1978

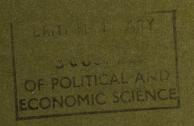
MSO

**Business Statistics Office** 

# **Business Monitor**

Report on the Census of Production

Miscellaneous base metals





#### 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. Business Monitors have a code P (for production) followed first by A (indicating that it is an annual series) or O (occasional) or Q (quarterly) or M (monthly): and then by a number indicating the minimum list heading, or sub-division of a minimum list heading, of the Standard Industrial Classification (revised 1968).

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

#### **Government Statistical Service**

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

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

# A323 Business Monitor

A publication of the Government Statistical Service

Report on the Census of Production 1978

# Miscellaneous base metals

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

Stone and slate quarrying and mining

Chalk, clay, sand and gravel extraction Petroleum and natural gas

Miscellaneous mining and quarrying

Bacon curing, meat and fish products

Cocoa, chocolate and sugar confectionery

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

Animal and poultry foods

PA229.2 Starch and miscellaneous foods
PA231 Brewing and malting

PA239.2 British wines, cider and perry

Mineral oil refining

Toilet preparations

Soap and detergents

Dyestuffs and pigments

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

PA279.6 Surgical bandages, etc.
PA279.7 Photographic chemical materials

Iron and steel (general)

Aluminium and aluminium alloys

Metal-working machine tools

PA333.3 Compressors and fluid power equipment

Industrial engines
Textile machinery and accessories

Mechanical handling equipment

PA339.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment

PA339.5 Scales and weighing machinery and portable

packaging and bottling machinery

Copper, brass and other copper alloys Miscellaneous base metals

Agricultural machinery (except tractors)

Construction and earth-moving equipment

PA339.2 Printing, bookbinding and paper goods machinery

synthetic rubber

PA279.4 Formulated pesticides, etc.

Iron castings, etc.

Office machinery

Mining machinery

power tools

Fertilizers

Steel tubes

Lubricating oils and greases

Miscellaneous chemicals

Milk and milk products

Coal mining

Grain milling

Biscuits

Sugar

Margarine

Soft drinks

Tobacco

PA271.1 Inorganic chemicals PA271.2 Organic chemicals

Paint

PA279.1 Polishes

PA279.5 Printing ink

PA1001 PA101

PA102

PA103

PA 104

PA109

PA211

PA212

PA213

PA214

PA215

PA216

PA218

PA219

PA221

PA229.1

PA232

PA239 1

PA240

PA261

PA262

PA272

PA273

PA274

PA275

PA277

PA278

PA311

PA312

PA321

PA322

PA323

PA332

PA334

PA335

PA337

PA333.1 Pumps PA333.2 Valves

PA369.1	Electrical equipment for motor vehicles, cycles
	and aircraft

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

Shipbuilding and marine engineering Wheeled tractor manufacturing PA380 Motor vehicle manufacturing

PA381.2 Trailers, caravans and freight containers Motor cycle, tricycle and pedal cycle manufacturing Aerospace equipment manufacturing and repairing PA382 Locomotives, railway track equipment, railway carriages,

PA384 wagons and trams
Engineers' small tools and gauges PA390 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 Jewellery and precious metals Metal furniture PA396 PA399.1

PA399.5 Drop forgings, etc. PA399.6 Metal hollow ware PA399.8 Miscellaneous metal manufacture

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

Woollen and worsted PA415

PA416 Rope, twine and net Hosiery and other knitted goods

PA417.2 Warp knitting PA418 Lace

Carpets PA421 Narrow fabrics

Household textiles and handkerchiefs PA422 1

PA422.2 Canvas goods and sacks and other made-up textiles PA423 Textile finishing

PA429 1 Ashestos

PA429.2 Miscellaneous textile industries PA431 Leather (tanning and dressing) and fellmongery

PA432 Leather goods

PA433

PA441 Weatherproof outerwear PA442

Men's and boys' tailored outerwear Women's and girls' tailored outerwear PA443 PA444 Overalls and men's shirts, underwear, etc. PA445

Dresses, lingerie, infants' wear, etc. PA446

Hats, caps and millinery
Corsets and miscellaneous dress industries PA449.1 PA449.2 Gloves

PA450 Footwear

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

PA462 Pottery PA463 Glass Cement PA469

Abrasives PA469.2 Miscellaneous building materials and mineral products

PA471 Timber PA472 Furniture and upholstery PA473

Bedding, etc. Shop and office fitting Wooden containers and baskets PA474

Miscellaneous wood and cork manufactures PA479 PA481 Paper and hoard

Cardboard boxes, cartons and fibre-board packing cases PA339.7 Food and drink processing machinery and PA482 1 Packaging products of paper and associated materials PA482.2 PA483 Manufactured stationery

PA339.9 Miscellaneous (non-electrical) machinery PA484.1 Wallcoverings Industrial (including process) plant and steelwork Ordnance and small arms PA484.2 Miscellaneous manufactures of paper and board

Printing, publishing of newspapers and periodicals General printing and publishing Ball, roller, plain and other bearings PA485 PA489 PA349.2 Precision chains and other mechanical engineering PA351 Rubber Photographic and document copying equipment

Watches and clocks PA492 Linoleum, plastics floor-covering, leathercloth, etc. Surgical instruments and appliances Scientific and industrial instruments and systems Brushes and brooms
Toys, games and children's carriages PA353 PA493 PA354 PA494.

PA494.3 Sports equipment Electrical machinery PA362 Insulated wires and cables PA495 Miscellaneous stationers' goods PA363 PA496 Plastics products Telegraph and telephone apparatus and

Musical instruments equipment Radio and electronic components PA499.2 Miscellaneous manufacturing industries PA500 Construction

PA365.1 Gramophone records and tape recordings PA365.2 Broadcast receiving and sound reproducing PA601 Gas equipment Electricity

PA366 Electronic computers PA603 Water supply PA367 Radio, radar and electronic capital goods PA1002 Summary tables Electrical appliances primarily for domestic use

PA323 MISCELLANEOUS BASE METALS

The information in this report relates to establishments classified to the Miscellaneous base metals industry, minimum list heading 323 in the standard Industrial Classification (revised 1968). The activities of the industry include:-

Smelting and refining of nickel, lead, zinc, magnesium and titanium and manufacturing their alloys and the production in these metals and their alloys of ingots, bars, billets, sheets, strip, foil, circles, sections, rods, pipes, tubes, powder etc., and of die castings. The manufacture of ferro-alloys other than in blast furnaces and the smelting and refining of other non-ferrous base metals, not reported on elsewhere, are also included but wire drawing and the production of finished goods such as hollow-ware are excluded.

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

#### LIST OF CONTENTS

Table No	Title ·	Page
1	Output and costs, 1974–1978	2
2	Capital expenditure, 1974—1978	3
3	Stocks and work in progress, 1974–1978	3
4	Analysis of establishments by size, 1978	4-5
5	Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1978	6
6	Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments; 1978	7
7	Percentage analysis of employees, by full and part-time employment and sex, 1977	7
8	Operating ratios, 1977—1978	8

Output and costs, 1974–1978 All United Kingdom establishments classified to the industry (a)

	Unit	1974	1975	1976	1977	1978
Enterprises	Number	193	208	238	244	253
Establishments	"	221	234	263	270	281
Sales of goods produced	£ thousand	590,259	465,098	598,277	750,200	750,383
Receipts for work done and industrial services rendered		(b)	(b)	5,930	7,635	8,511
Capital goods produced for establishments' own use	"	751	1,828	1,271	1,975	1,973
Non-industrial services rendered		1,281	1,191	1,301	1,495	1,678
Goods merchanted or factored	,,	152,028	136,352	192,281	177,245	153,281
Total sales and work done (c)	,,	744,319	604,469	799,061	938,549	915,825
ncrease during the year, work in progress and goods on hand for sale	,,	18,789	11,726	42,469	26,574	-3,700
Gross output	,,	763,108	616,196	841,530	965,124	912,126
Purchases of materials for use in production, and packaging and fuel		473,724	358,940	493,201	619,736	608,120
Purchases of goods for merchanting or actoring	,	145,030	135,389	193,131	169,164	140,379
ncrease during the year, stocks of naterials, stores and fuel	,,	6,070	2,356	19,317	7,993	18,420
Cost of industrial services received		8,638	8,744	8,398	10,204	12,895
Net output	"	141,786	115,479	166,117	174,013	169,152
Fotal employment (d)	Thousands	21.0	17.9	18.8	19.0	18.8
Net output per head	£	6,763	6,451	8,844	9,138	8,990
Payments for non-industrial services						
Hire of vehicles, plant and machinery	£ thousand	1,023	1,005	766	1,044	1,610
Rents of industrial and commercial buildings	"	(f)	(f)	320	461	1,014
Commercial insurance premiums	,,	1,259	1,227	1,482	1,677	1,768
Bank charges	,,	95	80	136	144	184
Other non-industrial services	,,	6,193	6,548	7,474	9,179	12,143
icensing of motor vehicles	,,	67	62	74	92	93
Rates, excluding water rates	"	2,147	2,702	2,835	3,153	3,178
Gross value added at factor cost		131,001	103,854	153,030	158,262	149,163
Gross value added at factor cost per head	£	6,248	5,801	8,147	8,311	7,928

Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. Satisfactory returns accounted for 88 per cent of employment within the industry. (a)

Capital expenditure, 1974—1978
All United Kingdom establishments classified to the industry (a)(b)

					£ thousand
The state of the s	1974	1975	1976	1977	1978
Land and buildings					
New building work	2,094	3,527	2,464	4,133	2,704
Land and existing buildings					
Acquisitions	607	69	195	1,032	719
Disposals	113	65	187	90	138
Vehicles					
Acquisitions	912	932	1,240	1,353	1,785
Disposals	155	180	308	305	445
Plant and machinery					
Acquisitions	9,985	10,056	12,995	23,283	17,835
Disposals	126	136	327	234	291
Total net capital expenditure	13,205	14,204	16,070	29,172	22,169

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

TABLE 3

Stocks and work in progress, 1974—1978 All United Kingdom establishments classified to the industry (a)

						£ thousand
	1974	1975	1976	1977		1978
	1023 00 350 3	BUNC	Increase		196	Value at end of year
Materials, stores and fuel	6,070	2,356	19,317	7,993	18,420	98,893
Work in progress	8,677	-692	21,374	14,624	-4,307	70,775
Goods on hand for sale	10,112	12,419	21,095	11,951	608	99,597
Total	24,859	14,082	61,786	34,567	14,720	269,265

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

Included in sales of goods produced. (b)

Details of manufacturers' quarterly sales of principal products are published regularly in Business Monitor PQ323.

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

For 1974 and 1975 rents of industrial and commercial buildings were not recorded separately, but included in hire of vehicles, plant and machinery.

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, 1978
All United Kingdom establishments classified to the industry (a)

Size Estab- group lish- (b) ments		Enter- prises (c)	Employmen	Employment			Wages and salaries (f)			
			Total	Opera-	Others (e)	Operatives		Others (e)		
			(d)	tives		Total	per head	Total	per head	
	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£	
1-10	136	136	638 )							
11–19	39	39	547)	0.000	4.407	11 770	2 527	4,964	4 40 4	
20-49	46	39	1,519)	3,330	1,107	11,779	3,537	4,904	4,484	
50–99	26	26	1,886)							
100-199	14	12	2,077	1,656	421	5,473	3,305	1,967	4,671	
200–299	5	5	1,138	804	334	3,153	3,922	1,587	4,751	
300-399	3	3	1,127	757	370	3,331	4,400	1,605	4,338	
400–499	5	5	2,204	1,404	800	5,903	4,204	3,810	4,763	
500 and over	7	5	7,679	5,288	2,391	22,937	4,338	11,894	4,974	

Total	281	253	18,815	13,239	5,423	52,576	3,971	25,827	4,762

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

Total sales and work done (g)	Gross output	Net output		Gross value added at factor cost		Net capital expenditure (h)	Total stocks and work in progress at end of year
		Total	per head	Total	per head		
£ thousand	£ thousand	£ thousand	£	£ thousand	£	£ thousand	£ thousand
174,237	178,389	42,500	9,259	(j)	(j)	3,478	31,150
59,686	61,142	17,883	8,610	52,430(j)	7,864(j)	1,717	13,466
31,583	31,071	8,857	7,783	7,082	6,223	1,137	5,829
70,306	72,203	21,663	19,222	20,014	17,759	2,109	20,584
134,899	135,550	19,225	8,723	17,009	7,717	2,234	46,625
445,115	433,771	59,025	7,687	52,629	6,854	11,494	151,611

915,825	912,126	169,152	8,990	149,163	7,928	22,169	269,265

The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of canteens, is estimated for the industry at £17,379 thousand. The remuneration of outworkers on returns received was £18 thousand.

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

<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.

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1978 All United Kingdom establishments classified to the industry (a)

Area	Total employment	(b)	Net capital expenditure (	(c)	Net output (d)	Gross value added at factor cost (d)	Gross value added at factor cost returned by establishments with 80 per cent or more of their employment in the region as a proportion of total gross value added at
							factor cost in the region
	Thousands	per cent of United Kingdom	£ thousand	per cent of United Kingdom	£ thousand	£ thousand	percentage
Standard regions of England							
North	0.3	1.7	1,022	4.6	4,295	3,567	89.0
Yorkshire and Humberside	2.2	11.9	3,186	14.4	28,065	25,895	82.3
East Midlands	0.5	2.8	844	3.8	4,519	3,697	3.1
East Anglia	0.1	0.6	92	0.4	1,927	1,795	83.1
South East	4.8	25.4	5,445	24.6	42,665	36,988	69.5
South West	1.4	7.4	810	3.6	4,013	2,394	87.9
West Midlands	5.4	28.9	3,138	14.2	42,033	37,070	85.8
North West	1.8	9.4	1,002	4.5	21,791	19,665	73.1
England	16.6	88.0	15,540	70.1	149,307	131,071	
Wales	2.0	10.8	6,400	28.9	17,735	16,255	96.7
Scotland	0.2	1.2	229	1.0	2,110	1,836	71.0
Great Britain	18.8	100.0	22,169	100.0	169,152	149,163	
Northern Ireland	-	_	_	_	-	_	·-
United Kingdom	18.8	100.0	22,169	100.0	169,152	149,163	

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

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

(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 of the net output attributable to each address was made by assuming that net output was proportionate to employment. An estimate for each region was obtained by aggregating estimates of net output for addresses located in that region. Gross value added at factor cost is treated similarly.

TABLE 6

percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments, 1978

Accoun	ting year ended	Percentage of total returns received	Percentage of total number employed	
		per cent	per cent	
1978	April (a)	6.2	2.8	
	May	2.5	1.0	
	June	1.2	0.2	
	July	1.2	2.5	
	August	1.2	1.0	
	September	9.9	8.5	
	October	2.5	0.4	
	November	1.2	0.2	
	December	60.5	71.2	
1979	January	2.5	1.3	
	February	-		
	March (b)	11.1	11.0	

(a) From 6th April.

(b) Including returns made for twelve-month period ended 1st to 5th April 1979.

#### TABLE 7

Percentage analysis of employees, by full and part-time employment and sex, 1977(a)

Sex	Full-time	Part-time	All employees	
	per cent	per cent	per cent	
Male	80	1	81	
Female	15	4	19	

Source: Department of Employment

(a) The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom at mid-June, 1977.

Operating ratios, 1977-1978 All United Kingdom establishments classified to the industry (a)

	Unit	1977	1978
Gross output per head	£	50,681	48,479
		0.400	
Net output per head	£	9,138	8,990
Gross value added per head	£	8,311	7,928
Gross value added as a percentage of gross output	%	16	16
	,,	10	10
Ratio of gross output to stocks		3.8	3.4
Wages and salaries as a percentage of gross value added	%	43	53
Ratio of operatives to administrative, technical and clerical employees		2.3	2.4
Nages and salaries per administrative, technical and clerical	£		
employee		3,978	4,762
Wages and salaries per operative	£	3,412	3,971
Net capital expenditure per head	£	1,532	1,178
See April 1919			
Net capital expenditure as a percentage of gross value added	%	18	15

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

notes give the main information needed for interpreting figures in the industry Business Monitors: more detailed nation about the census is given in a separate Business PA 1001 (Introductory Notes) of the Report on the sus of Production, 1978.

## NERAL INFORMATION

es made for 1978

Census for 1978 is in line with similar inquiries being ucted in other member countries of the European Economic

census differed from earlier censuses in three respects. ling was introduced for establishments employing 20 to 49 a sample of smaller units was selected. A new question on pasing of capital assets was included for 1978 only. This will de register information for use in related inquiries into leasing.

ession of information relating to individual undertakings on 9(5)(b) of the Statistics of Trade Act 1947 states following provisions shall have effect with respect to any ort, summary or other communication to the public of nation obtained under the foregoing provisions of this Act compiling any such report, summary or communication the mpetent authority shall so arrange it as to prevent any articulars published therein from being identified as being articulars relating to any individual person or undertaking xcept with the previous consent in writing of that person or the rson carrying on that undertaking, as the case may be; but nis provision shall not prevent the disclosure of the total antity or value of any articles produced, sold or delivered; so, wever, that before disclosing any such total the competent thority shall have regard to any representations made to em by any person who alleges that the disclosure thereof ould enable particulars relating to him or to an undertaking carried on by him to be deduced from the total disclosed". figure involved disclosure the contributor concerned was imes asked to give permission for its publication. In the prity of cases permission was given. When it was refused and contributors were not approached the figure has been essed, either by combining it with other figures, or as in the onal tables, by omitting the figure altogether.

following symbols are used throughout the PA series of ness Monitors:

il or less than half the final digit shown

gures cannot be shown owing to the risk of disclosing ormation about individual enterprises

#### nding of figures

es in the tables have, where necessary, been rounded to the est final digit. Where figures have been so rounded, the sum the constituent items may not always agree exactly with the

#### dustrial classification

United Kingdom Standard Industrial Classification (SIC) was issued in 1948 and was subsequently revised in 1958 and It exists to promote uniformity and comparability in the cial statistics of the United Kingdom. The general principles ved are those of the International Standard Industrial ssification of all Economic Activities of the United Nations stical Office but the United Kingdom SIC reflects the isation and structure of industry and trade as it exists in the d Kingdom. The SIC is a classification by activity and is commodity classification. However, an index of all commodity ngs for which sales data are provided in the Quarterly Business ors, is published in Business Monitor PQ 1000.

atistical unit for the purpose of the Census is the establishment is defined in the SIC as the smallest unit which can provide formation 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 (eg steel making or sugar refining). Typically the establishment embraces all the activities carried on at a single address eg 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 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 (BSO) to ensure, by negotiating with respondents, that the return from an establishment does not cover local units in more than one of the countries of the United Kingdom.

Establishments are asked to exclude from their returns particulars relating to any department not engaged in production eg merchanting, transport, warehousing, for which they keep a separate set of accounts. Transfers of goods produced to such departments are treated as sales and respondents are asked to value them as far as possible as if sold to an independent purchaser. Where separate accounts are not kept they are asked to include details of all these activities in their return.

Particulars relating to head offices mainly engaged in the administration of the production units within the scope of the census were included. Where more than one return was made the information in respect of the head office was apportioned among them.

For certain purposes in the annual censuses of production (especially the enterprise analyses of Business Monitor PA 1002) related establishments are combined. An enterprise group is 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

#### 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. New additions to the register are obtained from various sources including the Department of Employment and HM Customs and Excise. The 1973 Finance Act allows the latter to pass lists of businesses registered for VAT to the BSO. Where necessary details are sought directly from new businesses. Units which cease to trade are removed from the live

#### Coverage

In recent censuses returns have been required from all establishments employing 20 or more. For the 1978 Census in 68 selected manufacturing industries coverage of establishments in the 20 to 49 employment size band has been reduced to a 1 in 2 sample. This change has relieved some 5,800 firms of the need to complete a census return. The Census has included for the first time a small sample (around 10 per cent) of units employing 11 to 19 to meet an EEC requirement to collect a limited range of data from smaller units every 5 years.

Produced in Wales by Her Majesty's Stationery Office Reprographic Unit, Cardiff Dd. 699517 K6 Cdf 397 8/80

#### 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 average number of persons on the payroll during the year of return. 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. Establishments were also required to state the number of working proprietors where appropriate and these are included in total employment figures. Full-time and part-time employees are included but outworkers (ie 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 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 and to state whether any of the investment shown in cost of new building work, vehicles or plant and machinery included goods for letting out on hire or leasing

#### (a) New building work

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

#### (b) Land and existing buildings

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

#### (c) Plant, machinery and vehicles

The items shown are the value of plant and machinery and of vehicles acquired, both new and second-hand, and the amount received for items disposed of during the year. The value of plant and machinery acquired includes plant, etc which firms produced for their own use in connection with the business covered by the return. The value of plant, etc acquired is the expenditure charged to capital account during the year of return less any discounts received, but including the cost of transport and installation. Deductible value added tax is excluded but non-deductible value added tax on motor cars acquired is included. No deduction is made for depreciation, amortization or obsolescence. The proceeds of items disposed of during the year exclude amounts written-off for items 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 rents of industrial and commercial buildings, hire of plant, machinery and vehicles (excluding vehicles hired with drivers), commercial insurance premiums, bank charges and amounts paid for professional services, post office services, transport (within the United Kingdom), advertising etc. Amounts payable on royalties for the right to use patents, trademarks, copyrights etc, manufacturing and quarrying rights and technical "know-how" are also included.

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

#### Gross value added at factor cost per head

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

#### Purchases

Purchases include the cost of raw materials, components, semimanufactured goods and workshop materials; of replacement parts and consumable tools not charged to capital account; of packaging materials of all types; of stationery and printed matter; of fuel, electricity and water; of materials to be used by the establishment or given out to other establishments for the production of machinery or other capital items for the establishment's own use; of materials for use by the establishment when working on goods supplied by

stomers; and of food, etc for any canteen covered by the stablishment's return. Transfers of goods to the establishment om another department of the same firm not covered by the stablishment's return are included at a cost corresponding to the mated selling value recorded by the other department. Amounts avable to transport firms or credited to the firm's own transport partment for delivery of materials are excluded, as are all rchases of machinery and plant charged to capital account. chases of goods for merchanting or factoring have been ected separately since 1973. The values shown exclude VAT. ev include, in addition to the actual purchase price, the value packaging material charged to the establishment. The value of arned goods or packaging material returned to suppliers and any ade discounts are excluded. Materials purchased duty-paid are hided at their duty-paid value, less any drawback, rebate, etc. e cost of transport is included only if it is included with the chase price in the firm's accounts. Imported goods are included heir full delivered cost. If in the firm's accounts the transport mdocks or airport is not included in the cost of goods purchased, cost is entered at cif plus duty (if applicable). Leasing, nting and hire purchase charges are excluded.

#### sales of goods produced

ales for the purposes of the annual censuses means deliveries on ale of goods made by establishments in the United Kingdom ered by the inquiry. Sales of goods made for these establishments outworkers or by other establishments from materials given out them and sales of waste products are included. New building ork and machinery or other capital items produced by establishnents for hiring out or leasing are regarded as sales, the value cluded in the return being that adopted in the establishments' nital asset accounts. Forward sales and canteen takings are excluded sales in the period of the inquiry are included irrespective of en the goods were manufactured. Goods produced in one rablishment and transferred either to ancillary departments not ngaged in production for which there are separate accounts, or to other establishment of the same firm not covered by the return. treated as sales by the producing establishment and valued as as possible as if they had been sold to an independent purchaser. ods transferred to wholesale or retail selling organisations, for ich separate accounts are kept are valued on the same basis

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

#### Receipts for work done and industrial services rendered

Figures for work done represent the amount charged for work carried out on materials supplied by a customer and include repair work. Within certain industries this heading covers a wide variety of activities, for example, within the food sector - butter packed on commission; within the textile industries - making up of garments, fur dressing and textile finishing; within printing and publishing preparatory work on type-setting, block making and binding. Work done is also significant in the electrical machinery and heavy engineering industries, covering erection, installation and repair and obbing 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 vehicles and other goods and amounts charged to other organisations for the provision of transport. It also includes amounts received for the right to use patents, trademarks, copyrights etc, manufacturing and quarrying rights and technical "know-how" and revenue from such staff facilities as canteens.

#### 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 include the cost of materials consumed and labour used. 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. The value of redundancy payments less any amounts reimbursed from Government sources is included. The value of any payments in kind, travelling expenses etc is included.

#### Remuneration paid to outworkers

The remuneration paid to outworkers (ie 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 under the Social Security Pensions Act, 1975 as well as commercial insurance premiums to provide pensions, superannuation or other retirement benefits, sickness benefits, personal accident benefits, disability or death benefits for employees or former employees or their dependants. Contributions to the running costs of canteens, social centres, children's and holiday homes, etc for employees, former employees and their dependants are also included.

#### Operating ratios

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

### © Crown copyright 1980

## Her Majesty's Stationery Office

Government Bookshops

49 High Holborn, London WC1¼6HB
13a Castle Street, Edinburgh EH2 3AR
41 The Hayes, Cardiff CF1 1JW
Brazennose Street, Manchester M60 8AS
Southey House, Wine Street, Bristol BS1 2BQ
258 Broad Street, Birmingham B1 2HE
80 Chichester Street, Belfast BT1 4JY

Government publications are also available through booksellers

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