

MANUFACTURING INDUSTRIES

1962-63

NO. 10. COTTON MILLS

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS, CANBERRA

AUSTRALIA

EXPLANATORY NOTES

GENERAL. The range of bulletins in this series for 1962-63 includes an additional bulletin - No. 35, "Printing and Stationery" which is issued for the first time this year. A complete list of the series is shown inside the back cover.

Where a number of industries are combined in one bulletin, the introductory paragraph on page 3 specifies the industries so included.

CLASSIFICATION OF FACTORIES. For purposes of industry classification, factories are classified according to the nature of their products. 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. 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, generally, to the operations of factories classified to the industry specified. However, figures in the tables showing details of articles produced represent total recorded production of the articles listed, and include quantities produced, as subsidiary production, in industries otherwise classified.

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

Briefly, a "factory" is defined as an establishment in which four or more persons are employed or where power (other than manual) is used in any manufacturing process. The figures do not include details relating to small establishments not classified for statistical purposes as factories.

All persons employed in the manufacturing activities of the factory are counted as factory employees. The figures relating to employment, therefore, include working proprietors as well as "out-workers", but 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 value of materials used includes the value, in the usual sense, of the materials used, stores used, containers, tools replaced and materials used in repairs to plant. In general, it does not include the value of customers' articles or materials repaired, assembled or treated by the factory.

The value of power, fuel, etc. used includes the cost of light, lubricants and water used.

The value of output is the selling value at the factory (exclusive of all delivery costs and charges and excise duties, but inclusive of bounty and subsidy payments to the manufacturer of the finished article) of all goods made during the year. 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, in addition to wages and salaries, such items as interest, depreciation, profits, taxation, advertising and other sundry charges are met. As details of these other costs of production are not collected, the amounts of profit resulting from factory operations cannot be ascertained from the figures contained herein.

MANUFACTURING INDUSTRIES : AUSTRALIA - 1962-63COTTON MILLS

INTRODUCTION. Statistics showing the development of factories engaged in the treatment of Cotton were not available prior to 1923-24. In that year, provision was made for details relating to the industry to be extracted from those of other textile factories and shown as separate sub-classes of industry. The first available dissection showed that there were 7 factories employing 371 persons engaged in the industry, including 3 establishments in Queensland engaged in the ginning of cotton seed grown in that State.

Some assistance was given in 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 duty. This assisted in the development of the industry and by 1933-34 there were 24 factories employing 2,012 persons engaged in Cotton spinning and weaving. Eight of these were in New South Wales and sixteen in Victoria. By 1938-39, these had increased to 13 in New South Wales employing 1,716 persons, and 20 in Victoria employing 1,873 persons. In 1939-40, Cotton Mills were established in South Australia and later in Queensland. In 1962-63 there were 88 factories engaged in these four States in the spinning and weaving of Cotton, employing 9,313 persons. The details contained in the several tables published in this Summary exclude particulars relating to factories engaged in ginning cotton.

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 1958-59 to 1962-63.

TABLE 1. - COTTON SPINNING AND WEAVING : AUSTRALIA

Year	Factories	Persons Employed	Salaries and Wages Paid	Power, Fuel and Light, etc. Used	Value of Materials etc. Used	Value of Production	Value of Output
	(1)	(2) (a)	(3) (b)	(4) (c)	(5) (d)	(6) (e)	(7) (f)
	No.	No.	£'000	£'000	£'000	£'000	£'000
1958-59	97	9,770	8,116	988	19,402	14,751	35,141
1959-60	92	9,780	8,853	997	20,631	16,224	37,852
1960-61	88	9,121	8,122	958	18,336	15,169	34,463
1961-62	88	8,980	8,245	1,033	19,161	14,827	35,021
1962-63	88	9,313	8,631	1,134	20,818	16,760	38,712

(a) Average over whole year; includes Working Proprietors.

(b) Excludes amounts drawn by Working Proprietors.

(c) Includes Water and Lubricating Oil.

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

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

(f) Value, at the factory, of goods produced.

In the following table particulars of the industry are given for each State for the year 1962-63.

TABLE 2. - COTTON SPINNING AND WEAVING : STATES, 1962-63

Particulars	N.S.W.	VIC.	Q'LD.	S.A.	W.A.	TAS.	AUSTRALIA
	No.	No.	No.	No.	No.	No.	No.
Factories	44	38	1	4	..	1	88
Persons Employed							
Males	2,004	1,651	(a)	(a)	..	(a)	4,356
Females	2,197	2,058	(a)	(a)	..	(a)	4,927
Total	4,201	3,709	(a)	(a)	..	(a)	9,313
	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Salaries and Wages paid ..	3,833	3,469	(a)	(a)	..	(a)	8,631
Value of -							
Power, Fuel and Light, etc. Used	622	341	(a)	(a)	..	(a)	1,134
Materials, etc. Used ..	9,841	9,092	(a)	(a)	..	(a)	20,818
Production	8,035	6,491	(a)	(a)	..	(a)	16,760
Output	18,498	15,924	(a)	(a)	..	(a)	38,712
Land and Buildings (b) ..	7,638	5,593	(a)	(a)	..	(a)	14,430
Plant and Machinery (b) ..	6,441	4,003	(a)	(a)	..	(a)	12,191
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
Rated Horsepower of Engines ordinarily in use ..	21,939	14,625	(a)	(a)	..	(a)	41,581

(a) Not available for publication.

(b) Depreciated or book values at end of year.

See also footnotes to Table 1 on previous page.

2. AVERAGE SALARIES, OUTPUT AND PRODUCTION Particulars of the average salaries and wages 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 1958-59 to 1962-63.

TABLE 3. - 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 of Salaries and Wages to value of Production
	£	£	£	%
1958-59	832	3,597	1,510	55.02
1959-60	907	3,870	1,659	54.57
1960-61	892	3,778	1,663	53.54
1961-62	919	3,900	1,651	55.61
1962-63	927	4,157	1,800	51.50

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

3. **MATERIALS USED AND ARTICLES PRODUCED** Details shown in Tables 4, 5 and 6 relate to total usage and production and, in some cases, include relevant information supplied by establishments not classified for statistical purposes to the Cotton Spinning and Weaving Industries.

In the following table, details are given of the quantities of raw cotton used, and cotton yarn, etc. produced in Australia for the years 1958-59 to 1962-63.

TABLE 4. - COTTON CARDING AND SPINNING
RAW COTTON USED AND YARN, ETC. PRODUCED : AUSTRALIA
('000 lb.)

Item	Commodity Code No.	1958-59	1959-60	1960-61	1961-62	1962-63
Raw Cotton used ..	244.15	43,819	46,492	42,865	43,395	45,874
Pure Cotton Yarn produced -						
Weaving ..	364.11	28,549	30,042	29,059	29,723	30,094
Condenser ..	364.19	3,986	4,416	4,047	3,726	3,335
Knitting-Machine ..	364.23	7,256	8,790	7,866	7,222	8,940
Cordage ..	364.27	878	881	872	1,246	1,902
Other ..	364.15,31	1,298	946	432	556	820
Total Pure Cotton Yarn ..	48	41,967	45,075	42,276	42,473	45,091
Mixed Yarn Predominantly Cotton	364.13,25	871	792	610	872	1,044
Cotton Waste ..	244.48	6,436	6,280	6,707	6,075	7,052
	761.32					

The following table shows particulars of the quantities and values of the principal yarns used and woven articles, etc. produced in Australia during the years 1961-62 and 1962-63.

TABLE 5. - COTTON WEAVING : YARN USED AND ARTICLES PRODUCED : AUSTRALIA

Particulars	Commodity Code	1961-62		1962-63	
		Quantity '000 lb.	Value £'000	Quantity '000 lb.	Value £'000
Materials Used:					
Cotton Yarn - Purchased	364.11.	17,363	6,800	18,037	6,869
Produced in Own Works	364.11.	13,033	(a)	13,068	(a)
Mercerised (Pure)	364.35	1,046	785	1,070	844
Articles Produced:					
Cotton Sewing Thread -					
For Household use ..	368.02.04	104	250	106	260
For Industrial Sewing purposes -					
Heavy Counts 8's-18's ..	368.08	479	257	571	324
Light Counts over 18's ..	368.06	1,380	1,827	1,595	2,086
Cotton Narrow Fabrics -		'000 cwt.		'000 cwt.	
Cotton and Cotton Mixtures					
Tape ..	378.11	4	472	5	604
Other (of, or predominantly of, cotton) ..	378.16	(b)	425	(b)	400
Towels -		'000 doz.		'000 doz.	
Up to and including 22" wide	373.58.60	212	661	244	620
Over 22" wide ..	373.62.64	531	3,648	485	3,325
Cotton knitted Fabric (incl. tubing) ..	382.04	3,416	1,835	3,284	1,774
Cotton Piece Goods (c) -		'000 sq.yds.		'000 sq.yds.	
Towelling - for own towels	373.02.03	7,092	(a)	6,858	(a)
for own baby napkins ..	373.04.05	1,127	(a)	1,026	(a)
for other purposes	373.06.07	970	365	941	394
Baby Napkins ..	373.68	195	386	174	343
Dress Fabrics and Shirtings		'000 sq.yds.		'000 sq.yds.	
..	373.38.40.	2,457	492	1,961	377
Cotton Tread ..	42.44	1,138	529	1,214	562
Linen, Dungarees, etc. ..	373.18.20	924	307	1,788	606
Canvas and Duck ..	373.22.24	9,779	3,744	11,511	4,565
Drills, Jeans, etc. ..	373.10.12	16,222	4,684	16,059	4,567
Upholstery and Furnishing Fabrics ..	373.14.16	1,491	727	831	404
Other (incl. Calico, Sheetings, etc.) ..	373.46.48	13,586	2,186	13,725	2,411
Open weave Fabric - Tyre Cord		'000 lb.		'000 lb.	
..	389.71	84	37	117	51
Other	373.54	379	166	436	187

(a) Quantity only available. (b) Value only available. (c) Of, or predominantly of, cotton.

In the next table, the output from all factories of the principal woven cotton products are shown for the years 1958-59 to 1962-63.

TABLE 6. - ALL FACTORIES : PRINCIPAL WOVEN COTTON PRODUCTS :

AUSTRALIA

Year	Towels	Towelling	Baby Napkins	Canvas and Duck	Drills, Jeans, etc.	Denims, Dungarees, etc.	Cotton Tweed	Other Close Weave Cotton Piece Goods (a)
	'000 dozen	'000 sq. yds.	'000 dozen	'000 sq. yds.	'000 sq. yds.	'000 sq. yds.	'000 sq. yds.	'000 sq. yds.
1958-59	759	(b)	(b)	10,140	14,471	1,756	2,036	13,882
1959-60	863	(b)	(b)	10,508	16,218	830	2,152	13,362
1960-61	695	8,987	175	11,115	15,381	867	1,474	14,858
1961-62	763	9,189	195	9,779	16,252	924	1,138	13,586
1962-63	729	8,825	174	11,511	16,059	1,788	1,214	13,725

(a) Excludes Tyre Cord and other Open Weave Fabrics.

(b) Comparable figure not available.

4. **EMPLOYMENT** The numbers of persons employed, shown in Tables 1, 2 and 8 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 for the years 1958-59 to 1962-63 according to the average number employed during the actual period worked.

TABLE 7. - COTTON MILLS : ACCORDING TO PERSONS EMPLOYED :

AUSTRALIA

Number of Persons Employed in each Factory	1958-59		1959-60		1960-61		1961-62		1962-63	
	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	10	27	10	25	9	24	8	16	6	10
4	2	8	5	20	2	8	1	4	3	12
5 to 10	15	105	11	73	13	93	11	79	7	53
11 to 20	17	249	17	259	15	216	17	269	20	314
21 to 50	19	629	18	627	19	617	21	744	17	582
51 to 100	7	474	6	360	5	288	7	503	12	811
101 to 200	11	1,528	10	1,394	11	1,604	9	1,238	9	1,227
201 to 300	4	951	4	1,037	5	1,419	4	956	5	1,208
301 to 400	7	2,322	5	1,642	3	1,023	4	1,325	2	648
401 and over	5	3,501	6	4,353	6	3,856	6	3,880	7	4,450
TOTAL	97	9,754	92	9,790	88	9,148	88	9,014	88	9,315
Average Number Employed per Factory	101		106		104		102		105	

Further details of employment are furnished in the two tables which follow. In Table 8, the number of males and females employed are shown for the years 1960-61 to 1962-63 according to the nature of their employment.

TABLE 8. - COTTON MILLS

PERSONS EMPLOYED CLASSIFIED ACCORDING TO OCCUPATIONAL STATUS :

AUSTRALIA

Occupational Status	Males			Females		
	1960-61	1961-62	1962-63	1960-61	1961-62	1962-63
Working Proprietors ..	11	10	5	2	1	1
Managerial and Clerical Staff including Salaried Managers and Working Proprietors ..	438	418	418	387	441	453
Chemists, Draftsmen and Other Laboratory and Research Staff	35	52	59	42	62	93
Foreman and Overseers, Workers in Factory (Skilled and Unskilled), Carters (excluding Delivery only), Messengers and Persons Working Regularly at Home ..	3,793	3,806	3,904	4,413	4,190	4,380
TOTAL:	4,277	4,286	4,386	4,844	4,694	4,927

In the following table, the numbers of persons employed in June in the years 1959 to 1963 are shown according to age and sex distribution.

TABLE 9. - COTTON MILLS

PERSONS EMPLOYED ACCORDING TO AGE AND SEX :

AUSTRALIA

(Excluding Working Proprietors)

Last Payday in June	Under 16 Years	16 to 20 Years	21 Years and over	Total all Ages
MALES				
1959	34	312	4,353	4,699
1960	44	296	4,340	4,680
1961	19	222	3,532	3,773
1962	43	300	4,297	4,640
1963	27	308	3,992	4,327
FEMALES				
1959	103	685	4,304	5,092
1960	99	685	4,494	5,278
1961	47	518	3,472	4,037
1962	145	737	4,126	5,008
1963	99	788	4,072	4,959

5. **POWER EQUIPMENT.** Statistics of the power equipment installed are given in the next table. The details include the rated horsepower of engines ordinarily in use together with those in reserve or idle.

TABLE 10. - COTTON MILLS : TYPES AND RATED HORSEPOWER OF ENGINES : AUSTRALIA

Class of Engine	Rated Horsepower of Engines					
	Ordinarily in Use			In Reserve or Idle		
	1960-61	1961-62	1962-63	1960-61	1961-62	1962-63
Steam - Turbine ..	..	..	..	25	25	25
Internal Combustion -						
Petrol and Other Light Oils	4	16	16	581	2,201	2,388
Heavy Oils ..	40	40	40	2,390	2,390	1,270
<u>Total, Prime Movers:</u>	44	56	56	2,996	4,616	3,683
Motors Driven by Electricity -						
Purchased ..	36,149	40,536	41,525	7,231	6,495	7,030
Own Generation ..	..	..	..	38	38	37
<u>Total, Electricity:</u>	36,149	40,536	41,525	7,269	6,533	7,067
<u>TOTAL POWER EMPLOYED:</u>	36,193	40,592	41,581	10,265	11,149	10,750

6. **POWER, FUEL AND LIGHT, ETC. USED.** Details of the quantities and values of the various items of power, fuel and light, etc. used during the years 1960-61 to 1962-63 are shown in the following table.

TABLE 11. - COTTON MILLS : POWER, FUEL AND LIGHT, ETC. USED : AUSTRALIA

Particulars	Unit of Qty.	Quantity			Value (£)		
		1960-61	1961-62	1962-63	1960-61	1961-62	1962-63
Power, Fuel and Light -							
Coal - Black ..	ton	25,318	24,889	21,040	79,061	78,268	65,302
Brown ..	"	1,737	168	287	5,221	812	1,389
Brown Coal Briquettes	"	613	1,389	3,381	3,246	7,102	17,109
Coke ..	"	18	8	1	162	64	153
Wood ..	"	..	..	27	..	..	2
Fuel Oil ..	gal.	2,880,694	2,923,186	3,097,541	153,319	150,704	150,076
Electricity ..	-	(a)	(a)	(a)	621,014	700,083	787,168
Gas ..	-	(a)	(a)	(a)	7,010	7,546	6,017
Other (Charcoal, etc.)	-	(a)	(a)	(a)	9,784	10,612	16,964
Water and Lubricating Oil	-	(a)	(a)	(a)	78,942	77,982	89,384
<u>TOTAL:</u>		(a)	(a)	(a)	957,766	1,033,173	1,133,564

(a) Value only available.

7. **VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY.** Particulars of the book values of premises occupied and plant installed at the 30th June for the years 1958-59 to 1962-63 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 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 12. - COTTON MILLS : VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY : AUSTRALIA

Year	Book Values as at 30th June (a)		Additions and 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
1958-59	10,624,682	9,948,646	3,815,375	3,988,968	19,214	744,220
1959-60	9,706,378	9,414,294	764,435	1,043,823	37,695	1,061,147
1960-61	10,391,549	10,105,460	617,342	1,859,063	32,583	971,521
1961-62	12,909,068	10,805,438	200,265	1,772,943	41,319	953,918
1962-63	14,429,917	12,191,142	982,283	3,275,424	45,411	1,148,889

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

8. MACHINE EQUIPMENT. Particulars of the principal machine equipment installed in Cotton Mills in Australia at 30th June, 1963 are shown in the general table below.

TABLE 13. - TEXTILE INDUSTRIES : MACHINES INSTALLED (a) AT 30TH JUNE, 1963 : AUSTRALIA

Description	Number Installed (a)			
	In Production at any time during June Quarter, 1963		Idle during whole of June Quarter, 1963	
	Machines		Machines	
SECTION 1 - FIBRE PREPARATION -				
Cotton Blowroom Machines - Opening and Blending (b)	75		4	
Scutching	60		4	
Woolscouring Machines - incl. Solvent Degreasing (i.e. Sets of Bowls incl. sets used as part of a carbonizing chain)	133		14	
Wool Carbonizing Machines (i.e. Sets of Acid and Neutralizing Bowls)	31		1	
SECTION 2 - CARDING, COMBING, ETC. -				
Carding Machines - Worsted	232		21	
Woollen	264		17	
Cotton - Flat	1,354		61	
Condensor	122		2	
Combing Machines - Wool - Noble	282		10	
French	161		31	
	Machines	No. of Heads	Machines	No. of Heads
Cotton	31	162	11	41
Tow to Top Converting Machines	10	17	..	..
SECTION 3 - DRAWING, SPINNING, ETC. -	Machines		Machines	
Drawing Sets - Worsted - Open (Bradford)	87		10	
Continental	5		3	
Cone	29		..	
Auto leveller	71		..	
	Machines	No. of Heads	Machines	No. of Heads
Cotton	273	1,335	3	12
	Machines	No. of Spindles	Machines	No. of Spindles
Speed Frames, Cotton - Slubbing	96	11,032	1	98
Intermediate	65	8,518	1	142
Roving	60	9,655	5	916
Spinning Frames - Worsted - Mules	..	..	2	1,200
Ring	341	72,490	17	3,960
Cap	665	125,134	70	12,400
Flyer	80	15,248	3	553
Others	51	9,544	..	..
Woollen - Mules	249	100,424	22	8,576
Ring	149	27,426	14	2,799
Cotton - Ring	707	245,348	63	22,924
Twisting Frames, other than for Throwing -				
Ring	644	108,438	45	8,252
Cap	190	36,106	26	4,400
Other	75	6,086	7	784
Winding Frames, other than for Weft and Firm Winding -				
Cone	1,341	32,574	64	972
Cheese	265	10,179	30	836
Hank	148	6,113	16	653
Other	172	7,614	12	960
SECTION 4 - YARN THROWING, ETC. -				
Twisting Frames for Throwing - Uptwisting	303	56,880	15	2,516
Down Twisting	105	9,948	10	974
Other	364	9,815	16	1,094
Bulking or Texturizing Machines	81	13,353	1	140

(a) Number in place and capable of operation at short notice.

(b) Includes Automatic Mixing and Blending Machines.

TABLE 13. - TEXTILE INDUSTRIES : MACHINES INSTALLED (a) AT 30TH JUNE, 1963, AUSTRALIA
(continued)

Description	Number Installed (a)			
	In Production at any time during June Quarter 1963		Idle during whole of June Quarter 1963	
	Machines	Spindles	Machines	Spindles
SECTION 5 - WEAVING, ETC. -				
Pirn or Weft Winding Frames - Automatic	510	5,934	51	434
Non-Automatic	137	2,519	31	556
Warping Machines	Machines		Machines	
Sizing Machines	485		31	
Dry Beaming Machines	53		12	
	25		3	
Looms (incl. Weaving Machines) used principally for weaving -	Looms		Looms	
(i) Woolen and Wool Worsted Cloth -	Auto.	Non-Auto.(b)	Auto.	Non-Auto.(b)
Reed Space - up to but not incl. 60"				
- 60" and over	36	89	1	26
(ii) Cotton and/or Man/Made Fibre Cloth -	1,389	2,531	216	323
Reed Space - up to but not incl. 14"	310	646	100	42
- 14" and up to but not incl. 42"	483	77	11	3
- 42" and up to but not incl. 60"	2,040	324	91	53
- 60" and over	1,677	176	150	61
SECTION 6 - KNITTING -				
Hosiery Machines -	Machines	No. of Heads	Machines	No. of Heads
Knitting - Fully Fashioned - Women's	182	2,847	113	1,875
Circular (excl. Anklets) -	Machines		Machines	
Women's - Rib	81		..	
Open Top	2,808		109	
Men's - Rib	824		164	
Open Top	140		39	
Children's				
- Rib	94		12	
- Open Top	26		6	
Anklet - Women's	181		8	
Men's	360		86	
Children's	770		107	
Linking and/or Looping	659		389	
Seaming	291		173	
Knitted Fabric Machines -				
Warp Knitting Machines or Looms	654		53	
Flat Knitting Machines	2,501		537	
Circular Knitting Machines - Rib	2,181		441	
Open Top	959		342	
Fully Fashioned Knitting Machines	Machines	No. of Heads	Machines	No. of Heads
	75	492	5	44
SECTION 7 - DYEING, ETC. -				
Dye Plant (c) for -	Open Vessels	Pressure Vessels	Open Vessels	Pressure Vessels
Loose Stock or Fibres	58	41	3	2
Tops, Sliver or Roving	138	40	2	..
Yarn - Cones, Cheesees, etc.	13	66	..	4
Beam	12	2	..	..
Hank	179	18	6	1
Piece Goods	854	39	43	1
Garments and Hosiery (d)	278	7	8	1
SECTION 8 - FINISHING -				
Finishing - Scouring (excl. Dye Vessels)	Machines		Machines	
Milling	214		15	
Stentering (Single Layer)	203		17	
Tentering (Multi-Layer)	57		6	
Resin Baking or Polymerizing	50		4	
Mercerising - Yarn or Piece	23		2	
Calendering	19		1	
Cropping	120		12	
Raising or Brushing	88		18	
Blowing - Steam	161		17	
Pressing - Power	84		2	
Hand	100		13	
Pre-boarding	96		2	
	126			

(a) Number in place and capable of operation at short notice. (b) Excludes Hand Looms.
(c) Classified by predominant usage. (d) Other than plant for re-dyeing.

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 1958-59 to 1962-63 in the following table.

TABLE 14. - IMPORTS OF COTTON, COTTON PIECE GOODS, YARN, ETC. : AUSTRALIA

Particulars	Unit of Quantity	Quantity				
		1958-59	1959-60	1960-61	1961-62	1962-63
Cotton - Raw	'000 lb.	43,984	41,519	41,842	37,735	42,543
Linters	" "	329	868	1,715	875	2,717
Waste	" "	11,718	13,556	9,923	11,822	11,069
Cotton Yarn - Mercerised ..	" "	271	707	609	286	510
Other	" "	6,571	7,200	8,458	5,124	6,188
Cotton Piece Goods, other than proofed -						
Canvas and Duck	'000 sq.yds.	6,088	7,011	5,693	(a)	(a)
Knitted or Lockstitched (tubular or otherwise) ..	'000 lb.	1,150	1,088	820	649	496
For Bag Making	'000 sq.yds.	7,404	9,401	9,648	6,405	6,278
Drills, Dungarees and Jeans ..	" "	4,128	4,376	4,559	2,315	2,712
Other -						
Grey, unbleached	" " "	36,837	45,851	41,860	34,589	43,232
White, bleached	" " "	50,920	62,169	57,420	48,054	56,825
Printed	" " "	64,890	69,386	65,567	81,462	91,176
Dyed or coloured woven ..	" " "	50,812	54,606	70,357	69,806	78,889

Particulars		Value (£A'000 f.o.b. port of shipment)				
		1958-59	1959-60	1960-61	1961-62	1962-63
Cotton - Raw	..	5,354	5,172	5,477	5,272	5,786
Linters	..	12	29	64	42	168
Waste	..	591	712	467	593	510
Cotton Yarn - Mercerised ..	..	203	479	461	208	333
Other	..	2,731	2,754	3,439	1,990	3,377
Cotton Piece Goods, other than proofed -						
Canvas and Duck	..	727	800	704	(a)	(a)
Knitted or Lockstitched (tubular or otherwise)	..	365	332	302	202	144
For Bag Making	..	399	519	591	366	344
Drills, Dungarees and Jeans ..	..	652	686	747	367	403
Other -						
Grey, unbleached	..	2,960	3,443	3,634	2,849	3,374
White, bleached	..	5,861	7,120	6,559	5,394	5,889
Printed	..	10,912	11,870	11,082	11,644	11,895
Dyed or coloured woven ..	..	8,013	8,928	12,018	11,394	12,049
All other	..	9,228	9,841	9,894	5,970	6,932

(a) Not recorded separately.

TABLE 15. - EXPORTS OF COTTON GOODS : AUSTRALIA (a)

Particulars	Unit	1958-59	1959-60	1960-61	1961-62	1962-63
Cotton Yarns	{ '000 lb. £A'000	119 40	94 28	71 31	54 30	112 81
Cotton Piece Goods other than proofed -						
Canvas and Duck	{ '000 sq.yds. £A'000	19 9	67 23	91 21	(b) (b)	(b) (b)
Other	£A'000	130	249	501	380	416

(a) Values are expressed in £A'000 f.o.b. port of shipment.

(b) Not recorded separately.

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS
CANBERRA, A.C.T. 7TH DECEMBER, 1964.

K.M. ARCHER
COMMONWEALTH STATISTICIAN

NOTE: Inquiries concerning these statistics may be made in Canberra by telephoning 419.71 Extension 52 or, in each State Capital, by telephoning the office of the Bureau of Census and Statistics.