

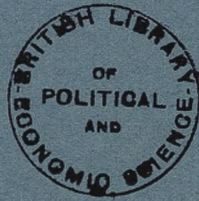
BOARD OF TRADE

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*The Report on the
Census of Production
for 1954*

Volume 2: Industry I

PAINT AND VARNISH



*Presented by the Board of Trade to Parliament in pursuance of the
Statistics of Trade Act, 1947 (10 & 11 Geo. 6 Ch. 39, Sec. 7)*

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The Report on the Census of Production for 1954

VOLUME 2 INDUSTRY I

PAINT AND VARNISH

THIS REPORT on the Paint and Varnish Industry relates to establishments engaged wholly or mainly in the manufacture of paint, varnish, enamel, distemper, wood stain, white lead (in paste form), French polish, artists' colours, etc., (but not pigments).

This industry corresponds to minimum list heading 34 in the Standard Industrial Classification.

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IMPORTANT NOTES and definitions appear on the next page. In interpreting the data in the tables, it is essential to bear these in mind.

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The following notes describe terms in general use in the tables of the report. More detailed explanations of the terms used and a description of the scope and method of taking the census are given in the separate booklet entitled 'The Report on the Census of Production for 1954 - Introductory Notes' (price 1s. 6d. net).

Industrial Classification: Establishments are classified to industries according to the nature of their output and, as far as possible, in conformity with the Standard Industrial Classification. Certain products are identified as the principal products of individual industries, the principal products for a given industry being of a similar nature or commonly associated in production. The principle of classification normally followed is that an establishment is classified to an industry if its output of the principal products of that industry accounted for a greater proportion of the value of its output than did its output of the principal products of any other industry.

Specialist producers normally comprise those establishments 50 per cent. or more of whose total output by value is accounted for by the characteristic products of the specialist group.

Intermediate products: For some industries figures are given showing the total quantities made during the year of intermediate products, i.e., products which may be further processed in the establishments in which they are produced.

Larger establishments: The information given in the report relates mainly to 'larger establishments', i.e., establishments of firms employing on the average more than 10 persons. In most cases an establishment comprises the whole of the premises under the same ownership or management at a particular address (e.g., a mine or factory). Offices, warehouses, laboratories and other ancillary places of business situated apart from the producing works are not regarded as separate establishments and are included in the return for the works.

Small firms are those employing on the average 10 or fewer persons.

The estimates for the industry as a whole given in Table 1 are normally obtained by increasing the other items shown in the same proportion as total employment.

Gross output (production) is the total value of goods made and other work done during the year: it is obtained by adjusting the value of sales and work done during the year for changes in the value of stocks of products on hand for sale and work in progress.

Net output is the amount left after deducting from the value of gross output the aggregate of the cost of materials and fuel used, the amount paid for work given out, and, for 1951 and 1954, any transport payments made. This represents the value added to materials by the process of production, and constitutes the fund from which wages, salaries, rents, rates and taxes, advertising and other selling expenses and all other similar charges have to be met, as well as depreciation and profits.

Sales means sales during the year of goods made in the establishment covered by the return or made on commission for it, whether produced in the year or not. The value of sales is the net selling value, i.e., the amount charged to customers, whether on an ex-works or delivered basis, and net of any trade discounts, agents' commissions, allowances for returnable cases, purchase tax, etc. For goods charged on a delivered basis to customers overseas, firms were required to give the f.o.b. value.

Materials and fuel: The total cost of materials and fuel purchased includes all purchases during the year of materials for use in production, and of fuel (includ-

ing oil, gas and electricity) for all purposes: packing materials, including the full cost of returnable cases when first purchased; workshop and office materials; water charges; materials for repairs to buildings, plant and vehicles when carried out by firms' own work-people included in their returns; consumable tools; and parts for machinery purchased as replacements. Purchases of goods for merchanting are excluded. The cost of materials and fuel used, given in Table 2, is obtained by adjusting purchases for changes during the year in the value of stocks.

Stocks: Firms were required to give stocks of materials and fuel, products on hand for sale, and work in progress, at income tax values.

Customs and Excise Duty paid on materials purchased is normally included in the cost of materials. Finished goods are similarly valued as they were sold, duty-paid or duty-free. The net amount of any duty paid is deducted in arriving at net output.

Employment: Total employment includes working proprietors, administrative, technical and clerical employees, and operatives, but excludes outworkers, canteen employees and persons engaged in merchanting or any other activity not covered by a firm's return, who are shown separately as excluded employees. Employees are persons on the pay-roll (i.e., persons whose National Insurance cards were held by employers), whether employed full-time or part-time.

Working proprietors are proprietors of businesses other than limited companies, together with members of their families who worked in the business without receiving fixed wages or salaries. Any persons working less than half the normal hours are excluded. For Northern Ireland directors of limited companies (other than those paid by fee only) are also included.

Administrative, technical and clerical employees include directors, other than those paid by fee only (except in Northern Ireland); managers, superintendents and works foremen; research, experimental, development, technical and design employees (other than operatives); draughtsmen and tracers; travellers; and office (including works office) employees.

Operatives include all other classes of employees, i.e., broadly speaking, all manual workers.

Outworkers are persons employed by the firm who work on materials supplied by the firm in their own homes.

Wages and salaries include all overtime payments, bonuses and commissions without any deductions for income tax, insurances, contributory pensions etc. They exclude payments to working proprietors.

Capital expenditure includes expenditure on new building work, and on plant, machinery and vehicles, charged to capital account during the year, including any transport and installation costs involved. It includes expenditure in respect of establishments in Great Britain which had not begun production before the end of the year (which has not previously been included in the Census of Production reports for individual industries).

Symbols used:

- .. for not available
- for nil or negligible (less than half the final digit shown).

Where figures are rounded, e.g., given to the nearest £ thousand, there may be apparent slight discrepancies between the sums of constituent items and the totals shown. In some cases, figures have been combined with others of a similar nature where publication of separate details might disclose information relating to an individual undertaking.

Industry summary

Estimates for the industry as a whole

TABLE 1

	United Kingdom			Scotland 1954	Wales 1954
	1948	1951	1954		
Gross output (production)	£ million 84.1	£ million 114.5	£ million 113.1	£ million 4.61	£ million 1.37
Net output	32.3	41.1	45.7	1.80	0.53
Total stocks and work in progress					
At beginning of year	16.1	20.9	19.7	0.82	0.22
Change during year	+ 1.5	+ 9.1	+ 2.4	+ 0.07	+ 0.05
Capital expenditure less disposals (a)	2.5	2.7	3.2	0.07	0.04
Wages and salaries	12.7	16.1	19.1	0.83	0.21
Total employment (including working proprietors)	Thousands 34.6	Thousands 37.8	Thousands 38.2	Thousands 1.78	Thousands 0.42

(a) Capital expenditure on new building work, plant, machinery and vehicles (including (except in 1948) that incurred at establishments not yet in production), less amounts received for plant, machinery and vehicles disposed of.

Summary of returns received

TABLE 2

	Unit	Great Britain 1948	United Kingdom		
			1951	1954	
FIRMS EMPLOYING ON AVERAGE MORE THAN 10 PERSONS					
Number of establishments	No.	363	363	334	
Total value of sales and work done	£'000	79,744	106,487	106,140	
Products on hand for sale	{ at beginning of year change during year	5,694	8,856	9,378	
and work in progress		+ 1,396	+ 2,580	+ 1,328	
Gross output (production) (a)	..	79,988	109,067	107,468	
Purchases of materials and fuel	..	49,197	74,046	62,950	
Stocks of materials and fuel	{ at beginning of year change during year	9,617	11,069	9,369	
Cost of materials and fuel used		+ 19	+ 6,138	+ 917	
Payment for work done on materials given out	..	49,178	67,908	62,034	
Payment for transport (b)	..	38	54	12	
Net output	..	1,152	1,903	1,998	
Average number of employees	{ operatives others	30,772	39,202	43,424	
Total employment (d)		No.	20,028	20,685	19,686
Net output per person employed (d)	..	12,863 (c)	15,290	16,586	
Wages and salaries	{ of operatives of others	£'000	32,923	36,005	36,294
Capital expenditure		..	935	1,089	1,196
New building work (e)	..	5,582	6,791	7,963	
Plant and machinery	{ acquisitions (e) disposals	..	6,540	8,543	10,191
Vehicles		..	47	50	40
	{ acquisitions (e) disposals	..	316	565	935
		..	59	123	239
FIRMS EMPLOYING ON AVERAGE 10 OR FEWER PERSONS					
Number of returns	No.	244	288 (f)	291	
Total employment, including working proprietors	..	1,346	1,690 (f)	1,640	

(a) For the year 1948 gross output excludes payments for transport services outwards on finished goods sold. For subsequent years gross output includes payments to other firms and undertakings and to firms' own separate transport organisations.

(b) Payments to other firms and undertakings and to firms' own separate transport organisations. For the year 1948 payments cover only transport outwards of finished goods sold. For subsequent years they cover payments for transport of both finished goods sold and materials and fuel purchased.

(c) Number in week ended September 25, 1948.

(d) Excluding outworkers and including working proprietors.

(e) Excluding expenditure for establishments not yet in production.

(f) Excluding Northern Ireland. No information about small firms was collected in Northern Ireland for 1951.

Larger establishments in the United Kingdom

TABLE 3

Average number employed (a)	Estab-lish-ments	Gross output	Net output	Employees		Wages and salaries		Capital expenditure (b)	Net output per person employed (a)
				Operatives	Others	Operatives	Others		
	Number	£'000	£'000	Number	Number	£'000	£'000	£'000	£
11 - 24	79	4,307	1,619	793	610	334	379	95	1,147
25 - 49	93	9,580	3,546	1,942	1,400	776	873	267	1,058
50 - 99	75	15,751	6,192	2,958	2,459	1,188	1,462	453	1,142
100 - 199	50	20,699	8,082	3,737	3,115	1,498	1,972	623	1,180
200 - 299	11	6,939	3,038	1,562	1,146	579	743	242	1,122
300 - 499	9	8,989	4,041	1,916	1,429	736	885	332	1,208
500 - 749	11	19,142	8,136	3,597	2,932	1,343	1,719	547	1,246
750 and over	6	22,061	8,771	3,181	3,495	1,509	2,159	714	1,314
Total	334	107,468	43,424	19,686	16,586	7,963	10,191	3,274	1,196

(a) Excluding outworkers and including working proprietors.

(b) Capital expenditure on new building work and on acquisition of plant, machinery and vehicles, excluding expenditure for establishments not yet in production.

TABLE 4 - Analysis according to specialisation within the industry, 1954

No specialisation within this industry was distinguished.

Sales of the principal products of the industry, including sales of these products by establishments classified to other industries

Larger establishments in the United Kingdom

TABLE 5

	1951		1954		
	Quantity	Value	Quantity	Value	Entries
	Th.cwt.	£'000	Th.cwt.	£'000	Number
Paints, pigments, fillers and extenders in paste form, whether with oil or other medium	683	5,140	505	3,908	167
Distempers and water paints					
In paste form			1,215	4,603	172
Emulsion paints and other water paints in ready mixed form	1,585	4,918	Th.gal. 3,520(a)	5,967	180
Dry distempers	98	248	41	108	43
Paints and painters' enamels, ready-mixed, including those containing synthetic resins	Th.gal.		Th.gal.		
Cellulose, pigmented	3,303	4,892	3,313	4,844	86
Metallic paint	1,291	1,894	1,282	2,017	203
			..	308	
Bituminous paints, and solutions and emulsions for use as paint	3,592	1,762	3,511	1,660	161
	..	207	..	264	
Other	36,536	56,045	35,752	55,313	248
Unclassified paints and painters' enamels ready-mixed	628	939	-	-	-
	..	234			
Ships' bottom compositions (anti-corrosive and anti-fouling)	1,248	1,401	1,480	1,792	52
	..	244			
Varnishes and lacquers, not pigmented					
Cellulose ester and cellulose ether varnishes, lacquers and clear solutions	3,304	3,565	3,859	4,039	86

(58449)

TABLE 5 (contd.)

	1951		1954		
	Quantity	Value	Quantity	Value	Entries
	Th.gal.	£'000	Th.gal.	£'000	Number
Varnishes and lacquers, not pigmented (contd.)					
Clear oil, litho, letterpress and other printers' varnishes (including stand oil)	7,702	8,067	1,742	1,786	73
Other varnishes (including spirit varnishes and varnish stains), japans, lacquers and liquid driers	..	1,064	5,477	5,296	214
Wood preservatives (other than those containing oils of coal tar) and stains (other than varnish stains) not elsewhere specified	1,077	480	319	260	63
	..	453	..	531	
Manufactured thinners (solvent mixtures)	6,479	4,124	6,947	4,414	188
	Th.cwt.		Th.cwt.		
Mastic and other adhesive cements	123	616	136	679	60
	..	71	..	866	
Paste fillers	103	769	45	321	103
Putty	528	1,256	484	979	125
Paint removers and strippers	164	311	103	226	139
	..	234	..	293	
Paint and varnish makers' materials not elsewhere specified, including gum copal but excluding synthetic resins	330	2,560	188	1,301	35
	..	221	..	256	
	Th.gal.		Th.gal.		
French polish (b)	65	65	108	95	..
	..	11	..	46	
Artists' paints and colours, including oil and water colours	..	1,193	..	1,622	14
Other artists' materials, not elsewhere specified (c)	..	196	..	202	..
	Th.cwt.				
Waterproofing compounds, roofing compositions and similar protective products, not elsewhere specified (b)	49	215	..	1,031	23
	..	449	..	22	36
Waste products	..	64	..	292(e)	15
Work done for the industry or on commission (d)		343(e)			
Total		104,250		105,341	..
Sales in other industries (see Table 6)		4,763		4,946	..
Principal products of this industry sold by establishments in the industry		99,487		100,395	294

(a) Estimated.

(b) So far as recorded separately.

(c) For artists' brushes and brushes of fine hair see the Brushes and Brooms Industry (Volume 11, Industry C).

(d) Amount charged.

(e) Including work done for other industries.

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Sales of principal products of the industry by establishments
classified to other industries

Larger establishments in the United Kingdom

TABLE 6

	1954			Principal industries in which produced (a)
	Quantity	Value	Entries	
	Th.cwt.	£'000	Number	
Paints, pigments, fillers and extenders in paste form, whether with oil or other medium, distempers and water paints in paste form, and dry distempers	154	1,435	10	2E, 2Q, 2R, 3G
Paints and painters' enamels, ready mixed, including those containing synthetic resins	Th.gal.			
Cellulose, pigmented; and metallic paint	..	380	5	2L, 3G, 4O, 12A
Bituminous paints, and solutions and emulsions for use as paint	694	171	34	2E, 2O, 1L, 12A
Other including ships bottom compositions (anti-corrosive and anti-fouling)	224	193		
	..	226	7	4A, 2E, 2O, 2L
Varnishes and lacquers not pigmented				
Cellulose ester and cellulose ether varnishes, lacquers and clear solutions, and clear oil, litho, letterpress and other printers' varnishes (including stand oil)	310	324	26	2L, 2O, 6D
Other varnishes (including spirit varnishes, and varnish stains), japans lacquers and liquid driers	..	407		
	20	18	8	2B, 2L, 2O, 11A
	..	162		
Wood preservatives (other than those containing oils of coal tar) and stains (other than varnish stains), not elsewhere specified	Th.cwt.			
	61	473	5	2B, 2K, 2R
	..	52		
	Th.gal.			
Manufactured thinners (solvent mixture)	..	53	5	2E, 2Q, 11A
	Th.cwt.			
Putty, mastic and other adhesive cements	69	154	8	1L, 2O, 4I
	..	48		
Paint removers and strippers	..	117	..	2E, 2Q
Paint and varnish makers' materials, not elsewhere specified, excluding synthetic resins	..	115	9	
Artists' paints and colours, including oil and water colours
Waterproofing compounds, roofing compositions and similar protective products not elsewhere specified	47	47	9	1L, 2D, 2K, 12A
	..	309		
Total		4,946		

(a) The volume number and industry references given are to the industries shown in the list at the back of this report.

Sales in the industry of other than principal products

Larger establishments in the United Kingdom

TABLE 7

	1954	
	Quantity	Value
	Th.cwt.	£'000
Linseed oil		
Refined	9(a)	40
Boiled	38(a)	183
White lead, basic carbonate, dry	24	141
Chemical colours		
Synthetic organic pigments (pure or reduced)		
Lakes and toners	..	169
Pigment dyestuffs	6	124
Inorganic pigment colours and synthetic oxides of iron	..	331
Miscellaneous chemical products	..	1,234
Synthetic resins (including solutions in terms of resin content but excluding esterified natural resins and zinc resinates)	179	1,545
Lubricating oils and greases	..	280
Polishes	..	172
	Th.doz.	
Artists' brushes and brushes of fine hair	622	373
Other goods	..	1,152
Total		5,745

(a) Estimated.

Total make of intermediate products
Larger establishments in the United Kingdom

TABLE 8

	Returned in this industry		
	1951	1954	
	Quantity	Quantity	Entries
	Th.cwt.	Th.cwt.	Number
Linseed oil			
Refined	18	13	9
Boiled	67	55	28

Purchases of materials and fuel, 1954

Larger establishments in the United Kingdom

TABLE 9

	Quantity	Cost
	Th.cwt.	£'000
Materials		
Pigments (white, black and coloured), dry		
White lead (basic carbonate)	81	509
Lead oxides (including red lead, orange lead and litharge)	119	716
Zinc oxide (including leaded zinc oxide)	137	629
Earth colours (including ochres, siennas, umbers and red oxides of iron, but excluding blacks)	176	250
Black, mineral and carbon (including vegetable, lamp, acetylene and bone black)	42	248
Synthetic organic pigments (colour lakes and toners), pure or reduced	25	973
Chromium compounds (including lead and zinc greens)	81	874
Iron oxides, chemically manufactured	75	228
Titanium dioxide, pure and reduced (in terms of 98 per cent Ti O ₂)	602	4,668
Antimony oxide	29	273
Metallic powders	21	228
Lithopone	606	1,594
Other sorts	107	697
Extenders, dry		
Barytes	440	363
China clay	152	104
Whiting (including Paris White)	1,136	331
Other sorts	344	407
Paints, pigments and extenders in paste form, whether with oil or other medium		
White lead, genuine	113	678
Other paste paints	30	351
Vegetable oils		
Linseed oil		
Raw	225	868
Refined or boiled	695	3,221
Tung oil	138	873
Castor oil	67	448
Other vegetable oils	107	620
Plasticisers (other than vegetable oils)	61	636
	Th.gal.	
Solvents		
Turpentine	592	159
Petroleum solvents	20,686	4,043
Coal tar solvents	11,863	3,015
Other alcohols, esters and ketones for use as solvents	8,119	3,662
Other solvents	1,244	500

TABLE 9 (contd.)

	Quantity	Cost
	Th.cwt.	£'000
Materials (contd.)		
Resins, natural and synthetic		
Rosin (colophony)	406	1,382
Other natural resins and gums (including shellac, seedlac and sticklac)	189	1,535
Esterified natural resins and zinc resinates	61	429
Synthetic resins (including solutions in terms of resin content, but excluding esterified natural resins and zinc resinates)	481	5,021
Bitumen	197	157
Asphaltum and pitch	213	169
Lead, metallic	190	914
Collodion cotton (nitrate-cellulose), wet	82	1,142
Dyes and dyestuffs	6	219
Varnish	98	579
	..	81
Glycerine	15	195(a)
	..	42
Phthalic anhydride	53	337(a)
P.V.A. emulsions	31	319(a)
	..	88
Packing materials		
Timber and containers made of timber	..	298
Tin containers	..	6,151
Other	..	1,998
Replacement parts for plant, machinery and vehicles and consumable tools bought as replacement	..	730
All other purchased materials	..	7,350
Unclassified materials	..	114
	Th.tons	
Fuel and electricity		
Coal	39.6	174
Coke	16.3	92
Liquid fuels (including creosote/pitch mixtures)		
For use in internal combustion engines	Th.gal.	
Motor spirit (petrol) for use in road vehicles and deriv. fuel	1,912	389
Other	189	12
For burning in furnaces, boilers, kilns, etc.	4,965	212
	Th.therms	
Gas purchased		
From Gas Boards	2,873	158
From other sources, including other departments of the same firms	..	1

TABLE 9 (contd.)

	Quantity	Cost
	Th.kWh.	£'000
Fuel and electricity (contd.)		
Electricity purchased (b)		
From Electricity Boards	76,483	480
From other sources, including other departments of the same firms	..	1
All other purchased fuel		12
Total cost		62,950

(a) So far as recorded separately.

(b) The total quantity of electricity generated in firms' own establishments in this industry in 1954 was 801 Th.kWh.

Average number of employees and wages, salaries and superannuation payments

Larger establishments in the United Kingdom (a)

TABLE 10

	1951	1954
	Number	Number
Average number of employees		
Operatives	20,685	19,686
Administrative, technical and clerical employees	15,290	16,586
Total	35,975	36,272
	£'000	£'000
Wages and salaries paid to		
Operatives	6,791	7,963
Administrative, technical and clerical employees	8,543	10,191
Total	15,335	18,154
	£	£
Wages and salaries per head		
Operatives	328	405
Administrative, technical and clerical employees	559	614

TABLE 10 (contd.)

		£'000
Superannuation and other pension funds for employees and dependents (b)		
Employers' contributions	..	605
Employees covered	..	16,396
		£'000
Pension, etc. payments to former employees and dependents (b)	..	168

(a) The following persons, not included above, were also employed by larger establishments in this industry ('other workers' includes, for example, employees engaged in merchanting).

Payments to outworkers are also shown.

	United Kingdom	
	1951	1954
Canteen workers	Number	Number
Males	18	18
Females	398	380
Total	416	398
Other workers		
Males	517	490
Females	183	114
Total	700	604
Total excluded employees	1,116	1,002
Amount paid to outworkers	£'000	£'000
	14	16
Number of outworkers	Number	Number
Males	2	2
Females	181	216
Total	183	218

(b) The figures given relate to larger establishments in Great Britain only.

Employment in a specified week (a)
Larger establishments in the United Kingdom

TABLE 11

	1951			1954		
	Males	Females	Total	Males	Females	Total
Working proprietors	29	1	30	21	1	22
Operatives	15,762	4,837	20,599	15,128	4,674	19,802
Administrative, technical and clerical employees	10,070	5,360	15,430	10,719	6,021	16,740
Total employees	25,832	10,197	36,029	25,847	10,695	36,542

(a) Week ended September 22, 1951, or October 30, 1954.

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