

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS, CANBERRA,
AUSTRALIA.

MANUFACTURING INDUSTRIES
1957-58

NO. 12. ROPE AND CORDAGE

Prepared Under Instructions from
THE RIGHT HONORABLE THE TREASURER,

by

S.R. Carver,
Commonwealth Statistician.

MANUFACTURING INDUSTRIES : 1957-58

P R E F A C E

1. GENERAL: The range of Bulletins in the series for 1957-58 is the same as for 1956-57 and a complete list is shown on the back of the cover of this Bulletin.

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. 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. Figures shown in the quantity tables herein represent total recorded production of the articles listed and include quantities produced, as subsidiary production, in industries otherwise classified.

3. 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. It should be noted that details relating to small establishments not classified for statistical purposes as factories are not included in the figures shown herein.

All persons employed in the manufacturing activities of the factory are counted as factory employees. The figures relating to employment, therefore, include proprietors who work in their own businesses 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 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 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
COMMONWEALTH STATISTICIAN

CANBERRA, A.C.T.

MANUFACTURING INDUSTRIES : AUSTRALIA, 1957-58ROPE AND CORDAGE

1. SUMMARY OF STATISTICS: The following table furnishes a summary of the principal statistics of the factories engaged in the manufacture of Rope and Cordage in Australia for the years 1938-39, 1945-46 and 1955-56 to 1957-58.

TABLE 1 : ROPE AND CORDAGE FACTORIES : AUSTRALIA

Year	Factories (1)	Persons Employed (a) (2)	Salaries and Wages Paid (b) (3)	Power, Fuel and Light, etc. Used (c) (4)	Value of Materials etc. Used (d) (5)	Value of Pro- duction (e) (6)	Value of Output (f) (7)
	Number	Number	£'000	£'000	£'000	£'000	£'000
1938-39	18	1,695	246	28	632	521	1,181
1945-46	25	2,323	623	42	1,373	1,052	2,467
1955-56	26	2,228	1,875	108	3,507	3,690	7,305
1956-57	27	2,199	1,831	123	3,537	3,362	7,022
1957-58	28	2,192	1,830	120	3,177	3,256	6,553

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

In the following table particulars are given for each State during the year 1957-58.

TABLE 2 : ROPE AND CORDAGE FACTORIES : STATES, 1957-58

Particulars	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	AUST.
	No.	No.	No.	No.	No.	No.	No.
Factories	11	12	2	1	2	-	28
Persons Employed -							
Males	355	954	(a)	(a)	(a)	-	1,452
Females	157	554	(a)	(a)	(a)	-	740
Total	512	1,508	(a)	(a)	(a)	-	2,192
	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Salaries and Wages Paid	435	1,261	(a)	(a)	(a)	-	1,830
Value of -							
Power, Fuel and Light, etc. used	34	78	(a)	(a)	(a)	-	120
Materials, etc. used	702	2,137	(a)	(a)	(a)	-	3,177
Production	673	2,228	(a)	(a)	(a)	-	3,256
Output	1,409	4,443	(a)	(a)	(a)	-	6,553
Land and Buildings (b)	405	1,683	(a)	(a)	(a)	-	2,405
Plant and Machinery (b)	344	852	(a)	(a)	(a)	-	1,369
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
H.P. of Engines ordinarily in use	3,268	9,174	(a)	(a)	(a)	-	13,530

(a) Not available for publication.

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

See also notes to Table 1 above.

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 ratio of salaries and wages to value of production, are shown in the following table for the years 1938-39, 1945-46 and 1955-56 to 1957-58.

TABLE 3 : ROPE AND CORDAGE FACTORIES : 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
	£.	£.	£.	%
1938-39	146	697	307	47.28
1945-46	270	1,062	453	59.20
1955-56	346	3,279	1,656	50.82
1956-57	838	3,193	1,529	54.45
1957-58	839	2,989	1,485	56.21

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

(b) Includes Working Proprietors.

3. MATERIALS USED AND ARTICLES PRODUCED: Particulars of the principal materials used and articles produced during 1956-57 and 1957-58 are shown in the following table. The quantities and values shown include quantities recorded by works other than those classified to this industry.

TABLE 4 : ROPE AND CORDAGE FACTORIES : PRINCIPAL MATERIALS USED AND ARTICLES PRODUCED : AUSTRALIA

Particulars	1956-57		1957-58	
	Quantity	Value £'000	Quantity	Value £'000
<u>MATERIALS USED -</u>				
Hard Fibres -				
Hemp	cwt.		cwt.	
Sisal	14,324	145	11,066	129
Soft Fibres -	225,696	1,147	207,194	1,023
Hemp and Hemp Tow	}	44,150	}	30,046
Flax and Flax Tow				
Jute	77,159	601	77,901	589
Yarns -	lb.		lb.	
Flax	262,622	73	239,149	57
Jute	609,969	97	607,580	114
Cotton	1,380,363	417	1,427,683	431
Coir	403,127	28	357,744	25
<u>ARTICLES PRODUCED -</u>	lb.		lb.	
Cords -				
Sash	378,470	181	437,456	216
Other	296,552	180	435,248	261
Ropes and Cables	cwt.		cwt.	
Twines -	131,746	1,916	130,413	1,866
Baler	67,252	752	60,300	608
Binder	20,645	239	17,628	198
Shop	23,240	719	22,254	659
Other	20,287	550	21,163	541
Cotton Sewing Threads -			lb.	
For Household Use - Sewings and/or Handicrafts	}	Not collected in this Dissection (a)	38,431	39
For Industrial Sewing Purposes -				
Heavy Counts - 8's to 18's			539,465	282
Light Counts - over 18's			1,126,850	1,278

(a) Production of Light Counts (over 12's) was 1,082,443 lb. £1,356,000.

4. **EMPLOYMENT:** The number of employees shown in Tables 1, 2 and 6 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 1938-39, 1945-46 and 1955-56 to 1957-58 according to the average number employed during the actual period worked.

TABLE 5 : ROPE AND CORDAGE FACTORIES CLASSIFIED ACCORDING TO PERSONS EMPLOYED : AUSTRALIA

Number of Persons Employed in each Factory	1938-39		1945-46		1955-56		1956-57		1957-58	
	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	3	7	5	14	6	12	6	12	7	13
4	1	4	1	4	-	-	1	4	1	4
5 to 10	3	24	4	29	7	42	7	49	6	37
11 to 20	-	-	1	20	-	-	-	-	1	15
21 to 50	2	73	5	163	2	74	2	74	3	95
51 to 100	3	176	3	197	5	327	5	306	4	247
101 to 200	6	1,412	3	482	2	355	2	336	2	315
201 and over			3	1,414	4	1,418	4	1,450	4	1,466
TOTAL:	18	1,696	25	2,323	26	2,228	27	2,231	28	2,192
Average Number Employed per Factory	94		93		86		83		78	

Further details of employment are furnished in the two tables which follow. In Table 6 the numbers of males and females employed for the years 1938-39, 1956-57 and 1957-58 are shown according to the nature of their employment, but because of the change in classification of occupational status adopted in 1945-46, group comparison between 1938-39 and later years shown is not possible.

TABLE 6 : ROPE AND CORDAGE FACTORIES : PERSONS EMPLOYED CLASSIFIED ACCORDING TO OCCUPATIONAL STATUS : AUSTRALIA

Occupational Status	Males			Females		
	1938-39	1956-57	1957-58	1938-39	1956-57	1957-58
Working Proprietors	11	13	11	-	-	-
Managerial and Clerical Staff, including Salaried Managers and Working Directors	) (			) (		
Chemists, Draftsmen and Other	) (	130	162	) (	118	112
Laboratory and Research Staff	1,111	21	21	551	13	14
Foremen and Overseers	) (	93	90	) (	5	4
Workers in Factory (Skilled and Unskilled)	) (	1,168	1,160	) (	630	610
Carters (excluding Delivery Only), Messengers and Persons Working Regularly at Home	22	8	8	-	-	-
TOTAL:	1,144	1,433	1,452	551	766	740

In the following table the number of persons employed in June in each of the years 1939, 1946 and 1956 to 1958 are shown according to age and sex distribution.

TABLE 7 : ROPE AND CORDAGE FACTORIES : DISTRIBUTION OF EMPLOYEES 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
MALES									
1939 (a)	115	(b)	(b)	(b)	(b)	(b)	468	582	1,165
1946 (a)	42	33	34	41	24	25	157	1,431	1,630
1956 (c)	29	45	37	33	27	31	173	1,234	1,436
1957 (c)	32	46	38	29	14	23	150	1,179	1,361
1958 (c)	39	26	43	45	30	22	166	1,258	1,463

FEMALES

1939 (a)	39	(b)	(b)	(b)	(b)	(b)	262	272	573
1946 (a)	30	38	38	44	24	28	172	546	748
1956 (c)	12	18	16	22	23	17	96	767	875
1957 (c)	11	18	17	16	20	20	91	640	742
1958 (c)	17	18	24	33	28	14	117	615	749

(a) Pay day nearest 15th June. (b) Details not collected. (c) Last pay day in June.

5. **POWER EQUIPMENT:** Statistics of the Power equipment installed 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 8 : ROPE AND CORDAGE FACTORIES : TYPES AND RATED HORSE-POWER OF ENGINES : AUSTRALIA

Class of Engine	Rated Horsepower of Engines					
	Ordinarily in Use			In Reserve or Idle		
	1938-39	1956-57	1957-58	1938-39	1956-57	1957-58
Steam - Reciprocating	350	-	-	-	-	-
Turbine ..	-	-	-	-	-	-
Internal Combustion -						
Gas ..	-	-	-	-	-	-
Petrol or Other Light Oils ..	-	319	317	-	465	465
Heavy Oils ..	-	590	-	-	-	590
Water ..	-	-	-	-	-	-
Total Prime Movers	350	909	317	-	465	1,055
Motors Driven by Electricity -						
Purchased ..	5,903	12,760	13,213	80	2,392	2,274
Own Generation ..	-	-	-	-	106	-
Total Electricity:	5,903	12,760	13,213	80	2,498	2,274
TOTAL POWER EMPLOYED:	6,253	13,669	13,530	80	2,963	3,329

6. POWER, FUEL AND LIGHT, ETC. USED: Details of the quantities and values of the various items of power, fuel and light, etc. used for the years 1938-39, 1956-57 and 1957-58 are shown in the following table.

TABLE 9 : ROPE AND CORDAGE FACTORIES : POWER, FUEL AND LIGHT, ETC. USED,
AUSTRALIA

Particulars	Unit of Quantity	Quantity			Value (£)		
		1938-39	1956-57	1957-58	1938-39	1956-57	1957-58
Power, Fuel and Light -							
Coal - Black	ton	1,988	900	862	3,114	3,986	4,248
Brown	"	128	414	232	202	503	320
Brown Coal Briquettes	"	(a)	3,138	2,845	(a)	16,045	14,958
Coke	"	61	32	24	130	297	218
Wood	"	3	7	2	4	63	10
Fuel Oil	gallons	3,366	27,525	22,065	111	2,768	2,340
Tar (Fuel)	"	-	720	400	-	54	20
Electricity	-	(b)	(b)	(b)	22,088	90,265	89,197
Gas	-	(b)	(b)	(b)	62	73	27
Other (Charcoal etc.)	-	(b)	(b)	(b)	-	30	27
Water and Lubricating Oil	-	(b)	(b)	(b)	2,624	8,840	8,682
<u>TOTAL:</u>		(b)	(b)	(b)	28,335	122,924	120,047

(a) Included with Brown Coal.

(b) Value only available.

7. VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY: Particulars of the book values of premises occupied and plant installed at 30th June for the years 1938-39, 1945-46 and 1955-56 to 1957-58 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 10 : ROPE AND CORDAGE FACTORIES : VALUE OF LAND AND BUILDINGS,
PLANT AND MACHINERY, ETC. : AUSTRALIA
(£)

Year	Book Values as at 30th June (a)		Additions and 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	292,033	344,810	33,055	57,579	8,531	30,132
1945-46	453,500	388,522	85,507	111,762	8,652	71,620
1955-56	2,111,058	1,197,779	96,731	219,368	8,277	155,675
1956-57	2,307,955	1,205,422	161,658	165,054	7,167	115,278
1957-58	2,404,921	1,369,130	144,460	311,027	35,272	149,062

(a) Includes estimated value of rented premises and machinery

8. EXTERNAL TRADE: The value of imports and exports of a number of items included in the group - Rope and Cordage - are given in the following tables for the years 1938-39, 1945-46 and 1955-56 to 1957-58.

TABLE 11 : IMPORTS OF ROPE AND CORDAGE : AUSTRALIA

(£A. f.o.b. port of shipment)

Item	1938-39	1945-46	1955-56	1956-57	1957-58
Cotton Twines ..	3,427	13,656	(a)	(a)	(a)
Twines (other than Cotton) ..	10,254	3,673	(b)	(b)	(b)
Other Cotton Cordage and Rope ..	137,312	66,811	29,812	25,443	21,316
Reaper and Binder Twines and Yarns ..	1,137	-	(b)	(b)	(b)
Cordage and Rope, Other ..	9,485	61,774	46,045	43,514	51,555

(a) Not available. (b) Included in Cordage and Rope, Other.

TABLE 12 : EXPORTS OF ROPE AND CORDAGE : AUSTRALIA

(£A. f.o.b. port of shipment)

Item	1938-39	1945-46	1955-56	1956-57	1957-58
Reaper and Binder Twine and Yarn	432	1,373	49,413	111,319	72,086
Other, including Manufactures of Cord or Twine ..	22,003	58,180			

Particulars of the imports of the principal types of fibres used in the Rope and Cordage industry are shown in the following table for the years 1938-39, 1945-46 and 1955-56 to 1957-58.

TABLE 13 : IMPORTS OF CERTAIN FIBRES USED BY ROPE AND CORDAGE MANUFACTURERS

AUSTRALIA

Item	Unit	1938-39	1945-46	1955-56	1956-57	1957-58
Soft Fibres -						
Jute	cwt.	44,137	49,367	76,077	82,954	86,620
	£A.	60,265	162,295	437,386	485,217	534,852
Flax	cwt.	3,286	-	18,688	24,486	4,467
	£A.	18,455	-	208,020	311,542	64,873
Hemp	cwt.	132,195	260,556	1,010	800	5,475
	£A.			3,599	2,649	40,768
Other (incl. Tow)	cwt.	31	83	900	149	1
	£A.			4,813	827	47
Hard Fibres -						
Sisal	cwt.	294,206	14,187	307,470	314,524	332,263
	£A.			1,422,980	1,436,444	1,521,211
Other	cwt.	345,095	64,534	38,903	16,296	8,591
	£A.			102,791	150,551	81,661
Coir Fibre	cwt.	42,841	52,911	161,180	150,023	155,041
	£A.	10,235	79,301	220,859	242,665	248,160

NOTE: Values are expressed in £A. f.o.b. port of shipment.

S. R. CARVER
COMMONWEALTH STATISTICIAN

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS

CANBERRA. A.C.T.

10TH JULY, 1959