

BOARD OF TRADE

5 42 [HA 251]

Report on the Census of Production 1963

30 Explosives and fireworks

LONDON: HER MAJESTY'S STATIONERY OFFICE THREE SHILLINGS NET

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Report on the Census of Production 1963

30 Explosives and fireworks

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)

LONDON: HER MAJESTY'S STATIONERY OFFICE 1968

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

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 fulltime 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.

The figures include persons engaged in merchanting 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



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Explosives and fireworks

This Report on the Explosives and Fireworks Industry relates to establishments engaged wholly or mainly in manufacturing explosives, fireworks, detonators, fuses (not shell fuses), percussion caps, flares, signal rockets, small arms ammunition, etc., and filling bombs, cartridges, shells, etc.

This industry corresponds to minimum list heading 273 in the Standard Industrial Classification (Consolidated edition, 1963).

Twenty-one Government Establishments are included for 1954, twenty for 1958 and eight for 1963. For 1963 certain armament storage depots have been placed outside the scope of the Census. The figures for 1963, therefore, are not strictly comparable with those of previous years. There were no establishments in this industry in Northern Ireland in 1954, 1958 and 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).

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

| | | Unit | 1958 | 1963 |
|---|--|---------------------------|------------------------|-----------|
| Number of enterprises | Unit Fireworks C | No. | 30 | 30 |
| Number of establishments | | es Catp | 63 | 51 |
| Gross output | | \$,000 | 51,314 | 48,392 |
| Net output | | | 30,943 | 30,998 |
| Net output per head | | 2 | 1,010 | 1,390 |
| 44.492 86836241 48.197 | goods produced and work done | €,000 | 51,408 | 46,277(b) |
| Sales and work done | merchanted goods and canteen takings | • 442 | 333 | 2,492 |
| Purchases | materials for processing and packaging, and fuel | 1,180 bes bed 1,180 | 18,518 | 13,416 |
| r ur chabes | goods for merchanting and canteen purchases | s signon | 10,310 | 2,361 |
| | for work done on materials given out | i physic | 10 | |
| Payments to other organisations | for transport | ducts | 1 020 | 230 |
| Stocks and work in progress | (for transport | | 1,029 | 594 |
| 18,083 [13,361] | change during year | ng, and | alainojaa alainojaa | |
| Total stocks and work in progress | - | er chaptra | - 1,202 | - 1,171 |
| 1 162.2 P | at end of year | panchal ac | 11,360 | 10,647 |
| Goods on hand for sale | change during year | iven our | - 114 | - 336 |
| | at end of year | a Fibersy | 2,796 | 3,981 |
| Work in progress | change during year | \$ 100 mm | - 313 | - 41 |
| | at end of year | | 3,609 | 3,050 |
| Materials, stores and fuel | change during year | a libera di sal | - 775 | - 793 |
| | at end of year | | 4,955 | 3,615 |
| | total, including working proprietors | Th. | 30.6 | 22.3 |
| Average number employed | operatives | derail So | 25.2 | 17.7 |
| | (other employees (c) | muline with | 5.4 | 4.5 |
| Wages and salaries | of operatives | £,000 | 13,405 | 11,532 |
| | of other employees (c) | | 5,086 | 5,396 |
| Employers' contributions to N pension schemes, etc. (d) | ational Insurance and private | yess (g) | latter empl | 1,839 |
| Capital expenditure (e) | | 3.0 | Liningo 964 | t bak aag |
| Total | | played | e tedio lo | 2,420 |
| New building work | | of taleion system | 1,303 | 895 |
| Land and existing buildings | (f) | (8) sask | Ique redio j | - 7 |
| Plant and machinery (f) | | Lawolysk . | 3,515 | 1,426 |
| Vehicles (f) | | SEV. | 81 | 105 |

⁽a) For 1963, estimates for small firms and for firms not making satisfactory returns accounted for less than 1 per cent. of the total figures in which they were incorporated. (For 1958 the comparable figure was also less than 1 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 <u>less</u> disposals.

TABLE 2 Analysis of larger firms by sub-divisions within the industry, 1958 and 1963 Firms employing 25 or more persons: United Kingdom (a)

| | | | Sub-d | ivisions of | the indust | ry (b) | | |
|----------------------|--|---|--------|-------------|-----------------|------------|-----------------------|---------|
| | | Unit | | works)1 | | her 12 | Tol | tal |
| 19 500 | 28 | | 1958 | 1963 | 1958 | 1963 | 1958 | 1963 |
| Number of ente | rprises (c) | No. | 15 | 12 | 9 | 9 | 24 | 21 |
| Number of esta | blishments | | 20 | 20 | 37 | 21 | 57 | 41 |
| Gross output | | £'000 | 3,396 | 3,705 | 47,847 | 44,492 | 51,241 | 48,197 |
| Net output | | | 1,970 | 2,289 | 28,929 | 28,584 | 30,899 | 30,873 |
| let output per | | £ | 733 | 972 | 1,036 | 1,440 | 1,010 | 1,390 |
| Sales and | goods produced and work done | £'000 | 3,346 | 3,495(d) | 47,990 | 42,596(d) | 51,335 | 46,090(|
| work done | merchanted goods and canteen takings | " | 41 | 59 | 292 | 2,423 | 333 | 2,482 |
| Sales of chara | cteristic products | ц | 3,265 | 3,263 | 38,177 | 34,663 | (e) | (e) |
| Index of speci | | Per cent. | 98 | 93 | 80 | 81 | 90 | 83 |
| Purchases | materials for processing and packaging, and fuel | 2,000 | 1,351 | 1,278 | 17,141 | 12,083 | 18,492 | 13,361 |
| | goods for merchanting and canteen purchases | н | | 60 | Jo 25 (| 2,291 |] 889 | 2,352 |
| Payments to other | for work done on materials given out | | 34 | 24 | 16 | 205 | 49 | 229 |
| organisations | for transport | | 55 | 60 | 973 | 531 | 1,028 | 591 |
| tocks and wor | | | + 3 | + 101 | - 117 | - 496 | - 114 | - 335 |
| Goods on hand for | change during year | | | 161 | - 117 | 3,196 | 2,792 | 3,965 |
| sale | at end of year | | 401 | 769 | 2,391 | - 31 | - 313 | - 41 |
| Work in progress | change during year | | | 10 | - 318 | 2,979 | 3,604 | 3,038 |
| | Lat end of year | 100000000000000000000000000000000000000 | 59 | 59 | 3,545 | - 796 | | - 790 |
| Materials, stores | change during year | | 10 | + 6 | 787 | 3,227 | 2 25500000 07 | 3,601 |
| and fuel | total, including working proprietors | No. | 282 | 374 | 4,666 27,916 | 19,855 | 30,602 | 22,209 |
| Average number | | | 2,410 | 2,034 | 22,757 | 15,642 | 25,167 | 17,676 |
| employed | other employees (g) | | 276 | 310 | 5,159 | 4,213 | 5,435 | 4,523 |
| | of operatives | £'000 | 958 | 952 | 12,428 | 10,540 | 13,387 | 11,491 |
| Wages and salaries | of other employees (g) | H | 216 | 308 | 4,863 | 5,069 | 5,079 | 5,377 |
| Vages and | (operatives | £ | 398 | 468 | 546 | 674 | 532 | 650 |
| salaries per head | other employees (g) | | 783 | 993 | 943 | 1,203 | 935 | 1,189 |
| | tributions to National | \$,000 | | 61 | (3) 2) | 592 | teixe bas t | 653 |
| | tributions to private s, etc. (i) | | | 34 | | 1,146 | (l) selai | 1,180 |
| Capital expend | | | 22 | 20 | 1 260 | 863 | 1,301 | 892 |
| New building | | enidas Torina | 32 | 29 | 1,269 | 38 | and and | 46 |
| Land and existing | acquisitions | ramane A | (,1990 | tog & nedl | Rapi cala | 49 | idarsquoo received | 53 |
| buildings | [disposals | simmos | | 4 | 2 061 | 1,578 | 3,722 | 1,613 |
| Plant and machinery | acquisitions | 101 1 | 30 | 35 | 3,961 | 192 | 212 | 192 |
| | [disposals | a pens | 30 1 | 130 6420 3 | 210 | 110 | 124 | 145 |
| Vehicles | acquisitions | roduction | 30 | 35 | 94 | expenditus | Exclading | 41 |
| | (disposals | н | 7 | 18 | 35 | 23 | 43 | 41 |

For notes to this table - see page 30/6

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) | Enter- prises | Estab- lish- ments | Average number employed (a) | Gross output | Net output | Net output per head | Capital expendi- ture (b) | Total value of stocks and work in progress at end of year |
|---|------------------|--------------------------|--------------------------------------|-----------------|---------------|------------------------|---------------------------------|---|
| 7314 200001117 | Number | Number | Number | £,000 | £,000 | 3 | £'000 | \$,000 |
| 25-99 | 8 | 8 | 540 | 759 | 479 | 887 | 23 | 153 |
| 100-199 | 4 | 6 | 526 | 1,175 | 495 | 942 | 17 | 319 |
| 200-499 | 4 | 9 | 1,585 | 3,200 | 1,870 | 1,180 | 66 | 849 |
| 500 and over | 5 | 18 | 19,558 | 43,063 | 28,029 | 1,433 | 2,303 | 9,283 |
| Total | 21 | 41 | 22,209 | 48,197 | 30,873 | 1,390 | 2,410 | 10,604 |

(ii) Employees, wages and salaries, and employers' contributions Firms employing 25 or more persons: United Kingdom

| Average number employed by | Employees | | Wages and salaries | | Employers' contributions | | Wages and salarie per head | |
|--|-----------------|------------|--------------------|------------|------------------------------|-----------------------------------|-------------------------------|---------------|
| the enterprise in the industry (a) | Oper- atives | Others (c) | Oper- atives | Others (c) | National Insurance (d) | Private pension schemes, etc. (e) | Oper- atives | Others (c) |
| Sther pyro | Number | Number | £'000 . | £,000 | \$,000 | \$,000 | 3 | 2 |
| 25-99 | 451 | 81 | 195 | 84 | 12 | 2 | 433 | 1,039 |
| 100-199 | 457 | 68 | 209 | 61 | 15 | 8 | 458 | 903 |
| 200-499 | 1,353 | 231 | 741 | 215 | 41 | 22 | 548 | 930 |
| 500 and over | 15,415 | 4,143 | 10,346 | 5,017 | 584 | 1,147 | 671 | 1,211 |
| Total | 17,676 | 4,523 | 11,491 | 5,377 | 653 | 1,180 | 650 | 1,189 |

- (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 £186,000.

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

| Ages | Males | Females | All employees |
|-------------|--------------|-----------|---------------|
| Latel | Per cent. | Per cent. | Per cent. |
| Under 18 | ilas) lugreo | ald 4ag | 5 |
| 18 and over | 63 | 32 | 95 |
| All ages | 64 | 36 | 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.

| | 1958 | 1963 |
|--|------|--------------------------------------|
| Number of firms | 6 | 10 |
| Average number employed: | | |
| Working proprietors Other persons employed | } 43 | $\begin{cases} 11 \\ 79 \end{cases}$ |

- (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 and other goods, for providing transport, or for technical or other services rendered).
- (e) Characteristic products relate only to the sub-divisions of the industry.
- (f) 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.
- (g) Administrative, technical and clerical employees.
- (h) Including both flat rate and graduated contributions.
- (i) Including pensions and gratuities paid other than from pension funds.
- (j) 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

| dustry | | 19 | 958 | 1963 | | | | |
|----------------|--|--------------------|-----------|-------------------|---|------------------|------------|--|
| ivision (a) | odects of the industry by establish- 085,000 in 1958 and ks. 195,000 in formation relating to individual | Quantity | Value | Quantity | Value | Enter- prises | Entrie | |
| 02 | Live ammunition not exceeding | annyin od 1 | £,000 | rate parrie | £,000 | Number | Number | |
| 02 | 30 mm. calibre | mydriter. | 6,361 | | 4,709 | 7 | 9 | |
| 02 | Live ammunition exceeding 30 mm. calibre | other | 1,556 | | 3,456 | * | 5 | |
| 02 | Fuses and blasting accessories | Mn.ft. | | Mn.ft. | | | | |
| | Safety fuse | 1,028 Thousands | 2,359 | 156 Thousands | 399 | * | 70 | |
| | Electric detonators | 143,034 | 3,612 | 114,821 | 3,560 | LE *F | 6 | |
| | All other fuses, tubes, primers and detonators | beilet | 1,382 | 30 25 30 OC | 2,182 | | 7 | |
| | Other accessories, including cables and parts of fuses and of blasting accessories | other than | 1,670 | 191 | 475 | | 38 | |
| 02 | Propellent powders of all types | Th.cwt. | 1,070 | Th.cwt. | that leds of | | | |
| 02 | Cordite and other smokeless propellents (other than smokeless | 39.5 | 1,603 | ed formes. | ties of dis particulars The total a | | | |
| | sporting powders) | [] | 1,976 | 72.0 | 4,136 | | 30 | |
| 00 | Smokeless sporting powders | J n.t. 000 .58 | 3 bas 880 | 5.9 | 203 | | * | |
| 02 | High explosives | 0.7.7 | | 6 | | | 883 | |
| | Blasting powder | 85.5 | 793 | 25.0 | 337 | | 100 | |
| | Other sorts of high explosives Gelatinous | 1,205 | 10,687 | 651 | 5,952 | | • | |
| 01 | Non-gelatinous Fireworks |] 1,200 | 10,00. | 390 | 2,690 | • | 6 | |
| | For amusement and display purposes | FF-58556*•1 | 2,586 | stren it | 2,329 | 10 | 12 | |
| | Other pyrotechnics, including signal rockets, line carrying | i sinomiki | by estab | 9011305070 985 | includings 1958 and | 3 344 | 903 903 | |
| | rockets, etc. | •• | 923 | | 1,068 | 10 | 12 | |
| 02 | Explosives not elsewhere specified | nanbni eldi | 2,474 | ggs bon bit | 1,238 | | 7 | |
| | Other products | •• | 1,406 | 100 | 767 | | 12 | |
| 91 | Waste products | •• | 530 | 101 | 615 | 8 | 14 | |
| 54 | Work done Research and development work | | (b) | 511 | 2,408 | • | 12 | |
| 4 | Other work done, on commission, sub-contract work, etc. | | 10,535 | 1,180 | 5,782 | • | 7 | |
| | Total vo variables and lo | d producti | 50,455 | sales io | 42,307 | 4.3.0 | AT. | |
| | Sales in other industries (see Table 6) | manifolds | 4,095 | | 3,795 | 7 - 1 0 | | |
| | Principal products of this industry sold by establish- ments in the industry | tambel stel | or Hidwil | iggs ton all | Inis capte | 2 | 33(c) | |

- (a) The number given is that of the sub-division of which the item is a characteristic product. The sales shown are the total sales by larger firms, not merely sales by establishments classified to the sub-division.
- (b) Not recorded separately in 1958.
- (c) 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

The total value of the sales of principal products of the industry by establishments classified to other industries was £4,095,000 in 1958 and £3,795,000 in 1963. Owing to the risk of disclosure of information relating to individual firms, separate particulars cannot be given.

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

Firms employing 25 or more persons: United Kingdom

The total value of sales of goods other than principal products by larger firms in the industry was £4,974,000 in 1958 and £7,578,000 in 1963. Owing to the risk of disclosure of information relating to individual firms, separate particulars cannot be given.

The total value of goods sold without having been subjected to any manufacturing process (merchanted or factored) by larger firms in the industry in 1958 was £17,103 and £2,296,000 in 1963. The total value of canteen takings by such firms in 1958 was £315,633 and £186,000 in 1963.

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,

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

| Geantity Cost Sesatity Cost | 19 | 954 | Opposit of 19 | 963 |
|--|--------------------------|------------------------|---|-------------------|
| 000'3 000'3 | Quantity | Cost | Quantity | Cost |
| Fuel and electricity (1) (continued) | (0) | £,000 | gasecorg re | £'000 |
| Materials for processing | 597 | 10 | 190 | er.EE |
| Sulphur-containing materials (including anhydrites, pyrites and spent oxide) | The hills | 272 | The state of | 30 |
| Heavy chemicals (acids, alkalis, alcohols, other inorganic and organic chemicals, compressed gases, et | c.) | 90 | 54,228 | Diner Textiles |
| Acids | | 24,811 | avain1. | 00150381 |
| Nitric Man description | | 162 | | 76 |
| Sulphuric | | 226 | | 58 |
| Other | galastasg | (a) | dio brand | 27 |
| Alcohols | The second second second | Justine and the second | Managaraka kana | 207130 |
| Methyl alcohol | | 191 | bos aile gi | 38 |
| Other | | 334 | •• | 204 |
| Ammonia | sachinery plan | wo 'smail' | it parts fo | Replaceme |
| Liquor | alors eldsaman | 730 | and access | 676 |
| Anhydrous | ives con target | 159 | this: indus | 80 |
| Ammonium compounds | | | elsiren | m painalas |
| Nitrate | | 437 | brisod | 362 |
| Other | bea smort ins | (a) | eg .adotre | 55 |
| Potassium compounds (b) | of paper, cardbo | 73 | m imposite : | 109 |
| Sodium compounds (c) | o ds a basens se | 61 | mil zanen | 152 |
| Ethanediol (ethylene glycol) | ion and record as | 171(d) | haza-inci | 107 |
| Cellulose esters and ethers (including gun cotton, i.e. cellulose nitrate) | Brand Spanish Brand | (a) | parp unital is of paper il secks) | 308 |
| Other heavy chemicals | | 315 | (5000) | 403 |
| Explosives | sibular bees | o Violes in | .x.Lloda an | Contain |
| High | ages violately | 530 | d drama, b | 302 |
| Other (including propellent powders) | | 700 | | 160 |
| Fuses and fuseheads | Markethie nic | 437 | asen or pl | 53 |
| Detonators (a) | gailuion. gail | 518 | roubore bo | 295 |
| Glycerine | tadture in o pa | ned for pan | wylq galbul | Outs Just |
| Crude | | 1,186 | on revised | 334 |
| Refined | | 132 | 5 20 Palata | 145 |
| Synthetic resins and plastics materials | | | Th aut | |
| Phenolic and cresylic resins, solutions, emulsions, dispersions, moulding and extrusion compounds | 3 6 | (a) { | Th.cwt. | 197 |
| Melamine and urea formaldehyde (aminoplastics) | J | | 0.2 | 6 |
| Light metals and non-ferrous metals in all forms exce finished parts, wire and scrap | Th.tons | sol ilrigi | Th.tons | |
| Aluminium and aluminium alloys | in digida tana | 166(d) | 0.8 | 287 |
| Brass and other copper alloys (including nickel sil | ver | 8 90 9 (0 1 5 9 g | Tollaupii. | |
| and cupro-nickel, but excluding all other nickel alloys) | 1.3 | 347 | 0.3 | 136 |

Continued on next page

TABLE 10 (continued)

| | 19 | 54 | 1963 | | |
|---|------------------------|----------------------------|-----------------------------|----------------------|--|
| 1994 1963 | Quantity | Cost | Quantity | Cost | |
| 1203 Village Cost Cost Cost | | £,000 | by 2910513 | £,000 | |
| aterials for processing (continued) | | STATE TO | | | |
| Wire | | 96 | | l aleire | |
| Insulated | ing golf.vior | 433 | m gainista | 99 | |
| Other | | 452 | se anede pe | 491 | |
| Textiles | alconols; compresse | de, alkalıs c ebesicals | | savy che narganio | |
| Cotton linters | | 109 | | 163 | |
| Jute yarn | | 621 | | 122 | |
| Wood pulp | a la e · · · · f | 365 | e inco-sess | 261 | |
| Paper and board, other than for packaging | | (a) | •• | 257 | |
| Trees footbern at it word persons between | | (| Th.gal. | lodosia | |
| . 187 | | 8(d) | 54.3 | 12 | |
| Lubricating oils and greases | 92 (20) (2) | 8(4) | Th.cwt. | 19010 5 | |
| | | | 1.7 | o i monand | |
| Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought | | | | | |
| as replacement | | 1,143 | 1918 991 | 708 | |
| All other materials for processing | | 9,868 | San Special | 3,711 | |
| ackaging materials | | | attended and a | a ve ili | |
| Paper and board | | | 91 | | |
| Boxes, cartons, packing cases, and drums and canisters | | | | seds0 | |
| (with or without metal ends) of paper, cardboard and fibreboard | | (e) | ra compound | 313 | |
| Wrapping paper (including paper coated with plastics | | 1.0 | * somogno: | BULLOG | |
| and any laminates incorporating paper but not metal), moulded pulp units, labels and other packaging | | ne glycol) | elydie) lei | Sthaned | |
| materials of paper, cardboard and fibreboard (except | a Sorperind | 381 | 2 235225 235 1101586 211 | 172 | |
| multiwall sacks) | | 301 | sousatites savy chemic | Other | |
| Timber | | | | wisoloz | |
| Containers wholly or mainly of wood, including plywood boxes and drums, baskets and wickerwork crates | | 347 | | dulit 7 | |
| | | a soul Lorens | Th.cu.ft. | | |
| Timber (sawn or planed) for manufacture into packing | | | a for a decision of | 2 480 7 50 | |
| cases, etc. | | | 173 | 161 | |
| Other wood products for packaging, including wood wool, but excluding plywood for manufacture into packing | II | (e) | | IOISR01S | |
| cases |] | | | 4 | |
| All other packaging materials | | 664 | | 367 | |
| uel and electricity (f) | Th.tons | dustry by | Th.tons | Refined | |
| Cool 1290 37 | 440 | 1,745 | 3 244 | 1,320 | |
| Coal | secision | 270 | 975 bas 3 | Phenois | |
| Coke (including screenings) and manufactured fuel | 21 | 115 | 2.9 | 25 | |
| (89418 | Th.gal. | Committee of the | Th.gal. | | |
| Derv fuel and motor spirit for use in road vehicles | 596 | 111 41 | } 477 | 7 | |
| Other liquid fuels (including creosote/pitch mixtures, | 3. | olla mini | nuls bns ma | nimula | |
| etc., and liquefied petroleum gases) | 1,834 | 78 | 2,826 | 116 | |

TABLE 10 (continued)

| | 5 TO 5 TO 19 | 1954 | | 63 |
|--|-----------------------------|-------------|------------------------|-----------|
| promise payable for terminate acquired | Quantity | Cost | Quantity | Cost |
| Fuel and electricity (f) (continued) | Th.therms | ₹,000 | Th.therms | £,000 |
| Gas | 597 | 19 | 190 | 18 |
| | Th.kWh | | Th.kWh | agniti la |
| Electricity | 134,619 | 604 90 | } 54,223 | 356 |
| Total cost of materials and fuel | MUT TO 1803 | 24,611 | 4 301 811503 (6) 28 | 13,361 |
| Goods purchased for merchanting | er Proces | | TATES DOLLAR | 2,197 |
| Canteen purchases | 37 8 13 69 2 300 9828 22 | 12 an 13 an | Sun bas 1 | 154 |
| Total cost of purchases | caples | ban aserga | el senedge. | 15,713 |

- (a) Not recorded separately in 1954.
- (b) Described in 1954 as 'Potassium chloride'.
 (c) Described in 1954 as 'Sodium nitrate'.
 (d) So far as recorded separately, in 1954.

- (e) Included in 'All other packaging materials'.
- (f) The total quantity of electricity generated in firms' own establishment in this industry was 27,924 Th. kWh in 1954 and 82,184 Th. kWh in 1963.

TABLE 11 Transport costs and employment of larger firms, 1963 Firms employing 25 or more persons: United Kingdom

| A STATE OF THE STA | Unit | 1963 |
|--|--|---------|
| Average number employed mainly on transport | No. | 417 |
| Transport costs | | ercod l |
| Wages and salaries | £'000 | 344 |
| Derv fuel and motor spirit | 31 7103 | 77 |
| Payments to other organisations for transport | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 591 |
| Costs of operating road goods vehicles | an many from | |
| Insurance | and other management | 9 |
| Vehicle licences | The state of the s | 9 |
| Depreciation | | 51 |
| Payments to other organisations for repairs and maintenance | CONTRACTOR OF THE PROPERTY OF | 49 |
| Total Total | gas and passes an | 1,130 |

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

Firms employing 25 or more persons: United Kingdom

| | | To do a consense | | |
|---------------------|---|---|--|---|
| To.therns | 00011 | empedia.dT | Amounts payable | |
| maintenance | to | ros | £,000 | |
| | | 1993 - 677 | 371 | |
| vehicles | | DIALKET D | 49 | |
| hinery, and | other cap | ital equipment | 84 | |
| icensing and es (b) | d deprecia | tion of road | 68 | |
| ding water | rates | | 487 | |
| nt and machi | nery | | 15 | |
| ephone, tel | egrams and | cables | 125 | |
| [otal | | STORES STORES STORES | 1,199 | |
| | maintenance s vehicles chinery, and cicensing and es (b) ading water at and machi | maintenance to s vehicles chinery, and other cap cicensing and deprecia ces (b) ding water rates at and machinery dephone, telegrams and | maintenance to s vehicles chinery, and other capital equipment dicensing and depreciation of road des (b) ding water rates at and machinery dephone, telegrams and cables | payable maintenance to £'000 371 s vehicles thinery, and other capital equipment dicensing and depreciation of road les (b) ding water rates that and machinery lephone, telegrams and cables 1100 |

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

TABLE 13 Percentage analysis of twelve-month periods covered by returns from larger firms, 1963 Firms employing 25 or more persons:

| Year ended | Percentage of total number employed | Year ended | Percentage of total number employed |
|------------|---|------------------|---|
| 1963 | Per cent. | 1963 (contd.) | Per cent. |
| April (a) | 0.0 | November | 3.4 |
| May | 0.0 | December | 34.0 |
| June | 2.1 | 1964 | |
| July | 0.0 | unnul allul a | STREET, TOTAL |
| August | 0.8 | January | 0.0 |
| September | 1.3 | February | 0.1 |
| October | 0.3 | March | 58.0 |
| | e lig 223 | 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.

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

(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

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 subdivision 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.

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

Larger Firms

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

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

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.

⁽b) For details see Table 11.

Purchases

Purchases include the cost of materials and components bought for use in production; of fuel and electricity for all purposes; of packaging 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 merchanting 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 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 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

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 merchanting 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

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.

List of Industry Reports, etc.

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