

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS, CANBERRA

AUSTRALIA

MANUFACTURING INDUSTRIES

1961-62

NO. 1 - CEMENT AND CEMENT GOODS

Prepared under Instructions from
THE RIGHT HONORABLE THE TREASURER

by

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EXPLANATORY NOTES

GENERAL: The range of bulletins in this series for 1961-62 is the same as for 1960-61, and a complete list is shown inside the back 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.

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. 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 1961-62

CEMENT AND CEMENT GOODS

1. **SUMMARY OF STATISTICS:** In the following table, details are given for each of the industries for the year 1961-62. These data are tabulated on a State basis but because of the limited number of factories engaged in the manufacture of Portland Cement and Asbestos Cement Sheets, Mouldings, etc., it is not permissible to publish State details for each industry separately without contravening the provisions for confidentiality of the Census and Statistics Act under which the information is obtained.

TABLE 1. - CEMENT AND CEMENT GOODS : AUSTRALIA, 1961-62

Particulars	Portland Cement	Asbestos Cement Sheets, etc.	Other Cement Goods	Total
	No.	No.	No.	No.
Factories	15	15	570	600
Persons employed (a) -				
Males	2,998	2,708	6,651	12,357
Females	128	35	395	608
Total	3,126	2,793	7,046	12,965
	£'000	£'000	£'000	£'000
Salaries and Wages Paid (b) ..	3,908	3,457	8,086	15,451
Value of -				
Power, Fuel and Light, etc., used (c)	5,042	517	494	6,053
Materials, etc., used (d) ..	7,522	6,572	26,399	40,493
Production (e)	11,755	6,768	17,007	35,530
Output (f)	24,319	13,857	43,900	82,076
Land and Buildings (g) ..	4,622	3,840	7,310	15,772
Plant and Machinery (g) ..	21,144	4,580	9,399	35,123
	h.p.	h.p.	h.p.	h.p.
H.P. of engines ordinarily in use	101,693	22,446	31,886	156,025

(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 added in process of manufacture.

(f) Value of goods produced.

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

A summary of the principal statistics of factories engaged in the production of Portland Cement, Asbestos Cement Sheets and Mouldings and Other Cement Goods is given in the following table.

TABLE 2. - CEMENT AND CEMENT GOODS : 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)	(3)	(4)	(5)	(6)	(7)
	Number	Number	£'000	£'000	£'000	£'000	£'000
1957-58	481	10,994	10,864	5,124	25,579	23,122	53,825
1958-59	499	11,392	11,648	5,265	28,739	26,178	60,182
1959-60	523	12,054	13,431	5,616	33,394	30,785	69,795
1960-61	577	12,998	15,122	5,968	40,326	34,905	81,199
1961-62	600	12,965	15,451	6,053	40,493	35,530	82,076

See notes on Table 1.

In the following table particulars of the industry as a whole are given for each State for the year 1961-62.

TABLE 3. - CEMENT AND CEMENT GOODS : STATES, 1961-62

Particulars	N.S.W.	Vic.	Q'ld.	S.A.	W.A.	Tas.	Aust.
	No.	No.	No.	No.	No.	No.	No.
Factories	197	166	67	85	63	22	600
Persons Employed (a) -							
Males	4,526	3,335	1,621	1,456	962	387	12,357
Females	249	129	70	82	50	28	608
Total	4,845	3,464	1,691	1,538	1,012	415	12,965
Salaries and Wages Paid (b)	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Value of -	6,028	4,242	1,947	1,709	1,054	471	15,451
Power, Fuel and Light, etc. used (c)	1,917	1,828	817	855	390	246	6,053
Materials, etc. used (d)	15,917	11,728	4,531	5,093	2,228	996	40,493
Production (e)	12,444	9,579	4,897	4,602	2,837	1,171	35,530
Output (f)	30,278	23,135	10,245	10,550	5,455	2,413	82,076
Land and Buildings (g)	6,177	3,776	1,635	2,030	1,619	535	15,772
Plant and Machinery (g)	13,322	8,089	4,286	6,589	1,848	989	35,123
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
H.P. of engines ordinarily in use	53,313	35,850	23,072	23,283	14,641	5,866	156,025

(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 added in process of manufacture.

(f) Value of goods produced.

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

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 value of production are shown in the following table for the years 1957-58 to 1961-62.

TABLE 4. - CEMENT AND CEMENT GOODS FACTORIES -
AVERAGE SALARIES AND WAGES, 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
	£.	£.	£.	%
1957-58	1,015	4,896	2,103	46.99
1958-59	1,044	5,283	2,298	44.50
1959-60	1,136	5,790	2,554	43.63
1960-61	1,185	6,247	2,685	43.32
1961-62	1,213	6,331	2,740	43.49

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

(b) Includes Working Proprietors.

3. **MATERIALS USED AND ARTICLES PRODUCED:** The following table shows particulars of the total quantity and value of the principal materials used and articles produced during the year 1961-62. In addition to production in factories classified for statistical purposes to the Cement and Cement Goods industry, the details shown in the three tables following include relevant production in factories otherwise classified.

TABLE 5. - MATERIALS USED AND ARTICLES PRODUCED : AUSTRALIA, 1961-62

Materials Used	Quantity	Value	Articles Produced	Quantity	Value
PORTLAND CEMENT					
	Tons (2240 lb.)	£		Tons (2240 lb.)	£
Limestone	3,679,722	2,363,082	Portland Cement, Grey	2,808,794	24,124,502
Clay Materials	244,531	86,712			
Gypsum	148,601	801,244			
ASBESTOS CEMENT SHEETS. ETC.					
	Tons (2000 lb.)	£		Sq. yd.	£
Asbestos	39,031	3,393,548	Asbestos Cement Building Sheets - Flat(a) - Decorated	1,076,386	865,439
			Undecorated	17,994,125	4,214,252
			Corrugated - Standard (b)	1,094,330	308,344
			Deep 6" (b)	5,599,150	1,965,469
Cement	147,563	1,413,555	Moulded or Grooved n.e.i. (b)	1,089,983	524,015
			Asbestos Cement Pipes (c)		4,017,070
			Other Asbestos Cement Products (incl. Bullnooses, Mouldings, etc.)	(c)	1,976,596
OTHER CEMENT GOODS					
	Tons (2240 lb.)	£		'000	£
Cement for Ready Mixed Concrete	836,106	8,683,093	Cement Bricks - Standard	21,375	325,974
			Cement Blocks (d)	27,078	2,921,344
			Cement Roofing Tiles	53,220	1,980,123
for Cement Goods	341,245	3,880,443	Cement Roofing Accessories (Ridge Caps, etc.)	(c)	136,926
			Silica - Lime Bricks	26,806	371,064
Reinforcing Steel	28,568	1,719,647	Concrete, Ready Mixed	3,717,665 cubic yard	19,820,863
			Concrete, Pre-stressed	72,728 tons	1,498,678
			Concrete Pipes - Agricultural	1,470,808 tons	59,143
			Other	529,792	7,529,485
			Other Cement and Concrete Goods	(c)	7,872,895

(a) Surface measurement.

(b) Finished size.

(c) Value only available.

(d) In terms of 16" x 8" x 8".

The following table shows the annual production of Portland Cement, Asbestos Cement Building Sheets and Cement Roofing Tiles, for the years 1957-58 to 1961-62 together with production in each month July, 1962 to May, 1963.

TABLE 6. - PRODUCTION OF PORTLAND CEMENT, ASBESTOS CEMENT BUILDING SHEETS AND CEMENT ROOFING TILES : AUSTRALIA

Year	Portland Cement (Tons)	Asbestos Cement Building Sheets ('000 sq. yds.)	Cement Roofing Tiles ('000)
ANNUAL TOTALS			
1957-58	2,291,043	26,026	49,468
1958-59	2,481,036	26,846	52,260
1959-60	2,631,599	30,707	56,896
1960-61	2,859,738	29,697	52,654
1961-62	2,808,794	26,854	53,220
MONTHLY TOTALS : 1962-63 (a)			
1962 : July	268,552	2,413	5,027
August	254,332	2,334	4,964
September	247,492	2,996	4,791
October	262,285	2,559	5,692
November	268,214	2,542	5,665
December	215,916	2,068	3,975
1963 : January	158,411	1,501	3,843
February	231,594	2,376	5,067
March	272,811	2,432	5,945
April	248,564	2,006	4,875
May	265,038	2,539	5,589
Total Eleven Months ended May, 1963	2,693,200	25,766	55,433

(a) Preliminary - subject to revision.

4. **PRODUCTION, EXTERNAL TRADE AND CONSUMPTION - PORTLAND CEMENT:** The quantity and value of Portland Cement produced in Australia, together with particulars of external trade and consumption during the years 1957-58 to 1961-62 are given in the next table.

TABLE 7. - PORTLAND CEMENT - PRODUCTION, EXTERNAL TRADE AND CONSUMPTION : AUSTRALIA

Year	Production		External Trade			Available for Consumption Tons
	Quantity Tons	Value £	Imports (a) Tons	Exports (a) Tons	Net Imports Tons	
1957-58	2,291,043	19,840,284	11,355	23,862	(-) 12,507	2,278,536
1958-59	2,481,036	21,167,944	13,451	17,643	(-) 4,192	2,476,844
1959-60	2,631,599	22,491,880	19,886	7,234	12,652	2,644,251
1960-61	2,859,738	24,434,442	19,994	6,377	13,617	2,873,355
1961-62	2,808,794	24,124,502	21,384	4,440	16,944	2,825,738

(a) Includes all Constructional Cements. Minus sign (-) denotes Net Exports.

5. **EMPLOYMENT:** The numbers of persons employed, as shown in Tables 1, 2, 3, 9 and 10 have 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.

**TABLE 8. - CEMENT AND CEMENT GOODS FACTORIES CLASSIFIED
ACCORDING TO PERSONS EMPLOYED : AUSTRALIA**

Number of Persons Employed in each Factory	1957-58		1958-59		1959-60		1960-61		1961-62	
	Number of Fac- tories	Number Em- ployed	Number of Fac- tories	Number Em- ployed	Number of Fac- tories	Number Em- ployed	Number of Fac- tories	Number Em- ployed	Number of Fac- tories	Number Em- ployed
Under 4	177	353	187	383	203	405	214	436	238	483
4	46	184	43	172	46	184	51	204	64	256
5 to 10	111	785	105	712	111	754	135	904	124	880
11 to 20	66	976	72	1,034	65	952	73	1,108	58	843
21 to 50	35	1,079	50	1,565	50	1,568	54	1,666	63	1,995
51 to 100	21	1,495	17	1,315	22	1,617	17	1,216	23	1,605
101 to 200	15	2,303	15	2,317	16	2,447	23	3,182	20	2,915
201 and over	10	3,961	10	3,999	10	4,191	10	4,430	10	4,076
Total:	481	11,136	499	11,497	523	12,118	577	13,146	600	13,053
Average Number employed per Factory	23		23		23		23		22	

Further details of employment are furnished in the following three tables. In Table 9 the numbers of males employed are shown according to the nature of their employment in each of the Industries (i) Portland Cement, (ii) Asbestos Cement Sheets and Mouldings and (iii) Other Cement Goods, for the year 1961-62.

**TABLE 9. - CEMENT AND CEMENT GOODS FACTORIES - PERSONS EMPLOYED,
MALES CLASSIFIED ACCORDING TO OCCUPATIONAL STATUS : AUSTRALIA, 1961-62**

Occupational Status	Portland Cement	Asbestos Cement Sheets and Mouldings	Other Cement Goods	Total
Males -				
Working Proprietors .. ..	..	..	210	210
Managerial and Clerical Staff, including Salaried Managers and Working Directors	234	253	713	1,200
Chemists, Draftsmen and other Laboratory and Research Staff	204	72	79	355
Other	2,560	2,383	5,649	10,592
Total	2,998	2,708	6,651	12,357
(Males:	128	85	395	608
(Females:	3,126	2,793	7,046	12,965
(PERSONS:				

In Table 10 the numbers of males employed are shown for the years 1957-58 to 1961-62, according to the nature of their employment.

**TABLE 10. - CEMENT AND CEMENT GOODS FACTORIES - PERSONS EMPLOYED,
MALES CLASSIFIED ACCORDING TO OCCUPATIONAL STATUS : AUSTRALIA**

Occupational Status	1957-58	1958-59	1959-60	1960-61	1961-62
Males -					
Working Proprietors	253	221	216	221	210
Managerial and Clerical Staff, including Salaried Managers and Working Directors	858	930	1,079	1,176	1,200
Chemists, Draftsmen and Other Laboratory and Research Staff	282	288	304	319	355
Foremen and Overseers	577	619	713		
Workers in Factory (Skilled and Unskilled)	8,567	8,842	9,191	10,712(a)	10,592(a)
Others (Carters and Messengers, etc.)	45	47	55		
Total	10,582	10,947	11,558	12,428	12,357
(Males:	412	445	496	570	608
(Females:	10,994	11,392	12,054	12,998	12,965
(PERSONS:					

(a) Separate details not now collected.



In the following table the numbers of persons employed in June in the years 1958 to 1962 are shown according to age and sex distribution.

TABLE 11. - CEMENT AND CEMENT GOODS FACTORIES -
PERSONS EMPLOYED CLASSIFIED ACCORDING TO AGE AND SEX : AUSTRALIA
 (Excluding Working Proprietors)

Last Pay Day in 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									
1958	56	80	101	118	132	149	580	9,861	10,497
1959	34	74	116	141	121	150	602	10,570	11,206
1960	41	83	101	129	150	142	605	11,145	11,791
1961	40	(a)	(a)	(a)	(a)	(a)	548	11,646	12,234
1962	41	(a)	(a)	(a)	(a)	(a)	625	11,760	12,426
FEMALES									
1958	5	19	27	19	20	27	112	298	415
1959	7	10	23	26	23	18	100	339	446
1960	5	12	17	28	35	21	113	376	494
1961	7	(a)	(a)	(a)	(a)	(a)	141	424	572
1962	11	(a)	(a)	(a)	(a)	(a)	155	447	613

(a) Separate details not now collected.

6. **POWER EQUIPMENT:** Statistics of the power equipment of the factories included in this combined group 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 12. - CEMENT AND CEMENT GOODS FACTORIES -
TYPES AND RATED HORSE-POWER OF ENGINES : AUSTRALIA

Class of Engine	Rated Horsepower of Engines					
	Ordinarily in Use			In Reserve or Idle		
	1959-60	1960-61	1961-62	1959-60	1960-61	1961-62
Steam - Reciprocating ..	18	15	15	..	120	120
Turbine ..	31,950	31,950	33,950	4,000	4,000	3,000
Internal Combustion -						
Petrol or Other Light						
Oils ..	1,741	3,605	5,697	328	325	993
Heavy Oils ..	..	28	..	600	600	..
Water ..	..	..	..	..	..	..
Total Prime Movers:	33,709	35,598	39,662	4,928	5,045	4,113
Motors driven by Electricity -						
Purchased ..	99,001	110,305	116,363	35,902	37,342	36,535
Own Generation ..	(a)29,677	(a)32,443	(a)40,153	6,066	7,561	14,980
Total Electricity:	128,678	142,748	156,516	41,968	44,903	51,515
TOTAL POWER EMPLOYED:	132,710	145,903	156,025	46,896	49,948	55,628

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

7. POWER, FUEL AND LIGHT, ETC., USED: Details of the quantities and values of the various items of power, fuel and light used during the years 1959-60 to 1961-62 are shown in the following table.

TABLE 13. - CEMENT AND CEMENT GOODS FACTORIES -
POWER, FUEL AND LIGHT, ETC., USED : AUSTRALIA

Particulars	Unit of Quantity	Quantity			Value (£)		
		1959-60	1960-61	1961-62	1959-60	1960-61	1961-62
Power, Fuel and Light -							
Coal - Black ..	Ton	837,308	864,999	732,959	2,872,402	2,897,603	2,512,527
Brown ..	"	20,272	7,501	1,181	33,880	14,316	2,440
Brown Coal Briquettes	"	5,170	8,901	11,892	22,004	43,494	55,144
Coke ..	"	1,781	2,534	17,652	7,802	9,643	105,845
Wood ..	"	5,425	4,898	4,348	12,934	12,166	9,919
Fuel Oil ..	'000 gal.	6,385	8,607	17,232	300,606	362,927	799,338
Tar (Fuel)	Gal.	..	..	..	..	..	..
Electricity ..	-	(a)	(a)	(a)	2,049,626	2,214,434	2,197,464
Gas ..	-	(a)	(a)	(a)	15,440	36,233	51,030
Other (Charcoal, etc.)	-	(a)	(a)	(a)	81,208	119,231	42,247
Water and Lubricating Oil used ..	-	(a)	(a)	(a)	219,644	256,813	276,404
Total:		(a)	(a)	(a)	5,615,546	5,966,860	6,052,358

(a) Value only available.

8. VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY: Particulars of the depreciated or book values of premises occupied and plant installed for factory purposes at 30th June for the years 1958 to 1962 are shown in the following table. Details of the values of additions and replacements made and depreciation allowed during the years 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 14. - CEMENT AND CEMENT GOODS 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
1957-58	7,407,707	19,822,843	470,352	3,555,581	170,857	1,921,819
1958-59	8,308,089	21,753,973	943,534	4,039,051	162,331	2,199,147
1959-60	10,614,219	24,273,660	1,000,663	5,300,794	156,727	2,521,971
1960-61	13,548,890	31,683,805	1,920,343	7,630,778	208,603	2,847,950
1961-62	15,772,224	35,123,242	1,153,159	6,237,014	203,524	3,439,233

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

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COMMONWEALTH STATISTICIAN

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS
CANBERRA, A.C.T. 2ND SEPT., 1963

NOTE: Inquiries concerning these statistics may be made in Canberra by telephoning 70413 Extension 301 or, in each State capital, by telephoning the office of the Bureau of Census and Statistics.