

A publication of the Government Statistical Service

## **BUSINESS MONITORS**

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# PA247

A publication of the Government Statistical Service

# Report on the **Census of Production** 1987

# Glass and glassware

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** 

**BUSINESS MONITOR** 

# 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, businesses but also from the reclassification of some small businesses from one industry to another.

Since estimates of census variables, based on register employment, are made for small businesses 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

		variatio
PA1001	Introductory notes	
PA1001 PA111	Coal extraction and manufacture of solid fuels	
PA1120	Coke ovens	
PA120 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	
DA000	dry cleaning machinery	-4
PA328	Miscellaneous machinery and mechanical equipment	0
PA329	Ordnance, small arms and ammunition	
PA330	Manufacture of office machinery and data processing equipment	7
PA341 PA342	Insulated wires and cables	1
PA342 PA343	Basic electrical equipment Electrical equipment for industrial use, and batteries and accumulators	3
PA344	Telecommunication equipment, electrical measuring equipment, electronic capital goods and	3
1 4344	passive electronic components	2
PA345	Miscellaneous electronic equipment	3
PA346	Domestic-type electric appliances	1
PA347	Electric lamps and other electric lighting equipment	13
PA347 PA351	Motor vehicles and their engines	0
PA352	Motor vehicle bodies, trailers and caravans	-3
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BUSINESS MONITORS MAKING UP THE COMPLETE CENSUS REPORT (continued)

PA362 PA363 PA364 PA365 PA371 PA372 PA373 PA374 PA411 PA412 PA413 PA414 PA415 PA416 PA416 PA419 PA420 PA421 PA420 PA421 PA422 PA423 PA424 PA423 PA424 PA426 PA427 PA428 PA429 PA421 PA428 PA429 PA431 PA432 PA433	Motor vehicle parts Shipbuilding and repairing Railway and tramway vehicles Cycles and motor cycles Aerospace equipment manufacturing and repairing Miscellaneous vehicles Measuring, checking and precision instruments and apparatus Medical and surgical equipment and orthopaedic appliances Optical precision instruments and photographic equipment Clocks, watches and other timing devices Organic oils and fats Slaughtering of animals and production of meat and by-products Preparation of milk and milk products Processing of fruit and vegetables Fish processing Grain milling Bread, biscuits and flour confectionery Sugar and sugar by-products Ice-cream, cocoa, chocolate and sugar confectionery Animal feeding stuffs Starch and miscellaneous foods Spirit distilling and compounding Wines, cider and perry
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PA429 PA431 PA432 PA433	Brewing and malting
PA431 PA432 PA433	Soft drinks
PA432 PA433	Tobacco industry
PA433	Woollen and worsted industry Cotton and silk industries
	Throwing, texturing, etc. of continuous filament yarn Spinning and weaving of flax, hemp and ramie
	Jute and polypropylene yarns and fabrics
	Hosiery and other knitted goods
	Textile finishing
	Carpets and other textile floorcoverings
	Miscellaneous textiles
	Leather (tanning and dressing) and fellmongery
	Leather goods
PA451 I	Footwear
	Clothing, hats and gloves
PA455 I	Household textiles and other made-up textiles
PA456 I	Fur goods
	Sawmilling, planing, etc. of wood
	Manufacture of semi-finished wood products and further processi
	Builders carpentry and joinery
	Wooden containers
	Miscellaneous wooden articles
PA466 /	Articles of cork and plaiting materials, brushes and brooms
	Wooden and upholstered furniture and shop and office fittings
	Pulp, paper and board
and the second second	Conversion of paper and board
	Printing and publishing
	Rubber products
	Processing of plastics Jewellery and coins
	Musical instruments
	Photographic and cinematographic processing laboratories
	Toys and sports goods
	Construction
	construction
34	Summary tables

Employment percentage variation

> > -2

-5

2

0

2

0

3

-5

8

2

7

-2

-27

-17

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-5

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-1 0 -2 3

-3 -3 0

3 3 1

ng and treatment of wood

2 1 -5

-1 67

PA247 GLASS AND GLASSWARE PA247

The information in this report relates to businesses classified to the Glass and glassware industry, Group 247 in the Standard Industrial Classification Revised 1980. The industry Group covers the following Activity Headings:-

#### 2471 Flat glass

- Flat glass not further worked Manufacture of flat glass not further worked other than by surface grinding or polishing.
- Manufacture of flat glass cut to shape and otherwise worked, including the manufacture of glass mirrors and multiple insulating glass. The cutting of glass to size in the course of distribution is classified to Group 613.
- 2478 Glass containers

Manufacture of glass bottles and jars for all purposes, including tubular glass containers and also glass stoppers.

### 2479 Other glass products

Domestic and ornamental glassware 1. Domestic and ornamental glassware Manufacture of glassware for ornamental, table and culinary purposes.

 Glass envelopes and illuminating glassware
 Manufacture of glass envelopes, including bulbs and tubes and their parts, for electric lamps, tubes and valves. Manufacture of lighting, illuminating and signalling glassware. The manufacture of complete electric lamps and valves is classified to Groups 347 and 345

#### respectively

 Glass tubing and scientific glassware
 Manufacture of glass in bars, tubes and rods for further processing and laboratory, hygienic and pharmaceutical glassware. Glass thermometers and similar measuring instruments are classified to Group 371.

Manufacture of glass fibre, including roving, wool and filament, and articles made therefrom. Woven glass fibre fabrics are classified to Group 432, complete glass fibre boats to Group 361, glass fibre reinforced plastics products to Group 438 and glass fibre reinforced Glass fibre and glass fibre products

# cement, plaster, etc. to Group 243.

5. Other glass products Manufacture of optical glass, vacuum flasks (complete and inners), glass insulators and insulating fittings, glass bricks and tiles, glass beads, mosaic cubes and fancy articles of glass and all other glass products. Glass cutting, decorating, engraving, polishing, staining, etc. of customers' material. The grinding of optical glass and lenses is excluded and classified to Group 373.

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

	Structures			
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		in mind the notes and definitions which c	commence on page 5.	
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#### EXPLANATORY NOTES AND DEFINITIONS

#### INTRODUCTION

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 classific ation 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

From the earliest censuses of production until that for 1986 the reporting unit to the census was the establishment. This was defined as the smallest unit which could provide the full range of data required for an economic census. Establishments were asked, where possible, to exclude from their returns to the census any nonproduction activity.

4. In 1987, for a number of administrative and statistical reasons, a new system of company-based reporting was introduced. Under the new system the reporting unit to the census is, generally, the company, but there are some exceptions. These arise, for example, for large mixed activity companies which are asked to make separate returns to the census for each of their production activities on an establishment basis. Throughout this monitor this mixture of reporting units are referred to as "businesses" These businesses are no longer asked to exclude non-production activities.

In practice, since most businesses, both before and after the change, reported for the company as a whole, little difference to the main economic series has resulted from the change

For most businesses, the returned data are appropriate to a single activity heading of SIC(80) and fall within a single geographical region. Where information covers a mixture of activities, the business is classified according to the main activity. Where the business operates at a number of different addresses then, in order to enable regional data to be compiled separate information on employment and capital expenditure is sought for each address.

## THE REGISTER

A register of businesses throughout the United Kingdom is held on the BSO computer and provides the basis for BSO inquiries. For each business the register contains identification particulars and information about its eligibility for inclusion in an inquiry, its relationship with other businesses 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 -Size analyses of United Kingdom businesses. 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

8. The Annual Census and other inquiries provide a major source of information for updating and checking the register. For businesses 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 businesses 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

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

10. Under the sampling arrangements agreed for the 1987 Census, forms were despatched to all businesses with 100 or more employed and, for most production industries, samples of 1 in 4 and 1 in 2 respectively being taken for businesses in the 20 to 49 and 50 to 99 employment size bands. It was necessary to increase the sample in those industries where there were few business in the sample size band or where response in earlier years was poor. About 16,200 forms were despatched in the United Kingdom for the 1987 Census

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ESTIMATION

13. 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 non-selected business to yield an estimated value for that business. Estimates for items not collected on the shorter form are made in a similar way using returned employment.

clearly marked.

that

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 '

5

#### PERIOD COVERED

Businesses were asked to make returns for the calendar year 1987 but, where this was not possible, returns for business years ending between 6 April 1987 and 5 April 1988 were accepted. Returns covering fewer than twelve months were accepted for businesses which had started or ceased trading during the year.

12. All published Census results include estimates for nonresponders, unsatisfactory returns and businesses not selected for the Census. Estimates are also made for items not covered on the shorter form sent to smaller businesses.

14. 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 businesses 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 businesses 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, will, in general, be better than that in an Industry Report where the coverage is only 70 per cent.

15. 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

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

"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 -

17. 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 1987

18. The 1987 Census, like that for 1986, was a slimline one. The questions relating to computers, included in the 1986 Census, were discontinued.

19. The following symbols are used throughout the PA series of

nil or less than half the final digit shown information suppressed to avoid disclosure revised

### ROUNDING OF FIGURES

20. 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 21. 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

22. 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 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

USE WITHIN THE BUSINESS by its 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

23. 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

24. 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

25. 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 USE WITHIN THE BUSINESS

26. This represents the value of all work of a capital nature carried out during the year by the staff of, and for use in, the businesses covered by the returns.

#### COST OF INDUSTRIAL SERVICES RECEIVED

27. This includes amounts payable to other organisations for work done on materials supplied by the business 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

28. 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 and on materials and fuel imported are excluded.

EMPLOYERS' NATIONAL INSURANCE CONTRIBUTIONS ETC. 29. 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

30. 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 (ie people who worked in their own homes on materials supplied by the business) and casual employees such as jobbers are excluded. The average number of employees returned by individual businesses 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

31. 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 exceet operatives.

### b. OPERATIVES

32. 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 included.

#### c. WORKING PROPRIETORS

33. 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.

#### ENTERPRISE

34. This is defined as one or more businesses under common ownership or control.

#### GROSS OUTPUT

35. This is calculated by adjusting the value of TOTAL SALES AND WORK DONE by the changes during the year of WORK IN PROGRESS and GOODS ON HAND FOR SALE.

#### GROSS VALUE ADDED AT FACTOR COST

36. 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 37. This is calculated by dividing GROSS VALUE ADDED AT FACTOR COST by total EMPLOYMENT.

NET CAPITAL EXPENDITURE

38. 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

39. This is calculated by deducting from GROSS OUTPUT the cost of PURCHASES OF MATERIALS FOR USE IN PRODUCT-ION AND PACKAGING AND FUEL and PURCHASES OF GOODS FOR MERCHANTING OR FACTORING, the COST OF INDUST-RIAL 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

40. This is calculated by dividing NET OUTPUT by total EMPLOYMENT.

#### NON-INDUSTRIAL SERVICES RENDERED

41. 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**

6

42. These ratios are calculated using industry totals, ie including the estimates for businesses 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

These include the cost of raw materials, components, semimanufactured 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 business or given out to others, for the production of machinery or other capital items used in the business, and materials used when working on goods supplied by customers. The figures exclude VAT, purchases of machinery and plant, which are included in CAPITAL EXPEND ITURE, and amounts payable to transport firms or credited to the business's 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 from other departments of the business not covered by the return are included at the estimated selling value recorded by the other departments.

#### REMUNERATION PAID TO OUTWORKERS

44. This represents amounts paid to outworkers, ie people who do work in their own homes generally on a piece-work basis, whose names appear on the payroll. Amounts paid to outworkers by subcontractors are included in the COST OF INDUSTRIAL SERVICES RECEIVED. Estimates are not made for remuneration of outworkers for businesses not completing Census returns.

#### SALES OF GOODS PRODUCED

45. This represents sales of goods during the year, irrespective of whether or not they were produced in the year of the return. It also includes sales of goods made from materials given out to other firms or to outworkers and sales of waste products and residues. The value of sales is the 'net selling value', ie 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 includes duty if the goods are sold 'duty-paid', but excludes it if they 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 a business to departments not covered by the return (including other businesses in the same enterprise group) are treated as sales, valued as if sold to an independent purchaser.

#### STOCKS

46. This represents the value of goods on hand for sale, including goods for merchanting or factoring and of materials, stores and fuel held by businesses, whether held in the United Kingdom or abroad. Values include any duty payable but exclude VAT.

#### WAGES AND SALARIES

47. 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

48. This includes amounts charged for work carried out including that done by sub-contractors on customers' materials and amounts charged for materials supplied in the course of such work. Industrial services such as repairs and maintenance, installation work and technical research and studies rendered to other organisations is also included. 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

49. 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

#### PA247

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Output and costs, 1983-1987 All United Kingdom businesses classified to the inc

(a) Satisfactory returns accounted for 83 per cen

(b) Use of a new register of businesses for 1984. This has led to the estimated total amployme for other variables are dependent upon emplointerpreting the figures in this publication. Prointerpreting the figures in this publication.

(c) For the 1987 Census a new system of reports were acked to include all activities carried ou The estimated effect of the revised system h

Output and costs, 1983-1987 All United Kingdom businesses classified to the industry (a)

The movies and de instructs groups i the brand choice groups to respect Series as were to be completted.	Unit	1983	1984	1985	1986	1987
interprises	Number	567	633(b)	703	740	799
usinesses		630	706(b)	788	823	851
ales of goods produced	£ million	1,122.6	1,223.3	1,275.6	1,403.7	1,596.3
Vork done and industrial services endered		10.9	8.1	10.7	13.6	46.1
apital goods produced for use within ne business	n State	4.0	2.9	3.2	1.9	2.1
on-industrial services rendered		1.6	1.8	2.9	2.9	2.8
oods merchanted or factored	e her niere ecial	52.7	78.6	77.2	80.4	172.2
Total sales and work done		1,191.7	1,314.7	1,369.6	1,502.6	1,819.4(c
ncrease during the year, work in rogress and goods on hand for sale		-21.5	13.6	15.8	-13.4	2.9
Gross output		1,170.1	1,328.3	1,385.4	1,489.2	1,822.3
urchases of materials for use in pro- uction, packaging and fuel	t only suich pro n	502.5	533.1	555.5	575.6	631.3
urchases of goods for merchanting or ctoring	" unding and of	41.9	61.7	60.4	59.8	130.6
crease during the year, stocks of naterials, stores and fuel		0.1	1.9	-0.1	2.5	9.1
ost of industrial services aceived	INV "VEHICL	24.5	20.4	24.4	24.9	41.5
Net output	and allocant-boa	601.4	714.9	745.0	831.4	1,028.0
otal employment	Thousand	40.6	40.1(b)	38.9	39.2	42.1(c
Net output per head	£	14,803	17,807	19,137	21,193	24,391
ost of non-industrial services aceived						
Hire of vehicles, plant and machinery	£ million	7.3	8.5	9.8	8.5	17.7
Rents of industrial and commercial buildings		7.1	7.0	8.3	8.1	12.8
Commercial insurance premiums	in the Parameters	5.0	5.0	5.7	6.6	10.4
Bank charges		0.8	1.0	1.1	1.2	1.5
Other non-industrial services	u	91.9	109.9	111.6	111.0	184.1
censing of motor vehicles	S REP. STVED	0.8	0.8	0.8	0.8	0.9
ates, excluding water rates		16.6	16.8	17.7	19.6	27.2
Gross value added at factor cost		471.9	565.9	590.0	675.7	773.5
Gross value added at factor cost						

(a) Satisfactory returns accounted for 83 per cent of employment within the industry in 1987.

(b) Use of a new register of businesses for 1984 has affected the number of enterprises and businesses. This has led to the estimated total employment being increased by 2% 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.

(c) For the 1987 Census a new system of reporting (company reporting) was introduced whereby contributors were asked to include all activities carried out by the business (including any non-production activity). The estimated effect of the revised system has been to increase both employment and total sales by 16%.

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# TABLE 2

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Capital expenditure, 1983-1987 All United Kingdom businesses classified to the industry

niaries (c) exorto	1983	1984	1985	1986	1987	Tatal attended
and and buildings			factor cost		d)	
New building work	6.3	4.7		2.5	4.0	
Land and existing buildings						
Acquisitions	1.5	3.0	3.4	1.4	*	
Disposals	3.5	1.1	1.0	0.6	*	
Net	4.2	6.6	4.3	3.4	9.5	
Plant and machinery						
Acquisitions	54.5	66.0	58.2	*	*	
Disposals	2.5	1.9	1.6	540 *	* 548 ····	
Net na er 271 mart	52.0	64.1	56.6	44.6	82.3	
Vehicles						
Acquisitions	3.4	4.7	4.2	5.9	10.9	50-99
Disposals	1.2	1.2	1.3	2.3	2.5	
Net	2.2	3.5	2.9	3.7	8.3	
				2 3 4 B . B		
Total net capital expenditure	58.4	74.2	63.8	51.6	100.1	deo-ont

# TABLE 3

Stocks and work in progress, 1983–1987 All United Kingdom businesses classified to the industry

						£ million				
5 P	1983	1984	1985	1986	1987	Value at end of 1987				
		Increase during year								
Materials, stores and fuel	0.1	1.9	-0.1	2.5	9.1	91.2				
Work in progress	0.6	2.9	1.4	-0.3	1.8	25.0				
Goods on hand for sale	-22.1	10.7	14.4	-13.0	ot only 1. 1	127.8				
Total	-21.5	15.5	15.7	-10.8	12.0	244.0				
pective of size, owning										

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Employment, labour costs, output, net capital expenditure and stocks and work in progress by size of total employment, 1987

All United Kingdom businesses classified to the industry (a)

Size group	Busin- esses	Enter- prises (b)	Employmer	nt	1984	Wages and s	alaries (c)		and a star
		(0)							
			Total including working proprietors	Opera- tives	Administr- ative,tech- nical and clerical	Operatives	823 1,403.7 2001 13.6	Administra technical a clerical	
						Total	per head	Total	per head
	Number	Number	Thousand	Thousand	Thousand	£ million	£	£ million	f
1-9	548	540	1.7)						
10-19	126	120	1.7)	6.1	1.7	46.7	7,677	19.5	11,294
20-49	85	83	2.6)	0.1	1,324.3	40.7	,,,,,,,	10.0	
50-99	31	30	2.1)						
100-199	21	21	3.0	2.2	0.7	16.9	7,597	9.1	12,206
200-299	12	12	3.0	2.6	0.5	21.8	8,525	5.4	11,466
300-399	4	4	1.4	1.0	0.3	10.5	10,410	4.3	12,216
400-499	3	3	1.3	1.0	0.3	11.0	10,862	3.3	10,379
500-749	11	9	6.7	4.9	1.8	45.5	9,216	21.5	11,977
750-999	5	4	4.4	3.3	1.0	32.5	9,749	13.5	13, 131
1,000-Plus	5	5	14.2	9.5	4.7	105.1	11,091	58.8	12,406

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Stocks and work in progress. 1983-1987 All United Kingdom businesses classified to the Industry,

Total 851 799 42.1 30.6 11.2 290.0 9,467 135.4 12,116

(a) Businesses employing fewer than 20 persons are not required to complete census returns. Because of this, data for these businesses 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 businesses shown in each size group. Because an enterprise may own businesses 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 £51.9 million. The remuneration of outworkers on returns received - also excluded from the table - was £116 thousand.

(d) Gross value added data relate to businesses employing 1-199.

) for the 1987 Choses a new systems of reporting (company reporting) was intraduced whereby constructors were asked to include all activities curried on by the business (including any non-production activity). The estimated affect of the revised system has been to morease both emotoprovet and total sales by 1916.

teglanet distribution of employ Ausary det Schedt 25 baseses envised to be industry

Total sales and work	Gross output	Net output		Gross value added at
done		output		factor cost
		Total	per head	Total
North		2.9	7.0	
£ million	£ million	£ million	£	£ million
271.1	271.0	137.5	16,868	(d)
110 0	117.9	59.2	19,870	157.9(d)
116.8				
116.0	114.2	74.0	24, 471	62.2
66.7	67.0	35.3	26,129	30.1
63.7	64.8	41.7	31,506	26.0
272.3	266.3	167.0	24,797	132.2
148.6	153.8	86.1	19,716	70.6
764.4	767.3	427.2	30,048	294.5
1,819.4	1,822.3	1,028.0	24,391	773.5

Inited Kingdom businesses classified to the

Net capital Total stocks expenditure and work in progress at end of year per head £ £ million £ million (d) 17.3 33.7 14,225(d) 15.2 5.9 20,576 10.5 10.7 22,249 4.4 12.9 19,618 -1.7 12.4 19,624 7.3 33.6 16, 169 14.2 41.1 20,715 42.2 84 4 18,352 100.1 244.0

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Percentage analysis of twelve-month periods covered by returns received for the 1987 Census by number of returns and total employment

Accounting yea	ar ended	rstlyr -	Perc rece	entage of total ived	returns	Wages antel	and a second sec	age of tota ment	Total sales
1987 Apri	il 6-30	5		3.4				2.0	whob
May	,			3.4				0.4	
June				4.5				1.9	
July	•			-				-	
Aug	ust			- lotoT				T-tal	
Sept	tember			4.5				5.2	
Octo	ober			2.3				1.5	
Nov	ember			9.1			1	12.9	
Dece	ember			31.8			2	26.3	
1988 Jani	lary			8.0				7.0	
	ruary			3.4				2.3	
	arch - 5 April			29.5				10.6	
100-388				(6)8.5812					
100 000	10.01	- 10	853,623	8-50-6	0.5.25			14 - <del>15 - 16</del> -	<u>0.000</u>
TABLE 6									
Operating ratio	- 1002 1007								

Operating ratios, 1983-1987

All United Kingdom businesses classified to the industry

	Unit	1983	1984	1985	1986	1987
Gross output per head	£	28,804	33,087	35,587	37,960	43,238
Net output per head	£	14,803	17,807	19, 137	21, 193	24, 391
Gross value added per head	£	11,616	14,095	15, 155	17,223	18,352
Gross value added as a percentage of gross output	%	40	43	43	45	42
Ratio of gross output to stocks		5.8	6.0	6.0	6.5	7.5
Wages and salaries as a percentage of gross value added	%	68	58	59	54	55
Ratio of operatives to administrative, echnical and clerical employees		2.8	2.7	2.9	3.0	2.7
Vages and salaries per operative	£	7,569	7,831	8,561	8,750	9,467
Vages and salaries per administrative, echnical and clerical employee	£	9,054	9,496	10,235	11,302	12,116
let capital expenditure per head	f	1,439	1,848	1,639	1,316	2,375
Net capital expenditure as a percentage of gross value added	%	12	13	11	8	13

# TABLE 7

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1987 All United Kingdom businesses classified to the industry

Area		Total employme (a)	ent	Net capi expendit (b)		Net out; (c)	out	Gross va added a factor co (c)	t
าเกิด อากอากอีสีชีวิต Land anistina bill	50 403. Ageib	Thousand	of	£ million	per cent of	£ million	per cent of	£ million	per cent of
			United Kingdom		United Kingdom		United Kingdon	e and industrie	United Kingdom
Standard regions of En	gland								
North		2.9	7.0	8.8	8.8	57.5	5.6	47.0	6.1
Yorkshire and Humberside		7.6	17.9	21.3	21.3	194.6		146.8	
East Midlands		¥	8.428	*	.*	*	24. Starb	Arone bes and	¥etal sa
East Anglia		1.5	3.5	2.3	2.3	39.4	3.8		3.6
South East		6.1	14.5	17.8	17.7	121.4	11.8	88.5	11.4
South West		*	*	*	*	*	*	a of materials	
West Midlands		5.4	12.8	8.0	8.0	116.5	11.3	89.6	11.6
North West		8.4	19.9	20.2	20.2	244.3	23.8	185.6	24.0
ngland	pangligore	36.9	87.5	89.3	89.2	876.7	85.3	663.1	85.7
Vales		2.1	5.1	3.4	3.3	72.2	7.0	47.3	6.1
cotland		2.5	6.0	6.5	6.5	68.4	6.7	55.5	7.2
Great Britain	9.2	41.5	98.5	99.1	99.0	1,017.2	99.0	765.9	99.0
lorthern Ireland		0.6	1.5	1.0	1.0	10.8	1.0	7.6	
	was, 1867							m-industrial si	Devisaei
Jnited Kingdom		42.1	100.0		100.0	1,028.0	100.0	773.5	100.0
<ul> <li>(a) Average number</li> <li>(b) New building wor machinery.</li> <li>(c) Where a census r each address was region was obtain</li> </ul>	k plus acqui eturn cover s made by a ned by aggre	sitions less o ed addresses ssuming that gating estim	disposals of s in two or m t net output nates of net	land and ex nore regions was proport	isting build s, an estima tionate to e	ings, vehicle ite of the ne mployment.	es and pla t output a An estim t region.	nt and ttributable to ate for each	
added at factor c	ost was trea	ted similarly	·						

Area		Total employme (a)	ent	Net capi expendi (b)		Net out (c)	put	Gross va added a factor co (c)	t
Laña Granca Granda estas Laña eniseira (GTB aña	403 Agni	Thousand	per cent of United	£ million	per cent of United	£ million	per cent of United	£ million	per cent of United
			Kingdom		Kingdom		Kingdon		Kingdom
Standard regions of Eng	gland								
North		2.9	7.0	8.8	8.8	57.5	5.6	47.0	6.1
Yorkshire and Humberside		7.6	17.9	21.3	21.3	194.6		146.8	
East Midlands		*	8.028	*	*	*	in in the	ine and work	¥etal sa
East Anglia		1.5	3.5	2.3	2.3	39.4	3.8	28.1	3.6
South East		6.1	14.5	17.8	17.7	121.4	11.8	88.5	11.4
South West		*	*	*	*	- 610	ni seu <b>t</b> o	of materials	Putohane
West Midlands		5.4	12.8	8.0	8.0	116.5	11.3	89.6	11.6
North West	2.2	8.4	19.9	20.2	20.2	244.3	23.8	185.6	24.0
ngland		36.9	87.5	89.3	89.2	876.7	85.3	663.1	85.7
Vales		2.1	5.1	3.4	3.3	72.2	7.0	47.3	6.1
cotland	246.1	2.5	6.0	6.5	6.5	68.4	6.7	55.5	7.2
ireat Britain		41.5	98.5	99.1	99.0	1,017.2	99.0	765.9	99.0
lorthern Ireland		0.6	1.5	1.0	1.0	10.8	1.0	7.6	
Jnited Kingdom	955, 1967 moses class 1 . 2	42.1	100.0		100.0	1,028.0	100.0	773.5	100.0
<ul> <li>(a) Average number</li> <li>(b) New building wor machinery.</li> </ul>								nt and	
(c) Where a census r each address was region was obtain added at factor co	made by a ed by aggre ost was trea	ssuming that gating estim	t net output ' nates of net '.	was propor	tionate to e	mployment.	An estim It region.	ttributable to ate for each Gross value	

PA247

Area		Total employme (a)	ant	Net capi expendi (b)		Net out (c)	put	Gross v added a factor c (c)	t
Land State existing work	403. Ago	Thousand	per cent of United	£ million	per cent of United	£ million	per cent of United	£ million	per cent of United
			Kingdom		Kingdom		Kingdon	1	Kingdom
Standard regions of Engl	land								
North		2.9	7.0	8.8	8.8	57.5	5.6	47.0	6.1
Yorkshire and Humberside		7.6	17.9	21.3	21.3	194.6		146.8	
East Midlands		*	8.008	*	.*	*	in in the	ing and more	¥etal sa
East Anglia		1.5	3.5	2.3	2.3	39.4	3.8	28.1	3.6
South East		6.1	14.5	17.8	17.7	121.4	11.8	88.5	11.4
South West		×	*	*	*	- 610	ni seu <b>t</b> o	of materials	Putohane
West Midlands		5.4	12.8	8.0	8.0	116.5	11.3	89.6	11.6
North West	2.2	8.4	19.9	20.2	20.2	244.3	23.8	185.6	24.0
England		36.9	87.5	89.3	89.2	876.7	85.3	663.1	85.7
Wales		2.1	5.1	3.4	3.3	72.2	7.0	47.3	6.1
Scotland	246.1	2.5	6.0	6.5	6.5	68.4	6.7	55.5	7.2
Great Britain		41.5	98.5	99.1	99.0	1,017.2	99.0	765.9	99.0
Northern Ireland		0.6	1.5	1.0	1.0	10.8	1.0	7.6	
United Kingdom	7.887 . es eses class 1 . 2	42.1	100.0	100.1	100.0	1,028.0	100.0	773.5	100.0
<ul><li>(a) Average number er</li><li>(b) New building work machinery.</li></ul>								nt and	
(c) Where a census ret each address was region was obtaine added at factor cos	made by as d by aggre st was trea	suming that gating estim	net output nates of net	was propor	tionate to e	mployment.	An estim It region.	ate for each Gross value	

# PA247

Output and costs, 1987 All United Kingdom businesses classified to each Activity Heading within the industry

				2471	2478	2479
Enterprises(a)		Number	(b)	277	54	477
Businesses				294	59	498
Sales of goods produced		£ millio	n	714.4	403.4	478.5
Work done and industrial services rendered		. United Kingdom		balad United K <b>*</b> gdom	*	1.8
Capital goods produced for use wit the business				*	*	nale ar brabie
Non-industrial services rendered		8.8		0.1	0.6	2.1
Goods merchanted or factored		e "re)		135.5	2.7	34.0
Total sales and work done		."31.8		894.8	407.1	517.5
ncrease during the year, work in progress and goods on hand for sal	le	٤.s ۵.e		7.4	2.5	-7.0
Gross output		5.513.4		902.2	409.6	510.5
Purchases of materials for use in p luction, packaging and fuel	ro-	- * _28.5 		319.7	145.2	166.4
Purchases of goods for merchantin actoring	g or	2.0.2		100.6	2.2	27.8
ncrease during the year, stocks of naterials, stores and fuel		89.2		7.4	0.6	1.1
eceived		8.8		14.2	16.8	10.6
Net output		u.		475.2	246.1	306.7
otal employment		Thousar	d	17.5	9.2	15.5
Net output per head		£		27,203	26,883	19,757
Cost of non-industrial services eceived						

Hire of vehicles, plant and the second machinery	£ million	10.4	2.1	5.1
Rents of industrial and commercial buildings	olume enti-rise and fiel o	7.5	2.8	2.6
Commercial insurance premiums	ribliod gritting boildin	4.7	2.6	3.1
Bank charges		0.8	0.1	0.5
Other non-industrial services	more regions, en estimate Livies prophritonam te em	94.2	31.9	58.1
Licensing of motor vehicles	not the second of the second	0.7	0.1	0.1
Rates, excluding water rates		11.8	8.7	6.7
Gross value added at factor cost		345.1	197.9	230.6
Gross value added at factor cost per head	f 7.563	19,754	21,612	14,851

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

# TABLE 9

Capital expenditure, 1987 All United Kingdom businesses classified to each Activity Heading within the industry

		2471	2478
Land and buildings			
New building work		3.7	0.1
Land and existing build	ings		
Acquisitions		* 17, 203	*
Disposals		* 10.754	*
Net		7.2	3.6
Plant and machinery			
Acquisitions		* 10.0	*
Disposals		*	*
Net		34.9	27.1
Vehicles			
Acquisitions		8.9	0.5
Disposals		1.8	0.1
Net		7.1	0.4
Total net capital exp	enditure	49.2	31.1

TABLE 10

Stocks and work in progress, 1987 All United Kingdom businesses classified to each Activity Heading within the industry

one of over 300	2471	2478	2479	
10a Increase during year				
Materials, stores and fuel	7.4	0.6	andiannua	
Work in progress	-0.4	-	2.2	
Goods on hand for sale	7.8	2.5	-9.2	
Total	14.9	3.1	-5.9	
revised prochure	<u>listing al</u>	the Busi	ness Menitors	
10b Value at end of year				
Materials, stores and fuel	47.7	14.0	29.5	
			20.0	
	7.7	0.2	17.1	
Work in progress				
Work in progress Goods on hand for sale Total	7.7	0.2	17.1	

14

	f million
2479	37
0.2	
2.1	
3.6	
to ege <sup>-1.3</sup>	
24.4	
4.1	
1.4	
0.6	
0.8	
19.7	

£ million

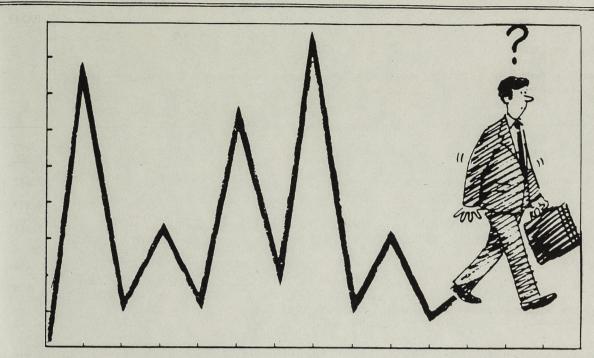
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**Operating ratios, 1987** 

All United Kingdom businesses classified to each Activity Heading within the industr

usingraa	Unit	2471	2478	2479
	i co	714.4	- 203 d	ALOW DUIDHDG ABOAT
Gross output per head	£	51,653	44, 744	32,882
Net output per head	£	27,203	26,883	19,757
Gross value added per head	£	19,754	21,612	14,851
Gross value added as a percentage of gross output	%	38	48	45
Ratio of gross output to stocks		10.0	6.1	5.9
Wages and salaries as a percentage of gross value added	%	52	55	60
Ratio of operatives to administrative, technical and clerical employees		2.2	3.7	3.1
Wages and salaries per operative	3.0 £	9,637	10,978	8,349
Wages and salaries per administrative, technical and clerical employee	£	11,695	14,860	11,318
Net capital expenditure per head	£	2,819	3,401	1,270
Net capital expenditure as a percentage of gross value added	%	14	16	9
a Contrada		19.4	16.0	10.6
			8.7 el	

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