

BOARD OF TRADE

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*The Report on the  
Census of Production  
for 1954*

Volume 10: Industry F

PAPER AND BOARD



*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 10, INDUSTRY F

PAPER AND BOARD

THIS REPORT on the Paper and Board Industry relates to establishments engaged wholly or mainly in the manufacture of paper and board and of transparent cellulose wrapping or in the coating of paper.

This industry corresponds to minimum list heading 180 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		
	£ million	£ million	£ million	£ million	£ million
Gross output (production)	131.2	305.4	274.6	44.84	5.70
Net output	44.1	105.4	103.0	17.02	1.99
Total stocks and work in progress					
At beginning of year	13.8	26.6	36.4	5.23	0.80
Change during year	+ 3.0	+ 29.2	+ 4.6	+ 0.55	- 0.19
Capital expenditure less disposals (a)	5.1	9.1	13.1	2.12	0.13
Wages and salaries	21.7	30.4	39.8	7.13	0.97
Total employment (including working proprietors)	Thousands 67.0	Thousands 73.9	Thousands 78.3	Thousands 15.46	Thousands 2.06

(a) Capital expenditure on new building work, plant, machinery and vehicles (including (except in 1948) that incurred in Great Britain for 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
<b>FIRMS EMPLOYING ON AVERAGE MORE THAN 10 PERSONS</b>				
Number of establishments	No.	275	282	278
Total value of sales and work done	£'000	130,289	301,085	273,318
Products on hand for sale	at beginning of year change during year	4,446	5,808	8,947
and work in progress		+ 1,121	+ 3,619	+ 273
Gross output (production) (a)		129,449	304,704	273,591
Purchases of materials and fuel		87,683	219,279	167,732
Stocks of materials and fuel	at beginning of year change during year	9,137	20,729	27,349
		+ 1,856	+ 25,517	+ 4,315
Cost of materials and fuel used		85,828	193,762	163,417
Payment for work done on materials given out		89	132	313
Payment for transport (b)		1,961	5,683	7,236
Net output		43,532	105,126	102,624
Average number of employees	{ operatives others	No. 58,276	64,479	67,310
Total employment (d)		No. 7,849 (c)	9,918	10,732
Net output per person employed (d)		£ 66,140	73,690	78,055
		£ 658	1,427	1,315
Wages and salaries	{ of operatives of others	£'000 17,325	24,376	32,166
		" 4,045	5,987	7,500
Capital expenditure				
New building work (e)		741	1,873 (f)	2,630
Plant and machinery	{ acquisitions (e) disposals	" 4,321	6,993	10,084
		" 165	156	191
Vehicles	{ acquisitions (e) disposals	" 196	398	445
		" 17	45	124

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TABLE 2 (contd.)

	Unit	Great Britain 1948	United Kingdom	
			1951	1954
FIRMS EMPLOYING ON AVERAGE 10 OR FEWER PERSONS				
Number of returns	No.	45	29(g)	28
Total employment, including working proprietors	"	235	158(g)	152

- (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 for transport services.
- (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) Corrected figure.
- (g) Excluding Northern Ireland. No information about small firms was collected in Northern Ireland for 1951.

## Analysis by size, 1954

## 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	20	1,039	467	347	64	141	60	20	1,136
25 - 49	24	3,251	1,321	758	119	335	108	61	1,501
50 - 99	62	13,750	5,403	3,943	588	1,760	467	783	1,191
100 - 199	57	24,015	9,031	7,318	1,085	3,218	746	853	1,074
200 - 299	31	28,567	10,389	6,353	1,145	3,148	909	895	1,386
300 - 399	24	24,009	8,817	7,335	987	3,305	664	854	1,060
400 - 499	17	22,826	9,510	6,541	989	3,015	778	988	1,263
500 - 749	22	47,266	17,525	11,988	1,594	5,604	1,165	3,311	1,290
750 - 999	11	36,401	12,428	8,480	1,272	4,334	845	1,261	1,274
1,000 - 1,499	5	20,863	8,386	4,992	818	2,593	476	2,072	1,443
1,500 and over	5	51,605	19,348	9,255	2,071	4,713	1,281	2,062	1,708
Total	278	273,591	102,624	67,310	10,732	32,166	7,500	13,159	1,315

- (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.

Analysis according to specialisation within the industry, 1954

## Larger establishments in the United Kingdom

TABLE 4

	Unit	Specialist producers of								Maker coaters	Coaters only	Remain- der of the in- dustry	Total
		A	B	C	D	E	F	G	H				
		A. Transparent cellulose film											
		E. Uncoated printing paper other than newsprint											
		C. Writing paper											
		D. Kraft paper											
		E. Strawpaper and strawboard weighing not more than 90lb. to the standard ream											
		F. Other packings and wrappings											
		G. Board other than coated											
		H. Oiled, waxed and waterproof wrappings											
Number of establishments	No.	5	26	19	11	6	20	44	23	8	27	89	278
Total value of sales and work done	£'000	13,334	41,328	15,141	23,709	3,649	7,523	39,200	13,881	8,312	11,803	95,438	273,318
Sales of characteristic products	"	12,815	29,561	10,331	14,746	2,982	6,515	26,205	11,764	5,076	9,880		
Products on hand for sale and work in progress	{ at beginning of year	457	1,099	845	412	29	217	669	414	434	439	3,933	8,947
	{ change during year	+ 78	- 24	- 151	+ 159	- 10	+ 20	+ 124	+ 163	- 93	+ 20	- 12	+ 273
Gross output (production)	"	13,412	41,303	14,990	23,869	3,640	7,543	39,324	14,044	8,219	11,823	95,425	273,591
Purchases of materials and fuel	"	7,156	26,950	8,816	17,395	2,043	4,407	19,979	9,883	4,958	7,484	58,663	167,732
Stocks of materials and fuel	{ at beginning of year	929	4,212	1,201	2,880	229	825	3,718	1,377	775	830	10,373	27,349
	{ change during year	+ 358	+ 461	+ 156	+ 1,046	+ 13	+ 3	+ 191	+ 407	+ 82	+ 244	+ 1,354	+ 4,315
Cost of materials and fuel used	"	6,798	26,489	8,661	16,349	2,029	4,403	19,788	9,476	4,876	7,240	57,309	163,417
Payment for work done on materials given out	"	117	737	597	650	68	250	1,890	212	317	293	2,418	313
Payment for transport	"												7,236
Net output	"	6,496	14,078	5,732	6,870	1,542	2,890	17,647	4,356	3,026	4,290	35,698	102,624
Average number of employees	No.	2,955	9,177	5,037	3,690	728	2,372	9,679	2,575	2,347	3,333	25,417	67,310
Total employment (a)	"	1,142	1,103	653	702	131	317	1,737	666	309	594	3,378	10,732
Net output per person employed (a)	£	1,586	1,369	1,007	1,564	1,795	1,075	1,545	1,344	1,139	1,092	1,239	1,315
Wages and salaries	{ of operatives	1,502	4,435	2,208	2,015	429	1,098	5,139	1,236	1,061	1,378	11,664	32,166
	{ of others	691	705	423	407	98	256	1,401	536	222	453	2,307	7,500
Capital expenditure	"	281	236	37	160	10	33	864	79	78	51	803	2,630
New building work (b)	"	1,196	1,079	284	860	133	241	2,166	233	338	258	3,296	10,084
Plant and machinery	{ acquisitions (b)	3	15	12	18	-	7	13	10	8	2	102	191
	{ disposals (b)	35	36	11	52	23	19	70	27	12	29	132	445
Vehicles	{ acquisitions (b)	7	6	4	(c)	(c)	1	19	2	2	6	22	124
	{ disposals												

- (a) Excluding outworkers and including working proprietors.
- (b) Excluding expenditure for establishments not yet in production.
- (c) Owing to the risk of disclosure of information relating to individual firms, separate details cannot be given.

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 Th. tons	Value £'000	Quantity Th. tons	Value £'000	Entries Number
Paper, other than coated					
Machine glazed					
Kraft	46.7	6,957	72.2	6,528	23
Imitation kraft	27.9	2,795	14.9	1,114	16
Poster, fully bleached	13.2	2,031	11.3	1,325	13
Pure sulphite, weighing 10lb. or more to the standard ream	35.7	5,404	47.2	4,727	32
All tissue, sulphite, mechanical and other, weighing less than 10lb. to the standard ream	13.9	2,254	13.6	1,444	5
Envelope	24.0	2,958	27.3	2,294	18
Manilla (other than envelope)	12.4	2,014	13.5	1,800	13
Other machine glazed uncoated paper					
Packing and wrapping	19.7	1,802	14.5	1,070	24
Other descriptions	43.8	6,819	28.9	4,147	26
Other than machine glazed					
Hand-made and mould-made papers					
Writing and drawing	0.5	257	0.5	199	5
Writing (other than hand-made and mould-made)	139.8	22,677	154.5	20,057	49
Printing paper					
Wallpaper long elephants (i.e. base paper for wallpaper)	38.6	2,742	45.8	3,007	14
Newsprint	529.8	28,437	614.2	31,605	10
Hand-made, mould-made and other uncoated printing paper	374.7	39,219(a)	466.4	39,812	69
Kraft	127.6	18,432	128.4	10,062	19
Imitation kraft	12.7	1,186	6.9	485	17
Genuine vegetable parchment	14.2	2,522	9.6	1,401	..
Glazed imitation parchment	12.9	2,285	22.9	2,951	20
Grease-proof and imitation grease-proof paper	7.8	1,169	15.1	1,530	12
Strawpaper and strawboard weighing not more than 90lb. to the standard ream	116.9	5,643	128.0	5,048	20
Blotting paper (including filter paper)	5.1	1,582	5.7	1,632	20
Cigarette paper in bobbins, reels or sheets	7.1	2,139	6.7	2,071	5
Carbonising tissue	3.1	1,161	3.0	1,063	5
Raw base paper for sensitising with silver salts or other solutions	13.0	2,341	15.4	2,562	9
Uncoated paper not specified above					
Weighing 10lb. or more to the standard ream					
Packing and wrapping papers	59.1	5,241	63.4	4,253	47
Other	129.9	18,278(a)	120.1	13,665	64
Weighing less than 10lb. to the standard ream	11.8	2,668	15.9	2,966	8
Total paper, other than coated	1,841.8	191,011	2,065.6	168,821	..
Board, other than coated					
Machine glazed					
Folding boxboard	24.1	2,484(a)	29.8	1,888	8
Other			17.8	1,766	5

TABLE 5 (contd.)

	1951		1954		
	Quantity Th. tons	Value £'000	Quantity Th. tons	Value £'000	Entries Number
Board, other than coated (contd.)					
Other than machine glazed					
Folding boxboard	114.3	6,669	117.7	6,461	7
Kraft board in reels	51.2	4,108	40.5	2,629	..
Strawboard or chipboard (including container middles) weighing more than 90lb. to the standard ream					
Lined	81.7	3,580	81.5	3,346	7
Other	131.1	4,708	210.9	6,102	21
Electrical insulating pressboard	3.4	660	4.3	827	..
Boot and shoe board	15.9	1,200	19.2	1,834	20
Fibre building board (all types)	48.3	2,223	65.8	3,111	10
Other uncoated board	85.7	6,832(a)	85.9	5,122	34
Total board, other than coated	555.7	32,465	673.5	33,085	..
Paper coated (excluding paper hangings and waterproof wrappings)					
Coated with metal coating on one or both sides (embossed or other)	5.7	2,301	9.4	2,737	17
Coated with white or coloured coating on both sides (other than embossed)	74.6	11,408	87.2	11,564	25
Coated with white or coloured coating on one side only (other than embossed)	33.8	6,786	35.6	6,379	33
Other coated paper (including embossed)	14.7	3,400	7.2	1,742	26
Total paper coated	128.8	23,895	139.3	22,422	..
Board, coated (excluding paper hangings)					
Coated with white or coloured coating on both sides (other than embossed)	5.1	917	3.9	645	19
Coated with white or coloured coating on one side only (other than embossed)	51.3	5,259	44.4	4,067	21
Other coated board (including embossed)	3.9	731	6.1	559	16
Total board coated	60.2	6,907	54.4	5,271	..
Transparent cellulose film in sheets or rolls	19.6	9,009	27.9	12,815	..
Manufactures of paper and board	2584				
Laminated and reinforced (e.g. cloth lined) paper (excluding bituminised laminated kraft)	9.6	1,632	5.8	1,396	14
Laminated and reinforced (e.g. cloth lined) board	22.2	2,269	11.8	855	13
Roofing and flooring felt paper	34.1	2,097	33.9	1,588	10
Oiled, waxed and other waterproof wrappings, not elsewhere specified	84.3	16,251	102.8	15,095	55
Other manufactures of paper and board	0.3	130	-	-	-
Straw pulp (b)	10.8	610	12.1	535	..
Waste products	..	358	..	267	80
Work done for the trade or on commission (c)					
Paper coating		386		279	6
Other		332		380	35
Total		287,352(a)		264,289	..
Sales in other industries (see Table 6)		3,987		6,003	..
Principal products of this industry sold by establishments in the industry		283,365(a)		258,287	263

(a) Corrected figure.  
(b) So far as recorded separately.  
(c) Amount charged.

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. tons	£'000	Number	
Paper, other than coated	3.3	209	..	10H
Total paper, other than coated	3.3	209	..	
Board, other than coated				
Fibre building board (all types)	1.4	67	..	10H, 4K, 1L
Other uncoated board	3.4	161	..	
Total board, other than coated	4.8	229	..	
Paper, coated (excluding paper hangings and waterproof wrappings)				
Coated with metal coating on one or both sides (embossed or other)	5.0	1,608	5	3G, 10I
Other coated paper (including embossed)	1.0	263	6	
Total paper, coated	6.0	1,871	..	
Board, coated (excluding paper hangings)				
Coated board (including embossed)	1.2	110	..	
Total board, coated	1.2	110	..	
Laminated and reinforced (e.g. cloth lined) paper (excluding bituminised laminated kraft)	0.5	297	..	10I, 10G
	..	284	..	
Laminated and reinforced (e.g. cloth lined) board	2.7	123	..	10H, 10I
	..	202	..	
Oiled, waxed and other waterproof wrappings, not elsewhere specified; roofing and flooring felt paper; work done for the trade or on commission	12.3	2,029	30	
	..	650	..	
Total		6,003	..	

(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
Paper bags and sacks	218.9	1,155
Purchased paper, corrugated, creped, crinkled, gummed, etc.	158.9	950
	..	69
Bobbins and tubes (other than for textile machinery) and paper rolls and coils including toilet paper	35.7	180
	..	26
Other manufactures of paper and board	..	10,123
Articles manufactured from transparent cellulose film	21.2	769
Cellulose wadding and articles manufactured therefrom	81.3	516
Other goods	..	673
Electricity sold	Th.kWh.	
Steam sold (a)	42,020	178
Work done (b)	..	252
	..	139
Total	..	15,031

(a) So far as recorded separately.

(b) Amount charged.

(59148)

## Total make of intermediate products

Larger establishments in the United Kingdom

TABLE 8

	Returned in this industry		
	1951	1954	
	Quantity	Quantity	Entries
	Th. tons	Th. tons	Number
Paper, other than coated			
Machine glazed			
Weighing 10lb. or more to the standard ream	230.0	241.3	54
Weighing less than 10lb. to the standard ream	17.6	13.6	5
Other than machine glazed			
Weighing 10lb. or more to the standard ream	1,655.3	1,890.8	142
Weighing less than 10lb. to the standard ream	24.0	30.1	14
Board, other than coated			
Machine glazed	61.4	93.2	11
Other than machine glazed	654.4	751.6	52

## Purchases of materials and fuel, 1954

Larger establishments in the United Kingdom

TABLE 9

	Quantity	Cost
	Th.cu. fthms.	£'000
Materials		
Pulpwood	100.6	3,244
Wood pulp	Th. tons (air dry weight)	
Chemical		
Dry bleached		
Sulphite		
Soda and sulphate	190.2	11,251
Dry unbleached	127.4	7,095
Sulphite		
Strong, easy bleaching and bleachable	372.3	17,750
Other	14.9	373
Soda and sulphate		
Kraft, easy bleaching and bleachable	209.7	9,009
Other	35.2	1,744
Wet	147.0	6,587
Mechanical		
Dry	22.3	624
Wet	611.0	16,976
Straw	Th. tons	
Straw pulp, bleached	115.2	536
Esparto	20.2	942
Wastepaper (including newspaper over-issues)	335.8	5,914
Linen, cotton, hemp, jute and ramie rags, not pulled	949.5	10,098
Cotton waste and cotton linters (raw)	51.5	2,726
Other fibrous materials (including waste)	14.8	404
China clay and other loadings	52.6	1,552
	..	173
	252.9	2,461

(59148)

	Quantity	Cost
	Th.tons	£'000
Materials (contd.)		
Sulphuric acid (in terms of 100 per cent. acid)	44.4	472
Chlorine	16.8	500
Caustic soda (on the basis of 76° E)	75.5	1,066
Soda ash (on the basis of 58°)	31.1	346
Glycerine and glycerine substitutes	5.9	1,341
Bleaching powder	14.1	149
	..	34
Glue and other adhesives (other than casein)	12.6	1,071
	..	347
Wax (a)	9.5	910
	..	421
Resin and resin size	41.0	2,154
Casein	7.8	1,292
Alum	81.1	1,357
Dyes and dyestuffs	Th.cwt. 63.8	988
Inorganic pigment colours	51.3	288
	..	143
Aluminium (a)	38.0	830
Printing ink (a)	23.2	400
	..	295
Lime	Th.tons 73.9	350
Body paper for coating	42.8	4,546
	..	596
Body board for coating	12.6	986
Paper and board purchased for oiling, waxing, corrugating, crepeing, etc.	109.7	9,585
Paper machine wires	Th.sq.ft. 3,232.6	890
Machine felts		
Of wool	7,594.7	1,883
Of cotton	3,281.0	682
Other replacement parts for machinery, plant and vehicles and consumable tools bought as replacements	..	5,998
Packing materials	Th.cwt.	
Paper for wrapping and packing	383.4	1,409
Other	..	287
All other purchased materials	..	1,514
	..	7,012
Fuel and electricity	Th.tons	
Coal	4,005.0	14,251
Coke	84.0	254
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	1,639.5	315
Other	906.3	50
For burning in furnaces, boilers, kilns, etc.	19,182.7	715
Gas purchased	Th.therms 630.6	40
Electricity purchased (b)	Th.kWh.	
From Electricity Boards	470,726	2,112
From other sources, including other departments of the same firms	40,122	184
All other purchased fuel		207
Total cost		167,732

(a) So far as recorded separately.

(b) The total quantity of electricity generated in firms' own establishments in this industry in 1954 was 1,908,498 Th.kWh.

(59148)

## Average number of employees, and wages, salaries and superannuation payments

## Larger establishments in the United Kingdom

TABLE 10

	1951	1954
	Number	Number
Average number of employees		
Operatives	64,479	67,310
Administrative, technical and clerical employees	9,198	10,732
Total	73,677	78,042
Wages and salaries paid to	£'000	£'000
Operatives	24,376	32,166
Administrative, technical and clerical employees	5,987	7,500
Total	30,362	39,666
Wages and salaries per head	£	£
Operatives	378	478
Administrative, technical and clerical employees	651	699
Superannuation and other pension funds for employees and dependents (a)		£'000
Employers' contributions	..	1,355
Employees covered	..	Number 41,591
Pension, etc. payments for former employees and dependents (a)	..	£'000 223

(a) 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
	Number					
Working proprietors	13	-	13	13	-	13
Operatives	51,756	13,268	65,024	55,399	13,087	68,486
Administrative, technical and clerical employees	6,319	2,939	9,258	7,478	3,363	10,841
Total employees	58,075	16,207	74,282	62,877	16,450	79,327

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

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