



BOARD OF TRADE

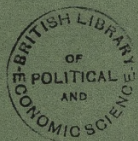
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FINAL REPORT
on the
CENSUS OF PRODUCTION
FOR 1948

Volume 2

Trade H

EXPLOSIVES AND FIREWORKS



*Presented by the Board of Trade to Parliament
in pursuance of the Statistics of Trade Act, 1947
(10 & 11 Geo. 6, Ch. 39, Sec. 7).*

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In interpreting the data in the following tables, it is essential to bear in mind not only the qualifications mentioned in this report but also the general explanations and qualifications contained in the separate booklet published in this series by H.M. Stationery Office entitled "Final Reports of the Census of Production for 1948: Introductory Notes", price 2s Od. NET

List of Tables

Table No.	Title	Page.
1	Summary: Larger establishments	2/H/2
2	Summary, 1948: Small firms in Great Britain	2/H/3
3	Estimated average employment, 1948: All firms in Great Britain	2/H/3
4	Analysis by size, 1948: Larger establishments in Great Britain	2/H/3
5	Analysis by standard region, 1948: Larger establishments in Great Britain	2/H/4
6	Analysis according to specialisation within the trade, 1948: Larger establishments in Great Britain	2/H/4
7	Total make of intermediate products: Larger establishments	*
8	Sales (or production) of the principal products of the trade, including sales (or production) of these products by establishments classified to other trades: Larger establishments	2/H/5
9	Sales (or production) of principal products of the trade by establishments classified to other trades: Larger establishments	2/H/7
10	Sales (or production) in the trade of other than principal products: Larger establishments	2/H/7
11	Analysis of sales, 1948: Larger establishments in Great Britain	2/H/8
12	Production, exports and imports of certain principal products: Larger establishments	2/H/9
13	Purchased materials and fuel: Larger establishments	2/H/10
14	Stocks of finished products and work in progress and stocks of materials and fuel, 1948: Larger establishments in Great Britain	2/H/12
15	Employment and remuneration: Larger establishments	2/H/13
16	Wages and salaries paid, 1948: Larger establishments in Great Britain	2/H/14
17	Payments for work done on materials given out, 1948: Larger establishments in Great Britain	2/H/14
18	Payments for certain services, 1948: Larger establishments in Great Britain	2/H/14
19	Plant, machinery and vehicles acquired and disposed of, 1948: Larger establishments in Great Britain	2/H/15
20	Capital expenditure on building work and changes in occupation of buildings and land, 1948: Larger establishments in Great Britain	2/H/15

Country Tables

Table No.	Title	Page
21	Summary: Larger establishments	2/H/16
22	Summary: Small firms	2/H/17
23 or 23(1)	Sales in the trade: Larger establishments	2/H/18
23(11)	Sales in the trade: Small firms	*
24 or 24(1)	Purchased materials and fuel: Larger establishments	2/H/20
24(11)	Purchased materials and fuel: Small firms	*
25 or 25(1)	Employment and remuneration: Larger establishments	2/H/22
25(11)	Employment: Small firms	*
26	Monthly index of employment of operatives: Larger establishments	2/H/23

* Not applicable to this trade

EXPLOSIVES AND FIREWORKS TRADE

THIS REPORT on the Explosives and Fireworks Trade relates to establishments engaged wholly or mainly in the manufacture of explosives, fireworks, detonators, fuses, percussion caps, flares, signal rockets, small arms ammunition, etc., and in filling bombs, cartridges and shells.

Thirteen Government establishments are included for 1948 and ten for 1935. Production by Government Departments was not recorded for 1937.

This trade corresponds to minimum list heading 33 in the Standard Industrial Classification.

Any establishments in Northern Ireland are excluded in 1948; no production was recorded there in this trade for 1937 or 1935.

CHEMICALS AND ALLIED TRADES
EXPLOSIVES AND FIREWORKS TRADE
Summary

Larger establishments

TABLE 1

	1948	1937 (a)	1935
	£'000	£'000	£'000
Gross output (production)	18,569	7,589	7,128
Cost of materials and fuel used	7,497	3,302	3,420
Payment for work done on materials given out	2	17	8
Net output	11,071	4,270	3,700
Wages and salaries of persons employed	7,841	..	..
Average number of persons employed (b)	No. 24,911 (c)	No. 12,736	No. 12,828
Net output per person employed (b)	£ 444	£ 335	£ 293
Stocks at end of year	£'000	£'000	£'000
Finished products and work in progress	2,426	..	..
Materials and fuel	3,820	..	..
Number of establishments	No. 49	No. ..	No. 53

- (a) Excluding Government establishments, production by which was not recorded for this year.
(b) Excluding outworkers.
(c) For the total number of persons employed in this trade see Table 3.

The values of gross output and of materials and fuel used are derived in the following way:-

	1948	1937	1935
	£'000	£'000	£'000
Output of firms in this trade			
Total value of sales (1948) or production (1937 and 1935)			
Principal products (see Table 3)	16,985	6,574	6,441
Other output (see Table 10)	1,916	1,015	687
Adjustment for changes in stocks and work in progress (see Table 14)	+ 88		
Less payment for transport by other firms	18,989 420	7,589	7,128
Gross output (production)	18,569	7,589	7,128
Materials and fuel used by firms in this trade			
Purchases (see Table 13)	7,816	3,302	3,420
Adjustment for changes in stocks (see Table 14)	- 319		
Materials and fuel used	7,497	3,302	3,420

Summary, 1948

Small firms in Great Britain

TABLE 2

Number of returns	6
Average number of persons employed (a)	
Males	24
Females	12
Total	36

(a) Including working proprietors.

Estimated average employment, 1948

All firms in Great Britain

TABLE 3

As returned by firms	
Employing on average more than ten persons (a)	24,911
Employing on average ten persons or less (b)	36
	24,947
Estimated average employment in firms not making satisfactory returns	-
Average employment in all firms	24,947

- (a) See Tables 1 and 15.
(b) See Table 2.

Analysis by size, 1948

Larger establishments in Great Britain

TABLE 4

Average number employed	Establishments	Gross output	Net output	Persons employed	Remuneration			Net output per person employed
					Wages	Salaries	Total	
11-24	No. 3	£'000 43	£'000 20	No. 54	£'000 7	£'000 5	£'000 12	£ 379
25-49	5	161	81	192	31	11	42	423
50-99	9	589	297	611	105	21	126	486
100-199	13	1,450	905	1,783	372	95	467	507
200-299	4	750	457	1,015	215	47	262	451
300 and over	15	15,576	9,310	21,256	5,154	1,777	6,931	438
Total	49	18,569	11,071	24,911	5,884	1,957	7,841	444

Analysis by standard region, 1948
Larger establishments in Great Britain

TABLE 5

Region	Establishments	Gross output	Net output		Persons employed	Remuneration		
			Value	Percentage of total		Wages	Salaries	Total
England	No.	£'000	£'000		No.	£'000	£'000	£'000
Northern; and East and West Ridings of Yorkshire	11	1,400	825	7.5	2,058	415	99	514
North Midland; and Eastern	4	602	311	2.8	696	126	40	166
London and South Eastern	6	609	390	3.5	1,091	241	50	291
Southern; and South Western	5	1,360	722	6.5	1,929	470	116	587
Midland	4	1,049	632	5.7	2,147	514	127	640
North Western	6	2,131	1,565	14.1	3,603	910	196	1,107
Total England	36	7,151	4,447	40.2	11,524	2,676	629	3,305
Wales	4	2,279	1,658	15.0	4,177	1,048	267	1,316
Scotland	9	9,140	4,966	44.9	9,210	2,159	1,061	3,221
Great Britain	49	18,569	11,071	100.0	24,911	5,884	1,957	7,841

TABLE 6 - Analysis according to specialisation within the trade, 1948

Larger establishments in Great Britain

No specialisation within this trade was distinguished.

TABLE 7 - Total make of intermediate products: Larger establishments

This table is not applicable to the trade.

Sales (or production) of the principal products of the trade,
including sales (or production) of these products by
establishments classified to other trades

TABLE 8

Larger establishments

	1948 Sales			1937 (a) Production		1935 Production	
	Quantity	Value	Entries	Quantity	Value	Quantity	Value
	Th. cwts.	£'000	No.	Th. cwts.	£'000	Th. cwts.	£'000
Propellent powders	17.0	885	..				
High explosives, except blasting powder	759.2	5,175	5	580.5	3,029	436.4	2,329
Blasting powder	106.4	662	5	142.0	367	152.0	391
Fuses and blasting accessories							
Safety fuse	133.9	1,436	..				
Fuse, instantaneous	12.0	221	..				
Electric detonators and fuses	27.5	1,371	9				
Other fuses, tubes, primers, etc., except shell fuses	1.7	89	5	139.0	1,660	117.0	1,221
Detonators, other than electric, including railway fog signals	7.2	472	5				
	..	88					
Other accessories (including cables and parts of fuses and of blasting accessories)	17.3	670	5				
Rockets (including line carrying rockets) and other pyrotechnic products	..	1,016	15	..	390	..	392
Small arms ammunition	Million			Million		Million	
Loaded cartridges for military and sporting purposes	100.3	1,271	13	291.4	1,121	333.8	1,140
	..	591					
Other sporting ammunition, including shot but excluding empty cartridge cases	6.3	37	..	54.1	77	65.7	65
Other ammunition, loaded or filled	228.7	372	..	..	42	..	900
	..	78					
Explosives, not elsewhere specified	..	237	5	..	565	..	
Waste products, other than scrap metals	..	4	5	..	(b)	..	(b)

TABLE 8 (contd.)

	1948 Sales		1937 (a) Production		1935 Production	
	Quantity	Value	Quantity	Value	Quantity	Value
		£'000	No.	£'000		£'000
Repair and maintenance work on ammunition (c)		1,252	8	(b)	}	1,245(d)
Work done for the trade or on commission (c)						
Filling of ammunition		1,022	..	112		
Other work		2,072	10			
Total		19,019	..	7,363		7,683
Less sales (or production) in other trades (see Table 9)		2,034	..	789		1,242
Total principal products of this trade sold or made by establishments in the trade		16,985	46	6,574		6,441

- (a) Excluding production by Government establishments.
 (b) Not recorded separately.
 (c) Amount charged in 1948 and amount received in 1937 and 1935.
 (d) So far as recorded separately.

Sales (or production) of principal products of the trade by establishments classified to other trades

Larger establishments

TABLE 9

	1948 Sales			1937 (a) Production		1935 Production	
	Quantity	Value	Entries	Quantity	Value	Quantity	Value
	Th. cwts.	£'000	No.	Th. cwts.	£'000	Th. cwts.	£'000
Propellant powders	1.1	49	..	1.1	5	0.7	5
High explosives, except blasting powder	-	-	-				
Fuses and blasting accessories				5.3	98	0.4	1
Detonators, other than electric, including railway fog signals	..	48	..				
Other	-	-	-				
Small arms ammunition	Million			Million		Million	
Loaded cartridges for military and sporting purposes	86.3	1,080	8	26.3	170	75.7	386
	..	591					
Other sporting ammunition, including shot but excluding empty cartridge cases	6.3	37	..	51.4	74	62.9	62
Other ammunition, loaded or filled	..	58	..	-	-		
Explosives, not elsewhere specified; and rockets (including line carrying rockets) and other pyrotechnic products	..	74	..	..	442	..	782
Work done for the trade or on commission other than filling of ammunition (b)		99	..		-		6
Total		2,034	..		789		1,242

- (a) Excluding production by Government establishments.
 (b) Amount charged in 1948 and amount received in 1935.

Sales (or production) in the trade of other than principal products

Larger establishments

TABLE 10

	1948 Sales	1937 (a) Production	1935 Production
	£'000	£'000	£'000
Chemical products	1,597	502	491
Other goods	308	513	196
Scrap metals	11		
Total	1,916	1,015	687

- (a) Excluding production by Government establishments.

Analysis of sales, 1948

Larger establishments in Great Britain

TABLE 11

	Sales	Percentage of total sales
	£'000	
Sales (or transfers) to other organisations under the same control		
Productive works	1,606	11.0
Export sales organisations (including branches abroad)	2,373	16.2
Other wholesale or selling organisations	112	0.8
Retail shops, etc.	-	-
Total sales (or transfers) to other organisations under the same control	4,092	27.9
Sales to independent buyers		
Exports invoiced directly overseas	1,131	7.7
Exports invoiced to Crown Agents and purchasing houses in this country of individual firms and governments abroad	849	5.8
His Majesty's Government and Local Authorities (other than productive establishments)	1,527	10.4
Manufacturers, repairers, builders, mines, public utilities, and transport and other productive undertakings	5,503	37.6
Wholesalers, merchants and other agents for resale	1,135(a)	7.7
Retailers, including multiple shops, caterers and N.A.A.F.I., for resale	319	2.2
Other businesses (including farmers) and institutions of all kinds	64	0.4
Members of the public, including employees	33	0.2
Total sales to independent buyers	10,562	72.1
Total	14,654	100.0

(a) Of this total £1,043,000 was recorded as divided between £243,000 for export and £800,000 for other sales.

Production, exports and imports of certain principal products (a)

TABLE 12

		Production (b) (c)	Exports (d)	Retained imports (e)
		Th. cwts.	Th. cwts.	Th. cwts.
Propellant powders	{ 1948 1937	17.0 ..	16.4 16.3	0.1 3.0
High explosives, except blasting powder	{ 1948 1937	759.2 ..	278.5 157.5	(f) 0.8
Total propellant powders and high explosives, except blasting powder	{ 1948 1937	776.2 580.5	294.9 173.8	0.1 3.8
Blasting powder	{ 1948 1937	106.4 142.0	11.3 17.1	- 17.6
Fuses and blasting accessories				
Safety fuse	{ 1948 1937	133.9 ..	116.8 89.6	- 0.5
Other fuses, tubes and primers, etc.	{ 1948 1937	13.7(g) (h) ..	2.7 1.9	0.1 -
Other accessories (including detonators, cables, and parts of fuses and blasting accessories)	{ 1948 1937	53.4(h) (1) ..	12.5 3.2	- 0.1
Total fuses and blasting accessories	{ 1948 1937	201.0(g) (1) 139.0(g)	132.0 94.7	0.1 0.6
Rockets (including line carrying rockets) and other pyrotechnic products	{ 1948 1937	£'000 1,016 390	£'000 285 41	£'000 1 -
Small arms ammunition				
Loaded cartridges for military and sporting purposes	{ 1948 1937	1,861 Million 291.4	3,512 Million 134.0	(f) Million 36.9
Other sporting ammunition, including shot but excluding empty cartridge cases	{ 1948 1937	Th. cwts. 6.3 54.1 £'000	Th. cwts. 4.9 17.9 £'000	Th. cwts. - 0.4 £'000
Explosives, not elsewhere specified	{ 1948 1937	237 565	130 24	(f) -

- (a) Figures of sales (or production) refer only to larger establishments in the relevant years. All recorded exports from and imports into the United Kingdom are given in the table. The figures, therefore, are not strictly comparable.
- (b) Sales in 1948 and production for sale (excluding production by Government establishments) in 1937.
- (c) Including sales (or production) by establishments classified to other trades.
- (d) Valued f.o.b.
- (e) Valued c.i.f.
- (f) Re-exports in excess of imports.
- (g) Except shell fuses.
- (h) Sales of electric detonators and fuses are included in the figures for "Other accessories".
- (1) Partly estimated.

Purchased materials and fuel

Larger establishments

TABLE 13

	1948		1937 (a)		1935	
	Materials and fuel purchased		Usage of purchased materials and fuel			
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. cwts.	£'000	Th. cwts.	£'000	Th. cwts.	£'000
Materials						
Ammonium nitrate	144.3	170	163.9	120	114.1	103
Mercury	Th. lbs. 9.6	2	Th. lbs. 120.3	21	Th. lbs. 97.4	13
Metallic powders	Th. cwts.		Th. cwts.		Th. cwts.	
Aluminium	4.0	31	5.6	29	2.1	13
Other	0.2	2				
Sodium nitrate	101.8	103	137.5	55	186.3	72
Potassium nitrate						
Refined	4.5	13	20.2	20	..	(b)
Unrefined	0.7	2				
Packing materials	..	960	..	213		
Alcohol	Th. bulk galls.					
Industrial methylated spirits	386.0	78				
Other	Th. proof galls. 332.4 Th. tons	39				
Ammonia liquor (in terms of 880 ammonia)	9.0	277				
Cotton linters	Th. lbs. 3,915.0 Th. cwts.	224				
Jute yarn	48.4	403				
Nitric acid (in terms of 100 per cent. acid)	Th. tons 2.1	45	..	(b)	..	(b)
Potassium chlorate	Th. cwts. 1.4	8				
Pyrites	247.3	37				
Sodium bicarbonate	83.5	43				
Sodium chloride	61.0	18				
Sulphur	84.4	43				
Sulphuric acid (in terms of 100 per cent. acid)	Th. tons 3.0	23				

TABLE 13 (contd.)

	1948		1937 (a)		1935	
	Materials and fuel purchased		Usage of purchased materials and fuel			
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. cwts.	£'000	Th. cwts.	£'000	Th. cwts.	£'000
Materials (contd.)						
Brass, including alloys of copper, but excluding nickel alloys other than nickel silver	14.1	163				
Metal cartridge cases (other than small arms ammunition), empty	..	35				
High explosives	64.9	240	..	2,675	..	3,051(c)
Propellant powders	3.7	22				
All other purchased materials	..	3,927				
Fuel and electricity	Th. tons		Th. tons		Th. tons	
Coal	154.5	405	130.3	116	135.4	111
Coke	3.3	11	..	(b)	3.0	4
Electricity purchased	Th. B. T. U. (kW. hrs.)		Th. B. T. U. (kW. hrs.)		Th. B. T. U. (kW. hrs.)	
From public supply	39,550	146	18,608	33	18,473	53
From other sources	-	-				
Electricity obtained from other works under the same ownership	-	-				
Motor spirit (petrol) and derv. fuel	Th. galls.					
Used for road vehicles	435	31				
Used for other power purposes	68	4				
Other oil fuel (including creosote/pitch mixtures)	3,996	136	..	20	..	(b)
Gas purchased and gas obtained from other works under the same ownership	Th. therms					
	185	9				
	..	3				
All other purchased fuel	..	1				
Unclassified purchased materials, fuel and electricity	..	145	-	-	-	-
Total		7,816		3,302		3,420

(a) Excluding Government establishments.

(b) Not recorded separately.

(c) Including fuel not specified separately.

Stocks of finished products and work in progress and stocks of materials and fuel, 1948

Larger establishments in Great Britain

TABLE 14

	At beginning of year		At end of year	
	Quantity	Value	Quantity	Value
	Th. cwts.	£'000	Th. cwts.	£'000
Finished products				
High explosives, including blasting powder	100.4	531	115.4	633
Fuses and blasting accessories	..	384	8.2 ..	152 392
Other finished products	..	392	..	479
Work in progress		1,031		770
Total finished products and work in progress		2,337		2,426
Materials and fuel		3,501		3,820

Employment and remuneration (a)

Larger establishments

TABLE 15

	Average number of operatives			Administrative, technical and clerical employees (b)			Total		
	1948	1937 (c)	1935	1948	1937 (c)	1935	1948	1937 (c)	1935
Males									
Under 18	287	356	307	23	48	25	310	404	332
All ages	14,583	6,211	7,103	2,576	1,064	1,132	17,159	7,275	8,235
Females									
Under 18	755	917	756	90	56	42	845	973	798
All ages	6,561	4,958	3,922	1,187	503	471	7,748	5,461	4,393
Total									
Under 18	1,042	1,273	1,063	113	104	67	1,155	1,377	1,130
All ages	21,144	11,169	11,025	3,763(d)	1,567	1,603	24,907 (d) (e) (f)	12,736	12,628
Total remuneration	£'000 5,884	..	..	£'000 1,957	..	..	£'000 7,841	..	..

(a) Excluded employees. The following numbers were employed at establishments in this trade but are not included in the table or in any other report (e.g., employees in a separate selling or transport organisation for which separate accounts are kept):-

Canteen workers	61	males	476	females
Other workers	116	males	12	females

(b) Number at September 25, 1948, October 16, 1937, and October 12, 1935.

(c) Excluding Government establishments.

(d) There were, in addition, 4 working proprietors (3 males and 1 female) in 1948. Working proprietors are included in the 1937 and 1935 figures.

(e) The employers' share of contributions to all National Insurance Schemes payable during the year in respect of these workers amounted to £205,000.

(f) The following persons (included in this total) were employed on special work by establishments employing 100 or more persons:-

	Operatives	Administrative, technical and clerical employees
Transport of goods outside the premises	142	
Maintenance and repair of firms' buildings, but not plant	592	
Research work not directly connected with current production however charged	3	327

In addition to the employees in the above table the firms in this trade employed 4 male and 305 female outworkers in 1948, the amount paid to them being £18,000. Similar information is not available for 1937 and 1935.

CHEMICALS AND ALLIED TRADES

Wages and salaries paid, 1948 (a)
Larger establishments in Great Britain

TABLE 16

	Amount paid by all establishments	Establishments making returns for the calendar year					Year
		Amount paid	Percentage of annual remuneration paid in				
			First quarter	Second quarter	Third quarter	Fourth quarter	
Wages and salaries of Operatives	£'000 5,884	£'000 22,829	23.2	24.4	25.4	26.9	100.0
Administrative, technical and clerical employees	1,957	11,295	23.1	22.9	23.6	30.4	100.0
Total	7,841	33,924	23.2	23.9	24.8	28.0	100.0

(a) Including bonus and commission payments.

TABLE 17 - Payments for work done on materials given out, 1948

Larger establishments in Great Britain

The total amount paid for work done on materials given out was £2,000.

Payments for certain services, 1948

Larger establishments in Great Britain

TABLE 18

	Amount paid
	£'000
Repair and maintenance	
Of buildings	91
Of plant, machinery and vehicles	34
Unclassified	11
Hire of plant, machinery and vehicles	9
Advertising and market research	
Advertising in newspapers, magazines and periodicals	7
Other advertising services (poster display, despatch of circulars, etc.) and market research	1
Unclassified	2
Payments made for research work	
To research associations	-
To universities, institutions, academic bodies and similar agencies	-
To other commercial concerns	137
Postage, telephone, telegrams and cables	43
Commercial insurance premiums	110
Rates (excluding water rates) payable in the year	63

EXPLOSIVES AND FIREWORKS

Plant, machinery and vehicles required and disposed of, 1948
Larger establishments in Great Britain

TABLE 19

	Acquisitions		Disposals
	New	Second-hand	
	£'000	£'000	£'000
Plant and machinery	354	118	97
Vehicles	51	15	8
Total	405	133	105

Capital expenditure on building work and changes in occupation of buildings and land, 1948

Larger establishments in Great Britain

TABLE 20

	£'000	£'000
1. Capital expenditure on building work (a)		94
2. Existing buildings and land (b)		
(1) Capital cost of freeholds bought	1	
Estimated capital value of		
(1i) Rented property newly occupied in the year (c)	-	
(1ii) Leasehold buildings and land newly occupied in the year	1	
Total of heading 2		2
Total of headings 1 and 2		96
3. Existing buildings and land relinquished (d)		
(1) Selling value of freeholds sold	-	
(1i) Estimated value of other properties relinquished	2	
Total of heading 3		2
4. Headings 1 and 2 less heading 3		94

(a) Excluding site value which, where appropriate, is included in heading 2(i).

(b) The figures do not reflect changes in ownership of previously occupied land and buildings.

(c) Property which is occupied under an agreement for the payment of rent without the purchase of a lease or the payment of a premium.

(d) Including property destroyed or abandoned.

EXPLOSIVES AND FIREWORKS TRADE

1948

Summary

Larger establishments

TABLE 21

	England	Wales	Scotland	Great Britain
Gross output (production)	£'000 7,151	£'000 2,279	£'000 9,140	£'000 18,569
Cost of materials and fuel used	2,702	620	4,174	7,497
Payment for work done on materials given out	2	-	-	2
Net output	4,447	1,658	4,966	11,071
Wages and salaries of persons employed	3,305	1,316	3,221	7,841
Average number of persons employed (a)	No. 11,524	No. 4,177	No. 9,210	No. 24,911
Net output per person employed (a)	£ 386	£ 397	£ 539	£ 444
Stocks at end of year	£'000	£'000	£'000	£'000
Finished products and work in progress	673	110	1,642	2,426
Materials and fuel	No. 2,004	No. 278	No. 1,539	No. 3,820
Number of establishments	36	4	9	49

(a) Excluding outworkers.

The values of gross output and of materials and fuel used are derived in the following way:-

	England	Wales	Scotland	Great Britain
Output of firms in this trade	£'000	£'000	£'000	£'000
Total value of sales (see Table 23)	7,282	2,280	9,340	18,901
Adjustment for changes in stocks and work in progress	- 54	- 1	+ 144	+ 88
	7,227	2,279	9,483	18,989
Less payment for transport by other firms	77	-	343	420
Gross output (production)	7,151	2,279	9,140	18,569
Materials and fuel used by firms in this trade				
Purchases (see Table 24)	2,770	616	4,430	7,816
Adjustment for changes in stocks	- 68	+ 4	- 255	- 319
Materials and fuel used	2,702	620	4,174	7,497

Summary

Small firms

TABLE 22

	England and Scotland (a)	Wales	Great Britain
Number of returns	6	-	6
Average number of persons employed (b)			
Males	24	-	24
Females	12	-	12
Total	36	-	36

(a) Owing to the risk of disclosure of information relating to individual firms, separate particulars for Scotland cannot be given.

(b) Including working proprietors.

Sales in the trade
Larger establishments

TABLE 23

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
	Th. cwts.	£'000	Th. cwts.	£'000	Th. cwts.	£'000
Principal products						
Propellant powders	..	(a)	..	(a)	15.9	836
High explosives, except blasting powder	..	(a)	..	(a)	759.2	5,175
Blasting powder	46.1	310	60.3	352	106.4	662
Fuses and blasting accessories						
Safety fuse	66.1	771	67.3	665	133.9	1,436
Fuse, instantaneous	9.3	96	2.7	124	12.0	221
Electric detonators and fuses	15.4	708	12.1	663	27.5	1,371
Other fuses, tubes and primers, etc., except shell fuses	1.3	64	0.4	25	1.7	89
Detonators, other than electric, including railway fog signals	..	(a)	..	(a)	7.2	472
Other accessories (including cables and parts of fuses and of blasting accessories)	..	(a)	..	(a)	..	40
Small arms ammunition					Million	
Loaded cartridges for military and sporting purposes	..	(a)	..	(a)	14.0	191
Other sporting ammunition, including shot but excluding empty cartridge cases	-	-	-	-	-	-
Other ammunition, loaded or filled	228.7	372	-	-	Th. cwts. 228.7	372
	..	20	-	-	..	20
Explosives, not elsewhere specified; and rockets (including line carrying rockets) and other pyrotechnic products	..	(a)	..	(a)	..	1,179
Waste products, other than scrap metals	..	4	-	-	..	4
Repair and maintenance work on ammunition (b)		(a)		(a)		1,252

TABLE 23 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
		£'000		£'000		£'000
Principal products (contd.)						
Work done for the trade or on commission (b)						
Filling of ammunition		1,022		-		1,022
Other work		1,766		207		1,973
Total principal products		9,270		7,715		16,985
Other output						
Chemical products	..	23	..	1,574	..	1,597
Other goods	..	258	..	50	..	308
Scrap metals	..	10	..	1	..	11
Total		9,561		9,340		18,901

(a) Owing to the risk of disclosure of information relating to individual firms, separate figures cannot be given.

(b) Amount charged.

Purchased materials and fuel

Larger establishments

TABLE 24

	England and Wales		Scotland		Great Britain	
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. cwts.	£'000	Th. cwts.	£'000	Th. cwts.	£'000
Materials						
Ammonium nitrate	131.2	155	13.1	15	144.3	170
	Th. lbs.		Th. lbs.		Th. lbs.	
Mercury	0.1	-	9.5	2	9.6	2
	Th. cwts.		Th. cwts.		Th. cwts.	
Metallic powders						
Aluminium	3.8	29	0.2	2	4.0	31
Other	0.2	2	-	-	0.2	2
Sodium nitrate	2.7	3	99.1	100	101.8	103
Potassium nitrate						
Refined	4.5	13	-	-	4.5	13
Unrefined	..	(a)	..	(a)	0.7	2
Packing materials	..	212	..	747	..	960
Alcohol	Th. bulk galls.		Th. bulk galls.		Th. bulk galls.	
Industrial methylated spirits	17.8	4	368.2	74	368.0	78
	Th. proof galls.		Th. proof galls.		Th. proof galls.	
Other	16.8	2	315.5	38	332.4	39
	Th. tons		Th. tons		Th. tons	
Ammonia liquor (in terms of 880 ammonia)	-	-	9.0	277	9.0	277
			Th. lbs.		Th. lbs.	
Cotton linters	-	-	3,915.0	224	3,915.0	224
	Th. cwts.		Th. cwts.		Th. cwts.	
Jute yarn	24.3	221	24.0	182	48.4	403
	Th. tons		Th. tons		Th. tons	
Nitric acid (in terms of 100 per cent. acid)	1.2	28	0.8	17	2.1	45
	Th. cwts.		Th. cwts.		Th. cwts.	
Potassium chlorate	1.3	7	0.1	1	1.4	8
Pyrites	-	-	247.3	37	247.3	37
Sodium bicarbonate	31.5	17	51.9	26	83.5	43
Sodium chloride	29.8	8	31.2	9	61.0	18
Sulphur	17.4	8	67.0	35	84.4	43
Sulphuric acid (in terms of 100 per cent. acid)	2.0	15	1.0	8	3.0	23
	Th. tons		Th. tons		Th. tons	

TABLE 24 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. cwts.	£'000	Th. cwts.	£'000	Th. cwts.	£'000
Materials (contd.)						
Brass, including alloys of copper, but excluding nickel alloys other than nickel silver	5.6	47	8.5	116	14.1	163
Metal cartridge cases (other than small arms ammunition), empty	..	(a)	..	(a)	..	35
High explosives	31.6	181	33.3	60	64.9	240
Propellant powders	3.7	22	-	-	3.7	22
	..	20	..	..	..	20
All other purchased materials	..	1,926	..	2,002	..	3,927
Fuel and electricity	Th. tons		Th. tons		Th. tons	
Coal	82.8	219	71.7	186	154.5	405
Coke	2.8	10	0.5	1	3.3	11
	Th. B.T.U. (kW. hrs.)		Th. B.T.U. (kW. hrs.)		Th. B.T.U. (kW. hrs.)	
Electricity purchased						
From public supply	11,890	55	27,660	91	39,550	146
From other sources	-	-	-	-	-	-
Electricity obtained from other works under the same ownership	-	-	-	-	-	-
Motor spirit (petrol) and deriv. fuel	Th. galls.		Th. galls.		Th. galls.	
Used for road vehicles	373	26	62	5	435	31
Used for other power purposes	57	3	11	-	68	4
Other oil fuel (including creosote/pitch mixtures)	111	4	3,885	132	3,996	136
	Th. therms		Th. therms		Th. therms	
Gas purchased and gas obtained from other works under the same ownership	91	4	94	5	185	9
	..	3	..	..	..	3
All other purchased fuel	..	1	-	-	..	1
Unclassified purchased materials, fuel and electricity	..	128	..	16	..	145
Total		3,386		4,430		7,816

(a) Owing to the risk of disclosure of information relating to individual firms, separate figures cannot be given.

Employment and remuneration

Larger establishments

TABLE 25

	England and Wales			Scotland			Great Britain		
	Average number of operatives	Administrative, technical and clerical employees (a)	Total	Average number of operatives	Administrative, technical and clerical employees (a)	Total	Average number of operatives	Administrative, technical and clerical employees (a)	Total
Males									
Under 18	101	6	107	186	17	203	287	23	310
All ages	9,851	1,350	11,201	4,732	1,226	5,958	14,583	2,576	17,159
Females									
Under 18	417	24	441	338	66	404	755	90	845
All ages	3,940	558	4,498	2,621	629	3,250	6,561	1,187	7,748
Total									
Under 18	518	30	548	524	83	607	1,042	113	1,155
All ages	13,791	1,908(b)	15,699 (b) (c)	7,353	1,855(b)	9,208 (b) (c)	21,144	3,763(b)	24,907 (b) (c)
Total remuneration	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
	3,724	896	4,620	2,159	1,061	3,221	5,884	1,957	7,841

(a) Number at September 25, 1948.

(b) There were, in addition, 4 working proprietors (3 males and 1 female) in Great Britain; 2 males in England and Wales, and 1 male and 1 female in Scotland.

(c) The employers' share of contributions to all National Insurance Schemes payable during the year in respect of these workers amounted to a total of £205,000; £138,000 for England and Wales, and £67,000 for Scotland.

In addition to the employees in the above table the firms in this trade employed outworkers whose numbers and remuneration are set out below.

	Average number of outworkers employed			Total amount paid to outworkers £'000
	Males	Females	Total	
England and Wales	4	305	309	18
Scotland	-	-	-	-
Great Britain	4	305	309	18

Monthly index of employment of operatives: Larger establishments

(average employment in 1948 = 100)

TABLE 26

Month	Monthly index (a)			Month	Monthly index (a)		
	England and Wales	Scotland	Great Britain		England and Wales	Scotland	Great Britain
1948				1948			
January	98.8	97.0	97.6	August	99.3	100.9	100.3
February	99.4	97.2	97.9	September	99.9	101.1	100.7
March	98.7	97.4	97.9	October	101.6	101.7	101.7
April	99.4	100.0	99.8	November	102.3	101.9	102.0
May	99.8	100.5	100.3	December	102.1	101.5	101.7
June	99.7	100.1	100.0	Percentage employment in this trade covered by the index			
July	99.0	100.7	100.1		23.4	89.7	46.5

(a) The index numbers are calculated from the number of operatives employed in one week in each month returned by larger establishments that made returns for the calendar year 1948.

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