# PA332

# 1976

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# **Business Monitor**

# **Report on the Census of Production**

# Metal-working machine tools

608

A publication of the Government Statistical Service

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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).

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#### Enquiries:

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

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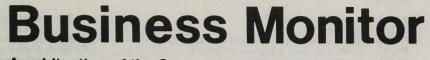
A publication of the Government Statistical Service

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

# **Metal-working** machine tools

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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# PA332 METAL-WORKING MACHINE TOOLS

The information in this report relates to establishments classified to the Metal-working machine tools industry, minimum list heading 332 in the Standard Industrial Classification (revised 1968). The activities of the industry include:-

Manufacturing metal-cutting machine tools, boring, drilling, grinding and milling machines; lathes and other turning machines; machining centres; metal-forming machine tools, including forging machines and hammers, extrusion and other presses, wire-drawing machines and sheet metal-working machines; all types of electric and gas welding machinery and equipment, flame cutting machines and welding electrodes and rods, physio-chemical process cutting and forming machines including equipment for high energy rate forming, electrochemical machinery, ultrasonic erosion etc. Electron beams and laser machines for metal-working are included but rolling mills, portable power tools and metal manufacturing plant 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).

		in mind the h	otes and definitions v	vincii commen	ce on page				
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Percentage analysis of employees, by full and part-time employment and sex, 1976

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#### TABLE 1

#### Output and costs, 1973 - 1976

All United Kingdom establishments classified to the industry (a)

	Unit	1973	1974	1975	1976
Enterprises	Number	775	880	956	994
Establishments	· · ··································	826	936	1,022	1,071
Sales of goods produced	£ thousand	304,747	364,801	472,658	522,270
Receipts for work done and industrial services rendered	•	(b)	(b)	(b)	9,715
Capital goods produced for establishments' own use	norm si fi esidar a salivise parateme	799	411	702	1,046
Non-industrial services rendered	"	1,324	3,254	1,936	1,705
Goods merchanted or factored	"	35,878	37,057	46,664	39,657
Total sales and work done (c)		342,746	405,523	521,960	574,394
ncrease during the year, work in progress and loods on hand for sale		8,876	35,565	1,268	24,876
Gross output	"	351,622	441,088	523,228	599,271
Purchases of materials for use in production, and backaging and fuel	"	134,001	185,581	212,835	232,690
urchases of goods for merchanting or factoring	"	28,042	27,116	34,206	31,732
ncrease during the year, stocks of materials, tores and fuel	"	10,050	15,696	6,462	2,504
Cost of industrial services received	"	10,487	18,883	17,715	19,027
Net output		189,142	225,203	264,935	318,326
otal employment (d)	Thousands	58.8	61.1	62.0	60.2
Net output per head	£	3,218	3,684	4,271	5,284
ayments for non-industrial services					
Rents, hire of plant and machinery (e)(f)	£ thousand	2,219	3,181	3,204	2,930
Commercial insurance premiums	"	1,905	2,191	2,720	3,444
Bank charges	"	302	369	553	621
Other non-industrial services (g)	"	11,455	12,990	19,567	26,113
icensing of motor vehicles	"	107	113	151	175
ates, excluding water rates	"	2,642	3,714	4,725	5,530
Gross value added at factor cost	"	170,512	202,644	234,015	279,512
Gross value added at factor cost per head	£	2,901	3,315	3,773	4,640

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 75 per cent of employment within the industry.

(b) Included with sales of goods produced.

(c) Details of manufacturers' sales of principal products are published regularly in Business Monitor PQ332.

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

(e) 1973 figures include hire of vehicles.

(f) For 1973-1975 rents of industrial and commercial buildings were not recorded separately. For 1976 the amount payable was £1,583 thousand.

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

#### TABLE 2

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

	1973	1974
Land and buildings		And
New building work	888	2,212
Land and existing buildings		
Acquisitions	372	308
Disposals	1,858	320
Vehicles		
Acquisitions		
Motor cars	1,264	1,491)
Other vehicles	158	241)
Disposals		
Motor cars	467	415)
Other vehicles	28	57)
Plant and machinery		
Acquisitions	8,166	11,439
Disposals	1,128	1,454
Total net capital expenditure	7,367	13,445

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 75 per cent of employment within the industry.

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

#### TABLE 3

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

					£ thousand
B03,89,271	1973	1974	1975	1,043 210,17 894	1976
	or response and establishments a	Langers string on	ncrease	and Anna An Adams	Value at end of year
Materials, stores and fuel	10,050	15,696	6,462	2,504	61,614
Work in progress	10,768	31,635	-2,437	19,165	134,298
Goods on hand for sale	-1,893	3,930	3,705	5,712	34,712
Total	18,926	51,261	7,730	27,380	230,624

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 75 per cent of employment within the industry.

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	 £ thousand
1975	1976
	TO DEPENDING AND
2,003	1,410
	-1 7 1
179	1,196
59	372
1,783	2,616
575	774
9,795	14,497
1,010	1,520
12,117	17,053

## TABLE 4

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

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	Estab- Enter- lish- prises ments (c)		Employment			Wages and salaries (f)			
			Total (d)	Opera- tives	Others (e)	Operatives		Others (e)	<u>a anta no</u>
	E .		(0)			Total	per head	Total	per head
Ŋ	lumber	Number	Number	Number	Number	£ thousand	£	£ thousand	£
1 - 10	557	553	2,718)						
11 - 19	189	185 27	2,699)		4.324	3:254		938   2001	
20 - 49	126	124	) 3,684 )	9,361	4,467	26,463	2,827	14,836	3,321
50 - 99	73	69	) 5,170)						
100 - 199	54	44	7,836	5,238	2,593	15,078	2,879	8,325	3,211
200 - 299	-20	18	4,826	3,028	1,795	8,442	2,788	6,162	3,433
300 - 399	17	16	5,886	3,814	2,072	10,467	2,744	6,452	3,114
400 - 499	12	11	5,288	3,501	1,782	10,460	2,988	5,856	3,286
500 - 749	11	11	6,503	4,223	2,280	13,155	3,115	8,451	3,707
750 - 999	5	4	4,394	2,784	1,610	8,339	2,996	5,565	3,456
1,000 and over	7	6	11,242	7,229	4,013	23,916	3,308	13,221	3,295
"otal 1,	071	994	60,246	39,178	20,612	116,320	2,969	68,868	3,341
a) Including estima	ates for est	ablishmente	ot making estin	factor		onse and establi		. (august 1	

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Total sales and work done (g)	Gross outpu	ut and and b acip	Net output		Gross value added at factor cost	La) sriga	Net capital expenditure (h)	Total stock and work in progress at end of year
			Total	per head	Total	per head		
£ thousand	£ thousand	-	£ thousand	£	£ thousand	£	£ thousand	£ thousand
133,726	136,657		74,217	5,201	(j)	(j)	3,367	37,697
75,973	79,494		41,431	5,287	103,359(j)	4,675(j)	2,589	25,652
42,530	45,219		25,881	5,363	23,403	4,849	1,355	19,283
47,696	50,776		28,699	4,876	24,955	4,240	1,790	21,906
57,790	59,553		32,827	6,208	28,951	5,475	1,647	19,321
74,842	77,329		38,473	5,916	32,718	5,031	2,831	29,799
48,995	50,772		25,121	5,717	20,688	4,708	1,161	19,207
92,843	99,470		51,676	4,597	45,438	4,042	2,313	57,759
74,394	599,271	bas m	318,326	5,284	279,512	4,640	17,053	230,624
COSTS OF	canteens, is estil	mated t	or the industry a	at £22,919 thou	sand.		d welfare schemes a their own use, wor	

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#### TABLE 5

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Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1976 All United Kingdom establishments classified to the industry

Area	Total employment	(a)	Net capital expenditure (b)(c)		Net output, gross value added and employment in the region from returns received from establish- ments with more than 80 per cent of their employ- ment in the region (d)			
					Net output	Gross value added at factor cost	Employment as a percentage of total regional employment in the industry	
	Thousands	per cent of United Kingdom	£ thousand	per cent of United Kingdom	£ thousand	£ thousand		
Standard regions of England								
North	3.7	6.1	966	5.7	13,967	12,368	85.9	
Yorkshire and Humberside	7.8	13.0	2,738	16.1	38,342	34,181	83.4	
East Midlands	5.8	9.6	1,520	8.9	17,794	16,101	63.5	
East Anglia	1.4	2.3	109	0.6	5,484	4,729	70.8	
South East	13.2	21.9	4,079	23.9	47,465	40,873	59.1	
South West	2.3	3.8	687	4.0	9,674	8,663	76.6	
West Midlands	18.2	30.2	3,441	20.2	62,190	54,368	72.2	
North West	4.3	807.2	2,480	14.5	11,378	9,937	54.0	
England	56.8	94.2	16.021	94.0	206,293	181,220	69.4	
Wales	0.8	1.4	144	0.8	1,280	1,194	26.2	
Scotland	2.6	4.4	887	5.2	9,905	8,531	62.1	
Great Britain	60.2	100.0	17,052	100.0	217,479	190,945	68.5	
Northern Ireland	-	-	-	-	-	-	-	
Unallocated (e)	-	-	-	-	100,848	88,567	-	
United Kingdom (b)	60.2	100.0	17,052	100.0	318,326	279,512		

(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.

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

(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.

Unallocated net output and gross value added covering establishments with addresses in two or more regions, plus estimates for (e) unsatisfactory returns, non-response and establishments exempt because of size.

#### TABLE 6

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

Accour	nting year ended	Percentage of t	otal returns received
- Seconds	Service and to suff	per cent	the second second backet
1976	April (a)	1.4	
	Мау	2.9	
	June	7.2	
	July	1.4	
	August	1.4	
	September	8.7	viantitasa Natiti viantitasa
	October	7.7	end shall min "
	November	3.9	
	December	33.8	
1977	January	6.3	
	February	0.5	
	March (b)	24.6	

From 6th April. (a)

(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
27 1758 2085 Y	per cent	per cent
Male	85	1 1 adol 1 Provide a state
Female		3
Lack sworf in		

(a) The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom at end June, 1976.

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Perce	entage of total number employed
per c	ent
0.3	
1.2	
3.7	
0.3	
0.2	
7.5	
7.7	
6.8	and the second second
42.2	
7.6	
0.2	
22.3	
NCI WALL - 1 Filesti	ananghitalantee bit hebenghere mied mort alement beneiligen
Waged !	
	All employees
	per cent
	86
	14
TIN	states and have contained

Source: Department of Employment

#### Notes

These notes give the main information needed for interpreting the figures in the industry Business Monitors: more detailed information about the census is given in a separate Business Monitor -PA1001 (Introductory Notes) of the Report on the Census of Production, 1976.

#### GENERAL INFORMATION

### Changes made for 1976

The Census for 1976 is in line with similar inquiries being conducted in other member countries of the European Economic Communities. There was a small number of changes in the scope of the industry reports compared with 1975. These include separate headings for:

Sales of goods produced

Receipts for work done and industrial services rendered

Amounts paid for hire of plant and machinery

Amounts paid for rent of industrial and commercial buildings

Specific changes are explained in the introductions to the industry reports or by footnotes to the tables.

Suppression of information relating to individual undertakings

Section 9(5)(b) of the Statistics of Trade Act 1947 states - "The following provisions shall have effect with respect to any report, summary or other communication to the public of information obtained under the foregoing provisions of this Act -

in compiling any such report, summary or communication the competent authority shall so arrange it as to prevent any particulars published therein from being identified as being particulars relating to any individual person or undertaking except with the previous consent in writing of that person or the person carrying on that undertaking, as the case may be; but this provision shall not prevent the disclosure of the total quantity or value of any articles produced, sold or delivered; so, however, that before disclosing any such total the competent authority shall have regard to any representations made to them by any person who alleges that the disclosure thereof would enable particulars relating to him or to an undertaking carried on by him to be deduced from the total disclosed."

If a figure involved disclosure the contributor concerned was sometimes asked to give permission for its publication. In the majority of cases permission was given. When it was refused and where contributors were not approached the figure has been suppressed, either by combining it with other figures, or as in the regional tables, by omitting the figure altogether.

#### Symbols used

The following symbols are used throughout the PA series of Business Monitors:

- .. not available
- nil or less than half the final digit shown figures cannot be shown owing to the risk of disclosing information about individual enter-
- prises

#### 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 and is not a commodity classification. However, an index of all commodity headings for which sales data are provided in the Quarterly Business Monitors, is published in Business Monitor PQ1000.

#### Statistical units

The statistical unit for the purpose of the Census is the establishment which is defined in the SIC as the smallest unit which can provide the information normally required for an economic census, for example, employment, expenses, turnover, capital formation. Usually the principal activities carried on in an establishment fall within a single heading of the classification (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 accounts. 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 aither a single establishment or two or more establishments under common ownership or control. Bringing together establishments into enterprise is also necessary for the purpose of aroups ensuring that there will be no disclosure of the activities of any one enterprise group. about Information 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 establishmonts.

#### 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 he manufacturing (or local) units which it comprises.

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

#### verage

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

#### egions

e regions defined in Table 5 take account of the oundary changes arising out of the Local vernment Act 1972 and the Local Government Act Scotland) 1973. These changes came into effect in pril 1974 in England and Wales and May 1975 in cotland.

### ERMS USED IN THE CENSUS REPORT

### erage number employed

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

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

arages could be calculated from the figures lating to the last week of each calendar month. tablishments were also required to state the

number of working proprietors where appropriate

Working proprietors These include all persons regarded as "selfemployed" for national insurance purposes and members of their families who worked in the business without receiving a wage or salary; but such persons who worked less than half the normal number of working hours are excluded. Directors working in the business but not in receipt of a definite wage, salary or commission are included under this heading: directors paid by fee only are not included.

Employees

(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

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

and these are included in total employment figures. Outworkers (i.e. persons employed by establishments who worked in their own homes etc. on materials supplied by the establishment) are excluded. The figures include persons engaged on merchanting or factoring and canteen workers where particulars in respect of these activities could not be excluded from the return.

firms produced for their own use in connection with the business covered by the return. The value of plant, etc. acquired is the expenditure charged to capital account during the year of return less any discounts received, but including the cost of transport and installation. Deductible value added tax is excluded but non-deductible value added tax on motor cars acquired is included. No deduction is made for depreciation, amortization or obsoles-cence. The proceeds of items disposed of during the year exclude amounts written-off for items scrapped.

#### Cost of industrial services

This includes amounts payable to other firms for work done on materials supplied by the establishment, payments for repairs and maintenance (including those in respect of rented buildings) and amounts paid to other firms for contracts which have been sublet. Payments to outworkers are excluded.

#### Cost of non-industrial services

This includes rent of industrial and commercial buildings, hire of plant and machinery, commercial insurance premiums, bank charges and amounts paid for professional services, post office services, transport, advertising etc. Amounts payable on royalties for the right to use patents, trademarks, copyrights etc., manufacturing and quarrying rights and technical "know-how" are also included.

#### Gross output

In the calculation of gross output the value of total sales and work done is increased by the rise (or reduced by the fall) during the year in the value of work in progress and goods on hand for sale.

#### Net output

Net output, a customary census measure, is calculated by deducting from gross output the cost of purchases (reduced by the rise, or increased by the fall, during the year of stocks of materials etc.) and the cost of industrial services received, and where applicable, duties etc.

#### Net output per head

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

### Gross value added at factor cost

Gross value added at factor cost is calculated by deducting from net output the cost of nonindustrial services (e.g. rent of buildings, hire of plant and machinery, commercial insurance premiums, bank charges and amounts paid for professional services, post office services, transport and advertising), rates (excluding water rates) and the cost of licensing motor vehicles. This estimate of gross value added approaches more closely than census net output to the definition of net output or value added in national accounts statistics.

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

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

#### Purchases

Purchases include the cost of raw materials,

materials; of replacement parts and consumable tools not charged to capital account; of packaging materials of all types; of stationery and printed materials to be used by the establishment or given materials to be used by the establishment or given materials to be used by the establishment or given materials to be used by the establishment or given materials to be used by the establishment or given materials to be used of the production of machinery or other capital items for the production of lishment's own use; of materials for use by the establishment when working on goods supplied by customers; and of food, etc. for any canteen covered by the establishment's return. Transfers components, semi-manufactured goods and workshop of goods to the establishment from another department of the same firm not covered by the ment of the same firm not covered by the timber. establishment's return are included at a cost dustrial services rendered include repairs and corresponding to the estimated selling value distrial services for other organisations. 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 exclude VAT. They include, in addition to the an-industrial services rendered actual purchase price, the value of packaging is includes rents received for commercial and material charged to the establishment. The value dustrial buildings, amounts charged for hiring of returned goods or packaging material returned in plant, machinery and other goods and amounts to suppliers and any trade discounts are excluded, marged to other organisations for the provision of Materials purchased duty-paid are included at their margort. It also includes amounts received for duty-paid value, less any drawback, rebate, etc. He right to use patents, trademarks, copyrights The cost of transport is included only if it is no, manufacturing and quarrying rights and tech-included with the purchase price in the firm's cal "know-how" and revenue from such staff accounts. Imported goods are included at their ellities as canteens. 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 ods merchanted or factored the cost of goods purchased, the cost is entered at schanted goods are those (excluding canteen c.i.f. plus duty (if applicable). Leasing, renting ales) sold without having been subjected to any and hire purchase charges are excluded.

Sales of goods produced tocks and work in progress Sales for the purposes of the annual censuses alues are given of stocks of goods on hand for means deliveries on sale of goods made by establic and of materials, stores and fuel, at the end lishments in the United Kingdom covered by the the year of return and of the change during the inquiry. Sales of goods made for these estables ar, including any stocks of goods held for lishments by outworkers or by other establishments including or factoring. Work in progress is from materials given out to them and sales of fined as materials which have been partially waste products are included. New building work possed by the establishment but which are not and machinery or other capital items produced by wally sold or transferred to another estab-establishments for hiring out or leasing are shment without further processing. The values regarded as sales, the value included in the establishments' ed, together with a margin of overhead costs and capital asset accounts. Forward sales and canteen of its. Progress payments made to sub-takings are excluded. All sales in the period of utractors are excluded and progress payments the inquiry are included irrespective of when the ceived from other organisations are not goods were manufactured. Goods produced in one ducted. establishment and transferred either to ancillary goods were manufactured. Occur in the same basis. goods were manufactured, occur in an offer the analysis of the same firm not covered by the eratives and salaries there are separate accounts, or to another ese are amounts paid during the year to establishment of the same firm not covered by the eratives and to administrative, technical and return, are treated as sales by the producing erical employees. Payments to working establishment and valued as far as possible as if oprietors, whether called salaries or not, are they had been sold to an independent purchaser, cluded. The values shown include all overtime Goods transferred to wholesale or retail selling wments, bonuses and commissions, whether paid organisations, for which separate accounts are gularly or not, and no deduction is made for come tax, insurances, contributory pensions etc. kept are valued on the same basis. establishment and transferred either to ancillary Kept are valued on the same basis. The value shown for sales is the "net selling e value of redundancy payments less any amounts value" defined as the amount (excluding value imbursed from Government sources is included. added tax) charged to customers whether on an evalue of any payments in kind, travelling ex-works or delivered basis, after any trade penses etc. is excluded. discounts and agents' commissions have been

deducted. The cost of packing materials less allowance for returnable cases is included. In value stated is usually inclusive of duty if sold is exported.

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

number field indering and neavy engineering nustries, covering erection, installation and epair and jobbing work. Other activities within his heading include exploration work, research and evelopment, glass cutting and dressing and planing

apital goods produced for establishments' own use is includes all work of a capital nature carried if during the year by the establishments' own raff for their own use.

### n-industrial services rendered

ales) sold without having been subjected to any anufacturing process by the seller.

#### uneration paid to outworkers

remuneration paid to outworkers (i.e. persons loyed by the establishment who do their work in alr own homes) is generally on a piece-work sis. Only amounts paid to outworkers whose names Dear on the establishment's payroll are included. unts paid to outworkers by sub-contractors are uded.

overs' insurance and welfare contributions item includes employers' contributions to onal insurance and graduated pensions (and/or ings related basic contributions under the included.

Social Security Act, 1973) as well as commercial insurance premiums to provide pensions, superannuation or other retirement benefits, sickness benefits, personal accident benefits, disability or death benefits for employees or former employees or their dependants. Contributions to the running costs of canteens, social centres, children's and holiday homes, etc. for employees, former employees and their dependants are also

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