

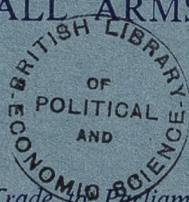
BOARD OF TRADE

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*The Report on the
Census of Production
for 1954*

Volume 4: Industry E

SMALL ARMS



*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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1958

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The Report on the Census of Production for 1954

VOLUME 4 INDUSTRY E

SMALL ARMS

THIS REPORT on the Small Arms Industry relates to establishments, including Government establishments, engaged wholly or mainly in the manufacture of small arms and parts thereof.

This industry is included in minimum list heading 57 in the Standard Industrial Classification.

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

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IMPORTANT NOTES and definitions appear on the next page. In interpreting the data in the tables, it is essential to bear these in mind.

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The following notes describe terms in general use in the tables of the report. More detailed explanations of the terms used and a description of the scope and method of taking the census are given in the separate booklet entitled 'The Report on the Census of Production for 1954 - Introductory Notes' (price 1s. 6d. net).

Industrial Classification: Establishments are classified to industries according to the nature of their output and, as far as possible, in conformity with the Standard Industrial Classification. Certain products are identified as the principal products of individual industries, the principal products for a given industry being of a similar nature or commonly associated in production. The principle of classification normally followed is that an establishment is classified to an industry if its output of the principal products of that industry accounted for a greater proportion of the value of its output than did its output of the principal products of any other industry.

Specialist producers normally comprise those establishments 50 per cent. or more of whose total output by value is accounted for by the characteristic products of the specialist group.

Intermediate products: For some industries figures are given showing the total quantities made during the year of intermediate products, i.e., products which may be further processed in the establishments in which they are produced.

Larger establishments: The information given in the report relates mainly to 'larger establishments', i.e., establishments of firms employing on the average more than 10 persons. In most cases an establishment comprises the whole of the premises under the same ownership or management at a particular address (e.g., a mine or factory). Offices, warehouses, laboratories and other ancillary places of business situated apart from the producing works are not regarded as separate establishments and are included in the return for the works.

Small firms are those employing on the average 10 or fewer persons.

The estimates for the industry as a whole given in Table 1 are normally obtained by increasing the other items shown in the same proportion as total employment.

Gross output (production) is the total value of goods made and other work done during the year; it is obtained by adjusting the value of sales and work done during the year for changes in the value of stocks of products on hand for sale and work in progress.

Net output is the amount left after deducting from the value of gross output the aggregate of the cost of materials and fuel used, the amount paid for work given out, and, for 1951 and 1954, any transport payments made. This represents the value added to materials by the process of production, and constitutes the fund from which wages, salaries, rents, rates and taxes, advertising and other selling expenses and all other similar charges have to be met, as well as depreciation and profits.

Sales means sales during the year of goods made in the establishment covered by the return or made on commission for it, whether produced in the year or not. The value of sales is the net selling value, i.e., the amount charged to customers, whether on an ex-works or delivered basis, and net of any trade discounts, agents' commissions, allowances for returnable cases, purchase tax, etc. For goods charged on a delivered basis to customers overseas, firms were required to give the f.o.b. value.

Materials and fuel: The total cost of materials and fuel purchased includes all purchases during the year of materials for use in production, and of fuel (includ-

ing oil, gas and electricity) for all purposes: packing materials, including the full cost of returnable cases when first purchased; workshop and office materials; water charges; materials for repairs to buildings, plant and vehicles when carried out by firms' own work-people included in their returns; consumable tools; and parts for machinery purchased as replacements. Purchases of goods for merchanting are excluded. The cost of materials and fuel used, given in Table 2, is obtained by adjusting purchases for changes during the year in the value of stocks.

Stocks: Firms were required to give stocks of materials and fuel, products on hand for sale, and work in progress, at income tax values.

Customs and Excise Duty paid on materials purchased is normally included in the cost of materials. Finished goods are similarly valued as they were sold, duty-paid or duty-free. The net amount of any duty paid is deducted in arriving at net output.

Employment: Total employment includes working proprietors, administrative, technical and clerical employees, and operatives, but excludes outworkers, canteen employees and persons engaged in merchanting or any other activity not covered by a firm's return, who are shown separately as excluded employees. Employees are persons on the pay-roll (i.e., persons whose National Insurance cards were held by employers), whether employed full-time or part-time.

Working proprietors are proprietors of businesses other than limited companies, together with members of their families who worked in the business without receiving fixed wages or salaries. Any persons working less than half the normal hours are excluded. For Northern Ireland directors of limited companies (other than those paid by fee only) are also included.

Administrative, technical and clerical employees include directors, other than those paid by fee only (except in Northern Ireland); managers, superintendents and works foremen; research, experimental, development, technical and design employees (other than operatives); draughtsmen and tracers; travellers; and office (including works office) employees.

Operatives include all other classes of employees, i.e., broadly speaking, all manual workers.

Outworkers are persons employed by the firm who work on materials supplied by the firm in their own homes.

Wages and salaries include all overtime payments, bonuses and commissions without any deductions for income tax, insurances, contributory pensions etc. They exclude payments to working proprietors.

Capital expenditure includes expenditure on new building work, and on plant, machinery and vehicles, charged to capital account during the year, including any transport and installation costs involved. It includes expenditure in respect of establishments in Great Britain which had not begun production before the end of the year (which has not previously been included in the Census of Production reports for individual industries).

Symbols used:

.. for not available

- for nil or negligible (less than half the final digit shown).

Where figures are rounded, e.g., given to the nearest £ thousand, there may be apparent slight discrepancies between the sums of constituent items and the totals shown. In some cases, figures have been combined with others of a similar nature where publication of separate details might disclose information relating to an individual undertaking.

TABLE 1 Industry summary: Estimates for the industry as a whole

	United Kingdom			Scotland	Wales
	1948	1951	1954	1954 (a)	1954 (a)
	£ million	£ million	£ million	£ million	£ million
Gross output (production)	4.1	4.3	5.1	..	..
Net output	2.9	3.1	3.7	..	..
Total stocks and work in progress					
At beginning of year	3.0	2.7	2.6	..	..
Change during year	+ 0.3	+ 0.4	+ 0.1	..	..
Capital expenditure less disposals (b)	-	0.6	0.5	..	..
Wages and salaries	2.2	2.2	2.6	..	..
Total employment (including working proprietors)	Thousands 6.4	Thousands 5.5	Thousands 5.4	Thousands ..	Thousands ..

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

(b) Capital expenditure on new building work, plant, machinery and vehicles (including (except in 1948) that incurred in Great Britain for establishments not yet in production), less amounts received for plant, machinery and vehicles disposed of.

Summary of returns received

TABLE 2

	Unit	Great Britain	United Kingdom	
		1948	1951	1954
FIRMS EMPLOYING ON AVERAGE MORE THAN 10 PERSONS				
Number of establishments	No.	21	20	21
Total value of sales and work done	£'000	3,564	3,627	4,602
Products on hand for sale		1,220	1,009	1,277
and work in progress		+ 319	+ 383	+ 232
Gross output (production) (a)		3,880	4,010	4,833
Purchases of materials and fuel		1,084	1,017	1,113
Stocks of materials and fuel		1,553	1,494	1,189
Cost of materials and fuel used		- 47	- 32	- 112
Payment for work done on materials given out		1,131	1,048	1,224
Payment for transport (b)		22	17	22
		3	12	17
Net output		2,727	2,933	3,570
Average number of employees	No.	5,149	4,392	4,406
Total employment (d)		802(c)	799	773
Net output per person employed (d)	£	5,953	5,194	5,180
		458	565	689
Wages and salaries	£'000	1,690	1,672	2,048
Capital expenditure		351	429	473
New building work (e)		-	16	68
Plant and machinery		97	536	505
Vehicles		60	8	87
		10	12	14
		2	2	2
FIRMS EMPLOYING ON AVERAGE 10 OR FEWER PERSONS				
Number of returns	No.	89	61(f)	50
Total employment, including working proprietors		408	301(f)	234

(a) For the year 1948 gross output excludes payments for transport services outwards on finished goods sold. For subsequent years gross output includes payments to other firms and undertakings and to firms' own separate transport organisations for transport services.

(b) Payments to other firms and undertakings and to firms' own separate transport organisations. For the year 1948 payments cover only transport outwards of finished goods sold. For subsequent years they cover payments for transport of both finished goods sold and materials and fuel purchased.

(c) Number in week ended September 25, 1948.

(d) Excluding outworkers and including working proprietors.

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

(f) Excluding Northern Ireland. No information about small firms was collected in Northern Ireland for 1951.

SMALL ARMS

Analysis by size, 1954

Larger establishments in the United Kingdom

TABLE 3

Average number employed (a)	Estab-lish-ments	Gross output	Net output	Employees		Wages and salaries		Capital expenditure (b)	Net output per person employed (a)
				Operatives	Others	Operatives	Others		
	Number	£'000	£'000	Number	Number	£'000	£'000	£'000	£
11 - 24(c)	8	92	69	77	14	34	9	5	752
25 - 49	3	131	106	119	24	45	17	4	741
50 - 99	4	309	211	229	33	110	26	8	805
100 - 199	-	-	-	-	-	-	-	-	-
200 and over	6	4,301	3,184	3,981	702	1,860	422	570	680
Total	21	4,833	3,570	4,406	773	2,048	473	587	689

(a) Excluding outworkers and including working proprietors.

(b) Capital expenditure on new building work and on acquisition of plant, machinery and vehicles, excluding expenditure for establishments not yet in production.

(c) Including four establishments with fewer than 11 persons employed, particulars of which were included with those for larger establishments on a single return.

TABLE 4 - Analysis according to specialisation within the industry, 1954

Larger establishments in the United Kingdom

No specialisation within this industry was distinguished.

Sales of the principal products of the industry, including sales of these products by establishments classified to other industries

Larger establishments in the United Kingdom

TABLE 5

	1951		1954		Entries
	Quantity	Value	Quantity	Value	
	Number	£'000	Number	£'000	Number
Sporting guns, rifles and carbines	74,573	706	28,974	361	9
	..	39	..	260	
Air guns, air rifles and air pistols	104,151	317	137,659	295	5
Other small arms, including military and other rifles and carbines; revolvers and pistols; mortars, automatic machine and quick-firing guns (up to 20 m.m.) and swords, cutlasses, bayonets, etc.	..	1,265	..	1,968	18
Parts and accessories of small arms (except ammunition) (a)	..	839	..	1,632	33
	Thousands		Thousands		
Empty cartridge cases for small arms ammunition	27,958	190	16,669	462	..
	..	48	..	593	
Waste products other than scrap metals	..	1	..	10	5
Research and development work (a)(b)	..	-	..	109	..
Repair and jobbing work (b)(c)	..	619	..	690	6
Work done for the trade or on commission (b)	..	55	..	12	5
Total		4,079		6,391	..
Sales in other industries (see Table 6)		1,129		2,596	..
Principal products of this industry sold by establishments in the industry		2,950		3,796	16

(a) So far as recorded separately.

(b) Amount charged.

(c) Exclusive of the value of goods used by firms and recorded as their output.

SMALL ARMS

Sales of principal products of the industry by establishments classified to other industries

Larger establishments in the United Kingdom

TABLE 6

	1954			Principal industries in which produced (a)
	Quantity	Value	Entries	
		£'000	Number	
Sporting guns, rifles and carbines; military rifles and carbines; air guns, air rifles and air pistols; mortars, automatic machine and quick-firing guns (up to 20 m.m.); swords, cutlasses, bayonets and arms of other sorts (not firearms)	..	588	13	3I, 3L, 4H, 4I
Revolvers, pistols (except air pistols) and other guns, rifles and carbines	..	90	..	2H, 4I
Parts of small arms	..	863	25	3I, 4F, 4H, 4I
	Thousands			
Empty cartridge cases for small arms ammunition	16,669	462	..	2H, 3G, 4C, 4I
	..	593	..	
Total		2,596	..	

(a) The volume number and industry references given are to the industries shown in the list at the back of this report.

Sales in the industry of other than principal products

Larger establishments in the United Kingdom

TABLE 7

	1954	
	Quantity	Value
	Th. tons	£'000
Engineering products	..	416
Scrap metals sold	2	30
Other goods	..	360
Total		806

TABLE 8 - Total make of intermediate products

Larger establishments in the United Kingdom

This table is not applicable to the industry.

SMALL ARMS
Purchases of materials and fuel, 1954
Larger establishments in the United Kingdom

TABLE 9

	Quantity	Cost
	Th. tons	£'000
Materials		
Iron and steel (alloy and non-alloy)		
Drop forgings	0.3	41
Wrought tubes and fittings for wrought tubes	..	102
Angles, shapes, sections, bars, rods (including wire rods) and girders, beams and joists (not fabricated)	..	2
Forgings, except drop-forgings, in the rough or machined	1.2	83
Other, except finished parts	..	13
Light metals and non-ferrous metals in all forms, except finished parts	..	9
Rubber in all forms, including finished parts	0.5	37
Paint, enamel and varnish	..	13
Lubricating oils and greases (including cutting oil and emulsions)	Th. gal. 51.7	20
Timber (excluding timber for making into packing cases, etc., or for repairing returnable cases)	..	1
Hardwood and softwood	Th. cu. ft. 54.6	3
Plywood, including battenboard, blackboard and laminboard	Th. sq. ft. 23.0	78
Nuts, bolts, studs, screws, rivets, washers, nails, tacks, etc.	..	1
Purchased components	..	11
Replacement parts for own plant, machinery and vehicles	..	199
Consumable tools, including gauges, etc. bought as replacement	..	38
Packaging materials	..	83
Paper and paperboard, and cardboard boxes, fibreboard packing cases, etc.	..	13
Other packaging materials	..	11
All other purchased materials	..	178
Fuel and electricity	Th. tons	
Coal	12.7	52
Coke	0.9	5
Liquid fuels (including creosote/pitch mixtures)	Th. gal.	
For use in internal combustion engines	142.8	14
For burning in furnaces, boilers, kilns, etc.	..	..
Gas purchased	Th. therms	
From Gas Boards	416.6	26
From other sources, including other departments of the same firms	..	8
Electricity purchased (a)	Th. kWh.	
From Electricity Boards	10,682	58
From other sources, including other departments of the same firms	-	-
All other purchased fuel	-	1
Total cost		1,113

(a) Owing to the risk of disclosure of information relating to individual firms the total quantity of electricity generated in firms' own establishments cannot be given.

SMALL ARMS
Average number of employees and wages, salaries and superannuation payments (a)
Larger establishments in the United Kingdom

TABLE 10

	1951	1954
	Number	Number
Average number of employees		
Operatives	4,392	4,406
Administrative, technical and clerical employees	799	773
Total	5,191	5,179
Wages and salaries paid to	£'000	£'000
Operatives	1,672	2,048
Administrative, technical and clerical employees	429	473
Total	2,101	2,521
Wages and salaries per head	£	£
Operatives	381	465
Administrative, technical and clerical employees	537	612
Superannuation and other pension funds for employees and dependents		£'000
Employers' contributions	..	21
Employees covered	..	Number 545
Pension, etc. payments to former employees and dependents	..	£'000 2

(a) The following persons, not included above, were also employed by larger establishments in this industry ('other workers' includes for example, employees engaged in merchanting). Payments to outworkers are also shown.

	1951	1954
	Number	Number
Canteen workers		
Male	2	1
Female	90	86
Total	92	87
Other workers		
Male	56	43
Female	9	10
Total	65	53
Total excluded employees	157	140
Outworkers	46	36
Payments to outworkers	£'000 8	£'000 8

Employment in a specified week (a)
Larger establishments in the United Kingdom

TABLE 11

	1951			1954		
	Males	Females	Total	Males	Females	Total
	Number					
Working proprietors	3	-	3	1	-	1
Operatives	3,219	1,179	4,398	3,145	1,259	4,404
Administrative, technical and clerical employees	544	264	808	555	236	791
Total employees	3,763	1,443	5,206	3,700	1,495	5,195

(a) Week ended September 22, 1951, or October 30, 1954.

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