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**Business Statistics Office** 

# **BUSINESS MONITOR**

Report on the Census of Production

Machinery for the food, chemical and related industries; process engineering contractors

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**HMSO** 



A publication of the Government Statistical Service

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# **BUSINESS MONITOR**

A publication of the Government Statistical Service

Report on the Census of Production 1983

Machinery for the food, chemical and related industries; process engineering contractors

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

Department of Trade and Industry
Business Statistics Office

London: Her Majesty's Stationery Office

#### BUSINESS MONITORS MAKING UP THE COMPLETE CENSUS REPORT

PA352 Motor vehicle bodies, trailers and caravans

Railway and tramway vehicles

PA364 Aerospace equipment manufacturing and repairing

PA371 Measuring, checking and precision instruments and

PA353 Motor vehicle parts
PA361 Shipbuilding and repairing

apparatus

PA363 Cycles and motor cycles

Miscellaneous vehicles

PA362

PA365

PA1001		PA372	Medical and surgical equipment and orthopaedic appliances
PA111	Coal extraction and manufacture of solid fuels	PA373	Optical precision instruments and photographic
PA120	Coke ovens	FA3/3	equipment
PA130 PA140	Extraction of mineral oil and natural gas  Mineral oil processing	PA374	Clocks, watches and other timing devices
PA161	Production and distribution of electricity	PA411	Organic oils and fats
PA162	Public gas supply	PA412	Processing of bacon, meat and poultry
PA170	Water supply industry	PA413	Preparation of milk and milk products
PA210	Extraction and preparation of metalliferous ores	PA414	Processing of fruit and vegetables
PA221	Iron and steel industry	PA415	Fish processing
PA222	Steel tubes	PA416	Grain milling
PA223	Drawing, cold rolling and cold forming of steel	PA419	Bread, biscuits and flour confectionery
PA224	Non-ferrous metals industry	PA420	Sugar and sugar by-products
PA231	Extraction of stone, clay, sand and gravel	PA421	Ice-cream, cocoa, chocolate and sugar confectionery
PA239	Extraction of miscellaneous minerals (including salt)	PA422	Animal feeding stuffs
PA241	Structural clay products	PA423	Starch and miscellaneous foods
PA242	Cement, lime and plaster	PA424	Spirit distilling and compounding
PA243	Building products of concrete, cement or plaster	PA426	Wines, cider and perry
PA244	Asbestos goods	PA427	Brewing and malting
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PA247	Glass and glassware	PA431	Woollen and worsted industry
PA248	Refractory and ceramic goods	PA432	Cotton and silk industries
PA251 PA255	Basic industrial chemicals	PA433 PA434	Throwing, texturing, etc. of continuous filament yarr
PA256	Paints, varnishes and printing ink Specialised chemical products mainly for industrial	PA435	Spinning and weaving of flax, hemp and ramie  Jute and polypropylene yarns and fabrics
FA250	and agricultural purposes	PA436	Hosiery and other knitted goods
PA257	Pharmaceutical products	PA437	Textile finishing
PA258	Soap and toilet preparations	PA438	Carpets and other textile floorcoverings
PA259	Specialised chemical products mainly for household	PA439	Miscellaneous textiles
	and office use	PA441	Leather (tanning and dressing) and fellmongery
PA260	Production of man-made fibres	PA442	Leather goods
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PA320	Industrial plant and steelwork		further processing and treatment of wood
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PA322	Metal-working machine tools and engineers' tools	PA464	Wooden containers
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PA325	Mining machinery, construction and mechanical	PA467	Wooden and upholstered furniture and shop and
PA326	handling equipment	DA 474	office fittings
PA327	Mechanical power transmission equipment	PA471	Pulp, paper and board
1 A321	Machinery for printing, paper, wood, leather, rubber, glass and related industries: laundry and dry cleaning	PA472 PA475	Conversion of paper and board
	machinery	PA481	Printing and publishing Rubber products
PA328	Miscellaneous machinery and mechanical equipment	PA483	Processing of plastics
PA329	Ordnance, small arms and ammunition	PA491	Jewellery and coins
PA330	Manufacture of office machinery and data processing	PA492	Musical instruments
	equipment	PA494	Toys and sports goods
PA341	Insulated wires and cables	PA495	Miscellaneous manufacturing industries
PA342	Basic electrical equipment	PA500	Construction
PA343	Electrical equipment for industrial use, and batteries and accumulators		Summary tables
PA344	Telecommunication equipment, electrical measuring equipment, electronic capital goods and passive		
	electronic components		
PA345	Miscellaneous electronic equipment		
PA346	Domestic-type electric appliances		
PA347	Electric lamps and other electric lighting equipment		
PA351	Motor vehicles and their engines		

# PA324 MACHINERY FOR THE FOOD, CHEMICAL AND RELATED INDUSTRIES; PROCESS ENGINEERING CONTRACTORS PA324

The information in this report relates to establishments classified to the Machinery for the food, chemical and related industries; process engineering contractors industry, Group 324 in the Standard Industrial Classification Revised 1980. The industry Group covers the following Activity Headings:—

# 3244 Food, drink and tobacco processing machinery; packaging and bottling machinery

1. Food and drink processing machinery

Manufacture of plant and machinery for industrial food and drink processing. Machinery for use on farms is classified to Group 321 and for domestic use to Group 346.

2. Packaging and bottling machinery

Manufacture of machinery for bottling, canning, packeting, labelling and bottle washing.

3. Tobacco processing machinery

Manufacture of tobacco processing and cigar and cigarette making machinery.

## 3245 Chemical industry machinery; furnaces and kilns; gas, water and waste treatment plant

1. Chemical industry machinery

Manufacture of centrifuges, drying machines, filtration and industrial mixing equipment.

2. Furnaces and kilns

Manufacture of furnaces, ovens and kilns for the manufacture of metals and for the manufacture of cement, lime, glass and similar materials. Electrically fired types are included. High frequency microwave and dielectric furnaces are classified to Group 343.

3. Gas, water and waste treatment plant

Manufacture of air and gas cleansing plant for processes and for polution control. Manufacture of water, effluent and sewage treatment plant for process, industrial or municipal use. Manufacture of refuse disposal plant including incinerators.

### 3246 Process engineering contractors

Contracting for the design, engineering, procurement, on site construction, assembly and installation, and commissioning of plant for the process industries. Firms in this category are organised to enable them to contract for a combination of these functions even though their responsibility may be limited in the case of individual contracts.

For a full description of the 1980 classification see Standard Industrial Classification Revised 1980, obtainable from Her Majesty's Stationery Office, price £3.40.

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

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EXPLANATORY NOTES AND DEFINITIONS

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

 Since 1980, Censuses have been conducted on the Standard Industrial Classification Revised 1980 (SIC(80)). The Standard Industrial Classification exists to promote uniformity and comparapility in the official statistics of the United Kingdom. The SIC(80) is the result of an attempt to align the United Kingdom classification with the General Industrial Classification of Economic Activities within the European Communities (NACE). It is based on activity rather than commodities produced. A full description of SIC(80) is given in Standard Industrial Classification Revised 1980, obtainable from Her Majesty's Stationery Office, price £3.40.

- As far as possible the reporting unit in respect of which nformation is collected is one whose activities fall within a single activity heading of the classification and which is situated at a single geographical location. Frequently, however, the information required cannot be provided on this basis. Where information covering a mixture of activities is all that is available, the unit is classified according to the main activity. Where a unit operates at a number of locations and the full range of information is not available for each location, the reporting unit is deemed to cover a number of locations. In most cases, separate information on employment and net capital expenditure is obtained for each ocation (local unit) in order to enable regional data to be compiled. The reporting unit, usually called the establishment, is therefore defined as the smallest unit for which the information normally required in a production census can be provided.
- Establishments are asked to exclude from their returns particulars relating to ancillary departments not engaged in production (such as merchanting or factoring organisations, transport organisations, canteens and warehouses) for which separate accounts are kept. Transfers of goods produced to such departments are treated as sales, valued as far as possible as if sold to an independent purchaser. Where separate accounts are not kept, establishments are allowed to include details in their returns. Establishments are asked to include details relating to head offices engaged mainly in the administration of production units within the scope of the Census. Where head office activity covers more than one return, details are included in the principal return.

THE REGISTER

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

- The Census covers United Kingdom establishments engaged in industrial production, i.e. mining and quarrying, manufacturing, construction, and gas, electricity and water supply industries (Divisions 1 to 5 of SIC(80)). Establishments in the Channel Islands and the Isle of Man are excluded.
- Under the sampling arrangements agreed for the 1983 Census, forms were despatched to all establishments with 100 or more employed with, for most production industries, samples of 1 in 4 and 1 in 2 respectively being taken for establishments in the 20 to 49 and 50 to 99 employment size bands. For the remaining industries, where there were few units in the sample size bands or where response in earlier years was poor, it was necessary to increase he sample of establishments with 20 or more employed. About 17,500 forms were despatched to production establishments in the United Kingdom for the 1983 Census.

PERIOD COVERED

Establishments were asked to make returns for the calendar 1983 but, where this was not possible, returns for business years ending between 6 April 1983 and 5 April 1984 were accepted. Returns covering fewer than twelve months were accepted for businesses which had started or ceased trading during the year.

ESTIMATION

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

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

in compiling any such report summary or communication the competent authority shall so arrange it as to prevent any particulars published therein from being identified as being particulars relating to any individual person or undertaking except with the previous consent in writing of that person or the person carrying on that undertaking, as the case may be; but this provision shall not prevent the disclosure of the total quantity or value of any articles produced, sold or delivered; so, however, that before disclosing any such total the competent authority shall have regard to any representations made to them by any person who alleges that the disclosure thereof would enable particulars relating to him or to an undertaking carried on by him to be deduced from the total disclosed.

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 1983** 

There were no major changes between the 1983 census and the 1982 census.

SYMBOLS USED

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

not available

- nil or less than half the final digit shown
- figures cannot be shown owing to the risk of disclosing information about individual enterprises

revised

ROUNDING OF FIGURES 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 The notes and definitions given in this section are based on the instructions given to respondents as to the way in which returns were to be completed.

CAPITAL EXPENDITURE

20. This represents the value charged to capital account together with any other amounts which ranked as capital items for taxation purposes during the year to which each establishment's return related. The value is inclusive of any amounts received or expected to be received in grants and/or allowances from government sources, statutory bodies or local authorities. Where expenditure is spread over more than one Census year, payments are included in the years in which they were made. Capital expenditure during the year in respect of production units where production had not started before the end of the year and the value of CAPITAL GOODS PRODUCED FOR ESTABLISHMENTS' OWN USE by establishments' own staff are included. The value of any assets acquired in taking over an existing business are excluded. The figures include non-deductible VAT but exclude deductible VAT. No allowance is made for depreciation, amortisation or obsolescence.

#### on LAND AND EXISTING BUILDINGS

21. This represents the value of freeholds and the value or premium payable or receivable for leaseholds acquired or disposed of. The figures for acquisitions include architects' and surveyors' fees, legal fees, stamp duties, agents' commissions and Land Registry fees. The figures for disposals are net of any such professional fees payable.

#### b. on NEW BUILDING WORK

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

#### C ON PLANT AND MACHINERY VEHICLES

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

CAPITAL GOODS PRODUCED FOR ESTABLISHMENTS' OWN

24. This represents the value of all work of a capital nature carried out during the year by the establishments' own staff for use in the businesses covered by the returns.

COST OF INDUSTRIAL SERVICES RECEIVED

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

COST OF NON-INDUSTRIAL SERVICES RECEIVED

26. This includes commercial insurance premiums, bank charges and amounts payable to other organisations for the hire of vehicles, plant and machinery, for the rent of industrial and commercial buildings, for the services of accountants, auditors, agents, solicitors and surveyors other than in connection with the acquisition or disposal of capital assets, for postal and telecommunications services, for carriage by all forms of transport within the United Kingdom, for advertising, market research etc., for the right to use patents, trade marks, copyrights etc., for manufacturing and quarrying rights and technical 'know-how'. Interest payments and amounts payable for sea and air freight on goods exported on materials and fuel imported are excluded.

EMPLOYERS' NATIONAL INSURANCE CONTRIBUTIONS ETC. 27. This includes employers' national insurance contributions, including the national insurance surcharge, 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 or their dependents. Also included are contributions to canteens, social centres, children's and holiday homes etc. and the cost of supplying luncheon vouchers.

**EMPLOYMENT** 

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

a. ADMINISTRATIVE, TECHNICAL AND CLERICAL EMPLOYEES

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

#### h OPERATIVES

30. This includes all manual wage earners including operatives in power stations, operatives engaged in outside work of erecting, fitting, etc., inspectors, maintenance workers and cleaners. Staff engaged in transport (including roundsmen) and employed in warehouses, stores, shops and canteens are in general excluded.

#### c. WORKING PROPRIETORS

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

**GROSS OUTPUT** 

32. This is calculated by increasing (or decreasing) the value of TOTAL SALES AND WORK DONE by the rise (or fall) during the year of WORK IN PROGRESS AND GOODS ON HAND FOR SALE.

GROSS VALUE ADDED AT FACTOR COST

33. This is calculated by deducting from NET OUTPUT the COST OF NON-INDUSTRIAL SERVICES RECEIVED, RATES and the cost of LICENSING OF MOTOR VEHICLES. This estimate of gross value added approaches more closely than NET OUTPUT the definition of net output or value added in national accounts statistics.

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

NET CAPITAL EXPENDITURE

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

NET OUTPUT

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

NET OUTPUT PER HEAD

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

NON-INDUSTRIAL SERVICES RENDERED

38. This includes amounts charged for the hire of vehicles, plant and machinery, for the rent of industrial and commercial buildings, for the right to use patents, trade marks, copyrights etc., for manufacturing and quarrying rights, for technical 'know-how' and for the provision of transport to other organisations. It also includes revenue from staff facilities such as canteens.

OPERATING RATIOS

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

PURCHASES OF MATERIALS FOR USE IN PRODUCTION, AND PACKAGING AND FUEL PURCHASES OF GOODS FOR MERCHANTING OR FACTORING

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 establishments or given out to other establishments for the production of machinery or other capital items for the establishments' own use and materials for use by the establishments when working on goods supplied by customers. The figures exclude VAT, purchases of machinery and plant, which are included in CAPITAL EXPENDITURE, and amounts payable to transport firms or credited to establishments' own transport departments for delivery of materials. The figures are net of the value of goods or packaging materials returned to suppliers and trade discounts receivable. Materials purchased duty-paid are included at their duty-paid value less drawbacks, rebates etc. Imported goods are included at their full delivered cost. If the transport from docks or airport of imported goods is not included in the cost of goods purchased, the cost is entered at cif

plus duty, if applicable. Transfers of goods to an establishment from other departments of the organisation not covered by the return are included at the estimated selling value recorded by the other departments.

REMUNERATION PAID TO OUTWORKERS

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

SALES OF GOODS PRODUCED

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

STOCKS

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

WAGES AND SALARIES

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

WORK DONE AND INDUSTRIAL SERVICES RENDERED

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

WORK IN PROGRESS

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

PA324

TABLE 2

PA324

Output and costs, 1979—1983
All United Kingdom establishments classified to the industry (a)

to member or purpose and or allowed to	Unit	1979	1980	1981	1982	1983
Enterprises	Number	729	732	742	715	692
Establishments	,,	813	817	825	790	763
Sales of goods produced	£ million	781.4	875.4	. 806.1	842.8	813.0
Work done and industrial services rendered		679.7	726.5	798.8	782.2	785.3
Capital goods produced for establishments' own use		1.0	1.6	0.6	0.6	0.5
Non-industrial services rendered	"	10.0	5.3	4.4	5.2	3.8
Goods merchanted or factored		93.4	116.2	119.2	100.4	123.9
Total sales and work done	"	1,565.4	1,725.0	1,729.1	1,731.2	1,726.5
Increase during the year, work in progress and goods on hand for sale	and representations and representations and "resources	2.0	6.9	7.3	2.6	10.2
Gross output		1,567.4	1,732.0	1,736.4	1,733.8	1,736.7
Purchases of materials for use in pro- duction, and packaging and fuel	ERV, VEHISI	364.0	415.1	355.2	385.5	365.0
Purchases of goods for merchanting or factoring	collect that the	78.2	89.3	84.2	79.9	89.2
Increase during the year, stocks of materials, stores and fuel		7.7	6.7	-8.5	-1.7	1.7
Cost of industrial services received	voorts of a s	129.5	117.2	124.8	135.8	104.0
Net output	Calmagaer and	1,003.3	1,117.2	1,163.7	1,130.8	1,180.3
Total employment	Thousand	79.1	73.4	65.9	61.3	56.0
Net output per head	£	12,686	15,213	17,645	18,462	21,058
Cost of non-industrial services received						
Hire of vehicles, plant and machinery	£ million	12.3	15.8	17.0	18.1	19.9
Rents of industrial and commercial buildings	Josepherra Andreas Mar comp., 1866 Mar common affect of	21.2	21.2	24.4	28.3	29.1
Commercial insurance premiums		9.6	11.4	11.1	9.8	8.8
Bank charges	"	1.1	1.3	1.3	1.4	1.6
Other non-industrial services	y or sonds	93.5	89.1	112.8	125.9	115.5
icensing of motor vehicles		0.5	0.5	0.5	0.7	0.5
Rates, excluding water rates	"	13.7	17.0	21.1	22.1	22.9
Gross value added at factor cost		851.4	960.8	975.4	924.6	981.9
Gross value added at factor cost per head	£	10,765	13,083	14,790	15,094	17,518

(a) Satisfactory returns accounted for 84 per cent of employment within the industry in 1983.

Capital expenditure, 1979—1983 All United Kingdom establishments classified to the industry

£ million

		1979	1980	1981	1982	1983	and white
				100.000			
Land and buildings  New building work		6.5	4.6	5.9	4.1	3.4	
Land and existing to		0.5	technical and clerical				
Acquisitions		7.1	1.8	2.0	8.3	1.5	
Disposals		1.8	3.4	3.5	3.0	3.8	
		11.8	3.0	4.4	9.4	1.1	
Plant and machinery							
Acquisitions		25.5	22.0	19.1	23.1	24.3	
Disposals		1.6	1.9	2.1	3.6	3.1	
Net		23.9	20.1	17.0	19.5	21.2	
Vehicles							
Acquisitions		9.6	7.3	7.4	7.5	6.9	
Disposals		3.0	2.7	3.4	3.7	2.3	
Net		810.0 6.6	4.6	4.0	3.8	4.5	
Total net capita	al expendi	ture 42.3	27.6	25.4	32.7	26.9	

TABLE 3

Stocks and work in progress, 1979—1983

All United Kingdom establishments classified to the industry

£ million 1979 1980 1981 1982 1983 3a. Increase during year Materials, stores and fuel 1.7 7.7 6.7 -8.5 -1.7 Work in progress 2.8 2.3 6.7 7.1 10.0 Goods on hand for sale 4.8 0.2 4.6 0.5 -4.6 Total 9.7 13.7 -1.2 0.9 12.0

Total	334.8	
Goods on hand for sale	49.6	
Work in progress	COT-1 grifyolgrate atmentifalktense of sorellar grab beld 211.3	
Materials, stores and fuel	w bis encianes, constant langites with or trouting from the constant of the co	
3b. Value at end of year		
	Tise con 1982 americales shown in each row represents the number of enterprise in each size and state in more than in each size and in the more than	

TABLE 4

Employment, labour costs, output, net capital expenditure and stocks and work in progress by size of total employment, 1983

All United Kingdom establishments classified to the industry (a)

registre 3				A HILL COLOR		•					
Size group	CSE li	stab- sh- nents	Enter- prises (b)	Employ	yment	(29		Wages a	nd salaries	s (c)	
				Total, includii workin proprie	g	Opera- tives	Admin- istrative, technical and clerical	Operativ	/es	techn	nistrative, ical and clerical
								Total	per head	Total	per head
Van Indonésial	N	lumber	Number	Thousa	nd	Thousand	Thousand	£ million	n £	£ mil	lion £
1–9	3	06	290	1.4)							
10–19	18	85	182	2.7)		6.4	5.3	42.0	6,52	26 44.6	8,453
20–49	10	05	101	3.5)		0.4	2.5	42.0	0,02	28	Discosels
50-99	2 12 (	62	60	4.2 )							
100-199		52	50	7.4		4.0	3.5	24.8	6,28	30.3	8,757
200–299	0.8	14	13	3.3		1.4	1.9	9.6	6,73	30 17.2	8,929
300-399		8	6	2.8		1.2	1.6	7.7	6,44	14.1	8,841
400–499		6	6	2.8		1.1	1.7	7.2	6,67	78 15.9	9,310
500-749	D.BK	12	12	7.0		2.0	5.0	12.4	6,28	59.8	11,852
750–999		4	3	3.4		0.5	2.9	3.5	6,57	70 32.5	11,197
,000–1,499		3	3	3.8		1.2	2.6	8.5	7,17	79 28.7	11,180
,500 plus		6	6	13.7		5.1	8.6	47.0	9,29	94.3	10,912

Total	763	692	56.0	22.8	33.1	162.6	7,126	337.5	10,186

<sup>(</sup>a) Establishments employing fewer than 20 persons are not required to complete census returns. Because of this, data for these establishments should be regarded merely as the best estimates available and used with caution.

10

Total sales and work done	Gross output	Net output		Gross value added at factor cost	0.7.	Net capital expenditure	Total stocks and work in progress at
							end of year
		Total	per head	Total	per head		
£ million	£ million	£ million	£	£ million	£	£ million	£ million
339.5	345.1	190.0	16,080	(d)	(d)	6.1	68.6
210.9	209.5	99.4	13,399	231.9(d)	12,057(d)	-0.5	41.7
104.8	102.7	72,2	21,573	61.6	18,414	2.1	17.1
100.9	101.0	65.5	23,459	57.0	20,423	1.0	34.2
103.2	113.7	78.6	28,242	70.1	25,181	4.2	66.7
203.0	202.8	149.3	21,261	117.8	16,775	5.6	23.7
122.4	122.7	103.9	30,286	81.3	23,710	0.5	6.0
119.3	119.3	86.8	23,144	76.7	20,446	3.5	34.0
422.4	420.0	334.7	24,438	285.5	20,846	4.3	42.8

	1,726.5	1,736.7	1,180.3	21,058	981.9	17,518	26.9	334.8
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 logic and splaries per idministrative,
 £
 6,296
 7,801
 8,810
 9,629
 10,166

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 £
 6,296
 7,801
 8,810
 9,629
 10,166

 si capital ampenditure per head
 £
 8,35
 375
 385
 535
 476

<sup>(</sup>b) The count of enterprises shown in each row represents the number of enterprises, irrespective of size, owning the establishments shown in each size group. Because an enterprise may own establishments in more than one size group, the sum of individual enterprise counts may exceed the total for the industry.

<sup>(</sup>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 £75.4 million.

<sup>(</sup>d) Gross value added data relates to establishments employing 1–199.

TABLE 5 PA324

Percentage analysis of twelve-month periods covered by returns received for the 1983 Census by number of returns and total employment

r ended		Percentag	ge of total returns	received	Perce	ntage of tota	al employment	
April	ground.	1.3	to bebtis tapo sorbet		0.5			have bno
May		1.9			0.3			
June		3.8			1.5			
July		0.6			0.2			
August		1.9			0.3			
September		5,7			3.8			
October		3.8			4.2			
November		1.3			0.2			
December		53.2			60.6			
62								
57 a.O-					0.9			
March-5 April		24.7			27,4			
	April May June July August September October November December	April May June July August September October November December	April 1.3  May 1.9  June 3.8  July 0.6  August 1.9  September 5.7  October 3.8  November 1.3  December 53.2  January 1.9  February —	April 1.3  May 1.9  June 3.8  July 0.6  August 1.9  September 5.7  October 3.8  November 1.3  December 53.2  January 1.9  February —	April 1.3  May 1.9  June 3.8  July 0.6  August 1.9  September 5.7  October 3.8  November 1.3  December 53.2  January 1.9  February —	April 1.3 0.5  May 1.9 0.3  June 3.8 1.5  July 0.6 0.2  August 1.9 0.3  September 5.7 3.8  October 3.8 4.2  November 1.3 0.2  December 53.2 60.6  January 1.9 0.9  February	April 1.3 0.5  May 1.9 0.3  June 3.8 1.5  July 0.6 0.2  August 1.9 0.3  September 5.7 3.8  October 3.8 4.2  November 1.3 0.2  December 53.2 60.6  June 1.9 0.9  February	April 1.3 0.5  May 1.9 0.3  June 3.8 1.5  July 0.6 0.2  August 1.9 0.3  September 5.7 3.8  October 3.8 4.2  November 1.3 0.2  December 53.2 60.6  January 1.9 0.9  February

TABLE 6

Operating ratios, 1979–1983

All United Kingdom establishments classified to the industry

	Unit	1979	1980	1981	1982	1983
Gross output per head	£	19,818	23,585	26,330	28,305	30,985
Net output per head	£	12,686	15,213	17,645	18,462	21,058
Gross value added per head	£	10,765	13,083	14,790	15,094	17,518
Gross value added as a percentage of gross output	%	54	55	56	53	57
Ratio of gross output to stocks		5.1	5.0	5.3	5.3	5.2
Nages and salaries as a percentage of gross value added	%	52	52	52	56	51
Ratio of operatives to administrative, echnical and clerical employees		0.8	0,8	0.7	0.7	0.7
Vages and salaries per operative	£	4,871	5,814	6,326	6,734	7,126
Vages and salaries per administrative, echnical and clerical employee	£	6,296	7,601	8,810	9,629	10,186
Net capital expenditure per head	£	535	376	385	535	479
Net capital expenditure as a percentage of gross value added	%	5	3	3	4	3

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