## Business Statistics Office

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## Business Monitor

## Report on the Census of Production

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Machinery for printing, paper, wood, leather, rubber, glass and related industries: laundry and dry cleaning machinery

Business Monitor

## PRICE INCREASES

Prices of Business Monitors in 1982 have been set to make some contribution for the first time to the cost Office in the preparation of Monit

## Report on the Census of Production 1980

Machinery for printing, paper, wood, leather, rubber, glass and related industries: laundry and dry cleaning machinery

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

SPECIAL NOTE FOR PURCHASERS
Reports on the Census of Production for separate industries are being published in the Business Monitor series. These Monitors nnual series) and then by a number indicating the icating an covered by the report.
Commencing with the 1980 census, the first Annual Census of Production to be conducted on the Standard Industrial Classifor each 3 digit Group of the new classification Results for 198 will include 1979 back data but more detailed 1979 figures based on the new classification will be published as a single separate Business Monitor (PA1002.1). This will also include the results of the 1979 Purchases Inquiry. Reports on the Census of Production for the years prior to 1980 are available at the Minimum List Industrial Classification (Revised 1968) on (Revised 1968).
The Census of Production (PA) reports are available on standing order from HMSO, PO Box 569, London, SE1 9NH, Tel No: 01-928-6977. A standing order ensures that selected cation. A $£ 20$ deposit will open an account.

Additionally single copies of the reports can be obtained from HMSO Bookshops and are individually priced GOVERNMENT STATISTICAL SERVICE

A service of statistical information and advice is provided to the Government by specialist staffs employed in the statistics division of individual Departments. Statistics are made generally available through their puiblications and further information and advice on them can be obtained from the Departments concerned.

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Department of Industry
Business Statistics Office

## LIST OF INDUSTRY REPORTS

The following is a list of of 1980 Industry Reports based on the Standard Industrial Classification Revised 1980. The number of the
Monitor will indicate aech 3 digigt troup industry of the new classification. This will produce about 110 Monitors in this sorien comperad with around 155 Monitors in in recent years
HMSO will automatically yupply the nerorst comparable, and, if necasarar, supplementary Monitors to all account holders. If your
rocuirements are not tuly If you have any enquiries about the new classification plaase ring Newport (STD 0633) 56111 Extension 2455.

PA1001 Introductory notes
PA120
PA130
PA140
PA162
PA170
PA210

| PA221 | Itron a |
| :--- | :--- |
| PA222 | Steel |

## Steel tube

Drawing, cold rolling and cold forming of steel Non-ferrous metals industry
Extraction of stone, clay, sand and grave Extraction of miscellaneous minerals lincluding salt) Structural Clay products
Cement, lime and plast
Asbestos goods Working of stone Abrasive products
Glass and glassware Glass and glassware
Betractory and ceramic good
Paints, varnishes and printin
Specialised chemical products mainly for industrial and agricultural purposes Pharmaceutical products
Soap and toilet preparations Specialised chemical products mainly for household
and office use Production of
PA311 Foundries
PA312 Forging, pressing and stamping
PA313 Bolts, nuts, washers, etc.; springs; non-precision A314 Metal doors, windows,
PA316 Hand tools and finished metal goo
PA320 Industrial plant and steelwork
PA321 Agricultural machinery and tractors
PA323
PA324
PA324
PA325
326
handing equipment construction and mechan
Machanical power transmission equipment glass and related industries: laundry leather, rubber glass and rel
PA328
PA329
Ordnance, small arms and ammunition
Manufacture of office machinery and data processing equipment
$\begin{array}{lll}\text { PA341 } & \text { Insulated wire and cables } \\ \text { PA342 } & \text { Basic electrical }\end{array}$
$\begin{array}{ll}\text { PA343 } & \text { Basic electrical equipment } \\ \text { Electrical equipment for industrial use, and batteries }\end{array}$
PA344 Telecommunication equipment, electronic equipment, electrical measuring electronic components
PA345
PA346
Domestic-type electric applipmest
PA351 Electric lamps and other electric
Motor vehicles and their engines

## $\begin{array}{lll}\text { PA352 } & \text { Motor vehicle bodies, trailers and caravans } \\ \text { PA353 } & \text { Motor vehicle parts }\end{array}$

$\begin{array}{ll}\text { PA361 } & \text { Motor vehicle parts } \\ \text { PA362 } & \text { Railding and repairing }\end{array}$
PA362 Railway and tramway vehicles
PA333 Cycles and motor cycles
PA364
PA365
PA365
PA372
РАЗ 3
PA373
PA374

PA412

PA413
PA414
PA415
PA416

## PA446 PA419

| PA4429 |
| :--- |
| PA421 |


| PA420 |
| :--- |
| PA422 |

## PA423

PA424 Starch and miscellaneous foods
PA424 Spirit distilling and compounding
PA426 Wines, cider and perry
PA428 Brewing and malting
PA428 Toft drinks
PA431 Woollen ind worsted industry
PA432 Cotton and silk industries
PA433 Throwing, texturing, etc. of continuous filament yam
PA434
PA435 Spinning and weaving of flax, hemp and ramie
PA435 Jute and polypropylene yarns and fabrics
$\begin{array}{ll}\text { PA436 } & \text { Hosiery and other knitted goods } \\ \text { PA437 } & \text { Textile finishing }\end{array}$
PA437 Textile finishing
PA438 Carpets and other textile floorcoverings
PA439 Miscellaneous textiles
PA441 Leather (tanning and dressing) and fellmongery
PA442 Leather goods
PA451 Footwear
PA453 Clothing, hats and gloves
PA455 Household textiles and other made-up textiles
PA456 Fur goods
PA462 Manufacture of semi-finished wood products and
PA463 further processing and treatment of wood
$\begin{array}{ll}\text { PA463 } & \text { Builders' carpentry and joinery } \\ \text { PA464 } & \text { Wooden containers }\end{array}$
PA464 Wooden containers
PA465 Miscellaneous wooden articles
broom of cork and plaiting materials, brushes and
PA467 Wooden and upholstered furniture and shop and
PA471 office fittings
PA471 Pulp, paper and board
$\begin{array}{ll}\text { PA472 } & \text { Conversion of paper and board } \\ \text { PA475 } & \text { Printing and pellish }\end{array}$
$\begin{array}{ll}\text { PA475 } & \text { Printing and publishind } \\ \text { PA481 } & \text { Rubber products }\end{array}$
$\begin{array}{ll}\text { PA483 } & \text { Processing of plastics }\end{array}$
PA491 Jewellery and coins
PA492 Musical instruments
PA494 Toys and sports goods
PA495 Miscellaneous manufacturing industries
PA1002 Summary table

227 MACHINERY FOR THE PRINTING, PAPER, WOOD, LEATHER, RUBBER, GLASS AND RELATED INDUSTRIES; LAUNDRY AND DRY CLEANING MACHINERY
e information in this report relates to establishments classified to the Machinery for the printing, paper, wood, leather, rubber, glass and the ind industries: laundry and dry cleaning machinery in

275 Machinery for working wood, rubber, plastics, leather and making paper, glass, bricks and similar materials; laundry and dry cleaning

## machinery

> machinery 1. Woodworking machinery

Manufacture of machines for pressing, shaping and sawing wood. Machines for working plywood, chipboard and veneer are included Portable power tools are classified to Group 328 .
2. Rubber and plastics working machinery, extruding, pressing and moulding of rubber and plastics. Calenders are included. 3. Leatherworking and footwear making and repairing machinery Manufacture of
to Group 328 .
4. Paper making machinery

Manufacture of machines for preparing paper and board stock and for making paper and board.
5. Glass and brick making and similar machinery Manufacture of machines for making and working glass, bricks, tiles, concrete blocks, pottery and other ceramics. Electric lamp making
machines are included. Manufacture of moulds and of furnaces and kills is excluded and classified to Groups 322 and 324 respectively. 6. Laundry and dry cleaning machinery Manufacture of washing, drying, ironing, folding and dry cleaning machines, including coin operaa)
laundering machines are classified to Group 346 and machines for textile finishing to Group 323 .

276 Printing, bookbinding and paper goods machinery
6 Printing, bookbinding and paper goods machinery Manufacture of typesetting, plate and cylinder production machinery including metal and film typesetting and composing room
 machines and offset-litho machines but excluding textile printing machines which are classified to Group 323 . Manufacture of
bookbinding and paper working machinery including bookbinders' sewing machines, ruling machines and machines for making bookbinding and paper working machinery including book binders' sewing m
and working cardboard boxes, paper bags, envelopes and other paper goods.

For a full description
office, price $£ 2.50$.
Office, price $£ 2.50$.
In interpreting the data in the tables it is essential to bear
in mind the notes and definitions which commence on page 9 .

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ercentage analysis of twelve-month periods covered by returns received from United ..... 8
Kingdom establishments, 19808

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. Satisfactory returns accounted for 71 per cent of employment within the industry.
(b) Average number employed, during the year, including full and part-time employees and working proprietors.

Capital expenditure, $1979-1980$
All United Kingdom establishments classified to the industry (a) (b)

## Land and buildings

New building work $\quad 4.307 .2$
Land and existing buildings
$\begin{array}{lll}\text { Acquisitions } & 2.0 & 0.9\end{array}$
$\begin{array}{lll}\text { Disposals } & 3.7 & 3.0\end{array}$
$\begin{array}{llll}\text { Plant and machinery } & & \\ 20.1 & 20.5\end{array}$
Acquisitions $\quad 20.1 \quad 20.5$

| Disposals | 2.3 | 3.2 |
| :--- | :--- | :--- |

$\begin{array}{lll} \\ \text { Acquisitions } & 6.2 & 5.3\end{array}$
$\begin{array}{lll}\text { Disposals } & 2.0 & 1.9\end{array}$
$\begin{array}{lll}\text { Total net capital expenditure } & 24.7 & 25.9\end{array}$
(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.

Capital expenditure in respect of manufacturing establishments where production had not commenced before the end of the year, is included.
-1900 the value of acquisitions and disposals of motor cars were collected separately. These were $£ 4,634$ thousand and $£ 1,823$ For 1980 the values of acquisitions and disposals of motor cars were colle
table 3
Stocks and work in progress, 1979-1980
All United Kingdom establishments classified to the industry (a)

|  | 1979 | 1980 | Value at end of 1980 |
| :---: | :---: | :---: | :---: |
|  | Increase during year |  |  |
| Materials, stores and fuel | 7.0 | 1.2 | 73.8 |
| Work in progress | 23.4 | 2.8 | 170.3 |
| Goods on hand for sale | 5.9 | 10.8 | 75.5 |
| Total | 36.3 | 14.8 | 319.6 |

Analysis of establishments by size, 1980

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.
(b) Average number employed during the year, including full and part-time employees and working proprietors
(c) Establishments employing fewer than 20 persons are generally exempt from Business Statistics Office inquiries and data for these establishments are therefore of doubtful reliability. Figures for establishments employing 1-10 persons are particularly at risk. They should be regarded merely as the best estimates available and used with caution.
(d) The count of enterprises shown in each row represents the number of enterprises, irrespective of size, owning the establishments shown The count of enterprises shown in each row represents the number of enterprises, irrespective of size, owning the establishments shown
in the previous column, i.e. the number of enterprises owning the establishments within the size group indicated by the row heading. It should be noted that tecause an enterprise may own establishments in more than one size group, the sum of the individual enterprise
counts may exceed the total for the industry.
(e) Including working proprietors.


Administrative, technical and clerical employees.
Thes res running costs of canteens is The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of caater
estimated for the industry at $£ 43.7$ million. The remuneration of outworkers on returns received was $£ 97$ thousand.

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

TABLE 5
Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments, 1980
Accounting year ended

198

- Apil May

June
July
August
September
October
November
December
981
January
February
(a) From 6th April
(b) Including returns made for twelve-month period ended 1st to 5 th April 1981

TABLE 6
Operating ratios, 1979-1980
All United Kingdom establishments classified to the industry (a)

|  | Unit | 1979 | 1980 |
| :---: | :---: | :---: | :---: |
| Gross output per head | £ | 18,322 | 20,871 |
| Net output per head | £ | 9,845 | 10,691 |
| Gross value added per head | £ | 8,423 | 9,064 |
| Gross value added as a percentage of gross output | \% | 46 | 43 |
| Ratio of gross output to stocks |  | 3.1 | 3.1 |
| Wages and salaries as a percentage of gross value added | \% | 55 | 61 |
| Ratio of operatives to administrative, technical and clerical employees |  | 1.6 | 1.4 |
| Wages and salaries per administrative, technical and clerical employee | £ | 5.196 | 6,252 |
| Wages and salaries per operative | £ | 4,413 | 5,162 |
| Net capital expenditure per head | £ | 488 | 551 |
| Net capital expenditure as a percentage of gross value added | \% | 6 | 6 |

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.

These notes give the main information needed for interpreting the These in the industry Business Monitors: more detailed informatio


## 1980.

GENERAL INFORMATION
CHANGES MADE FOR 1980
The 1980 census differed from the 1979 in three main respects.
Thestions relating to standard cost stocks and road transport costs. Questions relating to standard cost stocks and road transport cos
weere removed from the questionnaire. Motor cars have been sepa
 assist in the 1980 rebasing of national accounts. Sampling arrange
ments were extended as detailed in the para headed Coverage
 results. Publication of the Business Monitor PA10ov show ing pro
visional results has been discontinued, and industry reports are bein
 1syed. A limited range of information for most 4 digit Activity
1980
Headings is publishes in the Summary Volume (PA1002). Regiona Heedings is pubisted in the Simmary Velume rest appear only in the Summary Volume

INDUSTRIAL CLASSIFICATIO
The 1980 census is the first being conducted on the SIC (Revised
1980). The United Kingdom SIC was first issued in 1948 and 1980). The United Kingom 1958 . 1968 and 1980 . It exists to tspomote in uniformit
revis 195 . 190 rensd omparability in the official statistics of the United Kingdom
Prior to the 1980 revision the general principles followed were thos Prior to the 1980 revision the general principles olilowed were those
of the International Standard Industrial Classification of a Economic Activities of the United Nations Statistical Office but for
the 1980 revision an antempt was made to align the United Kingdom the 1980 revision an attempt was made to a alion the United Kingdom
classification as closely as practicable with NACE, the classification
隹 Classication by
in use by tatisticical Officice of the European Community. Th
SIC is a classification by activity and not a commodity classiSIC is a
fication.
STATISTICAL UNIT
STATISTICAL UNIT
The statistical unit
for
The statisicical unit for the purpose of the census is the establish-
ment, which is defined in provide the information the SIC as the smallest unit which ca tor example, employment, expenses, turnover, and capital form-
ation. Usually the ation. Usually the principal activities carried on in an establishmen
fall within a single heading of the classification (e.a steel makine fall within a single heading of the classification (e.g. steel making or
sugar refining). Typically the establishment embraces all the activisurag refining. Typically the establishment embraces al the activ
tete carried on at a single address e.g. a mine or factory, includin those which are ancillary to the principal activities. Frequently
distinct activities characteristic of different industries are carried on distinct activities characteristic of different industries are carried o
at one address, but normally these ree not classified separately and
the whole estab lishment is clasifitied according to the whole establishment is classified according to the main activity,
If, however, the required range of data can be provided for each activity, each is taten to constitite a a seaparate establishment. Some-
times activities which are conducted as a single business are carried
on at a number of addresses. Where this is so, businesses are asked On a a number of adaresses. Where this is so, businesses are aske
to provide the full range of information in respect of each address
whether Whether or not the activities are different. Their cativities may,
however, be intergrated to such an extent that they costitute however, be intergrated to such an extent that they constitute
single establishment. In the latter case the establishment is defined to cover the combined activities at these adddresses (termed local
units). Separate figures of employment and net capital expenditur Unitis. Separate figures of employment and net capital expenditur
are obtained for each Iocal unit in order to compile regional tables
Efforts are made by the Efforts are made by the BSO to ensure, by neogotiating with respon-
dents, that the return from an establishment does not cover loc dents, that the return from an establishment does not cover loc
units in more than one of the countries of the United Kingdom. Establishments are asked to exclude from their returns particula relating to any department not engaged in production e.g. mer-
chanting, transport or warehousing. for which they keep a separate
set of accounts Thent set of accounts. Transfers of goods produced to such departments
are treated as sales and respondents are asked to value them as far are treated as sales and respondents are asked to value them as far a
possible as if sold to an independent purchaser. Where separat accounts are not kept, responders are asked to include details of al these activities in their return. Particulars relating to head office
mainly engaged in the administration of the production units with the scope of the census are included. Where more than one return is made the information in respect of the head office is apportioned
among them le.g. for disclosure testing and the preparation of the enterprise
analy yes shown in analyses shown in Business Monitor PA1002) related establishments
are combined to enterprise level. An enterpr ise group is defined as are combined to enterprise level. An enterprise group is defined as a
business consisting of either a single establishment or wo or more
eetablishents. ind establishments under common ownershio or control. Informatio
about relationships between establishments the changing structur aoout relationships between establishments, the changing structur
of groups of companies and about common ownership links is
obtained from obtained from many sources, including the Stock Exchange Year
Book, company reports, press reports, and information supplied by Book, company reports, p.
individual establ ishments.

THE REGISTER
A computerised register of about 120,000 production units through out the United Kingdom is held in the BSO. This register rovovides
the basis for a wide range of $B S O$ inquiries mailed to he basis for a wide range of BSO inquiries mailed to the production
sector. For each production unit the register contains identification sector. For each proauction unit the register contains identification
particulars and information about a units eligibility for inclusion in particulars and information about a units eligibility for inclusion in
an inquiry its relationship with other units in common ownership industrial classification; nationality of parent company if foreign
owned and location indicators permitting regional analyses Regional a and size analyses of manufacturing local units are pub
lished each year in Business Monitor PA1003 (Analyses of United Kingdom Manufacturing (Iocal) units by employment size). The inquiries provide a major source of information for keeping the register continuously up-to-date and act as a check on its structure
For the establishments on the register making returns to the quar orly inquiries into manufacturers' sales, industrial classification is derived from an analysis of their commodity sales and is reviewed
annually. For any other establishments for which no up-to-date
inter
 made on a pro-rota basis in line with the reclassification pattern by industry of estabishments for which actual product sales data was
held. Employment data are entered on the register trom the quar-
terly inquiries and the censuses of production. Where establish. terly inquiries and the censuses of production. Where establish-
ments do not make a return to these inquiries the employment
 Employment from censuses of employment.
New additions to the register are obtained New additions to the register are obtained from various sources
including Value Added Tax records, the Census of Employment and
register proving forms register proving form

COVERAGE
The census covers United Kingdom establishments engaged in
production and construction industries (Divisions 1 to 5 of the SIC production and construction industries (Divisions 1 to 5 of the SIC
(Revised 1980). The Channel Islands and the Isle of Man are
Excisded excluded.
Under the nder the sampling arrangements agreed for the 1980 census, forms
were despatched to samples of 1 in 4 and 1 in 2 for the 20 to 49 and
50 to 99 employment size band 50 to 99 employment size bands respectively for most production industries. For a limited number of production industries, where
there were very few units in the sample size bands, all establishments with employment of 20 or more were included. Units
montlone employing fewer than 20 continued to be exempt from selection.
All units employing 100 or more were subjectet to a full coverage. The total number of forms mailed was 18,965 .
In the construction industry all undertakings In the construction industry all undertakings employing 50 or more
were selected. The 1 in 2 sample for undertakings with 20 to were selected. The 1 in 2 sample for undertakings with 20 to 49 5 per cent sample of undertakings with fewer than 20 employees was discontinued. This resulted in a reduction in the number of
forms sent out to 6,500 , which is about one half of the average mailed for the years upto 1978 .

SUPPRESSION OF INFORMATION RELATING TO
INDIVIDUAL UNDERTAKINGS
Subsection $9(5)$ (b) of the Statistics of Trade Act, 1947 states that: The following provisions shall have effect with respect to any report, summary ord other communication to
ation obtained under the foregoing provisions of this act -
in compiling any such report, summary or communication the lars published thereiin from being identified as being particulars lars pubbished therein from being identified as being particiliars
relating to any individual person or undertaking except with the previous consent in writing of that person or the eerson carrving
on that undertaking as the case may be: but this provision shall on that undertaking, as the case may be; but this provision shall
not prevent the disclosure of the total quantity or value of any not prevent the disclosure of the total quantity or value of any
articles produced, sold or delivered; so, however, that before
disclosing any such total disclosing any such total the competent authority shall have
regard to any representations made to them by any person who alleges that the disclosure thereof would enable particulars
relating to him or to an undertaking carried on by him to be Where the trom the totication disclosed" fig tigure is likely to disclose particulars relating to an individual undertaking. either the contributor is approached to seek consent for pubication or the figure is sup-
pressed. Where convenient, suppression takes the form of com-
bining the disclosive figure with adjacent cells. Staps are also bining the disclosive figure with ajiacent cells. Steps are also
taken to avoid the release of figures which may lead to disclosure taken to avoid the release of figures which may lead
by deduction when compared with other census results.

SYMBOLS USED The following sym
Business Monitors:
not available

- nil or less than half the final digit shown
information about individual enterprises.

ROUNDING OF FIGURES
Figures in the tables have, where necessary, been rounded to the nearest final digit. Where figures have been so orounded, the sum of
the constituent items may not always agree exactly with the total
shown.

EXPLANATION OF TERMS USED IN THE CENSUS REPORT The notes and definitions given in this section are mainly based on the general instructions given
returns were to be completed.
CAPITAL EXPENDITURE
apital expenditure during the year in respect of production units Where production had not started before the end of the year is of capital expenditure amounts received or expected to be received of capital expenditure amounts recieved or expected to be received or local authority. Establishments with 100 or more employees
were asked to include a total net capital expenditure figure for the were asked tor
calendar year
New building work
nd other constre cost incurred during the year of new building business covered by the return to be used in connection with th account during the year of return; it includes expenditure on new buildings and on the extension or reconstruction of old dbe bildings,
the value of works of a capital nature carried out by the estab ish the value of works of a capital nature carried out by the establish-
ments own staft and the cost of any newly constructed buidings
purchased. Figures shown include legal charges, stamp duties, purchased. Figures show
egents commissions, etc.
T. Land and existing buildings

The items shown are the capital cost of freeholds purchased and the
capital cost or premium payable for leaseholds acquired (excluding the value of assets acquired in taking over an existing business), and the amounts receivable for freetolds ov leaseholdds sisposesed of. The
value is that charged to capital account during the year of return.
c. Plant, machinery and vehicles
The eltems shown are the value of plant machinery and of
vehicles accquired both new and second-hand, and the amount
 nd machinery acquired includes plant, etc. Which firms produce
or their own use in connection with the business covered by or their own use in connection with the business covered by
he return. The value of plant, etc. acquired is the expenditure
harged to capital and charged to capital account during the year of return less any
discounts received. but inclưing the cost of transort and
installation. Deductable value added tax is excluded but nondiscounts received, but incluaing the cost of transport and
installation. Deductable value added tax is excluded but non-
deductible value added tax on motor cars acquired and Customs deductible value added tax on motor cars acquired and Customs
and Excesise car tax are incluced. No deduction is made for deprecition, amortization or obsolescence. The proceeds of items
disposed of during the year exclude amounts written-off for items
scrapeed scrapped.
CAPITAL GOODS PRODUCED FOR AN ESTABLISHMENT'S
OWN USE. his includes all work of a capital nature carried out during the yea by the establ ishment's own staff for their own use.
COST OF INDUSTRIAL SERVICES
This includes amounts payable to other firms for work done on materials supplied by the establishment, payments for repairs an
maintenance (including those in respect of rented building) maintenance lincluding those in respect of rented buildingss and
amounts poid to other firms for contracts which have been sublet.
Payments to outworkers are excluded.

COST OF NON-INDUSTRIAL SERVICES
This includes rents of industrial and commercial buildings, hire of
plant, machinery and vehicles (excluding vehicles hired with plant, machinery and vehicles (excluding vehicles hired wit
drivers), commercial insurance premiums, bank hharges and amounts
arid for professional senvices, post office services, transport (withi paid for orofossional services, post office services, transport ( wiuthin
the United Kingdom), advertising, etc. Amounts payable on the United Kingdom), advertising, etc. Amounts payable on
royalties for the right on to use patents, trademarks. cooprights, tetc. oraties or the right to use patents, trademarks, cooprights, etc.,
nanufacturing and quarrying rights and technical "know-how", are
also included manufacturing
also included.

## EMPLOYMENT:

VERAGE NUMBER EMPLOYED
stablishments were required to state the average number of persons
n the pay roll during the year of return. Separate figures were
a. administrative, technical and clerical employees
b.
all other employees (operatives)

Averages could be calculated from the figures relating to the
week of each calendar month. Establishments were also to state the number of working proprietors where apporopriate requir these are included in total employment figures. Full-time and a time employees are included but outworkers (i.e. persons emplo
by establishments who worked in their own homes, etc on Supsplied by the establishment) are excluded. The tigures iterilid
persons engaged on merchanting or factoring and canteen wolde persons engaged on merchanting or factoring and canteen worken
where earticulars in respect of these activities could not be excluded
from the return where the return.

## WORKING PROPRIETORS

These include all persons regarded as "self-employed" for nation business wuthoout receiving a wage or sair sary: but such work in the
work less than half the normal number of working hons wh xcluded. Directors working in the business but not in receipto of definite wage, salary, or commission are included
heading: directors paid by fee only are not included.
EMPLOYEES
Administracke, tectnical and clerical employees include directur works foremen; research and design employees lother ther onerativess; draughtsmen, editorial staff, advertising staff, travelle
and all office employes.
Operatives include all other classes of emplovees, that is, broat Operatives include all other classes of employees, that is, broad,
speaking, all manual wage earners. They include operatie speaking, all manual wage earners. They include operative
semploved in opwer stations, inspectors, maintenance workersin)
cleaners. Staff engaged in transport (including roundsmen), emploved in warehouses, , stores, sonops and canteonns, should
included only where separate accounts are not kept. Oeratie engaged in outside work of erecting, fitting, etc. are also includ
but outworkers are excluded.

MPLOVERS INSURANCE AND WELFARE CONTRIBUTIOI his item includes employer's contributions to national insura nder the Social Security Pensions Act, 1975 , as well as commercial
nsurance premiums to provide pensions, superannuation or or retirement benefits, sickness benefits, personal accident benditisy
disability or death benefits for employees or former emploees or their dependants.
Contributions to the running costs of canteens, social cent
hildren's and holiday homes etc. for employees, former and their dependants are also included.
GROSS OUTPUT
In the calculation
one is increased of gross output the value of total sales and

Gross value added at factor cost Gross value added at factor cost is calculated by deducting hire of plant, machinery and vehicles (excluding vehicles hired rivers), commercial insurance premiums, bank charges and amo
 and the cost of licensing motor vehicles. This estimate of gros
value added approaches more closely than census net output tot value added approaches more closely than census net output to
definition of net output or value added in national acco definition
tatistics.
GOSS VALUE ADDED AT FACTOR COST PER HEAD by dividing, the gross value added by the average number of employed (ffull and part-time) on all acerave number of pities covered by employees and working proprietors, but excluding outworkers. NET OUTPUT
Net output, a
Net output, a customary census measure, is calculated by deour from gross output the cost of purchases reduced by the rise
increased by the fall, during the year of stocks of materials, etc.
the cost of industrial services received and where applicable, d etc.
NET OUTPUT PER HEAD
The figures of net output per head are derived by dividing the ne
output by the average number of persons employed (full and paf
otmet by time) on all activities covered by the returns, including opera administrative, tecchical and clerical employees and wor
proprietors, but excluding outworkers.

NU.INDUSTRIAL SERVICES RENDERED
NoNis includes rents received for commercial and industrial buildings, amounts charged for hiring out plant, machinery and vehicles and provisison of transport. It also includes amounts received for the right to to se patents, trademarks, copyrights etc., manufacturing
ond quarrying rights and technical "know-how" and revenue from such safff facilities as canteens.
OPERATING RATIOS
The operating ratios shown are obtained by dividing the estimate o the industry corresponding estimate for the quantity shown in the denominator. cocrespsont estimates cover all establishments classified to each industry
Thesududing establ ishments not selected and non-respondents. Within
ind including establishments not selected and non-respondents. Withi
on industry, it is ossible to compare ratios for an individual firm
or ant the ratios shown for the relevant industry. However, it
inth then mont
inmortant to bear in mid that various factors may affect the results inorrant to bear in definitions, treatment of depreciation (which
e.g. diferin in e.t. didntified in the census data) and vary ing practice with
stock valuation, may affect comparability in some respects.

PURCHASES
Purchases include the cost of raw materials, components, semimanufactured goods and workshop materials; of replacement parts
and consumable tools not charged to capital account: of packaging and
meterials of all types: of stationery and printed mattera of fuel
elerticity and water: of materials to be used by the establishmen delecticicty and water; of materials to be used by the establishmen
or given out to other establishments for the production maschinery or other capital items for the establishment's own use
of matrails for use by the establishment when working on good
suoplied by customers: and of tood of materiab customers; and of food, etc. for any canteen covered
supl teie by cutablishment's return. Transfers of goods to the estab
by by the establishment's return. Transfers of goods to the estab
listment from another department of the same firm not covered by
the establishment's return are included isshent from ant's return are included at a cost corresponding to
the estabishment
the estimated selling value recorded by the other department The estimated selling value recorded by the other department.
Amounts payable to transport firms or credited to the firm's own transoort department for delivery of materials are excluded, as are
all purchases of machinery and plant charged to capital account dal purchases of machinery and plant charged to capital account
Purchases of goods for merchanting or factoring have been collected separately since 1973. The values shown exclude VAT. The include, aterial charged to the establishment. The value of returne aging material charged to the establishment. she value of returned
goods or packaing material returned to the esupl
discounts and any trade
are excluded. Materials purchased duty-paid are included discounts are excluded. Materials purchased duty-paid are included
at their duty-paid velue, lesss any drawback, rebate e.tc. The cost of
transoort is included only if it is included with the purchase price transorort is inclucuded only if it is inclucded with the purchase price
in the firm's accounts. 1 mported goods are included at their full
in in the firm's accounts. Imported goods are incluaded at their
deliverd oss. It in the firmm saccounts the transport from docks
airport is not included in the cost of goods purchased, the cost is airport is not included in the cost of
RECEIPTS FOR WORK DONE AND INDUSTRIAL SERVICES
Figures for work done represent the amount charged for work
cried out on materials supolied by a customer and include reoai Corirk. Within certain industries this heading covers a wide variety
activities sativities, for example, within the food sector - butter packed of
coommission; within the textile industries - mar
furd ding commission, within the textile industries - making up of garments,
fur dressing and textile finishing within printing and publishing
preparatory work on type-setting, block making preparatory work on type-setting, block making and binding
Work done is also significant in the electrical machinery and heavy eningeering industries, covering the electroctical machinery and heavy
eostallation and repair and
iobing work.
Other activities within this. jobbing work. Other activities within this heading include
exploration work, research and development, glass-cutting and dressing and pork, research of timber
Industrial services rond
Industrial services rendered include repairs and maintenance, install-
ation work, and technical research and studies for other organ
istions bation wor istions.
REMUNERATION PAID TO OUTWORKERS
The remuneration paid to outworkers (i.e. persons employed by the
establishment who do their work in their own homes) is generally on a piece-work basis. Only amounts paid to outworkers whose
names appear lames appear on the establishment's payroil are inc
paid to outworkers by sub-contractors are excluded.
SALES OF GOODS PRODUCED
Sales for the purposes of the annual censuses means deliveries on
sale of goods made by establishments in the United covered by the inquiry. Sales of goods in the United Kingdom
ments by these establishgiven out to them and sales of waste products are included Forward sales and canteen takings are excluded. All sales in the
period of the inquiry are included irrespective of when the goods Perind of the inquir
were manuactured.

Goods produced in one establishment and transferred either to separate accounts, or to another establishment of the same firm no overed by the return are treated as sales by the producing establish ment and valued as far as possible as if they had been sold to a
ndependant purchaser. Goods transferred to wholesale or retail selling organisations, for which separate accounts are kept, ar
valued on the same basis. The value shown for sales is the "net selling value" defined as the
mount (excluding VAT) charged to customers, whethe mount (excluding VAT) charged to customers, whether on an exworks or delivered basis, after any trade discounts and agents' com
nissions have been deducted. The cost of packing materials less missions have been deducted. he cost of packing materials les
allowance for returnable cases is included. In industries wher products attract Excise Duty the value stated is usually inclusive
of duty if sold duty-paid and exclusive of duty if sold in bond or
exported.

STOCKS AND WORK IN PROGRESS
Values are given of stocks of goods on hand for sale and of change during the year, including any stocks of goods held for merchanting or factoring. processed by the establishment but which are not usually sold or ransferred to another establishment without further processing The values include the cost of materials consumed and labour used Progress payments made to sub-contractors are excluded and
progress payments recived from other organisations are not
deducted. WAGES AND SALARIES
These are amounts paid during the year to operatives and to admin-
istrative, technical and clerical employees. Payments to working istrative, technical and clerical employees. Payments to working
proprietors, whether called salaries or not, are excluded. 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 redundancy payments less any amounts reimbursed from Government
sources is included. The values of any payments in kind, travelling expenses, etc. is excluded.

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