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BUSINESS STATISTICS OFFICE

Business Monitor

Report on the Census of Production

Cotton and silk industries

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A publication of the Government Statistical Service

BUSINESS MONITORS

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PA432

BUSINESS MONITOR

A publication of the Government Statistical Service

Report on the Census of Production 1985

Cotton and silk industries

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)

Department of Trade and Industry
Business Statistics Office

London: Her Majesty's Stationery Office

BUSINESS MONITORS MAKING UP THE COMPLETE CENSUS REPORT

The following is the list of Business Monitors making up the complete census report.
Shown alongside each title, where appropriate, is an indication of the change in the estimated employment in that industry that has arisen, between 1983 and 1984, from the introduction of a new, more up to date, register of businesses. The change shown reflects the increase or decrease between the old and new registers at a fixed point in time and does not in itself give any indication of the growth or contraction within any industry between 1983 and 1984. Over all manufacturing industry there was an increase between the two registers of 1.3%. Changes for individual industries have arisen not only from the addition of extra, mainly small, units but also from the reclassification of some small units from one industry to another.
Since estimates of census variables, based on register employment, are made for small establishments which are not required to complete census forms, the change will affect much of the data contained in the reports. This should be taken into account in interpreting the figures.

		Employment percentage variation
PA1001	Introductory notes	
PA111	Coal extraction and manufacture of solid fuels	
PA120	Coke ovens	
PA130	Extraction of mineral oil and natural gas	
PA140	Mineral oil processing	
PA161	Production and distribution of electricity	
PA162	Public gas supply	
PA170	Water supply industry	
PA210	Extraction and preparation of metalliferous ores	38
PA221	Iron and steel industry	−1
PA222	Steel tubes	1
PA223	Drawing, cold rolling and cold forming of steel	−2
PA224	Non-ferrous metals industry	0
PA231	Extraction of stone, clay, sand and gravel	−18
PA239	Extraction of miscellaneous minerals (including salt)	−6
PA241	Structural clay products	−1
PA242	Cement, lime and plaster	0
PA243	Building products of concrete, cement or plaster	−9
PA244	Asbestos goods	0
PA245	Working of stone and other non-metallic minerals	−2
PA246	Abrasive products	−6
PA247	Glass and glassware	2
PA248	Refractory and ceramic goods	1
PA251	Basic industrial chemicals	0
PA255	Paints, varnishes and printing ink	1
PA256	Specialised chemical products mainly for industrial and agricultural purposes	1
PA257	Pharmaceutical products	1
PA258	Soap and toilet preparations	0
PA259	Specialised chemical products mainly for household and office use	0
PA260	Production of man made fibres	0
PA311	Foundries	−4
PA312	Forging, pressing and stamping	0
PA313	Bolts, nuts, etc; springs; non-precision chains; metals treatment	0
PA314	Metal doors, windows etc	2
PA316	Hand tools and finished metal goods	−1
PA320	Industrial plant and steelwork	4
PA321	Agricultural machinery and tractors	−1
PA322	Metal-working machine tools and engineers' tools	−1
PA323	Textile machinery	0
PA324	Machinery for the food, chemical and related industries; process engineering contractors	2
PA325	Mining machinery, construction and mechanical handling equipment	3
PA326	Mechanical power transmission equipment	14
PA327	Machinery for printing, paper, wood, leather, rubber, glass and related industries; laundry and dry cleaning machinery	−4
PA328	Miscellaneous machinery and mechanical equipment	0
PA329	Ordnance, small arms and ammunition	0
PA330	Manufacture of office machinery and data processing equipment	7
PA341	Insulated wires and cables	2
PA342	Basic electrical equipment	1
PA343	Electrical equipment for industrial use, and batteries and accumulators	3
PA344	Telecommunication equipment, electrical measuring equipment, electronic capital goods and passive electronic components	2
PA345	Miscellaneous electronic equipment	3
PA346	Domestic-type electric appliances	1
PA347	Electric lamps and other electric lighting equipment	13
PA351	Motor vehicles and their engines	0
PA352	Motor vehicle bodies, trailers and caravans	−3

BUSINESS MONITORS MAKING UP THE COMPLETE CENSUS REPORT (continued)

		Employment percentage variation
PA353	Motor vehicle parts	−2
PA361	Shipbuilding and repairing	0
PA362	Railway and tramway vehicles	0
PA363	Cycles and motor cycles	0
PA364	Aerospace equipment manufacturing and repairing	0
PA365	Miscellaneous vehicles	2
PA371	Measuring, checking and precision instruments and apparatus	4
PA372	Medical and surgical equipment and orthopaedic appliances	−8
PA373	Optical precision instruments and photographic equipment	1
PA374	Clocks, watches and other timing devices	0
PA411	Organic oils and fats	1
PA412	Slaughtering of animals and production of meat and by-products	
PA413	Preparation of milk and milk products	−5
PA414	Processing of fruit and vegetables	0
PA415	Fish processing	−4
PA416	Grain milling	−7
PA419	Bread, biscuits and flour confectionery	14
PA420	Sugar and sugar by-products	0
PA421	Ice-cream, cocoa, chocolate and sugar confectionery	−2
PA422	Animal feeding stuffs	−5
PA423	Starch and miscellaneous foods	2
PA424	Spirit distilling and compounding	0
PA426	Wines, cider and perry	2
PA427	Brewing and malting	0
PA428	Soft drinks	−1
PA429	Tobacco industry	0
PA431	Woollen and worsted industry	−2
PA432	Cotton and silk industries	3
PA433	Throwing, texturing, etc. of continuous filament yarn	−3
PA434	Spinning and weaving of flax, hemp and ramie	−3
PA435	Jute and polypropylene yarns and fabrics	0
PA436	Hosiery and other knitted goods	3
PA437	Textile finishing	3
PA438	Carpets and other textile floorcoverings	1
PA439	Miscellaneous textiles	3
PA441	Leather (tanning and dressing) and fellmongery	−5
PA442	Leather goods	8
PA451	Footwear	2
PA453	Clothing, hats and gloves	7
PA455	Household textiles and other made-up textiles	−2
PA456	Fur goods	−27
PA461	Sawmilling, planing, etc. of wood	−17
PA462	Manufacture of semi-finished wood products and further processing and treatment of wood	−4
PA463	Builders carpentry and joinery	−5
PA464	Wooden containers	−6
PA465	Miscellaneous wooden articles	4
PA466	Articles of cork and plaiting materials, brushes and brooms	7
PA467	Wooden and upholstered furniture and shop and office fittings	−1
PA471	Pulp, paper and board	1
PA472	Conversion of paper and board	3
PA475	Printing and publishing	5
PA481	Rubber products	−1
PA483	Processing of plastics	2
PA491	Jewellery and coins	1
PA492	Musical instruments	−5
PA493	Photographic and cinematographic processing laboratories	
PA494	Toys and sports goods	−1
PA495	Miscellaneous manufacturing industries	67
PA500	Construction	
PA1002	Summary tables	

PA432 COTTON AND SILK INDUSTRIES

The information in this report relates to establishments classified to the Cotton and silk industries, Group 432 in the Standard Industrial Classification Revised 1980. The industry Group covers the following Activity Headings:—

4321 Spinning and doubling on the cotton system

1. Spinning

Spinning of cotton, cotton waste and silk and spinning of man-made staple fibre on the cotton system.

2. Doubling and winding

Doubling, winding, etc. of cotton yarn, man-made fibre yarn spun on the cotton system, glass fibre yarn and continuous filament yarn (excluding continuous filament yarn doubled, twisted, etc. in an establishment producing man-made fibres). The production of finished thread from such yarns is also included.

4322 Weaving of cotton, silk and man-made fibres

Weaving fabrics from cotton yarn, silk yarn and man-made fibre yarn (spun on cotton system) or from man-made continuous filament yarn or glass fibre yarn (excluding carpet weaving and weaving operations of the miscellaneous textile industries). Establishments both weaving and finishing are included as are such establishments which produce both woven textiles and made-up household textiles.

For a full description of the 1980 classification see Standard Industrial Classification Revised 1980, obtainable from Her Majesty's Stationery Office, price £3.95.

In 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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EXPLANATORY NOTES AND DEFINITIONS

INTRODUCTION

1. These notes give basic information to help with the interpretation of tables in this Industry Report. More general information about the Census is given in a separate Business Monitor — Report on the Census of Production, Introductory Notes (PA1001).

2. Since 1980, Censuses have been conducted on the Standard Industrial Classification Revised 1980 (SIC(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 classification with the General Industrial Classification of Economic Activities within the European Communities (NACE). It is based on activity rather than 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.

REPORTING UNIT

3. As far as possible the reporting unit in respect of which information is collected is one whose activities fall within a single activity heading of the classification and which is situated at a single geographical 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 classified according to the main activity. Where a unit operates at a 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.

4. Establishments are asked to exclude from their returns particulars relating to ancillary departments not engaged in production (such as merchanting or factoring organisations, transport organisations, canteens and warehouses) for which separate accounts are kept. Transfers of goods produced to such departments are treated as sales, valued as far as possible as if sold to 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.

THE REGISTER

5. A register of production units 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, its relationship with other units in common ownership, 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 updated register which makes fuller use of information obtained from HM Customs and Excise VAT records.

6. 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 Inquiry, 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 VAT records and Censuses of Employment.

COVERAGE

7. The Census covers United Kingdom establishments engaged in industrial production, i.e. mining and quarrying, manufacturing, construction, and gas, electricity and water supply industries (Divisions 1 to 5 of SIC(80)). Establishments in the Channel Islands and the Isle of Man are excluded.

8. Under the sampling arrangements agreed for the 1985 Census, forms were despatched to all establishments with 100 or more employed and, for most production industries, samples of 1 in 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. About 16,800 forms were despatched to production establishments in the United Kingdom for the 1985 Census.

PERIOD COVERED

9. Establishments were asked to make returns for the calendar year 1985 but, where this was not possible, returns for business years ending between 6 April 1985 and 5 April 1986 were accepted. Returns covering fewer than twelve months were accepted for businesses which had started or ceased trading during the year.

ESTIMATION

10. All published Census results include estimates for non-responders, unsatisfactory returns and establishments not selected for the Census. Estimates are also made for items not covered on the shorter form sent to smaller establishments.

11. 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 to exist in each non-responding or unselected establishment to yield an estimated value for that establishment. Estimates for items not collected on the shorter form are made in a similar way using returned employment.

12. The accuracy of the totals produced by adding together estimates and returned data is mainly dependent on two measures. 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 footnote (a) to Table 1). 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, wili, in general, be better than that in an Industry Report where the coverage is only 70 per cent.

13. The second measure is the extent to which individual headings in an Industry Report are related to employment. Thus an estimate of total earnings which bears a close relationship to total employment is likely to be more accurate than an estimate of capital expenditure where the relationship to employment is not so clearly marked.

SUPPRESSION OF INFORMATION RELATING TO INDIVIDUAL UNDERTAKINGS

14. Sub-section 9(5)(b) of the Statistics of Trade Act 1947 states that:

"The following provisions shall have effect with respect to any report, summary or other communication to the public of information obtained under the foregoing provisions of this Act —

> 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 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."

15. Figures which would be likely to disclose particulars relating to an individual undertaking are not published unless the contributor has given written consent for their publication.

CHANGES MADE FOR 1985

16. The 1985 Census was a slimline one with fewer establishments receiving inquiry forms than in 1984, due to the increased use of sampling. The additional questions in the 1984 Census relating to road transport costs, and postal and telecommunications costs were excluded for 1985.

SYMBOLS USED

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

..	not available
–	nil or less than half the final digit shown
*	figures cannot be shown owing to the risk of disclosing information about individual enterprises
R	revised

ROUNDING OF FIGURES
18. Figures in the tables have been rounded to the nearest final digit where necessary and, in these instances, the sum of the constituent items may not always agree exactly with the total shown.

EXPLANATION OF TERMS USED IN THE CENSUS REPORT
19. The notes and definitions given in this section are based on the instructions given to respondents as to the way in which returns were to be completed.

CAPITAL EXPENDITURE
20. This represents the value charged to capital account together 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 to be received in grants and/or allowances from government sources, statutory bodies 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 before the end of the year and the value of CAPITAL GOODS PRODUCED FOR ESTABLISHMENTS' OWN USE by establishments' own staff are included. The value of any assets acquired in taking over an existing business are excluded. The figures include non-deductible VAT but exclude deductible VAT. No allowance is made for depreciation, amortisation or obsolescence.

a. on LAND AND EXISTING BUILDINGS

21. 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 Registry fees. The figures for disposals are net of any such professional fees payable.

b. on NEW BUILDING WORK

22. This represents the value of new building and other constructional work such as the extension and reconstruction of old buildings, and the value of any newly constructed buildings acquired. The figures include architects' and surveyors' fees, legal fees, stamp duties, agents' commissions and Land Registry fees.

c. on PLANT AND MACHINERY, VEHICLES

23. 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.

CAPITAL GOODS PRODUCED FOR ESTABLISHMENTS' OWN USE
24. This represents the value of all work of a capital nature carried out during the year by the establishments' own staff for use in the businesses covered by the returns.

COST OF INDUSTRIAL SERVICES RECEIVED
25. 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 capital account are excluded.

COST OF NON-INDUSTRIAL SERVICES RECEIVED
26. 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 buildings, for the services of accountants, auditors, agents, solicitors and surveyors other than in connection with the acquisition or disposal of capital assets, for postal and telecommunications 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 quarrying rights and technical 'know-how'. Interest payments and amounts payable for sea and air freight on goods exported on materials and fuel imported are excluded.

EMPLOYERS' NATIONAL INSURANCE CONTRIBUTIONS ETC.
27. This includes employers' national insurance contributions under the Social Security Pensions Act 1975, commercial insurance premiums for policies providing pensions, superannuation or other retirement benefits, sickness benefits, personal accident benefits, disability benefits or death benefits for employees, including former employees, or their dependants. Also included are contributions to canteens, social centres, children's and holiday homes etc. and the cost of supplying luncheon vouchers.

EMPLOYMENT
28. This is the average number of ADMINISTRATIVE, TECHNICAL AND CLERICAL EMPLOYEES and OPERATIVES on the payroll and the number of WORKING PROPRIETORS employed during the year of return. Full-time and part-time employees are included but outworkers (i.e. people who worked in their own homes on materials supplied by establishments) and casual employees such as jobbers are excluded. The average number of employees returned by individual establishments may have been calculated by, for example, the average of the number of employees on the payroll for the last week of each calendar month.

a. ADMINISTRATIVE, TECHNICAL AND CLERICAL EMPLOYEES

29. This includes directors who received a definite wage, salary or commission, managers, foremen, draughtsmen, editorial and advertising staff, travellers, all office employees and research and design employees other than operatives.

b. OPERATIVES

30. This includes all manual wage earners including 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 warehouses, stores, shops and canteens are in general excluded.

c. WORKING PROPRIETORS

31. 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 least half the normal working hours and directors who worked in 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
32. This is calculated by increasing (or decreasing) the value of TOTAL SALES AND WORK DONE by the rise (or fall) during the year of WORK IN PROGRESS AND GOODS ON HAND FOR SALE.

GROSS VALUE ADDED AT FACTOR COST
33. 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 estimate of gross value added approaches more closely than NET OUTPUT the definition of net output or value added in national accounts statistics.

GROSS VALUE ADDED AT FACTOR COST PER HEAD
34. This is calculated by dividing GROSS VALUE ADDED AT FACTOR COST by total EMPLOYMENT.

NET CAPITAL EXPENDITURE
35. This is calculated by adding to the value of NEW BUILDING WORK acquisitions less disposals of LAND AND EXISTING BUILDINGS, VEHICLES and PLANT AND MACHINERY.

NET OUTPUT
36. This is a traditional census measure calculated by deducting from GROSS OUTPUT the cost of PURCHASES OF MATERIALS 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 STOCKS OF MATERIALS, STORES AND FUEL.

NET OUTPUT PER HEAD
37. This is calculated by dividing NET OUTPUT by total EMPLOYMENT.

NON-INDUSTRIAL SERVICES RENDERED
38. This includes amounts charged for the hire of vehicles, plant and machinery, for the rent of industrial and commercial 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 organisations. It also includes revenue from staff facilities such as canteens.

OPERATING RATIOS
39. These ratios are calculated using industry totals, i.e. including the estimates for establishments not responding to or not selected for the Census. Respondents are able to compare the ratios for their own businesses with those for the industry as a whole.

PURCHASES OF MATERIALS FOR USE IN PRODUCTION, AND PACKAGING AND FUEL. PURCHASES OF GOODS FOR MERCHANTING OR FACTORING
40. These include the cost of raw materials, components, semi-manufactured goods and workshop materials, replacement parts and 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 given 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' own transport departments for delivery of materials. The figures are net of the value of goods or packaging materials returned to suppliers and trade discounts receivable. Materials purchased duty-paid are included at their duty-paid value less drawbacks, rebates etc. Imported goods are included at their full delivered cost. If the transport from docks or airport of imported goods is not included in the cost of goods purchased, the cost is entered at cif plus duty, if applicable. Transfers of goods to an establishment from other departments of the organisation not covered by the return are included at the estimated selling value recorded by the other departments.

REMUNERATION PAID TO OUTWORKERS
41. 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 remuneration of outworkers for establishments not completing Census returns.

SALES OF GOODS PRODUCED
42. This represents deliveries on sale of goods produced by establishments in the United Kingdom coming within the scope of the Census irrespective of whether or not they were produced in the year of the return. It also includes sales of goods made for establishments from materials given out by them to other organisations 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, trade 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 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. Transfers 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.

STOCKS
43. This represents the value of goods on hand for sale, including goods for merchanting or factoring and of materials, stores and fuel held by establishments coming within the scope of the Census, whether held in the United Kingdom or abroad. Values include any duty payable but exclude VAT.

WAGES AND SALARIES
44. 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 for this purpose 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, travelling expenses, lodging allowances etc. and EMPLOYERS' NATIONAL INSURANCE CONTRIBUTIONS ETC. are excluded.

WORK DONE AND INDUSTRIAL SERVICES RENDERED
45. 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 in the course of such work and for industrial services such as repairs 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, and preparatory work on typesetting, block making and binding in the 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 jobbing work.

WORK IN PROGRESS
46. 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 progress payments received from other organisations are not deducted.

TABLE 1 **PA432**

Output and costs, 1981-1985
All United Kingdom establishments classified to the industry (a)

	Unit	1981	1982	1983	1984	1985
Enterprises	Number	369	365	356	379(b)	389
Establishments	"	437	426	404	426(b)	433
Sales of goods produced	£ million	806.2	816.5	852.7	960.8	987.2
Work done and industrial services rendered	"	6.9	7.0	9.7	9.0	10.5
Capital goods produced for establishments' own use	"	0.9	0.7	0.6	0.4	0.6
Non-industrial services rendered	"	2.8	3.3	3.2	4.2	2.4
Goods merchanted or factored	"	34.1	33.4	49.1	64.1	54.8
Total sales and work done	"	**850.8**	**861.0**	**915.3**	**1,038.6**	**1,055.5**
Increase during the year, work in progress and goods on hand for sale	"	-14.0	-1.7	8.7	11.3	17.5
Gross output	"	**836.8**	**859.3**	**924.0**	**1,049.9**	**1,073.0**
Purchases of materials for use in production, and packaging and fuel	"	478.9	499.8	530.5	601.5	608.6
Purchases of goods for merchanting or factoring	"	26.6	27.2	41.9	52.4	46.2
Increase during the year, stocks of materials, stores and fuel	"	2.6	-5.0	7.3	6.9	4.7
Cost of industrial services received	"	20.1	23.6	25.3	32.3	36.9
Net output	"	**313.8**	**303.7**	**333.5**	**370.8**	**386.0**
Total employment	Thousand	40.6	35.8	32.6	32.5(b)	31.3
Net output per head	£	**7,738**	**8,493**	**10,240**	**11,419**	**12,333**
Cost of non-industrial services received						
Hire of vehicles, plant and machinery	£ million	2.6	2.4	2.5	3.1	3.6
Rents of industrial and commercial buildings	"	1.2	1.4	1.5	1.7	1.9
Commercial insurance premiums	"	5.3	4.8	4.6	5.2	5.4
Bank charges	"	0.5	0.6	0.6	0.7	0.7
Other non-industrial services	"	22.9	24.6	26.9	35.5	30.8
Licensing of motor vehicles	"	0.2	0.2	0.2	0.2	0.2
Rates, excluding water rates	"	6.7	6.9	6.0	6.7	6.3
Gross value added at factor cost	"	**274.4**	**262.8**	**291.3**	**317.8**	**337.0**
Gross value added at factor cost per head	£	**6,768**	**7,349**	**8,943**	**9,789**	**10,768**

(a) Satisfactory returns accounted for 83 per cent of employment in the industry in 1985.

(b) Use of a new register of businesses for 1984 has affected the number of enterprises and establishments. This has led to the estimated total employment being increased by 3% in this industry. Estimates for other variables are dependent upon employment and the change should be taken into account when interpreting the figures in this publication. Further information is given on page 2.

TABLE 2 **PA432**

Capital expenditure, 1981-1985
All United Kingdom establishments classified to the industry

£ million

	1981	1982	1983	1984	1985
Land and buildings					
New building work	1.1	1.1	2.2	1.8	1.5
Land and existing buildings					
Acquisitions	1.8	1.0	1.4	0.6	2.7
Disposals	1.1	2.3	1.8	1.9	1.1
Net	1.8	-0.2	1.9	0.5	3.1
Plant and machinery					
Acquisitions	17.7	13.9	20.7	26.0	31.2
Disposals	4.4	3.0	2.5	2.3	1.2
Net	13.3	10.9	18.2	23.7	30.0
Vehicles					
Acquisitions	2.2	2.1	2.6	2.3	2.4
Disposals	0.8	0.7	3.8	0.9	0.7
Net	1.4	1.4	-1.2	1.4	1.7
Total net capital expenditure	**16.6**	**12.2**	**18.9**	**25.7**	**34.8**

TABLE 3

Stocks and work in progress, 1981-1985
All United Kingdom establishments classified to the industry

£ million

	1981	1982	1983	1984	1985	Value at end of 1985
	Increase during year					
Materials, stores and fuel	2.6	-5.0	7.3	6.9	4.7	62.2
Work in progress	-4.5	0.9	3.6	4.0	2.7	54.4
Goods on hand for sale	-9.5	-2.6	5.1	7.3	14.9	85.6
Total	**-11.4**	**-6.7**	**16.0**	**18.3**	**22.3**	**202.3**

TABLE 4

Employment, labour costs, output, net capital expenditure and stocks and work in progress by size of total employment, 1985

All United Kingdom establishments classified to the industry (a)

Size group	Establishments	Enterprises (b)	Employment			Wages and salaries (c)				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
			Total, including working proprietors	Operatives	Administrative, technical and clerical	Operatives		Administrative, technical and clerical									
						Total	per head	Total	per head			Total	per head	Total	per head		
	Number	Number	Thousand	Thousand	Thousand	£ million	£	£ million	£	£ million	£ million	£ million	£	£ million	£	£ million	£ million
1-9	190	190	0.7)														
10-19	70	70	1.0)														
20-49	55	54	1.9)	5.6	1.2	30.1	5,358	11.3	9,116	249.8	252.8	91.9	13,218	(d)	(d)	7.8	46.8
50-99	48	47	3.4)														
100-199	34	26	4.8	4.0	0.9	22.7	5,710	8.2	9,371	198.0	201.2	73.4	15,143	143.1(d)	12,127(d)	6.0	37.5
200-299	12	12	2.9	2.4	0.4	14.6	5,991	3.9	9,131	94.4	95.1	29.6	10,341	25.0	8,733	4.7	16.8
300-399	11	8	3.9	3.3	0.6	17.9	5,453	5.4	8,731	132.9	135.5	44.9	11,492	38.3	9,815	4.3	24.4
400-Plus	13	9	12.7	10.2	2.5	59.4	5,809	20.2	8,075	380.3	388.5	146.1	11,485	130.5	10,254	12.0	76.8
Total	**433**	**389**	**31.3**	**25.5**	**5.7**	**144.7**	**5,666**	**49.0**	**8,654**	**1,055.5**	**1,073.0**	**386.0**	**12,333**	**337.0**	**10,768**	**34.8**	**202.3**

(a) Establishments employing fewer than 20 persons are not required to complete census returns. Because of this, data for these 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 in each size group. Because an enterprise may own establishments in more than one size group, the sum of individual enterprise counts may exceed the total for the industry.

(c) 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 £24.2 million. The remuneration of outworkers on returns received - also excluded from the table - was £25 thousand.

(d) Gross value added data relates to establishments employing 1-199.

TABLE 5 PA432

Percentage analysis of twelve-month periods covered by returns received for the 1985 Census by number of returns and total employment

Accounting year ended	Percentage of total returns received	Percentage of total employment
1985		
April 6-30	2.9	1.9
May	1.0	2.1
June	-	-
July	2.9	1.5
August	1.0	0.1
September	5.8	5.8
October	1.9	0.5
November	5.8	5.7
December	37.5	29.7
1986		
January	3.8	7.7
February	-	-
1 March-5 April	37.5	44.9

TABLE 6

Operating ratios, 1981-1985

All United Kingdom establishments classified to the industry

	Unit	1981	1982	1983	1984	1985
Gross output per head	£	20,636	24,031	28,368	32,338	34,283
Net output per head	£	7,738	8,493	10,240	11,419	12,333
Gross value added per head	£	6,768	7,349	8,943	9,789	10,768
Gross value added as a percentage of gross output	%	33	31	32	30	31
Ratio of gross output to stocks		4.7	5.0	5.6	5.5	5.3
Wages and salaries as a percentage of gross value added	%	66	66	59	59	58
Ratio of operatives to administrative, technical and clerical employees		4.7	4.6	4.4	4.5	4.5
Wages and salaries per operative	£	4,071	4,445	4,887	5,274	5,666
Wages and salaries per administrative, technical and clerical employee	£	6,321	6,921	6,999	7,858	8,654
Net capital expenditure per head	£	410	341	580	792	1,111
Net capital expenditure as a percentage of gross value added	%	6	5	6	8	10

TABLE 7 PA432

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1985
All United Kingdom establishments classified to the industry

Area	Total employment (a)		Net capital expenditure (b)		Net output (c)		Gross value added at factor cost (c)	
	Thousand	per cent of United Kingdom	£ million	per cent of United Kingdom	£ million	per cent of United Kingdom	£ million	per cent of United Kingdom
Standard regions of England								
North	1.0	3.0	1.0	3.0	14.8	3.8	11.4	3.4
Yorkshire and Humberside	3.3	10.6	2.6	7.5	41.0	10.6	36.4	10.8
East Midlands	1.7	5.6	0.9	2.7	28.3	7.3	24.8	7.4
East Anglia	0.5	1.6	0.8	2.4	8.0	2.1	6.5	1.9
South East	0.6	1.9	0.6	1.9	11.8	3.1	10.4	3.1
South West	1.1	3.4	2.3	6.6	13.0	3.4	11.0	3.3
West Midlands	0.3	1.0	0.1	0.3	3.1	0.8	2.6	0.8
North West	18.0	57.4	17.5	50.3	210.4	54.5	186.9	55.5
England	26.5	84.6	26.0	74.7	330.4	85.6	290.1	86.1
Wales	-	0.1	-	0.1	0.2	0.1	0.2	0.1
Scotland	2.5	8.0	5.9	17.1	36.6	9.5	30.0	8.9
Great Britain	29.0	92.6	31.9	91.8	367.3	95.2	320.3	95.0
Northern Ireland	2.3	7.4	2.8	8.2	18.7	4.8	16.7	5.0
United Kingdom	31.3	100.0	34.8	100.0	386.0	100.0	337.0	100.0

(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 for each region was obtained by aggregating estimates of net output for addresses located in that region. Gross value added at factor cost was treated similarly.

TABLE 8 **PA432**

Output and costs, 1985
All United Kingdom establishments classified to each Activity Heading within the industry

	Unit	4321	4322
Enterprises(a)	Number	123	272
Establishments	"	136	297
Sales of goods produced	£ million	414.3	573.0
Work done and industrial services rendered	"	1.9	8.6
Capital goods produced for establishments' own use	"	0.2	0.3
Non-industrial services rendered	"	0.7	1.7
Goods merchanted or factored	"	32.0	22.8
Total sales and work done	"	**449.1**	**606.4**
Increase during the year, work in progress and goods on hand for sale	"	5.3	12.3
Gross output	"	**454.4**	**618.6**
Purchases of materials for use in production, packaging and fuel	"	239.5	369.2
Purchases of goods for merchanting or factoring	"	27.5	18.7
Increase during the year, stocks of materials, stores and fuel	"	1.5	3.2
Cost of industrial services received	"	12.3	24.6
Net output	"	**176.6**	**209.4**
Total employment	Thousand	16.4	14.9
Net output per head	£	**10,774**	**14,046**
Cost of non-industrial services received			
Hire of vehicles, plant and machinery	£ million	1.7	1.9
Rents of industrial and commercial buildings	"	0.9	1.1
Commercial insurance premiums	"	2.4	3.0
Bank charges	"	0.2	0.5
Other non-industrial services	"	13.5	17.3
Licensing of motor vehicles	"	0.1	0.1
Rates, excluding water rates	"	3.2	3.2
Gross value added at factor cost	"	**154.6**	**182.4**
Gross value added at factor cost per head	£	**9,433**	**12,235**

(a) The count of enterprises shown in each column represents the number of enterprises owning the establishments shown for each activity heading. Because an enterprise may own establishments in more than one activity heading, the sum of the enterprise counts may exceed the total for the industry.

TABLE 9 **PA432**

Capital expenditure, 1985
All United Kingdom establishments classified to each Activity Heading within the industry

£ million

	4321	4322
Land and buildings		
New building work	0.3	1.1
Land and existing buildings		
Acquisitions	2.3	0.4
Disposals	0.8	0.3
Net	1.8	1.3
Plant and machinery		
Acquisitions	12.2	19.0
Disposals	0.6	0.6
Net	11.6	18.4
Vehicles		
Acquisitions	1.1	1.4
Disposals	0.3	0.5
Net	0.8	0.9
Total net capital expenditure	**14.1**	**20.7**

TABLE 10

Stocks and work in progress, 1985
All United Kingdom establishments classified to each Activity Heading within the industry

£ million

	4321	4322
10a Increase during year		
Materials, stores and fuel	1.5	3.2
Work in progress	-0.5	3.2
Goods on hand for sale	5.8	9.1
Total	**6.8**	**15.5**
10b Value at end of year		
Materials, stores and fuel	24.3	37.9
Work in progress	17.6	36.9
Goods on hand for sale	35.4	50.2
Total	**77.2**	**125.0**

Operating ratios, 1985

All United Kingdom establishments classified to each Activity Heading within the industry

	Unit	4321	4322
Gross output per head	£	27,723	41,492
Net output per head	£	10,774	14,046
Gross value added per head	£	9,433	12,235
Gross value added as a percentage of gross output	%	34	30
Ratio of gross output to stocks		5.9	4.9
Wages and salaries as a percentage of gross value added	%	63	53
Ratio of operatives to administrative, technical and clerical employees		4.6	4.4
Wages and salaries per operative	£	5,408	5,953
Wages and salaries per administrative, technical and clerical employee	£	8,288	9,047
Net capital expenditure per head	£	862	1,385
Net capital expenditure as a percentage of gross value added	%	9	11

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