

137 Paper and board

This Report on the Paper and Board Industry relates to establishments engaged wholly or mainly in manufacturing all types of paper and board including newsprint, printing and writing paper, wrapping paper, cigarette paper, cardboard and building board; and paper coating. Paper sensitizing is excluded.

This industry corresponds to minimum list heading 481 in the Standard Industrial Classification (Revised 1968) which has been used for the first time as a basis of classification in the 1968 Census. The definition of this industry however is unchanged from the last detailed Census of Production for 1963 in which it was reported (Part 114).

METHOD OF CLASSIFICATION

The classification of returns to this industry followed the standard procedure as outlined in the notes on page (i). In classifying returns to the sub-divisions of the industry shown in Table 4, they were first classified according to whether their sales of coated paper and board were greater than their sales of uncoated paper and board. Returns with greater sales of coated paper were classified to the sub-division 'Coated paper and board including oiled, waxed and other water-proof wrappings'. Other returns were classified to one of the remaining sub-divisions according to which group of products ranked largest in their sales.

In interpreting the data in the tables it is essential to bear in mind the notes and definitions which appear on pages (i) to (iv).

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(c) Including services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered).

(d) Administrative, technical and clerical employees.

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

(f) Acquisitions less disposals.

TABLE 1 Industry summary, 1963 and 1968
United Kingdom (a) (b)

	Unit	All establishments		
		1963	1968	
Number of enterprises	No.	192	170	
Number of establishments	"	318	271	
Gross output	£'000	383,969	461,032	
Net output	"	144,725	170,163	
Net output per head	£	1,637	2,236	
Sales and work done	{ goods produced and work done (c)	£'000	378,654	449,035
	{ merchanted goods and canteen takings	"	5,041	9,108
Purchases	{ materials for use in production and packaging and fuel	"	224,368	273,721
	{ goods for merchenting and canteen purchases	"	4,268	8,051
Payments to other organisations	{ for work done on materials given out for transport	"	889	768
	{ by road	"	9,932	10,418
	{ by rail and other means excluding postal services	"			1,524
Stocks and work in progress				
Total stocks and work in progress	{ change during year	"	+ 487	+ 6,502
	{ at end of year	"	62,461	72,871
Goods on hand for sale	{ change during year	"	+ 235	+ 2,464
	{ at end of year	"	19,661	23,742
Work in progress	{ change during year	"	+ 39	+ 425
	{ at end of year	"	4,256	6,497
Materials, stores and fuel	{ change during year	"	+ 214	+ 3,612
	{ at end of year	"	38,543	42,631
Number employed on average during the year	{ total, including working proprietors	Th.	88.4	76.1
	{ operatives	"	73.3	61.7
	{ other employees (d)	"	15.0	14.3
Wages and salaries	{ of operatives	£'000	54,383	66,484
	{ of other employees (d)	"	14,899	18,384
Capital expenditure (e)				
Total	"	22,569	21,917	
New building work	"	4,091	3,184	
Land and existing buildings (f)	"	- 128	- 1,566	
Plant and machinery (f)	"	18,058	19,694	
Vehicles (f)	"	548	606	

(a) For 1968, estimates for establishments not making satisfactory returns and for small establishments, from which only employment data were collected, accounted for 2 per cent. of the total figures in which they were incorporated: of this, unsatisfactory returns accounted for 1 per cent. For 1963 the comparable figures were less than 1 per cent. in both cases.

(b) The following information relates to small establishments (employing fewer than 25 persons) in this industry. It includes an estimate for small establishments not making satisfactory returns.

	1963	1968
Number of establishments	55	58
Average number employed		
Working proprietors	51	39
Other persons employed	542	556

Footnotes continued on page 137/2.

TABLE 2 Analysis by size of establishment within the industry, 1968

(i) Output and employment

All establishments: United Kingdom

Number employed on average during the year by the establishment (a)	Estab-lish-ments	Enter-prises (b)	Total number employed on average during the year (a)	Gross output	Net output	Net output per head
	Number	Number	Number	£'000	£'000	£
1-5	13	13	43	..	..	..
6-10	13	13	95	..	..	..
11-24	26	26	444	..	..	..
25-49	17	16	635	3,724	1,409	2,219
50-99	36	30	2,753	13,938	5,433	1,974
100-199	45	34	6,325	42,951	15,569	2,462
200-299	35	30	8,432	51,437	21,554	2,556
300-399	14	12	5,015	27,658	9,843	1,963
400-499	16	14	7,239	36,664	13,961	1,929
500-749	16	12	9,900	55,193	19,424	1,962
750-999	8	8	6,852	36,581	12,889	1,881
1,000-1,499	12	10	14,040	84,172	34,923	2,487
1,500 and over	7	5	13,556	100,483	32,115	2,369
Unsatisfactory returns	13	11	788	..	..	..
Total	271	170	76,117	461,032(c)	170,163(c)	2,236(c)

(ii) Employees, wages and salaries

All establishments: United Kingdom

Number employed on average during the year by the establishment (a)	Employees		Wages and salaries		Wages and salaries per head	
	Oper-atives	Others (d)	Oper-atives	Others (d)	Oper-atives	Others (d)
	Number	Number	£'000	£'000	£	£
1-5	..	..	..	..	..	..
6-10	..	..	..	..	..	..
11-24	..	..	..	..	..	..
25-49	513	117	532	131	1,038	1,118
50-99	2,213	530	2,088	606	944	1,144
100-199	5,053	1,265	5,211	1,666	1,031	1,317
200-299	6,781	1,651	7,126	2,130	1,051	1,290
300-399	4,060	954	3,911	1,082	963	1,135
400-499	5,845	1,394	5,890	1,768	1,008	1,263
500-749	8,229	1,671	8,155	2,148	991	1,286
750-999	5,612	1,240	5,919	1,640	1,055	1,322
1,000-1,499	11,332	2,707	12,697	3,372	1,120	1,246
1,500 and over	11,017	2,539	13,794	3,521	1,252	1,387
Unsatisfactory returns	..	..	..	..	..	..
Total	61,737(c)	14,317(c)	66,484(c)	18,384(c)	1,077(c)	1,284(c)

(a) Including working proprietors.

(b) The sum of the figures for the size groups exceeds the total for the industry to the extent that enterprises made returns for establishments in more than one size group.

(c) Including estimates for establishments employing fewer than 25 persons and for establishments not making satisfactory returns.

(d) Administrative, technical and clerical employees.

TABLE 3 Percentage analysis of employees, by age and sex, 1969 (a)

All establishments: United Kingdom

Ages	Males	Females	All employees
	Per cent.	Per cent.	Per cent.
Under 18	3	2	5
18 and over	77	18	95
All ages	80	20	100

Source: Department of Employment

(a) The percentages relate to the numbers employed (excluding working proprietors) at June 1969, the earliest date for which the information is available on the basis of the Standard Industrial Classification, (Revised 1968).

Footnotes to Table 4.

- (a) Some establishments employing fewer than 25 persons were included in returns for larger establishments. These amounted to 1 establishment in 1968 and 4 in 1963.
- (b) The method of classifying returns to sub-divisions of the industry is explained in the notes; the characteristic products of each sub-division are identified in Table 5.
- (c) The sum of the figures for the sub-divisions exceeds the total for the industry to the extent that enterprises made returns for more than one sub-division.
- (d) Including services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered).
- (e) Direct sales of goods (excluding canteen takings) made to, and work done for, the general public by larger establishments are included. These amounted to £7,000 in 1968. Similar information is not available for 1963.
- (f) Characteristic products relate only to specific sub-divisions of the industry.
- (g) For sub-divisions of the industry, this is the ratio of sales of characteristic products to total sales of goods produced and work done. For the industry as a whole, this is the ratio of total sales of principal products by the industry to total sales of goods produced and work done.
- (h) Administrative, technical and clerical employees.
- (i) Excluding expenditure for establishments not yet in production.
- (j) Acquisitions less disposals.

TABLE 4 Analysis of larger establishments, 1963 and 1968
Establishments employing 25 or more persons: Analysis of returns received, United Kingdom (a)

	Unit	Sub-divisions of the industry (b)				Sub-divisions of the industry (b)								
		Coated paper and board including oiled, waxed and other waterproof wrappings		Newsprint		Other printing and writing papers	Industrial and special purpose papers		Board, other than coated or laminated					
							Packaging	Other						
		01	02	03	06	07		08						
		1963	1968	1963	1968	1963	1968	1963	1968	1963	1968			
Number of enterprises (c)	No.	39	27	3	5	33	26	24	22	14	16	22	17	
Number of establishments	"	59	40	8	7	59	40	38	30	20	22	29	18	
Gross output	£'000	64,318	72,269	48,857	62,178	93,658	95,671	35,073	52,694	49,372	58,448	16,899	24,251	
Net output	"	21,944	25,401	15,484	18,417	36,099	35,245	15,180	25,185	21,145	22,801	7,975	9,789	
Net output per head	£	1,394	2,137	1,846	2,332	1,499	2,073	1,548	2,357	1,996	2,369	1,507	2,198	
Sales and work done	£'000	63,050	68,165	49,236	61,613	92,826	93,643	34,348	51,910	49,216	58,527	15,778	21,269	
	{ goods produced and work done (d)(e)													
	{ merchanted goods and canteen takings	"	1,012	3,151	102	477	654	829	492	286	93	106	1,116	2,638
Sales of characteristic products	"	45,825	55,665	30,816	41,928	68,204	77,033	22,249	34,895	31,786	48,151	12,078	16,473	
Index of specialisation (g)	Per cent.	73	82	63	68	73	82	65	67	65	82	77	77	
Purchases	£'000	39,628	43,336	30,734	42,057	54,485	58,178	18,524	26,626	26,651	33,747	7,581	11,486	
	{ materials for use in production and packaging, and fuel													
	{ goods for merchenting and canteen purchases	"	736	2,768	92	494	607	732	447	251	83	103	923	2,310
	{ for work done on materials given out	"	318	155	48	264	65	160	102	41			51	36
Payments to other organisations	"													
	{ for transport													
	{ by road	"		1,243		1,453		2,399		837		1,572		729
	{ by rail and other means excluding postal services	"	1,391		304	200	2,453	457	542	197			564	19
Stocks and work in progress														
Goods on hand for sale	{ change during year	"	+ 183	+ 631	- 490	+ 129	+ 226	+ 1,062	+ 175	+ 438	+ 128	- 78	+ 8	+ 303
	{ at end of year	"	3,879	4,118	2,192	2,993	6,125	6,199	2,121	3,606	948	1,333	953	1,669
Work in progress	{ change during year	"	+ 74	+ 322	+ 9	- 41	- 48	+ 138	+ 58	+ 60	- 65	- 106	- 3	+ 43
	{ at end of year	"	1,324	1,748	30	208	1,004	1,938	1,089	1,462	288	179	174	247
Materials, stores and fuel	{ change during year	"	- 300	+ 939	- 1,049	+ 707	+ 51	+ 1,499	- 278	+ 444	+ 254	- 225	+ 195	+ 118
	{ at end of year	"	4,861	5,817	6,332	8,073	8,803	9,757	3,524	4,829	4,763	4,520	1,355	1,509
Number employed on average during the year	No.	15,745	11,884	8,386	7,899	24,077	17,004	9,807	10,687	10,593	9,624	5,292	4,453	
	{ operatives	"	12,886	9,200	7,187	6,626	20,474	14,117	7,847	8,637	8,639	7,639	4,338	3,621
	{ other employees (h)	"	2,853	2,683	1,199	1,273	3,599	2,882	1,956	2,048	1,985	944	828	
Wages and salaries	£'000	8,709	9,351	5,993	7,944	14,146	14,310	5,794	8,752	7,468	9,501	3,181	3,601	
	{ of operatives	"	2,756	3,196	1,266	1,769	3,413	3,707	1,936	2,591	2,149	2,799	956	1,035
	{ of other employees (h)	"	676	1,016	834	1,199	691	1,014	738	1,013	864	1,244	733	994
Wages and salaries per head	£	966	1,191	1,056	1,389	948	1,286	990	1,265	1,100	1,410	1,013	1,250	
Capital expenditure (i)														
New building work	£'000	597	447	164	162	932	557	967	705	563	272	404	179	
Land and existing buildings	{ acquisitions	"	112	18		22	31	95	28	-	12	56		
	{ disposals	"	360	214	28(j)	94	352	1	216	30	36	5	- 789(j)	
Plant and machinery	{ acquisitions	"	2,989	3,496	2,004	1,298	3,207	4,162	3,015	3,350	3,243	2,485	1,437	871
	{ disposals	"	76	63	7	19	47	77	84	17	89	19	5	11
Vehicles	{ acquisitions	"	139	134	50	35	110	122	76	110	83	98	83	110
	{ disposals	"	46	54	3	12	27	33	22	36	18	33	21	27

Continued on next page

TABLE 4 (continued)

	Unit	Sub-divisions of the industry (b)		Total	
		Remainder including household toilet papers and tissues and wrapping papers other than oiled, waxed and other waterproof wrappings			
		04, 05, 09			
		1963	1968	1963	1968
Number of enterprises (c)	No.	39	37	144	111
Number of establishments	"	54	50	267	207
Gross output	£'000	73,403	87,368	381,580	452,880
Net output	"	25,997	30,315	143,825	167,153
Net output per head	£	1,863	2,293	1,637	2,236
Sales and work done	£'000	71,845	85,967	376,299	441,095
	"	1,542	1,461	5,010	8,947
Sales of characteristic products	"	(f)	(f)	(f)	(f)
Index of specialisation (g)	Per cent.	..	..	93	97
Purchases	£'000	45,369	53,451	222,972	268,881
	"	1,354	1,249	4,242	7,908
Payments to other organisations	"	2,023	2,420	884	754
	"			9,870	1,497
Stocks and work in progress	"				
Goods on hand for sale	"	+ 3	- 64	+ 233	+ 2,421
	"	3,321	3,404	19,539	23,322
Work in progress	"	+ 14	+ 3	+ 38	+ 418
	"	320	601	4,230	6,382
Materials, stores and fuel	"	+1,340	+ 67	+ 212	+ 3,548
	"	8,665	7,372	38,304	41,877
Number employed on average during the year	No.	13,954	13,220	87,854	74,771
	"	11,506	10,836	72,877	60,676
	"	2,430	2,372	14,935	14,071
Wages and salaries	£'000	8,801	11,881	54,092	65,341
	"	2,346	2,971	14,823	18,068
Wages and salaries per head	£	765	1,096	742	1,077
	"	966	1,252	992	1,284
Capital expenditure (i)	£'000	439	806	4,065	3,128
New building work	"		11	388	170
Land and existing buildings	"	51(j)	23	515	1,709
Plant and machinery	"	2,415	4,048	18,310	19,710
	"	56	159	365	365
Vehicles	"	172	213	713	822
	"	32	33	169	227

For notes to this table - see page 137/5.

TABLE 5 Sales of principal products of the industry by larger establishments, including sales by establishments classified to other industries, 1963 and 1968

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

Industry sub-division (a)	1963		1968		Enterprises	Entries
	Quantity	Value	Quantity	Value		
Paper, other than coated	Th.tons	£'000	Th.tons	£'000	Number	Number
02 Newsprint	682	39,141	734	47,336	5	7
03 Other printing and writing papers						
Mechanical printings			204	16,012	13	19
Wallpaper base			84.0	6,365	11	20
Base paper for off-machine coating						
Woodfree			60.0	8,149	13	26
Esparto and part mechanical furnish	808	83,518	14.6	1,959	9	11
Rag papers			11.7	2,933	13	19
			..	1,335		
Other esparto (not for coating)			69.2	10,383	14	24
Other woodfree (not for coating)			401	52,123	33	53
04, 05, 09 Food wrapping papers						
Imitation parchment (glazed and unglazed) including waxing and unbleached	116	13,970	27.8	3,931	13	17
Other			35.3	5,788	9	12
04, 05, 09 Kraft wrapping papers, bleached and unbleached						
Machine glazed	226	18,121	141	13,997	19	26
Other			116	10,464	16	22
04, 05, 09 Other wrapping and packing papers						
Fluting and case liners	..	19,558	389	15,549	14	27
Other			118	9,723	20	32
04, 05, 09 Cellulose wadding	..	1,459	8.1	1,598	11	11
			..	394		
04, 05, 09 Household toilet papers and tissues	41.4	4,384(b)	55.9	6,663	5	7
04, 05, 09 Other tissues (wrapping, cigarette and other industrial, etc)	28.8	4,890	33.0	6,284	11	15
06 Industrial and special purpose papers	323	32,689	326	41,237	37	56
	..	6,478				
Total paper, other than coated (including cellulose wadding)	2,226	196,712	2,829	260,496	..	..
	..	27,495	..	1,730		
07 Board, other than coated or laminated						
Packaging boards						
Solid pulpboards, duplex and triplex boards (including body-board for off-machine coating)			119	9,464	9	15
Lined chipboard	716	33,098	311	19,911	10	17
Test jute liner			158	8,232	8	14
Other			459	16,722	14	20
08 Industrial and special purpose boards	..	7,016(b)	190	15,086	19	21
08 Building boards	44.2	2,468(b)	24.9	1,384	18	19
	..	1,792	..	1,156		
08 Other boards	81.3	7,611	91.3	10,968	18	25
	..	1,518				
Total board, other than coated or laminated	841	43,178	1,353	81,767
	..	10,327	..	1,156		

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TABLE 5 (continued)

Industry sub-division (a)	1963		1968				
	Quantity	Value	Quantity	Value	Enterprises	Entries	
01	Th.tons	£'000	Th.tons	£'000	Number	Number	
Paper, coated (excluding paper hangings and waterproof wrappings)							
Coated printings (other than embossed)							
Coated with white or coloured coating on one side only	41.0	6,776	61.0	9,963	15	21	
Coated with white or coloured coating on both sides	154	20,947	187	25,740	14	21	
Other coated paper (including embossed)	..	9,898	48.9	14,413	18	20	
Total paper, coated	{ 195 ..	{ 27,722 9,898	{ 297	{ 50,116	{ ..	{ ..	
01	Board, coated	66.6	7,735	96.4	12,395	13	25
		Th.cwt.		Th.cwt.			
01	Laminated and reinforced (eg cloth lined) paper (excluding bituminised laminated kraft)	{ 64.0 ..	{ 643 2,695	{ 90.6 ..	{ 1,051 3,087	{ 6	{ 9
01	Laminated and reinforced (eg cloth lined) board	571	3,017	{ 543 ..	{ 3,054 1,052	{ 14	{ 18
05,09	Manufactures of paper and board	{ 477 ..	{ 1,283 718	{ 837	{ 2,042	{ 6	{ 6
01	Roofing and flooring felt paper						
01	Oiled, waxed and other waterproof wrappings						
Waxed	860	8,634	..	6,618	21	23	
Bituminised papers							
Kraft unions reinforced with fibres	52.3	403	158	1,095	5	5	
Kraft unions not reinforced with fibres	591	2,588	372	2,131	13	13	
Other bituminised papers (eg saturated and coated) other than laminated	..	740	87.3	514	7	7	
Plastic coated	{ ..	{ 2,102	{ 170 ..	{ 907 2,073	{ 9	{ 9	
Other	{ ..	{ ..	{ 459	{ 3,794	{ 17	{ 20	
Total oiled, waxed and other waterproof wrappings	{ 1,503 ..	{ 11,624 2,841	{ 1,247 ..	{ 8,440 8,691	{ ..	{ ..	
05, 09	Single face corrugated paper	667	1,795	524	2,043	19	21
	Other products		2,390		3,975	13	16
	Waste products						
Paper and board	{ ..	{ 624	{ ..	{ 638	{ 37	{ 56	
Other	{ ..	{ ..	{ ..	{ 311	{ 25	{ 46	
Work done		831		552	21	31	
Total		351,529		442,596	..	..
	Sales in other industries (see Table 6)		8,788		15,952
	Principal products of this industry sold by establishments in the industry		342,741		426,644	111	193(c)

(a) The number given is that of the sub-division of which the item is a characteristic product. The sales shown are total sales by larger establishments, not merely sales by establishments classified to the sub-division.

(b) Amended figures.

(c) This figure represents the total number of returns made for larger establishments in this industry, which is less than the total number of establishments shown in Table 4 on account of combined returns covering more than one establishment.

TABLE 6 Sales of principal products of the industry by larger establishments classified to other industries, 1963 and 1968

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

	1963	1968		
	Value	Value	Entries	Principal industries in which produced (a)
	£'000	£'000	Number	
Paper, other than coated	1,712	2,440	11	43,139,141
Board, other than coated or laminated				
Building boards	436	429	13	131,138
Other boards	238	1,783	12	131,136,138,141
Board, coated, laminated and reinforced (eg, cloth lined)	338	974	6	32,138,139
Laminated and reinforced (eg, cloth lined) paper (excluding bituminised laminated kraft) and coated paper (excluding paper hangings and waterproof wrappings)	1,484	2,026	8	141,143
Manufactures of paper and board				
Oiled, waxed and other waterproof wrappings				
Waxed	2,625	2,702	14	138,139,140,141
Bituminised papers (b)	{ 119	{ 109	{ 10	{ 138,139,143
Other	{ ..	{ 3,398	{ 19	{ 138,139,140,141
Single faced corrugated paper	427	1,002	*	138
Roofing and flooring felt paper and cellulose wadding	1,408	1,090	9	23,42,100,145
Total	8,788	15,952	..	

(a) The references given are to the list of industries at the front of this report.

(b) For 1963, described as 'Bituminised kraft unions not reinforced with fibres'.

TABLE 7 Sales of other than principal products by larger establishments in the industry, 1963 and 1968

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

	1963		1968	
	Quantity	Value	Quantity	Value
	Th.cwt.	£'000	Th.cwt.	£'000
Paper bags (including carrier bags)	261	1,781	61.8	471
Articles manufactured from transparent regenerated cellulose film	35.9	1,380	..	1,729
Purchased paper processed				
Crêped, corrugated, crinkled, etc and gummed	127	824	161	1,036
Wrapping paper, cut and packed, etc	..	37(a)		
Other	30.2	182	109	617
Other manufactures of paper and board	92.0	832	197	1,404
	..	69(a)		
	..	18,940	..	1,406
	Metal content Th. tons		Metal content Th. tons	
Foil laminated with paper, film, etc	2.0	3,846	1.7	3,787
Other goods (b)	..	3,361	..	1,119
			Th.kWh	
Electricity sold	..	1,073	172,696	644
Steam sold	..	632	..	745
Services rendered to other organisations (c)		599		1,492
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)		4,252		8,031
Canteen takings		758		916
Total		38,567		23,397

(a) Amended figures.

(b) Including some work done.

(c) Amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered to other organisations.

TABLE 8 Production of certain principal products of the industry by larger establishments, 1963 and 1968

This table is not applicable to this industry.

TABLE 9 Purchases by larger establishments of selected principal products of the industry, 1968

This table is not applicable to this industry.

TABLE 10 Purchases by larger establishments in the industry, 1963 and 1968

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

	1963		1968	
	Quantity	Cost	Quantity	Cost
Materials for use in production		£'000		£'000
Pulpwood, including wood chips (a)	..	3,689	..	7,033
Wood pulp				
Chemical				
Dry, bleached				
Sulphite	..	18,425	..	18,480
Soda and sulphate	..	24,518	..	44,530
Dry, unbleached				
Sulphite	..	10,462	..	6,382
Soda and sulphate				
Kraft, easy bleaching and bleachable	..	8,770	..	7,565
Other	..	2,412	..	5,639
Wet				
Sulphite	..	4,202	..	6,334
Soda and sulphate	..	6,798	..	4,641
Semi-chemical	..	(b)	..	770
Mechanical				
Dry	..	866	..	5,808
Wet	..	17,870	..	16,240
Straw	..	460	..	226
Straw pulp, bleached	..	336	..	6
Esparto grass	..	3,206	..	1,174
Esparto grass pulp	..	2,020	..	1,551
Other vegetable fibres and pulp thereof	1,537
Waste paper (including newspaper over-issues)	..	14,678	..	21,894
Linen, cotton, hemp, jute and ramie rags, not pulled	..	2,954	..	2,062
Cotton waste and cotton linters	..	1,072	..	1,402
Other fibrous materials (including waste)	..	1,079	..	1,002
Titanium oxide	..	(b)	..	1,393
China clay (loading and coating clays) and other loadings (c)	..	5,034	..	4,572
General chemicals (d)				
Inorganic (including inorganic gases)				
Alum	..	1,313	..	1,522
Chlorine	..	467	..	407
Sodium hydroxide (caustic soda)	..	363	..	499
Soda ash	..	216	..	258
Sulphuric acid	..	108	..	175
Other inorganic chemicals	1,612
Organic (including organic gases)	..	3,370	..	2,971
Other (eg mixtures of inorganic and organic chemicals)	1,313
Glycerine and glycerine substitutes	..	193	..	173
Rosin and rosin size (e)	..	3,627	..	3,154
Casein	..	1,264	..	1,055
Dyestuffs and pigment colours	..	2,266	..	2,421

Continued on next page

TABLE 10 (continued)

	1963		1968	
	Quantity	Cost	Quantity	Cost
Materials for use in production (continued)		£'000		£'000
Lime	..	217	..	80
Body paper for coating	..	9,695	..	9,613
Body board for coating	..	1,141	..	2,595
Paper and board purchased for oiling, waxing, corrugating, creping, etc	..	8,881	..	7,057
Starch for use in paper making	..	(b)	..	5,051
Glues and adhesives (including formulated adhesives, but excluding unformulated synthetic resins bought as such) (f)	..	1,865	..	1,585
Printers' inks	..	918	..	671
Waxes	..	1,070	..	793
Bitumen	..	386	..	428
Aluminium foil	..	1,145	..	1,194
Transparent regenerated cellulose film in sheets or rolls (g)	..	1,234	..	1,015
Plastics materials				
Polyethylene and polypropylene and co-polymers			Th.cwt.	
Granules, moulding and extrusion compounds	..	(b)	89.3	660
Sheet, rod, film, profile shapes and monofilament (h)	..	604	31.7	778
	Th.gal.		Th.gal.	
	820	193	871	244
	Th.cwt.		Th.cwt.	
	3.0	21	3.7	27
	..	45	..	35
Lubricating oils and greases				
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement				
Machine felts				
Of wool or wool mixtures (i)	..	2,016	..	1,994
Of cotton or man-made fibres	..	1,033	..	1,342
Other	..	164	..	754
Paper machine wires	..	1,594	..	2,493
Tyres and other spare parts for firms' own road goods vehicles	..	6,480	..	261
Other	..	..	..	4,987
All other materials for use in production	..	8,163	..	9,113
Packaging materials				
Paper and board				
Boxes, cartons, drums and canisters (with or without metal ends) of paper and cardboard	..	770	..	837
Fibreboard packing cases	..	..	..	136
Bags and multiwall paper sacks	..	(b)	..	30
Wrapping and packing paper (including paper coated with plastics and any laminates incorporating paper, but not metal)	..	..	..	2,143
Paper and board for converting into packaging materials	..	2,656	..	280
Other packaging materials of paper and paperboard (including moulded pulp units and labels)	..	..	..	945
Timber				
Containers wholly or mainly of wood (including plywood boxes and drums), baskets and wickerwork crates	..	395	..	473

TABLE 10 (continued)

	1963		1968	
	Quantity	Cost	Quantity	Cost
Packaging materials (continued)	Th.cu.ft.	£'000	Th.cu.ft.	£'000
Timber (continued)				
Timber (sawn or planed) for manufacture into packing cases, etc	323	154	378	264
Other wood products for packaging, including wood wool but excluding plywood for manufacture into packing cases	..	22	..	84
Plastics (other than transparent regenerated cellulose film)	..	193	..	532
Film (up to 0.01 inches thick)				
Of polyethylene	..	(b)	..	23
Of other plastics materials	..	..	..	5
Sheets and sheeting (thicker than 0.01 inches)	..	..	..	4
All other packaging materials	..	972	..	807
Fuel and electricity (j)	Th.tons		Th.tons	
Coal	3,082	16,045	2,542	12,939
Coke (including screenings) and manufactured fuel	215	1,242	135	573
Derv fuel and motor spirit for use in road vehicles	2,052	386	2,235	559
Other liquid fuels (including creosote/pitch mixtures, etc and liquefied petroleum gases)	112,463	4,054	225,122	9,111
Gas	Th.therms		Th.therms	
1,085	77	392	35	
..	109	..	24	
Electricity	Th.kWh		Th.kWh	
1,481,792	6,995	1,409,450	7,939	
..	(b)	..	1,645	
All other fuels	..	..	..	920
Total cost of materials and fuel		222,972		268,881
Goods purchased for merchanting		3,538		7,003
Canteen purchases		704		905
Total cost of purchases		227,214		276,789

(a) For 1963 'Wood chips' were not specifically included.

(b) Not recorded separately for 1963.

(c) For 1963 described as 'China clay and other loadings'.

(d) For 1963 described as 'Heavy chemicals'.

(e) For 1963 described as 'Resin and resin size'.

(f) For 1963 described as 'Glues and adhesives (including compound synthetic resin adhesives, but excluding synthetic resins bought as such and casein)'.

(g) For 1963 described only as 'Transparent regenerated cellulose film'.

(h) For 1963 foil of polyethylene and polypropylene and co-polymers and polystyrene sheet, tape, foil and foam were specifically included.

(i) For 1963 wool mixtures were not specifically included.

(j) The total quantity of electricity generated in establishments employing 25 or more persons in this industry was 2,713,956 Th.kWh in 1968 and 2,422,523 Th.kWh in 1963.

TABLE 11 Transport costs and employment of larger establishments, 1963 and 1968

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

	Unit	1963	1968
Average number mainly employed on transport	No.	1,048	1,082
Transport costs			
Wages and salaries	£'000	971	1,273
Derv fuel and motor spirit	"	386	559
Tyres and other spare parts for road goods vehicles	"	..	261
Payments to other organisations for transport	{ by road by rail and other means excluding postal services	{ 9,870	{ 10,234 1,497
Costs of operating road goods vehicles			
Insurance	"	55	54
Vehicle licences	"	62	129
Depreciation	"	514	591
Payments to other organisations for repairs and maintenance	"	170	198
Total	"	12,028 (a)	14,797

(a) Excluding tyres and other spare parts for road goods vehicles, not collected separately for 1963.

TABLE 12 Payments for certain services, etc by larger establishments, 1963 and 1968 (a)

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

	Amounts payable	
	1963	1968
Repairs and maintenance to	£'000	£'000
Buildings	624	740
Road goods vehicles	170	198
Plant, machinery and other capital equipment	3,781	5,319
Insurance, licensing and depreciation of road goods vehicles (b)	631	774
Rates, excluding water rates	2,631	3,451
Hire of plant and machinery	157	392
Postage, telephone, telegrams, cables and telex (c)	552	714
Total	8,545	11,588

(a) No deduction is made for these payments to arrive at the figures of net output given in this report.

(b) For details see Table 11.

(c) Excluding telex for 1963.

TABLE 13 Percentage analysis of twelve-month periods covered by returns from larger establishments, 1968

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

Year ended	Percentage of total returns received	Percentage of total number employed
	Per cent.	Per cent.
<u>1968</u>		
April (a)	2.1	1.2
May	0.5	0.2
June	1.0	0.4
July	0.5	0.1
August	1.0	0.3
September	8.3	5.2
October	6.2	5.5
November	0.0	0.0
December	53.9	58.5
<u>1969</u>		
January	0.5	0.1
February	1.0	0.9
March	24.4	27.7
April (b)	0.5	0.0
	100	100

(a) From 6 April.

(b) To 5 April.