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**Business Statistics Office** 

# **Business Monitor**

Report on the Census of Production

**Mineral oil refining** 



A publication of the Government Statistical Service

## PA262

A publication of the Government Statistical Service

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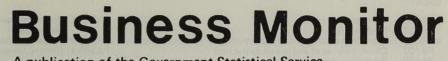
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## **Report on the Census of Production** 1978

## Mineral oil refining

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

Department of Industry **Business Statistics Office** 



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PA603 Water supply PA1002 Summary tables

## PA262 MINERAL OIL REFINING

The information in this report relates to establishments classified to the Mineral oil refining industry, minimum list heading 262 in the Standard Industrial Classification (revised 1968). The activities of the industry include: -

Refining petroleum or shale oil and production of medicinal paraffin, paraffin wax, petroleum jelly, etc.

The blending of mineral, animal or vegetable lubricating oils and greases carried out at refineries is regarded as an activity of the industry. Also included is the production of butane and propane for use as fuel and the production of bitumen.

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### 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, 1974–1978 All United Kingdom establishments classified to the industry (a)

	' Init	1974	1975	1976	1977	1978
Enterprises	Number	30	33	35	34	32
Establishments	"	40	42	44	. 43	. 39
Sales of goods produced and goods merchanted or factored	£ thousand	4,875,162	5,249,025	6,222,262	6,864,759	6,204,248
Receipts for work done and industrial services rendered	"	(b)	(b)	19,025	20,489	36,065
Capital goods produced for establishments' own use		2,536	3,403	3,177	4,777	6,026
Non-industrial services rendered	"	12,597	16,551	16,146	16,960	17,001
Total sales and work done (c)	"	4,890,296	5,268,979	6,260,609	6,906,985	6,263,340
ncrease during the year, work in progress and goods on hand for sale	"	255,641	-5,503	196,234	-56,176	56,474
Gross output	"	5,145,937	5,263,476	6,456,843	6,850,809	6,206,866
Purchases of materials for use in production, and backaging and fuel, and burchases of goods for	"				et ponte.	
nerchanting or factoring	"	4,601,007	4,271,532	5,814,534	5,853,516	5,464,718
ncrease during the year, stocks of naterials, stores and fuel	"	217,753	-73,649	119,624	-29,583	-62,901
Cost of industrial services received	"	22,554	31,498	32,494	42,886	46,328
Excise duty etc. (net)	"	70,325	(d)	(d)	(d)	(d)
Net output	"	669,804	886,797	729,439	924,824	632,918
otal employment (e)	Thousands	18.7	18.3	17.7	17.1	17.0
Net output per head	£	35,799	48,488	41,211	53,957	37,237
ayments for non-industrial services						
Hire of vehicles, plant and machinery	£ thousand	2,843	2,940	3,408	4,736	6,117
Rents of industrial and commercial buildings	"	(f)	(f)	300	373	416
Commercial insurance premiums	"	4,709	6,504	6,308	8,292	7,459
Barrk charges	"	95	19	23	21	26
Other non-industrial services	"	12,791	19,248	14,313	27,171	29,788
icensing of motor vehicles	"	78	83	93	139	147
lates, excluding water rates	"	12,637	15,309	15,412	17,120	19,447
Gross value added at factor cost	"	636,651	842,695	689,581	866,972	569,520
Gross value added at factor cost per head	£	34,027	46,077	38,959	50,582	33,507

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. Satisfactory returns accounted for 99 per cent of employment within the industry.

(b) Included in sales of goods produced and goods merchanted or factored.

(c) Details of manufacturers' quarterly sales of principal products are published regularly in Business Monitor PO262.

(d) 1975-1978 values not recorded.

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

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

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TABLE 2

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

	1974	1975	1976
Land and buildings			Caribo and
New building work	1,523	2,386	2,950
Land and existing buildings			
Acquisitions	129	16	149
Disposals	43	87	131
Vehicles			
Acquisitions	522	692	1,087
Disposals	54	43	86
Plant and machinery			
Acquisitions	41,715	70,824	69,484
Disposals	526	1,491	751
Total net capital expenditure	43,266	72,298	72,702

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

b) Included in Acquisitions of Plant and machinery.

### TABLE 3

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

						£ thousand
	1974	1975	1976	1977		1978
And Andrew State	and and pers		Increase	THE PARTY		Value at end of year
Materials, stores and fuel	217,753	-73,649	119,624	-29,583	-62,901	352,555
Work in progress	89,121	19,390	56,862	-23,403	-20,848	170,800
Goods on hand for sale	166,520	-24,893	139,371	-32,773	-35,626	312,386
Total	473,394	-79,153	315,858	85,760	-119,375	835,740

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

3

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		£ thousand
1977	1978	and the second
	Tiputa	1999 J. 199
5,802	4,412	
192	76	
6,500	31	
1,101	1,463	
164	188	
71,819	142,336	
177	(b)	
72,073	148,066	

Analysis of establishments by size, 1978 All United Kingdom establishments classified to the industry (a)

Size group (b)	Estab- lish- ments	Enter- prises (c)	Employment		Wages and salaries (f)					
			Total (d)	Opera- tives	Others (e)	Operatives	Operatives		Others (e)	
			(0)		(0)	Total	per head	Total	per head	
	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£	
1—10	11	11	51)							
11—19	4	4	66 )	303	138	1,433	4,729	767	5,558	
20—99	6	6	326)							
100–299	5	5	974	625	349	3,341	5,346	2,272	6,510	
300—399	4	4	1,412	934	478	5,633	6,031	3,358	7,025	
400—999	3	3	2,336	1,428	908	7,950	5,567	5,885	6,481	
,000 and over	6	3	11,832	8,298	3,534	41,409	4,990	23,346	6,606	

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				ter an Antonio and an Antonio a		and the second second second	and the second second second
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
149,374	147,963	21,615	48,792	(j)	(j)	1,077	20,696
908,966	900,326	78,222	80,310	83,446(j)	58,889(j)	3,245	109,307
898,728	902,682	53,551	37,926	47,548	33,674	18,874	133,439
881,610	870,174	118,556	50,752	108,902	46,619	66,131	141,779
3,424,662	3,385,721	360,974	30,508	329,623	27,859	58,739	430,520

6,263,340 6,206,866 632,918 37,237 569,520 33,507

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

5,407

59,766

5,158

35,628

6,589

(j)

11,588

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

16,997

(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.

4

(d) Including working proprietors.

39

Total

(e) Administrative, technical and clerical employees.

32

The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of canteens, is estimated for the industry at £33,416 thousand. (f)

(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.

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

Gross value added data relate to establishments employing 1-299.

5

148,066

835,740

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	Total employment (b)		Net capital expenditure (c)		Gross value added at factor cost (d)	factor cost by establis 80 per cent of their em	Gross value added at factor cost returned by establishments with 80 per cent or more of their employment	
							in the regic proportion gross value factor cost region	on as a of total added at	
	Thousands	per cent of United Kingdom	£ thousand	per cent of United Kingdom	£ thousand	£ thousand	percentage		
Standard regions or England	F STREET								
North		•	•	•	*	*	*		
Yorkshire and Humberside		1000 <b>.</b>			*	59.344 • 05	22080		
East Midlands		•	35/5 <b>*</b> 5	• • • • • • •	• 68		•		
East Anglia	101,440	971-50% (g)	639-01	66, 762-9	- cost -968				
South East	6.3	37.0	75,157	50.8	245,080	228,652	99.4		
South West	•	*	*	*	*	*	*		
West Midlands	•	*	*	*	*	*	*		
1 North West	*	*	*	*	*	*	*		
England	11.9	70.2	102,121	69.0	533,227	486,706			
Wales	3.1	18.4	23,668	16.0	63,263	55,365	100.0		
Scotland	*	*	*	•	*	*	*		
Great Britain	*	*	*	*	*	*	/		
Northern Ireland	*	*	*	*	* .	*	*		
United Kingdom	17.0	100.0	148,066	100.0	632,918	569,520	/		

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

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

(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 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. (d)

### TABLE 6

PA262

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

Accounting year ended		Percentage of total returns received			
	The and a second spectrum	per cent		p	
1978	April (a)	-			
	Мау	transferrer transferrer transferrer to			
	June	water of the contact			
	July				
	August	and adding the are seen			
	September	forman <u>e</u> phononious pata nor other pata			
	October				
	November	en al fadractivation films			
	December	91.3		9	
1979	January	au ta a care mar tan tan			
	February				
	March (b)	8.7			

(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
	per cent	per cent
Male	89	
Female	10	and the line of the second sec

(a) The percentages relate to the numbers employed (excluding working proprietors) in the Un

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-	
.6	
	All employees
	per cent
13123	
	89
	89
	89 11
	11
	11 Source: Department of Employment
	11
	11 Source: Department of Employment
	11 Source: Department of Employment
	11 Source: Department of Employment

### Operating ratios, 1977-1978

All United Kingdom establishments classified to the industry (a)

Parate suite si tolla restrate anotoved	Unit	· 1977	1978
Gross output per head	. mar se f	399,697	365,174
Net output per head	£	53,957	37,237
Gross value added per head	£	50,582	33,507
Gross value added as a percentage of gross output	%	13	9
Ratio of gross output to stocks		7.4	7.4
Nages and salaries as a percentage of gross value added	%	10	17
Ratio of operatives to administrative, technical and clerical mployees		2.3	2.1
Vages and salaries per administrative, technical and clerical employee	£	5,614	6,589
Nages and salaries per operative	£	4,447	5,158
Net capital expenditure per head	£	4,205	8,711
Net capital expenditure as a percentage of gross value adde	d %	8	26

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

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

### ENERAL INFORMATION

### hanges made for 1978

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

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

ppression of information relating to individual undertakings tion 9(5)(b) of the Statistics of Trade Act 1947 states the following provisions shall have effect with respect to any port, summary or other communication to the public of armation 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, nowever, 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" figure involved disclosure the contributor concerned was times asked to give permission for its publication. In the prity of cases permission was given. When it was refused and ere 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.

#### mbols used

ne following symbols are used throughout the PA series of iness Monitors:

#### not available

nil or less than half the final digit shown

figures cannot be shown owing to the risk of disclosing formation about individual enterprises. evised

#### unding of figures

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

#### ustrial classification

United Kingdom Standard Industrial Classification (SIC) was issued in 1948 and was subsequently revised in 1958 and 68. It exists to promote uniformity and comparability in the cial statistics of the United Kingdom. The general principles wed are those of the International Standard Industrial sification of all Economic Activities of the United Nations istical Office but the United Kingdom SIC reflects the nisation and structure of industry and trade as it exists in the ed Kingdom. The SIC is a classification by activity and is a commodity classification. However, an index of all commodity lings for which sales data are provided in the Quarterly Business tors, is published in Business Monitor PO 1000.

#### stical units

statistical unit for the purpose of the Census is the establishment h is defined in the SIC as the smallest unit which can provide 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 (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.

activities in their return. For certain purposes in the annual censuses of production establishments.

#### THE REGISTER

The register permits a questionnaire to be sent direct to the reporting establishment on which the latter can include information relating to all the manufacturing (or local) units which it comprises. The inquiries provide a major source of information for keeping the register continuously up-to-date and act as a check on its detail and structure. For the establishments on the register making returns to the quarterly inquiries, the industrial classification is derived from an analysis of their sales of commodities and is reviewed annually. Employment data are entered on the register from returns to the annual census of production. In cases where an establishment does not make a return to these inquiries the employment data are based on information provided by the Department of Employment from the annual censuses of employment. 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 register.

#### 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.

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

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.

(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

#### 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:

- administrative, technical and clerical employees (a)
- (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 discount 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-of for items scrapped.

#### Cost of industrial services

This includes amounts payable to other firms for work done or 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 amounted 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

#### Net output

Net output, a customary census measure, is calculated by deducting from gross output the cost of purchases (reduced by the rise, of 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

(iv)

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 establishmen 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

mers; and of food, etc for any canteen covered by the ablishment's return. Transfers of goods to the establishment another department of the same firm not covered by the stablishment's return are included at a cost corresponding to the imated 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 chases of machinery and plant charged to capital account. chases of goods for merchanting or factoring have been acted separately since 1973. The values shown exclude VAT. include, in addition to the actual purchase price, the value packaging material charged to the establishment. The value of med goods or packaging material returned to suppliers and any de discounts are excluded. Materials purchased duty-paid are uded 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 their full delivered cost. If in the firm's accounts the transport mdocks or airport is not included in the cost of goods purchased, the cost is entered at cif plus duty (if applicable). Leasing, ting and hire purchase charges are excluded.

#### les of goods produced

es for the purposes of the annual censuses means deliveries on e of goods made by establishments in the United Kingdom vered by the inquiry. Sales of goods made for these establishments nutworkers 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 establishents for hiring out or leasing are regarded as sales, the value luded in the return being that adopted in the establishments' apital 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 ablishment and transferred either to ancillary departments not paged in production for which there are separate accounts, or to her 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 ch separate accounts are kept are valued on the same basis

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

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

gures for work done represent the amount charged for work ried out on materials supplied by a customer and include repair rk. Within certain industries this heading covers a wide variety of ities, for example, within the food sector - butter packed on mission; within the textile industries - making up of garments, dressing and textile finishing; within printing and publishing paratory work on type-setting, block making and binding. Work ne is also significant in the electrical machinery and heavy eering industries, covering erection, installation and repair and bing work. Other activities within this heading include exploration rk, research and development, glass cutting and dressing and ing of timber.

strial services rendered include repairs and maintenance, instaon work, and technical research and studies for other nisations

### pital goods produced for establishments' own use

s 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

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.

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

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