



BOARD OF TRADE

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[HA 251]

Report on the Census of Production 1963

71 Wire and wire manufactures

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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 - 'Introduction to the Census of Production 1963'.

BOARD OF TRADE

Report on the Census of Production 1963

71 Wire and wire manufactures

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)

The figures in this report are based on the returns made by the manufacturers of wire and wire manufactures in Great Britain during the year 1963. The figures are expressed in million tons and million man-hours.

TERMS USED IN THE CENSUS REPORT
Average number employed
The number of persons employed in the industry during the year 1963 is shown in million man-hours. This is the sum of the number of persons employed in the industry during the year 1963 multiplied by the number of days in the year 1963 divided by 365.

Notes - continued on page 72 and 73

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 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.

71 Wire and wire manufactures

This Report on the Wire and Wire Manufactures Industry relates to establishments engaged wholly or mainly in manufacturing ferrous and non-ferrous wire and wire products such as wire nails, wire netting, wire gauze, etc. Insulated electrical wire and wire mattresses are excluded.

This industry corresponds to minimum list heading 394 in the Standard Industrial Classification (Consolidated edition, 1963).

There were no larger establishments in this industry in Northern Ireland in 1954.

METHOD OF CLASSIFICATION

The classification of returns to this industry followed the standard procedure as outlined in the notes on page (ii). A different procedure was used in classifying returns to the sub-divisions of the industry shown in Table 2; returns made by wire drawers were classified to the sub-division 'Drawing of wire' if sales of wire accounted for the major part of their output and sales of wire products did not exceed five per cent; otherwise they were classified to the sub-division 'Drawing and working of wire'. Returns from establishments making wire products but not also drawing wire were classified to the sub-division 'Working of wire'.

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



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TABLE 1 Industry summary: United Kingdom

Estimates for all firms, 1958 and 1963 (a)

	Unit	1958	1963	
Number of enterprises	No.	463	415	
Number of establishments	"	543	538	
Gross output	£'000	168,746	199,566	
Net output	"	42,665	59,371	
Net output per head	£	1,087	1,401	
Sales and work done	{ goods produced and work done	£'000	160,967	188,674(b)
	{ merchanted goods and canteen takings	"	7,860	10,198
Purchases	{ materials for processing and packaging, and fuel	"	121,958	126,745
	{ goods for merchenting and canteen purchases	"			9,497
Payments to other organisations	{ for work done on materials given out	"	704	1,253
	{ for transport	"	2,795	3,253
Stocks and work in progress				
Total stocks and work in progress	{ change during year	"	- 704	+ 1,247
	{ at end of year	"	20,537	27,623
Goods on hand for sale	{ change during year	"	- 61	+ 476
	{ at end of year	"	5,465	7,709
Work in progress	{ change during year	"	- 20	+ 218
	{ at end of year	"	4,151	6,978
Materials, stores and fuel	{ change during year	"	- 623	+ 553
	{ at end of year	"	10,921	12,937
Average number employed	{ total, including working proprietors	Th.	39.3	42.4
	{ operatives	"	30.6	32.1
	{ other employees (c)	"	8.6	9.8
Wages and salaries	{ of operatives	£'000	17,649	23,520
	{ of other employees (c)	"	6,471	9,015
Employers' contributions to National Insurance and private pension schemes, etc. (d)	"	..	2,327	
Capital expenditure (e)				
Total	"	..	5,934	
New building work	"	1,357	1,329	
Land and existing buildings (f)	"	..	- 167	
Plant and machinery (f)	"	2,411	4,380	
Vehicles (f)	"	312	391	

(a) For 1963, estimates for small firms and for firms not making satisfactory returns accounted for about 8 per cent. of the total figures in which they were incorporated. (For 1958 the comparable figure was 9 per cent.) A summary of the detailed returns received is given in Table 2.

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

(c) Administrative, technical and clerical employees.

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

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

(f) Acquisitions less disposals.

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

	Unit	Sub-divisions of the industry (b)		
		Drawing of wire		
		1958	1963	
Number of enterprises (c)	No.	51	45	
Number of establishments	"	66	72	
Gross output	£'000	77,948	86,397	
Net output	"	15,604	22,428	
Net output per head	£	1,108	1,420	
Sales and work done	goods produced and work done	£'000	77,029	84,066(d)
	merchanted goods and canteen takings	"	1,304	2,196
Sales of characteristic products	"	68,825	72,925	
Index of specialisation (f)	Per cent.	89	87	
Purchases	materials for processing and packaging, and fuel	£'000	61,065	60,413
	goods for merchandising and canteen purchases	"	2,082	2,082
Payments to other organisations	for work done on materials given out	"	354	560
	for transport	"	976	1,132
Stocks and work in progress				
Goods on hand for sale	change during year	"	- 310	+ 9
	at end of year	"	1,207	1,833
Work in progress	change during year	"	- 75	+ 126
	at end of year	"	2,469	4,435
Materials, stores and fuel	change during year	"	+ 53	+ 218
	at end of year	"	4,715	5,209
Average number employed	total, including working proprietors	No.	14,071	15,795
	operatives	"	11,583	12,421
	other employees (g)	"	2,488	3,366
Wages and salaries	of operatives	£'000	7,443	10,313
	of other employees (g)	"	2,054	3,162
Wages and salaries per head	operatives	£	643	830
	other employees (g)	"	825	939
Employers' contributions to National Insurance (h)	£'000	..	499	
Employers' contributions to private pension schemes, etc. (i)	"	..	445	
Capital expenditure (j)				
New building work	"	794	376	
Land and existing buildings	acquisitions	"	..	*
	disposals	"	..	39
Plant and machinery	acquisitions	"	1,055	2,258
	disposals	"	65	35
Vehicles	acquisitions	"	131	214
	disposals	"	42	64

For notes to this table - see page 71/7

Sub-divisions of the industry (b)				Total	
Working of wire		Drawing and working of wire		1958	1963
1958	1963	1958	1963		
94	86	18	29	155	138
127	123	32	47	225	242
44,175	50,855	31,538	46,508	153,660	183,759
14,490	16,978	8,757	15,263	38,851	54,668
1,012	1,330	1,189	1,461	1,087	1,401
39,520	45,094(d)	30,027	44,570(d)	146,576	173,729(d)
4,511	5,433	1,342	1,762	7,157	9,391
36,028	42,581	28,037	42,143	(e)	(e)
91	94	93	95	93	92
28,228	27,690	21,762	28,603	111,055	116,706
251	427	35	166	641	1,154
917	763	652	1,100	2,545	2,995
+ 78	+ 296	+ 177	+ 133	- 55	+ 438
2,222	3,146	1,548	2,119	4,976	7,098
+ 66	+ 32	- 8	+ 43	- 18	+ 201
793	1,012	518	978	3,780	6,425
- 289	+ 83	- 332	+ 209	- 568	+ 509
3,347	3,725	1,882	2,978	9,945	11,912
14,305	12,769	7,365	10,450	35,741	39,014
10,478	9,724	5,849	7,685	27,910	29,830
3,817	3,010	1,516	2,761	7,821	9,137
5,240	6,034	3,431	5,536	16,114	21,882
2,661	2,735	1,194	2,490	5,908	8,387
500	620	587	720	577	734
697	909	788	902	755	918
..	394	..	292	..	1,155
..	267	..	298	..	1,010
263	390	178	457	1,236	1,223
..	104	..	*	..	126
..	84	..	156	..	279
646	957	665	1,086	2,366	4,301
75	122	31	110	171	267
263	274	61	158	454	647
105	131	23	92	170	286

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		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	36	37	1,318	5,081	1,654	1,255	76	441
50-99	38	42	2,818	8,807	3,453	1,225	472	1,189
100-199	26	28	3,555	13,972	4,411	1,241	380	2,136
200-399	16	28	4,461	21,867	6,317	1,416	413	2,816
400-499	4	9	1,732	10,517	2,357	1,361	152	1,403
500-749	5	18	3,323	15,009	4,870	1,466	393	2,425
750-999	4	17	3,774	18,577	4,900	1,298	899	2,231
1,000-1,499	5	24	5,893	24,307	9,847	1,671	983	4,070
2,000 and over	4	39	12,140	65,622	16,860	1,389	1,697	8,723
Total	138	242	39,014	183,759	54,668	1,401	5,464	25,435

(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	1,088	211	615	207	38	8	565	979
50-99	2,308	497	1,351	449	82	50	585	904
100-199	2,946	599	1,790	595	100	49	607	994
200-399	3,402	1,055	2,608	909	134	78	767	862
400-499	1,439	293	1,075	324	47	51	747	1,105
500-749	2,315	1,008	1,729	1,009	97	105	747	1,001
750-999	2,860	914	2,077	778	102	59	726	851
1,000-1,499	4,349	1,544	3,224	1,537	161	169	741	995
2,000 and over	9,123	3,016	7,414	2,580	394	441	813	856
Total	29,830	9,137	21,882	8,387	1,155	1,010	734	918

(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 £176,000.

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

Ages	Males	Females	All employees
	Per cent.	Per cent.	Per cent.
Under 18	4	3	7
18 and over	72	21	93
All ages	76	24	100

Source: Ministry of Labour

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

Footnotes to Table 2.

(a) The following information relates to small firms (employing fewer than 25 persons) in this industry. It includes an estimate for small firms not making satisfactory returns, which account for 4 per cent. of the employment shown for 1963 and 5 per cent. for 1958.

	1958	1963
Number of firms	307	287
Average number employed:		
Working proprietors	3,141	438
Other persons employed			2,520

(b) The method of classifying returns to sub-divisions of the industry is explained in the introduction to this report.

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

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

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

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

(g) Administrative, technical and clerical employees.

(h) Including both flat rate and graduated contributions.

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

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

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	Enter-prises	Entries
	Th.tons	£'000	Th.tons	£'000	Number	Number
Iron and steel wire (except insulated wire)						
Single wire						
Mild steel (under 0.41 per cent. carbon content)	503	32,522	496	34,275	38	49
Hard steel (0.41 per cent. carbon content and over)	238	23,167	306	31,164	27	39
Other	..	(a)	..	1,170	*	*
Barbed wire (of single or 2 ply)	19.3	1,475	13.7	1,075	8	8
Stranded wire (of 2 or more ply)	13.6	1,300	14.3	1,656	11	12
Total iron and steel wire (except insulated wire)	774	58,464	830	68,169	..	..
Manufactures of iron and steel wire						
Wire cable and rope (except insulated telephone and telegraph cable)	98.2	16,607	107	19,665	22	37
Wire netting, wire fencing and wire mesh of all kinds						
Hexagonal mesh, galvanised	21.8	2,483	20.5	2,407	6	6
Chain link fencing	14.3	1,248	19.1	1,942	14	14
Reinforcement fabric	78.4	5,746	119	8,260	15	17
Woven wire cloth, gauze, fabric, screening, sieving, lawn or meshing, square and rectangular mesh (other than mesh for paper machine (fourdrinier) wires and pot scourers)	Th.sq.ft.		Th.sq.ft.			
404	67	9,663				
9,421						
Mesh from 2 and up to 30 per lineal inch	Th.tons	601	Th.tons	910	12	14
2.1			2.2			
0.3	85		..	603		
Mesh over 30 per lineal inch	Th.sq.ft.	209	Th.sq.ft.	279	8	11
1,188			969			
0.1			0.1			
..	357		..	133		
Pot scourers made wholly or partly of woven or knitted mesh	..	77	28.2	3,732	14	18
Other	21.3	2,355				
Nails, tacks and staples (including insulated staples) made from wire	85.6	5,562	80.2	6,094	22	24
Fire, machinery, window and other guards made of wire	2.0	495	2.8	751	48	52
..	..	1,309	..	1,061		
Canteen, restaurant and domestic cooking equipment made of wire (e.g. potato baskets, cooker shelves and grids) and sieves, riddles and screens made of wire	0.6	139	2.2	511	27	29
..	..	747	..	577		

TABLE 5 (continued)

	1958		1963			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
	Th.tons	£'000	Th.tons	£'000	Number	Number
Manufactures of iron and steel wire (continued)						
Wire rods and bars purchased and fabricated for concrete reinforcement	66.9	3,789(b)	163	8,705	12	15
Wire of iron and steel, purchased, plated, cut, etc. and not further manufactured	6.3	642	36.2	6,503	70	77
Other manufactures of iron and steel wire	6.4	865	..	3,141		
..	..	3,791				
Total manufactures of iron and steel wire		47,174		65,622	..	..
Brass and other copper alloys including nickel silver and cupro-nickel, but excluding all other nickel alloys						
Wire in coils						
Circular section, thinner than No. 20 gauge (S.W.G.)						
Of brass	1.3	453	3.8	1,300	15	16
Of other alloys of copper	2.8	1,122	1.9	1,330	14	17
Circular section, No. 20 (S.W.G.) and thicker						
Of brass	9.1	2,245	13.3	3,871	10	13
Of other alloys of copper	4.1	1,730	2.8	1,469	13	14
Other descriptions (including stranded wire)	1.2	571				
Paper machine wires	Th.sq.ft.	487	..	3,432	7	9
1,591						
4,424						
Th.cwt.	1,356					
13.4						
Woven wire cloth, gauze, fabric, screening, sieving, lawn or meshing, square and rectangular mesh, other than paper machine (fourdrinier) wires	Th.sq.ft.		Th.sq.ft.			
385	120	21	..			
1,810			1,091			
Mesh from 2 and up to 30 per lineal inch	Th.cwt.	231	Th.cwt.	204	8	12
6.3			3.8			
Mesh over 30 per lineal inch	Th.sq.ft.	215	Th.sq.ft.	29		
666			..			
1,382			1,870			
Other manufactures of brass, etc., wire	Th.cwt.	388	Th.cwt.	483	9	12
3.3			4.3			
..	..	232	..	346	18	22
Total brass, etc., wire and manufactures thereof		9,150		12,485	..	..

Continued on next page

TABLE 5 (continued)

	1958		1963			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
	Th.tons	£'000	Th.tons	£'000	Number	Number
Copper						
Wire in coils (including uninsulated electric wire)						
Circular section						
Thinner than No. 20 gauge (S.W.G.)	19.4	5,286	14.2	4,471	15	18
No. 20 gauge (S.W.G.) and thicker	105	23,830	48.5	10,710	17	20
Unclassified						
Other than circular section	2.9	889	15.3	4,812	14	21
Stranded wire	9.6	2,707				
Woven wire cloth	0.1	54	0.2	126	9	11
	..	63				
Other manufactures of copper wire	1.6	77	..	23		
	..	93				
Total copper wire and manufactures thereof		32,999		20,140	..	..
Aluminium	Th.tons					
Wire						
Pure	1.9	655	3.5	1,129	9	9
Alloy	1.8	924	2.8	1,563	8	8
Aluminium wire or cable, steel cored, uninsulated	20.7	6,370	20.9	4,967	8	8
Manufactures of aluminium wire	0.1	40	..	60	13	16
	..	18				
Nickel and nickel alloys (other than nickel silver and cupro-nickel)	Th.cwt.		Th.cwt.			
Wire	65.5	3,754	72.5	4,542	12	13
Manufactures of nickel alloy wire	5.6	395	10.1	708	15	17
Molybdenum wire, in all forms except ferro-alloys	..	182	..	1,935	14	15
Wire of metals not specified above (excluding precious metals)	..	343				
Other products	..	1,379	..	703	42	58
Scrap metal	Th.tons		Th.tons			
Iron and steel	33.9	275	55.5	532	68	115
	..	32				
Brass	0.7	59	0.4	88	19	24
	..	21				
Copper	3.1	601	3.7	805	22	24
Zinc	3.1	109	2.9	120	22	27
Other scrap metals	9.0	411	2.3	204	45	51
	..	4	..	74		

TABLE 5 (continued)

	1958		1963			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
		£'000		£'000	Number	Number
Work done on commission, sub-contract work, etc.		425		1,443	30	43
Total		163,786		186,462	..	..
Sales in other industries (see Table 6)		27,901		27,421	..	..
Principal products of this industry sold by establishments in the industry		135,885		159,042	138	200(c)

(a) Not recorded separately.

(b) So far as recorded separately.

(c) This figure represents the total number of returns made by larger firms in this industry, which is less than the total number of establishments in Table 2 on account of combined returns covering more than one establishment.

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

Firms employing 25 or more persons: United Kingdom

	1958		1963			
	Quantity	Value	Quantity	Value	Entries	Principal industries in which produced (a)
	Th. tons	£'000	Th. tons	£'000	Number	
Iron and steel single and barbed wire (except insulated wire)			{ 88.6 ..	{ 5,837 659	{ 9	37, 38, 45, 118
Manufactures of iron and steel wire						
Wire cable and rope (except insulated telephone and telegraph cable)	93.5	6,066	1.2	214	5	62, 74
Wire netting, wire fencing and wire mesh of all kinds			{ 13.0 ..	{ 960 114	{ 7	37, 74, 126
Fire, machinery, window and other guards made of wire	{ 0.3 ..	{ 84 44	{ 0.6 ..	{ 226 55	{ 20	42, 49, 74
Nails, tacks and staples (including insulated staples) made from wire			36.1	2,618	13	37, 70, 74
Wire rods and bars purchased and fabricated for concrete reinforcements	{ 38.3 ..	{ 2,736 245	3.8	269	*	74
Other manufactures of iron and steel wire			{ 1.9 ..	{ 241 670	{ 15	37, 61, 74, 119
Total iron and steel wire (except insulated wire) and manufactures thereof		9,175		11,862	..	
Brass and other copper alloys including nickel silver and cupro-nickel, but excluding all other nickel alloys						
Wire in coils						
Circular section, thinner than No.20 gauge (S.W.G.)	0.7	199	1.8	569	5	40
Circular section, No.20 gauge (S.W.G.) and thicker						
Of brass	2.3	459	3.0	751	8	40
Of other alloys of copper	1.1	461	0.8	471	*	40
Other descriptions (including stranded wire)			-	-		
Woven wire cloth, gauze, fabric, screening, sieving, lawn or meshing, square and rectangular mesh, other than paper machine (fourdrinier) wires and other manufactures of brass etc., wire	..	186	..	129	5	50, 70, 72, 74
Total brass etc., wire and manufactures thereof		1,304		1,921	..	

TABLE 6 (continued)

	1958		1963			Principal industries in which produced (a)
	Quantity	Value	Quantity	Value	Entries	
	Th. tons	£'000	Th. tons	£'000	Number	
Copper						
Wire in coils (including uninsulated electric wire)						
Circular section						
Thinner than No.20 gauge (S.W.G.)	9.1	2,492	6.4	2,060	6	40, 56
No.20 gauge (S.W.G.) and thicker	{ 30.6	{ 7,538	{ 11.6	{ 3,325	{ 8	{ 40, 56
Unclassified			-	-		
Other than circular section						
Stranded wire	..	2,783	..	2,807	8	40, 56
Other manufactures of copper wire						
Total copper wire and manufactures thereof		12,813		8,192	..	
Aluminium wire and manufactures thereof and aluminium wire or cable, steel cored, uninsulated	2.2	1,928	11.6	2,837	7	40, 56
Molybdenum wire, in all forms except ferro-alloys; nickel and nickel alloy wire (other than nickel silver and cupro-nickel); other wire of non-ferrous metals in coils and wire of metals not specified above (excluding precious metals)	..	2,680	..	2,608	8	40, 58, 107, 124
Total		27,901		27,421	..	

(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
	Th. tons	£'000	Th. tons	£'000
Manufactures of iron and steel				
Wire rods of non-alloy steel	15.1	720	13.3	1,177
Steel rods and bars (excluding wire rods of non-alloy steel), angles, shapes, etc.	8.8	953		
Other manufactures of iron and steel	..	1,371	..	1,328
Manufactures of other metals				
High conductivity strip	4.6	1,415	8.9	3,055
Brass and other copper alloys, including nickel silver and cupro-nickel, but excluding all other nickel alloys	10.1	2,190	18.4	4,623
Other manufactures of non-ferrous metals	4.9	1,872		
Other products and work done	..	2,170	..	2,780
Services rendered to other organisations (a)	..	..	..	1,476
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)	..	6,998	..	9,201
Canteen takings	..	160	..	190
Total		17,848(b)		24,078

(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				
Steel				
Ingots, blooms, billets, slabs, and sheet and tinplate bars	55.8	2,049(a)	27.0	1,419
Bars and rods (excluding wire rods), angles, shapes and sections, girders, beams, joists and pillars rolled (not fabricated), including tube rounds and squares	760	26,102(b)	162	7,081
Wire rods			943	43,042
Iron and steel not elsewhere specified except finished parts, wire and scrap	12.2	453	40.9	1,742
Light metals and non-ferrous metals in all forms except finished parts, wire and scrap				
Copper (excluding blister) (c)				
Wire rods	63.3	16,853	52.8	13,292
Other kinds			10.0	2,408
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other nickel alloys)				
Wire rods	10.2	2,040	5.2	1,264
Other kinds			7.6	1,686
Nickel	1.2	614	1.0	726
Nickel alloys (excluding nickel silver and cupro-nickel)			0.6	416
Aluminium and aluminium alloys	..	(d)	17.6	3,841
Zinc and alloys of zinc	23.6	1,863	22.7	1,847
Wire				
Steel (single wire)	212	12,702	204	17,459
Copper	1.7	542	1.5	453
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other nickel alloys)	5.2	1,546	1.9	956
Aluminium and aluminium alloys	0.3	81	..	45
Cores of jute and hemp for wire and cables	..	401(e)	..	804
Lubricating oils and greases (including cutting oils and emulsions)	..	..	Th. gal. 204	48
			Th. cwt. 34.0	131
			..	59
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement	..	1,399	..	2,294
All other materials for processing	..	6,859	..	9,105

Continued on next page

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost £'000	Quantity	Cost £'000
Packaging materials				
Boxes, cartons, packing cases and drums and canisters (with or without metal ends) of paper, cardboard and fibreboard	..	(f)	..	382
Containers wholly or mainly of wood, including plywood boxes and drums, baskets and wickerwork crates	..	189	..	547
Jute and hessian piece goods, sacks and bags (g)	..	283	..	143
All other packaging materials	..	416	..	427
Fuel and electricity (h)	Th. tons		Th. tons	
Coal	105	367	62.3	322
Coke (including screenings) and manufactured fuel	21.0	114	13.2	116
	Th. gal.		Th. gal.	
Derv fuel and motor spirit for use in road vehicles	879	172	970	193
			..	22
Other liquid fuels (including creosote/pitch mixtures, etc., and liquefied petroleum gases)	2,588	116	9,515	390
	Th. therms		Th. therms	
Gas	14,939	686	17,924	1,205
	..	99	..	170
	Th. kWh		Th. kWh	
Electricity	341,960	1,471	494,338	2,610
Total cost of materials and fuel		77,419		116,706
Goods purchases for merchanting		..		8,479
Canteen purchases		..		266
Total cost of purchases		..		125,451

(a) Excluding sheet and tinplate bars in 1954.

(b) 'Pillars rolled (not fabricated), including tube rounds and squares' were not included in 1954.

(c) 'Blister' was not specifically excluded in 1954.

(d) Owing to the risk of disclosure of information relating to individual firms separate particulars cannot be given and, are included with 'All other materials for processing'.

(e) So far as recorded separately.

(f) Included in 'All other packaging materials'.

(g) Description in 1954 included 'cores of jute, hemp etc.'

(h) The total quantity of electricity generated in firms' own establishments in this industry was 2,913 Th.kWh in 1954 and 10,391 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.	549
Transport costs		
Wages and salaries	£'000	456
Derv fuel and motor spirit	"	215
Payments to other organisations for transport	"	2,995
Costs of operating road goods vehicles		
Insurance	"	35
Vehicle licences	"	39
Depreciation	"	163
Payments to other organisations for repairs and maintenance	"	113
Total	"	4,015

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	218
Road goods vehicles	113
Plant, machinery, and other capital equipment	589
Insurance, licensing and depreciation of road goods vehicles (b)	236
Rates, excluding water rates	799
Hire of plant and machinery	40
Postage, telephone, telegrams and cables	422
Total	2,417

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

(b) For details see Table 11.

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

Firms employing 25 or more persons:
United Kingdom

Year ended	Percentage of total number employed	Year ended	Percentage of total number employed
1963	Per cent.	1963 (contd.)	Per cent.
April (a)	2.8	November	0.4
May	0.8	December	45.0
June	2.0		
July	4.4	1964	
August	3.3	January	0.2
September	22.3	February	0.0
October	1.5	March	17.3
		Total	100

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

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

This table is not applicable to this industry.

Capital Expenditure (continued)

(ii) Land and existing buildings.

The items shown are the capital cost of freeholds purchased and the capital cost or premium payable for leaseholds acquired (excluding the value of any assets acquired in taking over an existing business), and the amounts receivable for any freeholds or leaseholds disposed of. The value is that charged to capital account during the year of return.

(iii) Plant, machinery and vehicles.

The items shown are the value of plant and machinery and of vehicles acquired, both new and second-hand, and the amount received for items disposed of during the year. The value of plant and machinery acquired includes plant, etc. which firms produced for their own use in connection with the business covered by the return. The value of plant, etc. acquired is the expenditure charged to capital account during the year of return less any discounts received, but including the cost of transport and installation. No deduction is made for depreciation, amortisation or obsolescence. The proceeds of items disposed of during the year exclude amounts written off for items scrapped.

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

Characteristic Products

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

Enterprise

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

Entries

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

Establishment

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

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

Gross Output

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

Larger Firms

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

Net Output

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

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

Net output per person employed

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

Principal Products

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

Production

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

Purchases

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

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

Sales

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

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

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

Services rendered

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

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

Small Firms

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

Stocks and Work in Progress

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

Transport Payments

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

Wages and Salaries

These are the amounts paid during the year to operatives and to administrative, technical and clerical employees. Payments to working proprietors, whether called salaries or not, are excluded; in Northern Ireland this exclusion extends also to payments to directors of limited companies. The values shown include all overtime payments, bonuses and commissions, whether paid regularly or not, and no deduction is made for income tax, insurances, contributory pensions, etc. The value of any payments in kind, travelling expenses, lodging allowances, etc. and employers' contributions to National Insurance and pension schemes is excluded.

Work given out

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

Symbols used

The following symbols are used throughout the report:

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

Rounding of Figures

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

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