proprietors who work in their own factories as well as "out-workers".

The value of output is the selling value at the factory of goods made or processed during the year, including by-products. In addition it includes the value of other work done, such as repair work, assembling and making-up for customers.

The value of production is the value added to raw materials by the process of manufacture. It is calculated by deducting from the value of factory output the value (at the factory) of the materials used, containers and packing, power, fuel and light used, tools replaced and materials used in repairs to plant (but not depreciation charges). The value of production is the source from which such items as wages, interest, depreciation, profits, taxation, advertising and other sundry charges are met. As full details of costs of production are not collected, the amount of profit resulting from factory operations cannot be ascertained from the figures contained herein.

S. R. CARVER
ACTING COMMONWEALTH STATISTICIAN

MANUFACTURING INDUSTRIES, AUSTRALIA : 1953-54
CONFECTIONERY

IT SHOULD BE NOTED THAT THE PARTICULARS OF FACTORY OPERATIONS GIVEN IN THIS SUMMARY EXCLUDE SIX FACTORIES OPERATING IN TASMANIA, EXCEPT IN TABLES 4 AND 5 WHERE THEY REFER TO AUSTRALIA AS A WHOLE AND INCLUDE THESE FACTORIES.

1. **SUMMARY OF STATISTICS:** The following table furnishes a summary of the principal statistics of the factories engaged in the manufacture of Confectionery in Australia for the years 1938-39, 1945-46 and 1951-52 to 1953-54.

TABLE 1 : CONFECTIONERY : AUSTRALIA (a)

Year	Factories (1)	Persons Employed (b)(2)	Salaries and Wages Paid (c)(3)	Power, Fuel and Light, etc. Used (d)(4)	Value of Materials etc. used (e)(5)	Value of Pro- duction (f)(6)	Value of Output (g)(7)
	Number	Number	£'000	£'000	£'000	£'000	£'000
1938-39	148	7,256	1,041	107	3,102	2,418	5,627
1945-46	198	5,965	1,389	139	4,669	3,314	8,122
1951-52	250	7,361	4,006	371	11,997	7,801	20,169
1952-53	256	6,873	4,084	436	12,554	7,910	20,900
1953-54	249	6,976	4,382	444	13,857	8,307	22,608

(a) Excludes Tasmania (see introductory note). (b) Average over whole year; includes Working Proprietors. (c) Excludes amounts drawn by Working Proprietors (d) Includes Water and Lubricating Oil. (e) Includes also value of containers, packing, etc., replacements of tools and repairs to plant. (f) Value of Production equals (7) less total of columns (4) and (5) (g) Value of Goods produced.

In the following table particulars of the Industry are given for each State excluding Tasmania during the year 1953-54 -

TABLE 2 : CONFECTIONERY : STATES (a) 1953-54

Particulars	N.S.W.	VIC.	Q'LD.	S.A.	W.A.	AUSTRALIA (a)
Number of Factories	97	99	23	22	8	249
Number Employed -						
Males	1,496	1,427	125	158	135	3,341
Females	1,434	1,636	193	193	179	3,635
Total	2,930	3,063	318	351	314	6,976
Salaries and Wages Paid	£ 1,939,654	£ 1,960,725	£ 128,653	£ 184,837	£ 168,169	£ 4,382,036
Value of -						
Power, Fuel and Light, etc. used	230,206	162,704	10,920	22,496	17,589	443,915
Materials, etc. used	6,543,033	6,001,657	462,973	416,505	432,757	13,856,925
Production	4,381,630	3,139,110	223,152	258,106	305,467	8,307,465
Output	11,154,869	9,303,471	697,045	697,107	755,813	22,608,305
Land and Buildings (b)	1,180,350	985,339	181,360	219,927	82,947	2,649,923
Plant and Machinery (b)	1,398,150	1,333,615	108,764	114,666	83,580	3,038,775
H.P. of Engines ordinarily in use.. ..	H.P. 13,864	H.P. 12,016	H.P. 826	H.P. 1,578	H.P. 479	H.P. 28,763

(a) Excludes Tasmania. (b) Depreciated or book value at end of year.

See also notes to Table 1.

2. **AVERAGE SALARIES, OUTPUT AND PRODUCTION:** Particulars of the average salary and wage paid, together with the average value of output and production per person engaged and the ratio of salaries and wages to the value of production, are shown in the following table for the years 1938-39, 1945-46 and 1951-52 to 1953-54.

TABLE 3 : CONFECTIONERY FACTORIES : AVERAGE SALARIES AND WAGES PAID OUTPUT, ETC. PER EMPLOYEE : AUSTRALIA (a)

Year	Salaries and Wages per Employee (b)	Value of Output per Person Engaged (c)	Value of Production per Person Engaged (c)	Ratio of Salaries and Wages to Value of Production
	£	£	£	%
1938-39	146	775	333	43.04
1945-46	239	1,362	556	41.93
1951-52	561	2,740	1,060	51.35
1952-53	614	3,041	1,151	51.64
1953-54	649	3,241	1,191	52.75

(a) Excludes Tasmania. (b) Excludes Working Proprietors and amounts drawn by them. (c) Includes Working Proprietors.

3. **MATERIALS USED AND ARTICLES PRODUCED:** Particulars of the principal materials used and articles produced in Confectionery factories for the years 1952-53 and 1953-54 are shown in the following table. Some of the products of Confectionery factories are also produced in other works, and where this occurs, the total production from all Australian factories has been given. Details for the six Tasmanian factories are included in this and the following table.

TABLE 4 : PRINCIPAL MATERIALS USED AND ARTICLES PRODUCED IN CONFECTIONERY FACTORIES AUSTRALIA (a)

Particulars	Unit of Qty.	1952-53		1953-54	
		Quantity	Value (£)	Quantity	Value (£)
MATERIALS USED:					
Sugar ..	ton	45,210	3,051,429	43,034	3,079,836
Icing Sugar -					
Own Manufacture ..	"	4,645	(b)	5,530	(b)
Purchased ..	"	1,271	100,411	1,268	114,978
Flour (Ton 2,000 lb.) ..	"	2,100	54,644	1,764	50,044
Milk - Whole - Fresh	gal.	6,899	1,444	8,115	2,043
Condensed	cwt.	57,306	401,424	64,774	455,815
Powdered	"	26,717	309,756	35,759	411,039
Concentrated	lb.	(c)	(c)	(c)	(c)
Skim - Concentrated	cwt.	-	-	(c)	(c)
Powdered	"	6,092	32,472	7,567	38,475
Cream ..	gal.	3,629	4,533	2,500	3,065
Butter ..	cwt.	4,394	87,677	4,610	96,423
Glucose ..	"	201,777	989,547	207,513	1,040,383
Cocoa - Beans ..	lb.	16,411,514	2,365,091	19,443,792	3,083,078
Butter ..	"	3,933,228	1,251,152	4,688,897	1,712,644
Cake ..	"	12,753	3,458	15,658	1,819
Chocolate ..	"	3,312,973	559,918	4,421,660	810,023
ARTICLES PRODUCED:					
Confectionery -					
Chocolate -					
(1) Sold for further manufacturing Purposes	lb.	5,503,938	817,298	7,150,727	1,123,324
(2) Moulded in solid bars, with or without fruit, nuts, etc.	"	23,088,317	4,840,931	25,959,132	5,863,670
(3) Moulded in blocks or bars with soft or hard centres	"	9,400,040	1,885,834	7,930,227	1,814,731
(4) Confectionery Bars, chocolate enrobed	"			(d)9,550,822	(d)1,709,690
(5) Chocolates (Mixtures and straight lines) incl. bulk standard and fancy packings	"	(d)26,473,131	(d)5,267,642		
(6) Other Chocolate Confectionery	"			(d)19,158,767	(d)4,497,710
Total Chocolate Confectionery (Items (2) to (6))	"	(d)58,961,488	(d)11,994,407	(d)62,598,948	(d)13,885,801
Other Confectionery without Chocolate ..	"	(d)76,644,403	(d)9,499,939	(d)76,872,179	(d)9,836,190
Cocoa Powder & Drinking Chocolate ..	"	(d)4,216,709	(d) 576,808	(d)4,910,123	(d) 694,394
Icing Sugar Made -					
Consumed in own works	ton	4,645	(b)	5,530	(b)
For Sale or addition to stocks ..	"	11,871	913,165	7,502	619,496

(a) Includes Tasmania

(b) Quantity only collected.

(c) Not available for publication.

(d) Includes Production in other works.

In the following table comparative details are given of the total Australian factory production of some of the principal items of confectionery for the years 1938-39, 1945-46 and 1951-52 to 1954-55.

TABLE 5 : CONFECTIONERY : PRINCIPAL ITEMS OF PRODUCTION IN ALL FACTORIES : AUSTRALIA (a)

Year	Confectionery				Cocoa Powder and Drinking Chocolate		Icing Sugar Made
	With Chocolate Basis		Without Chocolate				
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity
	'000 lb.	£'000	'000 lb.	£'000	'000 lb.	£'000	Tons
1938-39	43,515	2,771	58,147	2,868	3,063	94	9,431
1945-46	60,122	4,350	63,480	3,478	6,876	437	21,541
1951-52	(b) 61,276	(b) 11,546	78,735	8,852	5,448	619	28,925
1952-53	(b) 58,961	(b) 11,994	76,644	9,500	4,217	577	25,672
1953-54	(b) 62,599	(b) 13,886	76,872	9,836	4,910	694	21,760
1954-55(c)	(b) 56,641	(d)	80,943	(d)	(d)	(d)	(d)

(a) Includes Tasmania. (b) Excludes that sold for further manufacturing purposes.

(c) Preliminary; subject to revision. (d) Not yet available.

4. **EMPLOYMENT:** The number of employees shown in Tables 1, 2 and 7 has been adjusted to show the average employment over the whole year in those cases where short time was worked. In the following table the factories have been classified according to the average number employed during the actual period worked for the years 1938-39, 1945-46 and 1951-52 to 1953-54.

TABLE 6 : CONFECTIONERY FACTORIES CLASSIFIED ACCORDING TO PERSONS EMPLOYED : AUSTRALIA (a)

Number of Persons Employed in each Factory	1938-39		1945-46		1951-52		1952-53		1953-54	
	No. of Factories	No. Employed	No. of Factories	No. Employed	No. of Factories	No. Employed	No. of Factories	No. Employed	No. of Factories	No. Employed
Under 4	27	58	39	79	68	134	80	156	78	148
4	12	48	15	60	26	104	26	104	22	88
5 to 10	35	250	50	331	60	417	63	460	56	384
11 to 20	31	454	42	589	38	554	30	441	40	581
21 to 50	22	713	31	1,013	31	973	32	977	25	747
51 to 100	9	642	11	750	13	879	13	877	16	1,042
101 to 200	12	5,122	4	553	6	713	4	476	4	479
201 to 300			2	500	5	1,230	5	1,197	4	984
301 to 500			2	772	3	2,380	3	2,203	4	2,561
501 and over			2	1,352						
TOTAL:	148	7,287	198	5,999	250	7,384	256	6,891	249	7,014
Average Number Employed per Factory	49		30		30		27		28	

(a) Excludes Tasmania.

Further details of employment in the Confectionery Industry are furnished in the two tables following. In Table 7, the numbers of males and females employed are shown for the years 1938-39, 1952-53 and 1953-54 according to the nature of their employment, but because of the change in classification of occupational status adopted in 1945-46, comparison between 1938-39 and later years shown is not possible.

TABLE 7 : CONFECTIONERY FACTORIES - PERSONS EMPLOYED CLASSIFIED ACCORDING TO OCCUPATIONAL STATUS : AUSTRALIA (a)

Occupational Status	Males			Females		
	1938-39	1952-53	1953-54	1938-39	1952-53	1953-54
Working Proprietors ..	115	189	187	12	30	32
Managerial & Clerical Staff, Incl. Salaried Managers and Working Directors ..	2,690	307	309	4,313	307	317
Chemists, Draftsmen and other Laboratory and Research Staff		39	43		4	6
Foreman and Overseers ..		206	199		89	80
Workers in Factory (skilled and Unskilled) ..	125	2,619	2,590	1	3,067	3,194
Others (Carters, Messengers, etc.)		12	13		4	6
TOTAL:	2,930	3,372	3,341	4,326	3,501	3,635

(a) Excludes Tasmania.

In the following table the numbers of persons employed in Confectionery Factories in June in the years 1939, 1946 and 1952 to 1954 are shown according to age and sex distribution.

TABLE 8 : CONFECTIONERY FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE AND SEX : AUSTRALIA (a)
(Excluding Working Proprietors)

June	Under 16 years	16 years	17 years	18 years	19 years	20 years	Total 16 to 20 years	21 years and over	Total All Ages
MALES									
1939(b)	167	(c)	(c)	(c)	(c)	(c)	728	2,084	2,979
1946(b)	65	96	58	54	32	41	281	2,621	2,967
1952(d)	61	47	53	45	57	41	243	3,078	3,382
1953(d)	46	66	58	69	55	52	300	2,975	3,321
1954(d)	41	42	50	60	48	42	242	2,873	3,156
FEMALES									
1939(b)	693	(c)	(c)	(c)	(c)	(c)	2,020	1,918	4,631
1946(b)	93	134	155	181	151	152	773	2,399	3,265
1952(d)	120	131	156	147	147	165	745	2,803	3,669
1953(d)	99	163	197	189	167	162	878	2,670	3,647
1954(d)	121	147	195	193	198	121	854	2,883	3,858

(a) Excludes Tasmania. (b) Pay day nearest 15th June. (c) Details not collected.
(d) Last Pay-day in June.

5. **POWER EQUIPMENT:** Statistics of the power equipment of the factories included in this group are given in the next table. The details given include the rated horse-power of engines ordinarily in use, together with those in reserve or idle.

TABLE 9 : CONFECTIONERY FACTORIES : TYPES AND RATED HORSE-POWER OF ENGINES : AUSTRALIA (a)

Class of Engine	Rated Horse-power of Engines					
	Ordinarily in Use			In Reserve or Idle		
	1938-39	1952-53	1953-54	1938-39	1952-53	1953-54
Steam - Reciprocating ..	190	171	161	50	150	150
Turbine ..	2,200	1,250	1,250	-	-	-
Internal Combustion -						
Gas ..	120	-	-	-	-	-
Petrol or Other Light						
Oils ..	-	89	278	200	356	276
Heavy Oils ..	-	812	1,593	-	1,256	180
Water ..	-	-	-	-	-	100
Total, Prime Movers:	2,510	2,322	3,282	250	1,762	706
Motors driven by electricity -						
Purchased ..	13,644	23,680	25,481	849	776	2,125
Own Generation ..	-	-	-	-	-	-
Total, Electricity:	13,644	23,680	25,481	849	776	2,125
TOTAL POWER EMPLOYED:	16,154	26,002	28,763	1,099	2,538	2,831

(a) Excludes Tasmania. (b) These motors are driven by electricity generated by Prime Movers, and to avoid duplication are excluded from statistics of total power employed.

6. CONSUMPTION OF POWER, FUEL AND LIGHT: Details of the quantities and values of the various items of power, fuel and light used in Confectionery factories, are shown in the following table for the years 1938-39, 1952-53 and 1953-54.

TABLE 10 : CONFECTIONERY FACTORIES : POWER, FUEL AND LIGHT, ETC. USED : AUSTRALIA (a)

Particulars	Unit of Quantity	Quantity			Value (£)		
		1938-39	1952-53	1953-54	1938-39	1952-53	1953-54
Power, Fuel and Light -							
Coal - Black ..	ton	12,689	8,841	6,862	19,211	43,731	35,445
Brown ..	"	1,296	3,049	2,433	2,072	5,578	4,896
Brown Coal Briquettes	"	(b)	145	636	(b)	475	2,194
Coke ..	"	2,437	728	617	3,609	4,464	3,724
Wood ..	"	2,158	3,975	3,258	1,549	11,366	9,252
Fuel Oil ..	gallon	70,246	1,272,227	1,233,385	1,797	100,601	85,458
Tar (Fuel) ..	"	(c)	-	-	(d)	-	-
Electricity ..	-	(e)	(e)	(e)	59,237	209,806	242,122
Gas ..	-	(e)	(e)	(e)	9,677	29,373	28,812
Other (Charcoal, etc.)	-	(e)	(e)	(e)	1,024	10,994	10,532
Water and Lubricating Oil Used ..	-	(e)	(e)	(e)	8,693	19,771	21,480
TOTAL:	-	(e)	(e)	(e)	106,869	436,159	443,915

(a) Excludes Tasmania. (b) Included with Brown Coal. (c) Not available.

(d) Included with other (Charcoal, etc.) (e) Value only available.

7. VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY: Particulars of the book values of premises occupied and plant installed in Confectionery factories at the 30th June for the years 1938-39, 1945-46 and 1951-52 to 1953-54 are shown in the next table. In addition, details of the values of additions and replacements made and depreciation allowed during the same periods are also shown.

It should be noted that the amounts shown are those recorded by factories which were operating during each year and that changes in their numbers, as well as other factors, affect comparison from year to year.

TABLE 11 : CONFECTIONERY FACTORIES : VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY AUSTRALIA (a)

Year	Book Value as at 30th June (b)		Additions & Replacements made during year		Depreciation Allowed during year	
	Land and Buildings	Plant and Machinery	Land and Buildings	Plant and Machinery	Land and Buildings	Plant and Machinery
1938-39	1,423,406	1,363,619	15,847	79,224	4,472	66,956
1945-46	1,556,321	1,142,484	14,624	86,897	8,953	113,564
1951-52	2,427,676	2,703,635	96,213	633,282	17,391	216,469
1952-53	2,510,372	2,872,065	57,130	485,826	17,121	234,879
1953-54	2,649,923	3,038,775	56,800	493,887	14,139	254,669

(a) Excludes Tasmania. (b) Includes estimated value of rented premises and machinery.

8. EXTERNAL TRADE: The quantities and values of imports and exports of Confectionery are given in the following table for the years 1938-39, 1945-46 and 1951-52 to 1953-54.

TABLE 12 : IMPORTS AND EXPORTS OF CONFECTIONERY : AUSTRALIA

Year	Imports		Exports	
	Quantity	Value	Quantity	Value
	lb.	£A	lb.	£A
1938-39	1,371,027	69,641	(a) 1,248,003	(a) 102,332
1945-46	6,742	10,053	(a) 5,658,087	(a) 355,357
1951-52	1,742,570	299,346	7,611,800	613,234
1952-53	204,079	43,024	7,861,114	581,776
1953-54	665,339	132,823	2,539,704	335,582

(a) Includes Cake, Cakes and Puddings.

Note - Values are expressed in £A, f.o.b. Port of Shipment.

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COMMONWEALTH BUREAU OF CENSUS AND STATISTICS

CANBERRA. A.C.T. 15TH SEPTEMBER, 1955.

LIST OF INDUSTRIES INCLUDED IN THE SERIES.

- No. 1. CEMENT AND CEMENT GOODS.
- " 2. BRICKS, TILES, POTTERY AND EARTHENWARE.
- " 3. CHEMICALS, DRUGS AND MEDICINES.
- " 4. WHITE LEAD, PAINTS AND VARNISH.
- " 5. CHEMICAL FERTILIZERS.
- " 6. SOAP AND CANDLES.
- " 7. BASIC METAL INDUSTRIES.
- " 8. METAL FABRICATING INDUSTRIES.
- " 9. MOTOR VEHICLES AND CYCLES.
- " 10. COTTON MILLS.
- " 11. WOOLLEN MILLS.
- " 12. ROPE AND CORDAGE.
- " 13. TANNERIES.
- " 14. BOOTS AND SHOES.
- " 15. CLOTHING (INCLUDING HOSIERY AND KNITTED GOODS)
- " 16. FLOUR AND OTHER GRAIN MILLS.
- " 17. BISCUITS.
- " 18. CONFECTIONERY.
- " 19. JAM, FRUIT, VEGETABLES, PICKLES, SAUCES, CONDIMENTS, ETC.
- " 20. BACON CURING.
- " 21. BUTTER, CHEESE AND CONDENSED, CONCENTRATED, ETC., MILK.
- " 22. AERATED WATERS AND CORDIALS.
- " 23. MEAT AND FISH PRESERVING.
- " 24. BREWERIES.
- " 25. WINERIES AND DISTILLERIES.
- " 26. TOBACCO, CIGARS AND CIGARETTES.
- " 27. SAWMILLING.
- " 28. PULP AND PAPER MAKING.
- " 29. RUBBER WORKS.
- " 30. BROOMS AND BRUSHES.
- " 31. ELECTRIC LIGHT AND POWER WORKS.
- " 32. GAS WORKS.
- " 33. PLASTIC MOULDING AND PRODUCTS.