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## PA1001 1986

 Report on the <br> Census of Production <br> \section*{\title{Business Monitor
}} <br> \section*{\title{
Business Monitor
}}

## Introductory notes

## TATISTICS READING ROOM

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## BUSINESS MONITORS

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The Business Statistics Office, aided by industry and commerce, provides a great deal of the statistical dat required by Government for monitoring the economy

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## PA1001 <br> BUSINESS MONITOR

Report on the Census of Production 1986

Introductory notes

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

## BUSINESS MONITORS MAKING UP THE COMPLETE CENSUS REPORT

| 1001 | Introductory notes | PA373 | Optical precision instruments and photographic |
| :---: | :---: | :---: | :---: |
| PA111 | Coal extraction and manufacture of solid fuels |  | equipment |
| PA120 | Coke ovens | PA374 | Clocks, watches and other timing devices |
| PA130 | Extraction of mineral oil and natural gas | PA411 | Organic oils and fats |
| PA140 | Mineral oil processing | PA412 | Slaughtering of animals and production of meat and |
| PA170 | Water supply industry |  | by-products |
| PA210 | Extraction and preparation of metalliferous ores | PA413 | Preparation of mikk and milk products |
| PA221 | Iron and steel industry | PA414 | Processing of fruit and vegetables |
| PA222 | Steel tubes | PA415 | Fish processing |
| PA223 | Drawing, cold rolling and cold forming of steel | PA416 | Grain milling |
| PA224 | Non-ferrous metals industry | PA419 | Bread, biscuits and flour confectionery |
| PA231 | Extraction of stone, clay, sand and gravel | PA420 | Sugar and sugar by-products |
| PA239 | Extraction of miscellaneous minerals (including salt) | PA421 | Ice-cream, cocoa, chocolate and sugar confectionery |
| PA241 | Structural clay products | PA422 | Animal feeding stuffs |
| PA242 | Cement, lime and plaster | PA423 | Starch and miscellaneous foods |
| PA243 | Building products of concrete, cement or plaster | PA424 | Spirit distilling and compounding |
| PA244 | Asbestos goods | PA426 | Wines, cider and perry |
| PA245 | Working of stone and other non-metallic minerals | PA427 | Brewing and malting |
| PA246 | Abrasive products | PA428 | Soft drinks |
| PA247 | Glass and glassware | PA429 | Tobacco industry |
| PA248 | Refractory and ceramic goods | PA431 | Woollen and worsted industry |
| PA251 | Basic industrial chemicals | PA432 | Cotton and silk industries |
| PA255 | Paints, varnishes and printing ink | РААЗ3 | Throwing, texturing, etc. of continuous filament yarn |
| PA256 | Specialised chemical products mainly for industrial and agricultural purposes | $\begin{aligned} & \text { PA434 } \\ & \text { PA435 } \end{aligned}$ | Spinning and weaving of flax, hemp and ramie Jute and polypropylene yarns and fabrics |
| PA257 | Pharmaceutical products | PA436 | Hosiery and other knitted goods |
| PA258 | Soap and toilet preparations | PA437 | Textile finishing |
| PA259 | Specialised chemical products mainly for household | PA438 | Carpets and other textile floorcoverings |
|  | and office use | PA439 | Miscellaneous textiles |
| PA260 | Production of man-made fibres | PA441 | Leather (tanning and dressing) and fellmongery |
| PA311 | Foundries | PA442 | Leather goods |
| PA312 | Forging, pressing and stamping | PA451 | Footwear |
| PA313 | Bolts, nuts, etc.; springs; non-precision | PA453 | Clothing, hats and gloves |
|  | chains; metals treatment | PA455 | Household textiles and other made-up textiles |
| PA314 | Metal doors, windows, etc. | PA456 | Fur goods |
| PA316 | Hand tools and finished metal goods | PA461 | Sawmilling, planing, etc. of wood |
| PA320 | Industrial plant and steelwork | PA462 | Manufacture of semi-finished wood products and |
| PA321 | Agricultural machinery and tractors |  | further processing and treatment of wood |
| PA322 | Metal-working machine tools and engineers' tools | PA463 | Builders' carpentry and joinery |
| PA323 | Textile machinery | PA464 | Wooden containers |
| PA324 | Machinery for the food, chemical and related | PA465 | Miscellaneous wooden articles |
|  | industries, process engineering contractors | PA466 | Articles of cork and plaiting materials, brushes and |
| PA325 | Mining machinery, construction and mechanical |  | brooms |
|  | handling equipment | PA467 | Wooden and upholstered furniture and shop and |
| PA326 | Mechanical power transmission equipment |  | office fittings |
| PA327 | Machinery for printing, paper, wood, leather, rubber, | PA471 | Pulp, paper and board |
|  | glass and related industries: laundry and dry cleaning | PA472 | Conversion of paper and board |
|  | machinery | PA475 | Printing and publishing |
| PA328 | Miscellaneous machinery and mechanical equipment | PA481 | Rubber products |
| PA329 | Ordnance, small arms and ammunition | PA483 | Processing of plastics |
| PA330 | Manufacture of office machinery and data processing | PA491 | Jewellery and coins |
|  | equipment | PA492 | Musical instruments |
| PA341 | Insulated wires and cables | PA493 | Photographic and cinematographic processing |
| PA342 | Basic electrical equipment |  | laboratories |
| PA343 | Electrical equipment for industrial use, and batteries | PA494 | Toys and sports goods |
|  | and accumulators | PA495 | Miscellaneous manufacturing industries |
| PA344 | Telecommunication equipment, electrical measuring | PA500 | Construction |
|  | equipment, electronic capital goods and passive electronic components | PA1002 | Summary volume |
| PA345 | Miscellaneous electronic equipment |  |  |
| PA346 | Domestic-type electric appliances |  |  |
| PA347 | Electric lamps and other electric lighting equipment |  |  |
| PA351 | Motor vehicles and their engines |  |  |
| PA352 | Motor vehicle bodies, trailers and caravans |  |  |
| PA353 | Motor vehicle parts |  |  |
| PA361 | Shipbuilding and repairing |  |  |
| PA362 | Railway and tramway vehicles |  | 8 |
| PA363 | Cycles and motor cycles |  |  |
| PA364 | Aerospace equipment manufacturing and repairing |  |  |
| PA365 | Miscellaneous vehicles |  |  |
| PA371 | Measuring, checking and precision instruments and apparatus |  |  |
| PA372 | Medical and surgical equipment and or thopaedic appliances |  |  |

PA120 Coke ovens
$\begin{array}{ll}\text { PA130 } & \text { Extraction of mineral oil and natural gat } \\ \text { PA140 } & \text { Mineral oil processing }\end{array}$
PA170 Water supply industry
PA21 Extraction and preparation of metaliferous ores Iron and steel industry
Steel tubes
Drawing, cold rolling and cold forming of stee Non-ferrous metals industry Structural clay products
Cement, lime and plast
Asbesto giol Working of stone

Refractory and cer
Basic industrial chemicals
Paints, varnishes and printing ink
and agricultural purposes Pharmaceutical products
Specialised chemical products mainly for household

Foundries
Forging, pressing and stamping ows, etc Industrial plant and steelwork Agricultural machinery and tractors Textile machinery Machinery for the food, chemical and related industries; process engineering contractors Mining machinery, construction and mechanic Mechanical power transmission equipment Machinery for printing, paper, wood, leather, rubber, machinery
PA328 Bat machinery and mechanical equipment Ordnance, small arms and ammunition equipment
Insulated wires and cables
Basic electrical equipment
Electrical equipment for industrial use, and batteries Telecommunication equipment, electrical measuri equipment, electronic capital goods and passive electronic components
Domestic-type electric appliance

Motor venicle bodies, trailers and caravans
Shipbuilding and repairing
Cycles and ramway velit
Aiscellane equipment manufacturing and repairing Measuranin
Medical and surgical equipment and or thopaedic appliances

1. General outline of the census of production

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| A | Members of the advisory committee | 11 |
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| B | Census form PA 920 | $13-16$ |
| C | Census form PA 922 | $17-20$ |
| D | Census form JA 570 | $21-24$ |
| E | Industry report mock-up | $25-36$ |

## introduction

1. The Report of the 1986 Census of Production is made up
of 113 separate Business Monitors in the PA series:
$\begin{array}{ll}\text { Introductory notes } & \text { PA 1001 } \\ 1111 \text { Industry Reports } & \text { PA 111-PA500 } \\ \text { Summary Volume } & \text { PA } 1002\end{array}$
2. The Census of Production is conducted by the Business
Statistics Office (BSO), part of the Department of Trade and Statistics Office (BSO), part of the Department of Trade and
Industry. It is a statutory inquiry carried out for Great Britain Industry. It is a statutory inquiry carried out for Great Britain
under the Statistics of Trade Act 1947 and for Northern Ireland under the Statistics of Trade Act 1947 and for Act 1944. Inform-
under the Statistics of Trade (Northern Irelan) Act and in included in the
ation for both Great Britain and Northern Ireland is in ation for both Great Britain and Northern Ireland is included in the
Industry Reports and Summary Volume.
Industry Reports and Summary Volume.
3. The Census is part of a comprehensive system of industrial
statistics which also includes quarterly inquiries on product sales statistics which also includes quarterly inquiries on product sales
and inquiries at less frequent intervals on purchases.

## objectives

4. The Census is conducted to meet the Statistical Directives
of the European Community and the varied needs of Government. of the European Community and the varied needs of Government.
Government needs include the provision of weights for the Index of Production and the provision of capital expenditure and stocks data for use in compiling the national accounts. The results of the Census are also used as a benchmark for the Purchases Inquiry as well as for information on industrial structure which is used in turn variety of policy issues.
5. The Census is similar to inquiries conducted by other mem-
bers of the European Community. Information on production bers of the European Community. Information on production
is supplied to the Statistical Iffice of the European is supplied to the Statistical Office of the European Communities
(SOEC) under two Directives: $64 / 475 / \mathrm{EEC}$ relating to capital (sOEC) under two Directives: $64 / 475 / \mathrm{EEC}$ relating to capital
expenditure and $72 / 221 / E E C$ relating to economic activity data expenditure and $72 / 221$ /EEC relating to economic activity data.
Information is supplied to the Organisation for Economic Co-operation and Development (OECD) and the United Nations (UN). Results are also of interest to the business community, economic analysts, universities, local authorities and market
researchers.

## CENSUS PREPARATORY WORK

6. Outline proposals for each Census are considered by the Production Statistics Advisory Committee, a body appointed under the Statistics of Trade Act 1947, which includes members from
industry, trades unions, the accountancy profession and public services. A list of members is given in Appendix A. Significant changes in form design or content are agreed in consultation with the Survey Control Unit of the Central Statistical Office, the
Scottish Office, the Welsh Office, the Northern Scottish Office, the Welsh Office, the Northern Ireland Department
of Economic Development and sponsoring government departments for particular industries. There is a statutory obligation on the Department of Trade and Industry and on the Northern Ireland Department of Economic Development to conduct a Census each
year.

## industrial classification

Since 1980 , Censuses have been conducted on the Standard Industrial Classification Revised 1980 (SIC C(80)). The Standard Industrial Classification exists to promote uniformity and comparability in the official statistics of the United Kingdom. The
SIC $(80)$ is the result of an attempt to align the United Kingdom SIC ( 80 ) is the result of an attempt to align the United Kingdom
classification with the General Industrial Classification of Economic Activities within the European Communities (NACE). It is based on activity rather than on commodities produced. A full description of SIC ( 80 ) is given in Standard Industrial Classification Revised 1980, obtainable from Her Majesty's Stationery Office,
price $£ 3.95$. Figures for 'All manufacturing industries' on the 1968 price $£ 3.95$. Figures for 'All manu facturing industries' on the 1968
classification can be calculated by adding information for Activity Headings 1115, 1200, 1401, 1402 and 1520 to, and deducting information for Activity Headings 2100, 2310, 2330 and 2396 from, information for Divisions 2 to 4 of SIC (80).

## reporting unit

8. As far as possible the reporting unit in respect of which
information is activity heading collected is one whose activities fall within a single single geoographical location. Frequently, however, the information required cannot be provided on this basis. Where information covering a mixture of activities is all that is available, the unit is covering a mixture of activities is all that is available, the unit is
classified according to the main activity. Where a unit operates at a classified according to the main activity. Where a unit operates at
number of locations and the full range of information is not available for each location, the reporting unit is deemed to cover a number of locations. In most cases, separate information on employment and net capital expenditure is obtained for each location (local unit) in order to enable regional data to be compiled
The reporting unit, usually called the establishment, is therefore defined as the smallest unit for which the information normally required in a production census can be provided.
9. For construction, coal extraction and manufacture of solid
fuels, extraction of fuels, extraction of mineral oil and natural gas, production and rerortinion of electricity and gas and water supply industries, the need not unit is referred to as the undertaking. An undertaking need not be a single geographical location and cannot be broken down into local units. Because of this, regional data are not
available for undertakings.
10. Establishments are asked to exclude from their returns particulars relating to ancillary departments not engaged i production -such as merchanting or factoring organisations, transport organisations, canteens and warehouses) for which
separate accounts are kept. Transfers separattments are treated as sales, valued as far as possible as if sold to
depart an independent purchaser. Where separate accounts are not kept, establishments are allowed to include details in their returns. Establishments are asked to include details relating to head offices engaged mainly in the administration of production units within the scope of the Census. Where head office activity covers more than
one return, details are included in the principal return.
11. For certain tables in the Summary Volume, related establishments are combined to enterprise level. An enterprise is defined as a business consisting of establishments under common
ownership or control. Information about relationships between establishments, the changing structure of groups of companies and common ownership links is obtained from various, mainly

## the register

12. A register of production units excluding construction throughout the United Kingdom is held on the BSO computer and provides the basis for BSO inquiries to the production sector. For each unit the register contains identification particulars and
information about that unit's eligibility for inclusion in an inquiry, information about that unit's eligibility for inclusion in an inquiry,
its relationship with other units in common ownershio, its industrial classification, the nationality of its parent and location indicators for regional analyses. Regional and size analyses of manufacturing units are published in Business Monitor PA1003 - Analyses of United Kingdom Manufacturing (Local) Units by Employment Size. During 1984, for production inquiries, the BSO moved to an from HM Customs and Excise VAT records.
13. The annual Census and other inquiries provide a major source of information for updating and checking the register. For establishments on the register making returns to the Quarterly Sales nquiry, industrial classification is reviewed annually and is derived
from an analysis of their commodity sales. Employment data are provided by the Quarterly Sales Inquiry and the Census of Production. Where establishments on the register do not make returns to these inquiries, employment is based mainly on information provided by the Department of Employment from Censuses of Employment. New additions to the register are
obtained from various sources including HM Customs and Excise MM Customs and Excise

The register for construction units is created each year from the Department of the Environment's Builders' Address File of private sector undertakings in Great Britain engaged in construction activitities. To this are added undertakings in the public sector (usually the direct labour departments of local authorities) and

## coverage

The Census covers United Kingdom establishments engaged in industrial production, i.e. mining and quarrying, manufacturing, construction, and gas, electricity and water supply industries (Divis
ions 1 to 5 of SIC (80)). Establishments in the Channel Islands and the Isle of Man are excluded.
16. Under the sampling arrangements agreed for the 1986 Census, forms were despatched to all establishments with 100 or 4 and 1 in 2 respectively being taken for establishments in the 20 to 49 and 50 to 99 employment size bands. For industries where there were few units in the sample size band or where response in earlier years was poor, it was necessary to increase the sample. In the onstruction industries forms were despatched to all undertakings
with 50 or more employed and to a 1 in 2 sample of undertakings with 50 or more employed and to a 1 in 2 sample of undertakings
in the 20 to 49 employment size band. The sampling scheme is reviewed each year in the light of experiences in previous Censuses.

The increased use of sampling over recent years has led to a fall in the number of forms mailed for successive Censuses. For production industries excluding construction, these fell from
34,000 for 1977 to 16,824 for 1985 and 16,179 for 1986 . For 1984, however, a benchmark census was conducted, resulting in 24,200 forms mailed. For construction industries the number of forms mailed fell from 13,000 for 1977 to 6,100 for 1984, 4,100
for 1985 and 4,117 for 1986 .

## ouestionnaire

18. Examples of the standard form used for establishments in production industries excluding construction employing 100 or more and employing 20 to 99 are given in Appendices B and C . In
the 1986 Census there were 11 other form types for industries like those of water and electricity where the standard range of questions is not appropriate. A copy of the standard form for the construc-

## tion industries is given in Appendix D .

## COLLECTION OF DATA

19. Forms are mailed to each selected establishment shortly after the end of the year to which the Census relates. Return of the completed forms for the 1986 Census was required by 31 March 1987. Up to three written reminders were sent to non-responders
followed if necessary by telex and telephone calls and for larger followed if necessary by telex and telephone calls and, for larger
persistent non-responders, personal visits. Outstanding cases can be the subject of legal action under Section 4 of the Statistics of Trade Act 1947.
20. Returns are given preliminary clerical scrutiny to ensure that the form is legible and sufficiently complete for computer completeness of the return, the credibility of the figures and the internal consistency of the return. Any queries which arise from hese checks are investigated and, if necessary, contributors are

## onsulted

## PERIOD COVERED

Estabiishments were asked to make returns for the calendar year 1986 but, where this was not possible, returns for business Years ending between 6 April 1986 and 5 April 1987 were accepted Returns covering fewer than twelve months were accepted for businesses which had started or ceased trading during the year. An
analysis of periods covered by returns for the 1986 Census is shown in Table 5 of each Industry Report (except construction (PA 500) Where the analysis is shown in Table 4) and in Table 9 of the
Summary Volume.

## ESTIMATION

22. All published Census results include estimates for nonresponders, unsatisfactory returns and establishments not selected or the Census. Estimates are also made for items not covered on the shorter form sent to smaller establishments
23. Within employment size groups in each industry, the "average per head" is calculated for each census variable by dividing the total returned value for each variable by the total returned employment. This value is multiplied by the employment thought o exist in each non-responding or unselocted establishment to yield collected on the shorter form are made in a similar way using returned employment.
24. The accuracy of the totals produced by adding together The first of these is the extent to which establishments making satisfactory returns account for the overall total for any heading. In practice a measure of this is normally taken to be the employment of establishments making satisfactory returns expressed as a percentage of the total estimated employment (this is given in
a footnote to Table 1 in each Industry Report) Thus the accuracy of data published in an Industry Report where 95 per cent of the employment in the industry is covered by returns made, will, in general, be better than that in a Industry Report where the coverage is only 70 per cent.
25. The second measure is the extent to which individual headings in an Industry Report are related to employment. Thus otal employmal earnings which bears a close relationship to capital expenditure where the relationship to employment is of capital expenditure
not so clearly marked.

SUPPRESSION OF INFORMATION RELATING TO INDIVIDUAL UNDERTAKINGS
26. Sub-section 9(5)(b) of the Statistics of Trade Act 1947 states that:

The following provisions shall have effect with respect to any eport, summary or other communication to the public of info
in compiling 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 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 articles
produced, sold or delivered; so, however, that before produced, sold or delivered; so, however, that before
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 deduced from the total disclosed
27. Figures which would be likely to disclose particulars relating to an individual undertaking are not published unles,
utor has given written consent for their publication.
publication
28. Data obtained from the 1986 Census are being published at both the 3 digit Group level and where possible the 4 digit
Activity Heading level of SIC (80) in individual Activity Heading level of SIC (80) in individual Industry Reports
except for construction level. Each report is prefaced by a brief description of the activity of the industry including any non-standard features and any changes which affect comparability with data for earlier years shown in the
report. Each report also includes a list of all the Business Monitors which make up the complete Census Report. The Summary Volume includes information for regions and enterprise analyses. The publication and sale of Business Monitors is arranged by Her Majesty's Stationery Office. (A mock up of the 1986 Industry Reports excluding the notes is given in Appendix E.)
29. As in previous Censuses, establishments were asked to state whether or not they were willing to have their names and addresses included in a Classified List of Businesses. Further information about the $L$

## CONGRUENCE WITH QUARTERLY INQUIRIES

30. As far as possible, figures collected in the Census are congruent with those collected in the Quarterly Sales Inquiry. (See the Guide to Short Term Statistics of Manufacturers' Sales

- Business Monitor Poloo1.) There are, however, some difference which are described below.
a. If an establishment changes its reporting structure or the way it keeps its accounts during the year, the change is
reflected during the year in the Quarteriy Inquiry, The figures reported to the Census are generally based on the structure of the establishment at the end of the Census year.

Because a Census return can be for an establishment's b. Because a Census return can be for an establishment
business year, it may differ from the aggregation of four quarterly returns making up a calendar year. In some cases figures may be as much as nine months out of phase, but

The remaining differences are usuly of minor c. The remaining differences are usually of minor
significance. Firstly canteen takings are excluded from the Quarterly Inquiry but may be included in the Census. Secondly, Quarterly Inquiry figures do not have to be adjusted for quantity rebates and allowances for returned goods as the value of these may not be known at the time of completion of returns and cannot always be apportioned
between the various headings. Their values are, however, reflected in Census returns. No adjustments are made in either inquiry for cash discounts.

## interpretation

31. In interpr
be kept in mind:
a. Year on year comparisons of Census results may be affected by the reclassification of units between industries,
the removal of units no longer in production the addition of new units, and by changes in coverage of the production register.
b. To the extent that sales of products of one establishment incorporate the output of other establishments, total sales figures include an element of duplication.

Census results exclude establishments whose predominant activities are outside manufacturing unless they keep separate accounts covering their manufacturing activities. Where the turnover of an establishment arises from
receipts for work done or materials supplied by a custoner sales of the finished product are not incliuded in that establishment's return.
d. Transfers between establishments within an enterprise
group are recorded as if they were transfers to or from independent establishments.

## e. Figures for net output and gross value added are adjusted to a factor cost basis by taking account of the net

## CHANGES MADE FOR 1986

32. The 1986 Census, like that for 1985 , was a slimline one. Additional questions were asked for numbers of computer employees, costs of computer equipment purchased and, for larger establishme
equipment.

## SYMBOLS USED

33. The following symbols are used throughout the PA series of 33. The followin
Business Monitors:

## not available <br> nil or less than half the final digit shown <br> figures cannot be shown owing to the risk of disclosin <br> information about individual enterprise

## ROUNDING OF FIGURES

34. Figures in the tables have been rounded to the nearest final digit where neesssary, therefore, the sum of the constituent items
explanation of terms used in the census report
35. The notes and definitions given in this section are based on the instructions given to respondents as to the way in which return were to be completed. In some industries it was necessary to ame
or supplement these instructions in order to fit the special circumstances of the particular industry. Where these supplemen ary instructions effect the basis of the published figures, an explanation is included in the appropriate Industry Report.

## CAPITAL EXPENDITURE

36. This represents the value charged to capital account togethe with any other amounts which ranked as capital items for taxation purposes during the year to which each establishment's return related. The value is inclusive of any amounts received or expected toterel vodies or local authorities. Where expenditure is spread over more than one Census year, payments are included in the years in which they were made. Capital expenditure during the year in respect of production units where production had not started bef the end of the year and the value of CAPITAL GOODS PRO-
DUCED FOR ESTABLISHMENTS' OWN USE by establishme DUCED FOR ESTABLISHMENTS' OWN USE by establishment over an existing business are excluded. The figures include nondeductible VAT but exclude deductible VAT. No allowance is made for depreciation, amortisation or obsolescence.
a. on LAND AND EXISTING BUILDINGS
37. This represents the value of freeholds and the value or premium payable or receivable for leaseholds acquired or disposed of. The figures for acquisitions include architects' and surveyors' fees. legal fees, stamp duties, agents' commissions and Land Regist fees. The figures for disposals are net of any such professional fees
b. on NEW BUILDING WORK
38. This represents the value of new building and other constructional work such as the extension and reconstruilin of buildings, and the value of any newly constructed buildings fees, stamp duties, agents' commissions and Land Registry fees.

## c. On PLANT AND MACHINERY, VEHICLES

39. This represents the value of new and second hand plant and machinery and vehicles acquired or disposed of. The figures for acquisitions are net of any discounts received but include the cost of transport and installation and Customs and Excise car tax. The figures for disposals exclude amounts written off for capital assets which are scrapped

## CAPI

40. This represens the
carried out during the year by the establishments' own staff for us in the businesses covered by the returns.

## COST OF INDUSTRIAL SERVICES RECEIVED

41. This includes amounts payable to other organisations for work done on materials supplied by the establishment completing the return, for repairs and maintenance including those in respect
of rented buildings, and for contracts which have been sublet. Direct payments to outworkers and amounts charged to capita account are excluded.

## COST OF NON-INDUSTRIAL SERVICES RECEIVED

42. This includes commercial insurance premiums, bank charges and amounts payable to other organisations for the hire of vehicles, plant and machinery, for the rent of industrial and commercial build ings, for the services of accountants, auditors, agents, solicito and surveyors other than in connection with the acquisition services, for carriage by all forms of transport within the United Kingdom, for advertising, market research etc, for the right to use patents, trade-marks, copyrights etc, for manufacturing and quarry ing rights and technical fuel imported are excluded.

## EMPLOYERS' NATIONAL INSURANCE CONTRIBUTIONS ETC

43. This includes employers' national insurance contributions, 43. This includes employers' national insurance contributions, premiums for policies providing pensions, superannuation or other retirement benefits, sickness benefits, personal accident benefits. disability benefits or death benefits for employees, former employees, or their dependents. Also included are contributions to canteens, social centres, children's and holiday homes etc. and the cost of supplying luncheon vouchers.

## EMPLOYMENT

44. This is the average number of ADMINISTRATIVE, TECH NICAL AND CLERICAL EMPLOYEES and OPERATIVES on th payroll and the number of WORKING PROPRIETORS employed included but outworkers (i.e. people who worked in their own homes on materials supplied by establishments) and casual employees such as iobbers are excluded. The average number of employees returned by individual establishments may have been on the payroll for the last week of each calendar month.
a. ADMINISTRATIVE, TECHNICAL AND CLERICAL EMPLOYEES
45. This includes directors who received a definite wage, salary or commission, managers, foremen, draughtsmen, editorial and design employees other than operatives.
b. OPERATIVES
46. This includes all manual wage earners including operatives 46. This includes all manual wage earners incluading operatives
in power stations, operatives engaged in outside work of erecting. fitting, etc, inspectors, maintenance workers and cleaners. Staff engaged in transport (including roundsmen) and employed in d canteens are, in general, excluded.

> WORKING PROPRIETORS
47. These are people who are regarded as self-employed for national insurance purposes, members of their families who worked in the business without receiving a definite wage or salary for at the business but did not receive a definite wage, salary or commission. Part-time directors paid by fee only and directors who received a definite wage, salary or commission are excluded.

## gross output

48. This is calculated by increasing (or decreasing) the value of the TOTAL SALES AND WORK DONE by the rise (or fall) during the year of WORK IN PROGRESS and GOODS ON HAND
gross value added at factor cost 49. This is calculated by deducting from NET OUTPUT the
COST OF NON-INDUSTRIAL SERVICES RECEIVED, RATES and the cost of LICENSING OF MOTOR VEHICLES. This OUTPUT the definition of net output or value added in national accounts statistics.
gross value added at factor cost per head
49. This is calculated by dividing GROSS VALUE ADDED AT FACTOR COST by total EMPLOYMENT

## NET CAPITAL EXPENDITURE

51. This is calculated by adding to the value of NEW BUILDING Wonk isition less disposal of LAND AND EXISTING BUILDINGS, VEHICLES and PLANT AND MACHINERY.

## NET OUTPUT

52. This is a traditional census measure calculated by deducting from Gross output the cost of PURCHASES OF MATERIAL FOR USE IN PRODUCTION AND PACKAGING AND FUEL and PURCHASES OF GOODS FOR MERCHANTING OR
FACTORING, the COST OF INDUSTRIAL SERVICES RECEIVED and is adjusted for net duties and levies etc. where applicable. Purchases are adjusted for changes during the year of

NET OUTPUT PER HEAD
53. This is calculated by dividing NET OUTPUT by tota EMPLOYMENT

## non industrial services rendered

54. This includes amounts charged for the hire of vehicles, plant and machinery, for the rent of industrial and commercia
buildings, for the right to use patents, trade-marks, copyrights etc, for manufacturing and quarrying rights, for technical 'know how' and for the provision of transport to other organisation.

## OPERATING RATIOS

55. These ratios are calculated using industry totals, i.e. includin the estimates for establishments not responding to or not selected for the Census. Respondents are able to compare the ra
own businesses with those for the industry as a whole.

PURCHASES OF MATERIALS FOR USE IN PRODUCTION, AN PACKAGING AND FUEL PURCHASES OF GOODS FOR MERCHANTING OR FACTORING
56. These include the cost of raw materials, components, semimanufactured goods and workshop materials, replacement parts an consumable tools not charged to capital account, packaging materials of all types, stationery and printed matter. fuel, electricity and water, materials of all types used by the establishments or give
out to other establishments for the production of machinery or other capital items for the establishments' own use and materials for use by the establishments when working on goods supplied by customers. The figures exclude VAT, purchases of machinery and plant, which are included in CAPITAL EXPENDITURE, and
amounts payable to transport firms or credited to establishments' amounts payable to transport firms or credited to establishments' net of the value of goods or packaging materials returned to suppliers and trade discounts receivable but not cash discounts. Materials purchased duty-paid are included at their duty-paid value less drawbacks, rebates etc. Imported goods are included at their imported goods is not included in the cost of goods aurchased cost is entered at cif plus duty, if applicable. Transfers of goods to an establishment from other departments of the organisation not overed by the return are included at the estimated selling value recorded by the other departments.

## REMUNERATION PAID TO OUTWORKERS

57. This represents amounts paid to outworkers, i.e. people who do work in their own homes generally on a piece-work basis, whose names appear on establishments' payrolls. Amounts paid
to outworkers by subcontractors are included in the COST OF INDUSTRIAL SERVICES RECEIVED. Estimates are not made for emuneration of outworkers for establishments not completing Census returns.

## SALES OF GOODS PRODUCED

58. This represents deliveries on sale of goods produced by stablishments in the United Kingdom coming withing the scope of the Census irrespective of whether or not they were produced in the year of return. It also includes sales of goods made for establishments from materials given out by them to other organisa
tions or to outworkers and sales of waste products and residues. The value of sales is the 'net selling value', i.e. the amount charged to customers whether valued 'ex-works' or 'delivered' less VAT, rade discounts, agents commissions, etc. and allowances on returned goods. Where products attract Excise duty, the value is
inclusive of duty if goods are sold 'duty-paid' and exclusive of nclusive of duty if goods are sold 'duty-paid' and exclusive of
duty if goods are sold in bond or exported. The cost of packaging materials less allowances for returnable containers is included. Sales of fixed assets and exceptional receipts are excluded. Transfer of goods produced by an establishment to departments not covered
by the return (including other establishments in the same enterprise group) are treated as sales, valued as if sold to an independent purchaser
59. This represents the value of goods on hand for sale, including goods for merchanting or factoring and of materials, stores and fue held by establishments coming within the scope of the Census, whether held in the United Kingdom or abroad. Values include an

## WAGES AND SALARIES

60. This represents amounts paid during the year to ADMINISTRATIVE, TECHNICAL AND CLERICAL EMPLOYEES and to OPERATIVES. All overtime payments, bonuses, commissions,
holiday pay and redundancy payments less any amounts reimbursed from government sources are included. No deduction is made for income tax or employees' national insurance contributions etc. Payments to WORKING PROPRIETORS, payments in kind ravelling expenses, lodging allowances etc. and EMPLOYERS

NORK DONE AND INDUSTRIAL SERVICES RENDERED
61. This includes amounts charged for work carried out including that done by sub-contractors on customers' materials including amounts charged by establishments for materials supplied by them and maintenance, installation work and technical research and studies rendered to other organisations. For certain industries this heading covers a wide variety of activities, for example, butter packed on commission in the food industries, making up of garments, fur dressing and textile finishing in the textile industries, nd preparatory work on type-setting, block making and binding in
he printing and publishing industries. Work done is an important part of the activities of the electrical machinery and heavy engineering industries, and includes erection, installation and repair and obbing work.

## WORK IN PROGRESS

62. This represents materials which have been partially processed and are awaiting further processing before being sold or transferred Progress payments made to sub-contractors are excluded and ments received from other organisations are not

## STANDARD REGIONS

63. The list below gives the definitions of the standard regions sed in tables in the Summary Volume. Metropolitan counties are marked by an *

## South East

Greater London, Bedfordshire, Berkshire, Buckinghamshire, East Sussex, Essex, Hampshire, Hertfordshire, Isle of Wight, Kent. Oxfordshire, Surrey, West Sussex

## East Angia

Embridgeshire Norfolk, Suffolk.

## South West

Avon, Cornwall, Devon, Dorset, Gloucestershire, Somerse,

## West Midlands

West Midlands** Hereford and Worcester, Shropshire, Staffordshire, Warwickshire

East Midlands
Derbyshire, Leicestershire, Lincolnshire, Northamptonshire
Nottinghamshire
Yorkshire and Humberside
South Yorkshire*, West Yorkshire*, Humberside, North Yorkshire.

## North West

Greater Manchester*. Merseyside* . Cheshire, Lancashire.
North
Tyne and Wear*, Cleveland, Cumbria, Durham, Northumberland
Wales
Clwyd, Dyfed, Gwent, Gwynedd, Mid Glamorgan, Powys, South Glamorgan, West Glamorgan.
scotland
Borders, Central, Dumfries and Galloway, Fife, Grampian, Highland
Lothian, Strathclyde, Tayside, and the Orkney Islands, Shetland
slands and the Western Isles.
Northern Ireland
Antrim, Armagh, Belfast CB, Down, Fermanagh, Londonderry, Londonderry CB, Tyrone.

## assisted areas

64. Assisted areas are areas for which government grants and ther help are available. There are two classes of assisted area development and intermediate.

MEMBERS OF THE ADVISORY COMMITTEE
Section 8 of the Statistics of Trade Act, 1947, requires that an Advisory Comittee should advise on the preparation of the forms and instruc tions necessary for the taking of a census and of advising with regard to such matters as may be referred to it. The following list gives the names of the members of the Production Statistics Advisory Committee, as at 31 December 1986.

| Mr R Ward | Business Statistics Office |
| :--- | :--- |
| Mr P A Bayliss | Association of Independent Businesses |
| Mr I McCafferty | Confederation of British Industry |
| Mr D W Flaxen | Central Statistical Office |
| Mr N Beck | Trades Union Congress |
| Mr J McLaughlin | British Aggregate Construction Materials Industries |
| Mr J J Harris |  |
| Mr C D Hughes | Industrial Consultant |
| Mr W S C Kennett | Profact Consulting and Planning Ltd |
| Dr D G Mayes | National Economic Development Office |
| Mr N Harvey | Department of Trade and Industry |
| Dr B Mitchell | Business Statistics Office |
| Mr R G Taylor | Association of British Chambers of Commerce |
| Mr G F Regan | Iron and Steel Statistics Bureau |
| Mr H L Cousins | Price Waterhouse and Company |
| Mr E G Wood | Management Consultant |
| Mr C J Spiller | Business Statistics Office |
| Mr D R Lewis | Business Statistics Office |

The joint secretaries of the Committee were Mr D J Baskerville and Mr W R Gadd of the Department of Trade and Industry, Business Statistics Office, Government Buildings, Cardiff Road, Newport, Gwent.


NOTICE UNDER SECTION 3 OF THE STATISTICS OF TRADE ACT, 1947
The Secretary of State for Trade and Industry hereby requires you by law to provide to the Business Statistics Office The Secretary of State for Trade and industry hereby requires you by law to provide to the Business Statistics Office unless no figures area available for that period when the return may be made for your business year which ends
between 6 April 1986 and 5 April 1987 .

Please complete and return this form to the Business Statistics Office by 31 March 1987 or within two months after the business year covered by your return, if that year ends after 31 January 1987
NB The information given by you will be treated as confidential in strict accordance with the Act and subject to the further restriction that information about individual businesses will be used and disclosed under Minister
direction to other government departments for statistical purposes only, except that the names and addresses of individual businesses, their industrial classification and the numbers of persons of different descriptions employed hem may, If a Minister so directs, be made available to Ministers and officials of government departments who need

## ANNUAL CENSUS OF PRODUCTION FOR 1986

Dear Contributo
We conduct this annual census to obtain up-to-date statistical information about the structure and development of industry in the United Kingdom. Census results are used in the construction of national accounts, the index of production and other statistical indicators. They also provide measures of industrial performance for use in industry and government department Comparisons may be made with results of similar inquiries that are being conducted in other countries of the European Community. The census has been designed in consultation with the Production Statistics Advisory Committee which is appointed under the Statistics of
profession and the public services.
Forms are sent to all larger establishments but sampling methods are used for medium sized establishments in most industrie. Forms are sent to all larger establishments but sampling methods are used for medium sized establish
Units with an employment of less than twenty are excused from the obligation to complete the form.

Census results consisting of individual industry reports and a summary volume will be available from Her Majesty's Stationery ore trom

Notes to help you complete your return are enclosed. If you have any difficulties or would like further information my staff


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Yours faithfully
Muard
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R G WAR
Director

1. PERIOD COVERED bY THE RETURN

Your return should relate to the calendar year 1986. If no figures are available for the calendar year, the return may be

made for a business year, ending on any date from 6 April 1986 to 5 April 1987 . Period covered by the return $\qquad$ to | Code day | month | year |
| :---: | :---: | :---: |
| 12 | 1 | 1 |

2. EMPLOYMENT (average number employed during the year)
2.1 $\qquad$ Administrative, technical
and clerical emplovees Number of employees, included above, who spend all of their time on the
provision of computer and associated data communications facilities, services provision of
and support

3. SALES, WORK DONE AND SERVICES RENDERED (exclusive of VAT, i.e. net selling value as invoiced)
3.1 Sales of goods of your own production
3.2 Work done and industrial services rendered
3.3 Sales of goods bought and resold without processing
(i.e. merchanted or factored goods).

| 261 | £thousand |
| :--- | :--- |
| 262 |  |
| 266 |  |

3.4 Other services rendered (include e.g. rents for industrial buiidings and amounts received for hiring out plant and machinery,
provision of transport, advertising revenue)

| 267 |  |
| :--- | :--- |

4. EXPENDITURE (exclusive of VAT)
4.1 Gross wages and salaries paid to:
(a) Administrative, technical and clerical employees
(b) All other employees (operatives).
(c) Remuneration paid to outworkers (i.e. homeworkers)
4.2 Employers' national insurance contributions and
4.3 Purchases of materials, fuel and water
4.4 Goods purchased for resale without processing
4.5 Amounts payable for work given out (i.e. subcontracted) and
for repairs and maintenance
4.6 Hiring, leasing or renting plant, machinery and vehicles

Amounts included above for hiring, leasing or renting computer
and associated data communications equipment
. 7 Rent pa
4.8 Rates (exclude water rates)
4.9 Commercial insurance premiums paid
4.10 Bank charges (exclude interest)
4.11 Road vehicle licences (include those relating to passenger vehicles)
4.12 Other services received (e.g. professional, postal telecommunications, transport, travel, research, advertising
publicity etc., senvices from other
 publicity etc., services from other organisations)
5. DUTIES, SPECIAL LEVIES, SUBSIDIES, ALLOWANCES, ETC. Not applicable
6. STOCKS (exclusive of VAT)
6.1 Value at beginning of year
6.2 Value at end of year

6.3 If the values given above are not for the calendar year 1986 please give a combined stocks total (corresponding to the tota
7. CAPITAL EXPENDITURE IN THE YEAR (exclusive of deductible VAT; do not make any deductions for depreciation)

Note: You are particularly asked to give the information at Questions 7.2 to 7.9 for the calendar year 1986. If this is not possible please provide information for your business year in 7.2 to 7.9 and also a single figure at 7.10 of net ,
7.1 The information given at 7.2 to 7.9 is for the year ending


ACQUISITIONS Cost of:
7.2 New building work
7.3 Land and existing buildings
7.4 New and second-hand plant, machinery, office equipment and other

| thousand |  |
| :---: | :---: |
| 501 |  |
| 502 |  |
| 517 |  |


|  | Amounts included above for computer and associated data communications equipment | 511 |
| :---: | :---: | :---: |
|  | New and second-hand vehicles (include Customs and Excise Car Tax | 504 |
| 7.6 | Work of a capital nature carried out by your own staff and included in questions 7.2 to 7.5 above | 252 |

DISPOSALS Proceeds from disposal of
7.7 Land and buildings
7.8 Plant, machinery and other capital equipment
7.9 Vehicles


To be completed only if capital expenditure figures given above are not on a calendar year basis.
7.10 Total net capital expenditure for calendar year 1986 (i.e. cost of acquisitions less proceeds from disposals)


## UNITS NOT YET IN PRODUCTION

Have you any additional capital expenditure at sites not covered by
this return and at which production has yet to commence

8. LIST OF UNITS COVERED BY THE CENSUS RETURN

A list, CR1, is enclosed. If your return is thought to relate to more than one unit details of these have been entered in column 1. Please enter any additional units not listed. In each case complete columns 2 to 6 as appropriate
9. DIRECTORY OF MANUFACTURING BUSINESSES

To assist industry the Business Statistics Office produces a directory of UK Manufacturing Businesses. The Directory is published by HMSO as Business Monitor PO1007 and shows the names and addresses of manufacturing units within their industrial classification.
Do you agree to the name, address and classification of the business covered by this return appearing in this usefu publication? (Please tick one box).
$\qquad$

| 8 | YES |
| :---: | :---: |
| $\qquad$\begin{tabular}{\|l|l}
\hline
\end{tabular} |  |

Signature
Position in business
10. NAME AND ADDRESS OF PERSON WHO SHOULD BE CONSULTED IF QUESTIONS ARISE ABOUT THIS RETURN (BLOCK CAPITALS PLEASE)

Telephone No
. Ext.
Telex No
Answer Back

| FOR OFFICIAL USE ONLY |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| RECEIPTED | DATA TAKE-ON | EXAMINED | P.A. CHECK |  |
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NOTICE UNDER SECTION 3 OF THE STATISTICS OF TRADE ACT, 1947
The Secretary of State for Trade and Industry hereby requires you by law to provide to the Business Statistics Office he information called for in this inquiry form. Your return should be made for the year ended 31 December 1 between 6 April 1986 and 5 April 1987.
Please complete and return this form to the Business Statistics Office by 31 March 1987 or within two months after the business year covered by your return, if that year ends after 31 January 1987.

NB The information given by you will be treated as confidential in strict accordance with the Act and subject to he further restriction that information about individual businesses will be used and disclosed under Ministerial individual businesses, their industrial classification and the numbers of persons of different descriptions employed them may, if a Minister so directs, be made available to Ministers and officials of government departments who need them for carrying out their functions.

## ANNUAL CENSUS OF PRODUCTION FOR 1986

Dear Contributor
We conduct this annual census to obtain up-to-date statistical information about the structure and development of industry in the United Kingdom. Census results are used in the construction of national accounts, the index of production and othe statistical indicators. They also provide measures of industrial performance for use in industry and government departments. Comparisons may be made with results of similar inquiries that are being conducted in other countries of the European Community. The census has been designed in consultation with the Production Statistics Advisory Committee which is appointed under the Statistics of Trade Act 1947 and includes members from industry, the trade unions, the accountancy ofession and the public services.
Forms are sent to all larger establishments but sampling methods are used for medium sized establishments in most industries Units with an employment of less than twenty are excused from the obligation to complete the form

Census results consisting of individual industry reports and a summary volume will be available from Her Majesty's Stationery
Office or from the above address.
Notes to help you complete your return are enclosed. If you have any difficulties or would like further information my staff will be pleased to help you. The telephone extension of the appropriate enquiry point is given above.

Yours faithfully
Mural
Director

## 1. PERIOD COVERED BY THE RETURN

Your return should relate to the calendar year 1986. If no figures are available for the calendar year the return may be made for a business year, ending on any date from 6 April 1986 to 5 April 1987.

Period covered by the return
 to $\overbrace{12}^{\text {cade }}$ $\qquad$ 1
2. EMPLOYMENT (average number employed during the year)

2.2 Number of employees, included above, who spend all of their time on the provision of computer and associated data communications facilities,
services and support. services and support


SALES, WORK DONE AND SERVICES RENDERED (exclusive of VAT, i.e. net selling value as invoiced)
3.1 Sales of goods of your own production
3.2 Work done and industrial services rendered
3.3 Sales of goods bought and resold without processing (i.e. merchanted or factored goods)

| 261 | E thousand |
| :--- | :--- |
| 262 |  |
| 266  |  |

4. EXPENDITURE (exclusive of VAT)
4.1 Gross wages and salaries paid to:
(a) Administrative, technical and clerical employees
(b) All other employees (operatives)
(c) Remuneration paid to outworkers (i.e. homeworkers).

| 301 | $£$ thousand |
| :---: | :---: |
| 304 |  |
| 314 |  |

4.2 Purchases of materials, fuel and water

4.3 Goods purchased for resale without processing (i.e. for merchanting or factoring)

4.4 Amounts payable for work given out (i.e. subcontracted) and or repairs and maintenance

5. DUTIES, SPECIAL LEVIES, SUBSIDIES, ALLOWANCES, ETC. Not applicable to this industry

| Materials, stores and fuel |  | Work in progress | Goods on hand for sale |
| :---: | :---: | :---: | :---: |
|  |  |  | £ thousend |
| 401 | 403 | 413 |  |
| 402 | 404 | 414 |  |

7. CAPITAL EXPENDITURE IN THE YEAR (exclusive of deductible VAT; do not make any deductions for

NOTE: You are particularly asked to give the information at Questions 7.2 to 7.9 for the calendar year 1986

$\square$

6. STOCKS (exclusive of VAT).
6.1 Value at beginning of year
6.2 Value at end of year. depreciation). If this is not possible please provide information for your business yea
7.1 The information given at 7.2 to 7.9 is for
the year ending

ACQUISITIONS Cost of:
7.2 New building work
7.3 Land and existing buildings
7.4 New and second-hand plant, machinery office equipment and other capital equipment

Amounts included above for computer and associated dat communications equipment
7.5 New and second-hand vehicles (include Customs and Excise Car Tax)
7.6 Question not applicable to this form

DISPOSALS Proceeds from disposal of:
7.7 Land and buildings
7.8 Plant, machinery and other capital equipment
7.9 Vehicles

## UNITS NOT YET IN PRODUCTION

Have you any additional capital expenditure at sites not covered by this return and at which production has yet to commence

Quisitions cost
7.6 Qusion mithe tor
8. LIST OF UNITS COVERED BY THE CENSUS RETURN

A list, CRI, is enclosed. If your return is thought to relate to more than one unit details of these have been entered in column 1. Please enter any additional units not listed. In each case complete columns 2 to 6 as appropriate.
9. DIRECTORY OF MANUFACTURING BUSINESSES

To assist industry the Business Statistics Office produces a directory of UK Manufacturing Businesses. The Direciory is published by HMSO as Business Monitor PO1007 and shows the names and addresses of manufacturing units within
their industrial classification. their industrial classification.
Do you agree to the name, address and classification of the businesses covered by this return appearing in this useful
publication? (Please tick one box)


Signature Date
Position in business
10. NAME AND ADDRESS OF PERSON WHO SHOULD BE CONSULTED IF QUESTIONS ARISE ABOUT THIS
RETURN (BLOCK CAPITALS PLEASE)

Telephone No.
Ext.
Telex No.
Answer Back

| FOR OFFICIAL USE ONLY |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| RECEIPTED | DATA TAKE-ON | EXAMINED | P.A. CHECK |  |
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|  |  |  |  |  |



NOTICE UNDER SECTION 3 OF THE STATISTICS OF TRADE ACT, 1947
The Secretary of State for Trade and Industry hereby requires you by law to provide to the Business Statistics Office unless no figures are available fis inquiry form. Your return should be made for the year ended 31 December 1986, 6 April 1986 and 5 April 1987.

Please complete and return this form to the Business Statistics Office by 31 March 1987 or within two months after the business year covered by your return, if that year ends after 31 January 1987.
NB The information given by you will be treated as confidential in strict accordance with the Act and subject to the further restriction that information about individual businesses will be used and disclosed under Ministerial
direction to other government departments for statistical purposes only, except that the names and addresses of individual businesses, their industrial classification and the numbers only, except that the names and addresses of them may, if a Minister so directs, be made available to Ministers and officials of government departments who need them for carrying out their functions.

## ANNUAL CENSUS OF PRODUCTION FOR 1986 - CONSTRUCTION INDUSTRY

Dear Contributor
We conduct this annual census to obtain up-to-date statistical information about the structure and development of industry in the United Kingdom. Census results are used in the construction of national accounts, the index of production and other statistical indicators. They also provide measures of industrial performance for use in industry and government departments. Comparisons may be made with results of similar inquiries that are being conducted in other countries of the European community. The census has been designed in consultation with the Production Statistics Advisory Committee which is profession and the public services.
Census results, consisting of individual industry reports and a summary volume, will be available from Her Majesty's
Stationery Office or from the above address.
Notes to help you complete your return are enclosed. If you have any difficulties or would like further information my staff will be pleased to help you. The telephone extension of the person dealing with this inquiry is shown above.

Yours faithfully
Muard
R G WARD
Director


Your return should relate to the calendar year 1986, or if no figures are available for that year, the return may be made for a business year ending on any date from 6 April 1986 to
5 April 1987 . If the business to which this form is addressed commenced or ceased during the year, you should make the return for that part of the year during which the business was
in operation, and should state the period in the box provided.
2. DETAILS OF BUSINESS

Please tick the most appropriate description of the main activity of your business.
2.1 Con.struction, improvement and repair of both residentia buildings. Specialist activities of construction work such as bricklaying, building maintenance and restoration, carpentry, roofing, scaffolding, and the
erection of steel and concrete structures for buildings.
Building completion, including plastering, on-site joinery, painting and decorat glazing, paperhanging, tiling and flooring, and other such special lised activities glazing, paperhanging, tiling and flooring, and o
relating directly to the completion of buildings


Civil engineering, including construction of roads, bridges, railways, tunnels, sha drilling, earth moving, fixed concrete oil production platiforms, construction w
relating to irrigation, drainage, water supply, rivers, harbours, sewerage, etc $\qquad$
2.4 Installation of fixtures and fittings, including gas fitting, plumbing, sanitary equip ment, heating, ventilating, insulation, electrical wiring and fittings; installation of
aerials, lightning conductors, telephones, etc. $\qquad$
2.5 Demolition; general construction; plant hire (with operators). Use this heading only if your activities during the year were mainly demolition or plant hire, or
included both building and civil engineering and were of such a general nature that you are unable to classify the main part of your output to one of the other headings

```
6
3. EMPLOYMENT

Average number of persons on the payroll during the year


Average employin last week of each calendar month

Include all persons on your payroll, whether full-time or part-time, except for casual worker Include arministrative, professional, technical and clerical employees (on-site and off-site),
and salaried directors, as weil as all manual wage-earners, apprentices and working foremen.

Exclude working proprietors, part-time directors paid by fee only, casual employees; and persons taking part in government training schemes paid from government sources.

\section*{4. TURNOVER (exclusive of VAT)}

Value of work (including sub-contract work) done during the period, sales of goods and receipts for services rendered to other organisations (including hiring out
industrial buildings)


For more detail, please see accompanying notes
5. COSTS (exclusive of VAT)
5.1 Gross wages and salaries paid, employers' National Insurance contributions and contributions to other pension and welfare schemes for \(\qquad\) Include all
overtime payments
bonuses
commission
commissions
redundancy payments
(less amounts reimbur
insurance premiums for policies providing pensions and other staff benefits contributions to running costs of canteens, social centres, etc.
Exclude travelling expenses, lodging allowances, etc. which should be included in 5.3 .
5.2 Purchases
\begin{tabular}{|l|l||}
\hline 400 & \(£\) thousand \\
\hline
\end{tabular}

Include Construction
stationer
packaging materials
goosis purchased for resale without processing
canteen purchases
canteen purchases
fuel (including petr
fuel (including petrol and DERV fuel
electricity
water char
materials for use by you for producing capital items for your own use
eplacement parts for your own machinery, plant and road vehicies
accessories and consumable tools bought as replacements are not covered by this return

Exclude
land and buildings acquired for development and subsequent disposal
5.3 Other expenditure lexcept capital expenditure, which should be entered in Section 6)
£ thousand

Include
the value of work done for you by sub-contractors
mounts payabbe to other organisations for repairs and maintenance to
your buildings (including rented buildings), vehicles, plant and machinery
mounts payable for the rent of industrial buildings
amounts payable for the hiring, leasing or renting of plant (including scaffolding), machinery and vehicles
commercial insurance premiums payable
mounts payabbe to accountants, solicitors, surveyors, etc. excepting those amounts covered by Section 6
mounts payable for technical and market research and advertising
mount pard for postage linclualing parcel services), tephones, telemessages and telex
Exclude rates and vehicle licences.
6. CAPITAL EXPENDITURE IN THE YEAR (exclusive of deductible VAT)

Do not make any deduction for depreciation, amortisation or obsolescence.
For more detail please see accompanying notes.

\author{
Report on the Census of Production 1986
}

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

NAME AND ADDRESS OF PERSON WHO SHOULD BE CONSULTED IF QUESTIONS ARISE ABOUT THIS RETURN (BLOCK CAPITALS PLEASE)
\begin{tabular}{|c|c|c|c|}
\hline PA1001 & Introductory notes & PA373 & Optical precision instruments and photographic \\
\hline PA111 & Coal extraction and manufacture of solid fuels & & equipment \\
\hline PA120 & Coke ovens & PA374 & Clocks, watches and other timing devices \\
\hline PA130 & Extraction of mineral oil and natural gas & PA411 & Organic oils and fats \\
\hline PA140 & Mineral oil processing & PA412 & Slaughtering of animals and production of meat and \\
\hline PA170 & Water supply industry & & by-products \\
\hline PA210 & Extraction and preparation of metalliferous ores & PA413 & Preparation of milk and milk products \\
\hline PA221 & Iron and steel industry & PA414 & Processing of fruit and vegetables \\
\hline PA222 & Steel tubes & PA415 & Fish processing \\
\hline PA223 & Drawing, cold rolling and cold forming of steel & PA416 & Grain milling \\
\hline PA224 & Non-ferrous metals industry & PA419 & Bread, biscuits and flour confectionery \\
\hline PA231 & Extraction of stone, clay, sand and gravel & PA420 & Sugar and sugar by-products \\
\hline PA239 & Extraction of miscellaneous minerals (including salt) & PA421 & Ice-cream, cocoa, chocolate and sugar confectionery \\
\hline PA241 & Structural clay products & PA422 & Animal feeding stuff \\
\hline PA242 & Cement, lime and plaster & PA423 & Starch and miscellaneous foods \\
\hline PA243 & Building products of concrete, cement or plaster & PA424 & Spirit distilling and compounding \\
\hline PA244 & Asbestos goods & PA426 & Wines, cider and perry \\
\hline PA245 & Working of stone and other non-metallic minerals & PA427 & Brewing and malting \\
\hline PA246 & Abrasive products & PA428 & Soft drinks \\
\hline PA247 & Glass and glassware & PA429 & Tobacco industry \\
\hline PA248 & Refractory and ceramic goods & PA431 & Woollen and worsted industry \\
\hline PA251 & Basic industrial chemicals & PA432 & Cotton and silk industries \\
\hline PA255 & Paints, varnishes and printing ink & PA433 & Throwing, texturing, etc. of continuous filament yarn \\
\hline PA256 & Specialised chemical products mainly for industrial & PA434 & Spinning and weaving of flax, hemp and ramie \\
\hline PA257 & Pharmaceutical products & PA436 & Hosiery and other knitted goods \\
\hline PA258 & Soap and toilet preparations & PA437 & Textile finishing \\
\hline PA259 & Specialised chemical products mainly for household and office use & \[
\begin{aligned}
& \text { PA438 } \\
& \text { PA439 }
\end{aligned}
\] & Carpets and other textile floorcoverings Miscellaneous textiles \\
\hline PA260 & Production of man-made fibres & PA441 & Leather (tanning and dressing) and fellmongery \\
\hline PA311 & Foundries & PA442 & Leather goods \\
\hline PA312 & Forging, pressing and stamping & PA451 & Footwear \\
\hline \multirow[t]{2}{*}{PA313} & Bolts, nuts, etc.; springs; non-precision & PA453 & Clothing, hats and gloves \\
\hline & chains: metals treatment & PA455 & Household textiles and other made-up textiles \\
\hline PA314 & Metal doors, windows, etc. & PA456 & Fur goods \\
\hline PA316 & Hand tools and finished metal goods & PA461 & Sawmilling, planing, etc. of wood \\
\hline PA320 & Industrial plant and steelwork & PA462 & Manufacture of semi-finished wood products and \\
\hline PA321 & Agricultural machinery and tractors & & further processing and treatment of wood \\
\hline PA322 & Metal-working machine tools and engineers' tools & PA463 & Builders' carpentry and joinery \\
\hline \multirow{3}{*}{PA324} & Textile machinery & PA464 & Wooden containers \\
\hline & Machinery for the food, chemical and related & PA465 & Miscellaneous wooden articles \\
\hline & industries, process engineering contractors & PA466 & Articles of cork and plaiting materials, brushes and \\
\hline PA325 & Mining machinery, construction and mechanical handling equipment & PA467 & \begin{tabular}{l}
brooms \\
Wooden and upholstered furniture and shop and
\end{tabular} \\
\hline PA326 & Mechanical power transmission equipment & & office fittings \\
\hline \multirow[t]{3}{*}{PA327} & Machinery for printing, paper, wood, leather, rubber, & PA471 & Pulp, paper and board \\
\hline & glass and related industries: laundry and dry cleaning & PA472 & Conversion of paper and board \\
\hline & machinery & PA475 & Printing and publishing \\
\hline PA328 & Miscellaneous machinery and mechanical equipment & PA481 & Rubber products \\
\hline PA329 & Ordnance, small arms and ammunition & PA483 & Processing of plastics \\
\hline \multirow[t]{2}{*}{PA330} & Manufacture of office machinery and data processing & PA491 & Jewellery and coins \\
\hline & equipment & PA492 & Musical instruments \\
\hline PA341 & Insulated wires and cables & PA493 & Photographic and cinematographic processing \\
\hline PA342 & Basic electrical equipment & & laboratories \\
\hline PA343 & Electrical equipment for industrial use, and batteries & PA494 & Toys and sports goods \\
\hline & and accumulators & PA495 & Miscellaneous manufacturing industries \\
\hline \multirow[t]{2}{*}{PA344} & Telecommunication equipment, electrical measuring & PA500 & Construction \\
\hline & equipment, electronic capital goods and passive electronic components & PA1002 & Summary volume \\
\hline PA345 & Miscellaneous electronic equipment & & \\
\hline PA346 & Domestic- type electric appliances & & \\
\hline PA347 & Electric lamps and other electric lighting equipment & & \\
\hline PA351 & Motor vehicles and their engines & & \\
\hline PA352 & Motor vehicle bodies, trailers and caravans & & \\
\hline PA353 & Motor vehicle parts & & \\
\hline PA361 & Shipbuilding and repairing & & \\
\hline PA362 & Railway and tramway vehicles & & \\
\hline PA363 & Cycles and motor cycles & & \\
\hline PA364 & Aerospace equipment manufacturing and repairing & & \\
\hline PA365 & Miscellaneous vehicles & & \\
\hline PA371 & Measuring, checking and precision instruments and apparatus & & \\
\hline PA372 & Medical and surgical equipment and orthopaedic appliances & & \\
\hline
\end{tabular}

The information in this report relates to establishments classified to the
industry, Group the standard Industrial Classification Revised 1980. The industry Group covers the following Activity Heading:-

For a full descriptio
Office, price \(£ 3.95\)

Interpreting the data in the tables it is essential to bear in mind the notes and definitions which commence on page 5

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Table 10 Stocks and work in progress by activity heading, 1986
Table 11 Operating ratios by activity heading, 1986

table 4
 All United Kingdom establishments classified to the industry (a)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{\[
\begin{aligned}
& \hline \text { Size } \\
& \text { group }
\end{aligned}
\]} & \multirow[t]{3}{*}{\begin{tabular}{l}
Estab- \\
lish- \\
ments
\end{tabular}} & \multirow[t]{3}{*}{\[
\begin{aligned}
& \text { Enter- } \\
& \text { prises } \\
& \text { (b) }
\end{aligned}
\]} & \multicolumn{3}{|l|}{Employment} & \multicolumn{4}{|l|}{Wages and salaries (c)} \\
\hline & & & Total, including working proprietors & Operatives & Administrative, technical and clerical & \multicolumn{2}{|l|}{Operatives} & \multicolumn{2}{|l|}{Administrative, technical and clerical} \\
\hline & & & & & & Total & \[
\begin{aligned}
& \text { per } \\
& \text { head }
\end{aligned}
\] & Total & \[
\begin{aligned}
& \text { per } \\
& \text { head }
\end{aligned}
\] \\
\hline & Number & Number & Thousand & Thousand & Thousand & £ million & £ & £ million & £ \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & & & & & & & \[
\begin{array}{r}
\text { PA } 1001 \\
\text { APPENDIX }
\end{array}
\] \\
\hline Total sales and work done & Gross output & Net output & & Gross value added at factor cost & & Net capital expenditure & Total stocks and work in progress at end of year \\
\hline & & Total & per head & Total & per head & & \\
\hline £ million & £ million & £ million & £ & \(\overline{\text { £ million }}\) & £ & £ million & £ million \\
\hline
\end{tabular}

Total
(a) Establishments employing fewer than 20 persons are not required to complete census returns. Because of this, data for these Establishments employing fewer than 20 persons are not required to complete census returns.
establishments should be regarded merely as the best estimates available and used with caution.
(b) 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 each size group. Because an enterprise may own establishments in more than one size group, the sum of individual enterprise counts in each size group. Because an enterp
may exceed the total for the industry.
The cost of employers' contributions to the national insurance, pensions and welfare schemes and the running costs of canteens are The cost of employers' contributions to the national insurance, pensions and welfare schemes and the running costs of canteens are
excluded from the table but were estimated for the industry at \(£ \quad\) million. The remuneration of outworkers on returns receive excluded from the table but were estimated for the ind
- also excluded from the table - was \(£\)
thousand.


\section*{table 6}

Operating ratios, 1982-1986
All United Kingdom establishments classified to the industry
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & Unit & 1982 & 1983 & 1984 & 1985 & 1986 \\
\hline Gross output per head & £ & & & & & \\
\hline Net output per head & £ & & & & & \\
\hline Gross value added per head & £ & & & & & \\
\hline Gross value added as a percentage of gross output & \% & & & & & \\
\hline Ratio of gross output to stocks & & & & & & \\
\hline Wages and salaries as a percentage of gross value added & \% & & & & & \\
\hline Ratio of operatives to administrative, technical and clerical employees & & & & & & \\
\hline Wages and salaries per operative & £ & & & & & \\
\hline Wages and salaries per administrative, technical and clerical employee & £ & & & & & \\
\hline Net capital expenditure per head & £ & & & & & \\
\hline Net capital expenditure as a percentage of gross value added & \% & & & & & \\
\hline
\end{tabular}
table 7
Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost. 1986 All United Kingdom establishments classified to the industry
\begin{tabular}{lllll}
\hline Area & \begin{tabular}{l} 
Total \\
employment (a)
\end{tabular} & \begin{tabular}{l} 
Net capital \\
expenditure (b)
\end{tabular} & \begin{tabular}{l} 
Net \\
output (c)
\end{tabular} & \begin{tabular}{l} 
Gross value \\
added at \\
factor cost (c)
\end{tabular}
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Thousands & \begin{tabular}{l}
per cent of \\
United \\
Kingdom
\end{tabular} & £ million & \begin{tabular}{l}
per cent of \\
United \\
Kingdom
\end{tabular} & £ million & \begin{tabular}{l}
per cent of \\
United \\
Kingdom
\end{tabular} & £ millio \\
\hline
\end{tabular}

Standard regions
England
North
Yorkshire and
Humberside
East Midlands
East Anglia
South East
South West
West Midlands
North West
England
Wales
Scotland
Great Britain
Northern Ireland
United Kingdom
(a) Average number employed during the year, including full and part-time employees and working proprietors.
(b) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.
(c) Where a census return covered addresses in two or more regions, an estimate of the net output attributable to each address was made by assuming that net output was proportionate to employment. An estimate of each region was obtained by agoregating estimates of

TABLE 8
Output and costs. 1986
All United Kingdom esta
All United Kingdom establishments classified to each activity heading within the industry
\(\qquad\)
Unit

\section*{Enterprises}

Number
Establishments
Sales of goods produced \(£\) million
Work done and industria
services rendered
Capital goods produced for establish-
ments' own use
Non-industrial services rendered
Goods merchanted or factored
Total sales and work done
Increase during the year, work in
progress and goods ond progress and goods on hand for sale

Gross output
Purchases of materials for use in pro
duction, and packaging and fuel
Purchases of goods for merchanting or
factoring
Increase during the year, stocks of
materials, stores and fuel
Cost of industrial services received
Net output
Total employment
Net output per head
Thousand
£
Cost of non-industrial services
received
Hire of vehicles, plant and
machinery
Rents of industrial and commercial
buildings
Commercial insurance premiums
Bank charges
Other non-industrial services
Licensing of motor vehicles
Rates, excluding water rates
Gross value added at factor cost
Gross value added at factor cost
per head

PA 1001
ENDIX APPENDIX E

table 9

\section*{Land and buildings}

New building work
Land and existing buildings
Acquisitions
Disposals
Net
Plant and machinery
Acquisitions
Disposals
Net
Vehicles
Acquisitions
Disposals
Net
Total net capital expenditure
table 10
Stocks and work in progress, 1986
Stocks and work in progress, 1986
All United Kingdom establishments classified to each activity heading within the industry

10a. Increase during year
Materials, stores and fuel
Work in progress
Goods on hand for sale
Total

10b. Value at end of yea
Materials, stores and fuel
Work in progress
Goods on hand for sale
Total

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