



BOARD OF TRADE

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Report on the Census of Production 1963

45 Textile machinery and accessories

LONDON: HER MAJESTY'S STATIONERY OFFICE
PRICE FOUR SHILLINGS NET

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 on the Census of Production' - which is available from the Board of Trade.)

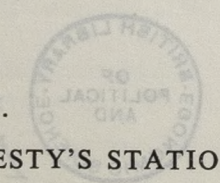
BOARD OF TRADE

Report on the Census of Production 1963

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 - continued on pages iii and iv



Notes

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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 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 construction 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.

45 Textile machinery and accessories

This Report on the Textile Machinery and Accessories Industry relates to establishments engaged wholly or mainly in manufacturing textile spinning, winding, weaving, knitting, printing, dyeing, etc. machinery, and accessories such as bobbins, combs, reeds, rollers, shuttles, sliver cans, spindles, spools and teasel rods.

This industry corresponds to minimum list heading 335 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 textile machinery; where the return was classified to another industry, these parts are also shown, together with the complete machines and accessories in Table 6.

Parts of textile machinery included in returns which showed no sales of the complete machines and accessories 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 textile 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 parts of textile machinery 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, parts of textile machinery and accessories 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).



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.	158	124
Number of establishments	"	214	178
Gross output	£'000	69,221	110,506
Net output	"	38,771	60,099
Net output per head	£	874	1,352
Sales and work done	£'000	66,352	103,548 (b)
	"	3,416	6,306
Index of specialisation (c)	Per cent.	86	83
Purchases	£'000	27,389	42,401
	"		5,323
Payments to other organisations	"	1,697	2,235
	"	538	563
Stocks and work in progress			
Goods on hand for sale	"	+ 152	+ 213
	"	3,225	4,371
Work in progress	"	- 699	+ 440
	"	10,040	16,505
Materials, stores and fuel	"	- 825	+ 115
	"	7,731	10,545
Average number employed	No.	44,359	44,444
	"	36,358	35,461
	"	7,983	8,889
Wages and salaries	£'000	19,985	24,367
	"	5,851	8,344
Wages and salaries per head	£	550	687
	"	733	939
Employers' contributions to National Insurance (e)	£'000	..	1,320
Employers' contributions to private pension schemes, etc. (f)	"	..	777
Capital expenditure (g)			
New building work	"	265	820
Land and existing buildings	"	..	250
	"	..	51
Plant and machinery	"	1,217	2,708
	"	123	156
Vehicles	"	236	269
	"	96	83

For notes to this table - see page 45/6

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
25-49	32	33	1,193	2,194	1,302	1,091	75	406
50-99	28	30	1,924	3,749	1,984	1,031	94	893
100-199	28	36	4,047	8,496	5,214	1,288	120	2,049
200-299	13	16	3,143	7,788	4,680	1,489	406	1,493
300-399	4	7	1,402	5,098	2,390	1,705	101	1,007
400-499	7	11	3,076	7,151	3,687	1,199	198	1,585
500-749	3	7	1,719	3,108	1,785	1,038	312	714
750-999	3	10	2,743	6,662	3,950	1,440	382	2,797
1,000-2,999	3	6	5,828	20,279	7,629	1,309	337	4,438
5,000 and over	3	22	19,369	45,981	27,480	1,419	1,730	16,039
Total	124	178	44,444	110,506	60,099	1,352	3,756	31,421

(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	927	232	558	197	40	8	602	847
50-99	1,586	320	980	290	55	12	618	905
100-199	3,239	798	1,991	776	112	53	615	972
200-299	2,545	595	1,681	624	90	39	661	1,049
300-399	1,106	296	671	275	40	26	607	930
400-499	2,594	471	1,782	513	93	51	687	1,090
500-749	1,392	327	889	245	50	18	638	750
750-999	2,043	700	1,510	680	83	88	739	972
1,000-2,999	4,320	1,502	3,091	1,534	184	159	716	1,022
5,000 and over	15,709	3,648	11,212	3,209	574	324	714	880
Total	35,461	8,889	24,367	8,344	1,320	777	687	939

(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 £146,000.

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	6	1	7
18 and over	80	13	93
All ages	86	14	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 5 per cent. for 1958.

	1958	1963
Number of firms	461	384

Average number employed:

Working proprietors	4,427	514
Other persons employed		3,240

(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 the 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			
	Quantity	Value	Quantity	Value	Enterprises	Entries
		£'000		£'000	Number	Number
TEXTILE MACHINERY, NEW						
COMPLETE MACHINES						
For extruding man-made fibres (a)	..	1,477	..	3,071	7	7
For processes preparatory to spinning and twisting						
For cotton and staple fibre	..	4,017	..	7,341	9	11
For wool	..	4,168	..	3,428	15	19
For other textiles		6,708	11	11
For spinning						
Th. spindles						
For wool	83.9	1,529	..	884	*	*
For cotton and staple fibre	461	5,618	..	6,314	8	9
For other textiles			..			
For doubling and twisting						
For cotton and staple fibre	51.7	536	..	262	5	6
Th. spindles						
For wool	34.6	764	19.3	469	5	6
For other textiles	62.1	1,454	..	2,445	8	11
For processes preparatory to weaving but subsequent to spinning and twisting						
Winding	..	1,269	23.2	1,245	14	14
			..	210		
Machinery for warp tying and warp drawing (b)	..	642	..	183	8	8
Other	..	55	..	1,129	13	15
Looms for weaving						
Automatic weft replenishing						
For cotton, silk and similar yarns	..	1,193	8,841	3,263	5	5
Number						
For other textiles	843	744	..	2,552	7	8
Other						
For cotton, silk and similar yarns (c)	..	1,332	..	140	*	*
For other textiles	518	678	781	1,481	8	8
Other weaving machinery (dobbies, jacquards, etc.)	..	335	..	378	10	10
Finishing, including bleaching, dyeing and printing machinery	..	3,521	..	5,448	41	44

Continued on next page

TABLE 5 (continued)

	1958		1963			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
	Number	£'000	Number	£'000	Number	Number
TEXTILE MACHINERY, NEW (continued)						
COMPLETE MACHINES (continued)						
Hosiery machinery (for stockings and socks)						
Circular seamless stockings	2,501	2,264(d)	728	689	*	*
Half and three-quarter hose	3,566	3,063	2,753	2,523	*	*
Other	..	28	..	332	*	*
Other knitting machinery (knitwear and knitted fabric)						
Circular	1,688	2,452(e)	..	3,672	*	*
Flat bar			275	4,775	*	*
Tufting machines for tufted carpets			68	649	*	*
Lace, net and embroidery machinery	..	3,672	..	3,740	36	38
Other new textile machinery						
Total textile machinery, new, complete machines		40,808		63,331	..	..
TEXTILE MACHINERY, RECONDITIONED, COMPLETE MACHINES (f)	..	739	..	747	33	34
PARTS of textile machinery and accessories sold in association with the sale of new complete machines characteristic of this industry (g)	..	8,080	..	15,354	117	268
PARTS of textile machinery and accessories sold in association with the sale of reconditioned complete machines characteristic of this industry (g)	..	200	..	260	19	19
TEXTILE MACHINERY ACCESSORIES (excluding hosiery needles and elements, and bobbins and tubes of paper and cardboard), sold separately (h)						
Bobbins	..	1,759	..	2,023	18	18
Card clothing	..	3,318	..	2,756	6	9
Reeds and healds	..	594	..	616	9	9
Rings and travellers	..	622	..	1,224	5	5
Shuttles	..	532	..	672	13	14
Spindles, flyers and rollers	..	1,574	..	2,025	15	17
Boxes and cans			..	345	9	9
Springs, temples, temple rings and temple rollers	..	2,849	..	2,203	36	36
Other			..	149	11	11
Unclassified wood accessories						
Total textile machinery accessories		11,248		12,015	..	..

TABLE 5 (continued)

	1958		1963			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
		£'000		£'000	Number	Number
OTHER PRODUCTS	..	30	..	270	17	17
WASTE PRODUCTS						
Scrap metals						
Iron and steel	10.8	67	21.1	120	67	79
Brass	..	127	..	17	36	41
Copper	..	17	..	33	13	16
Other scrap metal	..	2	..	3	30	33
Other waste products	..	22	..	19	7	8
WORK DONE						
Machinery and plant (other than marine machinery and air conditioning, heating and ventilating plant), erected and installed and other installation work						
Textile machinery and accessories		193		589	19	21
Other		43		16	5	5
Research and development work done for customers (including Government Departments)		43		45	5	6
Total		61,603		92,841	..	..
Sales in other industries (see Table 6)		4,501		6,546	..	..
Principal products of this industry sold by establishments in the industry		57,103		86,296	124	146(i)

- (a) Described as 'for manufacture of man-made fibres' in 1958.
(b) Described as 'machinery for the preparation of warp' in 1958.
(c) May include 'narrow fabric'.
(d) Including 'fully fashioned stockings'.
(e) Including 'warp knitting looms (single and double)'.
(f) Including machinery 'for cotton and staple fibre', 'for wool' and 'other descriptions'.
(g) For details of these parts see Table 14.
(h) Hosiery needles and elements are included in Miscellaneous Metal Manufactures Industry and bobbins and tubes of paper and cardboard are included in the Miscellaneous Manufactures of Paper and Board Industry.
(i) 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)
		£'000		£'000	Number	
TEXTILE MACHINERY, NEW						
Finishing, including bleaching, dyeing and printing machinery						
Complete machines	..	1,017	..	1,238	20	40, 49, 52
Parts	..	314	..	671	16	40, 49
For processes preparatory to spinning and twisting						
Complete and parts			..	1,054	7	40, 49, 52
For spinning						
Complete and parts			..	54	6	46, 52
For processes preparatory to weaving but subsequent to spinning and twisting						
Winding	..	1,813				
Complete machines			..	164	*	40, 46
Other						
Complete and parts			..	66	8	49, 52
Looms for weaving						
Complete and parts			..	547	9	48, 50, 52
Other new textile machinery						
Complete machines			..	471	23	49, 50, 52
Parts			..	638	17	49
TEXTILE MACHINERY RECONDITIONED						
Complete machines	..	41	..	30	*	52
Parts	81	5	52
TEXTILE MACHINERY ACCESSORIES (excluding hosiery needles and elements, and bobbins and tubes of paper and cardboard), sold separately						
Bobbins, spindles, flyers and rollers	..	1,005	..	1,017	9	52, 72
Other	..	311	..	470	26	52, 91, 107
WORK DONE						
Textile machinery and accessories erected and installed		-		43	*	52
Total		4,501		6,546	..	

(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	
	Quantity	Value	Quantity	Value
		£'000	Th. tons	£'000
Iron castings in the rough or machined	..	414	8.2	770
Machinery and parts				
Metal-working machine tools				
Complete	..	1,411	..	258
Parts	24
Other machinery and parts	..	1,456	..	5,161
Engineers' small tools and gauges	..	155	..	46
Parts of textile machinery and accessories sold other than in association with the sale of complete machines	..	91	..	94
Industrial plant and steelwork	..	209	..	3,561
Other mechanical engineering products	..	972	..	1,616
Miscellaneous metal manufactures	..	666	..	1,110
Other products	..	182	..	1,168
Work done				
Repair and jobbing work	..	2,168	..	889
Structural work carried out as main contractors	..	89	..	2,450
Machinery and plant erected and installed and other installation work	-	-	..	2,450
Other work done on commission, etc.	..	1,436	..	105
Services rendered to other organisations (a)	105
Total value of goods sold without being subjected to any manufacturing process (merchanted or factored)	..	3,286	..	6,174
Canteen takings		130		132
Total		12,665(b)		23,557

(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	Quantity	Cost
	Th. tons	£'000	Th. tons	£'000
Materials for processing				
Iron				
Pig iron, including refined pig iron and other irons for re-melting (a)	50.4	868	15.9	383
Castings	21.1	1,891	16.4	1,841
Steel				
Ingots, blooms, billets, slabs, and sheet and tinplate bars	0.3	34	0.8	67
Bars and rods (including wire rods), angles, shapes and sections, girders, beams, joists and pillars rolled (not fabricated), including tube rounds and squares (b)	37.1	1,901	42.0	3,041
Plates, 3mm. thick and over	2.6	251	6.6	391
Hoop and strip (including tape of all thicknesses)			0.7	84
Sheets under 3mm. thick (including electrical sheets)	2.9	271	5.1	395
Tinplate, terneplate and blackplate	2.1	111	0.5	37
Forgings (except drop forgings)	0.8	177	1.3	224
Castings	0.6	64	0.5	141
Tyres, wheels and axles (rail type)	..	(c)	..	177
Drop forgings (d)	0.1	20	0.4	59
Iron and steel not elsewhere specified except finished parts, wire and scrap				
Wrought tubes and fittings for wrought tubes (including welded, seamless, conduits, etc.)	1.8	81	2.1	308
Other (e)	12.9	694	0.6	142
Precision chain (e.g. transmission and timing)	..	67	..	203
Springs, laminated and other types	..	67	..	193
Steel wire and wire manufactures (excluding insulated wire and cables) (f)				
Wire (single wire)	..	301	..	398
Wire manufactures including wire cables and ropes and stranded wire of two or more ply	..	50	..	28
Ferro alloys	..	28	..	29
Iron and steel scrap	..	193	..	296

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
	Th. tons	£'000	Th. tons	£'000
Materials for processing (continued)				
Light metals and non-ferrous metals in all forms except finished parts, wire and scrap				
Aluminium and aluminium alloys	2.1	647	2.2	708
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other nickel alloys)	0.9	287	1.2	411
Copper (excluding blister) (g)	0.2	54	..	20
Zinc and alloys of zinc	0.1	12	..	56
Tin	1.4	31	..	13
Solder, soft	..	10	..	14
Non-ferrous metal wire (single wire, not insulated) (h)	..	31	..	2
Non-ferrous metal scrap	..	13	..	5
Heavy chemicals (acids, alkalis, alcohols, other inorganic and organic chemicals, compressed gases, etc.)	..	(c)	..	175
Paint and varnish (including lacquers and stains)	..	190	..	192
Synthetic resins and plastics materials (excluding leathercloth and reinforced plastics)	..	(c)	..	134
Refractory materials	..	33	..	76
Rubber, including hard rubber, balata, gutta-percha and synthetic rubber in all forms, including finished parts	..	140	..	355
Timber				
Softwood, sawn or planed, but not further prepared or manufactured	..	770	..	171
Hardwood, sawn or planed, but not further prepared or manufactured	..		212	235
Plywood, including blockboard, laminboard and battenboard	126	12	216	25
Woven piece goods (other than narrow fabrics)	..	(c)	..	182
Asbestos in all forms, including finished parts	..	3	..	21
Other thermal insulating materials	..	22	..	73
Insulated wires, cables, strips and strands (i)	..	20	..	40
Bolts, rivets, nuts and washers, screws, nails, tacks, etc.	..	521	..	672
Machinery bought for installation	..	(c)	..	575
Purchased components for incorporation in firms' own products	..		..
Ball and roller bearings and parts thereof	..	723	..	905

Continued on next page

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
Materials for processing (continued)		£'000		£'000
Purchased components for incorporation in firms' own products (continued)				
Electric motors				
Of less than 1 h.p.	..	751	..	115
Of 1 h.p. and over	..	19	..	1,165
Industrial valves	..	94	..	128
Gear and gear wheels of metal	..	72	..	361
Pumps	..	72	..	199
Measuring instruments and gauges and parts				
Industrial process measuring and control instruments and equipment	..	63	..	291
Other	..	157	..	41
Plastic goods moulded and fabricated	..	4,998	..	97
Other and unclassified components not elsewhere specified except those of rubber and asbestos (j)	..	269	..	17,794
Purchased second-hand machinery for reconditioning	..	(c)	..	269
Lubricating oils and greases (including cutting oils and emulsions)	Th.gal.		Th.gal.	
	277	82	358	87
	..	21	..	30
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement	..	1,320	..	1,290
All other materials for processing	..	4,907	..	2,788
Packaging materials				
Paper and board				
Boxes, cartons, packing cases and drums and canisters (with or without metal ends) of paper, cardboard and fibreboard	..	48	..	114
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)	..	794	..	61
Timber				
Containers wholly or mainly of wood, including plywood boxes and drums, baskets and wickerwork crates	..	794	..	229
Timber (sawn or planed) for manufacture into packing cases, etc.	..	71	..	543
Plywood for manufacture into packing cases	..	71	..	81
All other packaging materials	..	71	..	81
Fuel and electricity (k)	Th.tons		Th.tons	
Coal	88.0	309	50.0	266
Coke (including screenings) and manufactured fuel	47.0	319	25.7	231
Derv fuel and motor spirit for use in road vehicles	Th.gal.		Th.gal.	
	845	169	721	146

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
Fuel and electricity (k) (continued)	Th.gal.	£'000	Th.gal.	£'000
Other liquid fuels (including creosote/pitch mixtures, etc., and liquefied petroleum gases)	1,523	71	3,850	177
Gas	Th.therms		Th.therms	
	5,663	270	5,536	293
	..	30	..	39
Electricity	Th.kWh		Th.kWh	
	116,679	604	74,769	502
			..	306
Total cost of materials and fuel		28,063		42,401
Goods purchased for merchanting		..		5,155
Canteen purchases		..		169
Total cost of purchases		..		47,725

- (a) Described in 1954 as 'Pig iron, except refined pig iron'.
 (b) 'Pillars rolled (not fabricated) including tube rounds and squares' were not included in 1954.
 (c) Not recorded separately.
 (d) Described in 1954 as 'Drop forgings of iron and steel'.
 (e) Heading in 1954 covered iron only.
 (f) Described as covering 'Iron and steel' in 1954.
 (g) 'Blister' was not specifically excluded in 1954.
 (h) Not specified as single wire in 1954.
 (i) 'Strips and strands' were not included in 1954.
 (j) Components of rubber and asbestos were not excluded in 1954.
 (k) The total quantity of electricity generated in firms' own establishments in this industry was 2,361 Th.kWh in 1954 and 1,000 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.	386
Transport costs		
Wages and salaries	£'000	275
Derv fuel and motor spirit	"	146
Payments to other organisations for transport	"	563
Costs of operating road goods vehicles		
Insurance	"	19
Vehicle licences	"	17
Depreciation	"	115
Payments to other organisations for repairs and maintenance	"	43
Total	"	1,177

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	247
Road goods vehicles	43
Plant, machinery, and other capital equipment	397
Insurance, licensing and depreciation of road goods vehicles (b)	150
Rates, excluding water rates	451
Hire of plant and machinery	61
Postage, telephone, telegrams and cables	336
Total	1,685

(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)	1.9	November	14.7
May	0.0	December	48.1
June	4.6		
July	1.2	1964	
August	0.5	January	0.1
September	3.2	February	0.2
October	7.1	March	18.3
		Total	100

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

TABLE 14 Sales of all parts of textile machinery and accessories by larger firms, including sales of 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) (ii) Other parts sold (b)	1958		1963	
	(i) £'000	(ii) £'000	(i) £'000	(ii) £'000
Parts of new textile machinery				
For extruding man-made fibres	203	1,070	1,893	679
For processes preparatory to spinning and twisting				
For cotton and staple fibre	1,638	35	1,404	161
For wool			1,487	
For other textiles			524	
For spinning				
For wool	1,079	240	281	-
For cotton and staple fibre			2,312	
For other textiles			(c)	
For doubling and twisting				
For cotton, staple fibre and wool	417	-	145	-
For other textiles			303	
For processes preparatory to weaving but subsequent to spinning and twisting				
For winding	322	48	341	-
For machinery warp tying and warp drawing	141		88	
For other	16		141	
For looms for weaving				
Automatic weft replenishing				
For cotton, silk and similar yarns	906	53	1,029	(c)
For other textiles			779	
Other				
For cotton, silk and similar yarns	368	237	116	12
For other textiles	223		672	
For other weaving machinery (dobbies, jacquards, etc.)	171		186	52
For finishing including bleaching, dyeing and printing machinery	745	244	1,212	258
For hosiery machinery (for stockings and socks)				
For circular seamless stockings	353(d)	663(d)	228	91
For half and three-quarter hose	206	6	237	
For other			(c)	
For other knitting machinery (knitwear and knitted fabric)				
For flat bar	309	2		(c)
For circular			1,085	
For warp knitting looms (single and double)				

Continued on next page

TABLE 14 (continued)

(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
Parts of new textile machinery (continued)				
For lace, net and embroidery machinery	296	-	177	-
For tufting machines for tufted carpets	686	153	216	-
For other new textile machinery			498	1,002
Total parts for new textile machinery	8,080	2,752	15,354	2,657
Parts for reconditioned textile machinery	200	146	260	236
Total parts for new and reconditioned textile machinery	8,280	2,898	15,614	2,893

- (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 new textile machinery'.
- (d) Including 'Fully fashioned stockings'.

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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 classifying 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
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