



# THE REPORT on the CENSUS OF PRODUCTION FOR 1951

Volume 1

Trade E

METALLIFEROUS MINES AND QUARRIES

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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1955

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\* Not applicable to this trade

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# METALLIFEROUS MINES AND QUARRIES TRADE

THIS REPORT on Metalliferous Mines and Quarries relates to establishments engaged wholly or mainly in the mining or quarrying of metalliferous ores (iron ore and ironstone, lead, tin, etc., ores).

This trade corresponds to minimum list headings 11 and 19(1) in the Standard Industrial Classification.

The mining and quarrying trades were excluded from the census for 1951 taken in Northern Ireland, and no census was taken there for 1948. There were no larger establishments in Northern Ireland in the register for this trade for 1950 and 1949. For 1935, particulars relating to all mining and quarrying in Northern Ireland were included in the report on the Non-Metalliferous Mines and Quarries (other than Coal, Salt and Slate) Trade (Volume 1, Trade B), separate particulars for each trade not being available.

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.

# METALLIFEROUS MINES AND QUARRIES TRADE

#### Summary

### Larger establishments (a)

TABLE 1

			Great Britain		
	1951	1950	1949	1948	1935
	£,000	£,000	£*000.	£,000	€,000
Gross output (production) (b)	8,910	6.086	5,539	4.755	3,059
Cost of materials and fuel used (c) Transport payments (d)	2.248 1.910	1,806	1,623	1.475	722
let output ages and salaries of persons employed	4.753 3.263	4.280 2.839	3.916 2.710	3.280 2.403	2.337
verage number of persons employed (e)	No. 7,996	No. 7.824	No. 7.892	No. 7.273	No. 10,850
et output per person employed	£ 594	£ 547	£ 496	£ 451	£ 215
Stocks at end of year	£,000	£'000	£,000	£,000	£,000
Products on hand for sale Materials and fuel	485 897	359 753	36 6 558	385 478	::
umber of mines and quarries	No. 64	No. 59	No. 59	No. 57	No. 85

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

	£'000	£.000	£'000	£,000	£,000
Output of firms in this trade (f)					
Principal products (g) Other output Value of outward transport on goods sold carried out by a separate	6.988 152	6.051	5,513 {	4.707 94	3,022 37
transport organisation	1.576				
Value of transport carried out by firms' own employees Changes in stocks (h)	66 + 129	39	47 - 20	- 46	
Payment for transport outwards (d)	8,910	6.086 1.343	5.539 1.167	4.755	3.059
Gross output (production)	8,910	6,086	5,539	4.755	3,059
Materials and fuel used by firms in this trade			1000		
Purchases Changes in stocks (h)	2.443 - 196	1,995 - 189	1.690 - 67	1.544 - 70	} 722
Materials and fuel used	2,248	1,806	1,623	1.475	722

 (a) For small firms' summary see Table 2.
 (b) Sales of products were collected at pithead prices in 1951, 1950, 1949 and 1948, and the cost of transport whether carried out by firms' own employees or by other firms was excluded and shown separately. Gross output for 1951 includes payments to other firms and undertakings and to firms' own separate transport organisations for transport services, but for other years payments for transport services outwards on goods sold are excluded.

(c) Amounts paid for delivery services are excluded for 1951 but included for other years.

(d) Payments to other firms and undertakings and to firms own separate transport organisations. For 1951 they cover payments for transport of both goods sold and materials and fuel purchased. For other years payments cover payments for transport of both goods sold.

(e) For an estimate of the total number of persons employed in this trade see Table 3.

(f) Total value of sales (1951, 1950, 1949 and 1948) or production for sale (1935).

(g) For details for 1951 and 1948 see Table 8.

(h) For details for 1951 see Table 21.

# Summary

#### Small firms (a)

TABLE 2

	Great Britain						
Name of the State	1951	1950	1949	1948			
Number of returns	17	16	19	18			
Average number of persons employed (b)	20000						
Males Females	96 2	86 2	99 2	88			
Total	98	88	101	91			

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

#### Estimated average employment

#### All firms

ABLE 3 Numb						
	Great Britain					
748 658 6 3 800 24058 3485 W	1951	1950	1949	1948		
As returned by firms						
Employing on the average more than ten persons (a) Employing on the average ten or fewer persons (b) (c)	7.996 98	7.824 88	7.892 101	7.273 91		
	8.094	7.912	7.993	7,364		
Estimated average employment in firms not making satisfactory returns	- area could be	-22-	•	30		
Estimated average employment in all firms	8.094	7,912	7.993	7.394		

(a) See Table 14.

(b) Including working proprietors.
(c) See Table 2.

# Analysis by size, 1951 Larger establishments in Great Britain

# TABLE 4

					1	Remuneration		
Average number employed	Establish- ments	Gross output	Net output	Persons employed	Operatives	Other employees (a)	Total	Net output per person employed
	No.	£,000	£,000	No.	£,000	£,000	£'000	£
11 - 24	13	303	194	222	67	9	76	872
25 - 49	10	57 9	249	355	119	24	143	7 03
50 - 99	16	1,830	762	987	326	53	379	772
100 - 199	8	1.457	674	1.047	375	58	433	644
200 - 299	10	2.365	1,588	2.441	963	86	1.049	651
300 - 399	4	776	436	1.401	460	57	517	311
400 - 749	3	1,601	8 50	1,543	552	114	666	551
Total	64	8,910	4.753	7.996	2.862	401	3,263	594

(a) Administrative, technical and clerical employees.

(84846/1)

(84846/1)

# Analysis by standard region, 1951

# Larger establishments in Great Britain

TABLE 5

			Net o	utput		F	lemuneration		
Region	Estab- lish- ments	Gross	Value	Percent- age of total	Persons employed	Operatives	Other employees (a)	Total	Net output per person employed
England and Wales	No.	£,000	£,000		No.	£,000	£,000	£,000	£
Northern; and East and West				1992					46.5
Ridings	16	2,073	1.176	24.7	3.086	1,184	89	1,273	381
North Midland	36	4.997	2,378	50.0	3,498	1,161	262	1.423	680
Southern; South Western; and Wales	12	1.840	1,198	25.2	1,412	517	50	566	849
Eastern; London and South Eastern; Midland; and									
North Western	-	-	-	-		-			-
Scotland	-	•	•			-	-	-	
Great Britain	64	8,910	4.753	100.0	7,996	2,862	401	3,263	59 4

(a) Administrative, technical and clerical employees.

Analysis according to specialisation within the trade, 1951

# Larger establishments in Great Britain

TABLE 6

			Sales of			R			
	Establish- ments	Gross output	charac- teristic products	Net output	Persons employed	Operatives	Other employees (a)	Total	Net output per person employed
Specialist producers of	No.	£,000	£,000	£,000	No.	£,000	£,000	£,000	£
Iron ore and ironstone	51	7.452	7,215	3,594	6,842	2,453	368	2,821	525
Remainder of the trade	13	1.458		1,158	1.154	408	33	442	1.004
Total	64	8,910		4,753	7,996	2,862	401	3, 26 3	594

(a) Administrative, technical and clerical employees.

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

The term of the same	.4 1 7	1951		19	48
	Quantity	Value (a)	Entries	Quantity	Value (a)
7.860 A 7 A 6 A 6 A 6 A 6 A 6 A 6 A 6 A 6 A 6	Th. tons	£,000	No.	Th. tons	£,000
Iron ore and ironstone		4			*Y0 550.
Hematite					
Crude, dressed or ground	450.8	1,215	5 {	320.0	560 71
Other	31				
Crude	12,985.3	3,914	29	10.635.3	2.833
Dressed or ground	768.8	526	9	1,525.0	622
Total iron ore and ironstone	14.204.9	5,655	{	12.480.3	4.015
Lead ore	5.6	570	8	3.6	205
Tin ore	1.2	697		1.2	454
Other metalliferous ores (including tungsten and zinc)		110		0.1	20
Waste products	ap bollinsus	managed the o	3235. S	108.311.	3
To tal	with all plane	7.033	535.0		4,768
Sales in other trades (see Table 9)	the second section	45	100 · 10 100	607.00 08	61
Principal products of this trade sold by establishments in the trade		6.988	46		4.707

(a) At pithead prices.

Sales of principal products of the trade by establishments classified to other trades

Larger establishments in Great Britain

TABLE 9

TABLE 9					
		1951	1948		
The state of the s	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.		£.000
Lead ore	0.6	45	5	h	61
Other metalliferous ores		•	-	)	la et
Total	5:0	45			61

TABLE 10 - Sales in the trade of other than principal products Larger establishments in Great Britain

The total values of the sales of other than principal products amounted to £152,000 in 1951 and £94,000 in 1948.

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

TABLE 11

		Production (b)(c)	Exports	Retained imports
		Th. tons	Th. tons	Th. tons
	(1951	14.204.9	0.8	8.747.5
Iron ore and ironstone	₹ 1948	12.520.0(d)	0.6	8.729.1
	(1935	10.866.9	0.8	4,546.9
	(1951	5.6		
Lead ore	19 48	3.6		0.2
	[1935	54.5	17.1	
	ſ1951	1.2		50.6
Tin ore	1948	1.2	•	48.4
	[1935	2.9	-	44.1

(a) Figures of production (or sales) refer only to larger establishments. 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 1951 and 1948, and production for sale in 1935.

(c) Including production (or sales) by establishments classified to other trades.

(d) Partly estimated.

TABLE 12 - Usage of certain specified purchased materials, 1951 Larger establishments in Great Britain

No information on usage of materials was required from this trade.

# Employment in September

Larger establishments (a)

TABLE 13

		Great Britain							
	1951 (b)	1950 (b)	1949 (b)	1948 (c)	1935 (c)				
Males Under 18 All ages Females	217 7,231	190 6.939	20 5 7,143	239 6,609	476 10.280				
Under 18 All ages	1 33	2 21	2 20	23	16				
Total Under 18 All ages	218 7.264	192 6.960	207 7.163	243 6.632	476 10,296				

(84846/1)

TABLE 13 (contd.)

(ii) Administrative, technical and clerical employees (d)

Number

	Great Britain				
	1951	1950	1949	19 48	1935
Males Under 18 'All ages	13 659	14 6 39	11 603	15 563	15 514
Females Under 18 All ages	13 113	17 103	16 87	13 78	7 40
Total Under 18 All ages	26 772(e)	31 7 42(e)	27 690(e)	28 641(e)	22 554

Number (iii) Total employees Great Britain 19 50 19 49 1935 1951 Males Under 18 7.172 10,794 7.746 7.890 7.578 All ages Females 19 Under 18 107 101 146 All ages Under 18 7.273(e) 7.853(e) 8.036(e) 7.702(e) All ages

(a) Excluded employees. The following persons were employed at the larger establishments 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 merchanting):-

Canteen workers 1 Males 16 Females
Other workers 17 Males 26 Females

(b) In week ended September 22, 1951, September 30, 1950, and September 24, 1949.

(c) Average for the year.

(d) In week ended September 22, 1951, September 30, 1950, September 24, 1949, September 25, 1948, and

(e) No working proprietors were recorded for larger establishments in this trade in 1951, 1950, 1949 and 1948.

The 1935 figures include any working proprietors.

#### Average employment

# Larger establishments (a)

TABLE 14

		Number

	Great Britain					
	1951	1950	1949	1948	1935	
Operatives	7.231	7,093	7.207	6,632	10.296	
Administrative, technical and clerical employees	765	731	685	641(b)	554(b)	
Total	7,996	7.824	7.892	7.273	10.850	

(a) For employment in small firms (employing on the average ten or fewer persons) that made satisfactory returns.

(b) In week ended September 25, 1948, and October 12, 1935. The 1935 figure includes any working proprietors.

Outworkers. No outworkers were recorded in this trade.

# Shift working, 1951 (a)

# Larger establishments in Great Britain

TABLE 15

	Total number of man-shifts worked in the week	Total number of shift-hours worked in the week	Number of returns showing the systems stated
Continuous 3 shift systems per 24 hours averaging 8 hours per shift Continuous 4 shift systems per 24 hours averaging 6 hours per shift	3,840	31,101	11
All 2 shift systems Other shift systems	5,140	41.116	7
Total	8,980	72,217	(b)

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

	Returns		Operatives		
191 - A2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Total in trade	Showing shift-work	Total in trade	Total on returns showing shift-work	Number employed on shift- work
Number Percentage of total in trade Percentage of total on returns showing shift-work	46 100.0	17 37.0	7.264	4.343 59.8	1,693 23.3 39.0

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

## Larger establishments

TABLE 16

	Great Britain			
	1951	1950	1949	1948
Wages and salaries (a) of	40,416,000,000			
Operatives Administrative, technical and	2,862	2.492	2,389	2,114
clerical employees	401	347	321	289
Total	3, 263	2.839	2.710	2.403
Employers' contributions to all National Insurance Schemes	82	78	79	57
(a) Including bonus and commission payments.	1 (84)			2441521

METALLIFEROUS MINES AND QUARRIES

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

## Larger establishments

rable 17			£.000
	Great Britain		
	1951	1949	1948
Plant, machinery and vehicles			
Acquisitions			
Plant and machinery		207	0.45
New	1,113	867	245 64
Second-hand	6	27	64
Vehicles	10	17	55
New	16 5	3	3
Second-hand	3	The second secon	3
Total acquisitions	1,141	915	367
Total dequisitions	2,212		
Disposals			
Plant and machinery	32	30	8
Vehicles	1	1	
Total disposals	33	30	8
New building work			
Capital expenditure on new building and other			
constructional work of a capital nature	97	104	11
(excluding sité values and development charges)	97	104	11

#### COUNTRY TABLES, 1951

Note - There were no larger establishments in Scotland in the register for this trade. Owing to the risk of disclosure of information relating to individual firms separate particulars for Wales cannot be given.

TABLE 18 - Summary: Larger establishments

See Table 1.

#### TABLE 19 - Summary: Small firms

See Table 2. There were no small firms in Wales or Scotland in the register for this trade.

Sales in the trade: Larger establishments

	England and Wales		
	Quanti ty	Value (a)	
	Th. tons	£:000	
Principal products			
Iron ore and ironstone			
Hematite, crude, dressed or ground Other	450.8	1.215	
Crude	12,985.3	3,914	
Dressed or ground	768.8	526	
Total iron ore and ironstone	14.204.9	5.655	
Lead ore	5.1	525	
Tin ore	1.2	697	
Other metalliferous ores (including tungsten and zinc)		110	
Waste products	••	1	
Total principal products		6.988	
Other output		152	
Total		7,140	

(a) At pithead prices.

(84846/1)

Stocks of products on hand for sale and stocks of materials and fuel

Larger establishments

TABLE 21

		England and Wales
		£.000
Products on hand for sale	at beginning of year at end of year	356 485
Materials and fuel	at beginning of year at end of year	701 897

TABLE 22 - Employment in September: Larger establishments

See Table 13.

TABLE 23 - Average employment: Larger establishments

See Table 14.

TABLE 24 - Wages and salaries and employers' National Insurance contributions paid during the year: Larger establishments

See Table 16.

TABLE 25 - Plant, machinery and vehicles - acquisitions and disposals, and capital expenditure on new building work: Larger establishments

See Table 17:

Payments for transport services for goods sold and materials and fuel purchased

Larger establishments

TABLE 26

125 S. I	England and Wales
	£,000
Amounts paid to other firms and undertakings Amount paid or credited to firms' own	1,905
separate transport organisations	5
Total	1.910

The following brief notes refer to Great Britain and, unless otherwise stated, to the census of production for 1951. Reference should be made to the separate booklet in this series entitled 'The Report on the Census of Production for 1951: Introductory Notes' (price 1s.6d. net) for particulars of the minor differences in the Northern Ireland censuses and other details about the census of production.

Trade classification: Establishments are classified to

Trade classification: Establishments are classified to trades according to the nature of their output. Certain products, called principal products, are identified as characteristic of the production of individual trades, the principal products for a given trade being of a similar nature or commonly associated in production. An establishment is classified to a trade if its output of principal products of that trade accounted for a greater proportion of the value of its output than did its output of principal products of any other trade.

The establishment: The basic unit for the collection of information is generally the establishment which in most cases comprises the whole of the premises under the same ownership or management at a particular address (e.g., a factory). Offices, warehouses and other ancillary places of business situated apart from the producing works are included in the return for the works.

Larger establishments and small firms: Larger establishments are those which employed more than 10 persons on the average during the year; small firms are those employing on the average 10 or fewer persons.

Working proprietors are proprietors of businesses other than limited companies, and include members of their families who work in the business without receiving fixed wages or salaries. Any persons working less than half the normal hours are excluded.

Persons employed: Administrative employees include directors other than those paid by fee only, managers, superintendents and works foremen: research, experimental, development, technical and design employees (other than operatives): draughtsmen and tracers; and travellers and office (including works office) employees. Operatives include all other classes of employees, that is, broadly speaking, all manual workers.

All these figures exclude 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.

Figures for employees include only persons on the pay-roll (that is whose National Insurance cards were held by the firm), whether full-time or parttime employees.

Outworkers, who are shown separately, are persons employed by the firm who work on materials supplied by the firm, but do not work on the premises; operatives directly employed who work out of doors (e.g., maintenance workers) and sub-contractors are not included as outworkers.

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

Capital expenditure: Expenditure on plant, machinery and vehicles relates to expenditure charged to capital account during the year of return, including transport and installation costs involved. Expenditure on new building work is similarly that charged to capital account during the year.

Materials and fuel: The cost of materials and fuel purchased includes all purchases during the year of materials for use in production and of fuel (including oil, gas, and electricity for all purposes, including heating and lighting); all packing materials, including the full cost of returnable containers when first purchased: workshop materials; office materials; water charges; materials for repairs to firms' own buildings, plant and vehicles when carried out by

their own work people included in the return: and consumable tools and parts for machinery purchased as replacement. Materials, components, etc. which were purchased and re-sold in the same state (that is, merchanted or factored goods) were excluded. For 1951 firms in many trades were required to state the quantities of certain purchased materials used.

Stocks and work in progress: Firms were instructed to give these at income tax value.

Output: 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. For all post-war censuses the value of sales was the net selling value, that is, the amount charged to customers, whether on an exworks 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.

Gross output of a trade is the total value of goods made and other work done during the year; this means the value of sales and work done during the year adjusted for changes in the values of stocks.

Net output is the amount left after deducting from the value of gross output the aggregate of the cost of materials and fuel used and the amount paid for work given out and, for 1951, any transport payments included in firms' returns. 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.

Customs and Excise Duty paid on materials purchased is included in the cost of materials, but where it is especially important separate figures are shown.

Later reports: Reports will be published later summarising the main census results and giving information about power equipment and fuel consumption.

Disclosure of information: The report has been prepared in conformity with the disclosure provisions of the Statistics of Trade Act, 1947. Figures have been combined with others of a similar nature in certain cases where publication of separate details might disclose the operations of an individual firm.

Symbols used: '..' for 'Not available'. '-' for 'Nil or negligible (less than half the final digit shown)'

The figures in the tables have been rounded off to the nearest final digit, and there may be an apparent slight discrepancy between the sums of the constituent items and the totals shown.

Tables 1 to 17 show figures for the United Kingdom (or Great Britain).

Tables 18 to 26 are country tables and give, where practicable, separate details for England and Wales, Scotland and Northern Ireland.

Table 6: Specialist producers refer to those establishments 50 per cent. or more of whose total output by value is accounted for by the groups of products specified.

Table 8 (or 8(i)) shows the total sales of principal products of the trade, and includes therefore the sales of these products returned by establishments whether classified to the trade or to other trades. Those produced by establishments in other trades are shown in Table 9.

Table 10 shows the sales by establishments in the trade of products other than those regarded as principal products of the trade.

Table 20 (or 20(i)) shows sales by establishments in the trade of products, whether principal products or not, and broadly the aggregates here are equal to the corresponding figures in Table 8 (or 8(i)) less those in Table 9, plus those in Table 10.

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