PA271.2

1976

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# Business Monitor

Report on the **Census of Production** 

**Organic chemicals** 



#### 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.

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## PA271.2 Business Monitor

A publication of the Government Statistical Service

Report on the Census of Production 1976

### **Organic chemicals**

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

Grain milling

Biscuits

Margarine

Soft drinks

Tobacco

PA271.2 Organic chemicals

Paint

PA279.1 Polishes

PA271.3 Miscellaneous chemicals

Sugar

Coal mining
Stone and slate quarrying and mining

Miscellaneous mining and quarrying

Bacon curing, meat and fish products

Cocoa, chocolate and sugar confectionery

Petroleum and natural gas

Milk and milk products

PA229.2 Starch and miscellaneous foods

Brewing and malting

PA239.2 British wines, cider and perry

Mineral oil refining

Inorganic chemicals

Toilet preparations

synthetic rubber

PA279.4 Formulated pesticides, etc.

Iron castings, etc.

Industrial engines

Office machinery

PA279.5 Printing ink PA279.6 Surgical bandages, etc.

Steel tubes

Fertilizers

Dyestuffs and pigments

PA279.2 Formulated adhesives, gelatine, etc. PA279.3 Explosives and fireworks

PA279.7 Photographic chemical materials

Iron and steel (general)

Miscellaneous base metals

Metal-working machine tools

Mechanical handling equipment

Aluminium and aluminium alloys

Copper, brass and other copper alloys

Agricultural machinery (except tractors)

Construction and earth-moving equipment

Lubricating oils and greases

Bread and flour confectionery

Fruit and vegetable products
Animal and poultry foods

Vegetable and animal oils and fats

Spirit distilling and compounding

Coke ovens and manufactured fuel

Pharmaceutical chemicals and preparations

Soap and detergents
Synthetic resins and plastics materials and

Chalk, clay, sand and gravel extraction

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PA103

PA104

PA109

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PA333.1 Pumps

PA333.2 Valves

PA271 1

PA229.1

PA369.1	Electrical equipment for motor ve	ehicles,	cycles
	and aircraft		

PA369.2 Primary and secondary batteries PA369.4 Electric lamps, electric light fittings, wiring accessories, etc.

PA370 Shipbuilding and marine engineering PA380 Wheeled tractor manufacturing

PA381 Motor vehicle manufacturing PA381 2 Trailers, caravans and freight containers Motor cycle, tricycle and pedal cycle manufacturing PA382

PA383 Aerospace equipment manufacturing and repairing PA384 Locomotives, railway track equipment, railway carriages wagons and trams

PA390 Engineers' small tools and gauges PA391

Hand tools and implements
Cutlery, spoons, forks and plated tableware, etc. PA392

PA393 Bolts, nuts, screws, rivets, etc. Wire and wire manufactures PA394 PA395 Cans and metal boxes PA396 Jewellery and precious metals

Metal furniture PA399. PA399.5 Drop forgings, etc. PA399 6 Metal hollow-ware

PA399.8 Miscellaneous metal manufacture PA411 Production of man-made fibres

Spinning and doubling on the cotton and flax systems Weaving of cotton, linen and man-made fibres PA412

PA414 Woollen and worsted PA415 Jute

PA416 Rope, twine and net

Hosiery and other knitted goods PA417.2 Warp knitting

PA418 Lace PA419 Carpets

PA421 Narrow fabrics

PA422.1 Household textiles and handkerchiefs

PA422.2 Canvas goods and sacks and other made-up textiles

PA423 Textile finishing PA429.1 Asbestos

PA429.2 Miscellaneous textile industries

PA431 Leather (tanning and dressing) and fellmongery

PA432 Leather goods PA433

Weatherproof outerwear PA441 PA442 Men's and boys' tailored outerwear

PA443 Women's and girls' tailored outerwear PA444 Overalls and men's shirts, underwear, etc.

PA445 Dresses, lingerie, infants' wear, etc. PA446 Hats, caps and millinery

PA449 Corsets and miscellaneous dress industries PA449.2 Gloves PA450 Footwear

Refractory goods PA461.1 PA461.2 Building bricks and non-refractory goods PA462 Pottery

PA333.3 Compressors and fluid power equipment PA463 Glass Textile machinery and accessories PA464 Cement

PA469 1 Abrasives

PA469.2 Miscellaneous building materials and mineral products

PA471 Timber PA472 Furniture and upholstery

Mining machinery PA339.2 Printing, bookbinding and paper goods machinery PA473 Bedding, etc. Shop and office fitting PA339.3 Refrigerating machinery, space-heating, PA474

ventilating and air-conditioning equipment Wooden containers and baskets PA479

PA339.5 Scales and weighing machinery and portable Miscellaneous wood and cork manufactures PA481 Paper and board power tools PA339.7 Food and drink processing machinery and Cardboard boxes, cartons and fibre-board packing cases

packaging and bottling machinery PA482.2 Packaging products of paper and associated materials PA339.9 Miscellaneous (non-electrical) machinery PA483 Manufactured stationery Industrial (including process) plant and steelwork Wallcoverings

Ordnance and small arms PA484.2 Miscellaneous manufactures of paper and board PA349.1 Ball, roller, plain and other bearings Printing, publishing of newspapers and periodicals General printing and publishing PA485 Precision chains and other mechanical engineering PA489

PA351 Photographic and document copying equipment PA491 Rubber PA352 Watches and clocks PA492 Linoleum, plastics floor-covering, leathercloth, etc. Surgical instruments and appliances PA493 Brushes and brooms PA354

Scientific and industrial instruments and systems PA494. Toys, games and children's carriages PA361 Electrical machinery Insulated wires and cables PA494.3 Sports equipment PA495 Miscellaneous stationers' goods PA363

Telegraph and telephone apparatus and PA496 Plastics products equipment PA499 Musical instruments Radio and electronic components PA499.2 Miscellaneous manufacturing industries PA365 1 Gramophone records and tape recordings PA500 Construction

PA365.2 Broadcast receiving and sound reproducing PA601 equipment PA602 Electricity PA366 Electronic computers PA603 Water supply PA367

Radio, radar and electronic capital goods Summary tables PA368 Electrical appliances primarily for domestic use

PA271.2 ORGANIC CHEMICALS

The information in this report relates to establishments classified to the General chemicals (organic) industry, minimum list heading 271.2 in the Standard Industrial Classification (revised 1968). The activities of the industry include:—

Manufacturing separate chemically defined organic compounds (i.e. compounds containing carbon, but excluding condensates, polymers and copolymers, elemental carbon and certain simple carbon compounds such as calcium carbide, carbon disulphide and carbon dioxide). Products of the tar distillation and benzole refining are included. Radio-active organic compounds and isotopes, mixtures of chemicals, and certain compounds used mainly for specific end-uses (such as simple phosphate or phthalate plasticiser chemicals), organic pharmaceutical chemicals and prepared products derived from organic chemicals, such as dyestuffs, pesticides preparations and pharmaceutical preparations are all excluded.

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

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

A CA CAST CONTRACTOR AND SPECIAL CONTRACTOR AND CON	Unit	1973	1974	1975	1976
Enterprises	Number	81	87	88	92
Establishments	tuiolin as ribus at	113	120	126	130
Sales of goods produced	£ thousand	724,085	1,344,486	1,398,096	1,946,926
Receipts for work done and industrial services rendered	e doce "Henimen: "	(b)	(b)	(b)	19,296
Capital goods produced for establishments' own use	sitenses al 11 aspentis Note communicate	7,340	21,460	14,052	16,103
Non-industrial services rendered	"	11,417	(c)	18,067	16,621
Goods merchanted or factored	,,	64,483	178,301	174,927	298,176
Total sales and work done (d)	"	807,325	1,544,246	1,605,142	2,297,122
Increase during the year, work in progress and goods on hand for sale	"	7,906	61,542	11,426	60,845
Gross output	,,	815,231	1,605,787	1,616,568	2,357,967
Purchases of materials for use in production, and packaging and fuel	"	458,631	1,036,254	1,013,630	1,464,660
Purchases of goods for merchanting or factoring	"	59,162	134,820	153,289	269,431
Increase during the year, stocks of materials, stores and fuel	,,	15,835	33,256	4,182	21,234
Cost of industrial services received	"	21,723	35,946	47,669	53,409
Excise payments etc. (net)	ii.	20,549	(e)	(e)	(e)
Net output	"	271,001	432,024	406,162	591,701
Total employment (f)	Thousands	35.5	35.4	36.1	36.2
Net output per head	£	7,629	12,196	11,251	16,355
Payments for non-industrial services					
Rents, hire of plant and machinery (g)(h)	£ thousand	5,709	6,366	8,234	11,238
Commercial insurance premiums		3,771	5,780	7,207	8,278
Bank charges	"	57	87	212	94
Other non-industrial services (j)	"	31,106	40,503	53,144	70,015
Licensing of motor vehicles	,,	167	144	195	211
Rates, excluding water rates		5,989	7,963	10,149	11,038
Gross value added at factor cost		224,203	371,182	327,021	490,828
Gross value added at factor cost per head	£	6,311	10,479	9,058	13,567

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 98 per cent of employment within the industry.

- (b) Included with Sales of goods produced.
- (c) Included with capital goods produced for establishments own use.
- (d) Details of manufacturers' sales of principal products are published regularly in Business Monitor PQ271.
- (e) Included with purchases of materials for use in production and packaging and fuel.
- (f) Average number employed, including full and part-time employees (see table 7) and working proprietors.
- (g) 1973 figures include hire of vehicles.
- (h) For 1973-1975 rents of industrial and commercial buildings were not recorded separately. For 1976 the amount payable was £1,445 thousand.
- (j) 1974-1976 figures include the cost of hiring goods vehicles.

TABLE 2

Capital expenditure, 1973 - 1976

All United Kingdom establishments classified to the industry (a)(b)

							£ thousand
	aries (f) as sat	Wages and sale	1973	1974 Volgm3	1975	Estab-	1976
Land and buildings						ments	
New building work		Operatives	3,474 (e)	Total 788,4 Opera-	5,721		7,047
Land and existing b	per sgnibliud		100	Toba			
Acquisitions	3	£ thousand	-138	1,298	3,592	Number	3,092
Disposals			469	1,424	468	JOSE HOAL	248
Vehicles							
Acquisitions							
Motor cars	3,445 %	5,313	342	344)	a1,490		1,613
Other vehicles			417	1,063)	77		
Disposals							
Motor cars	3,369	8,501	94	3,892 2,523 (88			
Other vehicles	3,676	4,819	834	7.02(88)	161		229 968 - 068
Plant and machinery							
Acquisitions	3,514	8,244	46,143	56,252 de E	169,201		270,787
Disposals 184.44		47,769 000	384	20,90,294,1	2,074		794
Total net capita	l expenditure		49,533	60,571	177,300		281,267

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 98 per cent of employment within the industry.

#### TABLE 3

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

					£ thousan
3,6674 788 588,784 781,800	1973	1974	1975		1976
ments with fewer than 20 employ a	nail <b>de</b> zer b <u>n</u> e senogra	ictory reterns, non-n	Increase	menes for establishment	Value at end of year
Materials, stores and fuel	7) and working prop 58,831	98det 998) 33,256	4,182	21,234	109,459
Work in progress	3,772	15,503	3,063	11,197	47,557
Goods on hand for sale	4,134	46,039	8,363	49,648	148,979
Total	23,741	94,798	15,608	82,079	305,995

Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 98 per cent of employment within the industry.

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

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

Size group (b)	Estab- lish- ments	Enter- prises (c)	Employmen	t		Wages and sa	laries (f)		
			Total (d)	Opera- tives	Others (e)	Operatives	1000	Others (e)	10000
			(6)	11.00		Total	per head	Total	per head
SAR CHI PARK	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£
1 - 10	38	36	178)						
11 - 19	14	14 8V	218)	1,542	823	5,313	3,445	3,085	3,749
20 - 49	15	15	467)						
50 - 99	21	17	1,541)						
100 - 299	22	18	3,893	2,523	1,370	8,501	3,369	5,708	4,166
300 - 399	6	6	2,024	1,311	713	4,819	3,676	2,731	3,830
400 - 749	6	5	3,407	2,188	1,219	7,788	3,559	5,093	4,178
750 - 1,999	3	105.03	3,550	2,346	1,204	8,244	3,514	5,666	4,706
2,000 and over	5	870.53	20,900	12,576	8,324	47,789	3,800	44,481	5,34

Total	130	92	36,178	22,486	13,653	82,454	3,667	66,764	4,890

(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.

Total sales Gross output Net output and work done (g)		Gross value added at factor cost		Processings 	Net capital expenditure (h)	Total stocks and work in progress at end of year	
		Total	per head	Total	per head		
£ thousand	£ thousand	£ thousand	£	£ thousand	£	£ thousand	£ thousand
109,781	111,267	34,882	14,510	(j)	(j)	5,602	15,001
1000	52,395 83'8'7"	E2 E97	13,765	75,221(j)	11,945(j)	77,463	31,900
233,386	240,071	53,587	13,705	75,221())	11,343(j)	2.2	HARTER SALES
72,408	74,934	23,684	11,702	20,394	10,076	8,034	14,134
214,184	219,091	55,985	16,432	50,841	14,923	10,085	25,435
248,446	253,565	68,297	19,239	57,237	16,123	12,997	32,662
1,418,917	1,459,038	355,266	16,998	287,135	13,739	167,084	186,863

2,297,122	2,357,967	591,701	16,355	490,828	13,567	281,267	305,995
	1 1 M Ce 3						

(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 £ 35,499 thousand.

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 1-299.

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: IstoT and work in progress at progress at and of year	latioso Tötal eruttipre emple (n)		(a)	I control	Net capital expenditure	(b)(c)	the region fro	pross value addec om returns receiv nore than 80 per egion (d)	red from	establish-
							Net output	Gross value	Employ	ment as a
							Total late1	added at factor cost	percent regiona	age of total lemploymen
bassundt 3	bnesuorit 3		3	br	Expousar		briegundt 3	bnezuori	in the in	ndustry
	Thou	sands	per cer United Kingdo		£ thousand	per cent of United Kingdom	£ thousand	£ thousand		
Standard regions of	f									
England	5,602		(i)		(i)	14,510	34,882	111,267		109,781
North	*		*		*	*	*	*	*	
Yorkshire and										
Humberside	3.4		9.5		18,258	6.5	58,799	52,395	83.6	
		(i)	11,945	(i)	75,221	13,765	53,587	240,071		233,386
East Midlands	2.2		6.0		9,090	3.2	15,199	13,283	62.5	
East Anglia	\$60,8 *		10,076		20,394	11,702	23,684	74,934	2,73	72,408
South East	880,01		14,923		148 08 3,773	16,432	36,328	219,001	80.8	214,184
South West	8.0 2.007	3 8	8.0		697,237	19,239	68,297	253,565,0,0	****	248,446
West Midlands	480,781.1	(	3.0		2 1,315	0.5	4,724 338	3,797.0,034	30.0	1,418,917
North West	8.3		23.0		29,132	10.4	114,805	83,522	93.0	
England	*		*		*	*	446,319	374,087	88.1	
Wales	3.1		8.7		4,716	1.7	47,621	38,052	98.8	
Scotland	3.6		10.1		43,903	15.6	*	*	*	
Great Britain	*		*		*	*	*	*	*	
Northern Ireland	*		*			*	*	*	*	
Unallocated (e)			_		_	_	44,879	35,504	_	
United Kingdom (b)	36.2		100.0		281,267	100.0	591,701	490,828		

(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.

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.

(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.

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

Accounting year ended	Percentage of total returns received	Percentage of total number employed
and the timestal set treated	per cent	per cent
1976 April (a)	0.0	0.0
May	0.0	0.0
June	2.8	0.7
July	0.0	0.0
August	1.4	0.1
September	0.0	0.0
October	2.8	1.3
November	1.4	1.1
December	63.4	85.6
1977 January	7.1	2.6
February	0.0	0.0
March (b)	21.1	8.6

(a) From 6th April.

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

#### TABLE 7

Percentage analysis of employees, by full and part-time employment and sex, 1976(a) General chemicals industries, minimum list heading 271

Sex seeles innot	Full-time	Part-time	All employees
1 canabnoques	per cent	per cent	per cent per cent
Male	84	0	84
Female	13	3	16

Source: Department of Employment

(a) The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom in minimum list heading 271 at end June, 1976. In the 1976 Census of Production the employment of the Organic chemials industry represented 32 per cent of the employment of minimum list heading 271 as a whole.

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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 enter-

prises 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 Industrial Standard Classification (SIC) was first issued in 1948 and was subsequently revised in 1958 and 1968. It 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, turnover, capital formation. Usually the principal activities carried on in an establishment fall within a single heading of the classification 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 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

roduction (especially the enterprise analyses of re combined. For these purposes an enterprise may be defined as a business consisting of a single establishment or two or more stablishments under common ownership or control. Inging together establishments into enterprise is also necessary for the purpose of nsuring that there will be no disclosure of the ctivities of any one enterprise group. stablishments, the changing structure of groups companies and about common ownership links is tained from many sources, including the Stock xchange Year Book, company reports, press reports nd information supplied by individual establish-

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

omprises. he inquiries provide a major source of information r keeping the register continuously up-to-date nd act as a check on its detail and structure. the establishments on the register making sturns to the quarterly inquiries, the industrial lassification is derived from an analysis of their gles of commodities and is reviewed annually. mployment data are entered on the register from eturns to the annual census of production. In ases where an establishment does not make a return these inquiries the employment data are based on formation provided by the Department of Employ-

ent from the annual censuses of employment. stablishments with 20 or more employees are ncluded in the censuses each year and the informtion they supply to the census is supplemented by he returns that those with 25 or more employees rovide to the quarterly inquiries. Information bout establishments with fewer than 20 employees most industries is less securely based, ncreasing use has been made of data on these mall establishments supplied by the Department of mployment. One benefit of using this information an improvement in the estimates of the number of maller establishments and enterprises, but there s little effect on other aggregates (e.g. employment, output, net capital expenditure).

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

e regions defined in Table 5 take account of the oundary 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 cotland.

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 full-time or part-time mployees. Separate figures were required for:

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

erages could be calculated from the figures elating to the last week of each calendar month. stablishments 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.

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 They include operatives employed earners. 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 ∞st 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 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 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 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 packagin materials of all types; of stationery and printer matter; of fuel, electricity and water; 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 lishment's own use; of materials for use by establishment when working on goods supplied by customers; and of food, etc. for any cantee covered by the establishment's return. Transfer of goods to the establishment from another depart ment of the same firm not covered by the establishment's return are included at a cos 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 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 i 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 c.i.f. plus duty (if applicable). Leasing, renting and hire purchase charges are excluded.

Sales of goods produced

Sales of goods produced Sales for the purposes of the annual censuses means deliveries on sale of goods made by estab-lishments 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 return, are treated as sales by the producing establishment and valued as far as possible as if establishment and valued as far as possible as if excluded. The values shown include all overtime they had been sold to an independent purchaser. Bayments, bonuses and commissions, whether paid for the same for manufactured and producing establishment and valued as far as possible as if excluded. The values shown include all overtime they had been sold to an independent purchaser. Bayments, bonuses and commissions, whether paid for the values shown in the paid that the paid the producing establishment and valued as far as possible as if excluded. The values shown include all overtime they had been sold to an independent purchaser. Bayments, bonuses and commissions, whether paid for the producing the producing establishment and valued as far as possible as if excluded. The values shown include all overtime they had been sold to an independent purchaser. Bayments, bonuses and commissions, whether paid for the producing establishment and valued as far as possible as if excluded. The values shown include all overtime 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 a 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 of

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

ndustries this heading covers a wide variety of of the packed on commission; within the textile ndustries - making up of garments, fur dressing textile finishing; within printing and pubshing - preparatory work on type-setting, block aking and binding. Work done is also significant the electrical machinery and heavy engineering null leavy engineering installation and repair and jobbing work. Other activities within his heading include exploration work, research and gyelopment, glass cutting and dressing and planing + timber .

ndustrial services rendered include repairs and antenance, installation work, and technical asearch and studies for other organisations.

apital goods produced for establishments! own use his includes all work of a capital nature carried out during the year by the establishments' own that the stablishments own that for their own use.

his includes rents received for commercial and nustrial buildings, amounts charged for hiring out plant, machinery and other goods and amounts broad to other creatisations for the harged to other organisations for the provision of ransport. It also includes amounts received for he right to use patents, trademarks, copyrights stc., manufacturing and quarrying rights and tech-lical "know-how" and revenue from such staff

oods merchanted or factored Verchanted goods are those (excluding canteen sales) sold without having been subjected to any nanufacturing process by the seller.

tocks and work in progress alues are given of stocks of goods on hand for ale and of materials, stores and fuel, at the end f the year of return and of the change during the ear, 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 sually sold or transferred to another estabishment without further processing. The values include the cost of materials consumed and labour sed, together with a margin of overhead costs and profits. Progress payments made to sub-contractors are excluded and progress payments received from other organisations are not

payments, bonuses and commissions, whether paid egularly or not, and no deduction is made for ncome tax, insurances, contributory pensions etc. he value of redundancy payments less any amounts elmbursed from Government sources is included. he value of any payments in kind, travelling expenses etc. is excluded.

emuneration paid to outworkers he remuneration paid to outworkers (i.e. persons imployed by the establishment who do their work in heir own homes) is generally on a piece-work basis. Only amounts paid to outworkers whose names appear on the establishment's payroll are included. mounts paid to outworkers by sub-contractors are xcluded.

imployers' insurance and welfare contributions
This item includes employers' contributions to national insurance and graduated pensions (and/or arnings 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.

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