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BOARD OF TRADE

THE REPORT ON THE CENSUS OF PRODUCTION FOR 1958

Part 23
MINERAL OIL REFINING



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

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NOTES

These notes give only the main information which is needed for interpreting the census figures. Fuller explanations are given in a separate booklet of Introductory Notes (Part 1 of the Report on the Census of Production for 1958).

TERMS USED IN THE CENSUS REPORTS

CAPITAL EXPENDITURE

The expenditure on new building work shown excludes the cost of land and existing buildings purchased; for plant, machinery and vehicles both new and second-hand items are included. The value is that charged to capital account during the year, including any transport and installation cost involved. It includes expenditure in respect of establishments in Great Britain where production had not started before the end of the year.

EMPLOYMENT

Employees are classified under the two main headings of (i) administrative, technical and clerical employees and (ii) operatives. The figures relate to persons on the pay-roll (i.e. whose National Insurance cards were held by employers), whether full-time or part-time employees. The figures for this industry exclude persons engaged in merchanting or factoring, and canteen workers.

Administrative, technical and clerical employees include, managers, superintendents, and works foremen; research, experimental, development, technical and design employees (other than operatives); draughtsmen and tracers; travellers; and office (including works office) employees.

Operatives include all other classes of employees, 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; inspectors, viewers and similar workers; maintenance workers; and cleaners. Operatives engaged in outside work of erection, fitting etc. are also included.

ENTERPRISE

The term enterprise is used in this report to mean one or more firms under common ownership or control as defined in the Companies Act, 1948. An enterprise normally consists either of a single firm, or of a holding company together with its subsidiary companies.

ENTRIES

The number of entries shown in Tables 4 and 7 is the number of returns on which figures against a particular output or production heading were recorded. The number of entries is less than the corresponding number of establishments to the extent that combined returns were made covering more than one of the establishments concerned.

ESTABLISHMENT

In most cases an establishment comprises the whole of the premises under the same ownership or

management at a particular address (e.g. a refinery or plant). Offices, warehouses, laboratories and other ancillary places of business at a separate address from the works were treated as part of the establishment.

INTERMEDIATE PRODUCTS

Figures are given showing the total quantities made during the year of important intermediate products, i.e. products which may be further processed in the establishments in which they are produced, whether or not they are also sometimes sold. They include also goods produced from materials supplied by other firms.

MATERIALS AND FUEL

The totals shown include the cost of all purchases of materials and components used in production, and of fuel (including oil, gas and electricity) for all purposes including heating, lighting and transport (where carried out by firms' own staff included in the return); all packing materials, including the full cost of returnable cases and containers when first purchased; workshop materials; office materials; water charges; materials for repairs to firms' own buildings, plant and vehicles when carried out by their own workpeople included in the return; consumable tools; and parts for machinery purchased during the year as replacements. 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 indigenous crude and shale oils represents the market value plus any payments to transport firms. Materials purchased overseas were entered at their c.i.f. cost plus landing charges and the cost of transport from the docks (unless landed and/or transported by firms' own employees).

NET OUTPUT

The net output of an industry represents the value added to materials by the process of production; it constitutes the fund from which wages, salaries, rents, rates and taxes, advertising and other selling expenses, and all other similar charges have to be met, as well as depreciation and profits. There is no appreciable duplication in net output.

Net output was obtained by taking the total value of sales and work done; adding the value of stocks of products on hand for sale and work in progress at the end of the year and deducting their value at the beginning of the year; and deducting also the cost of purchased materials and fuel used, payments for work given out to other firms, and payments for outwards transport. The net amount of duty paid was deducted.

NET OUTPUT PER PERSON EMPLOYED

The figures for net output per person employed are derived by dividing net output by total employment (see above).

SALES

Sales include goods made by the business covered by the return and those made for it by other firms from materials given out to them. Any machinery or other capital items produced for use in the business covered by the return are also included, the value being that adopted in the firm's capital account for income tax purposes. Goods sold without being subjected to any manufacturing process (merchanted or factored) and canteen takings are excluded.

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. With a few exceptions, receipts for business and other services are not included.

To the extent that the finished products of one establishment constitute the materials purchased by another, total figures of the value of sales (and of materials and fuel purchased) include an element of duplication.

STOCKS AND WORK IN PROGRESS

The values reported were the income tax values of stocks of products on hand for sale, work in progress, and stocks of materials and fuel, at the beginning and end of the year of return.

SYMBOLS USED

The following symbols are used throughout the reports:

- .. for not available
- for nil or negligible (less than half the final digit shown)

TRANSPORT PAYMENTS

These represent the total amount paid or credited during the year for outwards transport of finished goods sold. 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 outwards carriage by all forms of inland transport, that is 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. 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. is excluded.

Figures are also shown for average salaries etc. paid per head for the week ended 25th October, 1958. For staff paid monthly, the figures are based on payments made in October, 1958. Where payments related to periods other than a week or month, an appropriate proportion was returned. Only those bonuses and commissions actually paid in the period are included.

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 for business and other services.

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.

The Report on the Census of Production for 1958

Part 23. MINERAL OIL REFINING

This report on the Mineral Oil Refining Industry relates to establishments engaged wholly or mainly in the refining of petroleum or shale oil, and production of medicinal paraffin, paraffin wax, petroleum jelly, etc.

This industry corresponds to minimum list heading 262 of the new edition of the Standard Industrial Classification, which has been used for the first time in the 1958 Census. The definition of this industry is unchanged from the last detailed Census of Production, for 1954, in which it was reported on as Industry N in Volume 2.

Sales are generally valued at open market prices f.o.b. in the Gulf of Mexico plus current rates of freight and insurance to the United Kingdom, and purchases of feedstock are valued at open market prices f.o.b. at the port of origin plus current rates of freight and insurance to the United Kingdom. The size of the net output is largely determined by the methods of valuation.

The figures have been compiled from returns made to the Ministry of Power.

There were no establishments in Northern Ireland in the register for this industry.

| Table No. | Title | Page |
|-----------|--|----------------|
| 1 | Industry summary: United Kingdom | 23/3 |
| 2 | Analysis by sub-divisions of the industry | Does not apply |
| 3 | Analysis by size of enterprise within the industry, 1958 | Does not apply |
| 4 | Sales of principal products of the industry | 23/4 |
| 5 | Sales of principal products of the industry by establishments classified to other industries | Does not apply |
| 6 | Sales in the industry of other than principal products | 23/5 |
| 7 | Total make of certain petroleum products, 1958 | 23/5 |
| 8 | Employment and salaries etc. for the week ended October 25, 1958 | 23/6 |

Industry summary: United Kingdom

TABLE 1 Estimates for all firms in the industry

| | Unit | 1954 | 1958 |
|---|---|-------------|---------|
| Number of enterprises | No. | 9 | 9 |
| Number of establishments | " | 18 | 18 |
| Sales of goods produced and work done | £'000 | 301,403 | 383,711 |
| Cost of purchased materials and fuel used (a) | " | 264,556 | 344,934 |
| Payments for work done on materials given out | " | | |
| Products on hand for sale | { change during year | + 1,927 | - 2,328 |
| | { at end of year | 12,120 | 24,708 |
| Work in progress | { change during year | + 1,296 | + 1,662 |
| | { at end of year | 6,718 | 13,151 |
| Stocks of materials and fuel | { change during year | + 142 | - 3 |
| | { at end of year | 16,344 | 26,489 |
| Payments for outwards transport | " | 348 | 542 |
| Customs and Excise duties | " | 2,684 | 2,428 |
| Net output | " | 37,038 | 35,141 |
| Average number employed | { operatives | No. 12,274 | 14,308 |
| | { administrative, technical and clerical employees | " 4,078 | 5,242 |
| | { total | " 16,352 | 19,550 |
| Net output per person employed | £ | 2,265 | 1,798 |
| Wages and salaries | { of operatives | £'000 6,557 | 10,024 |
| | { of administrative, technical and clerical employees | " 2,587 | 4,716 |
| Wages and salaries per head | { operatives | £ 534 | 701 |
| | { administrative, technical and clerical employees | " 634 | 900 |
| Capital expenditure | | | |
| New building work (b) | £'000 | 2,811 | 6,099 |
| Plant and machinery | { acquisitions (b) | " 13,119 | 33,479 |
| | { disposals | " 266 | 124 |
| Vehicles | { acquisitions (b) | " 91 | 335 |
| | { disposals | " 13 | 24 |

(a) Including £110,000 and £79,000 in 1954 and 1958 respectively for carriage of goods inwards.
 (b) Including expenditure in Great Britain for establishments not yet in production.

TABLE 2 - Analysis by sub-divisions of the industry, 1958

No sub-divisions of this industry were distinguished.

TABLE 3 - Analysis by size of enterprise within the industry, 1958

Owing to the risk of disclosure of information relating to individual firms, an analysis by size of enterprise cannot be given.

Sales of principal products of the industry (a)

TABLE 4

All firms in the industry: United Kingdom

| | 1954 | | 1958 | | Enter- prises | Entries |
|--|----------|---------|----------|---------|------------------|---------|
| | Quantity | Value | Quantity | Value | | |
| | Th. tons | £'000 | Th. tons | £'000 | | |
| Aviation and motor spirit | 7,307 | 115,724 | 7,529 | 117,946 | 7 | 15 |
| Industrial and white spirits | 272 | 4,982 | 247 | 4,751 | 6 | 9 |
| Kerosine | 741 | 10,242 | 1,256 | 17,731 | 5 | 11 |
| Gas/diesel oils (other than marine diesel oil) | 3,335 | 40,758 | 5,387 | 65,987 | 7 | 13 |
| Marine diesel oil | 1,048 | 10,589 | 1,262 | 13,135 | 6 | 12 |
| Fuel oil | 12,264 | 77,091 | 13,314 | 94,711 | 8 | 15 |
| Lubricating oil (all grades) (b) | 510 | 10,772 | 793 | 19,152 | 8 | 11 |
| Bitumen and bituminous products | 822 | 8,001 | 873 | 9,249 | 6 | 9 |
| Other finished petroleum products and amount charged for commission refining | .. | 8,014 | .. | 23,579 | 8 | 13 |
| Unfinished materials sent to other refineries | 855 | 8,114 | 1,008 | 9,939 | .. | .. |
| Other saleable output | .. | 203 | .. | 652 | .. | .. |
| Work done (c) | | 4,872 | | 2,895 | .. | .. |
| Total | | 299,362 | | 379,727 | 9 | 18 |

(a) The selling values shown in the table are inclusive of duty if the products are sold duty paid, and exclusive of duty if the products are sold in bond or exported. The total amount of duty included in the selling value is £2,684,000 in 1954 and £2,428,000 in 1958.

(b) For the output of establishments not classified to this industry see the Lubricating Oils and Greases Industry (Part 24).

(c) Including capital work in refineries carried out by the firms' own employees, which is valued at cost of labour and materials. For other work done, the value included is the amount charged.

TABLE 5 - Sales of principal products of the industry by establishments classified to other industries

Owing to the risk of disclosure of information relating to individual firms, sales of these products by establishments classified to other industries cannot be given for 1958.

TABLE 6 - Sales in the industry of other than principal products

All firms in the industry: United Kingdom

Sales of butane, propane and other gases amounted to 194,000 tons, value £2,041,000, in 1954, and 347,000 tons, value £3,984,000, in 1958.

Total make of certain petroleum products, 1958 (a)

TABLE 7

All firms in the industry: United Kingdom

| | Returned in this industry | | |
|---|---------------------------|-------------|---------|
| | Quantity | Enterprises | Entries |
| | Th. tons | Number | Number |
| Aviation and motor spirits | 6,554 | 7 | 15 |
| Industrial and white spirits | 252 | 6 | 9 |
| Kerosine | 1,274 | 5 | 11 |
| Gas/diesel oils (including marine diesel oil) | 6,124 | 8 | 16 |
| Fuel oil | 13,839 | 8 | 15 |
| Lubricating oils (all grades) | 751 | 8 | 11 |
| Bitumen and bituminous products | 864 | 6 | 9 |

(a) Including oil used in refineries. There is duplication of output in this table to the extent that production which takes place in stages in more than one refinery is included at each stage.

MINERAL OIL REFINING

Employment and salaries, etc. for the week ended
October 25, 1958

TABLE 8 All firms in the industry: United Kingdom

| | Males | Females | Total |
|---|--------|---------|--------|
| | Number | Number | Number |
| Operatives | 14,124 | 216 | 14,340 |
| Administrative, technical and clerical employees | 4,365 | 944 | 5,309 |
| Total employees (a) | 18,489 | 1,160 | 19,649 |
| Average salaries, etc. paid per head for the week to administrative, technical and clerical employees | £ 19 | £ 9 | £ 17 |

(a) The following persons, not included above, were also employed in this industry:-

| | | |
|--------------------------|-----------|-------------|
| Canteen workers | Males 122 | Females 559 |
| Other excluded employees | Males 480 | Females 87 |

LIST OF INDUSTRY REPORTS, ETC.

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- 4 Chalk, Clay, Sand and Gravel Extraction
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- 6 Salt and Miscellaneous Non-metalliferous Mining and Quarrying
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- 54 Scientific, Surgical and Photographic Instruments, etc.
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- 56 Electrical Machinery
- 57 Insulated Wires and Cables
- 58 Telegraph and Telephone Apparatus
- 59 Radio and Other Electronic Apparatus
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- 62 Shipbuilding and Marine Engineering
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- 64 Motor Cycle, Three-wheel Vehicle and Pedal Cycle Manufacturing
- 65 Aircraft Manufacturing and Repairing
- 66 Locomotives and Railway Track Equipment
- 67 Railway Carriages and Wagons and Trams
- 68 Perambulators, Hand-trucks, etc.
- 69 Tools and Implements

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CENSUS OF PRODUCTION REPORTS FOR OTHER RECENT YEARS

The census reports for earlier years include some items which are not included in the Report on the Census of Production for 1958. The most recent reports are listed below, with an indication of any important items they contain which do not appear in the 1958 Reports. The data in all these earlier reports is analysed in accordance with the original (1948) edition of the Standard Industrial Classification.

Census of Production for 1951: Summary Tables, Part I (H.M.S.O., 1956. Price 6s. net).

No important items which do not appear in the 1958 Reports.

Census of Production for 1951: Summary Tables, Part II (H.M.S.O., 1956. Price 6s. net).

Channels of sales, 1948

Payments for services, 1948

Shift working, 1951

Power equipment, 1951

Prime movers, 1951

Analysis of periods covered by census returns, 1948 and 1951.

The Report on the Censuses of Production for 1952 and 1953. Introductory Notes and 5 volumes. (These volumes are now out of print.)

No important items which do not appear in the 1958 Reports.

The Report on the Census of Production for 1954. Introductory Notes, Index of Products, and 154 booklets relating to individual industries (H.M.S.O., 1956-59. Prices vary, usually from 1s. 6d. to 2s. net for each booklet).

Detailed information about materials and fuel purchased.

Census of Production for 1954: Summary Tables, Part I (H.M.S.O., 1958. Price 9s. net).

Fuel purchased

Gas produced in certain industries

Electricity generated, purchased and sold

Materials purchased: iron and steel; non-ferrous metals; paint; plastics materials; cotton and rayon, nylon, etc. textiles; timber; packing materials; replacement parts for plant etc. (Information about purchases of other materials is given in The Report on the Census of Production for 1954.)

Census of Production for 1954: Summary Tables, Part II (H.M.S.O., 1959. Price 7s. net).

Regional analyses of gross output, net output and capital expenditure.

Census of Production for 1954: Summary Tables, Part III (H.M.S.O., 1959. Price 8s. net).

Sales of particular products by certain industries in Scotland and Wales.

The Report on the Censuses of Production for 1955, 1956 and 1957. Introductory Notes and 5 volumes (H.M.S.O., 1959. Prices 1s. 6d. to 3s. 6d. net according to size of volume).

No important items which do not appear in the 1958 Reports.

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