## Business Monitor

## 976

## Report on the <br> Census of Production <br> Mineral oil refining

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## Business Monitor

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## Report on the Census of Production 1976

Mineral oil refining

Presented by the Secratary of State for Industry or Parliament in pursuance of the Statistics of Trade Act 1947 ( 10 \& 11 Geo. 6 Cha. 39 sec 7)

List of Industry Reports, etc.

| PA1001 | Introductory notes | PA369. 1 | 1 Electrical equipment for motor vehicles, cycles |
| :---: | :---: | :---: | :---: |
| PA101 PA102 | Coal mining <br> Stone and slate quarrying and mining | PA369.2 | and aircraft |
| PA103 | Chalk, clay, sand and gravel extraction | PA369.4 | Electric lamps, electric light fittings, wiring |
| PA104 | Petroleum and natural gas |  | accessories, etc. |
| PA109 | Miscellaneous mining and quarrying | PA370 | Shipbuilding and marine engineering |
| PA211 | Grain milling |  | Wheeled tractor manufacturing |
| PA212 | Bread and flour confectionery | PA381.1 | Motor vehicle manufacturing |
| PA213 | Biscuits | PA381.2 | Trailers, caravans and freight conta |
| PA214 | Bacon curing, meat and fish products | PA382 | Motor cycle, tricycle and pedal cycle manufacturing |
| PA215 | Milk and milk products | PA383 | Aerospace equipment manufacturing and repairing |
| ${ }_{\text {PA216 }}{ }_{\text {PA217 }}$ | Sugar Cocoa, chocolate and sugar confectionery | PA384 | Locomotives, railway track equipment, railway carriages, |
| PA218 | Fruit and vegetable products | PA390 | Engineers' small tools and gau |
| PA219 | Animal and poultry foods | PA391 | Hand tools and implements |
| PA221 | Vegetable and animal oils and fats | PA392 | Cutlery, spoons, forks and plated tableware, etc. |
| PA229.1 | Margarine |  | Bolts, nuts, screws, rivets, etc. |
| PA229.2 | Starch and miscellaneous foods | PA394 | Wire and wire man |
| PA231 | Brewing and malting | PA395 | Cans and metal boxes |
| PA232 | Soft drinks | PA396 | Jewellery and precious metals |
| PA239. 2 | Spirit distiling and compounding | PA399.1 | Metal furniture |
| PA240 | Tobacco | PA 3999.6 | Drop forgings, etc. |
| PA261 | Coke ovens and manufactured fuel | PA399. 8 | Miscellaneous metal manufacture |
| PA262 | Mineral oil refining | PA411 | Production of man-made fibres |
| PA263 | Lubricating oils and greases | PA412 | Spinning and doubling on the cotton and flax systems |
| PA271.1 | Inorganic chemicals | PA413 | Weaving of cotton, linen and man-made fibres |
| PA271.3 | Miscellaneous chemicals | PA414 | Woollen and worsted |
| PA272 | Pharmaceutical chemicals and preparations | PA416 | Rope, twine and net |
| PA273 | Toilet preparations | PA417. 1 | Hosiery and other knitted goods |
| PA274 | Paint | PA417. 2 | Warp knitting |
|  | Soap and detergents | PA418 | Lace |
|  | Synthetic resins and plastics materials and | PA419 | Carpets |
| PA277 | Dyestuffs and pigments | PA422.1 | Narrow fabrics Household text |
|  |  | PA422. 2 | Canvas goods and sacks and other made-up textiles |
| PA279.1 | Polishes | PA423 | Textile finishing |
| PA279.2 PA2793 | Formulated adhesives, gelatine, etc. | PA429.1 | Asbestos |
| PA279.4 | Explosives and fireworks | PA429.2 | Miscellaneous textile industries |
| PA279.5 | Printing ink | PA432 | Leather (tanning and dressing) and fellmongery |
| PA279.6 | Surgical bandages, etc. | PA433 |  |
| PA279.7 | Photographic chemical materials | PA441 | Weatherproof outerwear |
| PA311 | Iron and steel (general) | PA442 | Men's and boys' tailored outerwear |
|  | Steel tubes | PA443 | Women's and girrs' tailored outerwear |
| PA321 | Iron castings, etc. | PA444 | Overalls and men's shirts, underwear, etc. |
| PA322 | Copeer, brass and other cooperellloys | PA445 | Dresses, lingerie, infants' wear, etc. |
| PA323 | Miscellaneous base metals | PA444, 1 | Hats, caps and millinery |
| PA331 | Agricultural machinery (except tractors) | PA449. 2 | Gloves |
| PA332 | Metal-working machine tools | PA450 | Footwear |
| PA333.1 | Pumps | PA461.1 | Refractory goods |
|  | Valves | PA461.2 | Building bricks and non-refractory goods |
| PA333.3 | Compressors and $f$ | PA462 | Pottery |
| PA335 | Industrial engines | PA463 | Glass |
| PA336 | Textile machinery and accessories | PA464 | Cement |
| PA337 | Mechanical handl ing equipment | PA469. 2 | Miscellaneous building materials and mineral products |
| P4338 | Office machinery | PA471 | Timber |
| PA339. 1 | Mining machinery | PA472 | Furniture and upholstery |
| РАЗ39. 3 | Printring, bookbinding and paper goods machinery | PA473 | Bedding, etc |
|  | ventilating and air-conditioning e | ${ }^{\text {PA4474 }}$ | Shop and office fitti |
| PA339.5 | Scales and weighing machinery and portable | PA479 N | Miscellaneous wood and cork manufactures |
|  |  |  |  |
| PA339.7 | od and drink processing machin | PA482.1 | Cardboard boxes, cartons and fibre-board packing cases |
| РАЗ39.9 | Miscellaneous (non-electrical)) mach hery | PA4833 ${ }^{\text {Pa }}$ | Packaging products of paper and associated materials |
| PA341 | Industrial lincluding process) plant and steelw | PA484.1 W | Wallcoverings |
| A342 | Ordnance and small arms | PA484.2 | Miscellaneous manufactures of paper and board |
| A349.1 | Ball, roller, plain and other bea |  | Piscelianeous manufactures of paper and board |
| PA349.2 | Precision chains and other mechanical engineering | PA489 G | General printing and publishing |
|  | Photographic and document copying equipment | PA491 | Rubber |
| PA352 | tches and clocks | PA492 | inoleum |
| A353 | - | PA493 | Brushes and brooms |
| PA354 | Scientific and industrial instruments and system | PA494.1 ${ }^{\text {T }}$ | Toys, games and children's carriages |
| PA362 | Electrical machinery | PA494.3 S | Sports equipment |
|  | Insulated wires and cables | 95 | Miscellaneous stationers' goods |
|  | Telegraph and telephone apparatus and | A496 | Plastics products |
| PA364 | Radio and electronic components | PA499. 1 M | Musical instruments |
| PA365. 1 | and tape r | PA500 | , |
| P365. 2 | d sound reprodu | 夈 |  |
|  | Electronic computers | PA602 E | Electricity |
| PA367 | Radio, radar and electr |  | Water supply |
|  | Electrical appliances primarily for dom |  |  |

The information in this report relates to establishments classified to the Mineral oil refining industry, minimum list heading 262 in the Standard Industrial Classification (revised 1968). The activities of the industry include:-

Refining petroleum or shale oil and production of medicinal paraffin, paraffin wax, petroleum jelly, etc.
The The blending of mineral, animal or vegetable lubricating oils and greases carried out at refineries is regat
Also included is the production of butane and propane for use as fuel and the production of bitumen.

Capital expenditure, 1973-1976
Capita expeniture,
Al United Kingdom establishments classified to the industry (a) (b)

|  | Unit | 1973 | 1974 | 1975 | 1976 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Enterprises | Number | 25 | 30 | 33 | 35 |
| Establishments | " | 36 | 40 | 42 | 44 |
| Sales of goods produced | £ thousand | 1,896,607 | 4.875.162 | 5.249,025 | 6,222,262 |
| Receipts for work done and industrial services rendered | " | (b) | (b) | (b) | 19,025 |
| Capital goods produced for establishments' own use | " | 6.062 | 2,536 | 3,403 | 3.177 |
| Non-industrial services rendered | " | 5,395 | 12,597 | 16,551 | 16.146 |
| Goods merchanted or factored | " | (b) | (b) | (b) | (b) |
| Total sales and work done (c) | " | 1,908,064 | 4,890,296 | 5,268,979 | 6,260,609 |
| Increase during the year, work in progress and goods on hand for sale | " | 60,592 | 255,641 | -5,503 | 196,234 |
| Gross output | " | 1,968,656 | 5,145,937 | 5,263,476 | 6,456,843 |
| Purchases of materials for use in production, and packaging and fuel (d) | " | 1,675,619 | 4,601,007 | 4,271,532 | 5,814,534 |
| Purchases of goods for merchanting or factoring | " | (e) | (e) | (e) | (e) |
| Increase during the year, stocks of materials, stores and fuel | " | 55,927 | 217,753 | -73,649 | 119,624 |
| Cost of industrial services received | " | 19,683 | 22,554 | 31,498 | 32,494 |
| Excise duty etc. (net) |  | . | 70,325 | (f) | (f) |
| Net outpur | " | 329,283 | 669,804 | 886,797 | 729,439 |
| Total employment (g) | Thousands | 18.6 | 18.7 | 18.3 | 17.7 |
| Net output per head | £ | 17,726 | 35,799 | 48,488 | 41,211 |
| Payments for non-industrial services |  |  |  |  |  |
| Rents, hire of plant and machinery (h) (j) | £ thousand | 2,273 | 2,843 | 2,940 | 3,708 |
| Commercial insurance premiums | " | 3,522 | 4,709 | 6,504 | 6,308 |
| Bank charges | " | 34 | 95 | 19 | 23 |
| Other non-industrial services (k) | " | 11.684 | 12,791 | 19,248 | 14,313 |
| Licensing of motor vehicles | " | 78 | 78 | 83 | 93 |
| Rates, excluding water rates | " | 8,905 | 12,637 | 15,309 | 15,412 |
| Gross value added at factor cost | " | 302,787 | 636,651 | 842,695 | 689,581 |
| Gross value added at factor cost par head | £ | 16,300 | 34,027 | 46,077 | 38,959 |

[^0]保
(b) Included with sales of goods produced.
(c) Details of manufacturers' sales of principal products are published regularly in Business Monitor PO262.
(d) For 1973 the figure includes net duty paid.
(e) Included with Purchases of materials for use in production, and packaging and fuel.
(f) 1975 and 1976 value not recorded.
tABLE 3
Stocks and work in progress, 1973-1976
All United Kingdom establishments classified to the industry (a)
a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 97 per cent of employment within the industry.
(b) Capital expenditure in respect of manufacturing establishments where production had not commenced before the end of the year, is Capital ex
included.
g) Average number employed, including full and part-time employees (see table 7 ).
(h) 1973 figure includes hire of vehicles.
(j) For 1973-1975 rents of industrial and commercial buildings were not recorded separately. For 1976 the amount payable was
$£ 300$ thousand.
(k) 1974-1976 figures include the cost of hiring goods vehicles.

Analysis of establishments by size, 1976
All United Kingdom establishments classified to the industry (a)

| Size | Estab- | Enter- | Employm |  |  | Wages and | aries (e) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | Operatives | $\begin{aligned} & \text { Others } \\ & \text { (d) } \end{aligned}$ | Operatives |  | Others (d) |  |
|  |  |  |  |  |  | Total | $\begin{aligned} & \text { per } \\ & \text { head } \end{aligned}$ | Total | per <br> per |
|  | Number | Number | Number | Number | Number | £ thousand | £ | £ thousand | £ |
| 1-99 | 25 | 23 | 516 | 314 | 202 | 1,339 | 4,263 | 968 | 4,791 |
| 100-399 | 10 | 10 | 2,575 | 1.685 | 890 | 7.775 | 4.614 | 4,708 | 5,290 |
| 400 and over | 9 | 6 | 14,609 | 10,257 | 4,352 | 40,227 | 3,922 | 21,973 | 5,049 |


| Total | 44 | 35 | 17,700 | 12,256 | 5,444 | 49,341 | 4,026 | 27,649 | 5,079 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| $6,260,609$ | $6,456,843$ | 729,439 | 41,211 | 689,581 | 38,959 | 72,702 | $\mathbf{1 , 0 3 0 , 2 6 6}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 employees.
(b) Average number employed, including full and part-time employees (see table 7 ) and working proprietors.
(c) The sum of the figures for the size groups may exceed the total for the industry because some enterprises control establishments in
more than one size group.
(d) Administrative, technical and clerical employees.
(e) The cost of employers' contributions to national insurance, graduated pensions, other pensions and welfare schemes and the running costs of canteens, is estimated for the industry at $£ 26,123$ thousand.
(f) Sales of goods produced, capital goods manufactured, buildings constructed by establishments for their own use, work done, industria
(g) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery
(h) Gross value added data relate to establishments employing 1-399.

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1976
All United Kingdom establishments classified to the industry

| Area | Total employment (a) |  | Net capital expenditure (b) (c) |  | Net output, gross value added and employment in the region from returns received from establish ments with more than 80 per cent of their employ.ment in the region (d) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Net output | Gross value added at factor cost | Employment as a percentage of total regional employme in the industry |
|  | Thousands | per cent of <br> United <br> Kingdom |  |  | £ thousand | per cent of United Kingdom | $\overline{£ \text { thousand }}$ | £ thousand |  |
| Standard regions of England |  |  |  |  |  |  |  |
| North | 0.8 | 4.4 | 7.159 | 9.9 | * | * | * |
| Yorkshire and Humberside | * | * | * | * | * | * | * |
| East Midlands | * | * | * | * | * |  |  |
| East Anglia | * | * | * | * | * | * |  |
| South East | 6.5 | 36.6 | 25,153 | 34.6 | 325,251 | 311,970 |  |
| South West | * | * |  | * | 325,251 | 311.970 | 99.2 |
| West Midlands | * | * | * | * | * |  |  |
| North West | * | * | * | * | * |  |  |
| England | 12.5 | 70.6 | 58,062 | 79.9 | 489,928 | 463,168 | 96.0 |
| Wales | 3.2 | 18.2 | 4,215 | 5.8 | 180,626 | 175,185 | 100.0 |
| Scotland | * | * | * | * | * |  |  |
| Great Britain | * | * | * | * | * |  |  |
| Northern Ireland | * | * | * | * | * |  |  |
| Unallocated (e) | - | - | - | - | 20,366 | 19,096 | - |
| United Kingdom (b) | 17.7 | 100.0 | 72.702 | 100.0 | 729,439 | 689.581 |  |

(a) Average number employed, including full and part-time employees (see table 7 ) and working proprietors.
(b) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 employees.
(c) New building work plus acquitions
and plant and machinery.
(d) Where a census return covered addresses in two or more regions an estimate was made of the net output and gross value added
attributable to the region only where more than 80 per cent of the establishment's attributable to the region only where more than 80 per cent of the establishment's employees were located in the region. The estimate
was made by assuming that net output and gross value added was made by
(e) Unallocated net output and gross value added covering establishments with addresses in two or more regions, plus estimates for unsatisfactory returns, non-response and establishments establishments with addresses in two or more regions, plus estimates for
und

Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments employing 20 or more
persons, 1976

Accounting year ended
1976 April (a)
April
May
June

| -2.0 |
| :--- | :--- |
| 0.0 |

$\begin{array}{ll}\text { July } & 0.0 \\ \text { August } & 0.0\end{array}$
Seotemb
4.4
Percentage of total returns received
per cent $\quad$ Percentage of total number employed

September
October
November
December
0.0

January
February
March (b)

From 6th April.
Including returns made for twelve-month period ended 1st to 5th April 1977.
table 7
Percentage analysis of employees, by full and part-time employment and sex, 1976(a)

| Sex | Full-time | Part-time | All employees |
| :--- | :--- | :--- | :--- |
| per cent |  |  |  |
| per cent |  |  |  |

Male
89
9
(2
289
female $\qquad$
Source: Department of Employment
The percentages relate to the numbers employed in the United Kingdom at end June, 1976.

Notes
These notes give the main information needed for interpreting the figures in the industry Business
Monitors: more detailed information about the census is given in a separate Business Monitor A1001 (Introductory Notes) of the Report on the
general information
Changes made for 1976
The Census for 1976 is in line with similar inquiriss being conducted in other member countries small number of changes Communitles. There was a ndustry reports compared with 1975. These include separate headings for:
Recelipts for work done and industrial services
Amounts pald for hire Amounts pald for rent of industrial and commercial bulldings
Specific changes are explained in the introductions
to the industry reports or by footnotes to the tables.
Suppression of information relating to individual section $9(5)(b)$ of the Statistics of Trade Act 1947 states - "The following provisions shall have communlcation to the public of information obtained under the foregoing provisions of this Act In compliling any such report, summary or
communication the competent authority shall so arrange it as to prevent any particulars published therein from being identified as being particulars relating to any individual person or
undertaking except with the previous consent in undertaking of that person or the previous consent in that undertaking, as the case may be; but this provision shall not prevent the disclosure of the total quantity or value of any articles produced,
sold or delivered; so, however, that before disclosing any such totai the competent authority shall have regard to any representations made to them by any person who alleges that the dis-
closure thereof would enable particulars relating to him or to an undertaking carried on by him to be deduced from the total disclosed."
if a flgure involved disclosure the
concerned was sometimes asked to the contributor for its publicatlon. In the majority of case permission was given. When it was refused and has been suppressed, either by combed the figure other flgures, or as in the combining it with ornit figures, or as in the regional tables, by
omitting the figure altogether.
Symbols used
The fol lowing
The fol lowing symbols are used throughout the PA
serles of Business Monitors:
.. not avallablo

* nill or less than half the final digit shown
disclosing information about individual enter
$R_{\text {prises }}$
Rounding of figures
Figures
Figures in the tables have, where necessary, been rounded to the nearest final digit. Where figures ltems may not always agree exactly with the total
shown.

The Undrial classification Classification (SIC) Standard was subsequently revised in 1958 and 1968
exists 198 exists to promote uniformity and comparability
the official statistics of the Unit The general principles followed are those of International standard Industrial Classificatio of all Economic Activities of the United Nation
Statistical Office but the United Kin reflects the organisation and structure industry and trade as it exists in the Un Kingdom. The SIC is a classilication by acti
and is not a commodity classificatin an index of all commodity headings for sales sales data are provided in the Quarterly Busines
Monitors, is published in Business Moniter Statistical units
The statistical unit for the purpose of the Cens
is Is the establishment which is defined in the S
as the smallest unit which can provide the as the smallest unit which can provide t
information normally required for an economic census, for example, employment, expenses, tur over, capital formation. Usually the principa activities carried on in an establishment (e.g. steel making or sugar refining). Typlcal the establishment embraces all the carried on at a single address e.g. a farm, a min
or a factory, including those which are ancillary or a factory, ancluding those which are ancillar
to the principal activities. Frequently distinc
activities activities characteristic of different industrie are carried on at one address, but normally thes are not classified separately and
establishment is classifled activity. If, however, the required range of data can be provided for each activity, each is take activities which are conducted as a sing business are carried on at a number of addresses,
Where this is so, businesses are asked to Where this is so, businesses are asked to provid the each address; whether or not the activitles are
of eation in respec
different different. Their activities may, however, be
infegrated to such an extent that they constitute integrated to such an extent that they constitut a single establishment. In the larter case the
establishment is defined to cover the combined activities
units). units).
Semparate figdresses are obtained employment and net capital expenditure at
unit in order to complie regional tables Efforts are made by the Business Statistics Offlc to ensure, by negotlating with respondents, that
the return from an establishment does not the return from an establ ishment does not cover
local units or addresses in more than one of th countr les of the United KIngdom.
Further Information
Further information about the statistical uni appeared in an article "The statistical unit 1971.

Establishments are asked to exclude from their engrns particulars relating to any department not engaged in production e.g. merchanting, transport, accounts. Transfers of goods produced to such
departments are treated as sales and departments are treated as sales and respondents
are asked to value them as far as possible as it are asked to value them as far as possible as it
sold to an Independent purchaser. Where separate accounts are not kept they are asked to include detalls of all these activitios in ther return.
Particulars relating to head offices mainly Pargiculars relating to head offices manly
engige the administration of the production
units within the scope of the census were included. Where the scope of the census wer information in respect of the head office was apportioned among them.
or certain purposes
roduction (especially the enterprise analyses of
隹 usiness Monitor PA1002) related establishments re combined. For these purposes an enterprise and may be defined as a business consisting of
ither a single establishment or two or more astabl ishments under common ownership or control. estinging together establishments into enterprise
groups is also necessary for the purpose of nsuring that there will be no disclosure of the
nivities
$\qquad$ establishments, the changing structure of groups
$f$ companies and about common ownership links is otained from many sources, including the stock Exchange Year Book, company reports, press reports
and Information supplied by individual establish-

HE REGISTER
ne register permits a questlonnaire to be sent
trect to the reporting establishment on mhict direct to the reporting establishment on which
the latter can include information relating to al
(tor local) units which it
emprises, provide a major source of information keeping the register continuously up-to-date
act as a check on its detall and structure. or the establishments on the register making
turns to the quarterly inquiries, the industrial oturns to the quarterly inquiries, the industria
lassification is derived from an analysis of their cass of commodities and is reviewed annually. sales of comma are entered on the register from
Employment data
returns to the annual census of production. in eturns to the annual census of production.
cases where an establishment does not make a return cases where an establithment does not make a return
to these inquiries the employment data are based on
information provided by the Department of EmployIntormation
nent from
Establ Ishmen
stablishments with 20 or more employees are
icluded in the censuses each year and the inform otion they supply to the census is supplemented by the returns that those with 25 or more employees
provide to the quarterly inquiries. Information provite to blishments with fewer than 20 employees
in most industries is less securely based, but Increasing use has been made of data on these
small establishments supplied by the Department of inployment. One benefit of using this information
is an improvement in the estimates of the number of snal ler establishments and enterprises, but there
is $\| t+\mid$ es effect on other aggregates (e.g. employIs little effect on other aggregates
nent, output, net capital expend iture).
coverage
return was required in the 1976 Census from each stabl ishment with 20 or more employees. Each
establishment is classified to an industry, as defined in the SIC, whose principal products form the major part of the establishment's sales.

The regions defined in Table 5 take account of the loundary changes arising out of the Local
Covernment Act 1972 and the Local Government Act (Scotland) 1973. These changes came into effect in April 1974 in England and Wales and May 1975 in
And scotland.
ERMS USED IN THE CENSUS REPORT
Average number employed
Establishments were required to state the number
of persons on the payroll on average during the persons on the payroll on average during the
of return, whether full-time or part-time yoar of return, whether full-time or part-time
omployees. Separate figures were required for:
(a) administrative, technical and clerical
(b) amployees

Averages could be calculated from the figures lating to the last week of each calendar month.
tablishments were also required to state the
number of working proprietors where appropriate
and these are included in total employment figures. Outworkers (1.e. persons employed by establishments who worked in thelr own homes etc.
on materials supplied by the establishment) are on materials supplied by the establishment) are
excluded. The figures include persons engaged on merchanting or factoring and canteen workers where particulars in respect of these activities could Working proprietors
These include all persons regarded as "selfemployed" for national insurance purposes and
members of their families who worked in the business without recelving a wage or salary; but such persons who worked less than half the normal
number of working hours are excluded. Directors
working in the business but not in recelpt of a definite wage, salary or commission are included
under this heading: directors paid by fee only are

Employess
Administrative, technical and clerical employess include directors in receipt of a definite wage,
salary or commission, managers, superintendents and works foremen; research and design employees
(other than operatives); draughtsmen, editorial (other than operatives); draughtsmen, editorial
staff, advertising staff, travellers and all office employees. Operatives include all other classes of employees,
that is, broadly speaking, all manual wage that is, broadly speaking, all manual wage
earners. They include operatives employed in power stations, transport (including roundsmen) warehouses, stores, shops
inspectors, maintenance work and canteens
cleaners Operatives engaged in outside work of erecting, fitting etc.
are excluded.
Capital expenditure
apital expenditure during the year in respect of manufacturing . units where production had not
started before the end of the year is included Establishments were asked not to deduct from the expected to be recelved in grants or allowance expected to be recelved in grants or allowances
from the Government or any statutory body or local authority. Establishments with 100 or more
employees were asked to include a total net apital expenditure figure for each calendar year
(a) New building work
his represents the cost incurred during the year of new building and other constructional work to
be used in connection with the business covered by: the return. The value is that charged to capital account during the year of return; it includes
expenditure on new buildings and on the extension expenditure on new buildings and on the extension
or reconstruction of old buildings, the value of works of a capital nature carried out by the establishment's own staff and the cost of any
newly constructed bulldings purchased. Figures hown include legal charges, stamp duties, agents. commissions, etc.
(b) Land and existing buildings
ltems shown are the capital cost of freeholds purchased and the capital cost or premlum payable
for leaseholds acquired cexcluding the value assets acquired in taking over an existing business), and the amounts recelvable for freeholds of leaseholds disposed of The value is
that charged to capital account during the year of
return. return.

[^1]firms produced for their own use in connection with the business covered by the return. The value of capital account during the yexpenditure of chargern less any discounts recelved, but including the cost of
transport and instaliation. Deductible value added transport and instat ation.
tax is excluded but non-deductible value added tax on motor cars acquired is included. No deduction is made for depreclation, amortization or obsoles-
cence. The proceeds of items disposed of during cence. The proceeds of items disposed of during
the year exclude amounts written-off for items the year
scrapped.
Cost of Industrial services
This Includes amounts payable to other firms for work done on materials supplied by the establish-
ment, payments for repairs and maintenance (including those in respect of rented maintenance and amounts pald to other firms for contracts which
have boen sublet. Payments to outworkers are excluded.
Cost of non-Industrial services
This includes rent of industrial and commercial bulidings, hire of plant and machinery, commerclal
Insurance premiums, bank charges and amounts paid for professional services, post office services, transport, advertising etc. Amounts payable on royalties for the right to use patents, trademarks,
copyrights etc., manufacturing and quarrying rights copyrights etc., manufacturing and quarrying
and technical "know-how" are also included.

Gross output
In the culculation of gross output the value of total sales and work done is increased by the rise
(or reduced by the fall) during the year in the value of work in progress and goods on hand for

Net output
Net output
output, a customary census measure, is
calculated by deducting from gross output the cost of purchases (reduced by the rise, or Increased by etc.) and the cost of industrial services recelved, and where applicable, duties etc.
Net output per head
The figures of net output per head are derlived by
dividing the net output by the average number of persons employed (full and parttotime) on all ctivities covered by the returns, including
operatives, administrative, technical and clerical employees and working proprietors, but excluding

Gross value added at factor cost
Gross value added at factor cost is calculated by deducting from net output the cost of non-
Industrial services re.g. rent of bulldings, hire Industrial services (e.g. rent of bullings, hire
of plant and machinery, commercial insurance of plant and machinery, commercial insurance
prompus, bank charges and amounts paid for
professional services, post office services,
porer professional services, post office services,
transport and advertising), rates (excluding water rates) and the cost of licensing motor vehicles. This estimate of gross value added approaches more closely than census net output to the definition
of net output or value added in national accounts of net output
statistics.

Gross value added at factor cost per head head are derived by dividing the gross cost per by the average number of persons employed (full and part-time) on all activities covered by the
returns, including operatives, administrative, returns, including operatives, administrative,
technical and clerical employees and working technical and clerical employees and working
proprietors, but excluding outworkers.
Purchases
Purchases
Purchases include the cost of raw materials,
components, semi-manufactured goods and worksho
materials; of replacement parts and consur tools not charged to capltal account; of consumabl materials of all types; of stationery and printe matter; of fuel, electricity and water; materlals to be used by the establishment or glv
out to other establishments for the production machinery or other capital items for the estab IIshment's own use; of materials for use by then
establishment when working on goods suppl customers; and of food, etc. for any cante covered by the establishment's return. Transfer
of goods to the establishment from another depart of goods to the establishment from another depart
ment of the same firm not covered by then ment of the same firm not covered by the
establishment's return are included at a cos corresponding to the estimated selling value
recorded by the other department. Amounts payable recorded by the other department. Amounts payable
to transport firms or credited to the firm's omir transport department for delivery of materials transport department for dellivery of materials ar
excluded, as are all purchases of machinery an plant charged to capital account. Purchases an goods for merchanting or factoring have been
collected separately since 1973 . The values shom collected separately since 1973. The values shom
exclude VAT. They include, in addition to th actual purchase price, the value of packaghn
materlal charged to the establishment. The val material charged to the establishment. The valu
of returned goods or packaging material returne of returned goods or packaging material returne
to suppliers and any trade discounts are excluded to suppliers and any trade discounts are excluded
Materials purchased duty-paid are included at the
duty-pald value, less any drawback, rebate, etc duty-pald value, less any drawback, rebate, e The cost of transport is included only if
included with the purchase price in the accounts Imported goods are included at the
full delivered cost. If in the firm's accounts full delivered cost. If in the firm's accounts th
transport from docks or airport is not included the cost of goods purchased, the cost is entered the cost of goods purchase, the cost is entered
c.i.f. plus duty (if applicable). Leasing, rentl c.i.t. plus duty (if applicable). Leas

Sales of goods produced
Sales for the purposes of the annual censuse
means delliveries on sale of goods made by estab means delliveries on sale of goods made by estab
lishments in the United Kingom covered by the
inquiry. sates of goods made for these estab inquiry. Sales of goods made for these esta
IIshments by outworkers or by other establishment from mater lals given out to them and sales
waste products are included. New building wor waste products are included. New building wor
and machinery or other capltal items produced and machinery or other capital items produced
establishments for hiring out or leasing ar regarded as sales, the value or included in the the
return being that adopted in the establlisments return being that adopted in the establishments capital asset accounts. Forward sales and canteen
takings are excluded. All sales in the perlod the inquiry are included irrespective of when goods were manufactured. Goods produced in a establishment and transferred elther to anclial departments not engaged in production for an establishment of the same flim, not covered by t
return, are treated as sales by the producl return, are treated as sales by the producl
establishment and valued as far as possible as they had been sold to an independent purchaser Goods transferred to wholesale or retail sellin
organisations, for which separate accounts ar organisations, for which separate accounts a kept are valued on the same basis.
The value shown for sales is the "net selll The value shown for sales is the "net sell
value" defined as the amount (excluding val added tax) charged to customers whether on ex-works or delivered, basis, after any
discounts and agents, comilssions have deducted. The cost of packing materlals
allowance for returnable cases is included. allowance for returnable cases is mater included. industries where products attract Exclse Duty
value stated is usually inclusive of duty if so duty-pald and exclusive of duty if sold in bond xported.

Work done and Industrial services rendered Figures for work done represent the amount charg
for work carried out on materials supplied by customer and include repalr materials supplied by
dustrles this heading covers a wide varlety of ctivlties, for example, within the food sector -
iter packed on commission; within the textile yiter packed making up of garments, fur dressing Ind textlle finishing; within printing and pub-
ond - preparatory work on type-setting, block
ishing - pind ishing - preparatory work done is also significant n the electrical machinery and heavy engineer ing
instries, covering erection
instal ation and nustries, cover ing erection, installation and pis heading include exploration work, research and timber. dustrial services rendered include repairs and
intenance,
installation work, and technical intenance, installation work, and tec.
asearch and studies for other organisations.
apital goods produced for establishments' own use s Includes all work of a capital nature carrled
during the year by the establishments own
aff for their own use.
n-industrial services rendered
Includes rents received for commercial and plant, machingery, amounts other goods for hiring arged to other organisations for the provision of right to use inc indes amounts recelved for , manufactur ing and quarrying rights and tech-
"know-how" and revenue from all "know-how" and revenue from such staff
llities as canteens.
ods merchanted or factored
lods merchanted or factored (excluding canteen
orchanted goods are those (exubjected to any
les) sold without having been subju ranufacturing process by the seller.
tocks and work in progress
alues are given of stocks of goods on hand for
and of materials, stores and fuel t one year of return and of the change during the
the ear, Including any stocks of goods held for
nerchanting or factoring. Work in progress is lerchanting or factoring. Work in progress is
deflned as materlals which have beon partilially
rocessed by the establishment but which are not processed by the establishment but which are not
isully sold or transferred to another estabsually sold or transferred to another estab-
lishment without further processing. The values
nclude the cost of materlals consumed and labour sed, together with a margin of overhead costs and Progress payments made to sub-
contractors are excluded and progress payments entractors are excluded and progress payments
ecolved from other organisations are not
educted. deducted.
hages and salarles
these are amounts paid during the year to lerlcal employees. Padministrative, technical and
Payments to working
roprien foprletors, whether called salarles or not, are
xcluded. The values shown Include all overtime payments, bonuses and commisslons, whether paid
regularly or not, and no deduction is made for egularly or not, and no deductlon is made for
income tax, insurances, contributory pensions etc. come tax, Insurances, contributory pensions etc.
The value of redundancy payments less any amounts elimbursed from Government sources is included.
The value of any payments in kind, travelling The value of any payment
expenses etc. is excluded.
kemuneration paid to outworkers
The remuneration paid to outworkers $11 . e$. persons
employed by the establishment who do the ir work in the or own homes) is generally on a plece-work
basis. Only amounts pald to outworkers whose-names appear on the establishment's payroll are included. Amounts pa
oxcluded.

Thployers' insurance and wel fare contributions This item includes employers' contributions to national insurance and graduated pensions (and/or
earnings related basic contributions under the

Social Security Act, 1973) as well as commerclal insurance premiums to provide pensions, superannuation or other retirement benefits, sickness
benefits, personal accident benefits, disablity benefits, personal accident benefits, disablility
or death benefits for employees or formea

 children's and hollday homes, etc. for employeas,
former employees and their dependants are also former er
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[^0]:    (a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size.

[^1]:    (c) Plant, machinery and vehicles

    The items shown are the value of plant and second-hand, and the amount received for items disposed of during the year. The value of plant machery acquired includes plant, etc. which

