PA334 8/4214(A)251) 1976

Business Statistics Office

Business Monitor

Report on the Census of Production

Industrial engines

BRITISH LIBRARY

OF POLITICAL AND ECONOMIC SCIENCE



Special Note for Purchasers

Commencing with the 1971 Census, the Census of Production reports are being numbered in a uniform series embracing all industrial inquiries in the Business Monitor series. These Business Monitors have a code P (for production) followed first by A (indicating that it is an annual series) or Q (quarterly) or M (monthly): and then by a number indicating the minimum list heading, or sub-division of a minimum list heading, of the Standard Industrial Classification (revised 1968).

The Census of Production (PA) reports are available on standing order (details on application to Her Majesty's Stationery Office, P.O. Box 569, London SE1 9NH. Telephone 01-928 6977), although they are not included in the global subscription arrangements for the Business Monitor series.

Government Statistical Service

A service of statistical information and advice is provided to the Government by specialist staffs employed in the statistics division of individual Departments. Statistics are made generally available through their publications and further information and advice on them can be obtained from the Departments concerned.

Enquiries:

Business Statistics Office Newport, Gwent NPT 1XG Newport 56111 (STD code 0633) ext 2455 Telex 497121 Answer Back BSONPT G

PA334

Business Monitor

A publication of the Government Statistical Service

Report on the Census of Production 1976

Industrial engines

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

Department of Industry
Business Statistics Office

London: Her Majesty's Stationery Office

PA101

PA102

PA103

PA 109

PA368

Coal mining
Stone and slate quarrying and mining

Chalk, clay, sand and gravel extraction

PA369.4 Electric lamps, electric light fittings, wiring

accessories, etc.

Petroleum and natural gas Shipbuilding and marine engineering Miscellaneous mining and quarrying Wheeled tractor manufacturing PA380

Grain milling PA211 Motor vehicle manufacturing PA381 Bread and flour confectionery PA381.2 Trailers, caravans and freight containers

PA213 PA214 Riscuits Motor cycle, tricycle and pedal cycle manufacturing PA382 Bacon curing, meat and fish products Aerospace equipment manufacturing and repairing PA383 Milk and milk products PA215 PA384 Locomotives, railway track equipment, railway carriages,

PA216 Sugar wagons and trams Cocoa, chocolate and sugar confectionery PA217 Engineers' small tools and gauges PA390

Fruit and vegetable products
Animal and poultry foods PA218 Hand tools and implements PA391 Cutlery, spoons, forks and plated tableware, etc. PA219

Vegetable and animal oils and fats PA221 Bolts nuts screws, rivets, etc PA393 PA229.1 Margarine Wire and wire manufactures PA394

PA229.2 Starch and miscellaneous foods Cans and metal boxes PA395 Brewing and malting PA231 PA396 Jewellery and precious metals Soft drinks PA232

Metal furniture PA399.1 Spirit distilling and compounding Drop forgings, etc. PA399.5 PA239.2 British wines, cider and perry PA399.6 Metal hollow-ware

Tobacco PA240 PA399.8 Miscellaneous metal manufacture Coke ovens and manufactured fuel PA261 PA411 Production of man-made fibres

PA262 Mineral oil refining Spinning and doubling on the cotton and flax systems PA412 Lubricating oils and greases PA263 Weaving of cotton, linen and man-made fibres PA413

Inorganic chemicals PA271.1 PA414 Woollen and worsted PA271.2 Organic chemicals PA415

PA271.3 Miscellaneous chemicals Rone twine and net PA416 PA272 Pharmaceutical chemicals and preparations Hosiery and other knitted goods PA417.1

PA273 Toilet preparations PA417.2 Warp knitting Paint PA274 PA418 Lace

PA275 Soap and detergents Carpets PA419 Synthetic resins and plastics materials and PA421 Narrow fabrics synthetic rubber Household textiles and handkerchiefs PA422.1

Dyestuffs and pigments PA277 PA422.2 Canvas goods and sacks and other made-up textiles PA278 Fertilizers PA423 Textile finishing PA279 1 Polishes PA429.1 Asbestos

PA279.2 Formulated adhesives, gelatine, etc. PA429.2 Miscellaneous textile industries PA279.3 Explosives and fireworks Leather (tanning and dressing) and fellmongery PA431 PA279.4 Formulated pesticides, etc.

Leather goods PA279.5 Printing ink PA433 Fur PA279.6 Surgical bandages, etc. PA441 Weatherproof outerwear

PA279.7 Photographic chemical materials Men's and boys' tailored outerwear Women's and girls' tailored outerwear Iron and steel (general) PA311 PA443 PA312 Steel tubes

Overalls and men's shirts, underwear, etc. PA444 PA313 Iron castings, etc. Dresses, lingerie, infants' wear, etc. PA445 Aluminium and aluminium alloys PA321 PA446 Hats, caps and millinery

Copper, brass and other copper alloys PA322 Corsets and miscellaneous dress industries PA // 1 Miscellaneous base metals PA449.2 Gloves Agricultural machinery (except tractors) PA331

PA450 Footwear Metal-working machine tools PA332 PA461.1 Refractory goods PA333.1 Pumps PA461.2 Building bricks and non-refractory goods

PA333.2 Valves PA462 Pottery PA333.3 Compressors and fluid power equipment PA463 Glass PA334 Industrial engines

PA464 Cement Textile machinery and accessories PA335 PA469.1 Abrasives Construction and earth-moving equipment PA336 Miscellaneous building materials and mineral products PA469.2 Mechanical handling equipment PA337

PA471 Timber Office machinery Furniture and upholstery PA472 PA339.1 Mining machinery PA473 Bedding, etc. PA339.2 Printing, bookbinding and paper goods machinery

Shop and office fitting PA474 PA339.3 Refrigerating machinery, space-heating, Wooden containers and baskets PA475 ventilating and air-conditioning equipment Miscellaneous wood and cork manufactures PA479

PA339.5 Scales and weighing machinery and portable Paper and board power tools Cardboard boxes, cartons and fibre-board packing cases PA482.1 PA339.7 Food and drink processing machinery and Packaging products of paper and associated materials

packaging and bottling machinery PA482.2 Manufactured stationery PA483 Miscellaneous (non-electrical) machinery PA484.1 Wallcoverings Industrial (including process) plant and steelwork

Miscellaneous manufactures of paper and board PA484 2 PA342 Ordnance and small arms Printing, publishing of newspapers and periodicals
General printing and publishing PA485 Ball, roller, plain and other bearings PA349 1 Precision chains and other mechanical engineering

PA491 Rubber PA351 Photographic and document copying equipment Linoleum, plastics floor-covering, leathercloth, etc. PA492 Brushes and brooms
Toys, games and children's carriages PA352 Watches and clocks PA353 Surgical instruments and appliances

PA494 Scientific and industrial instruments and systems PA354 Sports equipment PA494.3 PA361 Flectrical machinery Miscellaneous stationers' goods PA495 Insulated wires and cables PA362

PA496 Plastics products Telegraph and telephone apparatus and Musical instruments PA499 1 equipment Miscellaneous manufacturing industries PA499.2 PA364

Radio and electronic components Construction PA500 Gramophone records and tape recordings PA601

PA365.2 Broadcast receiving and sound reproducing PA602 Electricity equipment Water supply PA603 Electronic computers Summary tables Radio, radar and electronic capital goods Electrical appliances primarily for domestic use

The information in this report relates to establishments classified to the Industrial engines industry, minimum list heading 334 in the Standard Industrial Classification (revised 1968). The activities of the industry include:-

Manufacturing industrial internal combustion engines (other than in marine engineering establishments), gas turbines and internal combustion engines for rail vehicles; other types of prime movers except turbines for electricity generation, marine engines and steam locomotives. Internal combustion engines for the propulsion of wheeled tractors, motor vehicles and aircraft are not included.

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

LIST OF CONTENTS

PA 334 INDUSTRIAL ENGINES

Table No	Title	Page
1	Output and costs, 1973-1976	2
2	Capital expenditure, 1973-1976	notes 3 months lastes
3	Stocks and work in progress, 1973-1976	3
4	Analysis of establishments by size, 1976	4-5
5	Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1976	6
6	Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments employing 20 or more persons, 1976	A TOTAL ENGINE
7	Percentage analysis of employees, by full and part-time employment and sex, 1976	The Period To
STATE OF THE PARTY		

16,875

Output and costs, 1973-1976 All United Kingdom establishments classified to the industry (a)

	Unit	1973	1974	1975	1976
Enterprises	Number	54	64	65	73
Establishments	11	61	72	71	80
	£ thousand	152,503	195,649	260,058	336,240
Sales of goods produced Receipts for work done and industrial services rendered	The second of th	(b)	(b)	(b)	8,354
Capital goods produced for establishments! own use	п	325	(b)	(b)	949
Non-industrial services rendered	nt " stokesst	416	494	586	718
Goods merchanted or factored	10 10 10 10 10 10	19,597	27,681	32,326	40,978
Total sales and work done (c)	п	172,840	223,824	292,970	387,239
Increase during the year, work in progress and goods on hand for sale	II SAASS	5,971	13,981	24,174	13,037
Gross output	m PAGIS	178,811	237,805	317,144	400,276
Purchases of materials for use in production, and packaging and fuel	н	80,260	114,656	140,432	175,532
Purchases of goods for merchanting or factoring	n .	16,216	20,760	24,327	33,183
Increase during the year, stocks of materials, stores and fuel	п	4,723	11,421	4,153	3,808
Cost of industrial services received	"	5,719	9,517	9,887	13,062
Net output	H PAGE	81,339	104,294	146,651	182,307
Total employment (d)	Thousands	26.0	27.2	25.1	28.4
Net output per head	£	3,127	3,829	5,852	6,415
Payments for non-industrial services					
Rents, hire of plant and machinery (e)(f)	£ thousand	785	1,049	978	1,543
Commercial insurance premiums	" PA4612	733	833	1,176	1,682
Bank charges	" Paulin	91	133	207	259
Other non-industrial services (g)	"	3,563	5,993	6,826	7,638
Licensing of motor vehicles	H ************************************	35	40	46	68
Rates, excluding water rates	II .	971	1,376	1,542	1,784
Gross value added at factor cost	# #34616 #A475	75,160	94,870	135,877	169,333
Gross value added at factor cost per head	£	2,889	3,483	5,422	5,958

⁽a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 92 per cent of employment within the industry.

TABLE 2

Capital Expenditure, 1973-1976 All United Kingdom establishments classified to the industry (a)(b)

All onfred Kriiguoiii estabrisiiiieitis Classi	 industry	(0)(0)	TANAMAS I LES TESTES	£ thousand
	1973	1974	1975	1976
Land and buildings	THE RESERVE OF	na n	Tollow Etass	took one aguo
New building work	369	1,389	1,964	1,931
Land and existing buildings	214	184	6	14
Disposals and book to the latest	48	12	55	540
Vehicles Acquisitions				
Motor cars Other vehicles	209 118	294 108) 249	780
Disposals				
Motor cars	49	69	9	
Other vehicles	12	10) 42	221
Plant and machinery				
Acquisitions	3,751	7,473	8,767	15,267
Disposals	153	84	121	355

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 92 per cent of employment within the industry.

4,398

9,272

10,769

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

TABLE 3

Total net capital expenditure

Stocks and work in progress, 1973-1976 All United Kingdom establishments classified to the industry (a)

生。20 新龙、宋河南联。3 102、河南花木、32 新龙、新	15世界	158,85	\$7 O	£	thousand
	1973	1974	1975	1970	6
its that classessoner-contrantly voctorials	na palkka tu	Incr	rease		Value at of year
Materials, stores and fuel	4,723	11,421	4,153	3,808	43,063
Work in progress	3,580	5,142	10,512	5,528	49,653
Goods on hand for sale	2,391	8,839	13,662	7,508	51,177
Total	10,694	25,403	28,327	16,845	143,893

a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 92 per cent of employment within the industry.

⁽b) Included with sales of goods produced.

⁽c) Details of manufacturers' sales of principal products are published regularly in Business Monitor PQ 334.

⁽d) Average number employed, including full and part-time employees (see table 7) and working proprietors.

⁽e) 1973 figures include hire of vehicles.

⁽f) For 1973-1975 rents of industrial and commercial buildings were not recorded separately. For 1976 the amount payable was £706 thousand.

⁽g) 1974-1976 figures include the cost of hiring goods vehicles.

Analysis of establishments by size, 1976
All United Kingdom establishments classified to the industry (a)

										ons be							
ize roup b)	Estab- lish- ments	Enter- prises (c)	Emp I oyme	ent		Wages a	nd salaries	s(f)	od bns bna!	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
			1,389	eBr				diad work	11 ye was								end or year
			Total (d)	Opera- tives	Others (e)	Operati	ves	Others(e) or best	70000010 0 0000010 0 00 0000		70 funtuo tek ba 3.8 si					
						Total	per head	Total	per	at takeyold vetadali e		Total	per head	Total	per head		
Ceess marketasses	Number	Number	Number	Number	Number	£ thous	and £	£ thousa	nd £	£ thousand	£ thousand	£ thousand	£	£ thousand	£	£ thousand	£ thousand
									itialamsa.	1990							
1-10	35	35	200)						- Hotolit								
			301						Tentile.	1000							
11-19	10	10	137)	676	288	1,818	2,69	0 1,060	3,682	13,014	13,119	4,016	4,036	(j)	(j)	276	3,046
20-49	9	9	272						THE RESIDENCE OF THE PARTY OF T						19 19 0		ana entituinis!
The state of the state of	Spell		386)						7.00								
50-99	6	6	300)						131111								
100-199	3	3	427	228	197	874	3,83	3 955	4,848	6,957	7,634	3,683	8,625	6,806(j)	4,786(j	78	2,906
200-399	4	4	1,150	800	350	2,322	2,90	2 1,251	3,574	11,107	11,342	5,619	4,886	4,979	4,330	806	4,925
and the second of the									7 004						4,550	000	4,923
400-749	3	3	1,609	959	650	2,881	3,00	5 2,005	3,084	25,674	27,429	13,588	8,445	12,959	8,054	1,414	10,627
750-1,999	3	3	4,349	2,734	1,615	8,852	3,23	8 6,331	3,920	82,984	84,854	37,690	8,666	34,931	8,032	3,063	23,953
,000 and over	7	3	19,891	12,160	7,731	35,689	2,93	5 24,912	3,222	247,504	255,898	117,712	5,918	109,658	5,513	11,238	98,436
									detes	2							
Franks, takes of									stugsa (n)								
									etofes								
				17,557	10,831	52,437		36,514	3,371	387,239							

⁽a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 employees.

⁽b) Average number employed, including full and part-time employees (see table 7) and working proprietors.

⁽c) The sum of the figures for the size groups may exceed the total for the industry because some enterprises control establishments in more than one size group.

⁽d) Including working proprietors.

⁽e) Administrative, technical and clerical employees.

⁽f) The cost of employers' contributions to national insurance, graduated pensions, other pensions and welfare schemes and the running costs of canteens, is estimated for the industry at £10,437 thousand.

⁽g) Sales of goods produced, capital goods manufactured, buildings constructed by establishments for their own use, work done, industrial and non-industrial services rendered and merchanted goods.

⁽h) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.

⁽i) Gross value added data relate to establishments employing 1-199.

TABLE 6

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1976
All United Kingdom establishments classified to the industry.

Area	Total employment	(a)		Net capital expenditure	(b)(c)	employment received fr	gross value a in the region om establishme O per cent of in the region	ents wi	nd eturns th
						Net output	Gross value added at factor cost	Employe as a pe age of region	ercent- total
								employ the in	ment in
bassion 3	Thousands	per cent of Unite Kingdom		£ thousand	per cent of United Kingdom	£ thousand	£ thousand		AADMOST
Standard regions of England									
North	*	*		*	*	*	*	*	
Yorkshire and					0.4	*	*	*	
Humberside	0.2	0.8		60 *	V•4 *	*	*	*	
East Midlands	*	*			*	*	*	*	
East Anglia	*	*		*				96.4	
South East	5.2	18.4		2,175	12.9	34,526	32,034	90.4	
South West	*	*		*	*	*	*		
West Midlands	4.6	16.1		2,341	13.9	*	*	*	
North West	5.5	19.5		3,588	21.3	* * *	1 3,000 * 04,75	*	492(
England	26.9	94.8	, 390	16,166	95.8	122,068	112,667	70.2	
Wales Scotland	7 -005,83	* * * * * * * * * * * * * * * * * * *		***	*	**********	17-2,333,08,28	*	7802,77
Great Britain	*	*		*	*	*	*	*	
Northern Ireland	*	*		*	*	*	*	*	
Unallocated (e)	_ =	-		-	-	47,361	44,436	-	
United Kingdom (b)	28.4	100.0		16,875	100.0	182,307	169,333		

- (a) Average number employed, including full and part-time employees (see table 7) and working proprietors.
- (b) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 employees.
- (c) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.
- (d) Where a census return covered addresses in two or more regions an estimate was made of the net output and gross value added attributable to the region only where more than 80 per cent of the establishment's employees were located in the region. The estimate was made by assuming that net output and gross value added at each address covered by a return was proportional to employment at the address.
- Unallocated net output and gross value added covering establishments with addresses in two or more regions, plus estimates for unsatisfactory returns, non-response and establishments exempt because of size.

Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments employing 20 or more persons, 1976

Accol	unting year ended	Percentage of total return	s received	Percentage of total number employed
100	rea berrau env te l vergetit chet inthi en	per cent		per cent
1976	April (a)	3.8		0.1
	May	0.0		0.0
.160	June	0.0		0.0
	July	15.4		4.9
	August	0.0		0.0
150	September	3.8		0.5
150	October	3.8		0.1
1100	November	0.0		0.0
	December	46.2		59.3
1977	January	0.0		0.0
	February	0.0		0.0
	March (b)	26.9		35.2
100				
10 35				

- (a) From 6th April.
- b) Including returns made for twelve-month period ended 1st to 5th April 1977.

ABLE 7

ercentage analysis of employees, by full and part-time employment and sex, 1976 (a)

Sex	Full-time	Part-time	All employees
evel from te	per cent	per cent	per cent
Male	85	tat manual manual poli	86
Fema le	12 12 14 14 14 14 14	2	14

Source: Department of Employment

The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom at end June, 1976.

Produced in Wales by Her Majesty's Stationery Office Reprographic Unit, Cardiff Dd. 597332 K5 Cdf 71 5/79

These notes give the main information needed for interpreting the figures in the industry Business Monitors: more detailed information about the census is given in a separate Business Monitor -PA1001 (Introductory Notes) of the Report on the Census of Production, 1976.

GENERAL INFORMATION

Changes made for 1976

The Census for 1976 is in line with similar inquiries being conducted in other member countries of the European Economic Communities. There was a small number of changes in the scope of the industry reports compared with 1975. These include separate headings for:

Sales of goods produced

Receipts for work done and industrial services rendered

Amounts paid for hire of plant and machinery Amounts paid for rent of industrial and commercial buildings

Specific changes are explained in the introductions to the industry reports or by footnotes to the

Suppression of information relating to individual

Section 9(5)(b) of the Statistics of Trade Act 1947 states - "The following provisions shall have effect with respect to any report, summary or other communication to the public of information obtained under the foregoing provisions of this Act -

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."

If a figure involved disclosure the contributor concerned was sometimes asked to give permission for its publication. In the majority of cases permission was given. When it was refused and where contributors were not approached the figure has been suppressed, either by combining it with other figures, or as in the regional tables, by omitting the figure altogether.

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

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, 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.

Industrial classification

Industrial United Kingdom Standard The United Kinguom Standard Industrial Classification (SIC) was first issued in 1948 and was subsequently revised in 1958 and 1968. exists to promote uniformity and comparability the official statistics of the United Kingdom, The general principles followed are those of the International Standard Industrial Classification of all Economic Activities of the United Nations Statistical Office but the United Kingdom SIC reflects the organisation and structure of industry and trade as it exists in the United Kingdom. The SIC is a classification by activity and is not a commodity classification. However an index of all commodity headings for which sales data are provided in the Quarterly Business Monitors, is published in Business Monitor PQ1000.

Statistical units

The statistical unit for the purpose of the Census is the establishment which is defined in the SIC as the smallest unit which can provide the information normally required for an economic census, for example, employment, expenses, turn-over, capital formation. Usually the principal activities carried on in an establishment fall within a single heading of the classification (e.g. steel making or sugar refining). Typically the establishment embraces all the activities carried on at a single address e.g. a farm, a mine or a factory, including those which are ancillary to the principal activities. Frequently distinct activities characteristic of different industries activities characteristic of different industries are carried on at one address, but normally these are not classified separately and the whole establishment is classified according to the main activity. If, however, the required range of data can be provided for each activity, each is taken to constitute a separate establishment. Sometimes activities which are conducted as a single ation they supply to the census is supplemented by the returns to the annual census of production. In cases where an establishment does not make a return to these inquiries the employment data are based on information provided by the Department of Employment from the annual census of production. In cases where an establishment does not make a return to these inquiries the employment data are based on information provided by the Department of Employment from the annual census of production. In cases where an establishment does not make a return to these inquiries the employment data are based on information provided by the Department of Employment from the annual census of employment are to these inquiries the employment data are based on information provided by the Department of Employment from the annual census of employment are to these inquiries the employment data are based on information provided by the Department of Employment from the annual census of production. In cases where an establishment does not make a return to these inquiries the employment data are based on information provided by the Department of Employment from the annual census of employment are the constitution of the cases are carried on at a number of addresses. business are carried on at a number of addresses. Where this is so, businesses are asked to provide the returns that those with 25 or more employees provide to the quarterly inquiries. Information the full range of separate information in respect of each address; whether or not the activities are different. Their activities may, however, be integrated to such an extent that they constitute a single establishment. In the latter case the establishment is defined to cover the combined activities at these addresses (termed local units). Separate figures are obtained of employment and net capital expenditure at each unit in order to compile regional tables. unit in order to compile regional tables.

Efforts are made by the Business Statistics Office to ensure, by negotiating with respondents, that the return from an establishment does not cover local units or addresses in more than one of the countries of the United Kingdom.

Further information about the statistical unit appeared in an article "The statistical unit in business inquiries" in Statistical News No.13 May

Establishments are asked to exclude from their returns particulars relating to any department not engaged in production e.g. merchanting, transport, warehousing, for which they keep a separate set of accounts. Transfers of goods produced to such departments are treated as sales and respondents are asked to value them as far as possible as if sold to an independent purchaser. Where separate accounts are not kept they are asked to include details of all these activities in their return. Particulars relating to head offices mainly engaged in the administration of the production units within the scope of the census were included. Where more than one return was made the information in respect of the head office was apportioned among them. For certain purposes in the annual censuses of

production (especially the enterprise analyses of Business Monitor PA1002) related establishments are combined. For these purposes an enterprise group may be defined as a business consisting of aither a single establishment or two or more stablishments under common ownership or control. ringing together establishments into enterprise is also necessary for the purpose of groups osuring that there will be no disclosure of the activities of any one enterprise group.

activities of any one enterprise group.

activities of any one enterprise group. stablishments, the changing structure of groups f companies and about common ownership links is btained from many sources, including the Stock exchange Year Book, company reports, press reports and information supplied by individual establish-

he register permits a questionnaire to be sent to the reporting establishment on which Hirect he latter can include information relating to all manufacturing (or local) units which it omprises.

The inquiries provide a major source of information keeping the register continuously up-to-date and act as a check on its detail and structure. or the establishments on the register making returns to the quarterly inquiries, the industrial classification is derived from an analysis of their sales of commodities and is reviewed annually. imployment data are entered on the register from returns to the annual census of production. In

overage

return was required in the 1976 Census from each establishment with 20 or more employees. Each establishment is classified to an industry, as defined in the SIC, whose principal products form he major part of the establishment's sales.

e regions defined in Table 5 take account of the boundary changes arising out of the Local overnment Act 1972 and the Local Government Act Scotland) 1973. These changes came into effect in pril 1974 in England and Wales and May 1975 in Scotland.

TERMS USED IN THE CENSUS REPORT

Verage number employed

stablishments were required to state the number persons on the payroll on average during the ear of return, whether rull-lime a for: of return, whether full-time or part-time

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

rages could be calculated from the figures ating to the last week of each calendar month. tablishments were also required to state the

number of working proprietors where appropriate and these are included in total employment figures. 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 "selfemployed" for national insurance purposes and members of their families who worked in the business without receiving a wage or salary; but such persons who worked 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, superintendents 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, transport (including roundsmen), warehouses, stores, shops and canteens, inspectors, maintenance workers and cleaners. Operatives engaged in outside work of erecting, fitting etc. are also included, but outworkers are excluded.

Capital expenditure

Capital expenditure during the year in respect of manufacturing 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 each 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 establishment's 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 is 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

Cost of industrial services

This includes amounts payable to other firms for work done on materials supplied by the establishpayments 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 rent of industrial and commercial buildings, hire of plant and machinery, commercial insurance premiums, bank charges and amounts paid for professional services, post office services, transport, 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.

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

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.) and 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.

Gross value added at factor cost Gross value added at factor cost is calculated by deducting from net output the cost of nonindustrial services (e.g. rent of buildings, hire of plant and machinery, commercial insurance premiums, bank charges and amounts paid for professional services, post office services, transport 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.

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 matter; of fuel, electricity and water; of materials to be used by the establishment or glven court to other establishments for the production of machinery or other capital items for the establishment when working on goods supplied by the establishment's return. Transfers of goods to the establishment from another departs. of goods to the establishment from another depart. ment 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 recorded by the other department. Amounts payable to transport firms or credited to the firm's own capital goods produced for establishments. Own capital same transport department for delivery of materials are this includes all work of a capital nature carried excluded, as are all purchases of machinery and out during the year by the establishments! own plant charged to capital account. Purchases of staff for their own use. plant charged to capital account. Purchases of staff for Their own use. 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 suppliers and any trade discounts are excluded, their duty-paid value, less any drawback, rebate, etc., the cost of transport is included only if it is lical "know-how" and revenue from such staff included with the purchase price in the firm's facilities as canteens. accounts. Imported goods are included at the full delivered cost. If in the firm's accounts the Goods merchanted or factored transport from docks or airport is not included in Merchanted goods are those (excluding canteen the cost of goods purchased, the cost is entered at sales) sold without having been subjected to any c.i.f. plus duty (if applicable). Leasing, renting manufacturing process by the seller. and hire purchase charges are excluded.

Stocks and work in progress

Sales of goods produced

Sales for the purposes of the annual censuses sale and of materials, stores and fuel, at the end means deliveries on sale of goods made by establishments in the United Kingdom covered by the lishments in the United Kingdom covered by the lishments by outworkers or by other establishments by outworkers or by other establishments defined as materials which have been partially from materials given out to them and sales of processed by the establishment but which are not waste products are included. New building work usually sold or transferred to another establishments for hiring out or leasing are establishments for hiring out or leasing are located in the establishments for being that adopted in the establishments profits. Progress payments made to subcapital asset accounts. Forward sales and canteer contractors are excluded and progress payments takings are excluded. All sales in the period of received from other organisations are not the inquiry are included irrespective of when the deducted. the inquiry are included irrespective of when the deducted.

goods were manufactured. Goods produced in one establishment and transferred either to ancillar lages and salaries 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 return, are treated as sales by the producing proprietors, whether called salaries or not, are establishment and valued as far as possible as it excluded. The values shown include all overtime they had been sold to an independent purchaser. Goods transferred to wholesale or retail selling regularly or not, and no deduction is made for organisations, for which separate accounts are line value shown for sales is the "net selling relimbursed from Government sources is included. The value of redundancy payments less any amounts relimbursed from Government sources is included. The value of any payments in kind, travelling added tax) charged to customers whether on a expenses etc. is excluded.

Work done and industrial services rendered

and fextile 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.

tocks and work in progress

added tax) charged to customers whether on a profises etc. Is excluded.

ex-works or delivered basis, after any tradiculation and agents' commissions have deducted. The cost of packing materials allowance for returnable cases is included. In employed by the establishment who do their work in industries where products attract Excise Duty their own homes) is generally on a piece-work value stated is usually inclusive of duty if sold in bond of appear on the establishment's payroll are included. Amounts paid to outworkers by sub-contractors are excluded.

Work done and industrial services rendered
Figures for work done represent the amount charge Employers' Insurance and welfare contributions
for work carried out on materials supplied by This Item Includes employers' contributions to
customer and include repair work. Within certal national Insurance and graduated pensions (and/or
earnings related basic contributions under the

Social Security Act, 1973) 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.

Crown copyright 1979

Her Majesty's Stationery Office

Government Bookshops

49 High Holborn, London WC1V 6HB
13a Castle Street, Edinburgh EH2 3AR
41 The Hayes, Cardiff CF1 1JW
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 $% \left(1\right) =\left\{ 1\right\} =\left\{$

Extracts from this publication may be reproduced provided the source is acknowledged. Proposals for complete reproduction should be addressed to the Librarian, Business Statistics Office, Newport, Gwent NPT 1XG