



BOARD OF TRADE

5
42
[HA 251]

Report on the Census of Production 1963

41 Agricultural machinery (except tractors)

LONDON: HER MAJESTY'S STATIONERY OFFICE

Price 3s. 6d. net

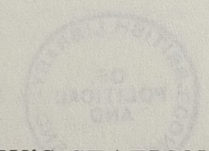
BOARD OF TRADE

Report on the Census of Production 1963

41 Agricultural machinery (except tractors)

*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)*

Notes - continued on pages 111 and 112



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 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.

41

Agricultural machinery (except tractors)

This Report on the Agricultural Machinery (except Tractors) Industry relates to establishments engaged wholly or mainly in manufacturing agricultural machinery and implements (including self-propelled agricultural machinery) such as ploughs, harrows, reapers, binders, threshers, elevators, etc. Milking machines are included, but dairy machinery and appliances, tractors and hand tools such as spades, are excluded.

This industry corresponds to minimum list heading 331 in the Standard Industrial Classification (Consolidated edition, 1963).

TREATMENT OF PARTS

In reports for this and other mechanical engineering industries, a distinction is made between parts sold in association with the sale of complete machines, and other parts sold. The only parts shown in Table 5 are those included on returns (whether classified to this or to other industries) which also showed sales of agricultural machinery; where the return was classified to another industry, these parts are also shown, together with the complete machines, in Table 6.

Parts of agricultural machinery included in returns which showed no sales of the complete machines are treated as principal products of the General Mechanical Engineering Industry (Part 52) whether made by general engineering firms or by specialist manufacturers of other types of machinery.

Sales of all parts of agricultural machinery (i.e. whether or not sold in association with the sale of the complete machines) are brought together in Table 14 in this report.

METHOD OF CLASSIFICATION

In classifying returns to this industry sales of machinery parts 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 General Mechanical Engineering (Part 52)). Exceptionally, however, machinery parts were taken into account where the return would otherwise have been classified outside the mechanical engineering group of industries. The standard classification procedure was further modified where a return would have been classified to one of the mechanical engineering industries relating to a specific class of machinery (viz., Parts 41 to 50 inclusive), but the sales of the principal products of the industry concerned accounted for less than 20 per cent. of the total output: in such cases the return was classified to the residual sub-division of the Miscellaneous (Non-electrical) Machinery Industry (Part 49).

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).



S
42
[HA 251]

TABLE 2 Summary of returns received from larger firms, 1958 and 1963
Firms employing 25 or more persons: United Kingdom (a)

	Unit	1958	1963	
Number of enterprises	No.	76	77	
Number of establishments	"	88	88	
Gross output	£'000	49,574	63,790	
Net output	"	20,473	28,589	
Net output per head	£	1,142	1,571	
Sales and work done	goods produced and work done	£'000	46,354	53,858(b)
	merchanted goods and canteen takings	"	2,837	11,192
Index of specialisation (c)	Per cent.	82	78	
Purchases	materials for processing and packaging, and fuel	£'000	26,437	26,004
	goods for merchandising and canteen purchases	"		7,202
Payments to other organisations	for work done on materials given out	"	936	861
	for transport	"	1,060	801
Stocks and work in progress				
Goods on hand for sale	change during year	"	+ 408	- 1,290
	at end of year	"	5,295	8,196
Work in progress	change during year	"	- 25	30
	at end of year	"	3,305	3,541
Materials, stores and fuel	change during year	"	- 668	- 332
	at end of year	"	6,833	8,093
Average number employed	total, including working proprietors	No.	17,924	18,199
	operatives	"	13,059	13,220
	other employees (d)	"	4,864	4,932
Wages and salaries	of operatives	£'000	7,256	9,289
	of other employees (d)	"	3,097	4,060
Wages and salaries per head	operatives	£	556	703
	other employees (d)	"	637	823
Employers' contributions to National Insurance (e)	£'000	..	551	
Employers' contributions to private pension schemes, etc. (f)	"	..	360	
Capital expenditure (g)				
New building work	"	251	464	
Land and existing buildings	acquisitions	"	..	12
	disposals	"	..	87
Plant and machinery	acquisitions	"	585	1,032
	disposals	"	45	21
Vehicles	acquisitions	"	238	248
	disposals	"	86	92

For notes to this table - see page 41/6

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
25-49	19	19	710	1,415	704	991	39	361
50-99	25	28	1,801	6,081	2,546	1,413	203	933
100-199	15	19	2,142	7,808	3,079	1,437	163	1,688
200-299	3	3	656	1,866	937	1,428	84	700
300-399	7	9	2,396	8,387	3,560	1,486	120	2,653
400 and over	8	10	10,494	38,234	17,765	1,693	947	13,495
Total	77	88	18,199	63,790	28,589	1,571	1,556	19,830

(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)
25-49	544	156	298	106	19	2	548	678
50-99	1,391	384	844	303	48	15	607	790
100-199	1,511	625	962	501	67	22	637	802
200-299	548	108	360	81	15	7	656	752
300-399	1,488	907	1,065	766	68	53	716	845
400 and over	7,738	2,752	5,761	2,302	334	261	744	836
Total	13,220	4,932	9,289	4,060	551	360	703	823

(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 £67,000.

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	7	2	9
18 and over	81	10	91
All ages	88	12	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 3 per cent. of the employment shown for 1963 and 6 per cent. for 1958.

	1958	1963
Number of firms	223	229
Average number employed:		
Working proprietors	1,814	309
Other persons employed		1,590

(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) This is the ratio of total sales of principal products by the industry to total sales of goods produced and work done.

(d) Administrative, technical and clerical employees.

(e) Including both flat rate and graduated contributions.

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

(g) 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

	1958		1963		Enter-prises	Entries
	Quantity	Value	Quantity	Value		
	Number	£'000	Number	£'000	Number	Number
AGRICULTURAL MACHINERY, other than tractors						
COMPLETE MACHINES						
Tractor ploughs (a)	36,372	2,319	27,857	2,251	16	16
	..	79				
Cultivators, harrows other than disc harrows, and tractor hoes (b)	28,779	2,881	42,268	3,847	35	35
Disc harrows	4,231	465	5,198	589	8	8
Seed drills, planters, fertilizer distributors and broadcasters (c)	8,799	905	27,465	2,467	40	41
Spraying machines for insecticides and herbicides	4,808	328	..	532	16	16
	..	220				
Hay and grass mowers, including mowing attachments for tractors, other than rotary blade type	17,365	1,389	..	984	14	14
	..	405				
Pick-up balers (d)	267	70	..	6,480	10	10
Combine harvesters (e)	6,254	7,760	3,895	7,374	6	6
Potato and sugar beet harvesters, diggers (all types), lifters, spinners and ploughs (f)	2,677	364	..	1,141	18	18
Forage harvesters	..	..	1,950	230	7	7
General purpose (agricultural) elevators, grain augers and conveyors (g)	3,074	408	12,230	1,363	29	29
	..	190				
Grain and grass driers	2,570	1,415	3,885	2,789	26	26
	..	70				
Sheep shearers and clipping machines	16,998	186	20,839	294	*	*
Milking machines	8,254	1,052	..	1,167	5	5
Other agricultural machinery (excluding dairy machinery)	..	14,904	..	8,863	79	82
Unclassified agricultural machinery (h)	..	1,540	..	1,401	9	9
PARTS of agricultural machinery sold in association with the sale of complete machines characteristic of this industry (i)	..	11,228	..	8,281	111	238
OTHER PRINCIPAL PRODUCTS	..	75	..	17	*	*
WASTE PRODUCTS						
Scrap metals	Tons		Tons			
Iron and steel	5,855	44	14,360	165	49	52
	..	29				
Brass	23	1	36	5	10	10
	..	2				
Copper	..	9	22	4	*	*
Other scrap metals	..	11	..	13	11	13
Other waste products	..	..	..	..	..	..

Continued on next page

TABLE 5 (continued)

	1958		1963			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
		£'000		£'000	Number	Number
WORK DONE						
Agricultural machinery and plant erected and installed	}	45(j)}		964	13	13
Research and development work done for customers (including Government Departments)				-	-	-
Total		48,395		51,888	..	..
Sales in other industries (see Table 6)		10,407		9,878	..	..
Principal products of this industry sold by establishments in the industry		37,988		42,010	77	82(k)

(a) Described as mechanical draft ploughs in 1958.

(b) Described as cultivators and grubbers in 1958.

(c) Described as planters, drills and seeders in 1958.

(d) Described as reapers and binders in 1958.

(e) Described as combine harvester-threshers and threshers in 1958.

(f) Described as potato and sugar beet lifters in 1958.

(g) Described as hay and corn elevators in 1958.

(h) This figure includes some parts in association with the sale of complete machines.

(i) For details of these parts see Table 14.

(j) So far as recorded separately.

(k) 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			
	Quantity	Value	Quantity	Value	Entries	Principal industries in which produced (a)
	Number	£'000	Number	£'000	Number	
Agricultural machinery, other than tractors						
Tractor ploughs, and cultivators, harrows other than disc harrows, and tractor hoes						
Complete	7,894	356	..	478	26	44,49,62,74
Parts							101
Seed drills, planters, fertilizer distributors and broadcasters						
Complete	-	-	5,271	234	7	44,46,49
Parts	-	-	..	7	6	(b)
Spraying machines for insecticides and herbicides						
Complete	}	285	..	182	10	44,47,64,74
Parts							53	6	44,47
Hay and grass mowers						
Complete and parts	-	-	..	8	7	(b)
Potato, sugar beet harvesters, diggers (all types), lifters, spinners and ploughs						
Complete	-	-	..	39	6	49
Parts	-	-	..	10	6	(b)
General purpose (agricultural) elevators, grain augers and conveyors						
Complete and parts	..	234	..	685	18	44,46,49,50
Grain and grass driers						
Complete	}	115	980	518	13	39,44,49,50
Parts							61	116
Combined harvester-threshers						
Complete and parts	..	563	..	16	7	(b)
Other agricultural machinery						
Complete	..	5,138	..	6,277(c)	46	44,46,49,62
Parts	..	581	..	576(d)	34	44,46,49,50
Unclassified						
Complete and parts	..	2,873	..	-	-	-
Agricultural machinery and plant erected and installed						
Complete and parts	..	-	..	680	9	47,49,50,62
Total		10,407		9,878	..	

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

(b) No significant production was recorded in other industries.

(c) Complete machines.

(d) Parts.

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	
	Quantity	Value £'000	Quantity	Value £'000
Iron castings in the rough or machined, and patterns of wood and metal	..	53	..	110
Contractors' plant and quarrying machinery complete and parts	..	1,481	..	3,199
Metal-working machine tools complete and parts			..	289
Other miscellaneous non-electrical industrial machinery	..	2,117		
Complete and parts			..	1,794
Industrial plant and steelwork other than boilers and boilerhouse plant	..	548	..	555
Wheeled and half-track tractors	Number			
Complete	2,116	1,090		
Parts	..	422	..	448
Industrial and works trucks and tractors, motor bodies, trailers (motor drawn) and caravans	..	631	..	1,370
Other metal manufactures	..	1,053	..	208
Other products	..		..	2,235
General mechanical engineering				
Repair and jobbing work		353		265
Other work done on commission		189		920
Other miscellaneous mechanical engineering		408		440
Services rendered to other organisations (a)		..		16
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)	..	2,783	..	11,134
Canteen takings		54		57
Total		11,203(b)		23,039

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

(b) 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 £'000	Quantity	Cost £'000
	Th. tons		Th. tons	
Materials for processing				
Iron				
Pig iron, including refined pig iron and other irons for re-melting (a)	..	761	9.0	206
Castings	13.9	1,047	11.1	1,009
Steel				
Ingots, blooms, billets, slabs, and sheet and tinplate bars			2.9	144
Bars and rods (including wire rods), angles, shapes and sections, girders, beams, joists and pillars rolled (not fabricated), including tube rounds and squares (b)	59.8	2,264	48.4	2,718
Plates, 3mm. thick and over	9.8	410	21.3	1,115
Hoop and strip (including tape of all thicknesses)			..	44
Sheets under 3mm. thick (including electrical sheets)	6.5	305	..	1,177
Tinplate, terneplate and blackplate	..	(c)	..	125
Forgings (except drop forgings)	0.2	35	0.8	137
Castings	2.2	319	2.9	555
Tyres, wheels and axles (rail type)	..	105	..	166
Drop forgings (d)	3.8	527	1.9	336
Iron and steel not elsewhere specified except finished parts, wire and scrap				
Wrought tubes and fittings for wrought tubes (including welded, seamless, conduits, etc.)	2.8	194	4.1	345
Other (e)	0.5	16	..	54
Precision chain (e.g. transmission and timing)	..	203	..	379
Springs, laminated and other types	..	167	..	105
Steel wire and wire manufactures (excluding insulated wires and cables) (f)				
Wire (single wire)			..	8
Wire manufactures including wire cables and ropes and stranded wire of two or more ply	..	172	..	27
Iron and steel scrap	..	44	..	22
Light metals and non-ferrous metals in all forms except finished parts, wire and scrap				
Aluminium and aluminium alloys	..	452	0.3	104
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other nickel alloys)	0.7	242	..	131
Copper (excluding blister) (g)				
Glass in all forms, including finished parts	..	(h)	..	55
Heavy chemicals (acids, alkalis, alcohols, other inorganic and organic chemicals, compressed gases, etc.)	..	(h)	..	41

Continued on next page

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
		£'000		£'000
Materials for processing (continued)				
Paint and varnish (including lacquers and stains)	..	420	..	394
Synthetic resins and plastics materials (excluding leathercloth and reinforced plastics)	..	(h)	..	38
Refractory materials	..	6	..	17
Rubber, including hard rubber, balata, gutta-percha and synthetic rubber in all forms, including finished parts	..	1,011	..	1,112
Timber				
Softwood, sawn or planed, but not further prepared or manufactured	}	284	..	114
Hardwood, sawn or planed, but not further prepared or manufactured			..	130
	Th.sq.ft.		Th.sq.ft.	
Plywood, including blockboard, laminboard and battenboard	136	16	377	28
Asbestos in all forms, including finished parts	..	7	..	4
Other thermal insulating materials	..	14	..	1
Insulated wires, cables, strips and strands (i)	..	17	..	21
Bolts, rivets, nuts and washers, screws, nails, tacks, etc.	..	588	..	670
Machinery bought for installation	..	(h)	..	285
Purchased components for incorporation in firms' own products				
Ball and roller bearings and parts thereof	..	281	..	793
Electric motors				
Of less than 1 h.p.	}	234	..	92
Of 1 h.p. and over			..	425
	Number		Number	
Internal combustion engines	49,800	2,139	53,354	1,489
Industrial valves	..	5	..	449
Gear and gear wheels of metal	..	150	..	223
Pumps	..	198	..	143
Measuring instruments and gauges and parts				
Industrial process measuring and control instruments and equipment	}	9	..	113
Other			..	24
Plastic goods moulded and fabricated	..	13	..	88
Other components not elsewhere specified except those of rubber and asbestos (j)	..	7,073	..	6,880
	Th.gal.		Th.gal.	
Lubricating oils and greases (including cutting oils and emulsions)	97.6	17	196	55
	..	35	..	15
Replacement parts for firm's own machinery, plant and vehicles, and accessories and consumable tools bought as replacement	..	1,032	..	508
All other materials for processing	..	4,859	..	1,584

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
		£'000		£'000
Packaging materials				
Paper and board				
Boxes, cartons, packing cases, and drums and canisters (with or without metal ends) of paper, cardboard and fibreboard	}	162	..	83
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)			..	36
Timber				
Containers wholly or mainly of wood, including plywood boxes and drums, baskets and wickerwork crates	}	447	..	189
Timber (sawn or planed) for manufacture into packing cases, etc.			..	63
Plywood for manufacture into packing cases	..	48	..	11
All other packaging materials	..	48	..	11
Fuel and electricity (k)	Th.tons		Th.tons	
Coal	18.3	64	11.0	68
Coke (including screenings) and manufactured fuel	16.5	108	6.8	71
	Th.gal.		Th.gal.	
Derv fuel and motor spirit for use in road vehicles	557	109	475	89
	..	11	..	19
Other liquid fuels (including creosote/pitch mixtures, etc., and liquefied petroleum gases)	706	34	2,601	116
	..	39	..	..
	Th.therms		Th.therms	
Gas	1,841	93	2,472	175
	..	56	..	..
	Th.kWh		Th.kWh	
Electricity	28,909	172	47,836	318
	..	23	..	41
Total cost of materials and fuel		27,158		26,004
Goods purchased for merchanting		..		7,134
Canteen purchases		..		68
Total cost of purchases		..		33,206

- (a) Described in 1954 as 'Pig iron, except refined pig iron'.
(b) 'Rolled pillars (not fabricated) including tube rounds and squares' not included in 1954.
(c) Owing to the risk of disclosure of information relating to individual firms separate particulars cannot be given and are included in 'All other materials for processing'.
(d) Described in 1954 as 'Drop forgings of iron and steel'.
(e) 1954 heading covered iron only.
(f) Including 'Iron and steel' in 1954.
(g) 'Blister' was not specifically excluded in 1954.
(h) Not recorded separately.
(i) 'Strips and strands' were not specifically excluded in 1954.
(j) 'Iron and steel' excluded in 1954. The 1963 figures exclude 'rubber and asbestos'.
(k) The total quantity of electricity generated in firms' own establishments in this industry was 407 Th.kWh in 1954; owing to the risk of disclosure of information relating to individual firms separate particulars cannot be given for 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.	200
Transport costs		
Wages and salaries	£'000	151
Derv fuel and motor spirit	"	108
Payments to other organisations for transport	"	801
Costs of operating road goods vehicles		
Insurance	"	18
Vehicle licences	"	18
Depreciation	"	94
Payments to other organisations for repairs and maintenance	"	53
Total	"	1,242

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	99
Road goods vehicles	53
Plant, machinery, and other capital equipment	81
Insurance, licensing and depreciation of road goods vehicles (b)	129
Rates, excluding water rates	338
Hire of plant and machinery	26
Postage, telephone, telegrams and cables	276
Total	998

(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)	1.1	November	0.0
May	0.4	December	35.3
June	0.7		
July	2.8	1964	
August	0.0	January	17.8
September	8.1	February	1.6
October	21.9	March	10.9
		Total	100

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

TABLE 14 Sales of all parts of agricultural machinery (except tractors) by larger firms, including sales by establishments classified to other industries, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

(i) Parts sold in association with the sale of complete machines characteristic of this industry (a)	1958		1963	
	(i)	(ii)	(i)	(ii)
(ii) Other parts sold (b)	£'000	£'000	£'000	£'000
For tractor ploughs	1,150	257	1,119	1,182
For cultivators, harrows other than disc harrows, and tractor hoes	601	325	1,342	197
For disc harrows	158	1,071	219	561
For seed drills, planters, fertilizer distributors and broadcasters	394	93	291	195
For spraying machines for insecticides and herbicides	114		176	
For hay and grassmowers, including mowing attachments for tractors, other than rotary blade type	683	157	172	227
For pick-up balers	63	31	331	246
For combine harvesters	506	340	608	125
For grain and grass driers	299	46	424	57
For sheep shearers and clipping machines		-		-
For milking machines	665	46	868	(c)
For potato and sugar beet harvesters, diggers (all types), lifters, spinners and ploughs	115	513	125	267
For forage harvesters	3,294		68	72
For general purpose (agricultural) elevators, grain augers and conveyors			63	56
For other agricultural machinery (excluding dairy machinery)	3,185	1,525	2,476	1,495
For unclassified agricultural machinery			-	1,090
Total	11,228	4,404	8,281	5,770

(a) Principal products of this industry.

(b) Principal products of General Mechanical Engineering.

(c) Owing to the risk of disclosure of information relating to individual firms separate particulars cannot be given and are included with 'Other agricultural machinery (excluding dairy machinery)'.

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.

List of Industry Reports, etc

Part No. and title

- 1 Introductory Notes
- 2 Coal Mining
- 3 Stone and Slate Quarrying and Mining
- 4 Chalk, Clay, Sand and Gravel Extraction
- 5 Metalliferous Mining and Quarrying
- 6 Salt and Miscellaneous Non-metalliferous Mining and Quarrying
- 7 Grain Milling
- 8 Bread and Flour Confectionery
- 9 Biscuits
- 10 Bacon Curing, Meat and Fish Products
- 11 Milk Products
- 12 Sugar
- 13 Cocoa, Chocolate and Sugar Confectionery
- 14 Fruit and Vegetable Products
- 15 Animal and Poultry Foods
- 16 Margarine
- 17 Starch and Miscellaneous Foods
- 18 Brewing and Malting
- 19 Spirit Distilling and Compounding
- 20 Soft Drinks, British Wines, Cider and Perry
- 21 Tobacco
- 22 Coke Ovens and Manufactured Fuel
- 23 Mineral Oil Refining
- 24 Lubricating Oils and Greases
- 25 Dyestuffs
- 26 Fertilizers and Chemicals for Pest Control
- 27 General Chemicals
- 28 Pharmaceutical Preparations
- 29 Toilet Preparations
- 30 Explosives and Fireworks
- 31 Paint and Printing Ink
- 32 Vegetable and Animal Oils and Fats
- 33 Soap, Detergents, Candles and Glycerine
- 34 Synthetic Resins and Plastics Materials
- 35 Polishes
- 36 Gelatine, Adhesives, etc.
- 37 Iron and Steel (General)
- 38 Steel Tubes
- 39 Iron Castings, etc.
- 40 Non-ferrous Metals
- 41 Agricultural Machinery (except Tractors)
- 42 Metal-working Machine Tools
- 43 Engineers' Small Tools and Gauges
- 44 Industrial Engines
- 45 Textile Machinery and Accessories
- 46 Contractors' Plant and Quarrying Machinery
- 47 Mechanical Handling Equipment
- 48 Office Machinery
- 49 Miscellaneous (Non-electrical) Machinery
- 50 Industrial Plant and Steelwork
- 51 Ordnance and Small Arms
- 52 General Mechanical Engineering
- 53 Scientific, Surgical and Photographic Instruments, etc.
- 54 Watches and Clocks
- 55 Electrical Machinery
- 56 Insulated Wires and Cables
- 57 Telegraph and Telephone Apparatus
- 58 Radio and Other Electronic Apparatus
- 59 Domestic Electrical Appliances
- 60 Miscellaneous Electrical Goods
- 61 Shipbuilding and Marine Engineering
- 62 Motor Vehicle Manufacturing
- 63 Motor Cycle, Three-wheel Vehicle and Pedal Cycle Manufacturing
- 64 Aircraft Manufacturing and Repairing
- 65 Locomotives and Railway Track Equipment
- 66 Railway Carriages and Wagons and Trams
- 67 Perambulators, Hand-trucks, etc.
- 68 Tools and Implements

Part No. and title

- 69 Cutlery
- 70 Bolts, Nuts, Screws, Rivets, etc.
- 71 Wire and Wire Manufactures
- 72 Cans and Metal Boxes
- 73 Jewellery, Plate and Refining of Precious Metals
- 74 Miscellaneous Metal Manufactures
- 75 Production of Man-made Fibres
- 76 Spinning and Doubling of Cotton, Flax and Man-made Fibres
- 77 Weaving of Cotton, Linen and Man-made Fibres
- 78 Woollen and Worsted
- 79 Jute
- 80 Rope, Twine and Net
- 81 Hosiery and Other Knitted Goods
- 82 Lace
- 83 Carpets
- 84 Narrow Fabrics
- 85 Household Textiles and Handkerchiefs
- 86 Canvas Goods and Sacks
- 87 Textile Finishing
- 88 Asbestos
- 89 Miscellaneous Textile Industries
- 90 Leather (Tanning and Dressing) and Fellmongery
- 91 Leather Goods
- 92 Fur
- 93 Weatherproof Outerwear
- 94 Men's and Boys' Tailored Outerwear
- 95 Women's and Girls' Tailored Outerwear
- 96 Overalls and Men's Shirts, Underwear, etc.
- 97 Dresses, Lingerie, Infants' Wear, etc.
- 98 Hats, Caps and Millinery
- 99 Corsets and Miscellaneous Dress Industries
- 100 Gloves
- 101 Footwear
- 102 Bricks, Fireclay and Refractory Goods
- 103 Pottery
- 104 Glass
- 105 Cement
- 106 Abrasives
- 107 Miscellaneous Building Materials, etc.
- 108 Timber
- 109 Furniture and Upholstery
- 110 Bedding and Soft Furnishings
- 111 Shop and Office Fitting
- 112 Wooden Containers and Baskets
- 113 Miscellaneous Wood and Cork Manufactures
- 114 Paper and Board
- 115 Cardboard Boxes, Cartons and Fibre-board Packing Cases
- 116 Miscellaneous Manufactures of Paper and Board
- 117 Printing and Publishing of Newspapers and Periodicals
- 118 General Printing, Publishing, Bookbinding, Engraving, etc.
- 119 Rubber
- 120 Linoleum, Leathercloth, etc.
- 121 Brushes and Brooms
- 122 Toys, Games and Sports Equipment
- 123 Miscellaneous Stationers' Goods
- 124 Plastics Moulding and Fabricating
- 125 Miscellaneous Manufacturing Industries
- 126 Construction
- 127 Gas
- 128 Electricity
- 129 Water Supply
- 130 Index of Products
- 131 Summary Volume
- 132 Summary Volume
- 133 Summary Volume

© Crown copyright 1968

Printed and published by
HER MAJESTY'S STATIONERY OFFICE

To be purchased from
49 High Holborn, London W.C.1
423 Oxford Street, London W.1
13A Castle Street, Edinburgh 2
109 St. Mary Street, Cardiff CF1 1JW
Brazenose Street, Manchester 2
50 Fairfax Street, Bristol 1
258-259 Broad Street, Birmingham 1
7-11 Linenhall Street, Belfast BT2 8AY
or through any bookseller

Printed in England