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MANUFACTURING INDUSTRIES, 1937-38.

No. 4. WHITE LEAD, PAINTS AND VARNISH.

PREPARED UNDER INSTRUCTIONS FROM
THE HONORABLE THE TREASURER.

BY

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P R E F A C E

1. Industries included in the Series: A complete list of the industries for which summaries in this series are being issued is given on the back of the cover page. They will be published as the material becomes available, and not necessarily in the order shown in the list. The following summary has already been published: No. 6.
2. Classification of Factories: The classification of factories in Australia is based on the nature of the product. Where two or more distinct types of industrial activity are carried on in one establishment, factory proprietors are requested to furnish separate returns for each activity. In some instances, however, this is not practicable, and in such cases there is no alternative but to classify the factory according to its predominant activity. This difficulty is most acute in the Metal Trades industries (e.g. Engineering firms also producing Agricultural Implements, Stoves and Ovens, and/or Brass and Copper products), but it is also to be found in factories concerned with the treatment or manufacture of Skins, Leather, Clothing, Wood products and some other articles. In consequence, and to an extent which will vary with individual industries, the figures may include the subsidiary but extraneous activities of those establishments included in the industry, while they will exclude relevant activities which are subsidiary to the predominant activity of establishments classified to some other industry. This qualification is not important in the case of "White Lead, Paints and Varnish", the industry with which this summary is concerned.
3. Basis of the Statistics: The scope of the factory statistics is fully explained in Part I of the annual Production Bulletin.

Briefly, a "factory" is taken to be an industrial establishment in which four or more hands 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, and retailing storemen. The figures do include, however, proprietors who work in their own business and "out-workers".

The value of output is the wholesale 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 of output minus the cost of raw materials, containers, power, fuel, light, lubricants, water, tools replaced, and repairs to plant.

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Canberra, A.C.T.
28th March, 1939.

WHITE LEAD, PAINTS AND VARNISH.

The following table furnishes a summary of the principal statistics of the factories engaged in the manufacture of White Lead, Paints and Varnish.

1. WHITE LEAD, PAINTS AND VARNISH - AUSTRALIA, 1906 TO 1937-38.

Year	Number of Factories	Persons Employed (a)	Salaries and Wages Paid (b)	Power, Fuel and Light Used	Value of Other Materials Used	Value of Production	Value of Output
	No.	No.	£'000	£'000	£'000.	£'000	£'000
1906	24	(c) 409	22	2	94	55	151
1913	18	(c) 213	21	1	77	49	127
1920-21	45	(c) 864	175	12	1,127	363	1,502
1928-29	62	(d) 1,376	356	35	1,309	923	2,267
1929-30	68	1,420	352	36	1,355	924	2,315
1930-31	59	1,169	260	23	802	701	1,526
1931-32	67	1,242	270	24	907	616	1,547
1932-33	71	1,322	276	28	1,073	770	1,871
1933-34	81	1,458	293	30	1,254	897	2,181
1934-35	81	1,629	323	32	1,545	1,090	2,667
1935-36	83	1,774	361	36	1,826	1,264	3,126
1936-37	90	1,987	412	42	2,100	1,398	3,540
1937-38	98	2,171	488	45	2,391	1,564	4,000

(a) Including Working Proprietors. (b) Exclusive of amounts drawn by Working Proprietors. (c) Average over period worked by factory. (d) For 1928-29 and succeeding years, the employment figures have been averaged over the whole year.

In the following table particulars of the industry are given for each State during the year 1937-38.

2. WHITE LEAD, PAINTS AND VARNISH - STATES, 1937-38.

Particulars	New South Wales	Vic-toria	Queens-land	South Aus-tralia	Western Aus-tralia	Tas-mania	AUSTRALIA
	No.	No.	No.	No.	No.	No.	No.
Number of Factories	45	37	5	7	2	2	98
Number employed (a) -							
Males	1,219	316	33	122	(c)	(c)	(d) 1,703
Females	370	49	3	46	(c)	(c)	(d) 468
Total	1,589	365	36	168	(c)	(c)	(d) 2,171
	£.	£.	£.	£.	£.	£.	£.
Value of -							
Salaries and Wages Paid (b)	375,177	69,637	7,454	33,555	(c)	(c)	(d) 487,869
Fuel used	33,751	6,832	236	2,953	(c)	(c)	(d) 44,513
Materials, etc. used	1,285,434	239,412	40,710	157,110	(c)	(c)	(d) 2,391,785
Production	1,252,266	215,707	13,569	77,622	(c)	(c)	(d) 1,564,046
Output	3,171,451	521,361	55,117	237,965	(c)	(c)	(d) 4,000,344
Land and Buildings	532,619	109,147	6,344	56,472	(c)	(c)	(d) 708,515
Plant and machinery	203,054	52,742	3,599	35,298	(c)	(c)</	

**3. AVERAGE SALARIES AND WAGES PAID, OUTPUT ETC. PER EMPLOYEE -
AUSTRALIA, 1908 TO 1937-38.**

Year	Salaries and Wages per Employee (a)	Value of Output per Person Engaged (b)	Value of Production per Person Engaged (b)	Ratio per cent of Salaries and Wages to Value of Production
	£.	£.	£.	%
1908	57	368	135	40.16
1913	102	597	230	43.03
1920-21	209	1,739	421	48.23
1928-29	267	1,648	670	38.59
1929-30	255	1,630	651	38.08
1930-31	229	1,305	600	37.10
1931-32	222	1,240	493	43.80
1932-33	216	1,409	580	35.86
1933-34	208	1,496	615	32.63
1934-35	205	1,637	669	29.65
1935-36	210	1,762	712	28.54
1936-37	212	1,781	704	29.50
1937-38	230	1,843	720	31.19

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

Particulars of the materials used and articles produced in White Lead, Paint and Varnish factories during 1937-38 are shown in the following table. The quantities and values shown here are those furnished by the establishments included in this Summary only. The figures do not include similar materials used or articles produced in establishments not classified as White Lead, Paints and Varnish Factories.

4. MATERIALS USED AND ARTICLES PRODUCED - AUSTRALIA, 1937-38.

Particulars	Unit of quantity	Quantity	Value £..
Materials used -			
White Lead ..	cwt.	49,966	91,129
Zinc Oxide ..	"	68,979	103,005
Linseed Oil ..	gal.	1,182,301	235,372
Whiting ..	ton	3,157	17,265
Varnishes ..	gal.	754,275	190,789
Other Materials ..	-	(a)	1,401,190
Total Value materials used:	-	Value only	2,038,750
Articles produced -			
Paints - Water ..	lb.	4,331,584	81,156
Oil ..	gal.)		
Ready Mixed ..	")	2,117,698	1,265,273
Other ..	")		
Colours ..	lb.	6,406,707	83,192
Varnishes ..	gal.	1,173,401	410,392
Kalsomine ..	lb.	5,508,331	84,790
Lacquer Nitro-Cellulose - Clear ..	gal.	126,407	71,744
Colours ..	"	593,004	485,232
Lacquer Thinners ..	"	677,476	197,155
Enamels ..	"	237,365	207,067
Stains (Oil, Spirit, Varnish and Gossote) ..	"	102,535	53,884
White Lead ..	cwt.	128,653	294,921
Zinc Oxide ..	"	41,354	86,004
Putty ..	"	25,943	28,137
Paint and Varnish Removers ..	gal.	5,146	2,507
Synthetic Finishes - Clear ..	"	13,447	11,605
Colours ..	"	253,535	293,890
Thinners ..	"	10,309	3,693
Rubbing Compounds ..	lb.	172,310	5,760
Plastic Woods ..	"	15,473	1,701
Polishes ..	-	(a)	6,540
Other Articles ..	-	(a)	320,699
Total Value of Output	-	Value only	2,000,344

(a) Value only collected.

The number of employees in the previous table 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 according to the average number employed during the actual period worked.

5. FACTORIES CLASSIFIED ACCORDING TO HANDS EMPLOYED - AUSTRALIA, 1908 TO 1936-37.

Number of persons employed in each Factory	1908		1913		1920-21		1928-29		1936-37 (a)	
	Number of Factories	Number Em-ployed	Number of Factories	Number Em-ployed	Number of Factories	Number Em-ployed	Number of Factories	Number Em-ployed	Number of Factories	Number Em-ployed
Under 4	6	17	5	12	10	22	23	60	27	62
4	1	4	-	-	4	16	2	12	5	20
5 to 10	6	36	8	64	16	107	16	120	30	216
11 to 20	5	65	2	22	7	95	8	111	14	201
21 to 50	4	121	2	59	3	88	6	201	7	231
51 to 100	1	61	1	55	4	261	1	80	2	119
Over 100	1	105	-	-	1	274	5	794	5	1,154
TOTAL:	24	409	12	213	45	864	62	1,376	90	2,003
Average Number employed per factory:	17		12		19		22		22	

(a) 1937-38 not yet available.

Further details of employment in the industrial group - White Lead, Paints and Varnish are furnished in the next three tables. In the first the employees have been classified according to the nature of their employment.

6. PERSONS EMPLOYED CLASSIFIED ACCORDING TO GRADE OF OCCUPATION - AUSTRALIA, 1908 TO 1937-38.

Grade of Occupation	1908	1913	1920-21	1928-29	1937-38
	No.	No.	No.	No.	No.
Working Proprietors ..	16	13	25	41	48
Managers and Overseers ..	22	17	58	83	209
Clerical Staff ..	34	20	127	226	341
Engine Drivers and Firemen ..	7	9	19	34	7
Workers, Skilled and Unskilled	318	139	623	972	1,534
Other (Carters and Messengers)	12	17	12	20	32
TOTAL:	409	213	864	1,376	2,171

The next table shows the actual number of persons employed (excluding Working Proprietors) on the pay-day nearest to the 15th of each month for the years 1936-37 and 1937-38.

7. PERSONS EMPLOYED ON PAY-DAY NEAREST TO THE 15TH OF EACH MONTH AUSTRALIA, 1936-37 AND 1937-38.

(Working Proprietors Excluded)

Month	1936-37			1937-38		
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A classification of the number of employees according to age on or about the 15th June, 1938 is shown in the next table:-

8. PERSONS EMPLOYED CLASSIFIED ACCORDING TO AGE - JUNE, 1937.

Sex		Under 16 Years	16 and under 21 Years	Adults	Total
		No.	No.	No.	No.
Males	..	40	310	1,279	1,629
	Per Cent of Total	2%	19%	79%	100%
Females	..	25	204	243	472
	Per Cent of Total	5%	43%	52%	100%
Persons	..	65	514	1,522	2,101
	Per Cent of Total	3%	24%	73%	100%

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 for the years 1936-37 and 1937-38 together with those in reserve or idle in the latter year.

9. POWER EMPLOYED TO DRIVE MACHINERY - AUSTRALIA.

Class of Engine	Rated H.P. of Engines		
	Ordinarily in Use		In Reserve or Idle
	1936-37	1937-38	1937-38
Steam - Reciprocating	6	-	-
Turbine	-	-	-
Internal Combustion -			
Gas	65	-	-
Petrol or Other Light Oils	45	93	6
Heavy Oils	45	45	4
Water	-	-	-
Total Prime Movers	163	138	10
Motors driven by electricity -			
Purchased	6,888	7,205	501
Own Generation	-	-	-
Total Electricity	6,888	7,205	501
Total Power Used (a):	7,051	7,343	511

(a) Without Duplication.

Details of the quantities and values of the various items of power, fuel and light used in White Lead, Paint and Varnish factories are shown in the following table:-

10. POWER, FUEL AND LIGHT, ETC. USED - AUSTRALIA 1937-38.

Particulars	Unit of Quantity	Quantity	Value £.
Coal - Black	ton	3,712	4,859
Brown	"	44	66
Coke	"	4,197	5,286
Wood	"	241	223
Fuel Oil	gallon	201,715	4,556
Electricity	-	(a)	19,327
Gas	-	(a)	4,455
Other (Charcoal, etc.)	-	(a)	521
Water used	-	(a)	4,398
Lubricating Oil	-	(a)	822
TOTAL:		Value only	44,513

(a) Value only available.

/Particulars

Particulars of the book values of premises occupied and plant used in White Lead, Paints and Varnish factories at the 30th June for each of the five years ended 1938 are shown in the next table. In addition, details of the values of additions and replacements made and depreciation allowed during the year 1937-38 are also shown. It should be noted that the amounts expended in additions and Replacements refer to expenditure incurred by existing factories and do not include the cost of erecting and equipping new factories; these latter items, however, are included with the book values shown at 30th June. The amounts shown for Depreciation are those returned by factories. Changes in the number of factories operating and other factors affect comparison from year to year.

11. VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY - AUSTRALIA
1937-38.

Particulars	Land and Buildings £.	Plant and Machinery £.
Additions and Replacements made during year (a)	53,942	24,148
Depreciation allowed during year (a) ..	2,313	30,794
Book Value (a) as at 30th June -		
1938	709,515	307,314
1937	637,535	320,543
1936	611,386	277,019
1935	611,402	280,690
1934	591,454	289,397

(a) See Note above.

The values of imports and exports of a number of items included in the group - White Lead, Paints and Varnish are given in the following tables:-

12. VALUE OF IMPORTS OF SPECIFIED ITEMS OF WHITE LEAD, PAINTS AND VARNISH - AUSTRALIA.

Item	1908 £.	1913 £.	1920-21 £.	1928-29 £.	1937-38 £.
Varnishes, Stains, Lacquers and the like	72,283	111,014	80,760	71,125	20,607
White Lead	6,220	5,806	43,683	63,442	554
Zinc Oxide	(a)	(a)	438	4,463	2,092
Fatty	4,117	5,294	5,059	4,866	227
Dry Colours	52,303	65,207	203,063	200,853	349,019
Paint Ground in Liquid	128,464	346,844	80,186	88,054	6,237
Malsomine	(a)	(a)	28,573	21,124	1,840
Whiting and Paris White	(b) 5,153	(b) 7,544	(b) 10,512	13,023	16,509
All Other Paints and Colours	91,269	67,550	169,060	362,638	341,359
TOTAL:	419,809	609,859	627,333	784,594	739,544

(a) Not stated separately.

(b) Whiting.

13. VALUE OF EXPORTS OF SPECIFIED ITEMS OF WHITE LEAD, PAINTS AND VARNISH - AUSTRALIA.

Item	1908 £.	1913 £.	1920-21 £.	1928-29 £.	1937-38 £.
Varnishes	1,660	2,786	29,403	8,329	64,682
White Lead	68	81	41,002	5,354	19,742
Dry Colours	1,893	2,580	9,547	17,853	21,398
Paint Ground in Liquid	6,091	5,673	103,149	21,110	27,213
All other Paints	1,370				

