

THE WROUGHT IRON AND STEEL TUBE TRADE

INTRODUCTORY

This trade comprises firms that were engaged wholly or mainly in the manufacture of wrought iron and steel tubes and fittings.

Table I A.—General summary

Particulars	1935	1934	1933	1930	1924
Value of products (Gross output)...	£'000 16,589	£'000 15,017	£'000 11,404	£'000 13,252	£'000 13,760
Cost of materials, fuel and electricity used ...	9,573	8,526	6,542	7,543	8,378
Amount paid for work given out ...	93	69	51	55	*
Net output ...	6,923	6,422	4,811	5,654	5,382
Average number of persons employed ...	No. 28,387	No. 24,811	No. 20,700	No. 25,796	No. 24,845
Net output per person employed ...	£ 244	£ 259	£ 232	£ 219	£ 217
Number of returns ...	No. 84	*	*	No. 65	No. 62
Number of establishments...	94	*	*	78	*

* Not available.

Table I B.—Firms employing not more than ten persons on the average

Particulars	1935	1930	1924
Number of returns received ...	No. 8	No. 20	No. 11
Average number of persons employed :—			
Males ...	41	84	52
Females ...	8	1	2
TOTAL ...	49	85	54

At each Census returns were received from all firms to which schedules were sent.

In 1924 the value of the gross output of the small firms was only 0.2 per cent. of the total.

Table II.—Size of establishments in 1935

Size of establishment (average number employed)	Number of establishments	Gross output	Net output	Number of persons employed	Net output per person employed
11-24 ...	No. 11	£'000 115	£'000 59	No. 212	£ 277
25-49 ...	18	296	112	624	180
50-99 ...	15	409	206	1,100	187
100-199 ...	20	1,509	519	2,776	187
200-299 ...	7	918	380	1,636	232
300-399 ...	3	575	327	1,055	310
400-499 ...	3	636	360	1,320	273
500-749 ...	5	1,878	784	3,100	253
750-999 ...	6	3,344	1,305	4,908	266
1,000 and over...	6	6,909	2,871	11,656	246
TOTAL ...	94	16,589	6,923	28,387	244

Table III.—Particulars of output, etc., in each of the principal areas of the United Kingdom

Area*	Number of establishments†	Gross output	Net output	Number of persons employed	Net output per person employed
	No.	£'000	£'000	No.	£
5... ..	{ 1935 1930	10,201 6,773	4,399 2,926	16,900 13,841	260 211
1... ..	1935	261	143	715	199
6 and 7 ...	1935	1,100	383	2,172	176
Other areas ...	1935	5,027	1,998	8,600	232
Total ...	{ 1935 1930	6,388 6,479	2,524 2,728	11,487 11,955	220 228
TOTAL ...	{ 1935 1930	16,589 13,252	6,923 5,654	28,387 25,796	244 219

* For particulars see page xviii.

† Number of returns for 1930.

Table IV.—No sub-divisions of this trade have been distinguished.

PRODUCTION

Table V A.—Output of principal products

Kind of output	1935			1934	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Wrought iron and steel tubes :—					
Weldless* :—					
Not exceeding 6 inches in diameter :—					
Cold drawn ...	63.6	3,708	27	184.3	5,729
Other ...	129.6	2,718	17		
Over 6 inches in diameter ...	74.9	1,519	10	50.1	1,244
Welded :—					
Not exceeding 6 inches in diameter ...	318.9	4,747	27	282.1§	4,645§
Over 6 inches in diameter ...	53.8	1,096	9	56.3	1,124
Cased tubes (including copper-clad and copper-lined steel tubes) ...	0.7	46	9	0.7	43
Electric conduit tubes ...	28.6	572	11	31.3	598
Other, including close joint ...	4.3	66	5	4.2§	69§
TOTAL—Wrought iron and steel tubes ...	674.4	14,472	...	609.0	13,452
Flexible metallic tubing ...	2.0	437	...	...	658
Purchased tubes, screwed, bent, or otherwise fabricated...	10.1	169	4	...	143†
Fittings for wrought tubes :—					
Wrought ...	17.2	861	30	16.2	794
Malleable cast ...	9.2	641	28	1.9†	157†
TOTAL—PRINCIPAL PRODUCTS	...	17,097	...	...	15,528

* Including gas containers.
§ Corrected figure.

† Including fittings.
‡ So far as recorded separately.

The figures shown in the preceding table include the following output recorded by firms whose returns were made on schedules for other trades and are not, therefore, included in Table I A.

Kind of output	1935			1934	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Wrought iron and steel tubes :—					
Weldless* :—					
Not exceeding 6 inches in diameter :—					
Cold drawn	0.5	64	5	0.2	13
Other	0.9	12	4		
Over 6 inches in diameter ...	0.1	20	1	0.3	53
Welded :—					
Not exceeding 6 inches in diameter	4.9	76	3	6.4	101
Over 6 inches in diameter ...	16.2	332	2	13.1	267
Cased tubes (including copper-clad and copper-lined steel tubes)	0.3	18	5	0.3	19
Electric conduit tubes† ... ..	...	345	18	...	658
Other, including close joint	0.6	13	2	0.9	15
Flexible metallic tubing	—	—	—	...	6
Purchased tubes, screwed, bent or otherwise fabricated	1.8	83	2	1.3	50
Fittings for wrought tubes :—					
Malleable cast‡	6.2	305	16	—	—
Total ... ..	...	1,268	...	...	1,182

* Including gas containers.

† Including fittings.

‡ Including a small output of wrought fittings.

Table V B.—Output of certain principal products, 1924-1935

Kind of goods		1924	1930	1933	1934	1935
Wrought iron and steel tubes :—						
Weldless	Th. tons	109.2	165.5	194.3	234.4	268.1
	£'000	4,053	5,169	4,627	6,973	7,945
Welded	Th. tons	297.7	300.8	287.9	338.4	372.7
	£'000	7,741	6,536	4,993	5,769	5,843
Other (including cased tubes and close joint)*	Th. tons	17.9	8.3	9.5	4.9	5.6
	£'000	635	180	180	112	122
Fittings for wrought tubes :—						
Wrought	Th. tons	11.9	12.8	12.3	16.2	17.2
	£'000	949	667	596	794	861
Other principal products	£'000	708	1,432	1,079	1,880	2,326
TOTAL — PRINCIPAL PRODUCTS	£'000	14,086	13,984	11,475	15,528	17,097

* Excluding electric conduit tubes and fittings therefor, so far as recorded separately and including for 1924 purchased tubes, screwed, bent, or otherwise fabricated.

Table VI.—Average values of goods produced, exported and imported

Kind of goods	Production (at factory)			Exports (f.o.b.)		Imports (c.i.f.)	
	Average value		1935 as a percentage of 1934	Average value		Average value	
	1935	1934		1935	1934	1935	1934
	£ per ton	£ per ton	Per cent.	£ per ton	£ per ton	£ per ton	£ per ton
Wrought iron and steel tubes :—							
Weldless :—							
Not exceeding 6 inches in diameter :—							
Cold drawn	58.3	51.2	113.8	37.0	33.3	23.7	23.0
Other	21.0	20.7	101.1	21.9	23.6	18.8	22.2
Over 6 inches in diameter	20.3	24.8	81.6	17.2	21.3	16.5	28.7
Welded :—							
Not exceeding 6 inches in diameter	14.9	16.5	90.4	13.5	16.1	24.6	22.6
Over 6 inches in diameter	20.4	20.0	102.0	17.7	18.2	...	...
Cased tubes (including copper-clad and copper-lined steel tubes)	62.4	59.8	104.4	66.6	73.4	66.0	61.7
Electric conduit tubes	20.0	19.1	104.6	24.9	26.4	...	...
Fittings for wrought tubes :—							
Wrought	50.0	48.9	102.3	59.7	56.5	27.2	54.4

Table VII.—Volume of Production, 1924-1935

Kind of output	Total production			Production index (1935 = 100)			
	1935 as returned	1934		1924	1930	1933	1934
		As returned	At 1935 average values				
	£'000	£'000	£'000	Per cent.	Per cent.	Per cent.	Per cent.
Wrought tubes :—							
Weldless tubes	7,945	6,973	7,147	42	63	74	90
Welded tubes	5,843	5,769	5,344	80	81	78	91
Fittings for wrought tubes :—							
Wrought	861	794	812	69	74	71	94
Other principal products	2,448	1,992	2,021	41*	57*	44*	94*
TOTAL	17,097	15,528	15,324	56*	69*	71*	91*

* In calculating this index the 1935 base figure has been adjusted in respect of malleable cast fittings for wrought tubes, which were not recorded separately in the Iron and Steel (Foundries) Trade prior to that year.

Table VIII.—Production in relation to Exports and Imports

Kind of goods	Production	Exports	Proportion of production exported	Retained imports	Available for use in the United Kingdom		Share of home market held by British goods
					Th. tons	Per cent.		Th. tons	Per cent.
Wrought iron and steel tubes:—	Th. tons	Th. tons	Per cent.	Th. tons	Th. tons	Per cent.	
Weldless:—							
Not exceeding 6 inches in diameter ...	1935 193.2 1934 184.3	47.1 69.7	24.4 37.8	17.8 15.8	163.9 130.4	89.1 87.9	
Over 6 inches in diameter ...	1935 74.9 1934 50.1	44.9 33.4	59.9 66.7	1.6 0.5	31.6 17.2	94.9 97.0	
Welded:—							
Not exceeding 6 inches in diameter ...	1935 318.9 1934 282.1	99.9 107.8	31.3 38.2	1.2 1.2	220.2 175.5	99.5 99.3	
Over 6 inches in diameter ...	1935 53.8 1934 56.3	26.5 20.4	49.2 36.2	0.1 0.0	27.4 35.9	99.7 99.9	
Cased tubes ...	1935 0.7 1934 0.7	0.3 0.2	34.1 21.9	0.2 0.2	0.6 0.7	75.2 75.7	
Fittings for wrought tubes:—							
Wrought ...	1935 17.2 1934 16.2	5.2 4.8	30.2 29.6	0.5 0.3	12.5 11.7	96.0 97.9	
Malleable cast... 1935 9.2 1934 ...	1935 9.2 1934 1.1	1.3 1.1	13.9 ...	1.1 1.1	9.0 ...	88.0 ...	

Table IX.—Other output of the Wrought Iron and Steel Tube Trade

The value of the gross output of the firms whose returns were made on schedules for the Wrought Iron and Steel Tube Trade was £16,589,000 in 1935 and £15,017,000 in 1934, of which £15,829,000 in 1935 and £14,346,000 in 1934 consisted of products included in Table V A. Particulars of the remaining items are shown below.

Kind of output	1935		1934	
	£'000		£'000	
Iron and steel manufactures, other than tubes and fittings... ..	312		339	
Goods of other metals	64		27	
Other goods made	12		—	
Waste products sold:—				
Iron and steel scrap	289	245	(131,000 tons)	(111,000 tons)
Scrap of non-ferrous metals	23	23	(1,800 tons)	(1,900 tons)
Other waste and by-products	10	6		
Work done for the trade or on commission, and iron and steel structural work	50*	31*		
TOTAL	760	671		

* Amount received.

MATERIALS AND FUEL

Table X A.—Materials, fuel and electricity purchased and used

Kind of materials, etc.	1935		1934
	Quantity	Cost	Cost
	Th. tons	£'000	£'000
Steel ingots	146.5	1,086	
Steel blooms, billets, and slabs	163.4	1,427	
Steel bars and rods	19.2	180	
Hoop and strip of iron or steel	395.6	3,127	
Hollow blooms or tube shells	32.4	598	
Fuel and electricity used for all purposes:—			
Coal	304.6	241	8,526
Coke	35.0	47	
Heavy fuel oil	Th. galls. 5,459	92	
Purchased electricity*	Th. B.T.U. (Kw.-hrs.) 99,608	238	
All other purchased materials and fuel		2,537	
TOTAL		9,573	8,526

* Including electricity generated in other works under the same ownership.

Table X B.—Consumption of coal, coke and electricity in 1935 and 1930

Kind of fuel	1935		1930	
	Th. tons	Th. tons	Th. tons	Th. tons
Coal	304.6	316.4	316.4	316.4
Coke	35.0	38.8	38.8	38.8
Electricity:—	Th. B.T.U. (Kw.-hrs.)	Th. B.T.U. (Kw.-hrs.)	Th. B.T.U. (Kw.-hrs.)	Th. B.T.U. (Kw.-hrs.)
Generated in same works	2,788	4,736	—	—
Generated in other works under same ownership	3,493	—	—	—
Purchased	96,115	69,979	69,979	69,979
Total electricity consumed	102,396	74,715	74,715	74,715

EMPLOYMENT

Table XI A.—Average numbers employed in 1935 and 1934

Persons employed	Males		Females		Total	
	Under 18	All ages	Under 18	All ages	Under 18	All ages
Operatives (average for the year)	1935 2,296 1934 1,822	23,274 20,824	410 245	1,319 936	2,706 2,067	24,593 21,760
Administrative, technical and clerical staff*	1935 201 1934 116	2,715 2,247	216 126	1,079 804	417 242	3,794 3,051
TOTAL	1935 2,497 1934 1,938	25,989 23,071	626 371	2,398 1,740	3,123 2,309	28,387 24,811

* As at 12th October, 1935, and 13th October, 1934.

Table XI B.—Operatives employed in one week in each month of 1934 and 1935 by firms furnishing returns in respect of the twelve months ended December

Mid week of*	Operatives employed		Monthly index†		
	1934	1935	1933	1934	1935
January	11,292	10,975	66.5	79.4	90.8
February	11,388	11,066	67.8	80.0	91.5
March	11,739	11,054	69.3	82.5	91.4
April	12,123	11,247	66.9	85.2	93.0
May	12,572	11,851	68.6	88.4	98.0
June	12,953	11,859	73.3	91.0	98.1
July	13,248	12,388	76.6	93.1	102.4
August	13,010	12,512	75.4	91.4	103.5
September	13,456	12,746	75.1	94.6	105.4
October	13,240	12,911	75.6	93.1	106.8
November	13,337	13,204	77.8	93.7	109.2
December	12,720	13,291	78.7	89.4	109.9
Average for the twelve months...	12,590	12,092	72.6	88.5	100.0
Proportion of total operatives represented	57.86	49.17	...	...	...

* For the ending date of each week see page xiv.

† Based on the estimated average for the year 1935.

Table XI C.—Average numbers employed, 1924-1935

Year	Operatives	Administrative, technical and clerical staff	Total
1924	21,908	2,937	24,845
1930	22,785	3,011	25,796
1933	17,864	2,836	20,700
1934	21,760	3,051	24,811
1935	24,593	3,794	28,387

WAGES

Table XII.—Wages paid by firms furnishing returns of wages in 1935 and 1930

The aggregate amount of wages paid by firms furnishing returns of wages was £2,081,000 in 1935 representing 44.5 per cent. of the net output of these firms, the corresponding figures for 1930 being £2,597,000 and 55.0 per cent. The figures for these firms given below indicate the size of the sample and the extent to which it is representative.

Firms furnishing returns of wages	1935		1930	
	Aggregate	Proportion of trade	Aggregate	Proportion of trade
Gross output... ..	£'000 10,207	Per cent. 61.5	£'000 11,108	Per cent. 83.8
Net output	4,676	67.5	4,724	83.5
Operative staff employed :—	No.		No.	
During mid-week of October :—				
Males	14,461	59.7	}	*
Females... ..	924	67.3		
Total	15,385	60.1	18,282	82.2
Average for the year	15,162	61.7	18,764	82.4
Administrative, technical and clerical staff	1,869	50.0	*	*
Number of establishments	56	59.6	...	...

* Not recorded separately.

COUNTRY TABLES (1935)

Note.—The figures given in the following tables relate only to firms whose returns were made on schedules for the Wrought Iron and Steel Tube Trade.

Owing to the possible disclosure of information relating to individual firms, separate particulars for England and Wales and for Scotland cannot be given. No production was recorded for Northern Ireland.

Table I.—General summary (see page 134)

Table II.—Output

Kind of output	Great Britain	
	Quantity	Value
	Th. tons	£'000
Wrought iron and steel tubes :—		
Weldless* :—		
Not exceeding 6 inches in diameter :—		
Cold drawn	63.1	3,644
Other	128.7	2,706
Over 6 inches in diameter	74.8	1,499
Welded :—		
Not exceeding 6 inches in diameter	314.0	4,671
Over 6 inches in diameter	37.6	764
Cased tubes (including copper-clad and copper-lined steel tubes)	0.5	28
Electric conduit tubes	28.6	572
Other, including close-joint	3.7	92
TOTAL—Wrought iron and steel tubes ... ..	...	14,029
Flexible metallic tubing	2.0	169
Purchased tubes, screwed, bent, or otherwise fabricated	8.3	250
Fittings for wrought tubes :—		130
Wrought	17.2	860
Malleable cast	3.1	337
Iron and steel manufactures, other than tubes and fittings ... ..	...	312
Goods of other metals ... ..	...	64
Other goods made ... ..	...	12
Waste products sold :—		
Iron and steel scrap	130.8	289
Scrap of non-ferrous metals	1.8	23
Other waste and by-products ... ..	...	10
Work done for the trade or on commission, and iron and steel structural work ... ..	...	50†
TOTAL—VALUE OF GOODS MADE AND WORK DONE ... ..	...	16,589

* Including gas containers.
† Amount received.

Table III A.—Materials, fuel and electricity purchased and used (see page 139)

Table III B.—Consumption of electricity (see page 139)

Table IV A.—Numbers employed in week ended 12th October, 1935

Persons employed	Males		Females		Total	
	Under 18	All ages	Under 18	All ages	Under 18	All ages
Great Britain :—						
Operatives	2,389	24,217	427	1,372	2,816	25,589
Administrative, technical and clerical staff... ..	201	2,715	216	1,079	417	3,794
TOTAL	2,590	26,932	643	2,451	3,233	29,383

Table IV B.—Operatives employed in one week in each month of 1935

Week ended	Males and females	Week ended	Males and females
	Great Britain		Great Britain
January 19	23,165	July 13	25,163
February 16	23,147	August 17	25,104
March 16	23,491	September 14	25,531
April 13	23,741	October 12	25,589
May 18	24,165	November 16	26,023
June 15	23,992	December 14	26,000
Average for the twelve months ... ..	...	...	24,593

Table V.—Firms employing not more than ten persons on the average (see page 134)