

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS, CANBERRA

AUSTRALIA

MANUFACTURING INDUSTRIES

1960-61

NO. 1 - CEMENT AND CEMENT GOODS

Prepared under Instructions from
THE RIGHT HONORABLE THE TREASURER

by

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PREFACE

1. GENERAL: The range of Bulletins in this series for 1960-61 is the same as for 1959-60 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 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 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 1960-61CEMENT AND CEMENT GOODS

1. SUMMARY OF STATISTICS: In the following table, details are given for each of the industries for the year 1960-61. 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 confidential provisions of the Census and Statistics Act under which the information is obtained.

TABLE 1. - CEMENT AND CEMENT GOODS : AUSTRALIA, 1960-61

Particulars			Portland Cement	Asbestos Cement Sheets, etc.	Other Cement Goods	Total
			No.	No.	No.	No.
Factories	..	..	15	14	548	577
Persons employed (a) -						
Males	..	..	3,151	2,812	6,465	12,428
Females	..	..	129	85	356	570
Total	..	..	3,280	2,897	6,821	12,998
			£'000	£'000	£'000	£'000
Salaries and Wages Paid (b)	..		3,832	3,481	7,809	15,122
Value of -						
Power, Fuel and Light, etc., used (c)			5,072	456	440	5,968
Materials, etc., used (d)	..		7,379	6,636	26,311	40,326
Production (e)	..		12,060	6,597	16,248	34,905
Output (f)	..		24,511	13,689	42,999	81,199
Land and Buildings (g)	..		4,399	2,825	6,325	13,549
Plant and Machinery (g)	..		18,715	3,895	9,073	31,683
			H.P.	H.P.	H.P.	H.P.
H.P. of engines ordinarily in use			99,288	18,674	27,941	145,903

(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 for the years 1956-57 to 1960-61.

TABLE 2. - CEMENT AND CEMENT GOODS : AUSTRALIA

Year	Factories	Persons Employed (a)	Salaries and Wages Paid (b)	Power, Fuel and Light etc. used (c)	Value of Materials, etc. used (d)	Value of Production (e)	Value of Output (f)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Number	Number	£'000	£'000	£'000	£'000	£'000
1956-57	479	10,688	10,312	5,119	23,226	21,228	49,573
1957-58	481	10,994	10,864	5,124	25,579	23,122	53,825
1958-59	499	11,392	11,648	5,265	28,713	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

See notes on Table 1.

In the following table particulars of the industry as a whole are given for each State for the year 1960-61.

TABLE 3. - CEMENT AND CEMENT GOODS : STATES, 1960-61

Particulars	N.S.W.	Vic.	Q'ld.	S.A.	W.A.	Tas.	Aust.
	No.	No.	No.	No.	No.	No.	No.
Factories	187	155	63	83	64	25	577
Persons Employed (a) -							
Males	4,796	3,351	1,629	1,360	914	378	12,428
Females	225	129	71	79	43	23	570
Total	5,021	3,480	1,700	1,439	957	401	12,998
	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Salaries and Wages Paid (b)	6,100	4,233	1,794	1,598	955	442	15,122
Value of -							
Power, Fuel and Light, etc. used (c)	1,831	1,834	820	904	384	195	5,968
Materials, etc. used (d)	17,039	11,608	4,610	3,947	2,119	1,003	40,326
Production (e)	13,705	9,500	4,252	3,944	2,557	947	34,905
Output (f)	32,576	22,940	9,683	8,796	5,059	2,145	81,199
Land and Buildings (g)	5,285	3,511	1,590	1,239	1,398	526	13,549
Plant and Machinery (g)	12,271	6,852	4,428	5,198	1,867	1,067	31,683
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
H.P. of engines ordinarily in use	51,889	31,690	22,273	19,985	14,242	5,824	145,903

(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 values 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 1956-57 to 1960-61.

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
	£.	£.	£.	%
1956-57	990	4,638	1,986	48.58
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

(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 in Cement and Cement Goods factories during the year 1960-61. In some cases the figures include relevant production in factories otherwise classified.

TABLE 5. - MATERIALS USED AND ARTICLES PRODUCED IN CEMENT AND CEMENT GOODS FACTORIES : AUSTRALIA, 1960-61

Materials Used	Quantity	Value	Articles Produced	Quantity	Value
PORTLAND CEMENT					
	Tons (2240 lb.)	£		Tons (2240 lb.)	£
Limestone	3,688,480	2,397,219	Portland Cement, Grey	2,859,738	24,434,442
Shel and Coral	513,215	583,734			
Clay Materials	264,998	94,790			
Gypsum	159,495	886,366			
ASBESTOS CEMENT SHEETS, ETC.					
	Tons (2000 lb.)	£		Sq.yd.	£
Asbestos	45,585	3,833,144	Asbestos Cement Building Sheets - Flat(a) - Decorated Undecorated	1,236,502	799,924
			Corrugated - Standard (b) Deep 6" (b)	19,734,017	4,381,267
			Moulded or Grooved n.s.i. (b)	1,203,912	328,933
			Asbestos Cement Pipes	6,678,669	2,328,793
Cement	173,364	1,629,541	Other Asbestos Cement Products (incl. Bullnoses, Mouldings, etc.)	843,722 (c)	373,145 (c)
				(d)	2,259,856
OTHER CEMENT GOODS					
	Tons (2240 lb.)	£		'000	£
Cement	1,128,768	12,068,625	Cement Bricks - Standard	38,289	596,393
			Cement Blocks (e)	21,846	2,448,123
			Cement Roofing Tiles	52,654	2,051,689
			Cement Roofing Accessories (Ridge Caps, etc.)	(d)	197,537
			Silica - Lime Bricks	26,559	398,352
				cubic yard	
Reinforcing Steel	26,125	1,597,488	Concrete, Ready Mixed	3,535,314	19,085,629
			Concrete, Pre-stressed	57,875	1,215,342
				Tons	
			Concrete Pipes - Agricultural	1,865,539	70,197
			Other	508,440	7,158,818
			Other Cement and Concrete Goods	(d)	7,881,625

- (a) Surface measurement.
 (b) Finished size.
 (c) Not available for publication.
 (d) Value only available.
 (e) 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 1956-57 to 1960-61 together with production in each month July, 1961 to April, 1962.

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			
1956-57	2,172,518	25,444	44,595
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
MONTHLY TOTALS : 1961-62 (a)			
1961 : July	242,215	2,406	3,883
August	248,562	2,575	4,725
September	239,135	2,539	4,455
October	244,549	2,220	4,475
November	228,716	2,397	4,572
December	206,644	1,813	3,497
1962 : January	175,474	1,559	3,482
February	206,789	2,097	4,031
March	244,277	2,636	4,956
April	237,313	1,876	4,052
Total Ten Months ended April, 1962	2,273,674	22,118	42,128

(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 1956-57 to 1960-61 are given in the next table.

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

Year	Production		External Trade			Available for Consumption
	Quantity	Value	Imports (a)	Exports (a)	Net Imports	
	Tons	£	Tons	Tons	Tons	Tons
1956-57	2,172,518	18,833,863	8,708	11,205	(-) 2,497	2,170,021
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

(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	1956-57		1957-58		1958-59		1959-60		1960-61	
	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	181	370	177	353	187	383	203	405	214	436
4	41	164	46	184	43	172	46	184	51	204
5 to 10	116	807	111	785	105	712	111	754	135	904
11 to 20	61	871	66	976	72	1,034	65	952	73	1,108
21 to 50	36	1,060	35	1,079	50	1,565	50	1,568	54	1,666
51 to 100	19	1,403	21	1,495	17	1,315	22	1,617	17	1,216
101 to 200	16	2,487	15	2,303	15	2,317	16	2,447	23	3,182
201 and over	9	3,665	10	3,961	10	3,999	10	4,191	10	4,430
TOTAL:	479	10,827	481	11,136	499	11,497	523	12,118	577	13,146
Average Number employed per Factory	23		23		23		23		23	

Further details of employment are furnished in the following three tables. In Table 9 the numbers of sales 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 1960-61.

**TABLE 9. - CEMENT AND CEMENT GOODS FACTORIES - PERSONS EMPLOYED,
MALES CLASSIFIED ACCORDING TO OCCUPATIONAL STATUS : AUSTRALIA, 1960-61**

Occupational Status		Portland Cement	Asbestos Cement Sheets and Mouldings	Other Cement Goods	Total
Males -					
Working Proprietors		..	..	221	221
Managerial and Clerical Staff, including Salaried Managers and Working Directors		235	227	714	1,176
Chemists, Draftsmen and other Laboratory and Research Staff		187	76	56	319
Other		2,729	2,509	5,474	10,712
Total { Males:		3,151	2,812	6,465	12,428
{ Females:		129	85	356	570
{ PERSONS:		3,280	2,897	6,821	12,998

In Table 10 the numbers of males employed are shown for the years 1956-57 to 1960-61, 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		1956-57	1957-58	1958-59	1959-60	1960-61
Males -						
Working Proprietors		259	253	221	216	221
Managerial and Clerical Staff, including Salaried Managers and Working Directors		820	858	930	1,079	1,176
Chemists, Draftsmen and other Laboratory and Research Staff		275	282	288	304	319
Foremen and Overseers		601	577	619	713	10,712(a)
Workers in Factory (Skilled and Unskilled)		8,278	8,567	8,842	9,191	
Others (Carters and Messengers, etc.)		62	45	47	55	
Total { Males:		10,295	10,582	10,947	11,558	12,428
{ Females:		393	412	445	496	570
{ PERSONS:		10,688	10,994	11,392	12,054	12,998

(a) Separate details not now collected.

In the following table the numbers of persons employed in June in the years 1957 to 1961 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									
1957	46	82	98	117	103	121	521	9,427	9,994
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
FEMALES									
1957	7	16	23	17	24	15	95	286	388
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

(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 horse-power 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		
	1958-59	1959-60	1960-61	1958-59	1959-60	1960-61
Steam - Reciprocating ..	73	18	15	107	..	120
Turbine ..	31,850	31,950	31,950	4,000	4,000	4,000
Internal Combustion - Petrol or Other Light Oils ..	1,077	1,741	3,605	420	328	325
Heavy Oils ..	112	..	28	600	600	600
Water ..	20	..	..	..	..	..
Total Prime Movers:	33,132	33,709	35,598	5,127	4,928	5,045
Motors driven by Electricity - Purchased ..	91,950	99,001	110,305	33,550	35,902	37,342
Own Generation ..	(a)29,692	(a)29,677	(a)32,443	6,440	6,066	7,561
Total Electricity:	121,642	128,678	142,748	39,990	41,968	44,903
TOTAL POWER EMPLOYED:	125,082	132,710	145,903	45,117	46,896	49,948

(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 1958-59 to 1960-61 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 (£)		
		1958-59	1959-60	1960-61	1958-59	1959-60	1960-61
Power, Fuel and Light							
Coal - Black ..	Ton	778,435	837,308	864,999	2,714,129	2,872,402	2,897,603
Brown ..	"	21,230	20,272	7,501	40,012	33,880	14,316
Brown Coal Briquettes	"	1,373	5,170	8,901	5,858	22,004	43,494
Coke ..	"	2,242	1,781	2,534	10,934	7,802	9,643
Wood ..	"	5,598	5,425	4,898	13,161	12,934	12,166
Fuel Oil ..	'000 gal.	6,725	6,385	8,607	302,414	300,606	362,927
Tar (Fuel) ..	Gal.	800	..	..	42	..	..
Electricity ..	-	(a)	(a)	(a)	1,916,633	2,049,626	2,214,434
Gas ..	-	(a)	(a)	(a)	7,389	15,440	36,233
Other (Charcoal, etc.)	-	(a)	(a)	(a)	69,700	81,208	119,231
Water and Lubricating Oil used ..	-	(a)	(a)	(a)	184,606	219,644	256,813
Total:		(a)	(a)	(a)	5,264,878	5,615,546	5,966,860

(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 1957 to 1961 are shown in the following 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 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
1956-57	6,994,131	18,453,529	416,544	2,826,853	147,180	1,612,991
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

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

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COMMONWEALTH BUREAU OF CENSUS AND STATISTICS
CANBERRA, A.C.T. 23RD JULY, 1962

NOTE: Inquiries concerning these statistics can be made in Canberra by telephoning UC413 Extension 301 or, in State Capitals, by telephoning the offices of the Deputy Commonwealth Statisticians.