



BOARD OF TRADE

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Report on the Census of Production 1963

52 General mechanical engineering

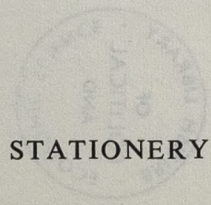
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BOARD OF TRADE

Report on the Census of Production 1963

52 General mechanical engineering

*Presented by the Board of Trade to Parliament in pursuance of the
Statistics of Trade Act 1947 (10 & 11 Geo. 6 Cha. 39 Sec. 7)*



These notes give the main information needed for interpreting the figures in the industry reports. (More detailed information about the Census is given in a separate booklet - 'Introductory Notes': Part 1 of the Report on the Census of Production for 1963.)

GENERAL INFORMATION

Changes in the 1963 census

There were few changes resulting from amendments to the Standard Industrial Classification and only minor changes in the scope of certain industry reports compared with 1958. Any such changes are explained in the introductions to the industry reports concerned or by footnotes to the tables.

Industrial Classification

Establishments were classified to industries on the basis of major activity in conformity with the second edition of the Standard Industrial Classification (Consolidated Edition 1963, incorporating Amendment 1). Each industry was basically defined in terms of its principal products, these being of a similar nature or commonly associated in production. Normally, an establishment was classified to an industry if its sales of the principal products of that industry accounted for a greater proportion of its total sales than did its sales of the principal products of any other industry. However, where the application of this rule would have resulted in a change of classification between 1958 and 1963, the establishment was reclassified only if the sales of principal products of the newly predominant industry was more than one third greater than the sales of principal products of the previously predominant industry. This modification of the general rule was introduced for 1958 to avoid discontinuities which would result from marginal changes in sales between successive censuses.

The principle of classification by major output was also normally followed in compiling the analysis by sub-divisions of an industry.

In certain industries, classification was dealt with in a different way. Details of any non-standard treatment are given in the introductions to the relevant industry reports.

TERMS USED IN THE CENSUS REPORT

Average number employed

Firms were required to state the number of persons on the payroll (i.e. whose National Insurance cards were held by them) on the average during the year of return, whether full-time or part-time employees. Separate figures were required for (a) administrative, technical and clerical employees and (b) operatives (see below). Averages could be calculated from figures relating to the last week of each calendar month; figures shown in respect of the average number employed relate to the sum of these averages. Firms were also required to state the number of working proprietors (see below) where appropriate and these are included in total employment figures. Outworkers are excluded.

The figures include persons engaged in 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 fixed wage or salary; but persons who worked less than half the normal number of working hours are excluded. For Great Britain, directors working in the business but not in receipt of a definite wage, salary or commission are included under this heading for 1963, but are excluded for 1958. For Northern Ireland, directors of limited companies, other than those paid by fee only, are included for both years. (Directors paid by fee only are not included in any of the employment figures for either year.)

Employees

- (i) Administrative, technical and clerical employees include managers, superintendents and works foremen; research, experimental, development, technical and design employees (other than operatives); draughtsmen and tracers; editorial staff, staff reporters, canvassers, competition and advertising staff; travellers; and office (including works office) employees. For Great Britain, but not for Northern Ireland, they include also managing and other directors in receipt of a definite wage, salary or commission.
- (ii) Operatives include all other classes of employees, that is, broadly speaking, all manual wage earners. They include those employed in and about the factory or works; operatives employed in power houses, transport work, stores, warehouses, shops and canteens; inspectors, viewers and similar workers; maintenance workers; and cleaners. Operatives engaged in outside work of erection, fitting, etc. are also included, but outworkers (i.e. persons employed by the firm who worked in their own homes, etc. on materials supplied by the firm) are excluded. Information about the numbers of outworkers employed was collected only for the gloves industry.

Capital Expenditure

- (i) New building work.

This represents the cost incurred during the year of new building and other new constructional work (including office buildings, canteens and the like used in connection with the business covered by the return but not dwelling houses for employees). The value is that charged to capital account during the year of return; it includes expenditure on new buildings or on the extension or reconstruction of old buildings, the value of work of a capital nature carried out by firms' own staff, and the cost of any newly constructed buildings purchased. The figures shown include any legal charges, stamp duties, agents' commissions, etc.

This Report on the General Mechanical Engineering Industry relates to establishments engaged wholly or mainly in manufacturing ball, roller, needle and similar bearings; transmission and other precision chains, including transmission chains for motor vehicles and cycles; machinery parts other than those made in association with complete machines, and to establishments undertaking general sub-contract or repair work. The report includes particulars relating to establishments whose products are of such a mixed character that they cannot be allocated elsewhere among the mechanical engineering group of industries.

This industry corresponds to minimum list heading 349 in the Standard Industrial Classification (Consolidated edition, 1963).

TREATMENT OF PARTS

In reports for mechanical engineering industries, a distinction is made between parts sold in association with the sale of complete machines, and other parts sold; a similar distinction is made in the Motor Vehicle Manufacturing and Motor Cycle, Three-wheel Vehicle and Pedal Cycle Manufacturing Industries in respect of complete internal combustion engines for use in motor vehicles, motor cycles, etc. and parts sold. The only parts shown in Table 5 are those included on returns (whether classified to this or to other industries) which showed no sales of complete machines; where the return was classified to another industry, these parts are also shown in Table 6.

Parts of machinery included in returns which showed no sales of complete machines are treated as principal products of this industry whether made by general engineering firms or by specialist manufacturers of machinery.

Sales of all parts (i.e. whether or not sold in association with the sale of the complete machines) are brought together in Table 14 of the reports covering the complete machines in the mechanical engineering group of industries.

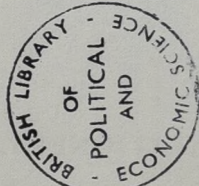
METHOD OF CLASSIFICATION

In classifying returns within the mechanical engineering group of industries sales of parts of machines and work done (other than structural and installation work), including repair work, were not taken into account unless they exceeded 80 per cent. of the total output of the return (in which case the return was classified to this industry). Exceptionally, however, parts of machines were taken into account where the return would otherwise have been classified outside the mechanical engineering group of industries.

The classification of returns to sub-divisions of the industry was by the standard procedure.

For 1963, but not for earlier censuses, the amount charged for erecting and installing machinery and plant (other than air-conditioning, heating and ventilating plant) was treated as part of the selling value of these items in determining the industrial classification of returns.

In interpreting the data in the tables it is essential to bear in mind the notes and definitions which appear on pages (ii), (iii), and (iv).



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TABLE 1 Industry summary: United Kingdom

Estimates for all firms, 1958 and 1963 (a)

	Unit	1958	1963
Number of enterprises	No.	3,891	4,417
Number of establishments	"	4,062	4,759
Gross output	£'000	337,875	467,618
Net output	"	186,761	272,859
Net output per head	£	996	1,287
Sales and work done			
{ goods produced and work done	£'000	318,775	438,018(b)
{ merchanted goods and canteen takings	"	15,666	28,825
Purchases			
{ materials for processing and packaging, and fuel	"	143,491	156,664
{ goods for merchenting and canteen purchases	"		23,930
Payments to other organisations			
{ for work done on materials given out	"	6,228	11,019
{ for transport	"	2,753	3,096
Stocks and work in progress			
{ change during year	"	+ 4,793	+ 725
{ at end of year	"	83,216	117,487
Goods on hand for sale			
{ change during year	"	+ 1,619	+ 105
{ at end of year	"	18,453	28,759
Work in progress			
{ change during year	"	+ 1,815	+ 670
{ at end of year	"	35,207	48,937
Materials, stores and fuel			
{ change during year	"	+ 1,359	- 50
{ at end of year	"	29,556	39,791
Average number employed			
{ total, including working proprietors	Th.	187.4	211.9
{ operatives	"	144.6	158.3
{ other employees (c)	"	41.8	47.7
Wages and salaries			
{ of operatives	£'000	84,333	113,306
{ of other employees (c)	"	30,755	42,210
Employers' contributions to National Insurance and private pension schemes, etc. (d)	"	..	9,226
Capital expenditure (e)			
{ Total	"	..	25,349
{ New building work	"	4,162	4,533
{ Land and existing buildings (f)	"	..	1,314
{ Plant and machinery (f)	"	14,168	18,274
{ Vehicles (f)	"	897	1,229

(a) For 1963, estimates for small firms and for firms not making satisfactory returns accounted for about 19 per cent. of the total figures in which they were incorporated. (For 1958 the comparable figure was 17 per cent.) A summary of the detailed returns received is given in Table 2.

(b) Including services rendered to other organisations (amounts charged for hiring out plant, machinery and other goods, for providing transport, or for technical or other services rendered).

(c) Administrative, technical and clerical employees.

(d) Including pensions and gratuities paid other than from pension funds.

(e) Excluding expenditure for establishments not yet in production.

(f) Acquisitions less disposals.

TABLE 2 Analysis of larger firms by sub-divisions within the industry, 1958 and 1963
Firms employing 25 or more persons: United Kingdom (a)

	Unit	Sub-divisions of the industry (b)		
		Ball and roller bearings		
		10		
		1958	1963	
Number of enterprises (d)	No.	16	20	
Number of establishments	"	28	30	
Gross output	£'000	47,869	61,966	
Net output	"	27,642	35,831	
Net output per head	£	1,069	1,230	
Sales and work done	£'000	goods produced and work done	43,844	58,024(e)
		merchanted goods and canteen takings	3,575	4,085
Sales of characteristic products	"	42,537	56,632	
Index of specialisation (g)	Per cent.	97	98	
Purchases	£'000	materials for processing and packaging, and fuel	19,733	22,614
		goods for merchandising and canteen purchases	"	2,441
Payments to other organisations	"	for work done on materials given out	214	325
		for transport	267	296
Stocks and work in progress				
Goods on hand for sale	"	change during year	+ 955	+ 14
		at end of year	4,670	7,400
Work in progress	"	change during year	- 505	- 158
		at end of year	5,767	9,323
Materials, stores and fuel	"	change during year	- 14	- 460
		at end of year	4,778	6,238
Average number employed	No.	total, including working proprietors	25,866	29,120
		operatives	20,416	22,529
		other employees (h)	5,450	6,580
Wages and salaries	£'000	of operatives	11,468	16,111
		of other employees (h)	3,323	4,759
Wages and salaries per head	£	operatives	562	715
		other employees (h)	610	723
Employers' contributions to National Insurance (i)	£'000	..	851	
Employers' contributions to private pension schemes, etc. (j)	"	..	330	
Capital expenditure (k)				
New building work	"	814	607	
Land and existing buildings	"	acquisitions	..	..
		disposals	..	- 48
Plant and machinery	"	acquisitions	2,026	2,903
		disposals	53	108
Vehicles	"	acquisitions	97	118
		disposals	25	39

For notes to this table - see page 52/7

Sub-divisions of the industry (b)								Total	
Firms engaged mainly on repair and jobbing work and making for the trade on commission, sub-contract, etc. 32		Makers of components and parts for sale 34		Other engineering including precision chain manufacture (c) 20 and 35					
1958	1963	1958	1963	1958	1963	1958	1963	1958	1963
257	346	165	181	327	364	765	891		
291	417	188	208	402	489	909	1,144		
32,304	60,488	39,905	56,789	160,658	200,922	280,739	380,166		
19,422	38,728	21,401	29,453	86,714	117,819	155,179	221,830		
942	1,291	1,011	1,346	984	1,290	996	1,287		
28,711	52,536(e)	36,933	52,986(e)	155,379	192,555(e)	264,869	356,102(e)		
3,434	7,737	1,572	4,466	4,436	7,146	13,017	23,434		
25,924	48,719	26,660	38,130	118,950	153,218	(f)	(f)		
90	93	72	72	77	79	87	85		
11,799	12,767	18,646	21,372	69,049	70,613	119,227	127,366		
840	6,562	3,660	6,792	4,785	6,792	19,454	19,454		
255	401	329	435	1,437	1,385	2,287	2,517		
+ 166	+ 68	+ 55	- 170	+ 168	+ 173	+ 1,345	+ 85		
957	1,878	1,578	1,780	8,127	12,323	15,332	23,381		
- 7	+ 148	+ 1,345	- 494	+ 675	+ 1,048	+ 1,508	+ 545		
1,470	3,983	6,106	7,773	15,911	18,706	29,254	39,785		
+ 12	+ 155	+ 1,145	- 207	- 15	+ 471	+ 1,129	- 41		
1,565	3,033	5,170	5,339	13,045	17,739	24,558	32,349		
20,613	29,990	21,169	21,881	88,077	91,307	155,725	172,298		
16,866	24,116	16,336	16,773	67,142	68,459	120,760	131,877		
3,699	5,563	4,818	4,989	20,921	22,583	34,888	39,715		
10,168	18,455	9,378	11,873	39,409	47,970	70,424	94,409		
2,979	5,626	3,655	4,642	15,726	20,143	25,682	35,170		
603	765	574	708	587	701	583	716		
805	1,011	759	930	752	892	736	886		
..	932	..	637	..	2,598	..	5,019		
..	363	..	309	..	1,668	..	2,669		
243	493	603	707	1,798	1,878	3,458	3,685		
..	+ 144	..	423	..	1,187	..	1,988		
..	..	..	377	..	261	..	920		
1,398	2,460	2,262	1,882	6,702	8,592	12,389	15,837		
118	313	174	120	272	439	617	981		
286	394	150	271	621	810	1,153	1,594		
107	138	55	101	221	317	408	595		

TABLE 3 Analysis of larger firms by size of enterprise within the industry, 1963

(i) Output, employment, capital expenditure and stocks

Firms employing 25 or more persons: United Kingdom

Average number employed by the enterprise in the industry (a)	Enterprises	Establishments	Average number employed (a)	Gross output	Net output	Net output per head	Capital expenditure (b)	Total value of stocks and work in progress at end of year
	Number	Number	Number	£'000	£'000	£	£'000	£'000
25-49	363	390	13,225	26,147	16,473	1,246	1,536	3,422
50-99	260	285	17,893	37,290	21,697	1,213	2,184	5,940
100-199	130	187	17,987	38,764	22,361	1,243	1,715	6,656
200-299	44	59	11,035	24,995	14,667	1,329	1,239	5,706
300-399	25	42	8,600	20,212	11,461	1,333	819	5,295
400-499	15	27	6,757	16,797	9,979	1,477	807	4,085
500-749	22	41	13,219	29,628	16,475	1,246	1,546	8,311
750-999	7	15	6,386	16,274	8,838	1,384	713	4,555
1,000-1,499	8	24	9,826	28,762	13,796	1,404	1,967	8,883
1,500-1,999	4	15	7,239	16,458	10,195	1,408	1,355	4,292
2,000-2,999	6	19	15,697	33,414	19,476	1,241	2,326	9,988
3,000 and over	7	40	44,434	91,422	56,413	1,270	4,400	28,381
Total	891	1,144	172,298	380,166	221,830	1,287	20,608	95,515

(ii) Employees, wages and salaries, and employers' contributions

Firms employing 25 or more persons: United Kingdom

Average number employed by the enterprise in the industry (a)	Employees		Wages and salaries		Employers' contributions		Wages and salaries per head	
	Operatives	Others (c)	Operatives	Others (c)	National Insurance (d)	Private pension schemes, etc. (e)	Operatives	Others (c)
	Number	Number	£'000	£'000	£'000	£'000	£	£
25-49	10,542	2,334	7,545	2,388	400	103	716	1,023
50-99	14,477	3,171	9,937	3,126	523	161	686	986
100-199	13,996	3,914	9,926	3,833	532	237	709	979
200-299	8,167	2,850	5,858	2,682	327	207	717	941
300-399	6,297	2,293	4,675	2,134	256	129	742	931
400-499	4,997	1,757	3,717	1,685	204	99	744	959
500-749	9,864	3,353	7,204	2,800	385	253	730	835
750-999	4,988	1,397	3,394	1,169	182	99	680	837
1,000-1,499	7,383	2,443	5,338	2,184	292	142	723	894
1,500-1,999	5,818	1,421	3,923	1,277	211	114	674	899
2,000-2,999	11,734	3,962	7,769	3,491	442	287	662	881
3,000 and over	33,614	10,820	25,123	8,401	1,265	837	747	776
Total	131,877	39,715	94,409	35,170	5,019	2,669	716	886

(a) Including working proprietors.

(b) Acquisitions less disposals.

(c) Administrative, technical and clerical employees.

(d) Including both flat rate and graduated contributions.

(e) Including pensions and gratuities paid other than from pension funds. These amounted in total to £291,000.

TABLE 4 Percentage analysis of employees, by age and sex, all firms, 1963: United Kingdom (a)

Ages	Males	Females	All employees
	Per cent.	Per cent.	Per cent.
Under 18	4	2	6
18 and over	74	20	94
All ages	78	22	100

Source: Ministry of Labour

(a) The percentages relate to the numbers employed (excluding working proprietors) at mid-June, 1963.

Footnotes to Table 2.

(a) The following information relates to small firms (employing fewer than 25 persons) in this industry. It includes an estimate for small firms not making satisfactory returns, which account for 4 per cent. of the employment shown for 1963 and 3 per cent. for 1958.

	1958	1963
Number of firms	3,115	3,519
Average number employed:		
Working proprietors	30,497	5,269
Other persons employed		29,593

(b) The method of classifying returns to sub-divisions of the industry is explained at the beginning of this report; the characteristic products of each sub-division are identified in Table 5.

(c) Including for 1958 but not for 1963 a small number of firms wholly or mainly engaged on research and development work.

(d) The sum of the figures for the sub-divisions exceeds the total for the industry to the extent that enterprises made returns for more than one sub-division.

(e) Including services rendered to other organisations (amounts charged for hiring out plant, machinery and other goods, for providing transport, or for technical or other services rendered).

(f) Characteristic products relate only to sub-divisions of the industry.

(g) For sub-divisions of the industry, this is the ratio of sales of characteristic products to total sales of goods produced and work done. For the industry as a whole, this is the ratio of total sales of principal products by the industry to total sales of goods produced and work done.

(h) Administrative, technical and clerical employees.

(i) Including both flat rate and graduated contributions.

(j) Including pensions and gratuities paid other than from pension funds.

(k) Excluding expenditure for establishments not yet in production.

TABLE 5 Sales of principal products of the industry by larger firms, including sales by establishments classified to other industries, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

Industry sub-division (a)	1958		1963			
	Quantity	Value	Quantity	Value	Enterprises	Entries
		£'000		£'000	Number	Number
10 Bearings and parts thereof						
Ball and roller bearings and parts thereof, excluding non-precision balls	..	41,976	..	56,772	36	38
35 Other bearings (e.g. plain) and bushes	..	13,004	..	22,808	45	53
35 Burners						
Oil fuel burning equipment	..	6,226	..	8,701	52	54
Other	..	274	..	567	19	20
20 Chains						
Steel transmission						
Roller type						
Up to and including 0.625 in. pitch						
Not over 0.2 in. width between plates	..	688	..	1,310	*	*
Over 0.2 in. width between plates	..	2,788	..	2,913	*	*
Over 0.625 in. pitch	..	2,718	..	4,381	*	*
Other than roller type	..	296	..	763	7	10
Precision chains, other than transmission chains	..	968	..	1,591	*	*
Transmission chains of iron	..	1,136	..	299	*	*
	Thousands		Thousands			
35 Cylinder liners and inserts	2,020	1,838	1,610	1,957	9	13
			..	1,259		
35 Filters, other than water filters and filter presses						
Oil	..	3,705	..	6,604	22	23
Other	..	1,595	..	4,033	30	33
35 Gaskets and jointings, including metallic packings	..	4,609	..	7,144	25	28
35 Gears and gear wheels						
For vehicles			..	2,183	21	22
Other than for vehicles including unclassified			..	12,461	95	103
35 Gear boxes, including steering boxes and differential gears			Number			
For railway locomotives and rail cars	..	30,542	142	209	*	*
For ships and boats		(b)	901	238	5	5
Other except road vehicles but including road rollers			..	11,183	44	46
35 Mechanical power transmission plant, not elsewhere specified						
Complete				5,165	17	17
Parts			..	1,459	18	18

TABLE 5 (continued)

Industry sub-division (a)	1958		1963			
	Quantity	Value	Quantity	Value	Enterprises	Entries
		£'000		£'000	Number	Number
35 Lubricators and parts (other than of railway wagon, etc. axle boxes)	..	2,383	..	3,585	22	22
35 Moulds, metal (other than moulds and dies for use with metal-working machine tools or for diecasting, moulds for use in civil engineering and ingot moulds and bottoms)	..	1,533	..	2,441	36	37
	Th.tons		Th.tons			
35 Moulding boxes and parts thereof	2.6	450	3.1	550	10	10
	..	65				
35 Oil seals	..	3,544	..	5,072	12	12
35 Pistons	..	7,212	..	11,299	10	14
35 Piston rings, packing rings, etc.	..	4,254	..	6,146	20	24
	Th.doiz.					
35 ✓ Pressure and vacuum gauges	238	2,143	..	3,705	38	39
	..	907				
35 Pulleys and pulley wheels	..	1,432	..	2,345	31	32
35 Railway and locomotive brake gear	..	6,089	..	3,688	9	13
35 Rolls of iron and steel	Th.tons					
For metal rolling mills	85.7	12,156	72.8	14,700	22	27
For machinery, other than metal working	8.3	1,176	5.4	861	21	21
			..	161		
35 Plant and machinery unclassified						
Complete	..	5,931	..	6,295	62	64
Parts	..	2,149	..	1,337	46	47
35 Other and unclassified engineering products	..	29,653	..	43,743	452	488
34 Parts not elsewhere specified sold other than in association with the sale of complete machines (c)						
Agricultural machinery other than tractors	..	4,404	..	5,770	134	134
Metal-working machine tools	..	1,086	..	949	63	63
Industrial engines	..	6,296	..	7,609	56	57
Textile machinery	..	2,898	..	2,893	100	100
Contractors' plant and quarrying machinery	..	5,406	..	5,500	80	82
Mechanical handling equipment	..	2,932	..	3,235	102	103
Office machinery	..	1,293	..	558	22	23
Other machinery	..	18,479	..	17,019	415	421
Industrial plant	..	8,537	..	5,695	115	118
35 Non-electrical parts of internal combustion engines other than for motor vehicles not specific to any type of internal combustion engine	..	13,125	..	6,596	9	10
35 Non-electrical parts of motor vehicle engines (sold other than in association with sales of complete engines) (d)	..	6,290	..	7,968	23	32

Continued on next page

TABLE 5 (continued)

Industry sub-division (a)	1958		1963			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
	Th. tons	£'000	Th. tons	£'000	Number	Number
Waste products						
Scrap metals						
Iron and steel	103	765	137	1,048	371	407
	..	330	..	130		
Brass	3.6	443	8.1	1,125	190	201
	..	158				
Copper	..	51	1.7	362	67	70
Other scrap metals	..	821	..	884	157	174
Other waste products	..	48	..	93	40	45
Work done						
Machinery and plant (other than marine machinery and air-conditioning, heating and ventilating plant) erected and installed and other installation work		2,395(e)		3,288	56	57
Research and development work done for customers (including Government Departments) (f)		2,329		872	23	23
Repair and jobbing work		48,816		81,531	1,566	1,829
Other work done on commission, sub-contract work, etc.		38,265		49,696	601	603
Total		358,611		462,748	..	..
Sales in other industries (see Table 6)		129,292		160,195	..	..
Principal products of this industry sold by establishments in the industry		229,319		302,552	891	976(g)

- (a) The number given is that of the sub-division of which the item is a characteristic product. The sales shown are total sales by larger firms, not merely sales by establishments classified to the sub-division.
- (b) Gear boxes, other than for motor vehicles, were not separately recorded for 1958 but insofar as they were distinguished, they were included with gears and gear wheels. Some gear boxes for motor vehicles may also be included.
- (c) Details of these parts are given in Table 14 at the end of the industry reports relating to the production of the complete machines.
- (d) So far as separately recorded.
- (e) Including other than principal products of the industry.
- (f) Including for 1958 but not for 1963 a small number of firms wholly or mainly engaged on research and development work.
- (g) This figure represents the total number of returns made by larger firms in this industry, which is less than the total number of establishments shown in Table 2 on account of combined returns covering more than one establishment.

TABLE 6 Sales of principal products of the industry by establishments classified to other industries, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

	1958		1963			
	Quantity	Value	Quantity	Value	Entries	Principal industries in which produced (a)
		£'000		£'000	Number	
Bearings and parts thereof						
Ball and roller bearings and parts thereof, excluding non-precision balls	..	138	..	902	14	37,47,49,74
Other bearings (e.g. plain) and bushes	..	810	..	1,456	27	40,49,107,124
Burners						
Oil fuel burning equipment	..	1,929	..	2,907	35	49,50,62,126
Other	..	155	..	214	14	49,50,60,74
Chains, steel transmission and other precision chains	..	126	..	55	7	47,49,51
Filters, other than water filters and filter presses						
Oil	..	2,020	..	3,115	10	49,51,53,62
Other	..	526	..	876	15	44,45,49,74
Gaskets and jointings, including metallic packings	..	1,376	..	1,182	11	40,88,113,124
Gears and gear wheels						
For vehicles			..	466	6	42,49,62,74
Other than for vehicles including unclassified			..	1,735	42	45,50,55,61
Gear boxes, including steering boxes and differential gears other than for vehicles	..	6,844	..	765	19	41,45,50,74
Mechanical power transmission plant, not elsewhere specified						
Complete			..	861	8	42,45,49,50
Parts			..	303	7	42,47,50
Lubricators and parts (other than of railway wagon, etc. axle boxes)	..	177	..	828	14	42,49,62,74
Moulds, metal (other than moulds and dies for use with metal-working machine tools or for diecasting, moulds for use in civil engineering and ingot moulds and bottoms)	..	209	..	165	15	40,43,49,50
Moulding boxes and parts thereof			..	43	*	50
Oil seals	..	21	..	126	*	50,74,109
Pistons, piston rings, packing rings, etc.	..	613	..	434	9	27,38,49,107
	Th.doz.					
Pressure and vacuum gauges	43.1	479	..	2,241	28	49,50,53,62
	..	393				
Pulleys and pulley wheels	..	263	..	208	20	41,49,59
Railway and locomotive brake gear	..	3,531	..	2,801	*	49,58,62,65

Continued on next page

TABLE 6 (continued)

	1958		1963			Principal industries in which produced (a)
	Quantity	Value	Quantity	Value	Entries	
	Th.tons	£'000	Th.tons	£'000	Number	
Rolls of iron or steel						
For metal rolling mills	22.0	5,005	22.6	6,622	18	37,49,50,65
For machinery, other than metal working	4.2	477	2.3	243	}	* 39,49,74
	..	75	..	22		
Plant and machinery unclassified						
Complete	..	3,990	..	6,076	41	27,55,58,126
Parts	..	2,514	..	1,266	26	40,55,58,60
Other and unclassified engineering products	..	14,226	..	17,906	225	(c)
Parts not elsewhere specified sold other than in association with the sale of complete machines						
Agricultural machinery other than tractors	..	2,534	..	1,939	58	49,50,62,74
Metal-working machine tools	..	431	..	456	34	47,49,50,51
Industrial engines	..	1,065	..	1,509	40	49,51,62,107
Textile machinery	..	685	..	913	45	40,42,49,50
Contractors' plant and quarrying machinery	..	1,408	..	1,569	50	37,47,49,50
Mechanical handling equipment	..	2,028	..	1,395	66	49,50,66,74
Office machinery	..	348	..	453	16	49,58,62,74
Other machinery	..	7,758	..	4,404	177	42,43,50,107
Industrial plant	..	5,488	..	1,358	67	27,49,60,107
Non-electrical parts of internal combustion engines other than for motor vehicles not specific to any type of internal combustion engine	..	745	..	8,772	28	37,44,49,62
Non-electrical parts of motor vehicle engines (sold other than in association with sales of complete engines)	..	4,148				
Work done						
Installation work		(b)		2,351	25	
Repair and jobbing work		35,632		61,012	1,548	
Other work done on commission, sub-contract work, etc.		21,173		20,246	364	
Total		129,292		160,195	..	

(a) The references given are to the list of industries at the back of this report.

(b) Not recorded separately.

(c) Production is widely distributed.

TABLE 7 Sales of other than principal products by larger firms in the industry, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

	1958	1963
	Value	Value
	£'000	£'000
Castings of iron	1,282	1,474
Castings and forgings of steel	1,096	1,288
Wood and metal patterns	10	86
Castings of brass and other copper alloys	309	783
Agricultural machinery		
Complete	} 317	} 72
Parts		
Metal-working machine tools		
New		
Complete	} 998	} 1,160
Parts		
Reconditioned		210
Welding and cutting machinery and accessories	369	349
Engineers' small tools and parts		
Cutting tools and press tools	299	930
Jigs and fixtures	219	218
Other	664	1,107
Engineers' gauges and measuring instruments	31	84
Industrial engines, complete and parts	420	282
Textile machinery, parts and accessories	1,141	2,020
Contractors' plant and quarrying machinery	10	1,149
Mechanical handling equipment and parts, new and reconditioned	894	2,840
Mining machinery		
Complete	} 571	} 135
Parts		
Printing, book-binding, paper-working etc., machines and parts, new and reconditioned	155	630
Space heating, ventilating and air-conditioning equipment	489	644
Pumps		
Complete	} 925	} 447
Parts		
Air compressors and exhausters and parts	284	327
Industrial valves and cocks	118	695
Bottling, packing, canning, packeting and labelling machinery and parts	182	101
Food and drink preparation, processing and sterilising machinery and parts	1,164	270
Pulpmaking and paper and board making machinery, complete and parts	(a)	4,055
Testing machinery and equipment	(a)	238
Boiler-house plant		
Complete	} 63	} 375
Parts		
		277

Continued on next page

TABLE 7 (continued)

	1958	1963
	Value £'000	Value £'000
Furnaces and kilns, complete and parts	218	211
Industrial plant, complete and parts		
Chemical making machinery	978	1,169
Gasworks plant		87
Other including water treatment plant and waterworks equipment		519
Fabricated iron and steelwork	621	1,318
Arms, ammunition and naval, military and air force stores	628	415
Scientific and industrial instruments	348	433
Electrical goods and machinery	122	1,282
Radio and television apparatus and parts	222	314
Marine machinery and parts	264	1,027
Motor vehicles and trucks, tractors and trailers, complete and parts	572	1,616
Motor bodies, chassis and other parts of motor vehicles	4,921	4,328
Aircraft parts and accessories		
Parts of aero-engines	210	1,352
Other	991	
Handtrucks, trolleys and parts	42	246
Stampings, pressings and drop forgings of iron and steel	242	303
Other manufactures	12,281	8,400
Work done		
Building and civil engineering work carried out, including structural work and the erection and installation of air-conditioning, heating and ventilating plant, but not of other industrial machinery and plant		
Work done as main contractors	417	762
Work done as sub-contractors	465	1,302
(Less) estimated value of goods made and used in the contract work	4	430
Other work		
Machinery and plant (other than air-conditioning, heating and ventilating plant) erected and installed and other work done (b)	..	1,817
Total work done exclusive of goods made and used in the contract work	878	3,451
Services rendered to other organisations (c)	-	2,314
Total value of goods sold without having been subjected to any manufacturing process	12,106	22,207
Canteen takings	911	1,227
Total	48,567(d)	76,985

(a) Included with Other manufactures for 1958.

(b) Other than for principal products of the industry.

(c) Amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered to other organisations.

(d) Excluding amounts charged for services rendered to other organisations.

TABLE 8 Production of certain principal products of the industry by larger firms, including production by establishments classified to other industries, 1958 and 1963

This table is not applicable to this industry.

TABLE 9 Purchases of selected principal products of the industry by larger firms, 1963

This table is not applicable to this industry.

TABLE 10 Purchases by larger firms in the industry, 1954 and 1963

Firms employing 25 or more persons: United Kingdom

	1954		1963	
	Quantity	Cost	Quantity	Cost
Materials for processing	Th.tons	£'000	Th.tons	£'000
Iron				
Pig iron, including refined pig iron and other irons for re-melting (a)	47.9	882	70.4	1,756
Castings	41.4	2,585	52.5	4,458
Steel	..	594	..	765
Ingots, blooms, billets, slabs, and sheet and tin-plate bars	10.9	411	11.3	700
Bars and rods (including wire rods), angles, shapes and sections, girders, beams, joists and pillars rolled (not fabricated), including tube rounds and squares (b)	106	7,347	194	15,442
Plates, 3mm. thick and over	34.6	1,688	60.2	3,203
Hoop and strip (including tape of all thicknesses)	..	238	..	411
Sheets under 3mm. thick (including electrical sheets)	21.7	1,384	39.5	2,978
Tinplate, terneplate and blackplate	1.5	88	3.6	260
Forgings (except drop forgings)	14.3	2,731	19.6	3,749
Castings	12.6	1,321	18.7	3,169
Tyres, wheels and axles (rail type)	..	14	..	42
Drop forgings (c)	5.3	763	21.6	2,547
Iron and steel not elsewhere specified except finished parts, wire and scrap	..	333	..	..
Wrought tubes and fittings for wrought tubes (including welded, seamless, conduits, etc.)	6.9	736	39.5	5,254
Other	..	140	..	..
Precision chain (e.g. transmission and timing)	13.2	409	12.0	1,560
Springs, laminated and other types (d)	..	93	..	298
Steel wire and wire manufactures (excluding insulated wires and cables) (e)	..	136	..	222
Wire (single wire)	..	522	..	1,292
Wire manufactures including wire cables and ropes and stranded wire of two or more ply	..	72	..	464
Ferro-alloys	..	316	..	836
Iron and steel scrap	..	566	..	961
Light metals and non-ferrous metals in all forms except finished parts, wire and scrap				
Aluminium and aluminium alloys	10.3	2,650	14.0	4,345
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other nickel alloys)	..	517	..	720
Copper (excluding blister) (f)	13.2	4,158	22.7	6,591
Lead and alloys of lead (excluding solder)	..	544	..	742
Zinc and alloys of zinc	6.4	2,011	5.7	1,641
Tin	..	271	..	..
	1.2	227	0.7	65
	0.6	78	1.2	205
	..	21	..	..
	Th.cwt.		Th.cwt.	
	35.1	1,271	25.3	1,181

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
Materials for processing (continued)		£'000		£'000
Solder, soft	..	21	..	44
Non-ferrous metal wire (single wire, not insulated) (g)	..	17	..	47
Non-ferrous metal scrap	..	35	..	271
Glass in all forms, including finished parts	..	(h)	..	56
Metal powders	..	(i)	..	696
Heavy chemicals (acids, alkalis, alcohols, other inorganic and organic chemicals, compressed gases, etc.)	567
Paint and varnish (including lacquers and stains)	..	267	..	314
Synthetic resins and plastics materials (excluding leathercloth and reinforced plastics)				
Polyethylene and polypropylene and co-polymers sheet, rod, film, foil, profile shapes and monofilament	Th.cwt.	..
Polyvinyl chloride (including co-polymers) plasticised and unplasticised sheet, film, rod, foil, tube, profile shapes and foam	4.4	245
Polystyrene sheet, film, tape, foil and foam	..	(i)	2.5	39
Phenolics and cresylics	13
Resins, solutions, emulsions, dispersions, moulding and extrusion compounds	1.2	17
Decorative and other laminated sheet, cast sheet, laminated or cast rod, tube and profile shapes	36.3	187
Thermosetting polyesters (including epoxide resins and resin glass fibre mixtures)	33
Refractory materials	..	122	0.5	52
Rubber, including hard rubber, balata, gutta-percha and synthetic rubber in all forms, including finished parts	..	716	..	29
Timber			1.5	37
Softwood, sawn or planed, but not further prepared or manufactured	10
Hardwood, sawn or planed, but not further prepared or manufactured
Plywood, including blockboard, laminboard and battenboard	Th.sq.ft.	..	Th.sq.ft.	..
Woven piece goods (other than narrow fabrics)	187	8	273	20
Asbestos in all forms, including finished parts	..	2	..	6
Other thermal insulating materials	..	(i)	..	238
Insulated wires, cables, strips and strands (j)	..	85	..	462
Bolts, rivets, nuts and washers, screws, nails, tacks, etc.	..	63	..	93
Machinery bought for installation	..	171	..	210
Purchased components for incorporation in firms' own products	..	536	..	1,447
Ball and roller bearings and parts thereof	..	(i)	..	1,199
Electric motors				
Of less than 1 h.p.	..	1,017	..	4,417
Of 1 h.p. and over	..	575	..	669

Continued on next page

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
	Number	£'000		£'000
Materials for processing (continued)				
Purchased components for incorporation in firms' own products (continued)				
Internal combustion engines	2,442	66	..	41
Industrial valves	..	56	..	435
Gear and gear wheels of metal	..	120	..	335
Pumps	..	126	..	565
Measuring instruments and gauges and parts				
Industrial process measuring and control instruments and equipment	..	555	..	471
Other	..	..	..	759
Plastic goods moulded and fabricated	..	..	..	254
Other components not elsewhere specified except those of rubber and asbestos (k)	..	5,799	..	9,710
Purchased second-hand machinery for reconditioning	..	(i)	..	400
Lubricating oils and greases (including cutting oils and emulsions)				
	Th.gal.		Th.gal.	
	930	218	3,286	844
	..	281	..	94
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement	..	4,626	..	7,069
All other materials for processing	..	10,191	..	14,030
Packaging materials				
Paper and board				
Boxes, cartons, packing cases, and drums and canisters (with or without metal ends) of paper, cardboard and fibreboard	..	..	..	917
Wrapping paper (including paper coated with plastics and any laminates incorporating paper but not metal), moulded pulp units, labels and other packaging materials of paper, cardboard and fibreboard (except multiwall sacks)	..	458	..	365
Timber				
Containers wholly or mainly of wood, including plywood boxes and drums, baskets and wickerwork crates	..	..	..	527
Timber (sawn or planed) for manufacture into packing cases, etc.	..	448	Th.cu.ft.	105
			{ 257	40
			{ ..	4
Plywood for manufacture into packing cases	..	..	..	16
Sheet, film, foams, etc., wholly or mainly of polyethylene (including bags and lay flat tubing)	..	(i)	..	181
All other packaging materials	..	402	..	..
Fuel and electricity (1)				
	Th.tons		Th.tons	
Coal	148	640	111	706
Coke (including screenings) and manufactured fuel	62.3	390	48.3	483
	Th.gal.		Th.gal.	
Derv fuel and motor spirit for use in road vehicles	2,076	421	2,454	524
			..	133
Other liquid fuels (including creosote/pitch mixtures, etc., and liquefied petroleum gases)	8,101	395	26,108	1,144
	..	89	..	..

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
	Th.therms	£'000	Th.therms	£'000
Fuel and electricity (1) (continued)				
Gas	{ 12,931	645	21,564	1,249
	{ ..	108	..	221
	Th.kWh		Th.kWh	
Electricity	{ 337,835	1,720	647,745	3,412
	{ ..	275	..	1,004
Total cost of materials and fuel				
		68,181		127,366
Goods purchased for merchandising		..		18,255
Canteen purchases		..		1,199
Total cost of purchases				
		..		146,820

- (a) Described in 1954 as 'Pig iron, except refined pig iron'.
(b) 'Pillars rolled (not fabricated) including tube rounds and squares' not included in 1954.
(c) Described in 1954 as 'Drop forgings of iron and steel'.
(d) Described in 1954 as 'Steel springs'.
(e) Described as covering 'Iron and steel' in 1954.
(f) 'Blister' was not specifically excluded in 1954.
(g) Not specified as 'single' wire in 1954.
(h) Included with 'all other materials for processing'.
(i) Not separately recorded.
(j) Strips and strands were not included in 1954.
(k) Components of rubber and asbestos were not excluded in 1954.
(l) The total quantity of electricity generated in firms' own establishments in this industry was 15,578 Th. kWh in 1954 and 3,034 Th. kWh in 1963.

TABLE 11 Transport costs and employment of larger firms, 1963
Firms employing 25 or more persons: United Kingdom

	Unit	1963
Average number employed mainly on transport	No.	1,419
Transport costs		
Wages and salaries	£'000	1,092
Derv fuel and motor spirit	"	657
Payments to other organisations for transport	"	2,517
Costs of operating road goods vehicles		
Insurance	"	108
Vehicle licences	"	78
Depreciation	"	516
Payments to other organisations for repairs and maintenance	"	264
Total	"	5,231

TABLE 12 Payments for certain services, etc. by larger firms, 1963 (a)

Firms employing 25 or more persons:
United Kingdom

	Amounts payable
Repairs and maintenance to	£'000
Buildings	855
Road goods vehicles	264
Plant, machinery, and other capital equipment	1,523
Insurance, licensing and depreciation of road goods vehicles (b)	701
Rates, excluding water rates	2,459
Hire of plant and machinery	813
Postage, telephone, telegrams and cables	1,642
Total	8,257

(a) No deduction is made for these payments to arrive at the figures of net output given in this report.

(b) For details see Table 11.

TABLE 13 Percentage analysis of twelve-month periods covered by returns from larger firms, 1963

Firms employing 25 or more persons:
United Kingdom

Year ended	Percentage of total number employed	Year ended	Percentage of total number employed
1963	Per cent.	1963 (contd.)	Per cent.
April (a)	2.5	November	1.5
May	0.6	December	40.7
June	9.8	1964	
July	5.7	January	1.5
August	1.7	February	3.9
September	11.8	March	17.7
October	2.6	Total	100

(a) Including returns made for twelve-month periods ended 1st to 5th April, 1964.

TABLE 14 Sales of all parts of machinery and plant by larger firms, including sales by establishments classified to other industries, 1958 and 1963

This table is not applicable to this industry.

Capital Expenditure (continued)

(ii) 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 any assets acquired in taking over an existing business), and the amounts receivable for any freeholds or leaseholds disposed of. The value is that charged to capital account during the year of return.

(iii) 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. No deduction is made for depreciation, amortisation or obsolescence. The proceeds of items disposed of during the year exclude amounts written off for items scrapped.

Capital expenditure during the year in respect of manufacturing establishments where production had not started before the end of the year is excluded in this report for both 1958 and 1963.

Characteristic Products

The characteristic products of a sub-division are those in terms of which the sub-division is defined. They are products commonly associated in production and are usually similar in nature or manner of production. In most cases the characteristic products of each sub-division are indicated in Table 5 of the industry reports. For those industries for which an analysis by sub-divisions has been made, Table 2 shows the total sales of such characteristic products for each sub-division. The totals include, besides the products which define the sub-division, other items of output assumed to be closely related to them, e.g. waste products and work done.

Enterprise

The term enterprise is used in this report to mean one or more firms under common ownership or control. An enterprise normally consists either of a single firm, or of a parent company together with its subsidiary companies.

Entries

The number of entries shown in Tables 5, 6 and 8 against a particular output or production heading is the number of returns on which figures were recorded for that item.

Establishment

The census was based on the establishment, comprising in most cases the whole of the premises under the same ownership or management at a particular address (e.g. a factory or mine); but firms were asked to exclude from all sections of their returns particulars relating to any department not engaged in production for which they kept a separate set of accounts. Where separate accounts were not kept, they were asked to include merchanting or factoring, canteens operated by them and other

ancillary activities such as bottling, packing and the manufacture of containers for packing their own products, whether or not these activities are carried on at the same address as the works. Building and engineering maintenance departments and selling and transport departments were treated similarly.

Gross Output

The gross output of an industry is the aggregate value of goods made and other work done during the year by the establishments classified to the industry. It is derived by subtracting from the value of sales and work done, the value of stocks of goods on hand for sale and work in progress at the beginning of the year and adding the value at the end of the year.

Larger Firms

These are firms in which twenty-five or more persons were employed on the average during the year.

Net Output

The net output of an industry represents the value added to materials by the process of production. It includes the gross margin on any merchanted or factored goods sold; it constitutes the fund from which wages, salaries, insurance, pensions, hire of plant and machinery, payments for repairs and maintenance, costs of operating road vehicles, rents, rates and taxes, advertising and other selling expenses and all other similar charges have to be met, as well as depreciation and profits. There is no appreciable duplication in net output. Net output has been obtained by deducting from the gross output the cost of purchases adjusted for stock changes, payments for work given out to other firms, and payments for transport.

Normally any customs or excise duty on materials purchased is included in the cost of materials. Similarly, finished goods sold have been valued as they were sold, duty paid or duty free. The amounts of duty, subsidies, allowances and levies receivable or payable, where of substantial importance in the industry, were required to be stated separately, and these items were taken into account when calculating net output.

Net output per person employed

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

Principal Products

The principal products of an industry are those in terms of which the industry is defined. They are products commonly associated in production, and are usually similar in nature or manner of production.

Production

This means the total quantity of a product made during the year, whether sold in the year, added to stock, transferred to another department of the same firm, or used in the manufacture of other products within the business covered by the return. It includes goods produced from materials supplied by other firms.

Purchases

Purchases include the cost of materials and components bought for use in production; of fuel and electricity for all purposes; of packing materials, including the full cost of returnable cases and containers when first purchased; of workshop materials, office materials and materials for repairs to firms' own buildings, plant and vehicles when carried out by their own workpeople included in the return; of consumable tools; and of parts for machinery purchased during the year as replacements. Water charges are also included. In general purchases of goods for merchandising or factoring and canteen supplies are included. Materials supplied by customers for processing are excluded.

The values shown include any duty paid (less rebate, etc.) but exclude trade discounts allowed. The cost of transport is included only if included in the cost of materials as invoiced; amounts paid to transport organisations, including firms' own separate transport organisations, for delivery of materials and fuel are, therefore, excluded. Materials purchased overseas are included at their c.i.f. cost plus any duty payable if the cost of transport from the docks was not included in the invoiced price, but at their full delivered cost if invoiced 'carriage paid home'. Materials and fuel transferred from another department of the firm not covered by the same return are included at the estimated selling value recorded by the other department.

Sales

Sales are in respect of goods made by the business covered by the return, goods made for it by outworkers or by other firms from materials given out to them (sometimes described as goods made on commission) and waste products. Any machinery or other capital items produced for use in the business covered by the return are included, the value being that adopted in the firm's capital asset account. Goods sold without being subjected to any manufacturing process (merchanted or factored) and canteen takings are included as in 1958.

The value shown for sales is the net selling value, defined as the amount charged to customers whether on an ex-works or delivered basis, net of any trade discounts, agents' commissions, allowances for returnable cases, purchase tax, etc.; the net amount charged for packing materials is included. Goods charged on a delivered basis to customers overseas are included at the f.o.b. value. For work done on commission or for the trade the value shown is the net amount charged.

Where goods produced in one department were transferred to another department of the same firm not covered by the return, these transfers were treated as sales by the producing department and valued as far as possible as if they had been sold to an independent purchaser. Goods transferred to wholesale or retail selling organisations for which separate accounts were kept were valued on the same basis. Estimations of a similar kind were also sometimes necessary in valuing transfers between different firms belonging to the same enterprise. To the extent that the sales of finished products of one establishment may constitute the materials purchased by another, total figures of the value of sales (and of materials and fuel purchased) include an element of duplication.

Services rendered

This represents the amounts charged for hiring out plant, machinery and other goods, providing transport, or for any technical or other

services rendered to other organisations. It includes amounts credited for similar services rendered to other departments of the same firm not covered by the return.

Small Firms

These are firms in which fewer than twenty-five persons were employed on the average during the year.

Stocks and Work in Progress

Values are given of stocks of goods on hand for sale, and of materials and fuel, at the beginning and end of the year of return, including any stocks of goods held for merchandising or factoring. The values include duty in the case of dutiable goods held out of bond. The value of work in progress at the two dates is also usually shown. This excludes any progress payments made to sub-contractors, and no deduction is made on account of progress payments received.

Transport Payments

These represent the total amount paid or credited during the year for both outwards transport of finished goods sold and inwards transport of materials and fuel purchased. They include payments to other firms, and to any separate transport organisation of the same firm, not covered by the return, but exclude the value of transport services provided by the business covered by the return. The items included are payments for hired cartage and for inwards and outwards carriage by all forms of inland transport, i.e. railways, road haulage, canals, coast-wise shipping, air, etc. Payments made for sea freight on goods sold to customers overseas and on materials and fuel purchased from overseas suppliers are excluded.

Wages and Salaries

These are the 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; in Northern Ireland this exclusion extends also to payments to directors of limited companies. 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 any payments in kind, travelling expenses, lodging allowances, etc. and employers' contributions to National Insurance and pension schemes is excluded.

Work given out

The figures shown represent the total amount paid for work done by other firms on materials supplied to them, and also by firms' own establishments for which separate returns were made. They do not include payments to individual outworkers or payments for business and other services.

Symbols used

The following symbols are used throughout the report:

- .. Not available
- Nil or negligible (less than half the final digit shown)
- * Figures cannot be shown owing to the risk of disclosing information about individual enterprises.

Rounding of Figures

The figures in the tables have, where necessary, been rounded to the nearest final digit. There may, therefore, be apparent slight discrepancies between the sums of the constituent items and the totals shown.

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