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MANUFACTURING INDUSTRIES

1965-66

No. 1

CEMENT AND CEMENT GOODS



COMMONWEALTH BUREAU OF CENSUS AND STATISTICS
CANBERRA, AUSTRALIA

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CANBERRA, AUSTRALIA

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NO. 1. CEMENT AND CEMENT GOODS

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EXPLANATORY NOTES

GENERAL. The range of bulletins in this series for 1965-66 is the same as for 1964-65. 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 4 specifies the industries so included.

Statistics of the number of factories, persons employed, salaries and wages, value of fuel, materials, production and output, etc., for 1965-66 include details for the Northern Territory and Australian Capital Territory. Prior to 1964-65 details for the Territories were excluded. Statistics of materials used and articles produced do not include details for the Territories.

CLASSIFICATION OF FACTORIES. For purposes of industry classification, factories are classified to sub-classes 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, in general, to the operations of factories classified to the industry specified. However, the statistics of articles produced represent total recorded production in all factories, irrespective of industry classification.

BASIS OF THE STATISTICS. The scope of the factory statistics is fully explained in the annual bulletin Manufacturing Industry which contains comprehensive statistics both for all factory sub-classes separately and in total.

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, etc., 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, light, etc., used includes the cost of lubricants and water.

The value of factory output is the value of the goods manufactured or their value after passing through the particular process of manufacture and includes the amount received for repair work, work done on commission and receipts for other factory work. The basis of valuation of the output is the selling value of the goods 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.

The value of production is the value added to 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 amount of profit resulting from factory operations cannot be ascertained from figures contained herein.

There are many miscellaneous expenses, such as maintenance of buildings, etc., depreciation, workers' compensation insurance, other insurances, pay-roll tax, income tax, advertising, interest on borrowed money, bad debts and many other sundry charges, which are not taken into account. Consequently it must not be inferred that, when wages and salaries are deducted from value of production, the whole of the surplus is available for profits.

ROUNDING OF FIGURES. Any discrepancies between totals and sums of components in tables are due to rounding.

This bulletin refers, in general, to factories which are classified to sub-classes 0107 (portland cement), 0108 (asbestos cement sheets and moulding) and 0109 (other cement goods) of the factory classification (1945).

TABLE 1. - CEMENT AND CEMENT GOODS FACTORIES : SUMMARY

AUSTRALIA

Year	Factories	Persons employed (a)	Salaries and wages paid (b)	Power, fuel, 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)
	No.	No.	\$'000	\$'000	\$'000	\$'000	\$'000
1961-62	600	12,965	30,901	12,106	80,987	71,060	164,151
1962-63	640	13,601	33,200	12,864	89,399	79,274	181,537
1963-64	669	14,230	37,050	13,690	103,035	91,570	208,294
1964-65	702	15,070	42,339	15,631	120,439	103,887	239,957
1965-66	761	15,327	44,541	15,156	129,821	106,460	251,437

(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., replacement of tools and repairs to plant. (e) Value added in process of manufacture. (f) Value at the factory of goods produced.

TABLE 2. - CEMENT AND CEMENT GOODS FACTORIES

BY SUB-CLASS : AUSTRALIA, 1965-66

Particulars	Portland cement	Asbestos cement sheets, etc.	Other cement goods	Total
	Number			
Factories	17	15	729	761
Persons employed (a) -				
Males	3,320	2,939	8,308	14,567
Females	144	107	509	760
TOTAL	3,464	3,046	8,817	15,327
	\$'000			
Salaries and wages paid (b)	10,408	8,707	25,426	44,541
Value of -				
Power, fuel, light, etc., used (c)	12,342	1,200	1,614	15,156
Materials, etc., used (d)	21,897	14,815	93,109	129,821
Production (e)	33,446	18,671	54,343	106,460
Output (f)	67,685	34,686	149,066	251,437
Land and buildings (g)	15,662	8,838	21,149	45,648
Plant and machinery (g)	71,158	8,443	23,611	103,212
	Horsepower			
Rated hp of engines ordinarily in use	148,149	25,686	44,552	218,387

For footnotes (a) to (f) see table 1. (g) Depreciated or book values at end of year.

TABLE 3. - CEMENT AND CEMENT GOODS FACTORIES : SUMMARY

STATES, 1965-66

Particulars	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
	Number								
Factories	248	192	91	92	84	34	(h)	(h)	761
Persons employed (a) -									
Males	5,072	3,994	2,122	1,485	1,192	457	(h)	(h)	14,567
Females	288	168	102	88	64	27	(h)	(h)	760
TOTAL	5,360	4,162	2,224	1,573	1,256	484	(h)	(h)	15,327
	\$'000								
Salaries and wages paid (b)	15,701	12,679	6,269	4,344	3,276	1,338	(h)	(h)	44,541
Value of -									
Power, fuel, light etc. used (c)	4,400	4,616	2,327	2,024	1,163	569	(h)	(h)	15,156
Materials, etc. used (d)	46,484	36,837	17,469	12,994	8,618	4,313	(h)	(h)	129,821
Production (e)	36,227	27,013	15,613	12,748	9,287	3,900	(h)	(h)	106,460
Output (f)	87,111	68,466	35,410	27,766	19,068	8,782	(h)	(h)	251,437
Land and buildings (g)	14,456	11,630	5,454	6,168	5,947	1,396	(h)	(h)	45,648
Plant and machinery (g)	33,361	31,433	12,759	13,580	7,407	3,453	(h)	(h)	103,212
	Horsepower								
Rated hp of engines ordinarily in use	64,959	58,843	33,461	31,651	22,163	6,613	(h)	(h)	218,387

For footnotes (a) to (f) see Table 1. (g) Depreciated or book values at end of year.
(h) Not available for publication.

TABLE 4. - CEMENT AND CEMENT GOODS FACTORIES

AVERAGE SALARIES AND WAGES, OUTPUT, PRODUCTION, 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
	\$	\$	\$	%
1961-62	2,465	12,660	5,481	43.49
1962-63	2,681	13,347	5,829	41.88
1963-64	2,646	14,638	6,435	40.46
1964-65	2,853	15,923	6,894	40.76
1965-66	2,953	16,405	6,946	41.84

(a) Excludes working proprietors and amounts drawn by them. (b) Includes working proprietors.

TABLE 5. - CEMENT AND CEMENT GOODS FACTORIES

PERSONS EMPLOYED (a) : AUSTRALIA

Number employed in each factory	1962-63		1963-64		1964-65		1965-66	
	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	251	516	251	492	259	524	277	561
4	56	224	69	276	66	264	85	340
5 to 10	138	942	155	1,102	168	1,173	191	1,350
11 to 20	75	1,082	75	1,136	77	1,135	74	1,069
21 to 50	60	1,907	55	1,746	67	2,034	69	2,089
51 to 100	29	2,020	31	2,190	30	2,117	33	2,329
101 to 200	19	2,573	20	2,565	22	2,929	18	2,466
201 and over	12	4,491	13	4,800	13	4,963	14	5,220
<u>TOTAL</u>	640	13,755	669	14,307	702	15,139	761	15,424
Average number employed per factory	21		21		22		20	

(a) Average persons employed during period of operation whether for the whole or only part of the year. Includes working proprietors.

TABLE 6. - CEMENT AND CEMENT GOODS FACTORIES

PERSONS EMPLOYED (a) BY OCCUPATIONAL STATUS : AUSTRALIA

Occupational status	1961-62	1962-63	1963-64	1964-65	1965-66
<u>MALES</u> -					
Working proprietors	210	197	210	212	246
Managerial and clerical staff, including salaried managers and working directors chemists, draftsmen and other laboratory and research staff	1,200	1,312	1,379	1,461	2,233
Workers in factory (skilled and unskilled), foremen and overseers, carters (excluding delivery only), messengers and persons working regularly at home	355	360	400	422	446
	10,592	11,065	11,577	12,246	12,402
<u>TOTAL</u> (Males	12,357	12,934	13,566	14,341	14,567
(Females	608	667	664	729	760
(Persons	12,965	13,601	14,230	15,070	15,327

(a) Average number employed calculated on a "whole year" basis, i.e. in factories working less than the full year the average numbers are reduced to whole year equivalents.

TABLE 7. - CEMENT AND CEMENT GOODS FACTORIES
PERSONS EMPLOYED (a) BY OCCUPATIONAL STATUS AND SUB-CLASS

AUSTRALIA, 1965-66

Occupational status	Portland cement	Asbestos cement sheets and mouldings	Other cement goods	Total
MALES -				
Working proprietors	..	3	219	222
Managerial and clerical staff including salaried managers chemists, draftsmen and other laboratory and research staff	273	281	1,022	1,576
Workers in factory (skilled and unskil- led), foremen and overseers, carters (excluding delivery only), messengers and persons working regularly at home	219 2,628	87 2,568	133 6,934	439 12,330
TOTAL				
(Males	3,320	2,939	8,308	14,567
(Females	144	107	509	760
(Persons	3,464	3,046	8,817	15,327

(a) See footnote (a) Table 6.

TABLE 8. - CEMENT AND CEMENT GOODS FACTORIES

PERSONS EMPLOYED BY AGE AND SEX : AUSTRALIA

(Excluding working proprietors)

Last pay day in June	Under 16 years	16 to 20 years	21 years and over	Total all ages
MALES				
1962	41	625	11,760	12,426
1963	40	680	12,378	13,098
1964	25	843	12,806	13,674
1965	24	880	13,344	14,248
1966	23	876	13,553	14,452
FEMALES				
1962	11	155	447	613
1963	13	155	473	641
1964	7	173	480	660
1965	8	177	538	723
1966	11	193	544	748

TABLE 9. - CEMENT AND CEMENT GOODS FACTORIES
CLASS OF ENGINE AND RATED HORSEPOWER : AUSTRALIA

Class of engine	Rated horsepower of engines					
	Ordinarily in use			In reserve or idle		
	1963-64	1964-65	1965-66	1963-64	1964-65	1965-66
Steam - Reciprocating ..	140	130	105	180	60	60
Turbine ..	33,850	44,800	44,800	3,000	16,100	16,100
Internal Combustion -						
Petrol and other light oils ..	5,028	6,238	7,552	1,296	1,527	1,615
Heavy oils ..	132	196		..	..	
<u>Total hp prime movers</u>	39,150	51,364	52,457	4,476	17,687	17,775
Motors driven by electricity -						
Purchased	131,613	155,221	165,930	47,116	44,344	44,802
Own generation	(a) 44,051	(a) 47,273	(a) 47,361	15,340	16,294	23,761
<u>Total hp electric motors</u>	175,664	202,494	213,291	62,456	60,638	68,563
<u>TOTAL POWER EMPLOYED</u>	170,763	206,585	218,387	66,932	78,325	86,338

(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.

TABLE 10. - CEMENT AND CEMENT GOODS FACTORIES
POWER, FUEL, LIGHT, ETC., USED : AUSTRALIA

Particulars	Unit of Quantity	Quantity			Value (\$'000)		
		1963-64	1964-65	1965-66	1963-64	1964-65	1965-66
Power, fuel and light -							
Coal - Black ..	ton	848,656	957,863	853,328	5,223	5,974	5,053
Brown ..	"	721	..	..	3	..	..
Brown coal briquettes ..	"	6,310	28,059	28,707	53	162	161
Coke ..	"	14,470	16,639	14,567	203	240	227
Wood ..	"	4,438	3,821	4,065	20	18	19
Fuel oil ..	'000 gal	30,927	42,369	47,679	2,083	2,692	3,032
Tar (fuel) ..	ton	..	..	70	..	..	1
Electricity ..	-	)	)	)	5,121	5,615	5,706
Gas ..	-				125	108	98
Other (charcoal, etc.) ..	-				132	4	15
Water and lubricating oil ..	-				725	817	846
<u>TOTAL</u>	-	(a)	(a)	(a)	13,689	15,631	15,156

(a) Value only available.

TABLE 11. - CEMENT AND CEMENT GOODS FACTORIES
VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY, ETC.

AUSTRALIA

(\$'000)

Year	Book values as at 30 June, (a)		Additions and replace- ments 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
1961-62	31,544	70,246	2,306	12,474	407	6,878
1962-63	34,019	74,230	3,096	13,328	478	7,487
1963-64	37,465	76,667	3,577	12,575	493	8,499
1964-65	40,555	87,093	5,247	22,048	609	9,658
1965-66	45,648	103,212	4,877	25,347	804	10,320

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

TABLE 12. - SELECTED MATERIALS USED IN FACTORIES CLASSIFIED TO SUB-CLASSES
0107 (PORTLAND CEMENT), 0108 (ASBESTOS CEMENT SHEETS AND MOULDING) AND 0109

(OTHER CEMENT GOODS) : AUSTRALIA, (a) 1965-66

Materials used	Commodity code no.	Unit of quantity	Sub- class	Quantity	Value \$'000
Clay material for cement	272.24	'000 ton			
Sand	274.24	"	0107	322	278
Limestone for cement	275.29	"	0108	85	234
Asbestos	279.05	"	0109	5,056	9,593
Reinforcing steel	461.16	'000 tons (2000 lbs)	0107	4,901	6,807
		'000 ton	0108	48	8,006
Cement - For ready mixed concrete	474.06	"	0109	39	4,829
For other purposes	474.10	"	0109	1,529	33,177
		"	0108	165	3,366
Lime	479.08	"	0109	467	10,620
		ton	0108	2,763	99
		"	0109	3,784	89

(a) Excludes Northern Territory and Australian Capital Territory.

NOTE. - The above details relate to materials used in factories classified to the sub-classes stated only.

TABLE 13. - SELECTED ARTICLES PRODUCED IN ALL FACTORIES : AUSTRALIA (a) 1965-66

(NOTE. These details relate to production in all factories, irrespective of classification.)

Item	Commodity code no.	Unit of quantity	Quantity	Value \$'000
Portland cement, grey	474.02	'000 tons	3,688	65,927
Asbestos-cement products - (b)				
Asbestos-cement building sheets -				
Flat (surface measure) -				
Uncoated	475.01	'000 sq yd	}	
Painted, coloured or coated during manufacture	475.02	"		
Corrugated (finished size) -				
Standard	475.04	"	}	20,304
Deep 6"	475.06	"		
Moulded or grooved n.e.i. (finished size)	475.07	"		
Pipes	475.08	-	}	14,564
Other products (including bullnoses, mouldings, etc.)	475.18	-		
Concrete products -				
Concrete bricks (in terms of standard bricks)	475.22	'000	18,200	651
Concrete blocks (in terms of 16" x 8" x 8" blocks)	475.26	"	43,921	10,676
Concrete roofing tiles	475.30	"	82,921	} 7,108
" " "	475.32	'00 sq ft	791,011	
Terazzo wall tiles	475.34	sq yd	34,570	196
Concrete roofing accessories (ridge caps, etc.)	475.38	-	(c)	638
Concrete pipes, agricultural -				
Up to and incl. 4" inside diameter	475.42	'000	2,211	146
Over 4" inside diameter	475.44	number	52,921	98
Concrete pipes other than agricultural	475.46	ton	670,963	19,472
Prestressed concrete	475.54	"	90,463	4,225
Concrete box culverts	475.60	"	52,914	1,849
Other concrete goods (incl. concrete ornaments)	475.80	-	(c)	24,917
Ready-mixed concrete	475.90	'000 cu yd	6,603	73,599

(a) Excludes Northern Territory and Australian Capital Territory. (b) Includes asbestos-cement products containing a small amount of wood pulp, diatomaceous earths, lime etc. (c) Value only available.

TABLE 14. - PRINCIPAL ARTICLES PRODUCED IN ALL FACTORIES : AUSTRALIA (a)

(NOTE. These details relate to production in all factories irrespective of classification.)

Year	Portland cement (¹ 000 tons)	Asbestos cement building sheets (¹ 000 sq yds)	Concrete roofing tiles (¹ 000)
1961-62	2,793	26,725	53,220
1962-63	2,942	27,743	60,482
1963-64	3,320	29,836	76,543
1964-65	3,746	32,477	87,744
1965-66	3,688	32,364	82,921

(a) Excludes Northern Territory and Australian Capital Territory.

TABLE 15. - IMPORTS AND EXPORTS OF CEMENT (a)

AUSTRALIA

'000 tons

	1961-62	1962-63	1963-64	1964-65	1965-66
Imports	21	29	28	61	68
Exports	4	5	6	4	3

(a) Includes all constructional cement.

J.P. O'NEILL
ACTING COMMONWEALTH STATISTICIAN

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS
CANBERRA, A.C.T. 2600. 24 NOVEMBER 1967

NOTE. Inquiries concerning these statistics may be made in Canberra by telephoning 63 9111 Extension 2267 or, in each State capital, by telephoning the office of the Bureau of Census and Statistics.