

## THE REPORT

 on the
## CENSUS OF PRODUCTION FOR 1951

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).

LONDON: HER MAJESTY'S STATIONERY OFFICE
1955
PRICE Is Gd NET
42
$[H A 251]$
Summary Small firms
Estimated average employment: All firms
All firms
All firms
Analysis by size. 1951: Larger establishments in Great Britain
Analysis according to specialisation within the trade. ASS1: Larger
establi ishments
Analysis according to specialisat
establi ishments in Great Britain
1951: Larger
Total make of intermediate products: Larger establishments in Great Eritain
Sales of the principal products of the trade, including sales of these products
by establishments classified to other trades: Larger establi shments in Great
Sales of the principal products of the trade, incluaing sales of these prouccts
by establishments classified to other trades: Larger establi shments in Great
Britain
Total sales by small firms in Great britain
Total sales by small firms in Great Britain
Sales of principal products of the rade by est
trades
Sales of principal products of the trade by establishments classified to other
trades:
Sales in the trade of other than principal products: Larger establishments in
Great Britain
Production, exports and imports of certain principal products
Usage of certain specified purchased materials, 1951: Larger establishments in
$\begin{aligned} & \text { Usage of certain specified purchased materials. 1951: Larger establishments in } \\ & \text { Great Britain }\end{aligned} \quad 2 / \mathrm{H} / 6$
Employment in September: Larger establishments
Average employment: Larger establishments
Shift working, 1951: Larger establishments in Great Britair
Wages and salaries and employers'
the yational Insurance contributions paid during
Larger establishments ..... 2/4/9
Plant, machinery and vehicles - acquisitions and disposals, and capital
expenditure on nev building work: Larger establi shments ..... 2/H/9
Count:y tables, 1951 ..... $2 / \mathrm{H} / 10$
Summary: Larger establishments
Summary: Larger establishments ..... 2/H/10
Sales in the trade: Larger establishments ..... 2/H/10
Sales in the trade: Small firms
Stocks of products on hand for sale and work in
materials and fuel: Larger establi shments
2/H/11
$2 / \mathrm{H} / 11$
$2 / \mathrm{H} / 11$
Employment in Septemb Larger establishments2/H/11Average employment:, Larger establishmentsAverage employment: Small firms
Wages and salaries and emplovers'
the year:
Larger establishmentsPlant, machinery and vehicles - ocquisitions and disposals, and capital
expenditure on new building work: Larger establi shments$2 / \mathrm{H} / 11$
$2 / \mathrm{H} / 11$
Payments for transport services for finished goods sold and materials and fuel Payments for transport services for
purchased: Larger establi shments ..... $2 / \mathrm{H} / 12$

## 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
and shells.

Sixteen Government establishments are included for 1951, twelve for 1950, thirteen for Sixteen Government establishments are included for 1951, twelve for 1950, thirteen for
1949 and 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.

There were no larger establishments in Northern Ireland in the register for this trade

[^0]Larger establishments (a)


Analysis by standard region, 1951 Larger establishments in Great Britain
table

| Region | Estab-lish-ments | Gross output | Net output |  | Personsemployed | Hemuneration |  |  | $\|$Net output <br> per person <br> employed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | value | $\left\|\begin{array}{c} \text { Pe reen t. } \\ \text { ageo of } \\ \text { total } \end{array}\right\|$ |  | Operatives | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Other } \\ \text { employees } \\ \text { (a) } \end{array} \\ \hline \end{array}$ | Total |  |
| North Midland | No. | £ 0000 581 801 | $\varepsilon \cdot 000$ | 1.7 | ${ }^{\text {No. }}$. ${ }_{466}$ | £.000 | £. 000 | ع. 000 | ${ }_{5}^{\text {¢ }}$ |
| Eastem | 5 | 773 | 404 | 2.8 | 649 | 160 | 38 33 | 128 | 536 622 |
| London and South Eastern | 6 | 1.521 | 740 | 5.0 | 1.401 | 384 | 79 | 463 | 528 |
| Southern; and South Western | 5 | 2.090 | 744 | 5.1 | 1.645 | 422 | 121 | 543 | 452 |
| North Western | 7 | 2.835 | 1.734 | 11.8 | 4.274 | 1.286 | 288 | 1.574 | 406 |
| Northern: East and Midland: Wales: and Scotland | 32 | 24.226 | 10.837 | 73.7 | 22.084 | 6.448 | 2.072 | 8.520 | 491 |
| Great Britain | 59 | 32.025 | 14.709 | 100.0 | 30.519 | 8.790 | 2.631 | 11.421 | 482 |

TABLE 6 - Analysis according to specialisation within the trade, 1951 Larger establishments in Great Britain

No specialisation with in this trade was distinguished.

TABLE 7 - Total make of intermediate products: Larger establishments in Great Britain
This table is not applicable to the trade.

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

Larger establishments in Great Britain

| TABLE 8 |
| :--- |

(a) Excluding scrap metal, which is included in the 1951 figure
(b) Amount charged.

TABLE 9-Sales of principal products of the trade by establishments classified to other trades: Larger establishments in Great Britain


TABLE 10 - Sales in the trade of other than principal products Larger establishments in Great Britain
 Production, exports and imports of certain principal products (a)
table 11

|  | Production (b) (c) | Exports (d) | Retained imports $(e)$ |
| :---: | :---: | :---: | :---: |
|  | £. 000 | \&'000 | $\varepsilon^{\prime} 000$ |
| Live small arms ammunition, including military and sporting ammunition |  |  |  |
| Loaded cartridges $\quad\left\{\begin{array}{l}1951 \\ 1948 \\ 195\end{array}\right.$ | 3.673 | 1.243 | 27 (f) |
| Loaded cartridges $\quad\left\{\begin{array}{l}1998 \\ 1937\end{array}\right.$ | ${ }_{1}^{1.861}$ | + ${ }^{170}$ | ${ }_{(98}$ |
| Other (including shot) $\left\{\begin{array}{l}1951 \\ 1948 \\ \hline 98\end{array}\right.$ | 281 37 | 60 44 | 6 |
| Other (incluaing shot) $\left\{\begin{array}{l}1993 \\ 1937\end{array}\right.$ | ${ }_{77}$ | ${ }_{34}^{44}$ | 3 |
| Fuses and blasting accessories $\quad\left\{\begin{array}{l}1951 \\ 1948 \\ 1937\end{array}\right.$ | 6.364(h) | 3.670 $\begin{aligned} & \text { 2.048 }\end{aligned}$ | 194 |
|  | ${ }^{4.647}$ (h) | ${ }^{2} 2.048$ | ${ }_{4}$ |
|  | Th.ewts. |  | Th.cwts. |
| Propellent pouders and high explosives | ${ }_{882.6}$ | 306.2 | 0.1 |
|  | 722.5 | 190.9 | 21.4 |

(a) Figures of production (or sales) refer only to larger establishments. All recorded exports from and (b) Comparable. in 19 and 1948 , and production for sale (excluding production by Government establishments) in 1937 . (c) Including pro,
(d) Valued f.o.b.
(e) valued $c, i, f$.

(g) Re-exports in in exeess of impore cases.
(h) Except shell fuses.

Usage of certain speci fièd purchased materials, 1951
Larger establishments in Great Britain


| Employment in September |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TABLE 13 | Larger establishments (a) |  |  |  |  |  |
|  | Great Britain |  |  |  |  |  |
|  | 1951 (b) | 1950 (b) | 1949 (h) | 1948(c) | 1937(c) (d) | 1935 (c) |
| Males Under 18 All ages | ${ }_{17}{ }^{260}$ | $\begin{array}{r} 303 \\ 13.735 \end{array}$ | $\begin{array}{r} 262 \\ 13.720 \end{array}$ |  |  | 307 7.103 |
| Under 18 <br> All ages | $\begin{array}{r} 917 \\ 9.047 \end{array}$ | $\begin{array}{r} 826 \\ 7.453 \\ \hline \end{array}$ | $\begin{array}{r} 680 \\ 6.653 \end{array}$ | $\begin{array}{r} 755 \\ 6.561 \\ \hline \end{array}$ | $\begin{array}{r} 917 \\ 4.958 \end{array}$ | $\begin{array}{r} 756 \\ 3.922 \end{array}$ |
| Total Under 18 All ages | 1.177 26.217 | 1.129 21.188 | $\begin{array}{r}942 \\ \hline 20.373 \\ \hline\end{array}$ | 1.042 21.144 | $1: 273$ 11.169 | 11.063 |
| (ii) Administrative, technical and clerical employees (e) Numbe |  |  |  |  |  |  |
|  | Great Britain |  |  |  |  |  |
|  | 1951 | 1950 | 1949 | 1948 | 1937 | 1935 |
| Males <br> Under 18 <br> All ages | 3.149 | 2.561 | 2.667 | 2.576 | 1.064 | 1.132 |
| Females <br> Under 18 <br> All ages |  |  |  |  | 56 503 | 42 471 |
| Total Under 18 All ages | ${ }_{4.484(f)}^{178}$ | ${ }_{3.687(f)}^{128}$ | ${ }_{3.864(f)}^{135}$ | ${ }_{3.763(f)}$ | 104 1.567 | $\begin{array}{r}\text { ¢ } 67 \\ \hline\end{array}$ |
| (iii) Total employees |  |  |  |  |  | Number |
|  | Great Britain |  |  |  |  |  |
|  | 1951 | 1950 | 1949 | 1948 | 1937 | 1935 |
| $\begin{aligned} & \text { Males } \\ & \text { Under } 18 \\ & \text { All ages } \end{aligned}$ | - $\begin{array}{r}287 \\ 20.319\end{array}$ | 16.296 | 16.387 ${ }^{282}$ | 17. $\begin{array}{r}310\end{array}$ | 7.275 | 8.235 |
| Unde <br> All ages <br> All ages | $\begin{gathered} 1.068 \\ 10.382 \end{gathered}$ | $\begin{array}{r} 942 \\ 8.579 \end{array}$ | $\begin{array}{r} 795 \\ 7.850 \\ \hline \end{array}$ | $\begin{array}{r} 845 \\ 7.748 \\ \hline \end{array}$ | $\begin{array}{r} 973 \\ 5.461 \\ \hline \end{array}$ | $\begin{array}{r} 798 \\ 4.393 \\ \hline \end{array}$ |
| Total <br> Under 18 <br> All ages | ${ }^{10.355}$ | ${ }_{24.875(f)}^{1.257}$ | ${ }_{24.237(\mathrm{f})}^{1.077}$ | 24.1507(f) | 1.377 12.736 | 1.130 12.628 |

(a) Excluded employees. The following persons were employed at the larger estalishmen ts in this trade in
1951 but are not included in the above tables or in any other Census of Production report (e.g.:
employees engaged in merchan ting):-

$$
\begin{aligned}
& \text { (b) In week ended September 22, 1951, September 30, 1950, and September } 24,1949 . \\
& \text { (c) Average for the year. }
\end{aligned}
$$

$$
\begin{aligned}
& \text { (f) 1937. and October 12. 1935. } \\
& \text { working propite tor s. In adition working proprietors. show in Table } 13 \text { (iv) below. rere engaged in this } \\
& \text { trade in larger establishments. The } 1937 \text { and } 1935 \text { figures include working proprietors. }
\end{aligned}
$$

| (iv) | Working proprietors |  |  | Number |
| :---: | :---: | :---: | :---: | :---: |
|  | Great Britain |  |  |  |
|  | 1951 | 1950 | 1949 | 1948 |
| Males Females | ${ }_{1}^{2}$ | ${ }_{1}^{2}$ | 1 | ${ }_{1}^{3}$ |
| Total | 3 | 3 | 2 | 4 |

$$
\begin{aligned}
& \begin{array}{l}
\text { (c) Average for the year. } \\
\text { (d) Excluding Govem ent establishen ts. } \\
\text { (e) In week ended September 22. } 1951 \text {. Se }
\end{array}
\end{aligned}
$$

Average employment
Larger establishments (a)

|  | Great Britain |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1951 | 1950 | 1949 | 1948 | 1937 (b) | 1935 |
| Operatives <br> Administrative, technical and <br> clerical employees <br> Total | 26.068 | 21.112 | 20, 533 | 21.144 | 11. 169 | 11.025 |
|  | 4.448 | 3.697 | 3.783 | 3.763(c) | 1. 567 (c) | 1.603(c) |
|  | 30.516 | 24.809 | 24.316 | 24,907 | 12,736 | 12.628 |
| (a) For employment in small firms (employing on the average ten or fewer persons) that made satisfactory returns. see Table 2. <br> (b) Excluding Govermment establishments. <br> (c) In week ended September 25, 1948, October 16, 1937, and October 12, 1935. The 1937 and 1935 figures include working proprietors. <br> Outworkers. In addition to the employees shown above the firms in this trade employed outworkers whose numbers are shown below. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 1951 | 1950 | 1949 | 1948 | 1937 | 1935 |
| $\xrightarrow[\substack{\text { Males } \\ \text { Females }}]{ }$ | $58{ }^{3}$ | $48{ }^{3}$ | $45{ }^{2}$ | $30{ }^{4}$ | : | .. |
|  | 590 | 485 | 453 | 309 | . | $\cdots$ |

Shift working, 1951 (a)
Larger establishments in Great Britain

| TABLE 15 |
| :--- |

(a) Shift working during week ended September 22, ${ }^{1951 \text {. }}$. ${ }^{\text {(b) The }}$ The number and percentage of returns showing shift working and of operatives on shift-work were as follows:-

|  | Returns |  | Operatives |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total in trade | $\underset{\text { shift-work }}{\substack{\text { Showing } \\ \text { sher }}}$ | $\begin{aligned} & \text { Total } \\ & \text { in trade } \end{aligned}$ | $\begin{gathered} \text { Total on on } \\ \text { returns } \\ \text { showng } \\ \text { shiftework } \end{gathered}$ | Number employed on shi ft-work |
| Number <br> Percentage of total in trade Percentage of total on retums showing shift-work | $\begin{array}{r} 53 \\ 100.0 \end{array}$ | $\begin{array}{r} 16 \\ 30.2 \end{array}$ | $\begin{array}{r} 26.217 \\ 100.0 \end{array}$ | $\begin{array}{r} 16.597 \\ 63.3 \\ 100.0 \end{array}$ | $\begin{aligned} & 5.252 \\ & 20.0 \\ & 31.6 \end{aligned}$ |

Wages and salaries and employers' National Insurance contributions paid during the year

Larger establishments
TABLE 16

|  |  | Great Britain |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1951 | 1950 | 1 |
| Wages and salaries (a) of |  |  |  |  |
| Operatives <br> Administrative, technical and clerical employees |  | 8.790 | 6.242 | 5. |
|  |  | 2.631 | 2.020 | 2. |
| Employers' contributions to all National Insurance Schemes |  | 11.421 | 8.252 | 7. |
|  |  | 301 | 236 |  |
| (a) Including bonus amd comm | ts. | xcludi | ts to |  |
|  | Great Britain |  |  |  |
|  | 1951 | 1950 | 1949 | 1948 |
|  | 34 | 31 | 23 | 18 |

Plant, machinery and vehicles - acquisitions and disposals
and capital expenditure on new building work

| TABLE 17 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Great Britain |  |  |
|  | 1951 | 1949 | 1948 |
| Plant. machinery and vehicles Acquisitions |  |  |  |
| $\underset{\text { Plant and machinery }}{\text { New }}$ |  |  |  |
| (ehemend-hand | ${ }_{149}^{49}$ | 288 50 | $\begin{aligned} & 354 \\ & 118 \end{aligned}$ |
| Vehicles Newes Second-hand |  |  |  |
| Second-hand | ${ }_{33}^{82}$ | 13 | ${ }_{15}^{51}$ |
| Total acquisitions | 756 | 445 | 538 |
| Disposals <br> Plant and machinery <br> Vehicles | ${ }_{29}^{157}$ | ${ }_{8}^{29}$ | ${ }_{8}^{97}$ |
| Total disposals | 186 | 37 | 105 |
| New building work <br> Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges) | 415 | 75 | 94 |

Note - Owing to the risk of disclosure of information relating to individual fi rms, separate
particulars for larger establi shments in wales and Scotland cannot be given.
TABLE 18 - Surmary: Larger establishments

$$
\begin{aligned}
& \text { See Table } 1 . \\
& \text { Summary }
\end{aligned}
$$

Small firms (a)

| TABLE 19 | England | Wales | Scotland | Great <br> Britain |
| :--- | :---: | :---: | :---: | :---: |
| Number of returns <br> Average number of persons employed (b) <br> Males <br> Females <br> $\quad$ Total | 8 | - | - | 8 |
|  | 22 | - | - | 22 |

(a) Small firms (employing on the average ten or fewer persons) that made satis factory retums
(b) Including working proprietors.

> Sales in the trade
> Larger establi ishments

|  | Great Britain |  |
| :---: | :---: | :---: |
|  | Quantity | value |
| Principal products | $\begin{aligned} & \mathrm{Th} . \text { coils }^{\text {of }} \\ & \text { of } 24 \mathrm{ft} . \end{aligned}$ | $\varepsilon^{\bullet} 000$ |
| Fuses and blasting accessories |  |  |
| Safety fuse | Th. ${ }^{57.052}$. ${ }^{\text {cres }}$. | 2.622 |
| Electric detonators and fuses | 39.3 | 2.106 |
| Other accessories (including cables and parts of fuses and of blasting accessories) | 29.0 | 921 |
| High explosives |  |  |
| Blasting powders | 82.2 | 582 |
| Other sorts of high explosives | 1.090 .5 |  |
| Live small arms ammunition, including military and including railvay fog signals: other fuses, tubes <br>  | .. | 5.747 |
| Ammurition, not elsewhere specified |  | 2.868 |
| Waste products | .. | 111 |
| Repair and maintenance work on ammunition (a) |  | 2.667 |
| Work done for the trade or on commission (a) |  | 1.252 |
| Total principal products |  | 27.074 |
| Other output |  | 3.700 |
| Total |  | 30.774 |

Amount charged

Payments for transport services for finished goods
sold and materials and fuel purchased
Larger establiishments

| TABLE 26 | ¢ 000 |
| :---: | :---: |
|  | Great Britain |
| Amounts paid to other fims and undertakings | 428 |
| Amount paid or credited to firms ${ }^{\circ}$ own separate transport organisations | 261 |
| Total | 689 |

## Crown Copyright Reserved

PRINTED AND PUBLISHED BY HER MAJESTY'S STATIONERY OFPICE
To be purchased from
York House, Kingsway, LONDON, w.c. 2 Oxford Street, LONDON, w. 1
P.O. Box 569 , LONDON, S.E. 1

13a Castle Street, EDINBURGH, $2 \quad 109$ St. Mary Street, CARDIFF
39 King Street, MANCHESTER, 2 Tower Lane, Bristol, 1
2 Edmund Street, BIRMINGHAM, $3 \quad 80$ Chichester Street, BELFAST
or from any Bookseller
1955
Price is $6 d$ net
PRINTED IN GREAT BRITAIN


[^0]:    IMPORTANT NOTES and definitions appear on the inside of the back cover of this Report. In interpreting the data in the following tables, it is essential to bear these in mind

