



BOARD OF TRADE

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Report on the Census of Production 1963

55 Electrical machinery



LONDON: HER MAJESTY'S STATIONERY OFFICE
FOUR SHILLINGS NET

These notes give the main information needed for interpreting the figures in the industry reports. (More detailed information about the Census is given in a separate booklet - 'Industry Reports' - published by the Board of Trade.)

BOARD OF TRADE

Report on the Census of Production 1963

(1) Administrative, supervisory, and technical staff, and design employees (other than operators); draughtsmen and...

55 Electrical machinery

Products of the newly predominant industry were more than one-fifth of the total value of principal products of any other industry. This was introduced in the new classification rule which would result from marginal changes in sales between successive censuses. The principle of classification by major output was also normally followed in compiling the analysis by sub-divisions of an industry. In certain industries, classification was dealt with in a different way. Details of non-standard treatment are given in the Introduction to the relevant industry report.

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



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Notes - continued on pages iii and iv

Notes

These notes give the main information needed for interpreting the figures in the industry reports. (More detailed information about the Census is given in a separate booklet - 'Introductory Notes': Part 1 of the Report on the Census of Production for 1963.)

GENERAL INFORMATION

Changes in the 1963 census

There were few changes resulting from amendments to the Standard Industrial Classification and only minor changes in the scope of certain industry reports compared with 1958. Any such changes are explained in the introductions to the industry reports concerned or by footnotes to the tables.

Industrial Classification

Establishments were classified to industries on the basis of major activity in conformity with the second edition of the Standard Industrial Classification (Consolidated Edition 1963, incorporating Amendment 1). Each industry was basically defined in terms of its principal products, these being of a similar nature or commonly associated in production. Normally, an establishment was classified to an industry if its sales of the principal products of that industry accounted for a greater proportion of its total sales than did its sales of the principal products of any other industry. However, where the application of this rule would have resulted in a change of classification between 1958 and 1963, the establishment was reclassified only if the sales of principal products of the newly predominant industry was more than one third greater than the sales of principal products of the previously predominant industry. This modification of the general rule was introduced for 1958 to avoid discontinuities which would result from marginal changes in sales between successive censuses.

The principle of classification by major output was also normally followed in compiling the analysis by sub-divisions of an industry.

In certain industries, classification was dealt with in a different way. Details of any non-standard treatment are given in the introductions to the relevant industry reports.

TERMS USED IN THE CENSUS REPORT

Average number employed

Firms were required to state the number of persons on the payroll (i.e. whose National Insurance cards were held by them) on the average during the year of return, whether full-time or part-time employees. Separate figures were required for (a) administrative, technical and clerical employees and (b) operatives (see below). Averages could be calculated from figures relating to the last week of each calendar month; figures shown in respect of the average number employed relate to the sum of these averages. Firms were also required to state the number of working proprietors (see below) where appropriate and these are included in total employment figures. Outworkers are excluded.

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The figures include persons engaged in merchandising or factoring and canteen workers where particulars in respect of these activities could not be excluded from the return.

Working Proprietors

These include all persons regarded as 'self-employed' for National Insurance purposes, and members of their families who worked in the business without receiving a fixed wage or salary; but persons who worked less than half the normal number of working hours are excluded. For Great Britain, directors working in the business but not in receipt of a definite wage, salary or commission are included under this heading for 1963, but are excluded for 1958. For Northern Ireland, directors of limited companies, other than those paid by fee only, are included for both years. (Directors paid by fee only are not included in any of the employment figures for either year.)

Employees

(i) Administrative, technical and clerical employees include managers, superintendents and works foremen; research, experimental, development, technical and design employees (other than operatives); draughtsmen and tracers; editorial staff, staff reporters, canvassers, competition and advertising staff; travellers; and office (including works office) employees. For Great Britain, but not for Northern Ireland, they include also managing and other directors in receipt of a definite wage, salary or commission.

(ii) Operatives include all other classes of employees, that is, broadly speaking, all manual wage earners. They include those employed in and about the factory or works; operatives employed in power houses, transport work, stores, warehouses, shops and canteens; inspectors, viewers and similar workers; maintenance workers; and cleaners. Operatives engaged in outside work of erection, fitting, etc. are also included, but outworkers (i.e. persons employed by the firm who worked in their own homes, etc. on materials supplied by the firm) are excluded. Information about the numbers of outworkers employed was collected only for the gloves industry.

Capital Expenditure

(i) New building work.

This represents the cost incurred during the year of new building and other new constructional work (including office buildings, canteens and the like used in connection with the business covered by the return but not dwelling houses for employees). The value is that charged to capital account during the year of return; it includes expenditure on new buildings or on the extension or reconstruction of old buildings, the value of work of a capital nature carried out by firms' own staff, and the cost of any newly constructed buildings purchased. The figures shown include any legal charges, stamp duties, agents' commissions, etc.

Notes - continued on pages iii and iv

55 Electrical machinery

This Report on the Electrical Machinery Industry relates to establishments engaged wholly or mainly in manufacturing electricity generators, transformers, electric motors (including electric traction motors and transmission equipment, and associated rectifiers), switchgear, etc. Electrical equipment for motor vehicles, cycles and aircraft is excluded.

This industry corresponds to minimum list heading 361 in the Standard Industrial Classification (Consolidated edition, 1963).

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

| | 1958 | 1963 |
|--|-----------|-----------|
| Average number employed | 130.7 | 130.7 |
| Operatives (a) | 99.7 | 99.7 |
| Administrative, technical and clerical employees (b) | 31.0 | 31.0 |
| Wages and salaries (c) | £ 1,100.0 | £ 1,100.0 |
| Employers' contributions to National Insurance and private pension schemes, etc. (d) | £ 100.0 | £ 100.0 |
| Capital expenditure (e) | | |
| Total | £ 1,200.0 | £ 1,200.0 |
| New building work | £ 1,000.0 | £ 1,000.0 |
| Land and existing buildings (f) | £ 200.0 | £ 200.0 |
| Plant and machinery (g) | £ 100.0 | £ 100.0 |
| Vehicles (h) | £ 100.0 | £ 100.0 |

(a) For 1958, estimates for small firms and for firms not making satisfactory returns accounted for about 3 per cent. of the total figures in which they were incorporated. (For 1963 the comparable figure was 2 per cent.) A summary of the detailed returns received is given in Table 2.

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

(c) Administrative, technical and clerical employees.

(d) Including provision for gratuity and other benefits.

(e) Excluding expenditure on stock-in-trade and work-in-progress.

(f) Acquisition of land.

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TABLE 1 Industry summary: United Kingdom
Estimates for all firms, 1958 and 1963 (a)

| | Unit | 1958 | 1963 | |
|--|--|---------|---------|------------|
| Number of enterprises | No. | 666 | 612 | |
| Number of establishments | " | 824 | 785 | |
| Gross output | £'000 | 387,379 | 445,385 | |
| Net output | " | 212,182 | 226,830 | |
| Net output per head | £ | 1,042 | 1,102 | |
| Sales and work done | goods produced and work done | £'000 | 352,718 | 410,689(b) |
| | merchanted goods and canteen takings | " | 31,990 | 29,102 |
| Purchases | materials for processing and packaging, and fuel | " | 163,853 | 180,003 |
| | goods for merchandising and canteen purchases | " | | |
| Payments to other organisations | for work done on materials given out | " | 6,200 | 7,058 |
| | for transport | " | 3,790 | 3,426 |
| Stocks and work in progress | | | | |
| Total stocks and work in progress | change during year | " | + 1,316 | + 4,279 |
| | at end of year | " | 138,049 | 158,873 |
| Goods on hand for sale | change during year | " | + 2,030 | + 2,009 |
| | at end of year | " | 14,906 | 16,955 |
| Work in progress | change during year | " | + 641 | + 3,585 |
| | at end of year | " | 87,219 | 100,782 |
| Materials, stores and fuel | change during year | " | - 1,355 | - 1,316 |
| | at end of year | " | 35,924 | 41,135 |
| Average number employed | total, including working proprietors | Th. | 203.6 | 205.8 |
| | operatives | " | 138.7 | 135.4 |
| | other employees (c) | " | 64.6 | 69.7 |
| Wages and salaries | of operatives | £'000 | 77,673 | 92,385 |
| | of other employees (c) | " | 46,681 | 62,915 |
| Employers' contributions to National Insurance and private pension schemes, etc. (d) | " | .. | 10,061 | |
| Capital expenditure (e) | | | | |
| Total | " | .. | 11,239 | |
| New building work | " | 4,553 | 3,536 | |
| Land and existing buildings (f) | " | .. | 328 | |
| Plant and machinery (f) | " | 10,033 | 7,216 | |
| Vehicles (f) | " | 648 | 815 | |

(a) For 1963, estimates for small firms and for firms not making satisfactory returns accounted for about 2 per cent. of the total figures in which they were incorporated. (For 1958 the comparable figure was 3 per cent.) A summary of the detailed returns received is given in Table 2.

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

(c) Administrative, technical and clerical employees.

(d) Including pensions and gratuities paid other than from pension funds.

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

(f) Acquisitions less disposals.

TABLE 2 Summary of returns received from larger firms, 1958 and 1963
Firms employing 25 or more persons: United Kingdom (a)

| | Unit | 1958 | 1963 |
|---|-----------|---------|------------|
| Number of enterprises | No. | 227 | 233 |
| Number of establishments | " | 372 | 392 |
| Gross output | £'000 | 377,292 | 435,169 |
| Net output | " | 206,657 | 221,627 |
| Net output per head | £ | 1,042 | 1,102 |
| Sales and work done | £'000 | 343,533 | 401,269(b) |
| | " | 31,157 | 28,435 |
| Index of specialisation (c) | Per cent. | 79 | 81 |
| Purchases | £'000 | 159,586 | 175,874 |
| | " | 26,140 | |
| Payments to other organisations | " | 6,039 | 6,896 |
| | " | 3,691 | 3,347 |
| Stocks and work in progress | | | |
| Goods on hand for sale | " | + 1,977 | + 1,963 |
| | " | 14,517 | 16,566 |
| Work in progress | " | + 625 | + 3,503 |
| | " | 84,947 | 98,471 |
| Materials, stores and fuel | " | - 1,320 | - 1,285 |
| | " | 34,989 | 40,192 |
| Average number employed | No. | 198,263 | 201,052 |
| | " | 135,241 | 132,697 |
| | " | 63,011 | 68,208 |
| Wages and salaries | £'000 | 75,710 | 90,508 |
| | " | 45,501 | 61,637 |
| Wages and salaries per head | £ | 560 | 682 |
| | " | 722 | 904 |
| Employers' contributions to National Insurance (e) | £'000 | .. | 5,790 |
| Employers' contributions to private pension schemes, etc. (f) | " | .. | 4,067 |
| Capital expenditure (g) | | | |
| New building work | " | 4,435 | 3,455 |
| Land and existing buildings | " | .. | 575 |
| | " | .. | 896 |
| Plant and machinery | " | 10,253 | 9,137 |
| | " | 481 | 2,087 |
| Vehicles | " | 928 | 1,190 |
| | " | 296 | 395 |

For notes to this table - see page 55/6

TABLE 3 Analysis of larger firms by size of enterprise within the industry, 1963
(i) Output, employment, capital expenditure and stocks

Firms employing 25 or more persons: United Kingdom

| Average number employed by the enterprise in the industry (a) | Enterprises | Establishments | Average number employed (a) | Gross output | Net output | Net output per head | Capital expenditure (b) | Total value of stocks and work in progress at end of year |
|---|-------------|----------------|-----------------------------|--------------|------------|---------------------|-------------------------|---|
| | Number | Number | Number | £'000 | £'000 | £ | £'000 | £'000 |
| 25-49 | 49 | 52 | 1,845 | 4,623 | 2,381 | 1,291 | 163 | 931 |
| 50-99 | 60 | 64 | 4,144 | 8,795 | 4,761 | 1,149 | 218 | 1,791 |
| 100-199 | 30 | 40 | 4,710 | 9,386 | 4,889 | 1,038 | 277 | 1,942 |
| 200-299 | 24 | 32 | 5,832 | 15,195 | 8,689 | 1,490 | 261 | 4,266 |
| 300-399 | 10 | 15 | 3,540 | 8,407 | 4,085 | 1,154 | 163 | 2,324 |
| 400-499 | 13 | 23 | 5,797 | 13,325 | 6,503 | 1,122 | 266 | 3,235 |
| 500-749 | 12 | 19 | 7,039 | 14,194 | 7,657 | 1,088 | 320 | 4,126 |
| 750-999 | 12 | 41 | 10,514 | 25,655 | 13,930 | 1,325 | 1,234 | 6,149 |
| 1,000-1,499 | 3 | 6 | 3,342 | 4,838 | 3,189 | 954 | 269 | 1,589 |
| 1,500-1,999 | 4 | 11 | 7,297 | 13,336 | 7,986 | 1,094 | 618 | 3,710 |
| 2,000-2,999 | 4 | 17 | 10,062 | 23,785 | 12,743 | 1,266 | 1,147 | 5,744 |
| 3,000-3,999 | 4 | 16 | 13,466 | 30,553 | 17,171 | 1,275 | 504 | 9,541 |
| 5,000-7,499 | 3 | 18 | 16,563 | 50,094 | 21,975 | 1,327 | 2,324 | 15,982 |
| 7,500 and over | 5 | 38 | 106,901 | 212,985 | 105,669 | 988 | 3,216 | 93,898 |
| Total | 233 | 392 | 201,052 | 435,169 | 221,627 | 1,102 | 10,981 | 155,228 |

(ii) Employees, wages and salaries, and employers' contributions

Firms employing 25 or more persons: United Kingdom

| Average number employed by the enterprise in the industry (a) | Employees | | Wages and salaries | | Employers' contributions | | Wages and salaries per head | |
|---|------------|------------|--------------------|------------|--------------------------|-----------------------------------|-----------------------------|------------|
| | Operatives | Others (c) | Operatives | Others (c) | National Insurance (d) | Private pension schemes, etc. (e) | Operatives | Others (c) |
| | Number | Number | £'000 | £'000 | £'000 | £'000 | £ | £ |
| 25-49 | 1,421 | 369 | 850 | 369 | 50 | 13 | 598 | 1,001 |
| 50-99 | 3,156 | 936 | 1,782 | 793 | 117 | 35 | 565 | 847 |
| 100-199 | 3,541 | 1,155 | 2,036 | 1,026 | 133 | 48 | 575 | 889 |
| 200-299 | 4,144 | 1,681 | 2,567 | 1,426 | 147 | 96 | 620 | 848 |
| 300-399 | 2,503 | 1,037 | 1,619 | 828 | 112 | 61 | 647 | 798 |
| 400-499 | 4,268 | 1,522 | 2,294 | 1,237 | 142 | 59 | 537 | 813 |
| 500-749 | 4,855 | 2,179 | 3,113 | 1,921 | 195 | 112 | 641 | 881 |
| 750-999 | 8,083 | 2,429 | 5,082 | 2,046 | 300 | 142 | 629 | 842 |
| 1,000-1,499 | 2,237 | 1,103 | 1,292 | 1,089 | 92 | 76 | 577 | 988 |
| 1,500-1,999 | 5,458 | 1,839 | 2,979 | 1,608 | 183 | 71 | 546 | 875 |
| 2,000-2,999 | 7,152 | 2,910 | 4,718 | 2,247 | 308 | 113 | 660 | 772 |
| 3,000-3,999 | 9,221 | 4,245 | 7,014 | 4,168 | 341 | 436 | 761 | 982 |
| 5,000-7,499 | 10,300 | 6,260 | 7,396 | 5,478 | 473 | 413 | 718 | 875 |
| 7,500 and over | 66,358 | 40,543 | 47,766 | 37,401 | 3,197 | 2,393 | 720 | 923 |
| Total | 132,697 | 68,208 | 90,508 | 61,637 | 5,790 | 4,067 | 682 | 904 |

(a) Including working proprietors.

(b) Acquisitions less disposals.

(c) Administrative, technical and clerical employees.

(d) Including both flat rate and graduated contributions.

(e) Including pensions and gratuities paid other than from pension funds. These amounted in total to £291,000.

TABLE 4 Percentage analysis of employees, by age and sex, all firms, 1963: United Kingdom (a)

| Ages | Males | Females | All employees |
|-------------|-----------|-----------|---------------|
| | Per cent. | Per cent. | Per cent. |
| Under 18 | 4 | 2 | 6 |
| 18 and over | 71 | 23 | 94 |
| All ages | 75 | 25 | 100 |

Source: Ministry of Labour

(a) The percentages relate to the numbers employed (excluding working proprietors) at mid-June, 1963.

Footnotes to Table 2.

(a) The following information relates to small firms (employing fewer than 25 persons) in this industry. It includes an estimate for small firms not making satisfactory returns which account for 4 per cent. of the employment shown for 1963 and 2 per cent. for 1958.

| | 1958 | 1963 |
|--------------------------|-------|-------|
| Number of firms | 427 | 376 |
| Average number employed: | | |
| Working proprietors | 4,380 | 553 |
| Other persons employed | | 3,397 |

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

(c) This is the ratio of total sales of principal products by the industry to total sales of goods produced and work done.

(d) Administrative, technical and clerical employees.

(e) Including both flat rate and graduated contributions.

(f) Including pensions and gratuities paid other than from pension funds.

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

TABLE 5 Sales of principal products of the industry by larger firms, including sales by establishments classified to other industries, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

| Kind of output | 1958 | | | 1963 | | | Enterprises | Entries |
|---|----------------------------|--------|-------|--------------------------|--------|-------|-------------|---------|
| | Quantity | | Value | Quantity | | Value | | |
| (i) Complete machines | Number | Th.kVA | £'000 | Number | Th.kVA | £'000 | Number | Number |
| (ii) Parts | | | | | | | | |
| Electrical machinery (new) | | | | | | | | |
| Generators | | | | | | | | |
| Alternating current | | | | | | | | |
| Not over 250 kVA | { (i) 13,320 (ii) 2,703 | 185 | 1,974 | 18,531 | 491 | 3,317 | 34 | 35 |
| | { (i) 290 (ii) 442 | .. | 290 | 2,547 | .. | 1,417 | | |
| | { (i) .. (ii) .. | .. | 192 | .. | .. | 251 | 17 | 17 |
| 251-10,000 kVA | { (i) 478 (ii) .. | 620 | 2,634 | 561 | 467 | 2,436 | 15 | 16 |
| | { (i) .. (ii) .. | .. | 162 | 199 | .. | 918 | | |
| | { (i) .. (ii) .. | .. | 131 | .. | .. | 112 | 8 | 9 |
| 10,001-30,000 kVA | { (i) 63 (ii) .. | 778 | 2,449 | .. | .. | 359 | * | * |
| | { (i) .. (ii) .. | .. | 194 | .. | .. | .. | | |
| 30,001-60,000 kVA | { (i) 52 (ii) .. | 5,178 | 8,506 | { (i) 17 (ii) .. | 585 | 2,112 | * | * |
| | { (i) .. (ii) .. | .. | 1,028 | { (i) .. (ii) .. | .. | 212 | * | * |
| Over 60,000 kVA | { (i) .. (ii) .. | .. | .. | { (i) 28 (ii) .. | 4,218 | 9,055 | 5 | 6 |
| | { (i) .. (ii) .. | .. | .. | { (i) .. (ii) .. | .. | 1,288 | 5 | 7 |
| Direct current | | Th.kW | | | Th.kW | | | |
| Not over 200 kW | { (i) 6,661 (ii) 4,507 | 180 | 3,430 | 3,963 | 65.5 | 1,020 | 27 | 29 |
| | { (i) .. (ii) .. | .. | 378 | 1,637 | .. | 935 | | |
| | { (i) .. (ii) .. | .. | 104 | .. | .. | 54 | 12 | 13 |
| | { (i) .. (ii) .. | .. | 334 | .. | .. | 52 | | |
| Over 200 kW | { (i) 472 (ii) 27 | 308 | 2,453 | 653 | 529 | 2,881 | 11 | 13 |
| | { (i) .. (ii) .. | .. | 65 | 578 | .. | 2,215 | | |
| | { (i) .. (ii) .. | .. | 149 | .. | .. | 188 | 7 | 9 |
| Generating sets (a) | { (i) 2,780 (ii) .. | | | Number of sets | | | 14 | 15 |
| | { (i) .. (ii) .. | | | Number of sets | | | | |
| | { (i) .. (ii) .. | | | .. | 26.2 | 2,206 | * | * |
| | { (i) .. (ii) .. | | | .. | .. | 935 | | |
| Railway, tramway and trolley bus motors | { (i) 2,670 (ii) .. | 613 | 6,109 | 5,434 | .. | 8,304 | 6 | 6 |
| | { (i) .. (ii) .. | .. | 561 | .. | .. | 480 | 6 | 6 |
| Traction motors (other than railway, tramway and trolley bus) | { (i) 3,080 (ii) .. | .. | 671 | 2,980 | 13.9 | 258 | 12 | 12 |
| | { (i) .. (ii) .. | .. | 208 | 8,691 | .. | 572 | | |
| | { (i) .. (ii) .. | .. | .. | .. | .. | 66 | 7 | 7 |
| Motors, other than traction, sold separately | | | | | | | | |
| Fractional horse-power | | | | | | | | |
| Complete | | | | | | | | |
| Not over one-tenth h.p. | { 1,354,874 1,692,140 | 243 | 6,245 | { 1,870,554 1,008,018 | 162 | 4,079 | 43 | 44 |
| | { | .. | 4,145 | { | .. | 2,947 | | |
| | { | .. | 189 | { | .. | 816 | | |
| Over one-tenth but not over one-third h.p. | { | .. | .. | { 859,229 459,556 | 302 | 4,411 | 36 | 37 |
| | { | .. | .. | { | .. | 2,077 | | |
| | { | .. | .. | { | .. | 360 | | |
| Over one-third but under 1 h.p. | { 234,219 66,962 | 168 | 2,422 | { 184,164 59,900 | 184 | 2,039 | 33 | 34 |
| | { | .. | 402 | { | .. | 828 | | |
| | { | .. | 65 | { | .. | 618 | | |
| Parts | .. | .. | 1,225 | .. | .. | 1,652 | 27 | 28 |

TABLE 5 (continued)

| Kind of output (i) Complete machines (ii) Parts | 1958 | | | 1963 | | | Enter-prises | Entries |
|--|---|--------------------------|-------------------------------|------------------------------|-------------------------|------------------------------|----------------|----------------|
| | Quantity | | Value | Quantity | | Value | | |
| | Number | Th.h.p. | £'000 | Number | Th.h.p. | £'000 | | |
| Electrical machinery (new) (continued) | | | | | | | | |
| Motors, other than traction, sold separately (continued) | | | | | | | | |
| Alternating current | | | | | | | | |
| Complete | | | | | | | | |
| 1-10 h.p. | { 416,015 4,604 | { 3,291 .. | { 15,847 493 1,325 | { 220,592 168,619 .. | { 803 | { 4,512 4,989 1,090 | { 40 | { 44 |
| 11-50 h.p. | { | { | { | { 49,459 32,736 .. | { 1,141 | { 4,701 2,507 683 | { 30 | { 34 |
| 51-100 h.p. | { 12,118 542 | { 1,401 .. | { 6,613 515 441 | { 6,708 18,611 .. | { 457 | { 1,977 1,895 | { 24 | { 27 |
| 101-250 h.p. | { | { | { | { 1,899 12,297 .. | { 354 | { 786 2,721 | { 17 | { 19 |
| 251-1,000 h.p. | { 1,330 176 .. | { 546 | { 2,693 536 262 | { 490 738 .. | { 242 | { 1,658 1,256 582 | { 14 | { 17 |
| Over 1,000 h.p. | { 177 .. | { 319 .. | { 1,580 447 | { 116 70 | { 335 .. | { 1,715 747 | { 10 | { 10 |
| Parts | { .. | { .. | { 994 | { .. | { .. | { 1,060 | { 25 | { 28 |
| Direct current | | | | | | | | |
| Complete | | | | | | | | |
| 1-10 h.p. | { 19,896 4,764 | { 158 .. | { 2,847 424 827 | { 9,100 10,329 .. | { 49.0 | { 735 778 | { 27 | { 28 |
| 11-50 h.p. | { | { | { | { 2,701 2,090 .. | { 66.2 | { 1,123 567 | { 15 | { 15 |
| 51-100 h.p. | { 2,087 47 | { 215 .. | { 2,260 57 241 | { 2,126 641 .. | { 119 | { 907 292 | { 13 | { 13 |
| 101-250 h.p. | { | { | { | { 644 242 .. | { 125 | { 594 380 | { 9 | { 10 |
| 251-1,000 h.p. | { 126 10 .. | { 56.1 | { 675 18 55 | { 39 194 .. | { 18.8 | { 177 935 | { * .. | { * .. |
| Over 1,000 h.p. | { .. | { .. | { 1,641 | { 65 | { 179 | { 2,063 | { * .. | { * .. |
| Parts | { .. | { .. | { 340 | { .. | { .. | { 523 | { 18 | { 19 |
| Converting machinery | { (i) { 12,980 3,943 (ii) { | { 44.8 | { 1,019 398 53 33 | { 1,776 | { 8.6 | { 812 933 78 | { 15 9 | { 17 9 |
| Mercury arc rectifiers (glass bulb and steel tank) | { (i) { (ii) { | { | { 2,980 256 | { 4,093 54 .. | { 354 | { 1,488 503 165 | { 5 * .. | { 7 * .. |
| Power rectifiers, electronic, metal and semi-conductor, excluding mercury arc, hot cathode mercury vapours and gas-filled rectifiers (b) | { (i) { 28,761 52,652 (ii) { | { 62.4 | { 1,699 877 .. 3,737 | { 6,870 6,646 | { 75.0 | { 1,278 628 538 163 | { 20 6 | { 20 6 |

TABLE 5 (continued)

| Kind of output (i) Complete machines (ii) Parts | 1958 | | | 1963 | | | Enter-prises | Entries |
|--|---|---------------------------|----------------------------------|----------------------------------|---------------------------|-----------------------------------|--------------|------------|
| | Quantity | | Value | Quantity | | Value | | |
| | Number | Th.kVA | £'000 | Number | Th.kVA | £'000 | | |
| Electrical machinery (new) (continued) | | | | | | | | |
| Transformers for lighting, heating and power including choking coils | | | | | | | | |
| Not over 5 kVA | { (i) { 175,967 404,573 (ii) { | { 102 | { 1,344 689 571 105 | { 686,220 447,266 | { 135 | { 1,386 1,275 559 655 | { 60 25 | { 64 25 |
| Over 5-800 kVA | { (i) { 36,329 4,941 (ii) { | { 3,378 | { 8,372 1,272 1,157 158 | { 27,281 13,925 | { 6,712 | { 11,312 4,174 105 1,067 | { 41 18 | { 47 21 |
| Over 800-7,500 kVA | { (i) { 1,386 154 (ii) { | { 3,092 | { 5,236 367 190 499 | { 2,210 362 | { 3,416 | { 4,700 1,128 77 | { 22 12 | { 25 13 |
| Over 7,500-30,000 kVA | { (i) { 424 .. (ii) { | { 6,185 | { 7,450 95 | { 406 182 .. | { 6,144 | { 8,047 2,926 735 | { 17 7 | { 18 9 |
| Over 30,000 kVA | { (i) { 192 .. (ii) { | { 14,605 | { 9,735 55 | { 120 86 .. | { 11,177 | { 9,513 6,467 920 | { 12 7 | { 13 8 |
| Current limiting reactors | { (i) { 217 .. (ii) { | { 424 4 | { 269 190 51 | { 17 * .. | { 18 * .. | | | |
| Capacitors for power factor improvement | { (i) { 1,255 .. (ii) { | { 1,731 11 | { 2,951 323 191 | { 13 5 | { 15 5 | | | |
| Starting and controlling gear for industrial, marine, traction and other electric motors | { (i) { (ii) { | { 29,513 2,175 | { 35,625 5,100 | { 77 44 | { 83 49 | | | |
| Switchgear and switchboards (other than telegraph and telephone) | | | | | | | | |
| Not exceeding 660 volts | { (i) { (ii) { | { 25,991 1,569 | { 31,318 2,810 | { 96 45 | { 104 50 | | | |
| Over 660 volts and not exceeding 15,000 volts or 350 mVA | { (i) { (ii) { | { 19,095 881 | { 27,132 1,491 | { 25 15 | { 30 20 | | | |
| Over 15,000 volts or 350 mVA | { (i) { (ii) { | { 19,229 517 | { 24,921 735 | { 11 9 | { 12 9 | | | |
| Fuses and fuse gear | { (i) { (ii) { | { 10,827 725 | { 10,981 871 | { 46 24 | { 50 25 | | | |
| Battery chargers | { .. | { (c) | { 1,951 | { 25 | { 25 | | | |
| Electricity meters | | | | | | | | |
| Complete | | | | | | | | |
| Prepayment type AC and DC | { 74.7 | { 655 | { 204 1,911 | { 5 | { 6 | | | |
| Single-phase credit type AC | { 1,047 | { 3,491 | { 1,159 850 | { 8 | { 10 | | | |

Continued on next page

TABLE 5 (continued)

| Kind of output (i) Complete machines (ii) Parts | 1958 | | 1963 | | Enter- prises | Entries |
|--|---------------|------------------|--------------|----------------|------------------|------------|
| | Quantity | Value | Quantity | Value | | |
| | Thousands | £'000 | Thousands | £'000 | Number | Number |
| Electrical machinery (new) (continued) | | | | | | |
| Electricity meters (continued) ✓ | | | | | | |
| Complete (continued) | | | | | | |
| Polyphase credit type AC | 85.8 | 1,024 | 71.8 | 1,320 | 8 | 8 |
| Other integrating meters AC and DC | 28.3 | 400 | 14.3 | 580 | 6 | 6 |
| Parts | .. | 486 | .. | 521 | 9 | 13 |
| Other electrical machinery (new) | { (i) (ii) | { 6,824 1,233 | { | { 7,506 876 | { 63 41 | { 65 41 |
| Electrical machinery (reconditioned) | { (i) (ii) | { 851 45 | { | { 831 9 | { 26 5 | { 26 5 |
| Electrical machinery, unclassified | (ii) | 1,320 | .. | 1,752 | 11 | 11 |
| Other products | .. | 6,126 | .. | 1,437 | 13 | 13 |
| Scrap metals sold | Th.tons | | Th.tons | | | |
| Iron and steel | { 96.5 .. | { 699 53 | { 83.3 .. | { 589 61 | { 105 | { 122 |
| Copper | { 3.7 .. | { 508 69 | { 3.9 | { 693 | { 120 | { 137 |
| Brass | { 2.5 .. | { 278 136 | { 4.3 | { 583 | { 85 | { 99 |
| Other metals | .. | 253 | .. | 297 | 72 | 82 |
| Other waste products sold | .. | 41 | .. | 31 | 20 | 26 |
| Work done | | | | | | |
| Machinery purchased and installed and other installation work | | 9,432 | | 7,646 | 35 | 41 |
| Repair and maintenance work on customers' machinery, plant, apparatus and appliances | | 6,119 | | 13,481 | 474 | 494 |
| Research and development work for customers (including Government Departments) | | 5,620 | | 3,338 | 20 | 21 |
| Other work done on commission | | 462 | | 3,213 | 31 | 31 |
| Total | | 301,554 | | 362,896 | .. | .. |
| Sales in other industries (see Table 6) | | 28,626 | | 36,795 | .. | .. |
| Principal products of this industry sold by establishments in the industry | | 272,928 | | 326,101 | 233 | 279(d) |

- (a) Firms were asked, wherever practicable, to show separate figures for the prime mover and generator components of generating sets.
- (b) Described in 1958 as 'Rectifiers, other than mercury arc (including metal but excluding hot cathode mercury vapour and gas-filled rectifiers)'.
- (c) Owing to the risk of disclosure of information relating to individual firms, in 1958 details of this heading were included in 'Power rectifiers'.
- (d) This figure represents the total number of returns made by larger firms in this industry, which is less than the total number of establishments in Table 2 on account of combined returns covering more than one establishment.

TABLE 6 Sales of principal products of the industry by establishments classified to other industries, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

| Kind of output (i) Complete machines (ii) Parts | 1958 | | 1963 | | Entries | Principal industries in which produced (a) | |
|---|---------------|----------------|------------------|----------------------|------------------|---|-------------------------------------|
| | Quantity | Value | Quantity | Value | | | |
| Electrical machinery (new) | | £'000 | Number | Th.kVA | £'000 | Number | |
| Generators | | | | | | | |
| Alternating current | { (i) (ii) | { 7,752 .. | { 1,231 .. | { 5,770 132 | { 8 6 | { 44, 52, 59, 61 44, 59, 61 | |
| Direct current | { (i) (ii) | { 7,832 .. | { | { | { * 6 | { 52, 59, 61 44, 58, 61, 126 | |
| Generating sets | | | | | | | |
| Motors, other than traction, sold separately | | | | Th.h.p. | | | |
| Under 1 h.p. | { (i) (ii) | { 2,487 .. | { (i) (i) | { 110,900 450,894 | { 18 1,412 | { 20 53, 54, 58, 59 | |
| Alternating current | { (i) (ii) | { 610 .. | { (i) (i) | { 604 .. | { 189 619 | { 7 42, 44, 49, 61 | |
| Direct current | | | | | | | |
| Power rectifiers, electronic, metal and semi-conductor, mercury arc, excluding hot cathode mercury vapour and gas-filled rectifiers (i),(ii) | | 1,318 | .. | .. | 888 | 6 57, 58 | |
| Transformers for lighting, heating and power in- cluding choking coils | | | | Th.kVA | | | |
| Not over 5 kVA | { (i) (ii) | { 4,273 .. | { (i) (i) | { 413,616 97,689 | { 54 .. | { 24 58, 59 | |
| Over 5 kVA | | | | | | | |
| Capacitors for power factor improvement (i),(ii) | | 1,648 | .. | .. | 2,465 | * 53, 56, 57, 58 | |
| Starting and controlling gear for industrial, marine, traction and other electric motors (i) (ii) | | 1,950 | { | { | { 1,727 439 | { 25 49, 50, 59, 60 | |
| Switchgear and switch- boards (other than telegraph and telephone) (i) (ii) | | 2,376 | { | { | { 2,231 1,420 | { 34 56, 57, 59, 62 | |
| Fuses and fuse gear (i),(ii) | | 2,806 | .. | .. | 2,008 | 14 38, 56, 59, 60 | |
| Electricity meters { (i) (ii) | | { 1,659 173 | .. | .. | 2,390 | 8 49, 52, 59, 60 | |
| Battery chargers | | - | .. | .. | 447 | 11 52, 58, 60, 107 | |
| Current limiting reactors | | | { (i),(ii) .. | { | { 109 .. | { 5 44, 52, 57, 74 | |
| Other electrical machinery { (i) (ii) | | { 1,094 397 | { (i) (ii) | { | { 1,189 1,292 | { 37 36 | { 40, 49, 50, 58 45, 52, 74, 107 |
| Electrical machinery, reconditioned | | | { (i) .. | { | { 150 .. | { 5 52, 57, 60, 126 | |
| Repair and maintenance work | | (b) | .. | .. | 3,914 | 398 126 | |
| Total | | 28,626 | | | 36,795 | .. | |

- (a) The references given are to the list of industries at the back of this report.
- (b) Not recorded separately in 1958.

TABLE 7 Sales of other than principal products by larger firms in the industry, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

| | 1958 | 1963 |
|--|----------------|----------------|
| | Value £'000 | Value £'000 |
| Iron castings | 1,077 | 1,492 |
| Welding machinery | | |
| Complete | 630 | 197 |
| Parts, including welding electrodes | 398 | 98 |
| Industrial engines | | |
| Complete machines | 10,430 | 13,365 |
| Parts | 877 | |
| Industrial plant and steelwork | 1,015 | 11,374 |
| Other non-electrical machinery | 2,653 | |
| Other mechanical engineering, not elsewhere specified | 4,025 | 4,052 |
| Scientific, surgical and photographic instruments, etc. | 5,027 | 3,358 |
| Insulated wires and cables | 253 | 236 |
| Telegraph and telephone apparatus | 141 | 1,339 |
| Radio and other electronic apparatus | | |
| Valves, cathode ray tubes and semi-conductors | 2,150 | 1,570 |
| Radio and other electronic equipment | 9,587 | 12,294 |
| Domestic electrical appliances | 8,645 | 8,944 |
| Electrical equipment for motor vehicles, cycles and aircraft | 2,271 | 6,200 |
| Electric lamps, batteries and other miscellaneous electrical goods | 7,980 | 9,257 |
| Shipbuilding and marine engineering | 2,862 | 11,374 |
| Locomotives and railway track equipment | 4,519 | |
| Other products (a) | 4,953 | |
| Total goods sold | 69,493 | 73,776 |
| Building and civil engineering work carried out in Great Britain, including structural work and the erection and installation of air-conditioning, heating and ventilating plant (b) | | |
| Work done as main or direct contractors | 689 | 320 |
| Work done as sub-contractors | 176 | 301 |
| (Less) estimated value of goods made by firms and separately recorded as sold which were used in the contract work | 32 | - |
| Total building and civil engineering work carried out exclusive of the value of goods made and used in the contract work | 833 | 621 |

TABLE 7 (continued)

| | 1958 | 1963 |
|---|-------------------|----------------|
| | Value £'000 | Value £'000 |
| Work done: repair and maintenance work on customers' machinery, plant, apparatus and appliances (c) | 279 | 308 |
| Services rendered to other organisations (d) | .. | 462 |
| Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored) | 29,940 | 26,671 |
| Canteen takings | 1,217 | 1,764 |
| Total | 101,762(e) | 103,603 |

- (a) Including 'Mechanical handling equipment and parts', and 'Non-ferrous metals'.
- (b) Described in 1958 as 'Structural work carried out in Great Britain (Electrical and other contract work on buildings, civil engineering works, etc., excluding the installation of machinery, etc.)'.
- (c) Described in 1958 as 'Other work done'.
- (d) Including amounts charged for hiring out plant, machinery and other goods, for providing transport, or for technical or other services rendered to other organisations.
- (e) Excluding amounts charged for services rendered to other organisations.

TABLE 8 Production of certain principal products of the industry by larger firms, including production by establishments classified to other industries, 1958 and 1963

This table is not applicable to this industry.

TABLE 9 Purchases of selected principal products of the industry by larger firms, 1963

This table is not applicable to this industry.

TABLE 10 Purchases by larger firms in the industry, 1954 and 1963

Firms employing 25 or more persons: United Kingdom

| | 1954 | | 1963 | |
|---|----------|-------|----------|--------|
| | Quantity | Cost | Quantity | Cost |
| Materials for processing | Th. tons | £'000 | Th. tons | £'000 |
| Iron | | | | |
| Pig iron, including refined pig iron, and other irons for re-melting (a) | 27.4 | 494 | 16.6 | 1,012 |
| Castings | 54.2 | 3,843 | 43.5 | 4,253 |
| Steel | | | | |
| Ingots, blooms, billets, slabs, and sheet and tinplate bars | 1.5 | 86 | 2.8 | 136 |
| | | | .. | 73 |
| Bars and rods (including wire rods), angles, shapes and sections, girders, beams, joists and pillars rolled (not fabricated), including tube rounds and squares (b) | 48.0 | 2,365 | 54.5 | 3,777 |
| Plates, 3mm. thick and over | 64.2 | 2,569 | 84.4 | 4,500 |
| Hoop and strip (including tape of all thicknesses) | | | 16.7 | 1,341 |
| Sheets under 3mm. thick (including electrical sheets) | 108 | 8,253 | 116 | 13,141 |
| | .. | 1,557 | | |
| Tinplate, terneplate and blackplate | 1.2 | 61 | 0.6 | 38 |
| Forgings (except drop forgings) | 7.1 | 1,110 | 11.6 | 3,240 |
| | .. | 1,075 | | |
| Castings | 7.0 | 1,110 | 18.2 | 2,772 |
| | .. | 611 | | |
| Iron and steel not elsewhere specified except finished parts, wire and scrap | | | | |
| Wrought tubes and fittings for wrought tubes (including welded, seamless, conduits, etc.) | 2.6 | 186 | 17.6 | 985 |
| | .. | 28 | | |
| Other | 2.6 | 283 | 9.7 | 1,411 |
| | .. | 52 | | |
| Steel wire and wire manufactures, including wire cables and ropes but excluding insulated wires and cables (c) | 3.9 | 294 | 0.7 | 112 |
| Springs, laminated and other types (d) | .. | 205 | .. | 513 |
| Light metals and non-ferrous metals in all forms except finished parts, wire and scrap | | | | |
| Aluminium and aluminium alloys | 7.1 | 2,290 | 8.9 | 2,891 |
| Brass and other copper alloys (including nickel silver and cupro-nickel but excluding all other nickel alloys) | 9.5 | 3,010 | 13.8 | 4,220 |
| Copper (excluding blister) (e) | 14.0 | 5,353 | 21.8 | 7,998 |
| | | | .. | 923 |
| Lead and alloys of lead (excluding solder) | 0.8 | 107 | .. | 41 |
| Zinc and alloys of zinc | 1.2 | 188 | 0.7 | 120 |
| | | | .. | 88 |
| Tin | 3.4 | 104 | 1.1 | 66 |
| | | | .. | 20 |
| Solder, soft | .. | 155 | .. | 234 |
| Uninsulated wire and cables of non-ferrous metals | | | | |
| Copper (f) | .. | 894 | .. | 1,352 |
| Other non-ferrous metals (f) | .. | 284 | .. | 647 |
| Bitumen and bitumastic compound | .. | 120 | .. | 182 |
| Glass in all forms, including finished parts | .. | 477 | .. | 727 |
| Ferrite | .. | (g) | .. | 28 |
| Insulating oils | .. | 1,066 | .. | 1,823 |

TABLE 10 (continued)

| | 1954 | | 1963 | |
|---|-----------|-------|------------|-------|
| | Quantity | Cost | Quantity | Cost |
| Materials for processing (continued) | | £'000 | | £'000 |
| Mica | | | | |
| Block and splittings | .. | 557 | .. | 386 |
| Built-up (Micanite) | .. | 489 | .. | 441 |
| | Th.gal. | | Th.gal. | |
| | | | 954 | 1,279 |
| Paint and varnish (including lacquers and stains) | 842 | 1,165 | Th.cwt. | |
| | | | 9.8 | 66 |
| Paper and paperboard, including press-board and paper yarn, tubes, etc. (excluding packaging materials) | .. | 862 | .. | 1,417 |
| Synthetic resins and plastics materials (excluding leathercloth and reinforced plastics) | | | | |
| Polyethylene and polypropylene and co-polymers; granules, moulding and extrusion compounds | | | 16.8 | 220 |
| Polyvinyl chloride (including co-polymers); resins, solutions, emulsions, dispersions, moulding and extrusion compounds | | | 4.7 | 53 |
| | | | .. | 17 |
| Polystyrene moulding and extrusion compounds | | | 17.0 | 197 |
| Phenolics and cresylics | .. | (g) | | |
| Resins, solutions, emulsions, dispersions, moulding and extrusion compounds | | | 53.8 | 511 |
| | | | .. | 316 |
| Industrial laminates, cast sheet, laminated or cast rod, tube and profile shapes | | | 55.6 | 981 |
| | | | .. | 1,155 |
| Thermosetting polyesters (including epoxide resins and resin glass fibre mixtures) | | | 13.8 | 192 |
| | | | .. | 458 |
| Porcelain and other ceramics in all forms | .. | 1,756 | .. | 3,547 |
| Rubber, including hard rubber, balata, gutta-percha and synthetic rubber in all forms, including finished parts | .. | 284 | .. | 873 |
| Timber | | | | |
| Softwood and hardwood, manufactured or semi-manufactured (i.e. further prepared than sawn or planed) | .. | 259 | .. | 275 |
| | Th.sq.ft. | | Th.sq.ft. | |
| Plywood, including blockboard, laminboard and battenboard | 414 | 33 | 806 | 85 |
| | .. | 10 | | |
| Textiles (excluding packaging materials) | | | | |
| Yarn, thread, tape and cloth, not oiled or otherwise coated or impregnated with insulating materials | Th.lb. | | Th.lb. | |
| | | | 190 | 94 |
| Of cotton | 484 | 192 | Th.sq.yds. | |
| | .. | 251 | 600 | 113 |
| | | | .. | 138 |
| | | | Th.lb. | |
| | | | 309 | 162 |
| | | | .. | 71 |
| Of man-made fibres (rayon, nylon, etc.) | 50.3 | 22 | Th.sq.yds. | |
| | .. | 39 | 108 | 35 |
| | | | .. | 5 |
| | | | Th.lb. | |
| Of jute | | | 10.7 | 1 |
| | | | Th.sq.yds. | |
| | .. | .. | 341 | 39 |
| Of silk | | | .. | 23 |

Continued on next page

TABLE 10 (continued)

| | 1954 | | 1963 | |
|---|-----------|--------|-----------|--------|
| | Quantity | Cost | Quantity | Cost |
| | | £'000 | | £'000 |
| Materials for processing (continued) | | | | |
| Electrical insulating materials not elsewhere specified | .. | 1,696 | .. | 2,400 |
| Insulating wires, cables, strips and strands (f) | .. | 9,427 | .. | 11,401 |
| Purchased components for incorporation in firms' own products | | | | |
| Ball and roller bearings and parts thereof | .. | 856 | .. | 1,737 |
| Batteries and accumulators | .. | 752 | .. | 363 |
| Fractional horse-power electric motors (i.e. less than one horse-power) | .. | 74 | .. | 827 |
| Internal combustion engines | .. | 653 | .. | 5,695 |
| Loudspeakers and microphones | .. | (g) | .. | 17 |
| Magnets, permanent | .. | 453 | .. | 347 |
| Measuring and control instruments including ammeters, voltmeters, thermostats, etc. | .. | 2,686 | .. | 6,267 |
| Radio, radiogram and television cabinets | | | | |
| Of wood | .. | 588 | .. | 20 |
| Of plastics materials | .. | .. | .. | .. |
| Valves, electronic (other than X-ray valves), electronic stabilising tubes and cathode ray tubes, excluding mercury pool rectifiers | Thousands | | Thousands | |
| Transmitting and industrial | 1,541 | 444 | 164 | 104 |
| | .. | 49 | .. | 39 |
| Other (including cathode ray tubes) | 552 | 790 | 15.1 | 160 |
| | .. | 9 | .. | .. |
| Semi-conductor devices | .. | .. | 3,533 | 1,106 |
| | .. | .. | .. | 943 |
| Electrical machinery not included above, e.g., generators, motors (other than fractional horse-power motors), converting machinery, static rectifiers, transformers for lighting, heating and power, starting control and switchgear, etc., and parts thereof | .. | 5,076 | .. | 11,476 |
| Other purchased electrical components, including parts and accessories (pick-ups, automatic record changers, etc.) for gramophones and radiograms, not elsewhere specified | .. | 1,797 | .. | 5,754 |
| Other finished parts not elsewhere specified | | | | |
| Wholly or mainly of plastics materials | .. | 649 | .. | 1,633 |
| Other, except those of rubber and glass | .. | 7,120 | .. | 16,197 |
| | Th.gal. | | Th.gal. | |
| | .. | .. | 407 | 133 |
| Lubricating oils and greases (including cutting oils and emulsions) | 570 | 144 | Th.cwt. | |
| | .. | 77 | .. | 41 |
| | .. | .. | 6.9 | 47 |
| Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement | .. | 2,491 | .. | 3,557 |
| All other materials for processing | .. | 20,487 | .. | 23,312 |

TABLE 10 (continued)

| | 1954 | | 1963 | |
|---|-----------|---------|-----------|---------|
| | Quantity | Cost | Quantity | Cost |
| | | £'000 | | £'000 |
| Packaging materials | | | | |
| Paper and board | | | | |
| Boxes, cartons, packing cases, and drums and canisters (with or without metal ends) of paper, cardboard and fibreboard | .. | .. | .. | 659 |
| Wrapping paper (including paper coated with plastics and any laminates incorporating paper but not metal), moulded pulp units, labels and other packaging materials of paper, cardboard and fibreboard (except multiwall sacks) | .. | 692 | .. | 176 |
| Timber | | | | |
| Containers wholly or mainly of wood, including plywood boxes and drums, baskets and wickerwork crates | .. | .. | .. | 678 |
| Timber (sawn or planed) for manufacture into packing cases, etc. | .. | 1,362 | Th.cu.ft. | 370 |
| | .. | .. | 779 | .. |
| Plywood for manufacture into packing cases | .. | .. | Th.sq.ft. | 9 |
| | .. | .. | 142 | 114 |
| Sheet, film, foams, etc. wholly or mainly of polyethylene (including bags and lay flat tubing) | .. | .. | .. | 42 |
| All other packaging materials | .. | 384 | .. | 166 |
| Fuel and electricity (h) | Th. tons | | Th. tons | |
| Coal | 277 | 969 | 270 | 1,368 |
| Coke (including screenings) and manufactured fuel | 31.9 | 201 | 29.3 | 198 |
| | .. | .. | .. | 25 |
| Derv fuel and motor spirit for use in road vehicles | Th.gal. | | Th.gal. | |
| | 1,652 | 345 | 2,542 | 520 |
| Other liquid fuels (including creosote/pitch mixtures, etc., and liquefied petroleum gases) | 8,670 | 398 | 17,194 | 1,737 |
| Gas | Th.therms | | Th.therms | |
| | 10,308 | 586 | 15,326 | 836 |
| | .. | 87 | .. | 105 |
| Electricity | Th.kWh | | Th.kWh | |
| | 350,312 | 1,749 | 556,230 | 3,067 |
| | .. | .. | .. | 424 |
| Total cost of materials and fuel | | 107,241 | | 175,876 |
| Goods purchased for merchanting | | .. | | 24,639 |
| Canteen purchases | | .. | | 1,501 |
| Total cost of purchases | | .. | | 202,016 |

(a) Described as 'Pig iron except refined pig iron' in 1954.

(b) Excluding 'Pillars rolled (not fabricated) including tube rounds and squares' in 1954.

(c) Main heading in 1954 covered 'iron and steel'.

(d) Main heading in 1954 covered 'steel' only.

(e) 'Blister' was not specifically excluded in 1954.

(f) Including 'flexibles' in 1954.

(g) Not recorded separately in 1954.

(h) The total quantity of electricity generated in firms' own establishments in this industry was 23,654 Th. kWh in 1954 and 58,407 Th. kWh in 1963.

TABLE 11 Transport costs and employment of larger firms, 1963

Firms employing 25 or more persons: United Kingdom

| | Unit | 1963 |
|---|-------|--------------|
| Average number employed mainly on transport | No. | 1,159 |
| Transport costs | | |
| Wages and salaries | £'000 | 904 |
| Derv fuel and motor spirit | " | 520 |
| Payments to other organisations for transport | " | 3,347 |
| Costs of operating road goods vehicles | | |
| Insurance | " | 112 |
| Vehicle licences | " | 60 |
| Depreciation | " | 487 |
| Payments to other organisations for repairs and maintenance | " | 177 |
| Total | | 5,606 |

TABLE 12 Payments for certain services, etc. by larger firms, 1963 (a)

Firms employing 25 or more persons: United Kingdom

| | Amounts payable |
|--|-----------------|
| Repairs and maintenance to | £'000 |
| Buildings | 1,161 |
| Road goods vehicles | 177 |
| Plant, machinery, and other capital equipment | 1,083 |
| Insurance, licensing and depreciation of road goods vehicles (b) | 659 |
| Rates, excluding water rates | 2,408 |
| Hire of plant and machinery | 373 |
| Postage, telephone, telegrams and cables | 1,695 |
| Total | 7,556 |

(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.

TABLE 13 Percentage analysis of twelve-month periods covered by returns from larger firms, 1963

Firms employing 25 or more persons: United Kingdom

| Year ended | Percentage of total number employed | Year ended | Percentage of total number employed |
|------------|-------------------------------------|---------------|-------------------------------------|
| 1963 | Per cent. | 1963 (contd.) | Per cent. |
| April (a) | 0.8 | November | 0.5 |
| May | 1.3 | December | 57.8 |
| June | 3.8 | | |
| July | 3.7 | 1964 | |
| August | 0.0 | January | 2.6 |
| September | 4.6 | February | 0.6 |
| October | 1.7 | March | 22.6 |
| | | Total | 100 |

(a) Including returns made for twelve-month periods ended 1st to 5th April, 1964.

TABLE 14 Sales of all parts of machinery and plant by larger firms, including sales by establishments classified to other industries, 1958 and 1963

This table is not applicable to this industry.

DM 54964/1/137230 K7 5/68 LB

Capital Expenditure (continued)

(ii) Land and existing buildings.

The items shown are the capital cost of freeholds purchased and the capital cost or premium payable for leaseholds acquired (excluding the value of any assets acquired in taking over an existing business), and the amounts receivable for any freeholds or leaseholds disposed of. The value is that charged to capital account during the year of return.

(iii) Plant, machinery and vehicles.

The items shown are the value of plant and machinery and of vehicles acquired, both new and second-hand, and the amount received for items disposed of during the year. The value of plant and machinery acquired includes plant, etc. which firms produced for their own use in connection with the business covered by the return. The value of plant, etc. acquired is the expenditure charged to capital account during the year of return less any discounts received, but including the cost of transport and installation. No deduction is made for depreciation, amortisation or obsolescence. The proceeds of items disposed of during the year exclude amounts written off for items scrapped.

Capital expenditure during the year in respect of manufacturing establishments where production had not started before the end of the year is excluded in this report for both 1958 and 1963.

Characteristic Products

The characteristic products of a sub-division are those in terms of which the sub-division is defined. They are products commonly associated in production and are usually similar in nature or manner of production. In most cases the characteristic products of each sub-division are indicated in Table 5 of the industry reports. For those industries for which an analysis by sub-divisions has been made, Table 2 shows the total sales of such characteristic products for each sub-division. The totals include, besides the products which define the sub-division, other items of output assumed to be closely related to them, e.g. waste products and work done.

Enterprise

The term enterprise is used in this report to mean one or more firms under common ownership or control. An enterprise normally consists either of a single firm, or of a parent company together with its subsidiary companies.

Entries

The number of entries shown in Tables 5, 6 and 8 against a particular output or production heading is the number of returns on which figures were recorded for that item.

Establishment

The census was based on the establishment, comprising in most cases the whole of the premises under the same ownership or management at a particular address (e.g. a factory or mine); but firms were asked to exclude from all sections of their returns particulars relating to any department not engaged in production for which they kept a separate set of accounts. Where separate accounts were not kept, they were asked to include merchanting or factoring, canteens operated by them and other

ancillary activities such as bottling, packing and the manufacture of containers for packing their own products, whether or not these activities are carried on at the same address as the works. Building and engineering maintenance departments and selling and transport departments were treated similarly.

Gross Output

The gross output of an industry is the aggregate value of goods made and other work done during the year by the establishments classified to the industry. It is derived by subtracting from the value of sales and work done, the value of stocks of goods on hand for sale and work in progress at the beginning of the year and adding the value at the end of the year.

Larger Firms

These are firms in which twenty-five or more persons were employed on the average during the year.

Net Output

The net output of an industry represents the value added to materials by the process of production. It includes the gross margin on any merchanted or factored goods sold; it constitutes the fund from which wages, salaries, insurance, pensions, hire of plant and machinery, payments for repairs and maintenance, costs of operating road vehicles, rents, rates and taxes, advertising and other selling expenses and all other similar charges have to be met, as well as depreciation and profits. There is no appreciable duplication in net output. Net output has been obtained by deducting from the gross output the cost of purchases adjusted for stock changes, payments for work given out to other firms, and payments for transport.

Normally any customs or excise duty on materials purchased is included in the cost of materials. Similarly, finished goods sold have been valued as they were sold, duty paid or duty free. The amounts of duty, subsidies, allowances and levies receivable or payable, where of substantial importance in the industry, were required to be stated separately, and these items were taken into account when calculating net output.

Net output per person employed

The figures for net output per person employed are derived by dividing the net output by the average number of persons employed (full-time and part-time) on all activities covered by the returns, including operatives, administrative, technical and clerical employees and working proprietors, but excluding outworkers.

Principal Products

The principal products of an industry are those in terms of which the industry is defined. They are products commonly associated in production, and are usually similar in nature or manner of production.

Production

This means the total quantity of a product made during the year, whether sold in the year, added to stock, transferred to another department of the same firm, or used in the manufacture of other products within the business covered by the return. It includes goods produced from materials supplied by other firms.

Purchases

Purchases include the cost of materials and components bought for use in production; of fuel and electricity for all purposes; of packing materials, including the full cost of returnable cases and containers when first purchased; of workshop materials, office materials and materials for repairs to firms' own buildings, plant and vehicles when carried out by their own workpeople included in the return; of consumable tools; and of parts for machinery purchased during the year as replacements. Water charges are also included. In general purchases of goods for merchandising or factoring and canteen supplies are included. Materials supplied by customers for processing are excluded.

The values shown include any duty paid (less rebate, etc.) but exclude trade discounts allowed. The cost of transport is included only if included in the cost of materials as invoiced; amounts paid to transport organisations, including firms' own separate transport organisations, for delivery of materials and fuel are, therefore, excluded. Materials purchased overseas are included at their c.i.f. cost plus any duty payable if the cost of transport from the docks was not included in the invoiced price, but at their full delivered cost if invoiced 'carriage paid home'. Materials and fuel transferred from another department of the firm not covered by the same return are included at the estimated selling value recorded by the other department.

Sales

Sales are in respect of goods made by the business covered by the return, goods made for it by outworkers or by other firms from materials given out to them (sometimes described as goods made on commission) and waste products. Any machinery or other capital items produced for use in the business covered by the return are included, the value being that adopted in the firm's capital asset account. Goods sold without being subjected to any manufacturing process (merchanted or factored) and canteen takings are included as in 1958.

The value shown for sales is the net selling value, defined as the amount charged to customers whether on an ex-works or delivered basis, net of any trade discounts, agents' commissions, allowances for returnable cases, purchase tax, etc.; the net amount charged for packing materials is included. Goods charged on a delivered basis to customers overseas are included at the f.o.b. value. For work done on commission or for the trade the value shown is the net amount charged.

Where goods produced in one department were transferred to another department of the same firm not covered by the return, these transfers were treated as sales by the producing department and valued as far as possible as if they had been sold to an independent purchaser. Goods transferred to wholesale or retail selling organisations for which separate accounts were kept were valued on the same basis. Estimations of a similar kind were also sometimes necessary in valuing transfers between different firms belonging to the same enterprise. To the extent that the sales of finished products of one establishment may constitute the materials purchased by another, total figures of the value of sales (and of materials and fuel purchased) include an element of duplication.

Services rendered

This represents the amounts charged for hiring out plant, machinery and other goods, providing transport, or for any technical or other

services rendered to other organisations. It includes amounts credited for similar services rendered to other departments of the same firm not covered by the return.

Small Firms

These are firms in which fewer than twenty-five persons were employed on the average during the year.

Stocks and Work in Progress

Values are given of stocks of goods on hand for sale, and of materials and fuel, at the beginning and end of the year of return, including any stocks of goods held for merchandising or factoring. The values include duty in the case of dutiable goods held out of bond. The value of work in progress at the two dates is also usually shown. This excludes any progress payments made to sub-contractors, and no deduction is made on account of progress payments received.

Transport Payments

These represent the total amount paid or credited during the year for both outwards transport of finished goods sold and inwards transport of materials and fuel purchased. They include payments to other firms, and to any separate transport organisation of the same firm, not covered by the return, but exclude the value of transport services provided by the business covered by the return. The items included are payments for hired cartage and for inwards and outwards carriage by all forms of inland transport, i.e. railways, road haulage, canals, coast-wise shipping, air, etc. Payments made for sea freight on goods sold to customers overseas and on materials and fuel purchased from overseas suppliers are excluded.

Wages and Salaries

These are the amounts paid during the year to operatives and to administrative, technical and clerical employees. Payments to working proprietors, whether called salaries or not, are excluded; in Northern Ireland this exclusion extends also to payments to directors of limited companies. The values shown include all overtime payments, bonuses and commissions, whether paid regularly or not, and no deduction is made for income tax, insurances, contributory pensions, etc. The value of any payments in kind, travelling expenses, lodging allowances, etc. and employers' contributions to National Insurance and pension schemes is excluded.

Work given out

The figures shown represent the total amount paid for work done by other firms on materials supplied to them, and also by firms' own establishments for which separate returns were made. They do not include payments to individual outworkers or payments for business and other services.

Symbols used

The following symbols are used throughout the report:

- .. Not available
- Nil or negligible (less than half the final digit shown)
- * Figures cannot be shown owing to the risk of disclosing information about individual enterprises.

Rounding of Figures

The figures in the tables have, where necessary, been rounded to the nearest final digit. There may, therefore, be apparent slight discrepancies between the sums of the constituent items and the totals shown.

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