

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS, CANBERRA.
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MANUFACTURING INDUSTRIES
1952-53

No. 12. ROPE AND CORDAGE

Prepared Under Instructions from
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MANUFACTURING INDUSTRIES : 1952-53

PREFACE

1. GENERAL: The Bulletins in the series for 1952-53 are listed on the back of the cover of this Bulletin and incorporate the same range of industries as the 1951-52 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.

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MANUFACTURING INDUSTRIES : AUSTRALIA, 1952-53ROPE 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 1950-51 to 1952-53.

TABLE 1 : ROPE AND CORDAGE : AUSTRALIA

Year	Number of Factories (1)	Persons Employed (a) (2)	Salaries and Wages Paid (b) (3)	Power, Fuel and Light, etc. Used (4)	Value of Materials etc. Used (c) (5)	Value of Pro-duction (d) (6)	Value of Output (7)
	No.	No.	£'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
1950-51	24	2,279	1,229	73	3,693	2,325	6,091
1951-52	25	2,374	1,511	80	4,894	2,674	7,648
1952-53	24	2,060	1,480	92	3,668	2,456	6,216

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

In the following table particulars of the industry are given for each State during the year 1952-53.

TABLE 2 : ROPE AND CORDAGE : STATES, 1952-53

Particulars	N.S.W.	VIC.	Q'LD.	S.A.	W.A.	TAS.	AUST.
Number of Factories	6	13	2	1	2	-	24
Number Employed (a) -							
Males	305	897	(c)	(c)	(c)	-	1,337
Females	129	565	(c)	(c)	(c)	-	723
Total	434	1,462	(c)	(c)	(c)	-	2,060
Value of -	£.	£.	£.	£.	£.	£.	£.
Salaries and Wages Paid (b) ..	299,722	1,079,083	(c)	(c)	(c)	-	1,480,228
Power, Fuel and Light, etc. Used	24,917	62,610	(c)	(c)	(c)	-	92,170
Materials, etc. Used	622,667	2,643,293	(c)	(c)	(c)	-	3,668,435
Production (d) ..	470,951	1,780,938	(c)	(c)	(c)	-	2,455,915
Output	1,118,535	4,486,841	(c)	(c)	(c)	-	6,216,520
Land and Buildings	130,318	532,228	(c)	(c)	(c)	-	775,327
Plant and Machinery	290,628	461,131	(c)	(c)	(c)	-	835,290
H.P. of Engines Ordinarily in use	H.P. 2,583	H.P. 7,681	H.P. (c)	H.P. (c)	H.P. (c)	H.P. -	H.P. 11,217

(a) Average over whole year; 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 1.

4.

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 1950-51 to 1952-53.

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
1950-51	542	2,673	1,020	52.86
1951-52	639	3,222	1,126	56.50
1952-53	722	3,018	1,192	60.27

(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 in Rope and Cordage Factories during 1939-40, 1951-52 and 1952-53 (together with preliminary figures for 1953-54) are shown in the following table so far as they are available. The quantities and values shown in the table are those furnished by the establishments included in this Summary only, but in the case of a few of the items there is a small quantity recorded in works other than those classified for statistical purposes as "Rope and Cordage" factories. Such items have been indicated by footnotes.

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

Particulars	Unit of Q'ty	1939-40		1951-52		1952-53		1953-54(a)
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity
MATERIALS USED -			£'000		£'000		£'000	
Hard Fibres -								
Hemp	cwt.	82,230	124	6,744	83	6,591	82	}
Sisal	"	119,255	157	184,669	2,142	151,091	1,765	
Other	"	20,103	22	(b)	(b)	627	6	
Soft Fibres								
Hemp and Hemp Tow	"	12,663	67	5,337	44	(b)	(b)	}
Flax and Flax Tow	"	6,892	53	41,833	624	33,545	553	
Jute	"	50,754	100	62,105	373	49,281	443	
Yarns -								
Flax	lb.	135,266	22	161,621	52	197,632	68	}
Jute	"	419,928	15	602,441	4,621	335,668	48	
Cotton	"	1,950,745	110	2,022,365	704	1,160,364	345	
Other	"	292,519	6	17,745	3	12,708	4	}
Coir	"	(b)	(b)	455,123	38	290,659	24	
ARTICLES PRODUCED -								
Sash and Other Cords	lb.	1,396,595	90	714,359	353	613,419	309	698,408
Ropes and Cables	cwt.	133,069	394	141,420	2,384	105,519	1,834	109,350
Twine -								
Baler	"	(c)	(c)	30,007	498	26,705	459	43,838
Binder (d)	"	97,860	267	26,947	439	22,200	376	30,171
Shop	"	34,923	330	31,580	818	20,961	580	20,030
Other (e)	"	24,666	247	22,023	692	16,312	449	21,233
Fishing Line	lb.	(f)	(f)	174,504	154	185,375	179	(g)
Sewing Cotton and Thread								
Heavy Counts 12's-8's	lb.	(f)	(f)	(e)934,850	(e)517	(e)461,819	(e)250	(b)

(a) Preliminary - subject to revision. (b) Not available for publication.
(c) Included in Other Twine. (d) Includes some unspecified twine. (e) Includes production in other works, details of which are not available for separate publication. (f) Not collected. (g) Not yet available.

4. EMPLOYMENT: The number of employees 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 1950-51 to 1952-53 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		1950-51		1951-52		1952-53	
	No. of Fac-tories	No. Emp-loyed	No. of Fac-tories	No. Emp-loyed	No. of Fac-tories	No. Emp-loyed	No. of Fac-tories	No. Emp-loyed	No. of Fac-tories	No. Emp-loyed
Under 4	3	7	5	14	4	9	4	9		
4	1	4	1	4	1	4	2	8		
5 to 10	3	24	4	29	6	34	6	33		
11 to 20	-	-	1	20	1	18	1	15		
21 to 50	2	73	5	163	3	103	2	68	(a)	
51 to 100	3	176	3	197	2	134	4	296		(a)
101 to 200			3	482	4	675	3	564		
201 and over	6	1,412	3	1,414	3	1,302	3	1,381		
TOTAL:	18	1,696	25	2,323	24	2,279	25	2,374	24	
Average Number employed per Factory	94		93		95		95		(a)	

(a) Not yet available.

Further details of employment in Rope and Cordage Factories are furnished in the two tables following. In Table 6 the numbers of males and females employed for the years 1938-39, 1951-52 and 1952-53 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	1951-52	1952-53	1938-39	1951-52	1952-53
Working Proprietors ..	11	10	11	-	-	-
Managerial and Clerical Staff, including Salaried Managers and Working Directors ..		118	104		102	96
Chemists, Draftsmen and Other Laboratory and Research Staff ..	1,111	7	4	551	9	4
Foremen and Overseers ..		95	110		3	3
Workers in Factory (Skilled and Unskilled) ..		1,254	1,093		765	620
Carters (excluding Delivery Only), Messengers and Persons Working Regularly at Home ..	22	11	15	-	-	-
TOTAL:	1,144	1,495	1,337	551	879	723

The number of persons employed in Rope and Cordage Factories on or about 15th June for the years 1939, 1946 and 1951 to 1953 are distributed according to age and sex in Table 7.

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	115	(a)	(a)	(a)	(a)	(a)	468	582	1,165
1946	42	33	34	41	24	25	157	1,431	1,630
1951(b)	9	24	20	14	25	33	116	1,351	1,476
1952(b)	19	15	19	27	24	19	104	1,301	1,424
1953(b)	24	25	28	24	22	13	112	1,233	1,369
FEMALES									
1939	39	(a)	(a)	(a)	(a)	(a)	262	272	573
1946	30	38	38	44	24	28	172	546	748
1951(b)	5	17	15	34	36	21	123	695	823
1952(b)	5	13	13	21	24	33	104	729	838
1953(b)	11	14	11	14	21	20	80	640	731

(a) Details not collected. (b) At 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 8 : ROPE AND CORDAGE FACTORIES : 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	1951-52	1952-53	1938-39	1951-52	1952-53
Steam - Reciprocating	350	-	-	-	-	-
Turbine	-	-	-	-	-	-
Internal Combustion -						
Gas	-	100	-	-	50	-
Petrol or Other Light Oils	-	-	630	-	-	153
Heavy Oils	-	730	590	-	640	150
Water	-	-	-	-	-	12
Total Prime Movers:	350	830	1,220	-	690	315
Motors Driven by Electricity -						
Purchased	5,903	11,645	9,997	80	981	1,246
Own Generation	-	-	(a)1,644	-	-	-
Total Electricity:	5,903	11,645	11,641	80	981	1,246
TOTAL POWER USED:	6,253	12,475	11,217	80	1,671	1,561

(a) These motors are driven by electricity generated by prime movers shown above, and are excluded from statistics of total power used to avoid duplication.

6. POWER, FUEL AND LIGHT, ETC. USED: Details of the quantities and values of the various items of power, fuel and light, etc. used in Rope and Cordage factories for the years 1938-39, 1951-52 and 1952-53 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	1951-52	1952-53	1938-39	1951-52	1952-53
Power, Fuel and Light -							
Coal - Black	ton	1,988	861	1,000	3,114	3,350	5,138
Brown	"	128	7,099	7,439	202	13,213	16,748
Brown Coal Briquettes ..	"	(a)	-	2	(a)	-	9
Coke	"	61	24	15	130	159	120
Wood	"	3	798	325	4	2,541	1,619
Fuel Oil	gal.	3,366	71,264	80,296	111	6,053	7,066
Tar Fuel	"	-	200	280	-	12	14
Electricity	-	(b)	(b)	(b)	22,088	45,510	53,206
Gas	-	(b)	(b)	(b)	62	85	70
Other (Charcoal, etc.) ..	-	(b)	(b)	(b)	(c)	1	-
Water and Lubricating Oil	-	(b)	(b)	(b)	2,624	8,968	8,180
TOTAL:		(b)	(b)	(b)	28,335	79,892	92,170

(a) Included with Brown Coal. (b) Value only available. (c) Not available.

7. VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY: Particulars of the book values of premises occupied and plant used in Rope and Cordage factories at the 30th June for the years 1938-39, 1945-46 and 1950-51 to 1952-53 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 numbers, 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 & 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
1950-51	673,272	769,266	5,287	107,440	3,934	133,726
1951-52	732,006	777,116	14,546	125,775	4,515	117,107
1952-53	775,327	835,290	7,923	172,307	4,788	112,620

(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 1950-51 to 1952-53.

TABLE 11 : IMPORTS OF ROPE AND CORDAGE : AUSTRALIA

(£A. f.o.b. Port of Shipment)

Item	1938-39	1945-46	1950-51	1951-52	1952-53
Cotton Twines ..	3,427	13,656	6,799	9,890	3,940
Twines (Other than Cotton) ..	10,254	3,673	9,925	21,236	7,129
Other Cotton Cordage and Rope	137,312	66,811	390,218	472,253	17,228
Reaper and Binder Twines and Yarns	1,137	-	400	704	169
Cordage and Rope, Other ..	9,485	61,774	39,589	49,899	15,791

TABLE 12 : EXPORTS OF ROPE AND CORDAGE : AUSTRALIA

(£A. f.o.b. Port of Shipment)

Item	1938-39	1945-46	1950-51	1951-52	1952-53
Reaper and Binder Twine and Yarn	432	1,373	5,243	60,235	3,310
Other, including Manufactures of Cord or Twine ..	22,003	58,180	147,847	171,248	121,595

Particulars of the imports of the principal fibres used in the Rope and Cordage industry are shown in the following table for the years 1938-39, 1945-46 and 1950-51 to 1952-53.

TABLE 13 : IMPORTS OF FIBRES USED IN THE MANUFACTURE OF CORDAGE :

AUSTRALIA

Year	Hemp, including Phormium Tenax.		Coir		Flax		Jute	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	cwt.	£	cwt.	£	cwt.	£	cwt.	£
1938-39	265,051	313,316	42,841	10,235	3,286	18,455	44,137	60,265
1945-46	140,641	277,128	52,911	79,301	-	-	49,367	162,295
1950-51	307,201	2,674,503	176,037	347,036	-	-	95,650	705,293
1951-52	343,669	4,007,479	183,287	469,014	804	18,678	125,026	848,994
1952-53	241,565	2,716,932	162,748	242,936	9,932	224,973	19,625	101,328

NOTE:- Values are expressed in Australian Currency, f.o.b. Port of Shipment.

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