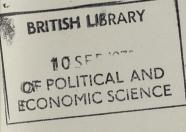
# PA461.1

# 1976



MSO

**Business Statistics Office** 

2/42(HA25)(2)

# **Business Monitor**

R834

# Report on the Census of Production

**Refractory goods** 



A publication of the Government Statistical Service

# PA461.1

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#### Enquiries:

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

# **Report on the Census of Production** 1976

**Refractory goods** 

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** 



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PA333.3 PA334	Compressors and fluid power equipment Industrial engines
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PA368 Electrical appliances primarily for domestic use

PA369 1	Electrical equipment for motor vehicles, cycles
	and aircraft Primary and secondary batteries
PA369.2 PA369.4	Electric lamps, electric light fittings, wiring accessories, etc.
PA370	Shipbuilding and marine engineering
PA380 PA381.1	Wheeled tractor manufacturing Motor vehicle manufacturing
PA381.2 PA382	Trailers, caravans and freight containers Motor cycle, tricycle and pedal cycle manufacturing
PA383	Aerospace equipment manufacturing and repairing Locomotives, railway track equipment, railway carriages,
PA384	wagons and trams
PA390 PA391	Engineers' small tools and gauges Hand tools and implements
PA392 PA393	Cutlery, spoons, forks and plated tableware, etc. Bolts, nuts, screws, rivets, etc.
PA394	Wire and wire manufactures Cans and metal boxes
PA395 PA396	Jewellery and precious metals
PA399.1 PA399.5	Metal furniture Drop forgings, etc.
PA399.6 PA399.8	Metal hollow-ware Miscellaneous metal manufacture
PA411	Production of man-made fibres Spinning and doubling on the cotton and flax systems
PA412 PA413	Weaving of cotton, linen and man-made fibres
PA414 PA415	Woollen and worsted Jute
PA416 PA417.1	Rope, twine and net Hosiery and other knitted goods
PA417.2	Warp knitting Lace
PA419	Carpets
PA421 PA422.1	Narrow fabrics Household textiles and handkerchiefs
PA422.2 PA423	Canvas goods and sacks and other made-up textiles Textile finishing
	Asbestos Miscellaneous textile industries
PA431	Leather (tanning and dressing) and fellmongery
PA432 PA433	Leather goods Fur
PA441 PA442	Weatherproof outerwear Men's and boys' tailored outerwear
PA443 PA444	Women's and girls' tailored outerwear Overalls and men's shirts, underwear, etc.
PA445	Dresses, lingerie, infants' wear, etc.
PA446 PA449.1	Hats, caps and millinery Corsets and miscellaneous dress industries
PA449.2 PA450	Gloves Footwear
	Refractory goods Building bricks and non-refractory goods
PA462	Pottery
PA463 PA464	Glass Cement
PA469.1 PA469.2	
PA471 PA472	Timber Furniture and upholstery
PA473	Bedding, etc.
PA474 PA475	Shop and office fitting Wooden containers and baskets
PA479 PA481	Miscellaneous wood and cork manufactures Paper and board
PA482.1	Cardboard boxes, cartons and fibre-board packing cases Packaging products of paper and associated materials
PA483 PA484.1	Manufactured stationery
PA484.2	Miscellaneous manufactures of paper and board
PA485 PA489	Printing, publishing of newspapers and periodicals General printing and publishing
PA491 PA492	Rubber Linoleum, plastics floor-covering, leathercloth, etc.
PA493 PA494.1	Brushes and brooms
PA494.3	Sports equipment Miscellaneous stationers' goods
PA495 PA496	Plastics products
PA499.1 PA499.2	Musical instruments 2 Miscellaneous manufacturing industries
PA500 PA601	Construction Gas
PA602	Electricity
PA603 PA1002	Water supply Summary tables

#### PA461.1 REFRACTORY GOODS

LI

The information in this report relates to establishments classified to the Refractory goods industry, minimum list heading 461.1 in the Standard Industrial Classification (revised 1968) The activities of the industry include:-

Manufacturing heat-resisting products such as ganister, magnesite and silica bricks, fireclay and graphite crucibles, gas retort and kiln linings, steel moulders' composition and radiants for gas and electric fires.

		In interpre	eting the data in the notes and definitions	tables it it essenti	al to bear
				which comment	e on page (III
T OF CONTI	ENTS				
Table No	Title 385,57		*** <sup>0</sup> 28,034		
1 8.0	0	070 1070	ACT.E		
	Output and costs, 1				
2	Capital expenditure				
3	Stocks and work in				
4	Analysis of establish	ments by size, 1	976		
5	Regional distributio at factor cost, 1976	n of employmen	nt, net capital expend	liture, net output	t and gross va
6	Percentage analysis Kingdom establishm	of twelve-month nents employing	periods covered by 20 or more persons,	returns received 1 1976	from United
7	Percentage analysis	of employees, by	y full and part-time e	mployment and	sex, 1976

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nd gross value added

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## TABLE 1

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

PATOL Telephone and person for	Unit	1973	1974	1975	1976
Enterprises	Number	116	119	120	painutos 116
Establishments	<b>"</b>	166	157	158	159
Sales of goods produced	£ thousand	96,822	125,610	150,460	188,509
Receipts for work done and industrial services rendered	which commence "	(b)	(b)	(Ь)	3,239
Capital goods produced for establishments' own use		229	136	213	461
Non-industrial services rendered	"	282	507	352	363
Goods merchanted or factored	"	4,801	7,658	6,670	7,345
Total sales and work done (c)	"	102,134	133,911	157,695	199,916
Increase during the year, work in progress and goods on hand for sale	"	223	2,606	3,908	2,826
Gross output	"	102,357	136,517	161,604	202,742
Purchases of materials for use in production, and packaging and fuel		42,778	66,972	73,995	93,686
Purchases of goods for merchanting or factoring	"	3,838	6,737	5,569	5,830
Increase during the year, stocks of materials, stores and fuel		1,480	4,392	5,850	5,965
Cost of industrial services received	"	3,988	2,448	3,080	3,660
Net output	"	53,231	64,754	84,810	105,531
Total employment (d)	Thousands	14.4	14.0	13.1	13.3
Net output per head	£	3,704	4,620	6,451	7,921
Payments for non-industrial services					
Rents, hire of plant and machinery (e)(f)	£ thousand	827	962	981	1,250
Commercial insurance premiums		479	508	657	823
Bank charges	<b>"</b>	93	134	143	77
Other non-industrial services (g)	"	5,931	8,312	9,248	10,224
Licensing of motor vehicles	la midi <b>n</b> acentifi Na	45	45	49	49100 <b>14</b> 32
Rates, excluding water rates		822	1,114	1,367	1,496
Gross value added at factor cost		45,034	53,679	72,365	91,617
Gross value added at factor cost per head	£	3,134	3,830	5,504	6,877

Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 86 per cent of employment within the industry. (a)

(b) Included with sales of goods produced.

Details of manufacturers' sales of principal products are published regularly in Business Monitor PQ461.1 (c)

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

(ė) 1973 figures include hire of vehicles.

For 1973-1975 rents of industrial and commercial buildings were not recorded separately. For 1976 the amount payable was (f) £505 thousand.

(g) 1974-1976 figures include the cost of hiring goods vehicles. PA461.1

## TABLE 2

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

		1973	1974
Land and buildings			Factor and
New building work		614	553
Land and existing buildings			
Acquisitions		234	207
Disposals		265	40
Vehicles			
Acquisitions			
Motor cars		397	455)
Other vehicles		277	215)
Disposals			
Motor cars		178	176)
		170	)
Other vehicles		46	28)
Plant and machinery			
Acquisitions		4,165	3,434
Disposals		30	169
Total net capital expenditu	re	5,168	4,451

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 86 per cent of employment within the industry.

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

#### TABLE 3

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

					E INOUSAI
	1973	1974	1975	DIF Dans a BOL	1976
	Antinata par emisioner	songeonnan worken	Increase	ere han sin antar	Value at end of year
Materials, stores and fuel	1,480	4,392	5,850	5,965	28,521
Work in progress	385	679	306	901	4,510
Goods on hand for sale	-163	1,927	3,602	1,925	17,681
Total	1,703	6,998	9,759	8,791	50,712

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 86 per cent of employment within the industry.

3

PA461 1

		£ thousand
1975		1976
131 207 0	astration	in the generation of the
650		679
113		78
77		145
696		1,061
030		1,001
193		190
4,127		6,959
97		343
5,219		8,099

#### TABLE 4

PA461.1

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

Size	Estab- lish-	Enter-	Employment			Wages and sa	laries (f)			
group (b)	ments	prises (c)								
				Opera- tives	Others (e)	Operatives		Others (e)		
			(0)		an isia	Total	per head	Total	per head	
negative ap	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£	
1 - 10	62	57	298)							
11 - 19	23	21	) 340 )							
20 - 49	25	21		2,256	683	6,257	2,774	2,183	3,197	
50 - 99	20	17	) 1,543)							
100 - 199	11	8	1,489	1,130	354	3,465	3,066	1,179	3,330	
200 - 299	9	7	2,161	1,646	515	4,835	2,937	1,980	3,844	
300 - 499	3	3	1,279	855	424	2,797	3,271	1,664	3,925	
500 and over	6	5	5,397	3,909	1,488	12,129	3,103	5,139	3,454	

Tota	al 159 116	13,323	9,796	3,464	29,483	3,010	12,145	3,506
(a)	Including estimates for establishments r	not making	satisfactory retu	ırns, non-re	sponse and esta	blishments with	fewer than	20 employees
(b)	Average number employed, including fu	III and part	-time employees	(see table )	7) and working	proprietors.		
(c)	The sum of the figures for the size group more than one size group.	ps may exc	eed the total for	the indust	ry because some	e enterprises con	itrol establis	shments in
(d)	Including working proprietors.							
(e)	Administrative, technical and clerical er	nployees.		l'anne saintea 1				

4

Total sales Gross output Net output and work done (g)		Gross value added at factor cost	
Total	per	Total	per

		added at factor oo	σται	per head	Total	per head		
£ thousand		id £	thousand	E To the test bathout and bathout	£ thousand	E to toos con control	£ thousand	£ thousand
46,425	46,874		25,288	8,438		(1)	4 750	to envigen losis
40,420	-0,07-		23,200	0,430	(j)	(j)	1,756	9,643
22,267	22,565	16,120	10,855	7,290	31,515(j)	7,025(j)	564	5,809
39,691	40,747		22,179	10,264	19,482	9,015	1,757	8,450
24,836	24,723		12,793	10,002	11,171	8,734	956	6,703
66,697	67,834		34,415	6,377	29,449	5,457	3,066	20,107
							najimi , bawalanna in	

199,916 202,742 105,531 7,921 91,617 6,877

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 £5,235 thousand. (f)

(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.

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

5

Net capital expenditure (h)

Total stocks and work in progress at end of year

bd

8,099

50,712

PA461.1

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)		Net output, gross value added and employment in the region from returns received from establish- ments with more than 80 per cent of their employ- ment in the region (d)			
			per cent of	£ thousand	per cent of	Net output	Gross va added at factor co	perce ost region	Employment as a percentage of total regional employment in the industry
hadaunde 3	<u></u>	Thousands					£ thousa	<u>com</u> idit <i>iti (</i> )	
		Thousands	United Kingdom	E thousand	United Kingdom	E mousund	2 110000		
Standard regions of									
England									
North		1.2	9.3	1,090	13.5	*	*	•	
Yorkshire and Humberside		3.2	24.1	1,953	24.1	17,760	16,120	61.0	
East Midlands		1.7	12.5	1,146	14.2	3,950	3,521	25.4	
East Anglia		505 <b>.</b>	and the seal	( <u>55</u> 80(6))	10,286,01	12.17 <b>9</b> 850.4	•	•	
South East		0.5	3.9	328	4.0	3,648	3,110	78.8	
South West		800•0	K84.8,999	29,0 •0	1,49-32.0	12,129 -116,6	• 101 10	•167,834	
West Midlands		2.5	18.8	1,226	15.1	11,998	10,455	64.7	
North West		0.8	5.9	467	5.8	•	• •	•	
England		10.0	75.4	6,275	77.5	47,472	41,210	60.0	
Wales		•	•	•	. *	•	*	*	
Scotland		2.6	19.9	1,671	20.6	20,575	17,790	98.8	
Great Britain		*	*	*	*	*	*	*	
Northern Ireland		•	*	*	*	•	•	*	
Unallocated (e)			-	-	-	33,392	29,099	-	
United Kingdom (b	)	13.3	100.0	8,099	100.0	105,531	91,617		

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

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

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

Where a census return covered addresses in two or more regions an estimate was made of the net output and gross value added (d) 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.

6

(e) 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.

#### TABLE 6

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

Accounting year ended		Percentage of total returns received				
) tot)	carriel estado estiluiro	per cent	o the not the week			
1976	April (a)	0.0				
	Мау	0.0				
	June	3.5				
	July	0.0				
	August	1.8				
	September	1.8				
	October	1.8				
	November	0.0				
	December	49.1				
1977	January	1.8				
	February	1.8				
	March (b)	38.6				

(a) From 6th April.

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

#### TABLE 7

(a)

Percentage analysis of employees, by full and part-time employment and sex, 1976(a) Bricks, fireclay and refractory goods industries, minimum list heading 461

Part-time		
a have with the		

The percentages relate to the numbers employed (excluding working proprietors) in the U 461 at end June, 1976. In the 1976 Census of Production the employment of the Refract cent of the employment of minimum list heading 461 as a whole.

Produced in Wales by Her Majesty's Stationery Office Reprographic Unit, Cardiff Dd.597332 K5 Cdf 54 4/79

6-01,369/1 64-14 66	nan bere trak doenn i anod seM er a
Percer	ntage of total number employed
per ce	
0.0	
0.0	
1.0	
0.0	
0.2	
0.7	
1.0	
0.0	
64.7	
	tie Stoorsseien oferinternahen g vadertakinge
4.5	
0.2	
27.6	
anar 4 Tanti	Aug of Sullinged 5 (517) + 194
112	anisstaubauranast, taminist, war .
	All employees
	per cent
	90 generation was given at a second to
	10
	restrictions and earlight and has lon
iter be	Source: Department of Employment
	Source: Department of Employment
Inited	Kingdom in minimum list heading
	oods industry represented 34 per
ffice	

#### Notes

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 tables.

Suppression of information relating to individual undertakings

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:

- 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
- R 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

United Kingdom Standard Industrial The Classification (SIC) was first issued in 1948 and was subsequently revised in 1958 and 1968. exists to promote uniformity and comparability in 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 fal 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 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 business are carried on at a number of addresses, Where this is so, businesses are asked to provide 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.

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 1971.

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 Transfers of goods produced to suc accounts. departments are treated as sales and respondents are asked to value them as far as possible as 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 main 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 wa apportioned among them.

For certain purposes in the annual censuses o

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 either a single establishment or two or more establishments under common ownership or control. Bringing together establishments into enterprise groups is also necessary for the purpose of ensuring that there will be no disclosure of the activities of any one enterprise group. Information about the relationship of establishments, the changing structure of groups of companies and about common ownership links is obtained from many sources, including the Stock Exchange Year Book, company reports, press reports and information supplied by individual establishments.

#### THE REGISTER

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

The inquiries provide a major source of information for keeping the register continuously up-to-date and act as a check on its detail and structure. For 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. Employment data are entered on the register from 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 censuses of employment. Establishments with 20 or more employees are

included in the censuses each year and the information they supply to the census is supplemented by the returns that those with 25 or more employees provide to the quarterly inquiries. Information about establishments with fewer than 20 employees in most industries is less securely based, but increasing use has been made of data on these small establishments supplied by the Department of Employment. One benefit of using this information is an improvement in the estimates of the number of smaller establishments and enterprises, but there is little effect on other aggregates (e.g. employment, output, net capital expenditure).

#### Coverage

A 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 the major part of the establishment's sales.

#### Regions

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

TERMS USED IN THE CENSUS REPORT

#### Average number employed

Establishments were required to state the number of persons on the payroll on average during the year of return, whether full-time or part-time employees. Separate figures were required for:

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

Averages could be calculated from the figures relating to the last week of each calendar month. Establishmerts were also required to state the

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 office employees. 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

(IV)

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

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

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.

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 obsoles-cence. The proceeds of items disposed of during the year exclude amounts written-off for items scrapped.

#### 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 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 rovalties 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 sale.

#### 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 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 good any canteen customers; and of food, etc. for any canteen Transfers establishment when working on goods supplied by 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 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 colofo plus duty (if applicable). Leasing, renting and hire purchase charges 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. New building work and machinery or other capital items produced by establishments for hiring out or leasing are regarded as sales, the value included in the return being that adopted in the establishments! capital asset accounts. 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 it 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 value added tax) 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. 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  $\sigma$ exported.

#### Work done and industrial services rendered Figures for work done represent the amount charged for work carried out on materials supplied by 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.

Capital goods produced for establishments! own use This includes all work of a capital nature carried out during the year by the establishments' own staff for their own use.

#### Non-industrial services rendered

This includes rents received for commercial and Industrial buildings, amounts charged for hiring out plant, machinery 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.

#### Goods merchanted or factored

Merchanted goods are those (excluding canteen sales) sold without having been subjected to any manufacturing process by the seller.

### 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 including any stocks of goods held for vear. 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, together with a margin of overhead costs and profits. Progress payments made to subcontractors 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. he value of redundancy payments less any amounts reimbursed from Government sources is included. he value of any payments in kind, travelling expenses etc. is excluded.

### 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.

### Employers' insurance and welfare contributions This item includes employers' contributions to national insurance and graduated pensions (and/or earnings related basic contributions under the

(v)

included.

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

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