

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS,
CANBERRA.
OFFICIAL STATISTICS, COMMONWEALTH OF AUSTRALIA.

MANUFACTURING INDUSTRIES,
1949-50

NO. 34. COTTON MILLS

Prepared Under Instructions from
THE RIGHT HONORABLE THE TREASURER,

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13/11/51

PREFACE

1. GENERAL: The industries included in the series for 1949-50 are listed on the back of the cover, and are the same as those covered by the 1948-49 series. The 1949-50 summaries published to date are indicated at the top of page 2.
2. CLASSIFICATION OF FACTORIES: For purposes of industry classification, a factory in Australia is classified according to the nature of the 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, there is no alternative but to classify the factory according to its predominant activity. This difficulty is most acute in the Metal Trades industries, (e.g. Engineering firms also producing Agricultural Implements, Stoves and Ovens, and/or Brass and Copper products), but it is also to be found in factories concerned with the treatment or manufacture of Skins, Leather, Clothing, Wood products and some other articles.

Each of the summaries in the series "Manufacturing Industries", relates as far as possible to the operations of factories classified to the industry specified. Sometimes articles applicable to this industry 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 Part I of the annual Production Bulletin.

Briefly, a "factory" is taken to be a manufacturing establishment in which four or more hands 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 wholesale 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 of output minus the cost of raw materials, containers, power, fuel, light, lubricants, water, tools replaced, and repairs to plant, and represents the value added in the process of manufacture within the factories. As full details of the cost of production are not collected, the amount of profit resulting from operations cannot be ascertained. The value of production, therefore, is the source from which such items as wages, interest, depreciation, profits, taxation, insurance, advertising and other sundry charges are met.

Note: Summaries already published in this Series are:- No's. 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. Industrial Metals-Ferrous-Parts I to IV; 8. Industrial Metals-Non-Ferrous-Parts I and II; 9. Electrical Machinery and Equipment; 10. Motor Vehicles and Cycles; 11. Agricultural Implements; 12. Wireless apparatus; 13. Stoves, Ovens and Ranges; 16. Tanneries; 17. Boots and Shoes; 19. Flour and Other Grain Mills; 20. Biscuits; 21. Confectionery; 22. Jam, Fruit and Vegetable Canning; 23. Pickles, Sauces, Condiments, Coffee, Spices, Etc.; 26. Breweries; 27. Tobacco, Cigars and Cigarettes; 28. Sawmilling; 29. Rope and Cordage; 30. Rubber Works; 32. Electric Light and Power Works; 33. Gas Works; 35. Paper Mills; 36. Wineries and Distilleries; 37. Aerated Waters and Cordials; 38. Meat and Fish Preserving; 39. Wire and Wire Working (including Nails).

COTTON MILLS

INTRODUCTION: Statistics showing the development of factories engaged in the treatment of Cotton are not available prior to 1923-24. In that year the classification of factories was amended to provide for this industry as a separate sub-class, which showed that there were 7 factories employing 371 persons in Australia, including 3 establishments in Queensland engaged in the ginning of the seed cotton grown in that State.

Some assistance was given to the industry by the provision of a bounty on the production of cotton yarn between the years 1926 and 1932, but this was subsequently replaced by protective customs duties. This assisted in the development of the industry, and by 1933-34 there were 24 factories employing 2,012 persons engaged in cotton spinning. Of these, 8 were in New South Wales and 16 in Victoria. By 1938-39 these had further increased to 13 in New South Wales employing 1,716 persons, and 20 in Victoria employing 1,873 persons - a total of 33 factories employing 3,589 persons.

Under the impetus of war, the industry developed still further and by 1939-40 had expanded to South Australia and later to Queensland. During 1949-50 there were 93 factories engaged in these four States in the spinning and weaving of cotton and 8,377 persons were employed, as shown in Table II below. The details contained in the several tables published in this Summary exclude particulars relating to two factories engaged in the ginning of cotton in Queensland.

COTTON SPINNING AND WEAVING

1. SUMMARY OF STATISTICS: The following table furnishes a summary of the principal statistics of factories engaged in the spinning and weaving of Cotton for the years 1938-39, 1945-46 and 1947-48 to 1949-50.

TABLE I : COTTON SPINNING AND WEAVING : AUSTRALIA

Year	Number of Factories	Persons Employed (a)	Salaries & Wages Paid (b)	Power, Fuel and Light, etc. Used (c)	Value of Materials Used (c)	Value of Production (d)	Value of Output
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	No.	No.	£'000	£'000	£'000	£'000	£'000
1938-39	33	3,589	493	50	1,357	979	2,386
1945-46	78	7,253	1,715	150	4,560	3,227	7,937
1947-48	79	7,702	2,512	209	6,075	4,087	10,371
1948-49	91	8,246	2,939	251	7,857	4,788	12,896
1949-50	93	8,377	3,326	308	9,889	5,991	16,188

(a) Includes Working Proprietors. (b) Excludes amounts drawn by Working Proprietors.

(c) Includes value of containers, packing, etc., tools replaced and repairs to plant.

(d) Value of production equals column (7) less total of columns (4) and (5).

In the next table particulars are given on a State basis for 1949-50 so far as this is possible within the limits prescribed by the confidential clause of the Census and Statistics Act.

TABLE II : COTTON SPINNING AND WEAVING : STATES, 1948-49.

Particulars	N.S.W.	VIC.	Q'LD.	S...	T...	T.S.	AUSTRALIA
Number of Factories	42	46	2	3	-	-	93
Number Employed (a) -							
Males ..	2,051	1,333	(c)	(c)	-	-	4,164
Females ..	2,024	1,488	(c)	(c)	-	-	4,213
Total ..	4,075	2,821	(c)	(c)	-	-	8,377
Value of -	£.	£.	£.	£.	£.	£.	£.
Salaries and Wages Paid (b)	1,510,387	1,166,819	(c)	(c)	-	-	3,306,022
Power, Fuel and Light etc.							
Used ..	118,688	109,342	(c)	(c)	-	-	308,156
Materials, etc. Used	4,788,373	3,822,190	(c)	(c)	-	-	9,889,139
Production (d) ..	3,118,704	1,916,883	(c)	(c)	-	-	5,991,110
Output ..	8,025,765	5,848,115	(c)	(c)	-	-	16,188,407
Land and Buildings	953,935	1,562,812	(c)	(c)	-	-	2,843,639
Plant and Machinery	2,273,274	1,456,558	(c)	(c)	-	-	4,117,589
H.P. of Engines Ordinarily in use ..	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
	13,606	11,094	(c)	(c)	-	-	29,118

(a) Includes Working Proprietors. (b) Excludes amounts drawn by Working Proprietors. (c) Not available for publication. These figures are included in the total for Australia. (d) See note (d) to Table I.

2. AVERAGE SALARIES, OUTPUT AND PRODUCTION: Particulars of the average salary and wage paid together with the average values 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 1947-48 to 1949-50.

TABLE III : AVERAGE SALARIES AND WAGES PAID, OUTPUT, ETC. PER EMPLOYEE :

AUSTRALIA

Year	Salaries and Wages per Employee (a)	Value of Output per Person Engaged (b)	Value of Production per Person Engaged (b)	Ratio per cent. of Salaries and Wages to Value of Production
	£.	£.	£.	%
1938-39	136	665	273	50.38
1945-46	237	1,094	445	53.13
1947-48	328	1,347	531	61.46
1948-49	358	1,564	581	61.38
1949-50	367	1,932	715	55.18

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

3. MATERIALS USED AND ARTICLES PRODUCED: In the following table details are given of the quantities of raw cotton used and cotton yarn, etc. produced in the carding and spinning sections of Cotton Mills in Australia for the years 1938-39, 1945-46 and 1947-48 to 1949-50.

TABLE IV : COTTON CARDING AND SPINNING : RAW COTTON USED AND YARN, ETC.
PRODUCED IN COTTON MILLS : AUSTRALIA
('000 lb.)

Year	Raw Cotton Used	Articles Produced		
		Cotton Yarn		Cotton Waste
		Eyed	Undyed	
1938-39	14,117	249	11,443	(a)
1945-46	25,329	3,081	20,873	8,573
1947-48	31,401	679	26,792	7,333
1948-49	31,077	1,898	25,197	7,109
1949-50	33,809	1,376	26,965	8,663

(a) Not available for publication.

The following table shows particulars of the quantity and value of the principal materials used and articles produced in the weaving sections of Cotton Mills during the year 1949-50. Some of the articles produced in Cotton Mills are, however, also produced in other establishments and the table accordingly shows separate particulars of these articles produced in (i) Cotton Mills, and (ii) all factories (including Cotton Mills).

TABLE V : COTTON WEAVING : YARN USED AND ARTICLES PRODUCED : AUSTRALIA
1949-50.

Materials Used	Quantity	Articles Produced	Cotton Mills		All Factories	
			Quantity	Value (£)	Quantity	Value (£)
Cotton Yarn - Mercerized	133	Cotton Thread	lb. 677,255	576,213	lb. 677,255	576,213
Other	23,143	Towels	Doz. (b)418,283	(b)1,109,705	Doz. 418,283	1,109,705
Woolen Yarn	146		sq.yds.		sq.yds.	
Worsted Yarn	87	Towelling (incl. Baby Napkins)	(b)871,056	(b)261,559	871,056	261,559
Rayon Yarn	271		cwt		cwt	
Other Yarn	27	Cotton Tape	395	39,438	395	39,438
			sq.yds.		sq.yds.	
		Canvas and Duck	(b)7,268,605	(b)2,166,335	7,268,605	2,166,335
		Denim	(b)116,297	26,962	116,297	26,962
		Drills	6,320,205	1,484,009	6,320,205	1,484,009
		Woolen Cloth and Tweed	(a)	(a)	12,582,763	35,521,876
		Worsted Cloth incl. Serge	130,739	104,118	19,801,929	13,027,846
		Cotton Tweed	2,467,933	1,118,879	2,518,129	1,135,946
			lb.		lb.	
		Tyre Cord	1,005,609	281,605	1,005,609	281,605
			sq.yds.		sq.yds.	
		Tyre Cord Fabric	1,673,743	340,886	1,673,743	340,886
		Other Cotton				
		Piece Goods	(b)2,196,268	2,147,403	12,196,268	2,147,403

(a) Not available for publication. (b) Includes production in other works, details of which are not available for separate publication.

In the next table, the output of the principal woven cotton products from all Factories are shown for the years 1938-39, 1945-46 and 1947-48 to 1949-50.

TABLE VI : ALL FACTORIES : PRINCIPAL WOVEN COTTON PRODUCTS : AUSTRALIA
('000 sq.yds.)

Year	Towels (a)	Towelling (incl. Baby Napkins)	Cotton Canvas and Duck	Cotton Drill	Denim	Cotton Tweed	Other Cotton Piece Goods(f)
1938-39	476	(c)	(b)	(b)	(b)	3,560	(d)
1945-46	354	391	6,633	4,974	(b)	1,432	7,457
1947-48	367	170	7,264	4,698	36	1,369	10,152
1948-49	389	138	7,149	5,172	90	1,756	10,095
1949-50	418	871	(e)7,269	6,320	116	2,528	12,196

(a) '000 Dozen. (b) Not available for publication. (c) Included with Towels.

(d) Not available. (e) Includes some flax and canvas. (f) Excludes Tyre Cord Fabric

4. **EMPLOYMENT:** The number of employees shown in Table I, II and VIII has been adjusted to represent 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 1947-48 to 1949-50.

TABLE VII : FACTORIES CLASSIFIED ACCORDING TO PERSONS EMPLOYED : AUSTRALIA

No. of Persons Employed in each Factory	1938-39		1945-46		1947-48		1948-49		1949-50	
	No. of Fac- tories	No. Em- ployed	No. of Fac- tories	No. Em- ployed	No. of Fac- tories	No. Em- ployed	No. of Fac- tories	No. Em- ployed	No. of Fac- tories	No. Em- ployed
Under 4	2	5	4	11	3	7	8	19	8	14
4	-	-	3	12	2	8	2	8	1	4
5 to 10	6	51	14	101	14	110	18	138	18	125
11 to 20	4	65	10	149	12	167	11	154	10	137
21 to 50	6	256	16	502	15	447	22	723	21	674
51 to 100	4	298	12	785	11	715	9	674	13	937
101 to 200			7	1,049	10	1,297	9	1,371	9	1,305
201 to 300			5	1,326	4	966	5	1,304	5	1,188
301 to 400	11	2,940	3	1,031	4	1,371	2	637	3	1,051
401 and over			4	2,295	4	2,632	5	3,224	5	3,156
Total:	33	3,615	78	7,261	79	7,720	91	8,252	93	8,591
Average Number Employed per Factory		110		93		98		91		92

Further details of employment are furnished in the two tables following. In Table VIII the numbers of males and females employed in Cotton Spinning and Weaving are shown for the years 1938-39, 1948-49 and 1949-50 according to the nature of their employment, but because of the change in classification which operated from 1945-46, comparison between 1938-39 and the later years shown is not wholly effective.

TABLE VIII : PERSONS EMPLOYED CLASSIFIED ACCORDING TO OCCUPATIONAL STATUS : AUSTRALIA

Occupational Status	Males			Females		
	1938-39	1948-49	1949-50	1938-39	1948-49	1949-50
Working Proprietors ..	21	36	33	1	6	6
Managerial and Clerical Staff, including Salaried Managers and Working Directors ..		265	263		296	299
Chemists, Draftsmen and Other Laboratory and Research Staff	1,346	13	13	2,221	-	-
Foremen and Overseers ..		249	269		66	57
Workers in Factory (Skilled and Unskilled) ..		3,622	3,581		3,669	3,833
Other (Carters, Messengers, etc.)		5	5		19	18
TOTAL:	1,367	4,190	4,164	2,222	4,056	4,213

The number of persons employed on or about the 15th June for the years 1939, 1946 and 1948 to 1950 are distributed according to age and sex in Table IX.

TABLE IX : DISTRIBUTION OF EMPLOYERS ACCORDING TO AGE AND SEX : AUSTRALIA
(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
<u>Males</u>									
1939	146	(a)	(a)	(a)	(a)	(a)	365	848	1,359
1946	116	91	101	126	97	85	500	3,023	3,639
1948	111	117	102	124	125	110	578	3,294	3,983
1949	140	120	113	137	128	123	621	3,489	4,250
1950	85	114	124	150	106	107	601	3,681	4,367
<u>Females</u>									
1939	310	(a)	(a)	(a)	(a)	(a)	878	1,123	2,311
1946	144	147	199	245	230	273	1,094	2,688	3,926
1948	110	109	136	153	147	176	721	3,904	3,735
1949	99	116	142	165	162	150	735	3,426	4,260
1950	86	138	147	196	160	161	832	3,704	4,622

(a) Details not collected.

7. POWER, FUEL AND LIGHT, ETC. USED: Details of the quantities and values of the various items of power, fuel and light used in Cotton Spinning and Weaving during the years 1938-39, 1947-48 and 1948-49 are shown in the following table.

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

TABLE X : TYPES AND RATED HORSE-POWER OF ENGINES : AUSTRALIA

Class of Engine	Rated Horse-Power of Engines					
	Ordinarily in Use			In Reserve or Idle		
	1938-39	1948-49	1949-50	1938-39	1948-49	1949-50
Steam - Reciprocating	36	10	10	-	-	-
Turbine	-	-	-	-	-	-
Internal Combustion -						
Gas	-	-	-	-	-	-
Petrol or Other Light Oils	-	48	520	-	50	45
Heavy Oils	-	157	362	-	164	-
Water	-	-	-	-	-	-
Total Prime Movers:	36	215	892	-	214	45
Motors Driven by Electricity -						
Purchased	8,047	25,863	28,226	87	1,163	2,609
Own Generation	-	-	-	-	-	-
Total Electricity:	8,047	25,863	28,226	87	1,163	2,609
TOTAL POWER USED:	8,103	26,078	29,118	87	1,377	2,654

6. MACHINE EQUIPMENT: Some details of the Principal machine equipment employed in Cotton Spinning and Weaving for the years 1938-39, 1945-46 and 1947-48 to 1949-50 are given in the next table.

TABLE XI : COTTON SPINNING AND WEAVING : PRINCIPAL MACHINE EQUIPMENT :

AUSTRALIA

(Number)

Year	Carding Machines	Combing Machines	Spindles	Looms	Twisters	Warpers
1938-39	455	20	91,148	1,291	61	59
1945-46	891	21	191,047	2,671	177	111
1947-48	876	32	195,014	3,049	204	111
1948-49	920	34	201,315	3,312	240	133
1949-50	1,021	35	215,223	3,390	213	119

TABLE XII : POWER, FUEL AND LIGHT, ETC. USED : AUSTRALIA

Particulars	Unit of Quantity	Quantity			Value (£)		
		1938-39	1948-49	1949-50	1938-39	1948-49	1949-50
Power, Fuel and Light -							
Coal - Black	ton	4,023	14,676	25,182	6,190	31,899	43,431
Brown	"	576	10,909	7,396	742	10,705	13,086
Brown Coal Briquettes	"	(a)	-	-	(a)	-	-
Coke	"	215	893	525	449	2,332	1,482
Wood	"	-	3,424	956	-	4,187	1,911
Fuel Oil	Gal.	43,000	618,011	892,161	1,084	30,233	48,566
Tar (Fuel)	"	-	61,000	-	-	1,578	-
Electricity	-	(b)	(b)	(b)	38,880	142,646	169,084
Gas	-	(b)	(b)	(b)	105	1,410	1,333
Other (Charcoal, etc.)	-	(b)	(b)	(b)	-	1,900	1,800
Water and Lubricating Oil Used	-	(b)	(b)	(b)	2,561	23,249	27,463
TOTAL:		(b)	(b)	(b)	50,011	250,739	308,156

(a) Included with Brown Coal. (b) Value only available.

8. VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY: Particulars of the book values of premises occupied and plant used in Cotton Spinning and Weaving at the 30th June for the years 1938-39, 1945-46 and 1947-48 to 1949-50 are shown in the next table. Details of the values of additions and replacements made and depreciation allowed during the same period 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 number, as well as other factors, affect comparison from year to year.

TABLE XIII : VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY, ETC. :

AUSTRALIA

(£)

Year	Book Value as at 30th June (a)		Additions & Replacements made during the year		Depreciation Allowed during the year	
	Land and Buildings	Plant and Machinery	Land and Buildings	Plant and Machinery	Land and Buildings	Plant and Machinery
1938-39	703,790	735,529	86,270	210,021	6,507	66,596
1945-46	1,529,150	1,913,775	61,750	177,955	25,972	264,975
1947-48	1,867,737	2,042,326	177,917	414,894	21,013	306,305
1948-49	2,077,982	2,748,439	155,515	1,041,711	26,822	506,799
1949-50	2,843,639	4,117,589	125,191	1,821,314	26,712	473,871

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

9. **EXTERNAL TRADE:** Details of the quantities and values of imports and exports of a number of items included in the group - Cotton Spinning and Weaving - are given for the years 1938-39, 1945-46 and 1947-48 to 1949-50 in the following tables.

TABLE XIV : IMPORTS OF COTTON, COTTON PIECE GOODS, YARN, ETC. : AUSTRALIA

Particulars	Unit of Quantity	Quantity					
		1938-39	1945-46	1947-48	1948-49	1949-50	
Cotton - Raw (excl. Linters)	'000 lb.	11,790	26,494	34,114	37,234	28,357	
Cotton Yarn - Mercerised	"	1,038	951	1,962	1,384	359	
Other	"	3,711	4,547	10,640	9,921	5,240	
Cotton Piece Goods -							
Canvas and Duck	'000sq.yd.	11,926	5,443	3,916	5,879	5,962	
	sq.yd.		sq.yd.	lb.	lb.	lb.	
Knitted or Lockstitched (tubular or otherwise)	'000	11,925	4,236	798	1,201	1,344	
For Bag Making	'000sq.yd.	24,609	1,607	976	1,913	5,024	
Drills, Dungarees and Jeans -							
Grey, unbleached	"	5,438	{	414	214	629	
White, bleached	"			121	127	331	199
Printed	"			1,829	4,186	94	37
Dyed or coloured woven	"	425			843	3,025	
Other -							
Grey, unbleached	"	20,335	24,002	22,447	32,109	27,049	
White, bleached	"	30,354	25,680	35,438	51,811	30,764	
Printed	"	86,340	57,135	109,881	40,534	40,143	
Dyed or coloured woven	"				54,485	59,298	
All other	-	-	-	-	-	-	

Particulars	Value (£'000 f.o.b.)					
	1938-39	1945-46	1947-48	1948-49	1949-50	
Cotton - Raw (excl. Linters)	285	1,662	2,935	3,666	3,729	
Cotton Yarn - Mercerised	153	320	954	931	220	
Other	297	848	3,061	3,189	1,708	
Cotton Piece Goods other than proofed -						
Canvas and Duck	604	592	630	1,070	1,006	
Knitted or Lockstitched (tubular or otherwise)	142	116	219	333	368	
For Bag Making	269	68	42	135	305	
Drills, Dungarees and Jeans -						
Grey, unbleached	158	{	38	27	67	
White, bleached			11	15	56	38
Printed			266	426	17	6
Dyed or coloured woven	22			155	427	
Other -						
Grey, unbleached	507	1,216	1,643	2,816	2,066	
White, bleached	792	1,730	4,027	6,479	3,714	
Printed	2,828	5,112	15,645	6,354	5,991	
Dyed or coloured woven				9,227	9,135	
All Other	394	1,613	3,658	4,745	3,974	

TABLE XV : EXPORTS OF COTTON PIECE GOODS : AUSTRALIA

Particulars	Unit	1938-39	1945-46	1947-48	1948-49	1949-50
Cotton Yarns	'000 lb.	(a)	49	2,543	35	11
	£A'000					
	f.o.b.	(a)	13	500	12	8
Cotton Piece Goods -						
Canvas and Duck	'000sq.yd.	33	299	56	506	26
	£A'000					
	f.o.b.	3	81	14	95	8
Other	£A'000					
	f.o.b.	29	487	1,059	209	301

(a) Not available.

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