



BOARD OF TRADE

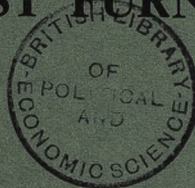
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THE REPORT  
on the  
CENSUS OF PRODUCTION  
FOR 1951

Volume 3

Trade A

BLAST FURNACES



*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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\* Not applicable to this trade

BLAST FURNACES

3/A/1

BLAST FURNACES TRADE

THIS REPORT on the Blast Furnaces Trade relates to establishments engaged wholly or mainly in iron smelting and the manufacture of pig iron, ferro-manganese and spiegeleisen.

This trade corresponds to minimum list heading 40 in the Standard Industrial Classification.

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

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.

METAL MANUFACTURE  
BLAST FURNACES TRADE

Summary  
Larger establishments

TABLE 1

	Great Britain					
	1951	1950	1949	1948	1937	1935
Gross output (production) (a)	£'000 121,860	£'000 111,342	£'000 103,788	£'000 91,906	£'000 35,914	£'000 21,047
Cost of materials and fuel used (b)	94,563	90,761	83,916	72,878	29,129	16,964
Payment for work done on materials given out	156	113	114	70	..	..
Transport payments (c)	6,046	..	..	..	..	..
Net output	21,094	20,468	19,759	18,958	6,785	4,083
Wages and salaries of persons employed	12,601	11,778	11,262	10,596	..	..
Average number of persons employed	No. 27,795	No. 28,057	No. 27,943	No. 27,257	No. 19,565	No. 15,815
Net output per person employed	£ 759	£ 729	£ 707	£ 696	£ 347	£ 258
Stocks at end of year	£'000	£'000	£'000	£'000	£'000	£'000
Products on hand for sale and work in progress	1,842	2,599	2,383	1,302	..	..
Materials and fuel	6,494	6,140	6,671	4,925	..	..
Number of establishments	No. 46	No. 51	No. 50	No. 51	No. ..	No. 48

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

	£'000	£'000	£'000	£'000	£'000	£'000
Output of firms in this trade (d)						
Principal products (e)	111,466	113,917	104,887	85,220	33,572	19,287
Other output (f)	11,097					
Changes in stocks and work in progress (g)	- 704	+ 226	+ 1,076	- 123		
	121,860	114,143	105,963	93,988	35,914	21,047
Less payment for transport outwards (c)	..	2,802	2,175	2,083		
Gross output (production)	121,860	111,342	103,788	91,906	35,914	21,047
Materials and fuel used by firms in this trade						
Purchases	94,949	90,207	85,668	73,677	29,129	16,964
Changes in stocks (g)	- 386	+ 553	- 1,752	- 799		
Materials and fuel used	94,563	90,761	83,916	72,878	29,129	16,964

(a) Gross output for 1951 includes payments to other firms and undertakings and to firms' own separate transport organisations for transport services. For other years payments for transport services outwards on finished goods sold are excluded.

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

(c) 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 only transport outwards of finished goods sold.

(d) Total value of sales (1951, 1950, 1949 and 1948) or production for sale (1937 and 1935).

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

(f) For details for 1951 and 1948 see Table 10.

(g) For details for 1951 see Table 21.

TABLE 2 - Summary: Small firms

There were no small firms in the register for this trade.

## Estimated average employment

## All firms

TABLE 3

	Great Britain				Number
	1951	1950	1949	1948	
As returned by firms					
Employing on the average more than ten persons (a)	27,795	28,057	27,943	27,257	
Employing on the average ten or fewer persons	-	-	-	-	
Estimated average employment in firms not making satisfactory returns	-	-	-	-	
Average employment in all firms	27,795	28,057	27,943	27,257	

(a) See Table 14.

## Analysis by size, 1951

## Larger establishments in Great Britain

TABLE 4

Average number employed	Establishments	Gross output	Net output	Persons employed	Remuneration			Net output per person employed
					Operatives	Other employees (a)	Total	
	No.	£'000	£'000	No.	£'000	£'000	£'000	£
11 - 99	3	373	143	122	51	7	58	1,172
100 - 199	7	5,076	853	1,113	444	89	533	766
200 - 299	4	4,141	690	980	351	81	431	704
300 - 399	5	7,561	1,046	1,633	675	115	790	641
400 - 499	5	11,856	1,918	2,242	858	190	1,048	855
500 - 749	11	31,904	4,825	7,118	2,713	468	3,181	678
750 - 999	4	15,725	2,419	3,158	1,201	248	1,449	766
1,000 and over	7	45,224	9,200	11,429	4,236	874	5,110	805
Total	46	121,860	21,094	27,795	10,530	2,071	12,601	759

(a) Administrative, technical and clerical employees.

Analysis by standard region, 1951  
Larger establishments in Great Britain

TABLE 5

Region	Estab- lish- ments	Gross output	Net output		Persons employed	Remuneration			Net output per person employed
			Value	Percent- age of total		Operatives	Other employees (a)	Total	
	No.	£'000	£'000		No.	£'000	£'000	£'000	£
England and Wales									
Northern	11	39,688	6,608	31.3	9,087	3,553	492	4,046	727
North Midland	14	38,760	7,987	37.9	9,884	3,529	921	4,450	808
East and West Ridings; London and South Eastern; North Western; and Wales	12	27,229	4,062	19.3	5,147	2,029	429	2,458	789
Midland	5	6,732	960	4.5	1,845	708	133	841	520
Eastern; Southern; and South Western	-	-	-	-	-	-	-	-	-
Total England and Wales	42	112,409	19,617	93.0	25,963	9,820	1,975	11,795	755
Scotland	4	9,451	1,478	7.0	1,832	710	96	806	806
Great Britain	46	121,860	21,094	100.0	27,795	10,530	2,071	12,601	759

(a) Administrative, technical and clerical employees.

TABLE 6 - Analysis according to specialisation within the trade, 1951

Larger establishments in Great Britain

No specialisation within 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

	1951			1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Pig iron					
Forge and foundry	1,563.3	17,087	18	1,484.7	13,834
Hematite	1,326.6	17,091	11	1,379.3	13,879
Basic	6,713.8	71,230	26	6,155.1	53,522
Total pig iron	9,603.7	105,408	..	9,019.1	81,235
Spiegeleisen and ferro-manganese	156.9	5,231	8	169.6	3,595
Direct iron castings	12.1	244	6	3.7	39
Waste products (a)					
Slag	2,214.1	665(b)	22	2,101.1	429
Other	369.2	242	21	..	58
	..	40			
Total		111,829	..		85,355
Sales in other trades (see Table 9)		362	..		136
Principal products of this trade sold by establishments in the trade		111,466	45		85,220

(a) Waste products were treated as other than principal products in the Census of Production report for 1948 on this trade.

(b) So far as recorded separately.

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

Larger establishments in Great Britain

TABLE 9

	1951			1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Spiegeleisen and ferro-manganese	2.1	362	..	1.5	136
Total		362	..		136

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

TABLE 10

	1951		1948	
	Quantity	Value	Quantity	Value
	Th. tons	£'000	Th. tons	£'000
Pig iron, refined	29.0	448	38.5	480
Tarred macadam (including tarred slag)	277.1	387	228.2	321
Coke and coke breeze	64.6	154	37.1	99
			..	102
	Mill. B.T.U. (kWh)		Mill. B.T.U. (kWh)	
Electricity sold	527	1,694	629	1,952
	Mill. cu. ft. 244,833	2,597	..	4,204
Gas sold	Th. therms 254,535			
	112,950			
	Mill. cu. ft. 91,031			
Steam sold	..	569	..	1,734
Other goods	..	2,467	..	..
Total		11,097		8,891

Production, exports and imports of certain principal products

TABLE 11

		Production (a) (b)	Exports	Retained imports
		Th. tons	Th. tons	Th. tons
Pig iron				
	1951	1,592.3	16.0	10.1(d)
	1948	1,523.2	1.5	6.4(d)
	1937	1,788.8	87.0	158.3(d)
	1951	1,326.6	-	53.3
Hematite	1948	1,379.3	-	37.4
	1937	1,827.6	65.8	50.5
	1951	6,713.8	-	237.8
Basic	1948	6,155.1	-	15.6
	1937	4,609.3	0.6	425.0
	1951	9,632.7	16.0	301.1
Total pig iron	1948	9,057.6	1.5	59.4
	1937	8,225.7	153.4	633.8
	1951	156.9	-	1.2
Spiegeleisen and ferro-manganese	1948	169.6	3.2	-
	1937	131.7	11.0	4.5

(a) Sales in 1951 and 1948, and production for sale in 1937.

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

(c) The production (or sales) figures include the output of refined pig iron (29,000 tons in 1951; 38,500 tons in 1948) recorded by establishments in this trade. The figures shown for exports include 12,000 tons of refined pig iron in 1951 and 400 tons in 1948; particulars of exports in 1937 or of imports in any year are not available.

(d) Including 'Pig iron smelted wholly with charcoal' (1,300 tons in 1951; 3,400 tons in 1948; 30,200 tons in 1937) and 'Vanadium-titanium pig iron produced in an electric furnace (3,400 tons in 1951; 1,500 tons in 1948; 5,200 tons in 1937).

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  
TABLE 13  
(i) Operatives  
Larger establishments (a)

	Great Britain					
	1951(b)	1950(b)	1949(b)	1948(c)	1937(c)	1935(c)
Males						
Under 18	503	389	462	462	490	371
All ages	23,927	23,975	24,005	23,480	18,156	14,530
Females						
Under 18	1	-	1	-	-	2
All ages	198	176	220	149	14	21
Total						
Under 18	504	389	463	462	490	373
All ages	24,125	24,151	24,225	23,629	18,170	14,551

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

	Great Britain					
	1951	1950	1949	1948	1937	1935
Males						
Under 18	129	145	154	155	141	89
All ages	3,163	2,924	2,926	2,858	1,196	1,082
Females						
Under 18	179	157	170	171	39	17
All ages	861	826	833	770	199	182
Total						
Under 18	308	302	324	326	180	106
All ages	4,024(e)	3,750(e)	3,759(e)	3,628(e)	1,395	1,264

(iii) Total employees

	Great Britain					
	1951	1950	1949	1948	1937	1935
Males						
Under 18	632	534	616	617	631	460
All ages	27,090	26,899	26,931	26,338	19,352	15,612
Females						
Under 18	180	157	171	171	39	19
All ages	1,059	1,002	1,053	919	213	203
Total						
Under 18	812	691	787	788	670	479
All ages	28,149(e)	27,901(e)	27,984(e)	27,257(e)	19,565	15,815

(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	25	Males	135	Females	
Other workers	33	Males	75	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, October 16, 1937 and October 12, 1935.

(e) No working proprietors were recorded for any post-war year.

Average employment  
Larger establishments

TABLE 14

	Great Britain						Number
	1951	1950	1949	1948	1937	1935	
Operatives	23,864	24,324	24,216	23,629	18,170	14,551	
Administrative, technical and clerical employees	3,931	3,733	3,727	3,628(a)	1,395(a)	1,264(a)	
Total	27,795	28,057	27,943	27,257	19,565	15,815	

(a) In week ended September 25, 1948, October 16, 1937, and October 12, 1935.

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	90,692	718,876	43
Continuous 4 shift systems per 24 hours averaging 6 hours per shift	-	-	-
All 2 shift systems	705	5,488	3
Other shift systems	-	-	-
Total	91,397	724,364	(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		
	Total in trade	Showing shift-work	Total in trade	Total on returns showing shift-work	Number employed on shift-work
Number	45	44	24,125	24,116	13,608
Percentage of total in trade	100.0	97.8	100.0	100.0	56.4
Percentage of total on returns showing shift-work				100.0	56.4

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

TABLE 16

	Great Britain				£'000
	1951	1950	1949	1948	
Wages and salaries (a) of Operatives	10,530	9,941	9,545	8,994	
Administrative, technical and clerical employees	2,071	1,837	1,717	1,602	
Total	12,601	11,778	11,262	10,596	
Employers' contributions to all National Insurance Schemes	290	291	285	216	

(a) Including bonus and commission payments.

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

TABLE 17

	Great Britain			£'000
	1951	1949	1948	
Plant, machinery and vehicles				
Acquisitions				
Plant and machinery				
New	4,236	3,217	2,725	
Second-hand	41	92	128	
Vehicles				
New	61	29	60	
Second-hand	18	4	20	
Total acquisitions	4,356	3,342	2,932	
Disposals				
Plant and machinery				
Vehicles	28	36	115	
	11	2	265	
Total disposals	39	38	380	
New building work				
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	805	988	589	

METAL MANUFACTURE COUNTRY TABLES  
BLAST FURNACES TRADE  
1951

Summary  
Larger establishments

TABLE 18

	England(a)	Wales(a)	Scotland	Great Britain
	£'000	£'000	£'000	£'000
Gross output (production)	112,409	..	9,451	121,860
Cost of materials and fuel used	86,862	..	7,701	94,563
Payment for work done on materials given out	156	-	-	156
Transport payments	5,774	..	272	6,046
Net output	19,617	..	1,478	21,094
Wages and salaries of persons employed	11,795	..	806	12,601
	No.	No.	No.	No.
Average number of persons employed	25,963	..	1,832	27,795
	£	£	£	£
Net output per person employed	756	..	807	759
	£'000	£'000	£'000	£'000
Stocks at end of year				
Products on hand for sale and work in progress	1,775	..	67	1,842
Materials and fuel	5,922	..	573	6,494
	No.	No.	No.	No.
Number of establishments	42	..	4	46

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

	£'000	£'000	£'000	£'000
Output of firms in this trade				
Total value of sales (see Table 20)	112,980	..	9,583	122,563
Changes in stocks and work in progress (see Table 21)	- 571	..	- 132	- 704
Gross output (production)	112,409	..	9,451	121,860
Materials and fuel used by firms in this trade				
Purchases	87,119	..	7,830	94,949
Changes in stocks (see Table 21)	- 257	-	- 129	- 386
Materials and fuel used	86,862	..	7,701	94,563

(a) Owing to the risk of disclosure of information relating to individual firms particulars for Wales cannot be given separately and have been included with those for England.

TABLE 19 - Summary: Small firms

There were no small firms in the register for this trade.

Sales in the trade  
Larger establishments

TABLE 20

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Principal products						
Pig iron						
Forge and foundry	..	(a)	..	(a)	1,563.3	17,087
Hematite	..	(a)	..	(a)	1,326.6	17,091
Basic	..	(a)	..	(a)	6,713.8	71,230
Total pig iron	8,801.8	96,278	801.9	9,130	9,603.7	105,408
Spiegeleisen and ferro-manganese	154.8	4,868	-	-	154.8	4,868
Direct iron castings	12.1	244	-	-	12.1	244
Waste products						
Slag	..	(a)	..	(a)	2,214.1	665(b)
Other	369.2	242	-	-	369.2	242
	..	40	-	-	..	40
Total principal products		(a)		(a)		111,466
Other output						
Pig iron, refined	29.0	448	-	-	29.0	448
Tarred macadam (including tarred slag)	277.1	387	-	-	277.1	387
Coke and coke breeze	64.6	154	-	-	64.6	154
Electricity sold	..	(a)	..	(a)	527	1,694
	Mill. cu. ft.		Mill. cu. ft.		Mill. cu. ft.	
	244,635		197		244,833	
Gas sold	Th. therms	2,595	Th. therms	2	Th. therms	2,597
	254,347		188		254,535	
	83,115	1,494	29,835	356	112,950	1,849
	Mill. cu. ft.		Mill. cu. ft.		Mill. cu. ft.	
	88,049	902	2,982	29	91,031	931
Steam sold	..	569	-	-	..	569
Other goods	..	2,464	..	3	..	2,467
Total		112,980		9,583		122,563

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

(b) So far as recorded separately.

Stocks of products on hand for sale and work in progress,  
and stocks of materials and fuel

Larger establishments

TABLE 21

		England and Wales	Scotland	Great Britain
		£'000		
Products on hand for sale and work in progress	{ at beginning of year	2,346	200	2,546
	{ at end of year	1,775	67	1,842
Materials and fuel	{ at beginning of year	5,665	444	6,108
	{ at end of year	5,922	573	6,494

Employment in September  
Larger establishments (a)(b)

TABLE 22  
(i) Operatives

	England and Wales	Scotland	Great Britain
Males			
Under 18	455	48	503
All ages	22,300	1,627	23,927
Females			
Under 18	1	-	1
All ages	187	11	198
Total			
Under 18	456	48	504
All ages	22,487	1,638	24,125

(ii) Administrative, technical and clerical employees

	England and Wales	Scotland	Great Britain
Males			
Under 18	119	10	129
All ages	3,013	150	3,163
Females			
Under 18	169	10	179
All ages	828	33	861
Total			
Under 18	288	20	308
All ages (c)	3,841	183	4,024

(iii) Total employees

	England and Wales	Scotland	Great Britain
Males			
Under 18	574	58	632
All ages	25,313	1,777	27,090
Females			
Under 18	170	10	180
All ages	1,015	44	1,059
Total			
Under 18	744	68	812
All ages (c)	26,328	1,821	28,149

(a) Excluded employees. The number of persons employed at the larger establishments in this trade but not included in the above tables or in any other Census of Production report (e.g., employees engaged in merchandising) are shown in Table 22(iv) below.

(b) Number employed in the week ended September 22, 1951.

(c) No working proprietors were recorded in this trade.

(iv) Excluded employees

	England and Wales	Scotland	Great Britain
Canteen workers			
Males	25	-	25
Females	(d)	(d)	135
Total	(d)	(d)	160
Other workers			
Males	33	-	33
Females	(d)	(d)	75
Total	(d)	(d)	108
Total excluded employees	(d)	(d)	268

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

Average employment  
Larger establishments

TABLE 23

	England and Wales	Scotland	Great Britain
Operatives	22,213	1,651	23,864
Administrative, technical and clerical employees	3,750	181	3,931
Total	25,963	1,832	27,795

Outworkers. No outworkers were recorded in this trade.

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

## Larger establishments

TABLE 24

	England and Wales	Scotland	Great Britain
Wages and salaries (a) of			
Operatives	9,820	710	10,530
Administrative, technical and clerical employees	1,975	96	2,071
Total	11,795	806	12,601
Employers' contributions to all National Insurance Schemes	270	20	290

(a) Including bonus and commission payments.

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

## Larger establishments

TABLE 25

	England and Wales	Scotland	Great Britain
Plant, machinery and vehicles			
Acquisitions			
Plant and machinery			
New	(a)	(a)	4,236
Second-hand	41	-	41
Vehicles			
New	(a)	(a)	61
Second-hand	18	-	18
Total acquisitions	(a)	(a)	4,356
Disposals			
Plant and machinery	(a)	(a)	28
Vehicles	11	-	11
Total disposals	(a)	(a)	39
New building work			
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	(a)	(a)	805

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



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

## Larger establishments

	England and Wales	Scotland	Great Britain
Amounts paid to other firms and undertakings	5,744	272	6,016
Amount paid or credited to firms' own separate transport organisations	30	-	30
<b>Total</b>	<b>5,774</b>	<b>272</b>	<b>6,046</b>

£'000

## GENERAL NOTES

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 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 part-time 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, merchant 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 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.

**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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