CENTRAL STATISTICAL OFFICE

Business Monitor

Report on the Census of Production

1990

PA221

Iron and steel industry



BUSINESS MONITORS

SPECIAL NOTE FOR PURCHASERS

The Central Statistical Office, aided by industry and commerce, provides a great deal of the statistical data required by Government for monitoring the economy.

Much of this data is published in the form of Business Monitors, giving information about production, sales, employment and investment.

Full details of the range of Business Monitors are available in the form of a Business Monitor brochure, which can be obtained from the Librarian, Central Statistical Office, Government Buildings, Cardiff Road, Newport, Gwent, NP9 1XG. Telephone (0633) 812973. Telex 497121; answer back BSONPT G.

Standing Order Service

Placing a standing order with HMSO Books enables a customer to receive future editions of this title and/or other titles in this series automatically as published.

This saves the time, trouble and expense of placing individual orders and avoids the problem of knowing when to do so.

For details please write to HMSO Books (PC 13A/1), Publications Centre, PO Box 276, London SW8 5DT (or telephone 071-873 8466 for standing orders).

The standing order service also enables customers to receive automatically as published all material of their choice which additionally saves extensive catalogue research. The scope and selectivity of the service has been extended by new techniques, and there are more than 3,500 classifications to choose from. A special leaflet describing the service in detail may be obtained on request.

PA221



Report on the 1990

Iron and steel industry

Presented by the Chancellor of the Exchequer to Parliament in pursuance of the Statistics of Trade Act 1947 (10 & 11 Geo.6 Cha.39 sec 7)

CENTRAL STATISTICAL OFFICE

BUSINESS MONITOR

A publication of the Government Statistical Service

Census of Production

BUSINESS MONITORS MAKING UP THE COMPLETE CENSUS REPORT

PA1001	Introductory notes	PA362	Railway ar
PA111	Coal extraction and manufacture of solid fuels	PA363	Cycles and
PA120	Coke ovens	PA364	Aerospace
PA130	Extraction of mineral oil and natural gas	PA365	Miscellane
PA140	Mineral oil processing	PA371	Measuring
PA161	Production and distribution of electricity		apparatus
PA162	Public gas supply	PA372	Medical an
PA170	Water supply industry		appliances
PA221	Iron and steel industry	PA373	Optical pre
PA222	Steel tubes		equipment
PA223	Drawing, cold rolling and cold forming of steel	PA374	Clocks, wa
PA224	Non-ferrous metals industry	PA411	Organic oi
PA231	Extraction of stone, clay, sand and gravel	PA412	Slaughteri
PA239	Extraction of miscellaneous minerals (including salt)		products
PA241	Structural clay products	PA413	Preparatio
PA242	Cement, lime and plaster	PA414	Processing
PA243	Building products of concrete, cement or plaster	PA415	Fish proce
PA244	Asbestos goods	PA416	Grain millin
PA245	Working of stone and other non-metallic minerals	PA419	Bread, bise
PA246	Abrasive products	PA420	Sugar and
PA247	Glass and glassware	PA421	Ice-cream,
PA248	Refractory and ceramic goods	PA422	Animal fee
PA251	Basic industrial chemicals	PA423	Starch and
PA255	Paints, varnishes and printing ink	PA424	Spirit distill
PA256	Specialised chemical products mainly for industrial and	PA426	Wines, cid
	agricultural purposes	PA427	Brewing an
PA257	Pharmaceutical products	PA428	Soft drinks
PA258	Soap and toilet preparations	PA429	Tobacco in
PA259	Specialised chemical products mainly for household	PA431	Woollen an
	and office use	PA432	Cotton and
PA260	Production of man-made fibres	PA433	Throwing,
PA311	Foundries	PA434	Spinning a
PA312	Forging, pressing and stamping	PA435	Jute and p
PA313	Bolts, nuts, etc.; springs; non-precision	PA436	Hosiery an
	chains; metals treatment	PA437	Textile finis
PA314	Metal doors, windows, etc.	PA438	Carpets an
PA316	Hand tools and finished metal goods	PA439	Miscellane
PA320	Industrial plant and steelwork	PA441	Leather (ta
PA321	Agricultural machinery and tractors	PA442	Leather go
PA322	Metal-working machine tools and engineers' tools	PA451	Footwear
PA323	Textile machinery	PA453	Clothing, h
PA324	Machinery for the food, chemical and related indus-	PA455	Household
	tries; process engineering contractors	PA456	Fur goods
PA325	Mining machinery, construction and mechanical	PA461	Sawmilling
	handling equipment	PA462	Manufactur
PA326	Mechanical power transmission equipment		further proc
PA327	Machinery for printing, paper, wood, leather, rubber,	PA463	Builders' ca
	glass and related industries: laundry and dry cleaning	PA464	Wooden co
	machinery	PA465	Miscellane
PA328	Miscellaneous machinery and mechanical equipment	PA466	Articles of a
PA329	Ordnance, small arms and ammunition		brooms
PA330	Manufacture of office machinery and data processing	PA467	Wooden an
	equipment		fittings
PA341	Insulated wires and cables	PA471	Pulp, paper
PA342	Basic electrical equipment	PA472	Conversion
PA343	Electrical equipment for industrial use, and batteries	PA475	Printing and
1 /10 40	and accumulators	PA481	Rubber pro
PA344	Telecommunication equipment, electrical measuring	PA481 PA483	Processing
1 7044	equipment, electronic capital goods and passive	PA403 PA491	Jewellery a
PA345	electronic components Miscellaneous electronic equipment	PA492	Musical ins
PA345 PA346		PA493	Photograph
PA346 PA347	Domestic-type electric appliances	DAIOA	laboratories
PA347 PA351	Electric lamps and other electric lighting equipment	PA494	Toys and s
	Motor vehicles and their engines	PA495	Miscellaneo
PA352	Motor vehicle bodies, trailers and caravans	PA500	Constructio
PA353	Motor vehicle parts	PA1002	Summary v
PA361	Shipbuilding and repairing		

and tramway vehicles nd motor cycles e equipment manufacturing and repairing neous vehicles g, checking and precision instruments and and surgical equipment and orthopaedic recision instruments and photographic atches and other timing devices oils and fats ring of animals and production of meat and byon of milk and milk products ng of fruit and vegetables essing ling scuits and flour confectionery d sugar by-products n, cocoa, chocolate and sugar confectionery eding stuffs d miscellaneous foods illing and compounding der and perry and malting industry and worsted industry nd silk industries texturing, etc. of continuous filament yarn and weaving of flax, hemp and ramie polypropylene yarns and fabrics nd other knitted goods ishing and other textile floorcoverings eous textiles tanning and dressing) and fellmongery oods hats and gloves d textiles and other made-up textiles g, planing, etc. of wood ure of semi-finished wood products and ocessing and treatment of wood carpentry and joinery containers eous wooden articles cork and plaiting materials, brushes and and upholstered furniture and shop and office er and board on of paper and board nd publishing oducts g of plastics and coins struments phic and cinematographic processing sports goods eous manufacturing industries volume

PA221 IRON AND STEEL INDUSTRY

The information in this report relates to businesses classified to the Iron and steel industry, Group 221 in the Standard Industrial Classification Revised 1980. The industry Group covers the following Activity Heading:-

2210 Iron and steel industry

(Note: Iron and steel industry as defined by the European Coal and Steel Community in the Treaty of Paris 1951). Units producing iron and steel products described in Annex 1 to the Treaty. This incudes the manufacture of pig iron, spiegeleisen, high-carbon ferromanganese, primary liquid steel for casting, steel ingots for remelting and forging, semi-finished products sauch as blooms, billets, slabs and bars, hot rolled wide coils other than finished products, hot finished products such as rails, sleepers, sole-plates, joists, heavy sections 80 mm and over, sheet piling, bars and sections of less than 80 mm and flats of less than 150 mm, wire rod, tube rounds and squares, hot-rolled hoop and strip, hot-rolled sheets under 3 mm, plats and sheets of 3 mm thickness and over, and universal plates of 150 mm and over. The manufacture of coated products, eg tinplate, terneplate, blackplate and galvanised sheets is also included as well as cold rolled sheet under 3 mm, electrical sheet and strip for tinplate. Subsequent work on the same site such as tube making, other cold forming, casting and forging should be separately identified and classified to Groups 222, 223, 311 or 312 as appropriate.

For a full description of the 1980 classification see Standard Industrial Classification Revised 1980, obtainable from Her Majesty's Stationery Office, price £4.25.

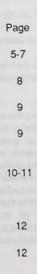
In interpreting the data in the tables it is essential to bear in mind the notes and definitions which commence on page 5.

LIST OF CONTENTS

-town and and definition

Explanato	ry notes and definitions
Table 1	Output and costs, 1986-1990
Table 2	Capital expenditure, 1986-1990
Table 3	Stocks and work in progress, 1986-1990
Table 4	Employment, labour costs, output, net capital expenditure and stocks and work in progress by size of total employment, 1990
Table 5	Percentage analysis of twelve-month periods covered by returns received for the 1990 Census by number of returns and total employment
Table 6	Operating ratios, 1986-1990
Table 7	Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1990

London: HMSC2



PA221

4

EXPLANATORY NOTES AND DEFINITIONS NTRODUCTION

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 (PA 1001).

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 £4.25.

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 non-production 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.

5. 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.

6. 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

7. A register of businesses throughout the United Kingdom is held on the CSO computer and provides the basis for CSO 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

8. The Annual Census and other CSO inquiries provide a major source of information for checking the register and updating employment data. Where businesses do not make returns to these inquiries, estimates of employment are imputed from VAT turnover. For businesses which have an imputed employment of 11 or more, the estimates are checked by means of register proving forms. For businesses on the register making returns to the Quarterly or Annual Sales Inquiries, industrial classification is reviewed annually and is derived from an analysis of their commodity sales. For other businesses the classification is obtained either from VAT sources or from the register proving forms. Estimates of employment made by the CSO and the Department of Employment differ because they are derived from two separate inquiries and use different procedures and employment definitions.

COVERAGE

excluded

10. Under the sampling arrangements agreed for the 1990 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 businesses in the sample size hand or where response in earlier years was poor. About 16,800 forms were despatched in the United Kingdom for the 1990 Census.

PERIODCOVERED 11. Businesses were asked to make returns for the calendar year 1990 but, where this was not possible, returns for business years ending between 6 April 1990 and 5 April 1991 were accepted. Returns covering fewer than twelve months were accepted for businesses which had started or ceased trading during the year.

ESTIMATION smaller businesses

14. The accuracy of the totals produced by adding together estimates and returned data is mainly dependent on the level of response. The extent to which businesses making satisfactory returns account for the total employment of any industry is shown as a percentage in footnote (a) to table 1. Thus the accuracy of the data published in an Industry Report where 95 per cent of the employment in the industry is covered by the returns made will, in general, be better than that in an Industry Report where the coverage is only 70 per cent.

15. Additionally, the extent to which individual headings in an Industry Report are related to employment should be taken into account in assessing the accuracy of estimated data. 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.

DERTAKINGS

"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 onthat 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 deducted from the total disclosed."

7. 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

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

13. Within employment size groups in each industry, the "average per head" is calculated for each census variable by dividing the total returns 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.

SUPPRESSION OF INFORMATION RELATING TO INDIVIDUAL UN-

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

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 1990

18. The 1990 Census reverted to a 'slimline' format with fewer businesses being required to complete forms than in 1989. The questions asked in 1989 on road transport costs and on postal and telecommunications costs were dropped but additional questions were included on capital and current costs associated with pollution abatement

SYMBOLS USED

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

- not available
- nil or less than half the final digit shown
- * information suppressed to avoid disclosure
- R 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. From 1988 contributors were asked to include the value of assets acquired as lessees under finance leasing arrangements. 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. 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 is 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 NEWBUILDING 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. Up to 1987 contributors were asked to include annual payments for assets acquired on a finance leasing basis. From 1988 they were asked to include the total value of such assets as capital expenditure during the year in which they were acquired. The cost of non-industrial services received 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

EMPL OVMENT

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 except 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 canteen 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 mmission are excluded

FNTERPRISE

34. This is defined as one or more businesses under common owner ship 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 PRODUCTION AND PACKAGING AND FUEL and PURCHASES OF GOODS FOR MER-CHANTING 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

40. This is calculated by dividing NET OUTPUT by total EMPLOY-MENT

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

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 MER-CHANTING OR FACTORING

43. 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 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 EXPENDITURE, 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 draw-

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.

STOCKS

WAGES AND SALARIES

47. This represents amounts paid during the year to ADMINISTRA-TIVE, TECHNICAL AND CLERICAL EMPLOYEES and to OPERA-TIVES. 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 IN-SURANCE CONTRIBUTIONS ETC. are excluded.

WORK IN PROGRESS

backs, 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.

SALES OF GOODS PRODUCED

45. This represents sales of goods during the year, 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 values '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.

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.

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.

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.

TABLE 1

Ente

Output and costs, 1986-1990 All United Kingdom businesses classified to the industry (a)

Unit

1986

1987

1988

1989

PA221

1990

TABLE 2

Capital expenditure, 1986-1990 (a) All United Kingdom businesses classified to the industry

eress Gross (Frenk output	o) seivällä bhs as	1986	1987	198
Land and buildings				
New building work		7.9	14. 8	12.
Land and existing buildin	igs			
Acquisitions		3. 2		1.
Disposals		2. 1	•	2.
Net		9.0	16. 1	11.
Plant and machinery				
Acquisitions		288. 4	276. 7	330.
Disposals		5.6	3. 3	3.
Net		282. 8	273. 5	327.
Vehicles				
Acquisitions		5.9	3. 7	3.
Disposals		1.6	0.8	0.
Net		4. 2	2. 9	2.
Total net capital exper	nditure	296. 0	292. 5	341.

(a) From 1988 contributors were asked to include as capital expenditure the value of assets acquired under finance leasing arrangements. The total value of these assets is estimated to be £429 thousand for 1990.

TABLE 3

Stocks and work in progress, 1986-1990 All United Kingdom businesses classified to the industry

						£ million
and the second second	1986	1987	1988	1989	1990	Value at end of 1990
		Inc	crease during	year		
Materials, stores and fuel	51.6	1.3	11. 1	13.6	-14. 4	537. 2
Work in progress	-66.6	48.0	73. 1	-50. 3	-60. 4	303. 7
Goods on hand for sale	8.7	-14.6	7. 1	-1.8	-4. 1	194. 9
Total	-6. 3	34. 6	91. 2	-38. 4	-78. 9	1, 035. 8
Total	-6. 3	34. 6	91. 2	-38.4	-/8.9	1, 035. d

s attimated for the industry at £128 d million

équived under finance lessing arrangements - ses Table 2.

Enterprises	Number	137	49(b)	24(b)	26	26
Businesses	roge"-days	171	75(b)	51(b)	52	51
Sales of goods produced	£ million	5, 243. 7	5, 657. 2	6, 507. 1	6, 882. 9(c)	6, 308. 2
Work done and industrial services rendered		46. 7	55. 0	53. 8	59. 5	61.3
Capital goods produced for use within the business	inal dia 1977 ary 404 Mary 404 Mary 404	3. 5	4. 9	4. 3	6. 7	7.2
Non-industrial services rendered		10.7	2.9	15.0	(c)	11.8
Goods merchanted or factored		27.4	5.0	22.8	20. 2	16.8
Total sales and work done	u na sis	5, 332. 0	5, 724. 9	6, 603. 0	6, 969. 2	6, 405. 1
Increase during the year, work in progress and goods on hand for sale		-57.8	33. 4	80. 2	-52.0	-64. 5
Gross output	"	5, 274. 2	5, 758. 3	6, 683. 2	6, 917. 2	6, 340. 7
Purchases of materials for use in pro- duction, packaging and fuel	н	3, 217. 1	3, 277. 8	3, 782. 2	3, 952. 9	3, 831. 9
Purchases of goods for merchanting or factoring		24. 1	3. 7	22.4	18. 7	16. 7
Increase during the year, stocks of materials, stores and fuel	u	51.6	1. 3	11. 1	13.6	-14. 4
Cost of industrial services received		230. 5	226. 4	254. 8	269. 1	327. 0
Net output	н	1, 854. 1	2, 251. 6	2, 634. 8	2, 690. 2	2, 150. 6
Total employment	Thousand	64.0	56.0	55. 2	54.7	50.8
Net output per head	£	28, 989	40, 211	47, 765	49, 181	42, 306
Cost of non-industrial services received						
Hire of vehicles, plant and machinery	£ million	31. 9	35. 3	41.3	55. 8	48.9
Rents of industrial and commercial buildings	and Andrews actuations of	2.6	1. 7	2. 5	2. 5	3. 4
Commercial insurance premiums		11.5	11.0	17.2	24.8	28. 2
Bank charges		1. 2	1.0	1.0	1.1	1.1
Other non-industrial services		234. 9	238.8	261. 2	270.8	266. 3
Licensing of motor vehicles	" bes	0.5	0.4	0.4	0.4	0. 5
Rates, excluding water rates		75.9	72.4	76. 3	76.8	72.0
Gross value added at factor cost	nos lio bokano	1, 495. 5	1, 891. 2	2, 234. 9	2, 258. 0	1, 730. 2
Gross value added at factor cost per head	£	23, 383	33, 774	40, 515	41, 280	34, 036

(a) Satisfactory returns accounted for 99 per cent of employment within the industry in 1990.

(b) The number of enterprises and businesses shown for this industry decreased in 1987 and 1988 as a result of reclassification.

8

(c) Non industrial services rendered included in sales of goods produced.

And when working on goods supplied by subtommer whether and provide the setting and subtom the setting and subtom to a subtom the setting and subtom to a subtom to the subtom to a subtom to the subt

			£ million
1988	1989	1990	Site (Jack Tele)
	(d) (d)		
12. 3		6. 0	
1.7		4. 2	
2.4		0. 7	
11.6	11. 7	9.4	
330. 9	420. 3	385. 9	
3. 1	7. 1	2. 2	
327. 7	413. 2	383. 7	
3. 1	4.0	2.6	
0.7	0. 9	0.8	
2.4	3. 0	1.8	
341. 7	427. 9	394. 9	

PA221

TABLE 4

- 20 20 20 EVA

Employment, labour costs, output, net capital expenditure and stocks and work in progress by size of total employment, 1990

All United Kingdom businesses classified to the industry (a)

Size group	Busin- esses	Enter- prises	Employment			Wages and	d salaries (c)			
The star blockey		(b)								
				Opera- tives	Administr- ative,tech- nical and clerical	Operatives	Operatives		Administrative, technical and clerical	
						Total	per	Total	per	
							head		head	
	9.4	11. 7.	11, 8		1.81 2.9	0.0		(0)		
	Number	Number	Thousand	Thousand	Thousand	£ million	£	£ millior	tem b.E. toat	
1-99	7	6	0.4	0.3	0. 1	4.0	12, 364	1. 9	15, 290	
100-199	12	11	1. 7	1.3	0.4	16.7	12, 734	5. 5		
200-Plus	32	14	48.7	34.2	14.4	553. 4	16, 174	258. 9		
						3, 783		200.0	3. Basida	

(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 £128.4 million.

(d) Net capital expenditure includes the value of assets acquired under finance leasing arrangements - see Table 2.

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

Total sales and work done	Gross output	Net output	ani	Gross value added at factor cost		
				all protonom	an an	
		Total	per head	Total	6.6	
£ million	£ million	£ million	£	£ millior	1	
54.8	54. 7	17.6	39, 138	(e)		
188. 0	186. 6	58. 3	33, 793	61.9	(e)	
6, 162. 3	6, 099. 4	2, 074. 8	42, 637	1, 668. 4		
6, 405. 1	6, 340. 7	2, 150. 6	42, 306	1, 730. 2	2	

ortal expenditure the value of assets sequired under finance

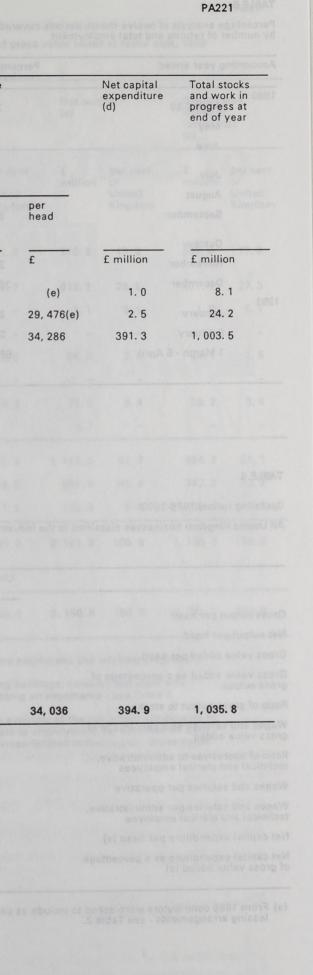


TABLE 5

PA221

TABLE 7

Percentage analysis of twelve-month periods covered by returns received for the 1990 Census by number of returns and total employment

Accounting year ended		Percentage of total returns received			Percentage of total employment			
1990	April 6-30		2. 2		tuqtuo	0. 1	nd work	
	May		-			_		
	June		O Tera-			Aliministri technical		
	July		-			ol <u>a</u> rical		
	August		- tertoT			Total		
	September		6.5			1. 2		
	October		-			-		
	November		2.2			0.3		
1991	December		32. 6			22. 1		
1001	January		2. 2			0.3		
	February		2. 2			0. 1		
	1 March - 5 April		52.2			76.0		

TABLE 6

Operating ratios, 1986-1990

All United Kingdom businesses classified to the industry

	Unit	1986	1987	1988	1989	1990
Gross output per head	£	82, 462	102, 834	121, 155	126, 457	124, 730
Net output per head	£	28, 989	40, 211	47, 765	49, 181	42, 306
Gross value added per head	£	23, 383	33, 774	40, 515	41, 280	34, 036
Gross value added as a percentage of gross output	%	28	33	33	33	27
Ratio of gross output to stocks		5. 1	5.8	6. 1	6.3	6. 1
Wages and salaries as a percentage of gross value added	%	49	39	35	37	49
Ratio of operatives to administrative, echnical and clerical employees		2.4	2.4	2.4	2.3	2.4
Nages and salaries per operative	£	11, 114	12, 807	13, 957	15, 069	16,013
Nages and salaries per administrative, echnical and clerical employee	£	12, 300	13, 460	15, 087	15, 749	17, 780
Net capital expenditure per head (a)	£	4, 628	5, 223	6, 195	7, 822	7, 768
Vet capital expenditure as a percentage of gross value added (a)	%	20	16	15	19	23

(a) From 1988 contributors were asked to include as capital expenditure the value of assets acquired under finance leasing arrangements - see Table 2.

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1990 All United Kingdom businesses classified to the industry

Area	Total employment (a)		Net capital expenditure (b)		Net output (c)		Gross value added at factor cost (c)	
	Thousand	l per cent of United Kingdom	£ million	per cent of United Kingdom	£ million	per cent of United Kingdom	£ million	per cent of United Kingdon
Standard regions of England								
North	7.8	15.3	86. 2	21.8	370. 8	17. 2	307.4	17.8
Yorkshire and Humberside	18. 2	35. 7	109. 3	27.7	612. 2	28.5	471.9	27. 3
East Midlands	0. 1	0. 2	0.1	-	2. 1	0. 1	1.6	0. 1
East Anglia	-	-	-	-	-	-	-	-
South East	1.0	1. 9	9. 8	2.5	54.9	2.6	44. 1	2.6
South West	-		- 1. March	-	-	- 7		-
West Midlands	1.6	3. 1	1.4	0.3	72.2	3. 4	59. 2	3. 4
North West	-		-		0. 1		- 67-	- ///
England	28.6	56. 3	206. 7	52.4	1, 112. 3	51.7	884. 3	51. 1
Wales	18. 5	36.5	183. 4	46.5	891.4	41.4	747.2	43. 2
Scotland	3. 7	7. 2	4. 7	1. 2	146.9	6. 8	98. 7	5. 7
Great Britain	50.8	100. 0	394. 9	100. 0	2, 150. 6	100. 0	1, 730. 2	100. 0
Northern Ireland	uninans -	15	1-	-	-	-	mary 12	-(-
United Kingdom	50.8	100. 0	394. 9	100. 0	2, 150. 6	100. 0	1, 730. 2	100. 0

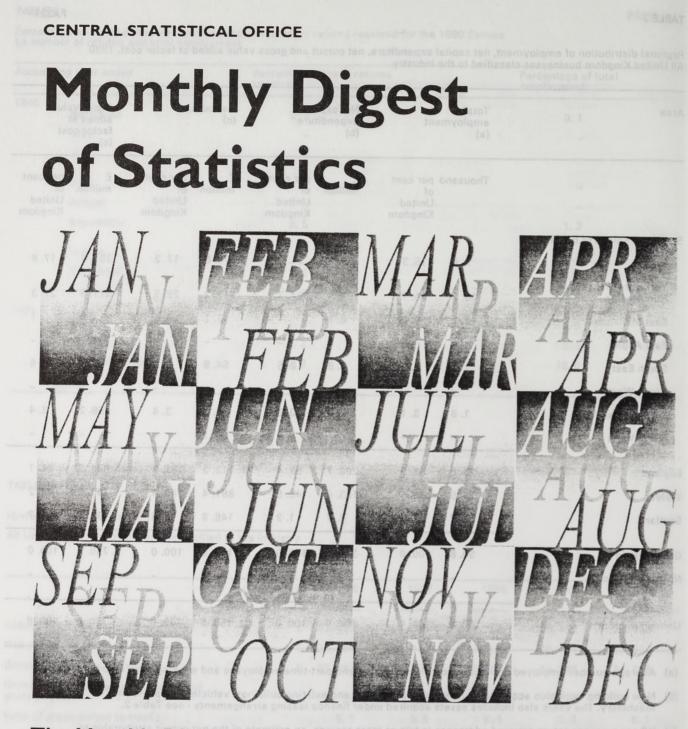
(a) Average number employed during the year, including full and part-time employees and working proprietors.

(b) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery. The value also includes assets acquired under finance leasing arrangements - see Table 2.

(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.

services, production and output menergy, engineering

13



The Monthly Digest of Statistics provides basic information on 20 subjects including population, employment and prices, social services, production and output, energy, engineering, construction, transport, catering, national and overseas finance and the weather. It contains mostly runs of monthly and quarterly estimates for at least two years and annual figures for several more.

Price £6.50

Central Statistical Office publications are published by HMSO. They are obtainable from HMSO bookshops and through booksellers.) BUIL

Timely information in a convenient form

MONTHLY Credit business Englineering sales and orders Englineering sales and orders Machine tools Machine tools Machine tools Overseas travel and tourism OUARTERLY Acquisitions and mergers Acquisitions and mergers Company liquidity Company liquidit



Just a sample of the many titles available

For further information, please contact:

Ian Bushnell Librarian, Central Statistical Office, Government Buildings, Cardiff Road NEWPORT, Gwent NP9 1XG Tel: 0633 812399



HMSO publications are available from:

HMSO Publications Centre

(Mail and telephone orders only) PO Box 276, London, SW8 5DT Telephone orders 071-873 9090 General enquiries 071-873 0011 (queuing system in operation for both numbers)

HMSO Bookshops

HMSO Bookshops
49 High Holborn, London, WCIV 6HB 071-873 0011 (counter service only)
258 Broad Street, Birmingham, BI 2HE 021-643 3740
Southey House, 33 Wine Street, Bristol, BSI 2BQ (0272) 264306
9-21 Princess Street, Manchester, M60 8AS 061-834 7201
80 Chichester Street, Belfast, BTI 4JY (0232) 238451
71 Lothian Road, Edinburgh EH3 9AZ 031-228 4181

HMSO's Accredited Agents (see Yellow Pages)

and through good booksellers

'Brief extracts from this publication may be reproduced provided the source is fully acknowledged. Proposals for reproduction of larger extracts should be addressed to the Librarian, Central Statistical Office, Government Buildings, Cardiff Road, Newport, Gwent NP9 IXG.'



£8.20 net

© Crown copyright 1992

Printed in the United Kingdom by HMSO at Cardiff from CRC supplied Dd. 0292625 C3 Cdf 101737 2/92