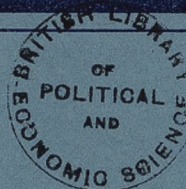


BOARD OF TRADE

S  
42  
[HA 251]

*The Report on the  
Census of Production  
for 1954*



Volume 11: Industry J

INCANDESCENT MANTLES

*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

1956

PRICE 1s. 6d. NET



# The Report on the Census of Production for 1954

VOLUME 11, INDUSTRY J

## INCANDESCENT MANTLES

THIS REPORT relates to establishments engaged wholly or mainly in the manufacture of incandescent mantles.

This industry is one of the miscellaneous manufacturing industries included in minimum list heading 199(3) in the Standard Industrial Classification.

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

### LIST OF TABLES

Table No.	Title	Page	Table No.	Title	Page
1	Industry summary: estimates for the industry as a whole	11/J/3	6	Sales of principal products of the industry by establishments classified to other industries	11/J/4
2	Summary of returns received	11/J/3	7	Sales in the industry of other than principal products	11/J/5
3	Analysis by size, 1954	11/J/4	8	Total make of intermediate products	Does not apply
4	Analysis according to specialisation within the industry, 1954	Does not apply	9	Purchases of materials and fuel, 1954	11/J/5
5	Sales of principal products of the industry, including sales of these products by establishments classified to other industries	11/J/4	10	Average number of employees and wages, salaries and superannuation payments	11/J/6
			11	Employment in a specified week	11/J/6

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

S  
42  
[HA 251]



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 if 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.

Industry summary  
Estimates for the industry as a whole

TABLE 1

	United Kingdom			Scotland 1954	Wales 1954
	1948	1951	1954		
Gross output (production)	£ million	£ million	£ million	£ million	£ million
Net output	.60	.73	.67	-	-
Total stocks and work in progress	.35	.44	.40	-	-
At beginning of year	.12	.15	.14	-	-
Change during year	+ .04	+ .09	+ .01	-	-
Capital expenditure less disposals (a)	-	.01	.01	-	-
Wages and salaries	.17	.18	.17	-	-
Total employment (including working proprietors)	Thousands	Thousands	Thousands	Thousands	Thousands
	.9	.8	.6	-	-

(a) 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 1948	United Kingdom	
			1951	1954
<b>FIRMS EMPLOYING ON AVERAGE MORE THAN 10 PERSONS</b>				
Number of establishments	No.	9	6	6
Total value of sales and work done	£'000	592	672	640
Products on hand for sale	{ at beginning of year and work in progress	43	41	48
Change during year		+ 3	+ 37	+ 15
Gross output (production) (a)	"	595	709	655
Purchases of materials and fuel	"	280	329	253
Stocks of materials and fuel	{ at beginning of year change during year	78	106	89
Cost of materials and fuel used		+ 38	+ 49	- 2
Payment for work done on materials given out	"	242	281	255
Payment for transport (b)	"	1	1	2
Net output	"	-	2	3
Average number of employees	{ operatives others	351	424	396
Total employment (d)		No.	870	724
Net output per person employed (d)	"	44 (c)	45	43
Wages and salaries	{ of operatives of others	917	769	604
Capital expenditure		£	383	551
New building work (e)	"	142	146	137
Plant and machinery	{ acquisitions (e) disposals	25	26	31
Vehicles		"	-	6
	{ acquisitions (e) disposals	4	4	4
		"	-	-
	"	-	-	2
	"	-	-	1
<b>FIRMS EMPLOYING ON AVERAGE 10 OR FEWER PERSONS</b>				
Number of returns	No.	-	3	1
Total employment, including working proprietors	"	-	27	9

(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.



TABLE 3 - Analysis by size, 1954: Larger establishments in the United Kingdom

Owing to the risk of disclosure of information relating to individual firms this table cannot be given.

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		
	Quantity	Value	Quantity	Value	Entries
Incandescent mantles, for all purposes, whether collodionised or not	Th.gross	£'000	Th.gross	£'000	Number
	255	670	247	638	5
Total		670		638	5
Sales in other industries (see Table 6)		-		-	-
Principal products of this industry sold by establishments in the industry		670		638	5

TABLE 6 - Sales of principal products of the industry by establishments classified to other industries: Larger establishments in the United Kingdom

No output of principal products of this industry by establishments classified to other industries was recorded for 1954.

TABLE 7 - Sales in the industry of other than principal products

Larger establishments in the United Kingdom

The total value of the sales in the industry of other than principal products was £2,000 in 1954.

TABLE 8 - Total make of intermediate products: Larger establishments in the United Kingdom

This table is not applicable to the industry.

Purchases of materials and fuel, 1954

Larger establishments in the United Kingdom

TABLE 9

	Quantity	Cost
	Th.gross	£'000
Materials		
Mantle Rings	77	25
Packing Materials	..	46
All other purchased materials	..	168
Fuel and electricity	Th.tons	
Coal	-	-
Coke	0.9	5
Liquid fuels (including creosote/pitch mixtures)	Th.gal.	
Gas purchased	Th.therms	
From Gas Boards	97	6
From other sources, including other departments of the same firms	-	-
Electricity purchased	Th.kWh.	
From Electricity Boards	297	2
From other sources, including other departments of the firms	-	-
All other purchased fuel		-
Total cost		253



## INCANDESCENT MANTLES

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	724	561
Administrative, technical and clerical employees	45	43
Total	769	604
	£'000	£'000
Wages and salaries paid to		
Operatives	146	137
Administrative, technical and clerical employees	26	31
Total	172	168
	£	£
Wages and salaries per head		
Operatives	202	245
Administrative, technical and clerical employees	578	709
		£'000
Superannuation and other pension funds for employees and dependents		
Employers' contributions	..	2
		Number
Employees covered	..	124
		£'000
Pension, etc. payments to former employees and dependents	..	-

(a) Outworkers. In addition to the employees shown above the firms in this industry employed outworkers whose numbers and remuneration are shown below:-

	United Kingdom	
	1951	1954
Males	-	-
Females	457	737
Total	457	737
	£'000	£'000
Total amount paid to outworkers	30	45

Employment in a specified week (a)

Larger establishments in the United Kingdom

TABLE 11

	1951			1954		
	Males	Females	Total	Males	Females	Total
Working proprietors	-	-	-	-	-	-
Operatives	63	663	726	55	531	586
Administrative, technical and clerical employees	21	24	45	22	21	43
Total employees	84	687	771	77	552	629

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

## LIST OF INDUSTRY REPORTS

## VOLUME 1

- A. Coal Mines
- B. Non-Metalliferous Mines and Quarries (other than Coal, Salt and Slate)
- C. Salt Mines, Brine Pits and Salt Works
- D. Slate Quarries and Mines
- E. Metalliferous Mines and Quarries
- F. Brick and Fireclay
- G. China and Earthenware
- H. Glass Containers
- I. Glass (other than Containers)
- J. Cement
- K. Abrasives
- L. Building Materials (including Roofing Felts)
- M. Manufactured Fuel

## VOLUME 2

- A. Coke Ovens and By-products
- B. Dyes and Dyestuffs
- C. Fertiliser, Disinfectants Insecticide and Allied Industries
- D. Coal Tar Products
- E. Chemicals (General)
- F. Drugs and Pharmaceutical Preparations
- G. Toilet Preparations and Perfumery
- H. Explosives and Fireworks
- I. Paint and Varnish
- J. Soap, Candles and Glycerine
- K. Polishes
- L. Ink
- M. Match
- N. Mineral Oil Refining
- O. Oils and Greases
- P. Seed Crushing and Oil Refining
- Q. Glue, Gum, Paste and Allied Industries
- R. Plastics Materials

## VOLUME 3

- A. Blast Furnaces
- B. Iron and Steel (Melting and Rolling)
- C. Iron Foundries
- D. Steel Sheets
- E. Tinplate
- F. Wrought Iron and Steel Tubes
- G. Non-Ferrous Metals (Smelting Rolling, etc.)
- H. Scrap Metal Processing
- I. Motor Vehicles and Cycles (Manufacturing)
- J. Motor Vehicles and Cycles (Repairing)
- K. Aircraft Manufacture and Repair
- L. Railway Locomotive Shops and Locomotive Manufacturing
- M. Railway Carriages and Wagons and Trams
- N. Carts, Perambulators, etc.

## VOLUME 4

- A. Shipbuilding and Ship Repairing
- B. Marine Engineering
- C. Machine Tools
- D. Textile Machinery and Accessories
- E. Small Arms
- F. Constructional Engineering
- G. Mechanical Handling Equipment

## VOLUME 4 (contd.)

- H. Printing and Bookbinding Machinery
- I. Mechanical Engineering (General)
- J. Mechanical Engineering (Repairing)
- K. Electrical Engineering (General)
- L. Electric Wires and Cables
- M. Radio and Telecommunications
- N. Batteries and Accumulators
- O. Electric Lighting Accessories and Fittings

## VOLUME 5

- A. Tool and Implement
- B. Cutlery
- C. Chain, Nail, Screw and Miscellaneous Forgings
- D. Wire and Wire Manufactures
- E. Hardware, Hollow-ware, Metal Furniture and Sheet Metal
- F. Brass Manufactures
- G. Needles, Pins, Fish Hooks and Metal Smallwares
- H. Scientific, Surgical and Photographic Instruments, etc.
- I. Watch and Clock
- J. Jewellery and Plate
- K. Precious Metals Refining
- L. Musical Instruments

## VOLUME 6

- A. Cotton Spinning and Doubling
- B. Cotton Weaving
- C. Woollen and Worsted
- D. Rayon, Nylon, etc. Production
- E. Rayon, Nylon, etc. Weaving, and Silk
- F. Flax Processing
- G. Linen and Soft Hemp
- H. Jute
- I. Rope, Twine and Net
- J. Hosiery and Other Knitted Goods
- K. Lace
- L. Carpets
- M. Narrow Fabrics
- N. Canvas Goods and Sacks
- O. Textile Converting
- P. Made-up Household Textiles
- Q. Textile Finishing
- R. Textile Packing

## VOLUME 7

- A. Asbestos
- B. Flock and Rag
- C. Hair, Fibre and Kindred Industries
- D. Leather (Tanning and Dressing)
- E. Fellmongery
- F. Leather Goods
- G. Fur
- H. Tailoring, Dressmaking, etc.
- I. Hats, Caps and Millinery
- J. Glove
- K. Umbrella and Walking Stick
- L. Boot and Shoe

## VOLUME 8

- A. Grain Milling
- B. Bread and Flour Confectionery
- C. Biscuit
- D. Bacon Curing and Sausage

## VOLUME 8 (contd.)

- E. Preserved Meat
- F. Milk Products
- G. Ice Cream
- H. Sugar and Glucose
- I. Cocoa, Chocolate and Sugar Confectionery
- J. Preserved Fruit and Vegetables

## VOLUME 9

- A. Margarine
- B. Fish Curing
- C. Cattle, Dog and Poultry Foods
- D. Vinegar and Other Condiments
- E. Starch
- F. Ice
- G. Miscellaneous Preserved Foods
- H. Brewing and Malting
- I. Wholesale Bottling
- J. Spirit Distilling
- K. Spirit Rectifying and Compounding
- L. Soft Drinks, British Wines and Cider
- M. Tobacco

## VOLUME 10

- A. Timber
- B. Furniture and Upholstery
- C. Soft Furnishings
- D. Shop and Office Fitting
- E. Wooden Containers and Baskets
- F. Paper and Board
- G. Wallpaper
- H. Cardboard Box, Carton and Fibre-board Packing Case
- I. Manufactured Stationery, Paper Bag and Kindred Industries
- J. Newspaper and Periodical Printing and Publishing
- K. Printing and Publishing, Bookbinding, Engraving, etc.

## VOLUME 11

- A. Rubber
- B. Linoleum, Leathercloth and Allied Industries
- C. Brushes and Brooms
- D. Toys and Games
- E. Sports Requisites
- F. Miscellaneous Stationers' Goods
- G. Cinematograph Film Production
- H. Cinematograph Film Printing
- I. Plastic Goods and Fancy Articles
- J. Incandescent Mantles

## VOLUME 12

- A. Building and Contracting
- B. Local Authorities (Building and Civil Engineering)
- C. Railways (Civil Engineering)
- D. Tramway, Trolley Bus and Omnibus Undertakings (Civil Engineering)
- E. Canal, Dock and Harbour Undertakings (Civil Engineering)
- F. Gas Supply Industry
- G. Electricity Supply Industry
- H. Water Undertakings



*Crown copyright reserved*

Printed and published by  
**HER MAJESTY'S STATIONERY OFFICE**

To be purchased from  
York House, Kingsway, London w.c.2  
423 Oxford Street, London w.1  
P.O. Box 569, London s.e.1  
13A Castle Street, Edinburgh 2  
109 St. Mary Street, Cardiff  
39 King Street, Manchester 2  
Tower Lane, Bristol 1  
2 Edmund Street, Birmingham 3  
80 Chichester Street, Belfast  
or through any bookseller

*Printed in Great Britain*