## PA276

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## 1976

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Business Statistics Office

## Business Monitor

## Report on the

 Census of ProductionSynthetic resins and plastics materials and synthetic rubber

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Commencing with the 1971 Census, the Census of Production reports are being numbered in a uniform series embracing all industrial inquiries in the Business Monitor series. These Business Monitors have a code it is an annual series) or O (quarterly) A (indicating tha and then by a number indicating the minimum list heading, or sub-division of a minimem list heading, or sub-division of a minimum list heading, of
the Standard Industrial Classification (revised 1968).

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## Report on the Census of Production 1976

## Synthetic resins and plastics materials and synthetic rubber

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

| PA1001 | Introductory notes |
| :---: | :---: |
| 101 | al mining |
| PA102 | Stone and slate quarry ing and mining |
| PA103 | Chalk, clay, sand and gravel extraction |
| PA104 | Petroleum and natural gas |
| PA109 PA211 | Miscellaneous mining and quarrying |
| ${ }_{\text {PA A2121 }}$ | Grain milling Bread and flour confectionery |
| PA213 | Biscuits |
| PA214 | Bacon curing, meat and |
| PA215 | Milk and milk products |
| PA216 | Sugar |
| PA217 | Cocoa, chocolate and sugar confectionery Fruit and vegetable products |
| PA219 | Animal and poultry foods |
| PA221 | Vegetable and animal oils and fats |
| PA229 |  |
| PA229.2 | Starch and miscellaneous foods |
| PA231 | Brewing and malting |
| PA232 | Soft drinks |
| PA239. 2 | British wines, cider and perry |
| PA240 | Tobacco |
| PA261 | Coke ovens and manufactured fuel |
|  | Mineral oil refin |
| PA263 | Lubricating oils and greases |
| PA271.1 | Inorganic chemicals |
|  | Miscellaneous chem |
| PA272 | Pharmaceutical chemicals and prep |
| PA273 | Toilet preparations |
|  | Pain |
|  | Soap and detergents |
| PA276 | Synthetic resins and plastics materials and synthetic rubber |
| PA277 | Dyestuffs and pigments |
|  | Fertilizers |
| $\begin{aligned} & \text { PA279.1 } \\ & \text { PA279. } \end{aligned}$ | Polishes |
| PA279.3 | Explosives and fireworks |
| PA279.4 | Formulated pesticides, etc. |
| PA279 | Printing ink |
| PA279.6 | Surgical bandages, etc. |
| PA279.7 | Photographic chemical materials |
| PA312 | Steel tubes (general) |
| PA313 | Iron castings, etc. |
| PA321 | Aluminium and aluminium alloys |
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| PA331 | Agricultural machinery (except tractors) |
| PA332, | Meta-working machine tools |
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| PA335 | Textile machinery and accessories |
| PA336 | Construction and earth-moving equipment |
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| PA339.1 | Mining machinery |
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| PA339. 3 | Refrigerating machinery, space-heating, ventilating and air-conditioning equipment |
| PA339.5 | Scales and weighing machinery and portable power tools |
| РАЗ39.7 | Food and drink processing machinery and packaging and bottling machinery |
| PA339.9 | Miscellaneous (non-electrical) machinery |
| PA341 | Industrial (including process) plant and steelwork |
|  | Ordnance and small arms plem and steerk |
| PA349.1 | Ball, roller, plain and other bear |
| ${ }_{\text {PA351 }}{ }^{\text {PA34. }}$ | Precision chains and other mechanical engineering Photographic and document copying equipment |
| PA352 | Watches and clocks |
| PA353 | Surgical instruments |
| PA354 | Scientific and industrial instrume |
| 61 | Electrical machinery |
|  |  |
| PA363 | Telegraph and telephone apparatus and |
|  | Radio and electronic componen |
| PA365.1 | Gramophone records and tape re |
| PA365.2 | Broadcast receiving and sound reproducing equipment |
| PA366 | Electronic computers |
|  |  |
| A368 | ectrical appliances primarily for domestic use |


| P369.1 | Electrical equipment for motor vehicles, cycles and aircraft |
| :---: | :---: |
| PA369.2 | Primary and secondary batteries |
| PA369.4 | Electric lamps, electric light fittings, wiring accessories, etc. |
| PA370 | Shipbuilding and marine engineering |
| PA380 | Wheeled tractor manufacturing |
| PA381.1 | Motor vehicle m |
| PA381.2 | Trailers, caravans and freight containers |
| PA382 | Motor cycle, tricycle and pedal cycle manufacturing |
| PA383 | Aerospace equipment manufacturing and repairing |
| PA384 | Locomotives, railway track equipment, railway carriages, wagons and trams |
| PA390 | Engineers' small tools and gauges |
| PA391 | Hand tools and implements |
| PA392 | Cutlery, spoons, forks and plated tableware, etc. |
| PA393 | Bolts, nuts, screws, rivets, etc. |
| PA394 | Wire and wire manufactures |
| PA395 | Cans and metal boxes |
| PA396 | Jewellery and precious metals |
| PA399. 1 | Metal furniture |
| PA399.5 | Drop forgings, etc. |
| PA399.6 | Metal hollow ware |
| PA399. 8 | Miscellaneous metal manufacture |
| PA411 | Production of man-made fibres |
| PA412 | Spinning and doubling on the cotton and flax syster |
| PA413 | Weaving of cotton, linen and man-made fibres |
| PA414 | Woollen and worsted |
| PA415 | Jute |
| PA416 | Rope, twine and net |
| PA417.1 | Hosiery and other knitted goods |
| PA417.2 | Warp knitting |
| PA418 | Lace |
| PA419 | Carpets |
| PA421 | Narrow fabrics |
| PA422.1 | Household textiles and handkerchiefs |
| PA422. 2 | Canvas goods and sacks and other made-up te |
| PA423 | Textile finishing |
| PA429.1 | Asbestos |
| ${ }_{P}^{\text {PA4292, }}$ | Miscellaneous textile industries |
| PA432 | Leather (tanning and dressing) and fellmongery |
| PA433 | Fur |
| PA441 | Weatherproof outerwear |
| PA442 | Men's and boys' tailored outerwear |
|  | Women's and gir $\mathrm{ls}^{\prime}$ ' tailored outerwear |
| PA444 | Overalls and men's shirts, underwear, etc. |
| PA445 | Dresses, lingerie, infants' wear, etc. |
| PA446 | Hats, caps and millinery |
| PA449.1 | Corsets and miscellaneous dress indu |
| PA449. 2 | Gloves |
| PA450 | Footwear |
| PA461.1 | Refractory goods |
| PA461. 2 | Building bricks and non-refractory goods |
| PA462 | Pottery |
| PA463 | Glass |
| PA464 | Cement |
| PA469.1 | Abrasives |
| PA469. 2 | Miscellaneous building materials and mineral products |
| PA471 | Timber |
| PA472 | Furniture and upholstery |
| PA473 | Bedding, etc. |
| PA474 | Shop and office fitting |
| PA475 | Wooden containers and baskets |
| PA479 | Miscellaneous wood and cork manufactures |
| PA481 | Paper and board |
| PA482.1 | Cardboard boxes, cartons and fibre-board packing cases |
| PA482.2 | Packaging products of paper and associated materials |
| PA483 | Manufactured stationery |
| PA484.1 | Wallcoverings |
| PA484. 2 | Miscellaneous manufactures of paper and board |
| PA485 | Printing, publisting of newspapers and periodicals |
| ${ }_{\text {PAA491 }}$ | General printing and publishing |
| PA492 | Linoleum, plastics fl |
| PA493 | Brushes and brooms |
| PA494.1 | Toys, games and children's carriages |
| PA494. 3 | Sports equipment |
| PA495 | Miscellaneous stationers' goods |
| PA496 | Plastic |
|  | Mus |
| PA499. 2 | Mis |
| PA500 | Construction |
| PA601 | Gas |
| PA602 | Electricity |
| $\text { PA } 1002$ | supply Summary tables |

The information in this report relates to establishments classified to the Synthetic resins and plastics materials and synthetic rubber industry minimum list heading 276 in the Standard Industrial Classification (revised 1968). The activities of the industry include:-

Manufacturing synthetic resins and plastics materials in the form of solid and liquid resins, latices, solutions, dispersions and emulsions, moulding and extrusion compounds, foam, non-decorative sheet, laminated sheet (including decorative), film, rods and tubes and profile shapes. Glass fibre sheet and transparent regenerated cellulose film are included. Unformulated synthetic resin adhesives are included but formulated synthetic resin adhesives (i.e. containing additives such as solvents, plasticisers, etc.) are excluded. The production of rextie fibres from plastics materials, plastics mouldings, coatings or extrusions produced from these synthetic resins and plastics m) are articles cut from
also excluded.

In interpreting the data in the tables it is essential to bear in mind the notes and definitions which commence on page (iii).
Table Title
1 Output and costs, 1973-1976 ..... 2
2 Capital expenditure, 1973-1976 ..... 3
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$6 \quad$ Percentage analysis of twelve-month periods covered by returns received from United8
7 Percentage analysis of employees, by full and part-time employment and sex, 1976 ..... 7

Output and costs, 1973-1976
All United Kingdom

|  | Unit | 1973 | 1974 | 1975 | 1976 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Enterprises | Number | 328 | 408 | 472 | 510 |
| Establishments | " | 359 | 444 | 516 | 555 |
| Sales of goods produced | £ thousand | 632,600 | 1,011,506 | 971,032 | 1.400,605 |
| Receipts for work done and industrial services rendered | . | (b) | (b) | (b) | 4.070 |
| Capital goods produced for establishments' own use | " | 4,983 | 5.729 | 6,687 | 7,008 |
| Non-industrial services rendered | , | 1,992 | 2,520 | 4,412 | 7,976 |
| Goods merchanted or factored | " | 33,974 | 62,020 | 62,896 | 87,046 |
| Total sales and work done (c) | " | 673,550 | 1,081,775 | 1,045,027 | 1,506,707 |
| Increase during the year, work in progress and goods on hand for sale | . | $-2,174$ | 49,484 | -2,396 | 40,998 |
| Gross output | , | 671,376 | 1,131,259 | 1,042,631 | 1,547,705 |
| Purchases of materials for use in production, and packaging and fuel | . | 341,782 | 647,305 | 596.710 | 930,703 |
| Purchases of goods for merchanting or factoring | " | 28,451 | 57,912 | 47.296 | 72,893 |
| Increase during the year, stocks of materials, stores and fuel | " | 10,097 | 28,608 | -10,079 | 16,893 |
| Cost of industrial services received | " | 13,821 | 18,235 | 21,677 | 31,537 |
| Net output | " | 297,419 | 436,415 | 366,870 | 529,466 |
| Total employment (d) | Thousands | 45.4 | 50.1 | 51.1 | 51.5 |
| Net output per head | £ | 6,545 | 8,714 | 7.175 | 10,276 |
| Payments for non-industrial services |  |  |  |  |  |
| Rents, hire of plant and machinery (e)(f) | £ thousand | 3,154 | 3,855 | 5,834 | 7.018 |
| Commercial insurance premiums | " | 3,936 | 4,597 | 5,680 | 6.413 |
| Bank charges | " | 202 | 351 | 368 | 415 |
| Other non-industrial services (g) | " | 21,687 | 33,780 | 38,902 | 58,295 |
| Licensing of motor vehicles | . | 138 | 165 | 204 | 229 |
| Rates, excluding water rates | " | 3.112 | 4.553 | 6.528 | 7,207 |
| Gross value added at factor cost | " | 265,189 | 389,114 | 309,355 | 449,889 |
| Gross value added at factor cost per head | £ | 5,836 | 7,769 | 6,050 | 8,731 |

[^0]Capital expenditure, 1973-1976
All United Kingdom establishments classified to the industry (a) (b)

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 86 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
included. included.
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 86 per cent of employment within the industry

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

| Size <br> group <br> (b) | Establish. ments | Enter- <br> prises <br> (c) | Employment |  |  | Wages and salaries (f) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total <br> (d) | $\begin{aligned} & \text { Opera- } \\ & \text { tives } \end{aligned}$ | $\begin{aligned} & \text { Others } \\ & \text { (e) } \end{aligned}$ | Operatives |  | Others (e) |  |
|  |  |  |  |  |  | Total | per | Total | per head |
|  | Number | Number | Number | Number | Number | £ thousand | £ | £ thousand | £ |


| Total sales and work done (g) | Gross output | Net output |  | Gross value added at factor cost |  | Net capital expenditure (h) | Total stocks and work in progress at end of year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | $\begin{aligned} & \text { per } \\ & \text { head } \end{aligned}$ | Total | $\begin{aligned} & \text { per } \\ & \text { head } \end{aligned}$ |  |  |
| £ thousand | f thousand | £ thousand | £ | £ thousand | £ | £ thousand | f thousand |


| $1-10$ | 287 | 284 | $1,427)$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| $11-19$ | 89 | 87 | $1,288)$ |  |  |  |  |  |  |
| $20-49$ | 68 | 66 | $2,080)$ | 4,680 | 2,228 | 13,758 | 2,940 | \&, 107 | 3,639 |
| $50-99$ | 33 | 32 | $2,319)$ |  |  |  |  |  |  |
| $100-199$ | 28 | 28 | 3,919 | 2,704 | 1,212 | 7,843 | 2,901 | 4,379 | 3,613 |
| $200-299$ | 14 | 12 | 3,307 | 2,113 | 1,194 | 6,982 | 3,304 | 4,460 | 3,735 |
| $300-399$ | 12 | 11 | 4,353 | 2,806 | 1,547 | 10,627 | 3,787 | 6,605 | 4,270 |
| $400-499$ | 5 | 4 | 2,225 | 1,207 | 1,018 | 4,224 | 3,500 | 3,980 | 3,910 |
| $500-749$ | 6 | 6 | 3,764 | 2,342 | 1,422 | 7,954 | 3,396 | 6,190 | 4,353 |
| $750-999$ | 3 | 3 | 2,535 | 1,286 | 1,249 | 4,522 | 3,516 | 5,597 | 4,481 |
| $1,000-1,499$ | 4 | 3 | 5,172 | 3,671 | 1,501 | 13,286 | 3,619 | 5,970 | 3,977 |
| 1,500 and over | 6 | 6 | 19,137 | 11,994 | 7,143 | 46,041 | 3,839 | 37,181 | 5,205 |


| Total | 555 | 510 | 51,526 | 32,803 | 18,514 | 115,237 | 3,513 | 82,469 | 4,454 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

(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) Including working proprietors.
(e) Administrative, technical and clerical employees.

| $1,506,707$ | $1,547,705$ | 529,466 | 10,276 | 449,889 | 8,731 | 70,335 | 232,050 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

(f) 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 $£ 33,882$ thousand.
(g) Sales of goods produced, capital goods manufactured, buildings constructed by establishments for their own use, work done
industrial and non-industrial services rendered and merchanted goods.
(h) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery
(j) Gross value added data relate to establishments employing 1-199.

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

(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 acquisitions less disposals of land and existing buildings, vehicles 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 employees were located in the region. The estimate
was made by assuming that net output and gross value added was made by assuming that net output and gross value added at each address covered by a return was proportional to employment at
the address.
(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 exempt because of size.

Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments employing 20 or mo r
Percentage anal
persons, 1976
Accounting year ended
1976 April (a) Percentage of total returns received $\qquad$


May
0.0
0.0

June
July

August
September
3.4

October
November
December
4.2
58.8

January
March (b)

## (a) From 6th April

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


Female

Source: Department of Employment
(a) The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom at end June, 1976

Notes
These notes give the main information needed for Interpreting the tigures in the Industry Business
Monitors: more detal led information about the
 PA1001 (Introductory Notes.
Census of Production, 1976.
general information
Changes made for 1976
Changes made for 1976 is in 1 ine with similar
The
Ine Inquiries being conducted in other member countries
of the European Economic Communities. There was of the European Econonic Communities. There was a
small number of changes It the scoper of the
Ind small number of changes
Industry reports compared
separate head ings for fer
Sales of goods produced
Recelpts for work done and industrial services rendered
Amounts pald for hire of plant and machinery Amounts pald for rent of industrial and
Specific changes are explained in the introductions
to the industry reports or by footnotes to the to the
tables.

Suppression of information relating to Individual under takings
Sectlon $9(5)(b)$ of the Statistics of Trade Act 1947
states effect with respect to any report, summary or other conmun icat ion to the publico of information obta a ned under the foregoing provislons of this Act
in compliling any
such report,
summary in complling any such report, summary or
comunication the competent authority shall so arrange it as to prevent any particulars
published therein from belng identifled publ Ished therein from being identifled as being
particulars relating to any individual person or particulars relating to any individual person or
undertaking except with the previous consent in writing of that person or the person carrying on that undertaking, as the case may be; but this
provision shall not prevent the disclosure of the total quantity or value of any articlises produced,
sold or delivered; so, however, that before disclosing any such total the competent author ity
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permiss ion was given. When it was refused and where contr ibutors were not approached the figure
has been suppressed, either by combining it with other figures, or as in the regional tables, by omitting the figure al together
Symbols used
The foll lowing
erites of Aus symbols re used throughout the PA
.. not avallable

* nil or less than half the final digit shown
digures cannot be shown owing to the risk of
disclosing information about individual enter R $\begin{gathered}\text { prises } \\ \text { revised }\end{gathered}$

Rounding of flgures
Flgures
Figures in the tables have, where necessary, been rounded to the nearest final dilitt. Where flgures
have been so rounded, the sum of the constituent Items may not always agree exactly with the tota

Industrial classification Standard Industrial
The United Kingdom
Classification (SIC) was first issued in 1948 was subsequently revised in 1958 and 1968 , it exists to promote uniformity and comparability in
the official statistics of the United Kingdom, the official statistics of the United Kingdom,
The general principles followed are those of the Ine genational standard Industrial Classification of ali Economic Activities of the United Nations
Statistical Office but the United Kingdom Statistical Office but the United KIngdom SIC
reflects the organisation and structure of reflects the organisation and structure o
industry and trade as it exists In the Unite Kingdom. The sic is a classification by activit
and is not a commodity classification. However and is not a commodity ciassification. However,
an index of all commodity headings for which
sales data are provided in the Quarterly Bus sales data are provided in the Quarterly Business
Monitors, is published in Business Monitor PQ1000.

Statistical units
The statistical unit for the purpose of the Censu is the establishment which is defined in the SI as the smallest unit which can provide the census, for example, employment, expenses, turn over, capital formation Usually the princlpal activities carrled on in an establishment fall
within a single heading of the classificatio within a single heading of the classificatlo
(e.g. steel making or sugar refining). Typlcally (e.g. steel making or sugar refining). Typlcally
the establishment embraces all the activities carried on at a single address e.g. a farm, a mine
or a factory, including those which are anclllary or a factory, including those which are ancillar
to the principal activities. Frequently distinc Frequently distinc
to the privities characteristic of different industries
actice carried on at one address, but normally thes are carried on at one address, but normally thes
are not classified separately and the whol are not cla
establishment activity. If, however, the required range of d can be provided for each activity, each is taken
to constitute a separate establishment. to constitute a separate establishment. Sometimes
activities which are conducted as a single business are carried on at a number of addresses. Where this is so, businesses are asked to provide
the full range of separate information in the full range of separate information in respec
of each address; whether or not the activities ar of each address; whether or not the activities ar
different. Their activities may, however, be integrated to such an extent that they constitut a single establishment. In the latter case the
establishment is defined to cover the combine establishment is defined to cover the comblineal
activities at these addresses (termed local units). Separate fligures are obtained of employment and net capltal expenditure
unit in order to complie regional tables. unit in order to complie regional tables.
Efforts are made by the Business Statistics offi to ensure, by negotlating with respondents, that the return from an establishment does not cover local units or addresses in more than one of the
countries of the United Kingdom. Further information about the statistical unit appeared in an article "The statistical unit in
business inquiries" in Statistical News No. 13 May
Establishments are asked to exclude from their returns particulars relating to any department no engaged in production e.g. merchanting, transport warenousing, for which they keep a separate set
accounts. Transfers of goods produced to such departments are treated as sales and respondents are asked to value them as far as possible as if accounts are not kept they are asked to Inclure accounts are not kept they are asked to incture Particulars relating to head offices mainly engaged in the administration of the productl
units within the scope of the census wer units within the scope of the census information in respect of the head office was apportioned among them.
roduct ion (especially the enterprise analyses of Business Monitor PA1002) related establ ishments
ure combined. For these purposes an enterpr tse
 eit ther a single establishment or two or more
establ lshments under common ownership or control. estabis together establishments into enterprise
Bringing is also necessary for the purpose
groups is groups is also necessary for the purpose of
ensur ing that there will be no disclosure of the activities of any one enterprise group.
information about the information about the relationship of
establishments, the changing structure of groups estabompanles and about common ownership links is
of com
otained from many sources. including he stock xxhange year Book, company reports, press report

WE REGISTER
ne register permits a questionnaire to be sent ect to the reporting establishment on which
latter can include information relating to all manufacturing (or local) units which it prises.
Inquirles provide a major source of information act as a check on its detail and structure or the establishments on the register making eturns to the quarterly inquiries, the industria sales of commodities and is reviewed annually, Employment data are entered on the register from returns to the annual census of production. In to these inquiries the employment data are based on Information provided by the Department of Employrent from the annual censuses of employment.
included in the censuses each year and the ine are
ation they supply to the census is supplemented by
the returns that those with 25 or more employees
provide to the quarterly inquiries. Information
about establishments with fewer than 20 employe
in most industries is less securely based, but
increasing use has been made of data on these
small establishments supplied by the Department of
Employment. One benefit of using this information
Employment. One benefit of using this information
Is an improvement in the estimates of the number of
smal ler establishments and enterprises, but there
is little effect on other aggregates (e.g. employ-
nent, output, net capital expenditure).
Coverage
Areturn was required in the 1976 Census from each ostabl ishment with 20 or more employees. Each
ostablishment is classified to an industry, as defined in the SIC, whose principal products form the major part of the establishment's sales.
Regions
The regions defined in Table 5 take account of the Government Act 1972 and the Local Government Act (Scotland) 1973. These changes came into effect in cotland.
RMS USED IN THE CENSUS REPORT
Average number emp loyed
fablishments were required to state the number persons on the payrol on average during the ear of return, whether full-time or part-time
mployees. Separate figures were required for:
(a) administrative, technical and clerica
(b) amp loyees
employees (operatives)
Averages could be calculated from the figures
relating to the last week of each calendar month. elating to the last week of each calendar month.
stablishments were also required to state the
number of working ingopletors where appropriate
and these are included in total employment
fise figures. Outworkers (1. ©. persons employed by
establishments who worked in their own homes etc. establishments who worked in their own homes etc.
on mater ials supplide by the establishment) are
excluded. The figures Include persons engaged on merchanting or factoring and canteen workers where particulas 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 receiving a wage or salary; but
such persons who worked less than half the normal 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

Employees
Administrative, technical and clerical employees
include directors in include directors in receipt of a definite wage,
salary or commission, managers, superintendents and works foremen; research and design employees
(other than operatives); draughtsmen, editorlal staff, advertising staff, travellers and all office employees.
Operatives include all other classes of employees, that is, broadiy speaking, al manual wage earners. They include operatives employed in
power stations, transport
(including roundsmen), warehouses, stores, shops and canteens,
inspectors, maintenance workers and cleaners. Operatives engaged in outside work of eracting, fit+ing etc.
are excluded.

Capital expenditure
Capital 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
value of capital expenditure amounts received or expected to be recelved in grants recelved or expected to be received in grants or al lowances
from the Government or any statutory body or local authority. Establishments with 100 or more
employees were asked to include a total net employees were asked to include a total ne
capital expenditure figure for each calendar year
(a) New building work

This 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
and 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 buildings purchased. Figures
shown include legal charges, stamp duties, agents commissions, etc.
(b) Land and existing buildings
shown are the capital cost of freeholds purchased and the capital cost or premlum payable assets acquired in taking over an existing usiness), and the amounts receivable for free-
olds or leaseholds disposed of that charged to capital account during the year of return.
(c) Plant, machinery and vehicles
The Items shown are the value of plant and 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 plant, etc. acquired is the expenditure charged to discounts recelved, but including the cost of transport and installation. Deductible value added
tax is excluded but non-deductible value added tax tax is excluded but non-deductible value added tax
on motor cars acquired is included. No deduction is mader for depreciation, amortization or obsolescence. The proceeds of items disposed of during
the year exclude amounts written-off for items scrapped.

Cost of industrial services
This includes amounts payable to other firms for ment, payments for sepairs and and maintenance
fent and
(including those in respect of rented buildings) and amounts pald to other firms for contracts which and amounts pald to other firms for contracts which
have been sublet. Payments to outworkers are
excluded.

Cost of non-industrial services
his includes rent of industrial and commercial buldings, hire of plant and machinery, commercial
insurance premiums, bank charges and amounts pald for professlonal services, post office services, ransport, advertising etc. Amounts payable on
royalties for the right to use patents, trademarks, royalties for the right to use patents, trademarks,
copyrights etc., manufacturing and quarrying rights copyrighs etc., manutacturing and quary
and technical "know-how" are al so included.
Gross output
In the calculation of gross output the value of total sales and work done is increased by the rise
tout the
(or reduced by the fall) during the year in the (or reduced by the fall) during the year in the
value of work in progress and goods on hand for value
sale.
Net output
Net output
Net output, a customary census measure, is
calculated by of purchases (reduced by the rise, or increased by the fall, during the year of stocks of materials etc.) and the cost of industrial services received,
and where applicable, duties etc.

Net output per head
The figures of net output per head are derived by persons employed output by the average number of of
(full and part-time) on all activities covered by the returns, including
operatives, administrative, technical and clerical operatives, administrative, technical and clerlal
employees and working proprietors, but excluding emp loyees
outworkers.
Gross value added at factor cos
Gross value added at factor cost is calculated by deducting from net output the cost of non-
industrial services of plant and machinery, commercial insurance premlums, bank charges and amounts paid for 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 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 out
Gross value added at factor cost per head
Gross value added at factor cost per head
The figures of gross value added at factor cost per
head are der lived by diviling the head are derived by dividing the gross value added
by the average number of persons employed (full and by the average number of persons employed (full and
part-time) on abl activities covered by the
returns. part-time) on all activities covered by the
returns, $\begin{aligned} & \text { Including operatives, administrative, } \\ & \text { technical and clerical employees and working }\end{aligned}$ technilal and clerical employees
proprietors, but excluding outworkers.

## Purchases Purchases

components, semi-manufactured goods and worksho
mater ials; of replacement parts and consumabl
tools not tools not charged to capital account; of packaging
materials of all types; of stationery and materials of all types; of stationery and printect
matter; of fuel, electricity and water: matter; of fuel, electricity and water; of
materials to be used by the establishment or given
out to other establishments for the product ion of
machinery or other capital items for the estab. machinery or other capital items for the esta lishment's own use; of materials for use by th customers; and of food, etc. for any cantee covered by the establishment's return. Transfers ment of the same firm not covered by the establishment's return are included at a cost 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 own
transport transport department for delivery of materlals are
excluded, as are all purchases of machinery excluded, as are all purchases of machinery an
plant charged to capital account. Purchases goods for merchanting or factoring have be collected separately since 1973. The values show
exclude VAT. They include, in addition exclude VAT. They include, in addition to
actual purchase price, the value of actual purchase price, the value of packagin
material charged to the establishment. The valu of returned goods or packaging material returned
to suppliers and any trade discounts are excluded, to suppliers and any trade discounts are excluded,
Materials purchased duty-pald are included at theli duty-paid value, less any drawback, rebate, The cost of transport is included only if
included with the purchase price in the accounts. Imported goods are included
full delivered cost. If in the firm's acco transport from docks or airport is not included in the cost of goods purchased, the cost is entered at c.l.f. plus duty (if applicable). Leasing, rentin
sales of goods produced
Sales for the purposes of the annul mence means deliveries on sale of goods made by estab-
lishments in the United inquiry. Sates of gited Kingdom covered by the lishments by outworkers from mater lals giverkers out by other establishments
them and sales of was machinery are included. New building wor establishments or other capital items produced regar ded as sales, hiring out or leasing
the value included in return being that adopted in the establishments capital asset accounts. Forward sales and canteen takings are excluded. All sales in the per iod of
the inquiry are included irrespective of when the the inquiry are included irrespective of when the
goods were manufactured. Goods produced in one goods were manufactured Goods produced in one
establishment and transferred either to ancillary departments not engaged in production for which
there are separate accounts there are separate accounts, or to anothe estarn, are treated as sales by the producing return, are treated as sales by the producing
establishment and valued as far as possible as if
they had been sold to an independent purchaser, they had been sold to an independent purchaser,
Goods transferred to wholesale or retail selling Goods transferred to wholesale or retall selling
organisations, for which separate accounts are
kept are valued kept are valued on the same basis.
The value shown for sales is value" defined as the amount (exchuding value
added tax) charged to customers whether on an ex-works or delivered basis, after any trad discounts and agents' commissions have been
deducted. The cost of packing materials less deducted. The cost of packing materials
allowance for returnable cases is included. industries where products attract Exclse Duty value stated is usually inclusive of duty if sol duty-paid and exclusive of duty if sold in bond exported.
Work done and industrial services rendered figures for work done represent the amount charge
for work carrled out on materials supplied by for work carrled out on materlals supplied by
customer and Include repalr work. Within cortaln
dustries this heading covers a wide varlety of activities, for example, within the food sector
otter packed on commission; within the textlie butcertries - making up of garments, fur dressing and textile finishing; within printing and pub-
lishing - preparatory work on type-setting, block naking and binding. Work done is also significant in the electrical machinery and heavy englineering
industries, covering erection, installation and ndustries, covering erection, installation and
epalir and jobbing work. other activities within this heading include exploration work, research and
fevel lopment, glass cutting and dressing and planing ftimber. services rendered include repairs and Industrial services rendered include repairs and
instal lation work, and technical
nesearch and studies for other argan isations. osearch and studies for other organisations
ital goods produced for establishments' own use
s includes all work of a capital nature carried during the year by the establishments' own
their

Ion-Industrial services rendered
doustrial buildings, amounts charged for hiring out plant, machinery and other goods and amounts charged to other organisations for the provision of
ransport. to also includes amounts recelved for ight to use patents, trademarks, copyrights
manufacturing and quarrying rights and techmanuacturing and quarrying rights and tech-
mknow-how ${ }^{\text {n }}$ and revenue from such staff ilities as canteens.
Ts macthantoo of factorso
les) sold without having texcluding canteen nuacturing process by the seller. subjected to any
tocks and work in progress
ales and of given of stocks of goods on hand for
and stores and fuel, at the ent the year of return and of the change during the
tincluding any stocks of goods held for
 defined as mater lals which have been partially
rocessed by the establishment but which are not rocessed by the establishment but which are not
sually sold or transferred to another estabsually sold or transferred to another estab-
ishment without further processing. The values ude the cost of materials consumed and labour sed together with a margin of overhead costs and
Prits.
Progress payments made to subProgress payments made to sub-
ontractors are excluded and progress $\begin{aligned} & \text { to } \\ & \text { payments }\end{aligned}$
from oived eceived from other organisations are not
ges and salarles
lese are amounts paid during the year to
peratives and to administrative, technical and lerical and to administrative, technical and
employees. Payments to working
coprietors, xcluded. The values shown include al I overtime
ayments, bonuses and commissions, whether paid egularly or not, and commissions, whether paid
nome deduction is made for he value of redundancy payments less any amounts
patmbursed from eimbursed from Government sourcess is included. he value of any payments in kind, travelling
xpenses etc. is excluded.
muneration paid to outworkers
remuneration paid to outworkers (i.e. persons
noloyed by the establishment who do their work in is own homes) is generally on a plece-work Only amounts pald to outworkers whose names mounts paid to outworkers by sub-contractors are mounts pa
loyers' insurance and welfare contributions
Is item includes employers ational insurance employers' contributions to irnings related basic contributions under the

Social Security Act, 1973) as well as commercial
insurance premiums insurance premiums to provide pensions, super-
annuation or other retirement benefits, sickness
benefits, personal accident benefits, personal accident benefits, disabillity
or death benet or death benefits for employees, or former
employes or their dependants. Contributions to the running costs of canteens, social contres,
children's and holliday homes, etc. for employes,
former former employees and their dependants are also
included.

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[^0]:    (a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size.
    b) Included with Sales of goods produced.
    (c) A breakdown of manufacturers' sales of principal products are published regularly in Business Monitor PQ276.
    (d) Average number employed, including full and part-time employees (see table 7 ) and working proprietors.
    (e) 1973 figures include hire of vehicles.
    (f) For $1973-1975$ rents of industrial and commercial buildings were not recorded separately. For 1976 the amount payable was
    $£ 2,223$ thousand.
    £2,223 thousand.
    (g) 1974-1976 figures include the cost of hiring goods vehicles.

