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OF POLITICAL AND E

ECONOMIC SCIENCE

**Business Statistics Office** 

## **Business Monitor**

Report on the Census of Production

Radio and electronic components



### 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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## PA364

## **Business Monitor**

A publication of the Government Statistical Service

Report on the Census of Production 1976

# Radio and electronic components

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

Introductory notes

Petroleum and natural gas

Milk and milk products

Bread and flour confectionery

Fruit and vegetable products

Vegetable and animal oils and fats

Spirit distilling and compounding

Coke ovens and manufactured fuel

Pharmaceutical chemicals and preparations

Synthetic resins and plastics materials and

Mineral oil refining Lubricating oils and greases

Animal and poultry foods

PA229.2 Starch and miscellaneous foods

Brewing and malting

PA239.2 British wines, cider and perry

Inorganic chemicals

Toilet preparations

Soap and detergents

Dyestuffs and pigments

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

Iron and steel (general)

Photographic chemical materials

Aluminium and aluminium alloys

synthetic rubber

PA279.4 Formulated pesticides, etc.

Iron castings, etc.

PA279.6 Surgical bandages, etc.

Steel tubes

Fertilizers

Polishes

PA279.5 Printing ink

Organic chemicals

PA271.3 Miscellaneous chemicals

Paint

Stone and slate quarrying and mining

Miscellaneous mining and quarrying

Bacon curing, meat and fish products

Cocoa, chocolate and sugar confectionery

Chalk, clay, sand and gravel extraction

Coal mining

Grain milling

Biscuits

Sugar

Margarine

Soft drinks

Tobacco

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- ventilating and air-conditioning equipment
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#### PA364 RADIO AND ELECTRONIC COMPONENTS

PA364

The information in this report relates to establishments classified to the Radio and electronic components industry, minimum list heading 364 in the Standard Industrial Classification (revised 1968). The activities of the industry include:—

Manufacturing electronic valves (including cathode ray tubes, but excluding glass envelopes), semi-conductors and electronic rectifiers; integrated circuits, including thin and thick film passive and hybrid circuits, monolithic semi-conductor circuits; and radio and electronic components and assemblies including resistors, capacitors, inductors, circuit breakers for electronic equipment, sound reproduction components, printed circuits and other components and assemblies not elsewhere specified. The manufacture of electronic components for broadcast receiving and sound reproducing equipment is included.

> 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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PA364

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

	Unit	1973	1974	1975	1976
Enterprises	Number	819	909	939	954
Establishments	ts, montellity, gen out brookers for e	914	1,000	1,026	1,037
Sales of goods produced	£ thousand	553,481	641,492	669,260	827,539
Receipts for work done and industrial services rendered		(b)	(b)	(b)	12,843
Capital goods produced for establishments' own use	in someones allega	4,486	4,893	4,282	4,326
Non-industrial services rendered	"	2,510	2,968	3,139	3,625
Goods merchanted or factored	"	103,202	108,360	103,790	146,483
Total sales and work done (c)	,,	663,678	757,713	780,471	994,817
Increase during the year, work in progress and goods on hand for sale	,,	17,579	21,371	2,151	12,845
Gross output	"	681,258	779,083	782,622	1,007,662
Purchases of materials for use in production, and packaging and fuel		233,962	278,226	257,688	350,085
Purchases of goods for merchanting or factoring	"	79,533	78,852	74,838	115,048
Increase during the year, stocks of materials, stores and fuel	,,	16,050	14,885	-7,282	14,817
Cost of industrial services received	"	13,654	15,910	17,635	21,705
Net output	"	370,159	420,981	425,178	535,642
Total employment (d)	Thousands	133.1	135.0	116.8	109.7
Net output per head	£	2,781	3,119	3,642	4,883
Payments for non-industrial services					
Rents, hire of plant and machinery (e)(f)	£ thousand	5,407	6,124	6,402	7,538
Commercial insurance premiums	"	2,918	3,326	4,131	4,573
Bank charges	"	384	456	1,734	793
Other non-industrial services (g)	"	14,214	21,050	24,593	33,256
Licensing of motor vehicles	"	102	99	121	атизтио 137
Rates, excluding water rates	"	3,293	4,408	6,133	6,564
Gross value added at factor cost	"	343,841	385,518	382,063	482,780
Gross value added at factor cost per head	£	2,583	2,856	3,272	4,401

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size, Satisfactory returns accounted for 84 per cent of employment within the industry.

Capital expenditure, 1973 - 1976

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

				£ thousand
Constitution (Gross suspect) assisted baseaspel/	1973	1974	1975	1976
Land and buildings		Server Serve - 17	(a) (b) sheen	parestoss a (d)
New building work	4,139	4,039	5,750	3,918
Land and existing buildings				
Acquisitions	582	1,268	1,476	1,919
Disposals	724	345	414	593
Vehicles				
Acquisitions				
Motor cars	1,236	1,556)		
Other vehicles	794	265)	1,671	2,454
Disposals 958.1 958.1				
Motor cars	440	549)	558	845
Other vehicles	24	72)	000	208,208
Plant and machinery				
Acquisitions	28,295	40,010	37,817	42,174
Disposals	1,229	1,183	2,136	1,624
Total net capital expenditure	32,628	44,989	43,605	47,404

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size.

Satisfactory returns accounted for 84 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)

					£ thousand
	1973	1974	1975		1976
	rits Helets & hate consequent	menteratura year and Inc	crease	periori de propio de la colonia	Value at end of year
Materials, stores and fuel	16,050	14,885	<b>-7,282</b>	14,817	86.901
Work in progress	12,377	9,784	3,393	9,118	62,021
Goods on hand for sale	5,202	11,586	-1,241	3,727	44,255
Total	33,629	36,256	-5,131	27,662	193,176

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 84 per cent of employment within the industry.

<sup>(</sup>b) Included in sales of goods produced.

<sup>(</sup>c) Details of manufactures' sales of principal products are published regularly in Business Monitor PQ364.

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

<sup>(</sup>e) 1973 figures include hire of vehicles.

<sup>(</sup>f) For 1973-1975 rents of industrial and commercial buildings were not recorded separately. For 1976 the amount payable was £4,240 thousand.

<sup>(</sup>g) 1974-1976 figures include the cost of hiring goods vehicles.

<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)	Employme	nt		Wages and sa	laries (f)			
			Total Opera-		Others	Operatives	Operatives		Others (e)	
			(d)	tives	tives (e)	Total	per head	Total	per head	
WINDS WIRT	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£	
1 - 10	506	502	2,448 )							
11 - 19	192	187	2,805 )					(IONE PROIT	0.45=	
20 - 49	111	110	3,371)	8,874	3,660	17,024	1,918	11,620	3,175	
50 - 99	65	65	4,594)							
100 - 199	50	48	7,109	4,972	2,125	9,244	1,859	6,791	3,196	
200 - 299	37	32	9,103	6,218	2,881	12,411	1,996	8,890	3,086	
300 - 399	21	20	7,213	5,052	2,160	9,953	1,970	6,919	3,203	
400 - 499	11	11	4,885	3,237	1,648	5,790	1,789	5,328	3,233	
500 - 749	19	16	11,345	7,442	3,903	16,027	2,154	13,154	3,370	
750 - 999	10	7	8,652	6,269	2,383	14,989	2,391	8,475	3,557	
1,000 - 1,499	5	4	5,731	3,940	1,791	7,679	1,949	6,379	3,562	
1,500 - 2,499	6	5 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	11,862	8,416	3,446	18, 143	2,156	11,442	3,320	
2,500 and over	4	4	30,579	22,842	7,737	47,408	2,075	27,829	3,597	

Total	1,037	954	109,697	77,262	31,734	158,668	2,054	106,827	3,366

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

Total sale and work done (g)	waters received from saleb- trian 80 per cent of tirals s	Net output	nizge of total or 	Gross value added at factor cost	- tes	Net capital expenditure (h)	Total stocks and work in progress at end of year
	ross vatus Employment data at percention of potor cost regional emp	Total	per head	Total	per head		
£ thousan	nd £ thousand	£ thousand	£	£ thousand	£	£ thousand	£ thousand
							2 110 900 110
113,570	114,668	59,456	4,498	(j)	(j)	5,722	22,667
66,311	66,350	32,996	4,641	79,810(j)	3,926(j)	2,134	12,629
77,331	78,242	45,497	4,998	39,555	4,345	3,509	16,617
72,191	73,392	36,038	4,996	32,295	4,477	4,040	14,040
58,922	59,756	28,057	5,744	25,353	5,190	2.327	11,642
93,947	94,514	50,005	4,408	43,938	3,873	3,756	23,066
78,501	80,001	38,617	4,463	33,893	3,917	3,925	17,681
44,381	44,519	26,200	4,572	24,594	4,291	1,354	10,420
73,571	75,732	46,650	3,933	43,151	3,638	4,023	16,697
316,092	320,487	172,126	5,629	160,191	5,239	16,614	47,718

994,81	7 1,007,662	535,642	4,883	482,780	4,401	47,404	193,176
	The cost of employers' costs of canteens, is estin returns received was £63	lated for the indus	tional insurance, stry at £35,640 t	graduated pensions, housand. In additio	other pensions n, for 1976, the	and welfare scheme remuneration of o	es and the running utworkers on

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.

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

<sup>(</sup>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.

<sup>(</sup>d) Including working proprietors.

<sup>(</sup>e) Administrative, technical and clerical employees.

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

<sup>(</sup>j) 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)		the region fro	t, gross value added and employment in from returns received from establish- h more than 80 per cent of their employ- ne region (d)		
					Net output	Gross value added at factor cost	percenta regional	ment as a age of total employment
Name and S	diagnity post 3	100000	tereseenti (b		E sturbessessorts	3 bresid	in the in	austry
	Thousands	per cent of United Kingdom	£ thousand	per cent of United Kingdom	£ thousand	£ thousand		
Standard regions of England								
North	7.6	6.9	4,227	8.9	21,825	18,612	77.8	
Yorkshire and Humberside	2.3	2.1	717	1.5	4,541	4,032	55.4	
East Midlands	6.0	5.5	2,195	4.6	16,701	15,111	56.3	
East Anglia	man a	TTN E 3 137	20032	4.298	8.00.0 8E0.0	392 070 3	EE.918	
South East	42.2	38.5	19,638	41.4	112,099	97,541	58.0	
South West	10.6	9.7	5,484	11.6	21,418	18,938	53.4	
West Midlands	3,756	EV8.5 944	508/09	•	00010	•	•	
North West	9.7	8.9	4,612	9.7	6,261	5,686	21.1	
	5 4 30 t	100 8 733	50868	1.70世史内含	3,839,000 à	S19 648.20	NB 379	3.580,A
England	92.8	84.6	41,454	87.4	193,029	168,796	48.5	
Wales	6.2	5.6	1,776	3.7	15,473	13,596	73.3	
Scotland	10.3	9.4	4,153	8.8	36,846	33,977	64.4	
Great Britain	109.3	99.6	47,383	100.0			•	
Northern Ireland	0.4	0.4	21	-			•	
Unallocated (e)	-	-	-	-	289,716	265,972	-	
United Kingdom (b	109.7	100.0	47,404	100.0	535,642	482,780		

- (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.
- (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 persons, 1976

Accour	nting year ended	Percentage of total	al returns received	Percentage of total number employed	d
20018	on south officers. To be	per cent	The angle the court	per cent	1 300 100
1976	April (a)	2.6		0.8	
	May	2.2		1.0	
	June	6.2		2.4	
	July	3.5		5.4	
	August	2.2		0.4	
	September	6.2		1.6	
	October	3.5		2.3	
	November	2.2		1.3	
	December	37.4		45.4	
1977	January	6.6		16.2	
	February	1.8		0.6	
	March (b)	25.6		22.6	

(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)

Sex	Full-time	Part-time	All employees
roffin, examinage	per cent	per cent	per cent
Male	48	Almy sool 1 these beauty	49
Female	37	14	51

Source: Department of Employment

(a) 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 17 2/79 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 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 -

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-

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 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 However, and is not a commodity classification. 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 (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

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 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 establish-

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).

overage

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.

egions

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

(a) administrative, technical and clerical employees

employees. Separate figures were required for:

(b) all other employees (operatives)

verages 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 "self-employed" 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 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 establishpayments for repairs and maintenance (including those in respect of rented buildings) and amounts paid to other firms for contracts which have been subjet. 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.

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 and advertising). 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 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 establishment when working on goods supplied by customers; and of food, etc. for any canteen covered by the establishment's return. Transfers of goods to the establishment from another departof 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 c.i.f. 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 if they had been sold to an independent purchaser. Goods transferred to wholesale or retail selling organisations, for which separate accounts are kept are valued on the same basis.

The value shown for sales is the "net selling value" defined as the amount (excluding 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 value stated is usually inclusive of duty if sold duty-paid and exclusive of duty if sold in bond or exported.

Work done and industrial services rendered Work done and industrial services rendered

Figures for work done represent the amount charged by a includes employers' contributions to

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 his 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.

facilities as canteens.

on-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 ransport. It also includes amounts received for he right to use patents, trademarks, copyrights etc., manufacturing and quarrying rights and technical "know-how" and revenue from such staff

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 year, including any stocks of goods held for merchanting or factoring. Work in progress is defined as materials which have been partially processed by the establishment but which are not usually sold or transferred to another establishment without further processing. The values nclude 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 eceived from other organisations are

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 egularly or not, and no deduction is made for come tax, insurances, contributory pensions etc. he value of redundancy payments less any amounts imbursed from Government sources is included. The 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

mployers' insurance and welfare contributions for work carried out on materials supplied by a national insurance and graduated pensions (and/or customer and include repair work. Within certain 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

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