

## CARDBOARD BOX TRADE

### INTRODUCTORY

This trade comprises firms that were engaged wholly or mainly in the manufacture of boxes and cartons of paper and cardboard and fibre board packing cases.

Separate returns were obtained as far as possible in respect of the cardboard box departments of firms manufacturing boxes and cases for their own use. The number of returns received from such firms for 1924 was, however, less complete than for 1930 and 1935.

**Table I A.—General summary**

Particulars	1935	1930	1924
	£'000	£'000	£'000
Value of products (Gross output) ... ..	13,920	10,751	7,155
Cost of materials, fuel and electricity used ... ..	6,868	5,255	3,217
Amount paid for work given out ... ..	34	24	24
Net output... ..	7,018	5,472	3,914
	No.	No.	No.
Average number of persons employed (excluding outworkers) ... ..	41,899	33,661	23,287
	£	£	£
Net output per person employed (excluding outworkers) ... ..	168	163	168
	No.	No.	No.
Number of returns ... ..	560	483	403
Number of establishments ... ..	581	504	*

\* Not available.

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

Particulars	1935	1930	1924
	No.	No.	No.
Number of returns received ... ..	251	281	115
Average number of persons employed :—			
Males... ..	529	480	236
Females ... ..	981	1,150	423
TOTAL ... ..	1,510	1,630	659
Number of firms not making returns ... ..	11	50	45

In 1924 the value of the gross output of the small firms making returns was 2.0 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 (excluding out-workers)	Net output per person employed
	No.	£'000	£'000	No.	£
11-24 ...	172	771	433	2,905	149
25-49 ...	213	1,959	1,076	7,504	143
50-99 ...	102	2,091	1,083	7,299	148
100-199 ...	49	2,562	1,215	6,719	181
200-299 ...	23	1,830	934	5,396	173
300-399 ...	6	825	390	2,063	189
400-499 ...	8	1,264	639	3,351	191
500 and over ...	8	2,618	1,248	6,662	187
TOTAL ...	581	13,920	7,018	41,899	168

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 (excluding out-workers)	Net output per person employed	
	No.	£'000	£'000	No.	£	
1 ...	1935	203	4,842	2,570	114,574	176
	1930	170	3,559	1,942	112,080	161
2 ...	1935	70	1,827	923	5,795	162
	1930	61	1,537	747	4,629	161
3 ...	1935	22	535	247	1,994	124
	1930	18	345	176	1,504	117
5 ...	1935	63	1,115	585	3,889	150
	1930	53	559	302	2,142	141
6 ...	1935	91	1,450	798	5,169	154
7 and 11 ...	1935	13	1,746	788	3,597	221
8 ...	1935	22	728	318	1,699	187
9 ...	1935	15	230	107	669	159
10 ...	1935	13	281	126	855	148
6 to 11 ...	1935	154	4,435	2,137	11,959	179
	1930	127	4,071	1,983	10,662	186
4 ...	1935	6	81	37	296	127
	1930	5	86	25	201	124
4 and 12 ...	1935	11	167	62	497	126
	1930	3	36	17	208	82
14 ...	1935	28	623	295	1,975	149
	1930	21	285	130	1,174	111
15 and 17 ...	1935	13	257	127	676	188
	1930	12	216	102	688	148
18 ...	1935	17	119	72	630	114
	1930	18	143	73	574	127
TOTAL ...	1935	581	13,920	7,018	41,899	168
	1930	483	10,751	5,472	33,661	163

\* For particulars see page xviii.  
† Number of returns for 1930.

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

## PRODUCTION

Table V.—Output of principal products

Kind of output	1935			1930	
	Quantity	Value	Entries	Quantity	Value
Boxes and cartons of paper and cardboard :—	Th. cwts.	£'000	No.	Th. cwts.	£'000
Rigid boxes (including round boxes) ...	2,589	4,569	409	3,941	8,165
Rigid boxes, delivered flat, made from material more than .028 in. thick* ...	284	429	122		
Folding boxes ...	2,954	5,687	208		
Unclassified boxes and cartons ...	307	485	63		
TOTAL — Boxes and cartons of paper and cardboard ...	6,134	11,170	...	3,941	8,165
Fibre - board packing cases (solid and corrugated) ...	3,061	2,794	50	1,011	1,006†
TOTAL—PRINCIPAL PRODUCTS	...	15,775	...	...	12,210

\* i.e., boxes of the type used by the laundry, dry-cleaning, tailoring, costumery and millinery trades.  
† 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			1930	
	Quantity	Value	Entries	Quantity	Value
Boxes and cartons of paper and cardboard :—	Th. cwts.	£'000	No.	Th. cwts.	£'000
Rigid boxes (including round boxes) ...	136	263	34	709	1,507
Rigid boxes, delivered flat, made from material more than .028 in. thick ...	44	55	9		
Folding boxes ...	671	1,202	46		
Unclassified boxes and cartons ...	87	169	41		
TOTAL — Boxes and cartons of paper and cardboard ...	938	1,689	...	709	1,507
Fibre - board packing cases (solid and corrugated) ...	1,100	859	4	668	663
TOTAL ...	...	2,640	...	...	2,605

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 1930	Average value		Average value	
	1935	1930		1935	1930	1935	1930
Boxes and cartons of paper and cardboard :—	s. per cwt.	s. per cwt.	Per cent.	s. per cwt.	s. per cwt.	s. per cwt.	s. per cwt.
Rigid boxes (including round boxes) ...	35.3	* ...	...	*	*	*	*
Rigid boxes, delivered flat ...	30.2						
Folding boxes ...	38.5						
TOTAL — Boxes and cartons of paper and cardboard ...	36.4	41.4	87.9	46.5	60.3	59.4	61.8
Fibre - board packing cases (solid and corrugated) ...	18.3	19.9	91.8	*	*	*	*

\* Not recorded separately.

Table VII.—Volume of Production, 1924-1935

Kind of output	Total production			Production index (1935 = 100)	
	1935 as returned	1930		1924*	1930
		As returned	At 1935 average values		
	£'000	£'000	£'000	Per cent.	Per cent.
Boxes and cartons of paper and cardboard ...	12,981	11,009	9,677	45	75
Fibre-board packing cases...	2,794	1,201	1,102		
TOTAL ...	15,775	12,210	10,779	45	68

\* See introductory paragraph, page 66

Table VIII.—Production, Exports and Imports

Kind of goods	Pro- duction	Exports		Retained imports	
	Value (at factory)	Quantity	Value (f.o.b.)	Quantity	Value (c.i.f.)
Boxes and cartons of paper and cardboard	£'000	Th. cwts.	£'000	Th. cwts.	£'000
{ 1935	12,981	99.0	209	39.6	118
{ 1930	11,009	77.7	234	69.2	214

Table IX.—Other output of the Cardboard Box Trade

The value of the gross output of the firms whose returns were made on schedules for the Cardboard Box Trade was £13,920,000 in 1935 and £10,751,000 in 1930, of which £13,135,000 in 1935 and £9,605,000 in 1930 consisted of products included in Table V. Particulars of the remaining items are shown below.

Kind of output	1935		1930
	Quantity	Value	Value
Paper bags ...	Th. cwts.	£'000	£'000
	123	136	89
Corrugated paper ...	{ 87	76	44
	{ ...	38	
Manufactured stationery ...	...	186	257
Other manufactures of paper or cardboard ...	...	183	186
Printing, engraving, etc. ...	...	63*	535*
Baskets and basketware ...	...	55	2
Other goods made and work done ...	...	38	23
Waste sold ...	...	10	10
TOTAL ...	...	785	1,146

\* Amount received.

## MATERIALS AND FUEL

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

Kind of materials, etc.	1935		1930
	Quantity	Cost	Cost
Board of all kinds ...	Th. tons	£'000	£'000
Fuel and electricity used for all purposes :—	398.7	4,832	5,255
Coal... ..	27.6	33	
Coke ... ..	8.0	11	
Heavy fuel oil ... ..	Th. galls.	2	5,255
	118		
Purchased electricity* ... ..	Th. B.T.U. (Kw.-hrs.)	74	5,255
All other purchased materials and fuel ... ..	15,875	1,916	
TOTAL ... ..	...	6,868	5,255

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

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

Kind of fuel	1935	1930
	Coal ... ..	Th. tons
Coke... ..	27.6	15.1
	8.0	3.4
Electricity :—	Th. B.T.U. (Kw.-hrs.)	Th. B.T.U. (Kw.-hrs.)
Generated in same works ... ..	2,569	1,094
Generated in other works under same ownership ... ..	1,082	133
Purchased ... ..	14,793	9,572
Total electricity consumed ... ..	18,444	10,799

## EMPLOYMENT

Table XI A.—Average numbers employed

Persons employed	Males		Females		Total	
	Under 18	All ages	Under 18	All ages	Under 18	All ages
Operatives (average for the year) ... ..	1,382	9,153	9,452	28,876	10,834	38,029
Administrative, technical and clerical staff* ... ..	1,037	7,123	7,394	23,804	8,431	30,927
	104	2,346	270	1,524	374	3,870
	107	1,657	186	1,077	293	2,734
TOTAL ... ..	{ 1,486	{ 11,499	{ 9,722	{ 30,400	{ 11,208	{ 41,899
	{ 1,144	{ 8,780	{ 7,580	{ 24,881	{ 8,724	{ 33,661
Average number of out- workers... ..	{ 4	{ 519	{ 535	{ 523	{ 540	{ 540
	{ 5	{ 535	{ 535	{ 535	{ 535	{ 535

\* As at 12th October, 1935, and 18th October, 1930.

**Table XI B.—Operatives employed in one week in each month of 1930 and 1935 by firms furnishing returns in respect of the twelve months ended December**

Mid week of*	Operatives employed		Monthly index†	
	1930	1935	1930	1935
January ... ..	17,494	25,610	82.0	96.3
February ... ..	17,359	25,570	81.3	96.1
March ... ..	17,254	25,615	80.8	96.3
April ... ..	17,246	25,725	80.8	96.7
May ... ..	17,326	26,050	81.2	97.9
June ... ..	17,278	26,099	80.9	98.1
July ... ..	17,136	26,347	80.3	99.0
August ... ..	17,133	26,642	80.3	100.1
September... ..	17,276	27,373	80.9	102.9
October ... ..	17,492	28,006	81.9	105.3
November ... ..	17,712	28,207	83.0	106.0
December ... ..	17,617	27,998	82.5	105.2
Average for the twelve months ...	17,360	26,604	81.3	100.0
Proportion of total operatives represented ... ..	56.13	69.96	...	...

\* 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 (excluding outworkers)
1924* ... ..	21,519	1,768	23,287
1930 ... ..	30,927	2,734	33,661
1935 ... ..	38,029	3,870	41,899

\* See introductory paragraph, page 66

### WAGES

**Table XII.—Wages paid by firms furnishing returns of wages**

The aggregate amount of wages paid by firms furnishing returns of wages was £1,893,000 in 1935 representing 48.5 per cent. of the net output of these firms, the corresponding figures for 1930 being £1,639,000 and 47.7 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	Per cent.	£'000	Per cent.
Net output ... ..	7,815	56.1	6,782	63.9
	3,907	55.7	3,435	63.6
Operative staff employed:—	No.		No.	
During mid-week of October:—				
Males ... ..	4,919	51.6	†	†
Females... ..	18,122	60.2	†	†
Total ... ..	23,041	58.1	18,005	58.6
Average for the year ... ..	21,928	57.7	17,865	58.7
Administrative, technical and clerical staff ... ..	2,196	56.7	†	†
Number of establishments ... ..	309	53.2	...	...

\* Great Britain only.

† 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 Cardboard Box Trade.

**Table I.—General summary**

Particulars	Unit	England and Wales	Scotland	Great Britain	Northern Ireland
Value of products (Gross output)	£'000	12,921	880	13,801	119
Cost of materials, fuel and electricity used ... ..	"	6,364	457	6,821	47
Amount paid for work given out	"	33	1	34	—
Net output ... ..	"	6,524	422	6,946	72
Average number of persons employed (excluding outworkers)	No.	38,618	2,651	41,269	630
Net output per person employed (excluding outworkers)	£	169	159	168	114
Number of returns ... ..	No.	504	39	543	17
Number of establishments ... ..	"	523	41	564	17

**Table II.—Output**

Kind of output	Unit	England and Wales and Northern Ireland*	Scotland	United Kingdom
Boxes and cartons of paper and cardboard:—				
Rigid boxes (including round boxes):—				
Quantity stated ... ..	Th. cwt.	2,280	173	2,453
Quantity not stated ... ..	£'000	3,967	339	4,306
Quantity not stated ... ..	£'000	1,340	44	1,384
Rigid boxes, delivered flat, made from material more than .028 in thick:—				
Quantity stated ... ..	Th. cwt.	212	28	240
Quantity not stated ... ..	£'000	339	35	374
Quantity not stated ... ..	£'000	77	—	77
Folding boxes ... ..	Th. cwt.	2,097	186	2,283
Quantity not stated ... ..	£'000	4,201	284	4,485
Unclassified boxes and cartons:—				
Quantity stated ... ..	Th. cwt.	201	19	220
Quantity not stated ... ..	£'000	304	12	316
Quantity not stated ... ..	£'000	249	9	258
Total—Boxes and cartons of paper and cardboard:—				
Quantity stated ... ..	Th. cwt.	4,790	406	5,196
Quantity not stated ... ..	£'000	8,811	670	9,481
Quantity not stated ... ..	£'000	1,666	53	1,719
Fibre-board packing cases (solid and corrugated) ... ..	Th. cwt.	1,906	55	1,961
Quantity not stated ... ..	£'000	1,872	63	1,935
Paper bags ... ..	Th. cwt.	42	81	123
Quantity not stated ... ..	£'000	72	64	136
Corrugated paper:—				
Quantity stated ... ..	Th. cwt.	87	†	87
Quantity not stated ... ..	£'000	75	1	76
Quantity not stated ... ..	£'000	38	—	38
Manufactured stationery ... ..	£'000	175	11	186
Other manufactures of paper or cardboard ... ..	£'000	178	5	183
Printing, engraving, etc. ... ..	£'000	51†	12†	63†
Baskets and basketware ... ..	£'000	55	—	55
Other goods made and work done	£'000	38	—	38
Waste sold ... ..	£'000	9	1	10
<b>TOTAL — VALUE OF GOODS MADE AND WORK DONE ...</b>	£'000	13,040	880	13,920

\* Owing to the possible disclosure of information relating to individual firms, the particulars for Northern Ireland have been combined with those for England and Wales. The output consisted mainly of "Boxes and cartons of paper and cardboard" (33,000 cwt. value £99,000).

† Less than 500.

‡ Amount received.

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

Kind of materials, etc.	Unit	England and Wales	Scotland	Great Britain	Northern Ireland
Board of all kinds ...	Th. tons	372.4	23.8	396.2	2.5
Fuel and electricity used for all purposes:—	£'000	4,488	317	4,805	27
Coal ...	Th. tons	25.7	1.7	27.4	0.2
Coke ...	£'000	32	1	33	*
Heavy fuel oil ...	Th. galls.	7.8	0.2	8.0	—
Purchased electricity†	£'000	11	*	11	—
All other purchased materials and fuel ...	Th. B.T.U. (Kw.-hrs.)	118	—	118	—
	£'000	2	—	2	—
	£'000	14,632	1,139	15,771	104
	£'000	68	5	73	1
TOTAL ...	£'000	1,763	134	1,897	19
	£'000	6,364	457	6,821	47

\* Less than £500.

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

Table III B.—Consumption of electricity

Electricity consumed	England and Wales	Scotland	Great Britain	Northern Ireland
Generated in same works ...	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 other works under same ownership ...	2,569	—	2,569	—
Purchased ...	914	168	1,082	—
Total ...	13,718	971	14,689	104
	17,201	1,139	18,340	104

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

Persons employed (excluding outworkers)	Males		Females		Total	
	Under 18	All ages	Under 18	All ages	Under 18	All ages
England and Wales:—						
Operatives ...	1,373	8,968	8,926	27,418	10,299	36,386
Administrative, etc.*... ..	102	2,193	250	1,396	352	3,589
Total ...	1,475	11,161	9,176	28,814	10,651	39,975
Scotland:—						
Operatives ...	49	472	797	2,157	846	2,629
Administrative, etc.*... ..	—	114	18	104	18	218
Total ...	49	586	815	2,261	864	2,847
Great Britain:—						
Operatives ...	1,422	9,440	9,723	29,575	11,145	39,015
Administrative, etc.*... ..	102	2,307	268	1,500	370	3,807
TOTAL ...	1,524	11,747	9,991	31,075	11,515	42,822
Northern Ireland:—						
Operatives ...	20	102	134	551	154	653
Administrative, etc.*... ..	2	39	2	24	4	63
Total ...	22	141	136	575	158	716

\* Administrative, technical and clerical staff.

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

Week ended	Males and females			
	England and Wales	Scotland	Great Britain	Northern Ireland
January 19 ...	34,223	2,233	36,456	445
February 16 ...	34,157	2,273	36,430	465
March 16 ...	34,191	2,304	36,495	463
April 13 ...	34,137	2,329	36,466	484
May 18 ...	34,564	2,343	36,907	547
June 15 ...	34,474	2,395	36,869	565
July 13 ...	34,699	2,420	37,119	577
August 17 ...	34,971	2,448	37,419	615
September 14 ...	35,690	2,529	38,219	643
October 12 ...	36,386	2,629	39,015	653
November 16 ...	36,591	2,673	39,264	674
December 14 ...	36,263	2,617	38,880	667
Average for the twelve months ...	35,029	2,433	37,462	567

Table IV C.—Number of outworkers at two specified periods in 1935

Country	January			July		
	Males	Females	Total	Males	Females	Total
England and Wales	4	492	496	4	545	549

No outworkers were recorded for Scotland or Northern Ireland.

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

Particulars	England and Wales	Scotland	Great Britain	Northern Ireland
Number of returns received ...	No. 240	No. 9	No. 249	No. 2
Average number of persons employed:—				
Males ...	507	16	523	6
Females ...	924	54	978	3
Total ...	1,431	70	1,501	9