

## 79 Miscellaneous electrical goods

This Report on the Miscellaneous Electrical Goods Industry relates to establishments engaged wholly or mainly in manufacturing lighting, starting and ignition sets, dynamos, dashboard instruments for road vehicles and wheeled tractors, electric horns, traffic indicators and similar electrical equipment for motor vehicles, wheeled tractors, cycles and aircraft; primary batteries, secondary batteries (accumulators); electric lamp bulbs of all types, including filament lamps, fluorescent tubes, gas discharge lamps, and neon, etc tubes for advertising, and parts except glass envelopes; electrical wiring accessories, such as lampholders, ceiling roses, plugs and sockets, switches, etc; electric lighting fittings (but not glassware therefor), searchlights, flashlight cases and all other types of electrical goods not reported elsewhere. Time switches are included but electric clocks and time recorders are excluded.

This industry corresponds to minimum list heading 369 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 industry corresponds to the Miscellaneous Electrical Goods Industry (Part 60) in the reports on the last detailed Census of Production for 1963, except that non-domestic hair drying apparatus (hoods) are now included in the Electric Appliances Primarily for Domestic Use Industry (Part 78).

Throughout this Report, the figures given for 1963 have been reclassified, as far as possible, according to the Standard Industrial Classification (Revised 1968) so that data for 1963 and 1968 are on the same industrial basis. However the reclassification of small firms, which provided limited information only, has been arbitrary.

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.	914	995	
Number of establishments	"	1,049	1,159	
Gross output	£'000	266,706	404,039	
Net output	"	135,882	216,378	
Net output per head	£	1,243	1,796	
Sales and work done	{ goods produced and work done (c) merchanted goods and canteen takings	£'000	243,381	369,434
	"	23,427	30,473	
Purchases	{ materials for use in production and packaging and fuel goods for merchandising and canteen purchases	"	107,361	162,012
	"	19,783	24,036	
Payments to other organisations	{ for work done on materials given out for transport by road by rail and other means excluding postal services	"	3,273	5,578
	"	2,173	1,627	
	"		813	
Stocks and work in progress				
Total stocks and work in progress	{ change during year at end of year	"	+ 1,664	+10,537
	"	53,318	81,042	
Goods on hand for sale	{ change during year at end of year	"	- 408	+ 2,128
	"	16,445	18,377	
Work in progress	{ change during year at end of year	"	+ 306	+ 2,003
	"	13,934	28,265	
Materials, stores and fuel	{ change during year at end of year	"	+ 1,766	+ 6,405
	"	22,939	34,400	
Number employed on average during the year	{ total, including working proprietors operatives other employees (d)	Th.	109.3	120.5
	"	83.4	91.4	
	"	24.9	28.2	
Wages and salaries	{ of operatives of other employees (d)	£'000	47,216	72,741
	"	21,486	32,665	
Capital expenditure (e)				
Total	"	11,456	16,115	
New building work	"	2,335	3,818	
Land and existing buildings (f)	"	1,487	13	
Plant and machinery (f)	"	6,923	11,609	
Vehicles (f)	"	711	674	

(a) For 1968, estimates for establishments not making satisfactory returns and for small establishments, from which only employment data were collected, accounted for 7 per cent. of the total figures in which they were incorporated: of this, unsatisfactory returns accounted for 2 per cent. For 1963 the comparable figures were 6 per cent. and less than 1 per cent. respectively.

(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	696	829
Average number employed:		
Working proprietors	830	857
Other persons employed	6,013	6,286

Footnotes continued on page 70/2.

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	255	253	744	..	..	..
6-10	155	152	1,200	..	..	..
11-24	241	230	4,228	..	..	..
25-49	70	63	2,687	8,566	4,401	1,638
50-99	72	64	5,235	17,405	9,189	1,755
100-199	65	55	9,281	29,785	14,840	1,599
200-299	17	15	4,271	14,130	6,596	1,544
300-399	16	14	5,584	14,282	7,218	1,293
400-499	6	6	2,734	8,802	4,466	1,634
500-749	23	17	14,749	51,646	27,485	1,864
750-999	12	8	10,189	35,947	22,861	2,244
1,000-1,499	13	8	15,462	54,226	28,717	1,857
1,500-1,999	5	4	8,687	25,686	14,453	1,664
2,000-2,499	4	4	8,686	34,728	18,756	2,159
2,500 and over	6	4	24,422	80,036	41,868	1,714
Unsatisfactory returns	199	195	2,334	..	..	..
Total	1,159	995	120,493	404,039(c)	216,378(c)	1,796(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	
	Operatives	Others (d)	Operatives	Others (d)	Operatives	Others (d)
	Number	Number	£'000	£'000	£	£
1-5	..	..	..	..	..	..
6-10	..	..	..	..	..	..
11-24	..	..	..	..	..	..
25-49	2,050	575	1,582	718	772	1,249
50-99	4,002	1,191	3,162	1,370	790	1,150
100-199	6,953	2,308	4,663	2,667	671	1,155
200-299	3,323	947	2,511	1,306	756	1,379
300-399	4,603	978	3,171	1,064	689	1,088
400-499	1,916	818	1,512	850	789	1,039
500-749	11,482	3,267	8,716	3,537	759	1,083
750-999	8,231	1,958	6,963	2,357	846	1,204
1,000-1,499	11,264	4,198	9,229	4,264	819	1,016
1,500-1,999	7,121	1,566	5,258	1,827	738	1,167
2,000-2,499	6,447	2,239	5,666	2,815	879	1,257
2,500 and over	18,097	6,326	15,646	7,819	865	1,236
Unsatisfactory returns	..	..	..	..	..	..
Total	91,353(c)	28,157(c)	72,741(c)	32,665(c)	796(c)	1,160(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	1	3	4
18 and over	52	44	96
All ages	53	47	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 17 establishments in 1968 and 23 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 £3,942,000 in 1968. Similar information is not available for 1963.
- (f) Characteristic products relate only to 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) Progress payments received for work in progress in 1968 from United Kingdom customers were recorded as £5,745,000 at beginning of year and £5,896,000 at end of year; and from overseas customers £10,000 at both beginning and end of year. Similar information is not available for 1963.
- (i) Administrative, technical and clerical employees.
- (j) Excluding expenditure for establishments not yet in production.
- (k) New building work, and acquisitions of land and existing buildings 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)			
		Electrical equipment for motor vehicles, cycles and aircraft 10		Primary batteries 20	
		1963	1968	1963	1968
Number of enterprises (c)	No.	33	31	8	6
Number of establishments	"	63	74	23	18
Gross output	£'000	74,182	151,174	21,740	30,665
Net output	"	38,074	84,110	12,060	18,177
Net output per head	£	1,166	1,826	1,282	1,805
Sales and work done	£'000	goods produced and work done (d) (e)			
		69,888	137,554	20,840	27,202
	"	merchanted goods and canteen takings			
	"	4,329	12,381	843	2,393
Sales of characteristic products	"	58,639	109,172	18,259	25,135
Index of specialisation (g)	Per cent.	84	79	88	92
Purchases	£'000	materials for use in production and packaging, and fuel			
		31,281	54,461	8,669	10,904
	"	goods for merchandising and canteen purchases			
	"	4,017	10,047	770	1,774
Payments to other organisations	"	for work done on materials given out			
		1,366	3,538	21	-
		for transport			
	"	by road		262	
	"	232	324	393	223
	"	by rail and other means excluding postal services		223	
Stocks and work in progress					
Goods on hand for sale	"	change during year			
		- 282	+ 251	+ 80	+ 878
	"	at end of year			
	"	3,031	4,995	1,575	2,219
Work in progress (h)	"	change during year			
		+ 247	+ 988	- 24	+ 192
	"	at end of year			
	"	3,302	10,923	788	1,256
Materials, stores and fuel	"	change during year			
		+ 789	+ 1,535	+ 174	+ 675
	"	at end of year			
	"	4,679	8,208	2,268	3,138
Number employed on average during the year	No.	total including working proprietors			
		32,651	46,064	9,406	10,071
		operatives			
	"	26,742	35,252	7,498	8,361
	"	other employees (i)			
	"	5,890	10,796	1,906	1,709
Wages and salaries	£'000	of operatives			
		15,392	28,985	3,939	6,325
	"	of other employees (i)			
	"	5,198	13,643	1,632	1,902
Wages and salaries per head	£	operatives			
		576	822	525	756
	"	other employees (i)			
	"	882	1,264	856	1,113
Capital expenditure (j)					
New building work	£'000	1,086	1,044	125	
Land and existing buildings	"	acquisitions			
		75	17	-	546 (k)
	"	disposals			
	"	-	19	-	
Plant and machinery	"	acquisitions			
		2,055	3,987	778	885
	"	disposals			
	"	84	157	24	57
Vehicles	"	acquisitions			
		174	284	93	146
	"	disposals			
	"	57	102	12	21

For notes to this table - see page 79/5.

	Unit	Sub-divisions of the industry (b)								Total	
		Secondary batteries (accumulators) 30		Electric lamps 40		Electric light fittings and accessories 51		Other electrical goods 52		1963	1968
		1963	1968	1963	1968	1963	1968	1963	1968	1963	1968
		13	18	44	26	93	79	67	50	247	195
		17	26	73	45	113	104	79	59	368	326
Gross output	£'000	27,762	48,454	51,149	50,862	49,444	65,658	25,326	29,626	249,602	376,439
Net output	"	12,932	23,973	25,932	28,455	24,422	32,184	13,748	14,698	127,168	201,597
Net output per head	£	1,501	2,190	1,339	1,836	1,173	1,531	1,200	1,696	1,243	1,796
Sales and work done	£'000	goods produced and work done (d) (e)									
		25,542	44,742	41,895	49,237	46,650	61,929	22,957	23,534	227,773	344,198
	"	merchanted goods and canteen takings									
	"	2,238	2,835	10,172	1,764	2,198	3,124	2,145	5,894	21,925	28,391
Sales of characteristic products	"	24,709	43,857	32,118	40,322	37,657	54,116	16,958	18,172	(f)	(f)
Index of specialisation (g)	Per cent.	97	98	77	82	81	87	74	77	87	86
Purchases	£'000	materials for use in production and packaging, and fuel									
		12,769	22,342	15,819	21,199	22,568	30,994	9,370	11,045	100,476	150,945
	"	goods for merchandising and canteen purchases									
	"	1,891	2,721	8,523	1,351	1,614	2,552	1,700	3,949	18,515	22,394
Payments to other organisations	"	for work done on materials given out									
		53	106	346	311	911	667	366	574	3,063	5,197
		for transport									
	"	by road		262							
	"	232	324	393	223						
	"	by rail and other means excluding postal services		223							
Stocks and work in progress											
Goods on hand for sale	"	change during year									
		- 4	+ 751	- 553	- 250	+ 254	+ 305	+ 123	+ 47	- 381	+ 1,983
	"	at end of year									
	"	2,206	4,463	5,335	420	2,342	3,639	900	1,386	15,390	17,122
Work in progress (h)	"	change during year									
		- 13	+ 126	- 365	+ 110	+ 341	+ 300	+ 100	+ 151	+ 286	+ 1,866
	"	at end of year									
	"	1,133	2,244	1,925	1,294	2,677	2,974	3,216	7,644	13,041	26,334
Materials, stores and fuel	"	change during year									
		+ 181	+ 1,127	+ 72	+ 618	+ 437	+ 1,265	- 1	+ 747	+ 1,653	+ 5,968
	"	at end of year									
	"	2,310	4,497	4,100	3,941	5,765	8,905	2,346	3,361	21,468	32,050
Number employed on average during the year	No.	total including working proprietors									
		8,617	10,945	19,368	15,495	20,817	21,021	11,455	8,666	102,314	112,262
		operatives									
	"	5,653	6,965	14,270	13,277	16,151	15,868	8,348	5,991	78,662	85,714
	"	other employees (i)									
	"	2,956	3,968	5,068	2,197	4,594	5,093	3,062	2,656	23,476	26,419
Wages and salaries	£'000	of operatives									
		4,491	7,878	7,826	9,523	8,328	10,897	4,565	4,643	44,543	68,251
	"	of other employees (i)									
	"	2,525	4,798	4,258	2,536	4,092	5,140	2,559	2,630	20,264	30,649
Wages and salaries per head	£	operatives									
		794	1,131	548	717	516	687	547	775	566	796
	"	other employees (i)									
	"	854	1,209	840	1,154	891	1,009	836	990	863	1,160
Capital expenditure (j)											
New building work	£'000	180		133	460	473	518	189	504	2,186	3,557
Land and existing buildings	"	acquisitions									
		333	391 (k)	561	2	499	230	29	76	1,498	345
	"	disposals									
	"	-		34	130	63	69	6	-	103	333
Plant and machinery	"	acquisitions									
		428	1,541	1,654	3,263	1,366	1,176	451	541	6,731	11,394
	"	disposals									
	"	7	22	102	209	32	111	3	21	252	577
Vehicles	"	acquisitions									
		75	103	254	67	193	198	137	115	925	913
	"	disposals									
	"	10	19	74	19	65	76	43	47	260	285

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			
	Quantity	Value	Quantity	Value	Enterprises	Entries
10	Thousands	£'000	Thousands	£'000	Number	Number
Electrical equipment for motor vehicles, wheeled tractors, motor cycles, cycles and aircraft and for other internal combustion engines, excluding accumulators and bulbs (b)						
Coils, ignition	3,643	1,331	4,385	1,705	10	10
Horns	..	1,501	4,441	2,011	5	5
Lighting and starting sets for motor vehicles, etc (including bulbs not sold separately, but excluding accumulators)	..	16,394	..	24,489	18	19
Magnetos, ignition						
For motor vehicles (including three wheelers) wheeled tractors and motor cycles	..	397	89.8	330	*	*
Other	..	266	..	415	*	*
Measuring instruments, indicating, for motor vehicles etc (excluding speedometers and tachometers) (c)						
Complete	5,061	2,539	6,841	5,311	14	15
Parts	..	204	..	705	8	9
Sparking plugs, other than for aircraft	62,000	6,385	94,281	10,517	6	7
Other electrical equipment (including lamps complete, with or without bulbs) not elsewhere specified						
For motor vehicles (including three wheelers) wheeled tractors, and motor cycles and dynamo sets for cycles	..	40,026	..	61,835	56	67
For aircraft (excluding aeronautical electrical instruments but including sparking plugs) (d)	..	15,299	..	19,299	33	39
Total electrical equipment for motor vehicles, wheeled tractors, motor cycles, cycles and aircraft and for other internal combustion engines excluding accumulators and bulbs (b)		84,342		126,617	..	..
Batteries and accumulators						
20 Primary batteries and cells	Th. cells		Th. cells			
Complete	1,054,450	15,767	1,269,934	25,190	13	14
Parts, other than carbons	..	1,888	..	1,894	5	5
Total primary batteries and cells		18,451		27,084	..	..

TABLE 5 (continued)

Industry sub-division (a)	1963		1968			
	Quantity	Value	Quantity	Value	Enterprises	Entries
30	Th. accumulators	£'000	Th. accumulators	£'000	Number	Number
Batteries and accumulators (continued)						
Accumulators						
Portable, complete						
For motor vehicle starting, lighting and ignition	5,054	17,307	6,200	25,591	16	17
For traction	513	3,978	704	7,399	*	5
Other portable	1,089	2,753	1,282	3,832	5	7
Stationary, complete						
Of lead-acid type	1,057	3,570	380	2,385	5	5
Other	..	..	380	1,588	*	*
Parts and accessories	..	3,123	..	1,950	10	11
Total accumulators		30,731		43,517	..	..
40						
Electric lamp bulbs						
Electric lamp bulbs, filament type, complete, ready for use						
Not over 28 volts						
Flash bulbs (excluding photo-flash bulbs) radio panel and cycle dynamo bulbs)	Thousands		Thousands			
Motor vehicle types	37,162	661	13,037	209	*	5
Other bulbs not over 28 volts	89,856	4,082	135,275	6,391	13	17
Over 28 volts	15,930	588	21,931	621	9	10
Photoflash bulbs for photographic and other purposes	..	210	..	..	10	21
Discharge lamps, luminous tubes, fluorescent tubes and tubes signs	245,751	12,786	309,234	15,161	10	21
Complete	..	601	96,478	1,823	*	5
Advertising types, ie high tension cold cathode tubes over 300 volts	..	3,098	..	2,663	17	19
Other fluorescent tubular lamps	19,988	4,987	45,604	9,318	11	13
Other discharge lamps, etc not over 300 volts	..	3,051	4,222	4,121	7	8
Parts (other than glass envelopes)	..	1,416	..	3,444	8	14
Total electric lamp bulbs		31,479		43,752	..	..
51						
Electric lighting fittings, wiring and accessories, etc						
Fittings (ceiling, wall, standard, portable or pendant, but excluding transformers, capacitors and glassware)						
Auxiliary gear for discharge lighting, sold separately	..	3,768	..	7,771	18	20
Lighting fittings, not elsewhere specified, sold separately						
Domestic, fluorescent and other (e)	..	7,167	..	5,165	42	43
Industrial, including flood-lighting and shop window lighting						
Tubular fluorescent	..	12,499	..	14,337	35	38
Other	..	..	..	7,135	46	51
Street lighting lanterns and associated gear	..	2,095	..	3,256	18	20

Continued on next page

TABLE 5 (continued)

Industry sub-division (a)	1963		1968			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
51		£'000		£'000	Number	Number
Electric lighting fittings, wiring and accessories, etc (continued)						
Wiring accessories, up to 250 volts, 30 amps. (eg lampholders, ceiling roses, wall plugs and sockets, switches, etc) not elsewhere specified						
Mainly of brass	..	5,301	..	3,951	18	19
Mainly of plastics materials	..	13,374	..	19,824	51	58
Other (porcelain, etc)	..	6,491	..	4,542	24	25
Electric bell apparatus, not telegraphic or telephonic	..	1,600	..	1,917	8	8
Total electric lighting fittings, wiring and accessories, etc		52,296		67,898	..	..
52						
Other electrical goods						
Joint boxes	..	4,960	..	3,091	12	12
Lamps, complete and parts (excluding bulbs and batteries), other than those for motor vehicles and aircraft	..	2,708	..	2,604	20	21
Magnets, permanent, other than of steel	..	839	..	1,198	5	5
Time switches and process timers and parts thereof	..	6,549	..	11,348	27	35
Other electrical goods not elsewhere specified (f)	..	29,893	..	15,659	72	80
Other products	..	1,505	..	1,132	11	11
Waste products						
Scrap metals						
Iron and steel	..	92	..	295	43	49
Copper	..	299	..	332	31	34
Brass	..	519	..	1,474	47	49
Other metals	..	447	..	587	51	56
Other waste products	..	175	..	79	22	27
Work done		964		2,516	13	13
Total		266,250		349,183	..	..
Sales in other industries (see Table 6)		67,049		52,111	..	..
Principal products of this industry sold by establishments in the industry		199,201		297,073	195	239(g)

(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) For 1963 wheeled tractors were not specifically included.

(c) For 1963 described as 'Measuring instruments, indicating, for motor vehicles so far as separately recorded'. Speedometers and tachometers are included in the report on the Scientific and Industrial Instruments and Systems Industry (Part 70).

(d) Aeronautical electrical instruments are included in the report on the Scientific and Industrial Instruments and Systems Industry (Part 70).

(e) For 1963 described as 'Domestic, decorative and commercial'.

Footnotes continued on page 79/12.

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)
Electrical equipment for motor vehicles, wheeled tractors, motor cycles, cycles and aircraft and for other internal combustion engines, excluding accumulators and bulbs	£'000	£'000	Number	
Coils, ignition, and lighting and starting sets for motor vehicles, etc (including bulbs not sold separately, but excluding accumulators)	4,583	364	14	67,70,82,85
Measuring instruments, indicating, for motor vehicles etc (excluding speedometers and tachometers), complete and parts	8,635	2,025	16	70,78,81,82
Other electrical equipment (including lamps complete, with or without bulbs) not elsewhere specified				
For motor vehicles (including three wheelers) wheeled tractors and motor cycles		9,036	39	72,74,78,82
For aircraft (excluding aeronautical electrical instruments but including sparking plugs)	12,498	6,141	30	72,77,78,84
Primary batteries and cells, complete, and parts other than carbons	1,265(b)	1,770	7	70,74,130,144
Electric lamp bulbs, filament type, complete, ready for use; discharge lamps, luminous tubes, fluorescent tubes and tube signs, complete and parts (other than glass envelopes)	1,433	2,746	13	71,74,78,97
Electric lighting fittings, wiring and accessories, etc				
Fittings (ceiling, wall, standard, portable or pendant, but excluding transformers, capacitors and glassware)				
Lighting fittings, not elsewhere specified, sold separately				
Domestic, fluorescent and other	789	258	11	72,78,149,150
Industrial, including flood-lighting and shop window lighting				
Tubular fluorescent	1,932	1,049	10	71,78,82,97
Other		1,168	18	70,71,78,97
Street lighting lanterns and associated gear	740	319	7	47,72,97,130
Wiring accessories, up to 250 volts, 30 amps. (eg lampholders, ceiling roses, wall plugs and sockets, switches, etc) not elsewhere specified				
Mainly of brass	700	2,152	11	71,72,74,97
Mainly of plastics materials	4,699	6,012	43	34,71,72,149
Other (porcelain, etc)	5,289	1,714	13	46,71,78,144

Continued on next page

TABLE 6 (continued)

	1963	1968		
	Value	Value	Entries	Principal industries in which produced (a)
	£'000	£'000	Number	
Other electrical goods				
Joint boxes	3,966	2,883	*	71,72
Lamps, complete and parts (excluding bulbs and batteries), other than those for motor vehicles and aircraft	1,068	985	13	74,78,82,91
Time switches and process timers and parts thereof	2,885	5,085	28	68,70,74,78
Other electrical goods not elsewhere specified	16,567	8,404	55	(c)
Total	67,049	52,111	..	

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

(b) Includes accumulators for 1963.

(c) Production is widely distributed.

Footnotes continued from page 79/10.

(f) Because of the collection of more detailed information about sales of commodities in 1968 the data shown for 1963 and 1968 are not strictly comparable. Other classes of electrical goods are shown separately in the following industry reports viz.

- Electrical machinery (Part 71)
- Insulated wires and cables (Part 72)
- Telegraph and telephone apparatus and equipment (Part 73)
- Radio and electronic components (Part 74)
- Broadcast receiving and sound reproducing equipment (Part 75)
- Electronic computers (Part 76)
- Radio, radar and electronic capital goods (Part 77)
- Electric appliances primarily for domestic use (Part 78)

(g) 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 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
	Value	Value
	£'000	£'000
Mechanical engineering		
Miscellaneous non-electrical machinery, complete and parts	924	1,711
Industrial plant and steelwork and other mechanical engineering products, complete and parts	1,564	1,932
Speedometers for motor vehicles and other scientific, industrial, etc instruments and apparatus	1,419	6,941
Electrical engineering		
Electrical machinery		
Machinery for generating, transmitting and distributing electric power, complete and parts		1,060
Switchgear and control gear, complete and parts		704
Non-traction motors sold separately, complete and parts	1,310	2,916
Battery chargers		1,007
Other electrical machinery, complete and parts		881
Components and parts of telegraph and telephone apparatus	307	692
Radio and electronic components (including passive components, sold separately)	2,632	3,403
Broadcast receiving and sound reproducing equipment (including dictating machines, complete, ie recording and reproducing machines)	832	247
Radio, radar and electronic capital goods, including parts	402	172
Electric appliances primarily for domestic use, complete and parts (including domestic portable electric fires and portable (mechanical) appliances, electrically operated)	6,782	4,515
Other electrical engineering products not elsewhere specified	1,514	3,572
Engineers small tools and gauges	357	118
Miscellaneous metal manufactures	1,115	1,113
Goods wholly or mainly of plastics materials	1,400	915
Other goods	3,504	9,940
Work done		
Building and civil engineering work (a)	1,524	198
Research and development	244	416
Machinery installed and installation work	222	2,318
Repair and maintenance work on customers' machinery, plant, apparatus and appliances	2,335	1,846
Services rendered to other organisations (b)	185	508
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)	21,426	27,401
Canteen takings	498	990
Total	50,496	75,517

(a) The data shown for 1963 is not comparable with that for 1968. Because of a change in the method of collection, the data for 1968 includes goods made by firms and incorporated in their building and civil engineering work whereas the data for 1963 excludes such goods. For 1963 the value of goods made and used in building and civil engineering work has been deducted from the gross figure for building and civil engineering in order to avoid duplication which arises because they have been included against the appropriate sales headings elsewhere in the Report. For 1968 duplication does not arise since goods made and used in building and civil engineering work were not shown additionally as sales elsewhere in the Report; estimates of the value of these goods for both years cannot be given owing to the risk of disclosure of information relating to individual firms.

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





TABLE 10 (continued)

	1963		1968	
	Quantity	Cost	Quantity	Cost
Materials for use in production (continued)	Th.cwt.	£'000	Th.cwt.	£'000
Synthetic resins and plastics materials (excluding leathercloth and reinforced plastics)				
Polyethylene and polypropylene and copolymers				
Granules, moulding and extrusion compounds	9.1	164	25.2	395
	..	23		
Sheet, rod, film, profile shapes and monofilament	..	(c)	..	56
Polyvinyl chloride (including copolymers)				
Polymers and copolymers including the net resin content of latices, solutions and dispersions, plasticised moulding and extrusion compounds (e)	120	1,268	147	1,026
Plasticised and unplasticised sheet, film, rod, tube, profile shapes and foam	..	(c)	4.5	99
			..	275
Polystyrene (including copolymers) moulding and extrusion compounds	7.7	97	41.1	516
	..	28		
Phenolics and allied products: resins (the net resin content), solutions, emulsions, dispersions, moulding and extrusion compounds	143	1,182	205	1,556
			..	377
Laminated thermosetting sheet (including decorative), cast sheet, laminated or cast rod, tube and profile shapes	9.6	175	1.8	52
	..	79	..	141
Aminoplastics (melamine and urea formaldehyde)	..	(c)	15.4	154
			..	18
Thermosetting polyesters, including epoxide resins (the net resin content excluding filler) and resin glass fibre mixtures	5.1	59	41.9	507
	..	94		
Softwood and hardwood, manufactured or semi-manufactured (ie further prepared than sawn or planed)	..	255	..	257
Textiles (excluding packaging materials)				
Yarn, thread, tape and cloth, not oiled or otherwise coated or impregnated with insulating materials	Th.lb.		Th.lb.	
Of cotton	287	85	233	127
	..	25	..	14
Of man-made fibres (nylon, rayon, etc)	529	265	58.8	30
	..	151	..	305
Of glass fibre	..	(c)	..	137
Insulated wires, cables, strips and strands	..	3,474	..	7,418
Electrical insulating materials not elsewhere specified	..	1,010	..	470
Bolts, rivets, nuts and washers, screws, nails and tacks etc	..	(c)	..	2,437
Electrical machinery				
Fractional horse-power motors (less than 1 h.p.)	..	85	..	271
Control gear			..	376
Fuse gear			..	113
Switch gear	..	1,702	..	486
Transformers and rectifying apparatus			..	1,531
Other electrical machinery			..	1,013
Electrical components not elsewhere specified				
Batteries and accumulators	..	407	..	400
Magnets, permanent	..	111	..	342
Semi-conductor devices	..	136	..	800
Capacitors			..	2,115
Resistors			..	254
Micro-circuits	..	5,758	..	107
Other electrical components			..	5,366

TABLE 10 (continued)

	1963		1968	
	Quantity	Cost	Quantity	Cost
Materials for use in production (continued)		£'000		£'000
Other components for incorporation in firms' own products				
Ball and roller bearings and parts thereof	..	369	..	630
Measuring and control instruments (including ammeters, voltmeters, thermostats etc)	..	257	..	569
Other components not elsewhere specified				
Wholly or mainly of plastics materials	..	3,384	..	3,970
Other materials except of rubber or glass	..	11,939	..	16,552
	Th.cwt.		Th.cwt.	
Lubricating oils and greases (including cutting oils and emulsions)	3.6	7	7.2	10
	..	61	..	255
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement				
Tyres and other spare parts for firms' own road goods vehicles	..	3,364	..	257
Other			..	3,752
All other materials for use in production	..	14,673	..	14,656
Packaging materials				
Paper and board				
Boxes, cartons, drums and canisters (with or without metal ends) of paper and cardboard	..	2,189	..	3,218
Fibreboard packing cases			..	462
Wrapping and packing paper (including paper coated with plastics and any laminates incorporating paper but not metal)			..	344
Other packaging materials of paper and paperboard (including moulded pulp units and labels, but excluding bags and multiwall paper sacks and paper and board for converting into packaging materials) (f)	..	437	..	265
Containers wholly or mainly of wood (including plywood boxes and drums other than cable drums), baskets and wickerwork crates	..	547	..	514
All other packaging materials	..	815	..	607
Fuel and electricity (g)	Th.tons		Th.tons	
Coal	25.9	144	19.3	103
	..	45		
Coke (including screenings) and manufactured fuel	5.3	49	4.7	69
	..	11		
	Th.gal.		Th.gal.	
Derv fuel and motor spirit for use in road vehicles	1,455	308	1,607	454
	..	43	..	111
Other liquid fuels (including creosote/pitch mixtures, etc and liquefied petroleum gases)	9,119	396	16,271	704
	..	261	..	541 (h)
	Th.therms		Th.therms	
Gas	7,494	486	11,976	742
	..	370	..	227
	Th.kWh		Th.kWh	
Electricity	218,403	1,186	396,202	2,757
	..	1,147	..	752
Total cost of materials and fuel		100,476		150,945
Goods purchased for merchanting		18,030		21,495
Canteen purchases		484		899
Total cost of purchases		118,990		173,340

For notes to this table - see page 79/18.

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.	1,258	1,275
Transport costs			
Wages and salaries	£'000	1,030	1,431
Derv fuel and motor spirit	"	351	565
Tyres and other spare parts for road goods vehicles	"	..	257
Payments to other organisations for transport	{ by road { by rail and other means excluding postal services	2,034	1,516
			757
Costs of operating road goods vehicles			
Insurance	"	71	66
Vehicle licences	"	61	112
Depreciation	"	393	374
Payments to other organisations for repairs and maintenance	"	197	293
Total	"	4,136(a)	5,371

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

## Footnotes to Table 10.

- (a) For 1963 cadmium copper was not specifically excluded.  
 (b) For 1963 blister was specifically excluded and cadmium copper was not specifically included.  
 (c) Not recorded separately for 1963.  
 (d) For 1963 described as 'Rubber, including hard rubber, balata, gutta-percha and synthetic rubber in all forms, including finished parts'.  
 (e) For 1963 emulsions were specifically included.  
 (f) For 1963 bags and paper and board for converting into packaging materials were not specifically excluded.  
 (g) Owing to the risk of disclosure of information relating to individual firms the total quantities of electricity generated in firms' own establishments for 1963 and 1968 cannot be given.  
 (h) For 1968, may include a small amount of fuels not covered by specific headings.

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	737	1,370
Road goods vehicles	197	293
Plant, machinery and other capital equipment	1,058	2,443
Insurance, licensing and depreciation of road goods vehicles (b)	525	553
Rates, excluding water rates	1,320	2,255
Hire of plant and machinery	118	325
Postage, telephone, telegrams, cables and telex (c)	988	1,200
Total	4,944	8,439

(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
1968	Per cent.	Per cent.
April (a)	2.9	1.1
May	1.7	1.2
June	5.0	2.9
July	9.6	31.7
August	3.3	4.5
September	4.6	1.4
October	4.2	1.0
November	2.5	1.8
December	31.6	21.1
1969		
January	2.1	1.2
February	3.3	1.0
March	27.5	30.9
April (b)	1.7	0.2
	100	100

(a) From 6 April.

(b) To 5 April.

