

PA324

1982

① "STATISTICS"
READING
ROOM

42 (MA251)

② STATISTICS
BACK-UP

BRITISH LIBRARY
14 SEP 1984
OF POLITICAL AND
ECONOMIC SCIENCE

HMSO

Business Statistics Office

BUSINESS MONITOR

Report on the
Census of Production

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



A publication of the Government Statistical Service

BUSINESS MONITORS

SPECIAL NOTE FOR PURCHASERS

The Business Statistics Office, aided by industry and commerce, provides much of the statistical data required by Government for monitoring the economy.

You may, if you wish, purchase much of the data in the form of Business Monitors which are a series of publications containing statistical information compiled from inquiry forms sent out regularly by the BSO to selected firms asking detailed questions about production, sales, employment and investment. Business Monitors are the primary or in many cases the only source of the information they contain.

The Annual Census of Production Monitors deal with the manufacturing, energy, mining and construction industries. There are 118 Monitors in this series some of which cover more than one industry and they are all listed overleaf. They are prefixed by a code P (for Production) followed by A (annual series).

The 1980 Annual Census of Production was the first to be produced on the basis of the 1980 revision of the Standard Industrial Classification with individual reports covering three digit groups of the classification. 1980 reports contain comparable data for 1979, reworked from information originally published on the basis of the 1968 revision of the SIC. Also available is a special summary volume for the 1979 Census of Production based on 1980 SIC, and also containing the 1979 Purchases Inquiry Business Monitor — PA1002.1. 1979 Census of Production and Purchases Inquiry is available from HMSO Books price £21.00 reference ISBN 011 5141146.

If you would like details concerning Annual Census of Production data published for earlier years please telephone Newport 56111 (STD 0633) Ext 2455.

If you would like to know more about the complete series of Business Monitors please contact HMSO Books (Publicity Department), FREEPOST, Norwich NR3 1BR who will send you a copy of the detailed Business Monitor Brochure which lists the Monitors available and tells you how to order. For individual Monitor copies, back numbers or further information regarding the contents of Business Monitors please contact the Librarian, Business Statistics Office, Government Buildings, Cardiff Road, Newport, Gwent, NPT 1XG. Telephone Newport (0633) 56111, Extension 2973. 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 and quoting reference X30.3.24.

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.

PA324

BUSINESS MONITOR

A publication of the Government Statistical Service

Report on the Census of Production 1982

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

LIST OF INDUSTRY REPORTS

- | | | | |
|--------|---|--------|---|
| PA1001 | Introductory notes | PA372 | Medical and surgical equipment and orthopaedic appliances |
| PA111 | Coal extraction and manufacture of solid fuels | PA373 | Optical precision instruments and photographic equipment |
| PA120 | Coke ovens | PA374 | Clocks, watches and other timing devices |
| PA130 | Extraction of mineral oil and natural gas | PA411 | Organic oils and fats |
| PA140 | Mineral oil processing | PA412 | Processing of bacon, meat and poultry |
| PA161 | Production and distribution of electricity | PA413 | Preparation of milk and milk products |
| PA162 | Public gas supply | PA414 | Processing of fruit and vegetables |
| PA170 | Water supply industry | PA415 | Fish processing |
| PA210 | Extraction and preparation of metalliferous ores | PA416 | Grain milling |
| PA221 | Iron and steel industry | PA419 | Bread, biscuits and flour confectionery |
| PA222 | Steel tubes | PA420 | Sugar and sugar by-products |
| PA223 | Drawing, cold rolling and cold forming of steel | PA421 | Ice-cream, cocoa, chocolate and sugar confectionery |
| PA224 | Non-ferrous metals industry | PA422 | Animal feeding stuffs |
| PA231 | Extraction of stone, clay, sand and gravel | PA423 | Starch and miscellaneous foods |
| PA239 | Extraction of miscellaneous minerals (including salt) | PA424 | Spirit distilling and compounding |
| PA241 | Structural clay products | PA426 | Wines, cider and perry |
| PA242 | Cement, lime and plaster | PA427 | Brewing and malting |
| PA243 | Building products of concrete, cement or plaster | PA428 | Soft drinks |
| PA244 | Asbestos goods | PA429 | Tobacco industry |
| PA245 | Working of stone and other non-metallic minerals | PA431 | Woollen and worsted industry |
| PA246 | Abrasive products | PA432 | Cotton and silk industries |
| PA247 | Glass and glassware | PA433 | Throwing, texturing, etc. of continuous filament yarn |
| PA248 | Refractory and ceramic goods | PA434 | Spinning and weaving of flax, hemp and ramie |
| PA251 | Basic industrial chemicals | PA435 | Jute and polypropylene yarns and fabrics |
| PA255 | Paints, varnishes and printing ink | PA436 | Hosiery and other knitted goods |
| PA256 | Specialised chemical products mainly for industrial and agricultural purposes | PA437 | Textile finishing |
| PA257 | Pharmaceutical products | PA438 | Carpets and other textile floorcoverings |
| PA258 | Soap and toilet preparations | PA439 | Miscellaneous textiles |
| PA259 | Specialised chemical products mainly for household and office use | PA441 | Leather (tanning and dressing) and fellmongery |
| PA260 | Production of man-made fibres | PA442 | Leather goods |
| PA311 | Foundries | PA451 | Footwear |
| PA312 | Forging, pressing and stamping | PA453 | Clothing, hats and gloves |
| PA313 | Bolts, nuts, etc.; springs; non-precision chains; metals treatment | PA455 | Household textiles and other made-up textiles |
| PA314 | Metal doors, windows, etc. | PA456 | Fur goods |
| PA316 | Hand tools and finished metal goods | PA461 | Sawmilling, planing, etc. of wood |
| PA320 | Industrial plant and steelwork | PA462 | Manufacture of semi-finished wood products and further processing and treatment of wood |
| PA321 | Agricultural machinery and tractors | PA463 | Builders' carpentry and joinery |
| PA322 | Metal-working machine tools and engineers' tools | PA464 | Wooden containers |
| PA323 | Textile machinery | PA465 | Miscellaneous wooden articles |
| PA324 | Machinery for the food, chemical and related industries; process engineering contractors | PA466 | Articles of cork and plaiting materials, brushes and brooms |
| PA325 | Mining machinery, construction and mechanical handling equipment | PA467 | Wooden and upholstered furniture and shop and office fittings |
| PA326 | Mechanical power transmission equipment | PA471 | Pulp, paper and board |
| PA327 | Machinery for printing, paper, wood, leather, rubber, glass and related industries: laundry and dry cleaning machinery | PA472 | Conversion of paper and board |
| PA328 | Miscellaneous machinery and mechanical equipment | PA475 | Printing and publishing |
| PA329 | Ordnance, small arms and ammunition | PA481 | Rubber products |
| PA330 | Manufacture of office machinery and data processing equipment | PA483 | Processing of plastics |
| PA341 | Insulated wires and cables | PA491 | Jewellery and coins |
| PA342 | Basic electrical equipment | PA492 | Musical instruments |
| PA343 | Electrical equipment for industrial use, and batteries and accumulators | PA494 | Toys and sports goods |
| PA344 | Telecommunication equipment, electrical measuring equipment, electronic capital goods and passive electronic components | PA495 | Miscellaneous manufacturing industries |
| PA345 | Miscellaneous electronic equipment | PA500 | Construction |
| PA346 | Domestic-type electric appliances | PA1002 | Summary tables |
| PA347 | Electric lamps and other electric lighting equipment | | |
| PA351 | Motor vehicles and their engines | | |
| PA352 | Motor vehicle bodies, trailers and caravans | | |
| PA353 | Motor vehicle parts | | |
| PA361 | Shipbuilding and repairing | | |
| PA362 | Railway and tramway vehicles | | |
| PA363 | Cycles and motor cycles | | |
| PA364 | Aerospace equipment manufacturing and repairing | | |
| PA365 | Miscellaneous vehicles | | |
| PA371 | Measuring, checking and precision instruments and apparatus | | |

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 Heading:—

- 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 pollution 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 9.

LIST OF CONTENTS

Table No	Title	Page
1	Output and costs, 1979—1982	4
2	Capital expenditure, 1979—1982	5
3	Stocks and work in progress, 1979—1982	5
4	Analysis of establishments by size, 1982	6—7
5	Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments, 1982	8
6	Operating ratios, 1979—1982	8

TABLE 1

PA324

Output and costs, 1979-1982
All United Kingdom establishments classified to the industry (a)

	Unit	1979	1980	1981	1982
Enterprises	Number	729	732	742	715
Establishments	"	813	817	825	790
Sales of goods produced	£ million	781.4	875.4	806.1	842.8
Receipts for work done and industrial services rendered	"	679.7	726.5	798.8	782.2
Capital goods produced for establishments' own use	"	1.0	1.6	0.6	0.6
Non-industrial services rendered	"	10.0	5.3	4.4	5.2
Goods merchanted or factored	"	93.4	116.2	119.2	100.4
Total sales and work done	"	1,565.4	1,725.0	1,729.1	1,731.2
Increase during the year, work in progress and goods on hand for sale	"	2.0	6.9	7.3	2.6
Gross output	"	1,567.4	1,732.0	1,736.4	1,733.8
Purchases of materials for use in production, and packaging and fuel	"	364.0	415.1	355.2	385.5
Purchases of goods for merchanding or factoring	"	78.2	89.3	84.2	79.9
Increase during the year, stocks of materials, stores and fuel	"	7.7	6.7	-8.5	-1.7
Cost of industrial services received	"	129.5	117.2	124.8	135.8
Net output	"	1,003.3	1,117.2	1,163.7	1,130.8
Total employment (b)	Thousand	79.1	73.4	65.9	61.3
Net output per head	£	12,686	15,213	17,645	18,462
Payments for non-industrial services					
Hire of vehicles, plant and machinery	£ million	12.3	15.8	17.0	18.1
Rents of industrial and commercial buildings	"	21.2	21.2	24.4	28.3
Commercial insurance premiums	"	9.6	11.4	11.1	9.8
Bank charges	"	1.1	1.3	1.3	1.4
Other non-industrial services	"	93.5	89.1	112.8	125.9
Licensing of motor vehicles	"	0.5	0.5	0.5	0.7
Rates, excluding water rates	"	13.7	17.0	21.1	22.1
Gross value added at factor cost	"	851.4	960.8	975.4	924.6
Gross value added at factor cost per head	£	10,765	13,083	14,790	15,094

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. Satisfactory returns accounted for 83 per cent of employment within the industry.

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

TABLE 2

PA324

Capital expenditure, 1979-1982
All United Kingdom establishments classified to the industry (a)(b)

	1979	1980	1981	1982
Land and buildings				
New building work	6.5	4.6	5.9	4.1
Land and existing buildings				
Acquisitions	7.1	1.8	2.0	8.3
Disposals	1.8	3.4	3.5	3.0
Plant and machinery				
Acquisitions	25.5	22.0	19.1	23.1
Disposals	1.6	1.9	2.1	3.6
Vehicles				
Acquisitions	9.6	7.3	7.4	7.5
Disposals	3.0	2.7	3.4	3.7
Total net capital expenditure	42.3	27.6	25.4	32.7

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.

(b) Capital expenditure in respect of manufacturing establishments where production had not commenced before the end of the year, is included.

TABLE 3

Stocks and work in progress, 1979-1982
All United Kingdom establishments classified to the industry (a)

	1979	1980	1981	1982	£ million
Increase during year					
Materials, stores and fuel	7.7	6.7	-8.5	-1.7	80.8
Work in progress	-2.8	2.3	6.7	7.1	197.6
Goods on hand for sale	4.8	4.6	0.5	-4.6	45.9
Total	9.7	13.7	-1.2	0.9	324.3

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.

TABLE 4

Analysis of establishments by size, 1982
All United Kingdom establishments classified to the industry (a)

Size group (b)	Estab-lish-ments (c)	Enter-prises (d)	Employment			Wages and salaries (f)			
			Total (e)	Opera-tives	Admin-istrative, technical and clerical	Operatives		Administrative, technical and clerical	
						Total	per head	Total	per head
Number	Number	Thousand	Thousand	Thousand	£ million	£	£ million	£	
1-10	341	325	1.7						
11-19	139	137	2.1						
20-49	125	123	3.9	6.8	5.7	41.1	6,056	44.2	7,754
50-99	71	68	5.1						
100-199	53	50	7.9	4.3	3.6	25.4	5,907	28.1	7,873
200-299	20	20	4.8	1.8	3.0	11.8	6,533	27.1	9,124
300-399	8	6	2.8	1.2	1.6	7.1	5,838	13.8	8,895
400-499	6	6	2.5	0.9	1.6	6.3	6,670	14.0	8,815
500-749	13	13	8.1	2.2	5.8	13.6	6,078	59.2	10,144
750-999	4	4	3.5	0.5	3.0	3.2	6,007	36.3	12,125
1,000-1,499	4	4	5.0	1.5	3.5	11.8	7,927	39.0	11,085
1,500 and over	6	6	13.9	4.9	9.1	42.5	8,739	92.7	10,214
Total	790	715	61.3	24.2	36.8	162.8	6,734	354.2	9,629

- (a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.
- (b) Average number employed during the year, including full and part-time employees and working proprietors.
- (c) Establishments employing fewer than 20 persons are generally exempt from Business Statistics Office inquiries and data for these establishments are therefore of doubtful reliability. Figures for establishments employing 1-10 persons are particularly at risk. They should be regarded merely as the best estimates available and used with caution.
- (d) The count of enterprises shown in each row represents the number of enterprises, irrespective of size, owning the establishments shown in the previous column, i.e. the number of enterprises owning the establishments within the size group indicated by the row heading. It should be noted that because an enterprise may own establishments in more than one size group, the sum of the individual enterprise counts may exceed the total for the industry.
- (e) Including working proprietors.

Total sales and work done (g)	Gross output	Net output		Gross value added at factor cost		Net capital expenditure (h)	Total stocks and work in progress at end of year				
		Total	per head	Total	per head						
								£ million	£	£ million	£
313.9	315.1	152.7	11,978	(j)	(j)	3.5	65.0				
198.4	194.7	101.0	12,803	196.8(j)	9,537(j)	2.9	39.1				
143.8	139.8	74.2	15,517	55.0	11,507	4.6	28.3				
68.9	62.3	23.9	8,662	14.5	5,263	0.7	32.2				
77.2	94.3	66.0	26,145	60.4	23,916	1.5	56.6				
245.7	245.8	182.8	22,625	149.2	18,471	10.4	29.4				
140.5	140.4	124.5	35,240	108.2	30,614	1.6	5.9				
128.8	129.2	87.1	17,403	65.0	12,985	0.6	9.1				
414.0	412.2	318.6	22,870	275.5	19,772	6.8	58.7				
1,731.2	1,733.8	1,130.8	18,462	924.6	15,094	32.7	324.3				

- (f) The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of canteens, is estimated for the industry at £83.7 million.
- (g) Sales of goods produced, capital goods manufactured and buildings constructed by establishments for their own use, work done, industrial and non-industrial services rendered and merchant goods.
- (h) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.
- (j) Gross value added data relate to establishments employing 1-199.

ROUNDING OF FIGURES

Figures in the tables have, where necessary, been rounded to the nearest final digit. Where figures have been so rounded, 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 mainly based on the general instructions given to respondents as to the way in which returns were to be completed.

CAPITAL EXPENDITURE

Capital expenditure during the year in respect of production units where production had not started before the end of the year is included. Establishments were asked not to deduct from the value of capital expenditure amounts received or expected to be received in grants or allowances from the Government or any statutory body or local authority. Establishments with 100 or more employees were asked to include a total net capital expenditure figure for the calendar year.

a. New building work

This represents the cost incurred during the year of new building and other constructional work to be used in connection with the business covered by the return. The value is that charged to capital account during the year of return; it includes expenditure on new buildings and on the extension or reconstruction of old buildings, the value of works of a capital nature carried out by the establishments own staff and the cost of any newly constructed buildings purchased. Figures shown include legal charges, stamp duties, agents commissions, etc.

b. Land and existing buildings

The items shown are the capital cost of freeholds purchased and the capital cost or premium payable for leaseholds acquired (excluding the value of assets acquired in taking over an existing business), and the amounts receivable for freeholds or leaseholds disposed of. The value is that charged to capital account during the year of return.

c. Plant, machinery and vehicles

The items shown are the value of plant and machinery and of vehicles acquired both new and second-hand, and the amount received for items disposed of during the year. The value of plant and machinery acquired includes plant, etc. which firms produced for their own use in connection with the business covered by the return. The value of plant, etc. acquired is the expenditure charged to capital account during the year of return less any discounts received, but including the cost of transport and installation. Deductible value added tax is excluded but non-deductible value added tax on motor cars acquired and Customs and Excise car tax are included. No deduction is made for depreciation, amortization or obsolescence. The proceeds of items disposed of during the year exclude amounts written-off for items scrapped.

CAPITAL GOODS PRODUCED FOR AN ESTABLISHMENT'S OWN USE

This includes all work of a capital nature carried out during the year by the establishment's own staff for their own use.

COST OF INDUSTRIAL SERVICES

This includes amounts payable to other firms for work done on materials supplied by the establishment, payments for repairs and maintenance (including those in respect of rented buildings) and amounts paid to other firms for contracts which have been sublet. Payments to outworkers are excluded.

COST OF NON-INDUSTRIAL SERVICES

This includes rents of industrial and commercial buildings, hire of plant, machinery and vehicles (excluding vehicles hired with drivers), commercial insurance premiums, bank charges and amounts paid for professional services, post office services, transport (within the United Kingdom), advertising, etc. Amounts payable on royalties for the right to use patents, trademarks, copyrights, etc., manufacturing and quarrying rights and technical "know-how" are also included.

EMPLOYMENT:

AVERAGE NUMBER EMPLOYED

Establishments were required to state the average number of persons on the pay roll during the year of return. Separate figures were required for:

- administrative, technical and clerical employees
- all other employees (operatives)

Averages could be calculated from the figures relating to the last week of each calendar month. Establishments were also required to state the number of working proprietors where appropriate and these are included in total employment figures. Full-time and part-time employees are included but outworkers (i.e. persons employed by establishments who worked in their own homes, etc. on materials supplied by the establishment) are excluded. The figures include persons engaged on merchanting or factoring and canteen workers where particulars in respect of these activities could not be excluded from the return.

WORKING PROPRIETORS

These include all persons regarded as "self-employed" for national insurance purposes and members of their families who work in the business without receiving a wage or salary; but such persons who work less than half the normal number of working hours are excluded. Directors working in the business but not in receipt of a definite wage, salary, or commission are included under this heading; directors paid by fee only are not included.

EMPLOYEES

Administrative, technical and clerical employees include directors in receipt of a definite wage, salary, or commission, managers and works foremen; research and design employees (other than operatives); draughtsmen, editorial staff, advertising staff, travellers and all office employees.

Operatives include all other classes of employees, that is, broadly speaking all manual wage earners. They include operatives employed in power stations, inspectors, maintenance workers and cleaners. Staff engaged in transport (including roundsmen), or employed in warehouses, stores, shops and canteens, should be included only where separate accounts are not kept. Operatives engaged in outside work of erecting, fitting, etc. are also included, but outworkers are excluded.

EMPLOYERS' INSURANCE AND WELFARE CONTRIBUTIONS

This item includes employers' contributions to national insurance under the Social Security Pensions Act, 1975, as well as commercial insurance premiums to provide pensions, superannuation or other retirement benefits, sickness benefits, personal accident benefits, disability or death benefits for employees or former employees or their dependants.

Contributions to the running costs of canteens, social centres, children's and holiday homes, etc. for employees, former employees and their dependants are also included.

GROSS OUTPUT

In the calculation of gross output the value of total sales and work done is increased by the rise (or reduced by the fall) during the year in the value of work in progress and goods on hand for sale.

GROSS VALUE ADDED AT FACTOR COST

Gross value added at factor cost is calculated by deducting from net output the cost of non-industrial services e.g. rent of buildings, hire of plant, machinery and vehicles (excluding vehicles hired with drivers), commercial insurance premiums, bank charges and amounts paid for professional services, post office services, transport (within the United Kingdom) and advertising, rates (excluding water rates) and the cost of licensing motor vehicles. This estimate of gross value added approaches more closely than census net output to the definition of net output or value added in national accounts statistics.

GROSS VALUE ADDED AT FACTOR COST PER HEAD

The figures of gross value added at factor cost per head are derived by dividing the gross value added by the average number of persons employed (full and part-time) on all activities covered by the returns, including operatives, administrative, technical and clerical employees and working proprietors, but excluding outworkers.

NET OUTPUT

Net output, a customary census measure, is calculated by deducting from gross output the cost of purchases (reduced by the rise, or increased by the fall, during the year of stocks of materials, etc.), the cost of industrial services received and where applicable, duties, etc.

NET OUTPUT PER HEAD

The figures of net output per head are derived by dividing the net output by the average number of persons employed (full and part-time) on all activities covered by the returns, including operatives, administrative, technical and clerical employees and working proprietors, but excluding outworkers.

NON-INDUSTRIAL SERVICES RENDERED

This includes rents received for commercial and industrial buildings, amounts charged for hiring out plant, machinery and vehicles and other goods and amounts charged to other organisations for the provision of transport. It also includes amounts received for the right to use patents, trademarks, copyrights etc., manufacturing and quarrying rights and technical "know-how" and revenue from such staff facilities as canteens.

OPERATING RATIOS

The operating ratios shown are obtained by dividing the estimate of the industry total for the quantity shown in the numerator by the corresponding estimate for the quantity shown in the denominator. These estimates cover all establishments classified to each industry, including establishments not selected and non-respondents. Within an industry, it is possible to compare ratios for an individual firm with the ratios shown for the relevant industry. However, it is important to bear in mind that various factors may affect the results e.g. differences in definitions, treatment of depreciation (which is not identified in the census data) and varying practice with regard to stock valuation, may affect comparability in some respects.

PURCHASES

Purchases include the cost of raw materials, components, semi-manufactured goods and workshop materials; of replacement parts and consumable tools not charged to capital account; of packaging materials of all types; of stationery and printed matter; of fuel, electricity and water; of materials to be used by the establishment or given out to other establishments for the production of machinery or other capital items for the establishment's own use; of materials for use by the establishment when working on goods supplied by customers; and of food, etc. for any canteen covered by the establishment's return. Transfers of goods to the establishment from another department of the same firm not covered by the establishment's return are included at a cost corresponding to the estimated selling value recorded by the other department. Amounts payable to transport firms or credited to the firm's own transport department for delivery of materials are excluded, as are all purchases of machinery and plant charged to capital account. Purchases of goods for merchanting or factoring have been collected separately since 1973. The values shown exclude VAT. They include, in addition to the actual purchase price, the value of packaging material charged to the establishment. The value of returned goods or packaging material returned to the suppliers and any trade discounts are excluded. Materials purchased duty-paid are included at their duty-paid value, less any drawback, rebate, etc. The cost of transport is included only if it is included with the purchase price in the firm's accounts. Imported goods are included at their full delivered cost. If in the firm's accounts the transport from docks or airport is not included in the cost of goods purchased, the cost is entered at cif plus duty (if applicable).

RECEIPTS FOR WORK DONE AND INDUSTRIAL SERVICES RENDERED

Figures for work done represent the amount charged for work carried out on materials supplied by a customer and include repair work. Within certain industries this heading covers a wide variety of activities, for example, within the food sector - butter packed on commission; within the textile industries - making up of garments, fur dressing and textile finishing; within printing and publishing - preparatory work on type-setting, block making and binding. Work done is also significant in the electrical machinery and heavy engineering industries, covering erection, installation and repair and jobbing work. Other activities within this heading include exploration work, research and development, glass-cutting and dressing and planing of timber. Industrial services rendered include repairs and maintenance, installation work, and technical research and studies for other organisations.

REMUNERATION PAID TO OUTWORKERS

The remuneration paid to outworkers (i.e. persons employed by the establishment who do their work in their own homes) is generally on a piece-work basis. Only amounts paid to outworkers whose names appear on the establishment's payroll are included. Amounts paid to outworkers by sub-contractors are excluded.

SALES OF GOODS PRODUCED

Sales for the purposes of the annual censuses means deliveries on sale of goods made by establishments in the United Kingdom covered by the inquiry. Sales of goods made for these establishments by outworkers or by other establishments from materials given out to them and sales of waste products are included. Forward sales and canteen takings are excluded. All sales in the period of the inquiry are included irrespective of when the goods were manufactured.

Goods produced in one establishment and transferred either to ancillary departments not engaged in production for which there are separate accounts, or to another establishment of the same firm not covered by the return are treated as sales by the producing establishment and valued as far as possible as if they had been sold to an independent purchaser. Goods transferred to wholesale or retail selling organisations, for which separate accounts are kept, are valued on the same basis.

The value shown for sales is the "net selling value" defined as the amount (excluding VAT) charged to customers, whether on an ex-works or delivered basis, after any trade discounts and agents' commissions have been deducted. The cost of packing materials less allowance for returnable cases is included. In industries where products attract Excise Duty the value stated is usually inclusive of duty if sold duty-paid and exclusive of duty if sold in bond or exported.

STOCKS AND WORK IN PROGRESS

Values are given of stocks of goods on hand for sale and of materials, stores and fuel at the end of the year of return and of the change during the year, including any stocks of goods held for merchanting or factoring.

Work in progress is defined as materials which have been partially processed by the establishment but which are not usually sold or transferred to another establishment without further processing. The values include the cost of materials consumed and labour used. Progress payments made to sub-contractors are excluded and progress payments received from other organisations are not deducted.

WAGES AND SALARIES

These are amounts paid during the year to operatives and to administrative, technical and clerical employees. Payments to working proprietors, whether called salaries or not, are excluded. The values shown include all overtime payments, bonuses and commissions, whether paid regularly or not, and no deduction is made for income tax, insurances, contributory pensions, etc. The value of redundancy payments less any amounts reimbursed from Government sources is included. The values of any payments in kind, travelling expenses, etc. is excluded.

© Crown Copyright 1984

Her Majesty's Stationery Office

Government Bookshops

49 High Holborn, London WC1V 6HB
13a Castle Street, Edinburgh EH2 3AR
Brazennose Street, Manchester M60 8AS
Southey House, Wine Street, Bristol BS1 2BQ
258 Broad Street, Birmingham B1 2HE
80 Chichester Street, Belfast BT1 4JY

*Government publications are also available
through 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, Business Statistics Office, Government Buildings, Cardiff Road, Newport, Gwent NPT 1XG.'