



BOARD OF TRADE

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[HA 251]

Report on the Census of Production 1963

51 Ordnance and small arms



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The figures include persons engaged in manufacturing of firearms and cannon works... The figures are given in the report in the form of a table... The figures are given in the report in the form of a table...

BOARD OF TRADE

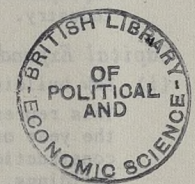
Report on the Census of Production 1963

The second edition of the Standard Industrial Classification (SIC) published in 1958... The figures are given in the report in the form of a table... The figures are given in the report in the form of a table...

51 Ordnance and small arms

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)

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Notes - contained on pages 111 and 112... The figures are given in the report in the form of a table... The figures are given in the report in the form of a table...

Notes

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 merchandising 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.

51 Ordnance and small arms

This Report on the Ordnance and Small Arms Industry relates to establishments engaged wholly or mainly in manufacturing guns, machine guns, mortars, rifles, pistols, revolvers, torpedoes, shell cases and components, bomb cases and components, sporting guns, air rifles, etc.; swords, bayonets, etc.; and tracked armoured fighting vehicles. Armoured cars and troop carriers are excluded.

This industry corresponds to minimum list heading 342 in the Standard Industrial Classification (Consolidated edition, 1963).

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).

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)				Total			
		Ordnance 01		Small arms 02		1958	1963		
		1958	1963	1958	1963				
Number of enterprises (c)	No.	33	23	11	11	42	33		
Number of establishments	"	57	33	18	13	75	46		
Gross output	£'000	54,553	47,432	8,440	6,319	62,994	53,751		
Net output	"	31,504	28,933	5,115	4,008	36,619	32,941		
Net output per head	£	906	1,121	878	1,077	902	1,116		
Sales and work done	£'000	goods produced and work done		55,657	44,407	8,005	5,488	63,662	49,895(d)
		merchanted goods and canteen takings		333	906	444	366	777	1,272
Sales of characteristic products	"	31,153	28,468	5,755	4,157	(e)	(e)		
Index of specialisation (f)	Per cent.	56	64	72	76	65	66		
Purchases	£'000	materials for processing and packaging, and fuel		20,676	15,694	2,870	1,797	23,546	17,492
		goods for merchandising and canteen purchases			811		345		1,156
Payments to other organisations	"	for work done on materials given out		1,201	1,355	413	47	1,613	1,402
		for transport		220	88	49	17	269	105
Stocks and work in progress									
Goods on hand for sale	"	change during year		+ 358	- 112	+ 81	- 1	+ 439	- 113
		at end of year		1,452	648	305	331	1,757	979
Work in progress	"	change during year		- 1,795	+ 2,231	- 90	+ 465	- 1,884	+ 2,697
		at end of year		23,241	18,237	2,678	1,951	25,919	20,188
Materials, stores and fuel	"	change during year		- 953	- 551	+ 7	- 104	- 946	- 655
		at end of year		7,370	5,695	1,260	512	8,630	6,207
Average number employed	No.	total, including working proprietors		34,767	25,807	5,825	3,721	40,592	29,528
		operatives		26,734	18,954	4,889	2,906	31,623	21,860
		other employees (g)		8,032	6,845	936	815	8,968	7,660
Wages and salaries	£'000	of operatives		15,657	13,868	2,928	2,107	18,585	15,975
		of other employees (g)		6,190	6,386	741	772	6,931	7,158
Wages and salaries per head	£	operatives		586	732	599	725	588	731
		other employees (g)		771	933	792	947	773	934
Employers' contributions to National Insurance (h)	£'000	..	734	..	105	..	839		
Employers' contributions to private pension schemes, etc. (i)	"	..	1,224	..	156	..	1,380		
Capital expenditure (j)									
New building work	"	554	181	145	6	698	187		
Land and existing buildings (k)	"	..	*	..	*	..	+ 493		
Plant and machinery	"	acquisitions		4,186	+ 1,817	825	- 164	5,011	2,161
		disposals		3,515		77		3,592	508
Vehicles	"	acquisitions		90	70	12	9	102	80
		disposals		27	21	2	6	29	27

For notes to this table - see page 51/6

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
25-99	10	12	635	1,286	739	1,163	43	543
100-199	4	5	598	1,106	669	1,118	11	370
200-299	6	8	1,540	3,744	1,766	1,147	72	3,018
300-499	5	5	2,049	3,157	1,876	916	- 46	945
500 and over	8	16	24,706	44,458	27,891	1,129	2,307	22,501
Total	33	46	29,528	53,751	32,941	1,116	2,388	27,374

(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	£	£
25-99	476	153	315	169	19	10	661	1,106
100-199	406	190	258	176	16	8	636	926
200-299	1,151	389	749	326	45	15	650	837
300-499	1,598	451	1,086	397	56	64	680	881
500 and over	18,229	6,477	13,567	6,090	704	1,283	744	940
Total	21,860	7,660	15,975	7,158	839	1,380	731	934

(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 £24,000.

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	3	1	4
18 and over	76	20	96
All ages	79	21	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 2 per cent. of the employment shown for 1963 and 48 per cent. for 1958.

	1958	1963
Number of firms	56	36
Average number employed:		
Working proprietors	} 484	{ 39
Other persons employed			207

(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) 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.

(d) 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).

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

(f) 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.

(g) Administrative, technical and clerical employees.

(h) Including both flat rate and graduated contributions.

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

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

(k) Acquisitions less disposals.

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
02 Small arms	Number	£'000		£'000	Number	Number
Sporting guns, rifles and carbines	51,489	432	}	1,267	8	9
Military rifles and carbines	..	210				
Air guns, air rifles and air pistols	161,459	387	164,892	489	*	*
Mortars, automatic machine and quick firing guns (up to 20mm.)	..	1,526	}	546	8	11
Revolvers, pistols (except air pistols) and other guns, rifles and carbines	..	144				
Swords, cutlasses, bayonets and arms of other sorts (not firearms)	..	2,584	}	1,433	10	15
Parts and accessories of small arms	..	349				
Empty cartridge cases for small arms ammunition	..	7,139		8,736	..	..
Total small arms and empty cartridge cases for small arms ammunition		7,139		8,736	..	..
01 Guns and howitzers and parts thereof	}	7,471	}	12,525	34	40
01 Gun mountings, carriages and platforms and parts thereof						
01 Armoured fighting vehicles (including tracked vehicles), chassis and parts thereof, excluding armoured cars and troop carriers (b)	..	10,392				
01 Artillery ammunition and parts thereof	..	3,639	..	10,004	13	19
Torpedoes, mines and aircraft bombs and parts thereof	..	2,877	..	2,742	12	17
01 Other naval, military and air force stores, unclassified	..	18,308	..	10,935	63	73
Total ordnance		42,687		36,206	..	..
Other products	..	500	..	531	7	11
Waste products						
Scrap metals			Th.tons			
Iron and steel	..	310	32.8	290	} 20	26
			..	2		
Th.tons						
Brass	1.5	170	1.6	166	12	17

Continued on next page

TABLE 5 (continued)

Industry sub-division (a)	1958		1963			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
		£'000	Th. tons	£'000	Number	Number
Waste products (continued)						
Scrap metals (continued)						
Copper	}	278	0.2	35	6	11
Other scrap metals			..	162	14	20
Other waste products			..	57	8	14
Research and development work done for customers (including Government Departments) and installation work		2,624		3,482	14	19
Total		53,709		44,669	..	..
Sales in other industries (see Table 6)		12,173		11,559	..	..
Principal products of this industry sold by establishments in the industry		41,535		33,110	33	39(c)

- (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) Including re-conditioned fighting vehicles and component parts for 1958.
- (c) This figure represents the total number of returns made by larger firms in this industry, which is less than the total number of establishments 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		
	Value	Value	Entries	Principal industries in which produced (a)
	£'000	£'000	Number	
Sporting guns, rifles and carbines, empty cartridge cases for small arms ammunition and parts and accessories of small arms	440	656	12	30,40,42,69
Mortars, automatic machine and quick firing guns (up to 20mm.); revolvers, pistols and other guns, rifles and carbines, swords, cutlasses, bayonets and arms of other sorts (not firearms)	-			
Guns and howitzers and parts thereof	2,340	4,430	29	42,46,61,62
Gun mountings, carriages and platforms and parts thereof				
Armoured fighting vehicles (including tracked vehicles), chassis and parts thereof, excluding armoured cars and troop carriers	1,157			
Artillery ammunition and parts thereof	-	730	9	30,40,52,74
Torpedoes, mines and aircraft bombs and parts thereof	566	769	*	49,50,64,74
Other naval, military and air force stores	7,672	4,973	53	30,49,61,74
Total	12,173	11,559	..	

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

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
Live ammunition not exceeding 30 mm. calibre; sporting	(a) 41	
Metal-working machine tools	(a) 1,713	
Engineers' small tools and gauges	872	660
Industrial plant and steelwork	(a) 758	
Other general mechanical engineering	4,934	1,909
Electrical engineering products	6,039	474
Other products		4,305
Electricity sold	-	35
Steam sold	-	226
Repair and jobbing work	1,251	1,841
Other work done	9,031	4,302
Services rendered to other organisations (b)	-	523
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)	674	1,133
Canteen takings	103	139
Total	22,904(c)	18,058

(a) Included in Other products.

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

(c) 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		£'000
Iron				
Pig iron, including refined pig iron, and other irons for re-melting (a)	6.5	128	}	127
Castings	7.6	437		
Steel				
Ingots, blooms, billets, slabs, and sheet and tinplate bars	72.7	3,073	..	896
Bars and rods (including wire rods), angles, shapes and sections, girders, beams, joists and pillars rolled (not fabricated), including tube rounds and squares (b)	46.1	2,616	Th.tons	1,156
Plates, 3mm. thick and over	} 28.1	1,856	..	1,091
Hoop and strip (including tape of all thicknesses)			..	13
Sheets under 3mm. thick (including electrical sheets)	10.4	659	1.1	77
Forgings (except drop forgings)	1.6	231	} 2.7	433
Castings	..	1,081		
Drop forgings (c)	8.8	1,467	1.7	345
Iron and steel not elsewhere specified except finished parts, wire and scrap	1.1	178	} 0.6	113
Steel wire and wire manufactures (excluding insulated wires and cables) (d)	..	176		
Light metals and non-ferrous metals in all forms except finished parts, wire and scrap	..	113	..	60
Aluminium and aluminium alloys	2.9	926	..	898
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other nickel alloys)	10.2	2,697	} 2.6	683
Copper (excluding blister) (e)	..	810		
Heavy chemicals (acids, alkalis, alcohols, other inorganic and organic chemicals, compressed gases, etc.)	7.2	1,939	3.0	766
Paint and varnish (including lacquers and stains)	..	(f)	..	114
Synthetic resins and plastics materials (excluding leathercloth and reinforced plastics)	..	205	Th.gal.	
Rubber, including hard rubber, balata, gutta-percha and synthetic rubber in all forms, including finished parts	..	75	36.9	52
Timber			..	16
Softwood, sawn or planed, but not further prepared or manufactured	} ..	449	0.2	41
Hardwood, sawn or planed, but not further prepared or manufactured			Th.cu.ft.	35.0	42
Plywood, including blockboard, laminboard and battenboard	..	191	..	29
Insulated wires, cables, strips and strands (g)	..	70	..	59
Bolts, rivets, nuts and washers, screws, nails, tacks, etc.	..	466	..	219

Continued on next page

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
Materials for processing (continued)		£'000		£'000
Machinery bought for installation	..	(f)	..	148
Purchased components for incorporation in firms' own products				
Ball and roller bearings and parts thereof	..	213	..	101
Electric motors	..	193	..	188
Industrial valves	..	13	..	54
Gear and gear wheels of metal	..	83	..	86
Pumps	..	61	..	71
Measuring instruments and gauges and parts				
Industrial process measuring and control instruments and equipment	..	249	..	267
Other	..		..	103
Plastic goods moulded and fabricated	..	55	..	28
Other components not elsewhere specified except those of rubber and asbestos (h)	..	7,757	..	2,607
	Th.gal.		Th.gal.	
Lubricating oils and greases (including cutting oils and emulsions)	539	115	340	73
	..	38	..	11
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement	..	1,931	..	1,215
All other materials for processing	..	7,694	..	2,540
Packaging materials				
Paper and board				
Boxes, cartons, packing cases, and drums and canisters (with or without metal ends) of paper, cardboard and fibreboard	..		..	59
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)	..	76	..	17
Timber				
Containers wholly or mainly of wood, including plywood boxes and drums, baskets and wickerwork crates	..		..	95
Timber (sawn or planed) for manufacture into packing cases, etc.	..	166	..	95
Plywood for manufacture into packing cases	..		..	29
All other packaging materials	..	43	..	29
Fuel and electricity (i)	Th.tons		Th.tons	
Coal	248	986	173	869
Coke (including screenings) and manufactured fuel	15.6	99	3.3	36
	..	13	..	
	Th.gal.		Th.gal.	
Derv fuel and motor spirit for use in road vehicles	782	151	304	61
	..	22	..	
Other liquid fuels (including creosote/pitch mixtures, etc., and liquefied petroleum gases)	3,196	207	4,729	224

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
Fuel and electricity (i) (continued)	Th.therms	£'000	Th.therms	£'000
Gas	6,756	303	4,511	255
	..	160		
Electricity	Th.kWh		Th.kWh	
	247,962	1,240	147,768	922
Total cost of materials and fuel		41,727		17,492
Goods purchased for merchanting		..		1,037
Canteen purchases		..		118
Total cost of purchases		..		18,647

- (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 as covering 'Iron and steel' in 1954.
 (e) 'Blister' was not specifically excluded in 1954.
 (f) Not separately recorded.
 (g) 'Strips and strands' were not included in 1954.
 (h) Components of rubber and asbestos were not excluded in 1954.
 (i) The total quantity of electricity generated in firms' own establishments in this industry in 1963 was 25,152 thousand kWh. Owing to the risk of disclosure of information relating to individual firms the quantity for 1954 cannot be given.

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.	200
Transport costs		
Wages and salaries	£'000	141
Derv fuel and motor spirit	"	61
Payments to other organisations for transport	"	105
Costs of operating road goods vehicles		
Insurance	"	3
Vehicle licences	"	4
Depreciation	"	31
Payments to other organisations for repairs and maintenance	"	17
Total	"	363

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

Firms employing 25 or more persons: United Kingdom		Amounts payable
		£'000
Repairs and maintenance to		
Buildings		309
Road goods vehicles		17
Plant, machinery, and other capital equipment		264
Insurance, licensing and depreciation of road goods vehicles (b)		38
Rates, excluding water rates		708
Hire of plant and machinery		59
Postage, telephone, telegrams and cables		183
Total		1,579

(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)	0.3	November	0.0
May	0.0	December	40.5
June	1.5	1964	
July	1.7	January	0.3
August	0.0	February	0.0
September	1.5	March	54.2
October	0.0	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 merchanting 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 (merchanting 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 merchanting 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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