



BOARD OF TRADE

THE REPORT  
on the  
CENSUS OF PRODUCTION  
FOR 1951

Volume 5

Trade K

PRECIOUS METALS REFINING



*Presented by the Board of Trade to Parliament  
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\* Not applicable to this trade

## PRECIOUS METALS REFINING TRADE

THIS REPORT on the Precious Metals Refining Trade relates to establishments engaged wholly or mainly in the smelting, refining, etc. of gold, silver, platinum and other precious metals. Those whose chief business is the production of finished goods of precious metals are included in the reports on the Jewellery and Plate Trade (Volume 5, Trade J) and the Watch and Clock Trade (Volume 5, Trade I).

This trade together with the Jewellery and Plate Trade corresponds to minimum list heading 102 in the Standard Industrial Classification.

Establishments engaged solely in the refining of precious metals were not covered by the 1937 Inquiry; Table I therefore gives, as well as the full totals for 1935, figures for that year relating to the sections of the trade included in the 1937 Inquiry.

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.

PRECISION INSTRUMENTS, JEWELLERY, ETC.  
PRECIOUS METALS REFINING TRADE

Summary  
Larger establishments (a)

TABLE 1

	Great Britain						
	All sections of the trade				Sections of the trade covered by the 1937 Inquiry		All Sections of the trade
	1951	1950	1949	1948(b)	1937	1935	1935
	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Gross output (production) (c)	62,246	74,293	52,969	34,422	23,602	29,661	31,182
Cost of materials and fuel used (d)	54,330	69,815	48,409	30,803	22,655	28,961	30,129
Payment for work done on materials given out	27	51	48	8	5	3	26
Transport payments (e)	35	..	..	..	..	..	..
Net output	7,854	4,427	4,513	3,612	942	697	1,027
Wages and salaries of persons employed	2,522 No.	2,078 No.	1,883 No.	1,758 No.	.. No.	.. No.	.. No.
Average number of persons employed (f)	5,696 £	5,331 £	4,861 £	4,631 £	2,327 £	2,057 £	2,367 £
Net output per person employed (f)	1,379	830	928	780	405	339	434
Stocks at end of year	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Products on hand for sale and work in progress	7,259	6,299	7,015	5,346	..	..	..
Materials and fuel	2,477 No.	2,739 No.	2,397 No.	2,214 No.	.. No.	.. No.	.. No.
Number of establishments	29	27	27	31	..	..	23

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

	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Output of firms in this trade (g)							
Principal products (h)	52,300	75,031	51,282	28,331	23,489	29,611	31,118
Other output (i)	9,769						
Changes in stocks and work in progress (j)	+ 177	- 715	+ 1,700	+ 755			
	62,246	74,316	52,982	34,424	23,602	29,661	31,182
Less payment for transport outwards (e)	..	22	13	2			
Gross output (production)	62,246	74,293	52,969	34,422	23,602	29,661	31,182
Materials and fuel used by firms in this trade							
Purchases	54,796	70,157	48,623	30,585	22,655	28,961	30,129
Changes in stocks (j)	- 465	- 342	- 214	+ 218			
Materials and fuel used	54,330	69,815	48,409	30,803	22,655	28,961	30,129

- (a) For small firms' summary see Table 2.  
 (b) Corrected figures due to an amended return.  
 (c) 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.  
 (d) Amounts paid for delivery services are excluded for 1951 but included for other years.  
 (e) 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.  
 (f) Excluding outworkers but including working proprietors. For the total number of persons employed in this trade see Table 3.  
 (g) Total value of sales (1951, 1950, 1949 and 1948) or production for sale (1937 and 1935).  
 (h) For details for 1951 and 1948 see Table 8.  
 (i) For details for 1951 and 1948 see Table 10.  
 (j) For details for 1951 see Table 21.

(90597/1)

Summary  
Small firms (a)

TABLE 2

	Great Britain			
	1951	1950	1949	1948
Number of returns	15	16	17	18
Average number of persons employed (b)				
Males	77	80	81	85
Females	22	23	24	22
Total	99	103	105	107

- (a) Firms employing on the average ten or fewer persons.  
 (b) Including working proprietors.

Estimated average employment (a)  
All firms

TABLE 3

	Great Britain				Number
	1951	1950	1949	1948	
As returned by firms					
Employing on the average more than ten persons (b)	5,696	5,331	4,861	4,631	
Employing on the average ten or fewer persons (c)	99	103	105	107	
Estimated average employment in firms not making satisfactory returns	5,795	5,434	4,966	4,738	
Average employment in all firms	5,795	5,434	4,966	4,738	

- (a) Including working proprietors.  
 (b) See Tables 13 (footnote (f)) and 14.  
 (c) See Table 2.

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 - 24	5	1,184	184	94	23	21	44	1,963
25 - 49	4	582	102	136	27	27	54	1,750
50 - 99	7	5,395	693	531	121	101	222	1,306
100 - 199	4	8,932	1,078	560	142	133	275	1,924
200 - 999	9	46,154	5,796	4,375	1,232	695	1,927	1,324
Total	29	62,246	7,854	5,696	1,545	977	2,522	1,379

- (a) Administrative, technical and clerical employees.

(90597/1)

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									
East and West Ridings; Southern; and North Western	8	6,900	837	10.7	621	168	104	272	1,347
London and South Eastern	13	48,266	6,154	78.3	4,388	1,222	753	1,975	1,402
Midland	8	7,081	863	11.0	687	155	119	274	1,256
Northern; North Midland; Eastern; and South Western	-	-	-	-	-	-	-	-	-
Total England	29	62,246	7,854	100.0	5,696	1,545	977	2,522	1,379
Wales	-	-	-	-	-	-	-	-	-
Scotland	-	-	-	-	-	-	-	-	-
Great Britain	29	62,246	7,854	100.0	5,696	1,545	977	2,522	1,379

(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.

Total make of intermediate products  
Larger establishments in Great Britain

TABLE 7

	Returned in this trade		Returned in all trades					
	1951		1948		1951		1948	
	Quantity	Entries	Quantity	Quantity	Entries	Quantity	Quantity	
	Th.ozs. troy	No.	Th.ozs. troy	Th.ozs. troy	No.	Th.ozs. troy	Th.ozs. troy	
Gold, refined, in bars, etc.	3,982.3	8	3,315.6	3,982.3	8	3,315.6	3,315.6	
Gold, partly refined, in bars, etc.	73.9	..	646.3	73.9	..	646.3	646.3	
Platinum, refined, in grain, ingot, bar or powder	338.6	..	236.4	338.6	..	236.4	236.4	
Silver, refined	43,797.9	..	(a)	46,045.2	10	31,007.7	31,007.7	
Silver, partly refined	10,339.5	..	(a)	10,339.5	..	(a)	(a)	

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

(90597/1)

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.ozs. troy	£'000	No.	Th.ozs. troy	£'000
Gold					
Refined, in bars, etc.	1,167.6	14,730	7	1,001.0	8,856
Partly refined, in bars, etc.	74.0	923	..	44.9	390
Manufactures of gold not specified above					
Gold leaf				Mill.leaves 14.7	124(a)
Gold sheet	302.3	3,211	8	Th.ozs. troy 571.0	3,047(b)
Gold fuse wire (b)	..	570	..		
Other gold wire (b)	40.8	299	..	543.6	2,224(a)
Other (c)	311.4	2,747	8		
	..	648			
Platinum					
Refined, in grain, ingot, bar or powder	219.6	6,876	..		
Other sorts, including alloys and manufactures, not elsewhere specified (c)	112.7	3,379	6	240.0	4,857(d)
Silver					
Refined	22,967.4	7,286	9	11,745.6	2,341
Manufactures of silver					
Fine silver sheet	2,155.9	604	5	3,092.5	572(b)
Fine silver wire	395.0	150	5		
Alloyed silver, including solders	8,611.8	1,880	9	11,304.1	2,326
Other manufactures of silver (c)	881.9	237	7	..	169
	..	608			
Palladium, iridium, rhodium, osmium and ruthenium, and alloys thereof other than platinum alloys	304.3	3,867(b)	6	224.6	1,808
Rolled gold	1,586.1	1,061	..		
	..	203			
Silver, partly refined	10,237.2	2,558	..	9,471.1	1,860(d)
	116.2	332	7	..	17
Other precious metals	..	173			
	Th. tons			Th. tons	
Concentrates, metallic residues, wastes, etc.	1.1	228	9	0.4	10
	..	58		..	1
Work done for the trade or on commission (e)					
Refining of gold					29
Refining of silver		356	..		83
Refining of other precious metals					48
Other		125	9		
Total		53,110	..		28,762
Sales in other trades (see Table 9)		810	..		431
Principal products of this trade sold by establishments in the trade		52,300	15		28,331

(a) Gold leaf other than in leaves is included in the figures shown for other manufactures of gold (except gold sheet).

(b) So far as recorded separately.

(c) Excluding plate, jewellery, watches, etc., for which see the Jewellery and Plate Trade (Volume 5, Trade J) and the Watch and Clock Trade (Volume 5, Trade I).

(d) Partly refined platinum is included in the figures shown for 'Other precious metals'.

(e) Amount charged.

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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. ozs. troy.	£'000	No.	Th. ozs. troy.	£'000
Silver, refined	2,247.3	773	..	1,857.3	420(a)
Concentrates, metallic, residues, wastes, etc.	..	37	..	-	11
Total		810	..		431

(a) Including manufactures of silver.

## 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
Copper and manufactures thereof	2.4	664	1.5	275
Brass and other copper alloys (including nickel silver, but excluding other nickel alloys) and manufactures thereof	7.4	2,185	4.1	514
Nickel and nickel alloys (other than nickel silver) and manufactures thereof	-	-	0.8	178
Other non-ferrous metals and manufactures thereof	..	554	..	66
Chemical manufactures	..	3,352	..	1,269
Other goods	..	2,380	..	3,015
Work done (a)		63		22
Total		9,769		5,338

(a) Amount charged.

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

Exports and imports of refined gold and silver do not bear any relation to the quantities produced at refineries in this country. Particulars relating to other precious metals are given below.

TABLE 11

		Production	Exports	Retained imports
		Th.ozs.troy	Th.ozs.troy	Th.ozs.troy
Platinum	1951	338.6	129.9	7.0
	1948	236.4	57.5	2.9
	1935	186.2	18.4	110.5
Other sorts, including alloys and manufactures	1951	112.7(b)	26.2	0.1
Palladium, iridium, rhodium, osmium, ruthenium, and alloys thereof other than platinum alloys	1951	304.3(b)	202.0	0.3
	1948	224.6(b)	111.5	(c)

(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.

(c) Re-exports in excess of imports.

## Usage of certain specified purchased materials, 1951

## Larger establishments in Great Britain

TABLE 12

Materials used	Quantity
	Th.cwts.
Brass and other copper alloys (including nickel silver, but excluding other nickel alloys) in all forms, except finished parts and scrap	6.9
Nickel and nickel alloys (excluding nickel silver) in all forms, except finished parts and scrap	0.5

## Employment in September

## Larger establishments (a)

TABLE 13

## (i) Operatives

	Great Britain							Number
	All sections of the trade				Sections of the trade covered by the 1937 Inquiry		All sections of the trade	
	1951(b)	1950(b)	1949(b)	1948(c)	1937(c)	1935(c)	1935(c)	
Males								
Under 18	115	110	135	122	214	149	156	
All ages	3,125	2,969	2,581	2,579	1,453	1,329	1,583	
Females								
Under 18	95	78	80	80	124	92	92	
All ages	1,033	1,093	928	886	360	307	310	
Total								
Under 18	210	188	215	202	338	241	248	
All ages	4,158	4,062	3,509	3,465	1,813	1,636	1,893	

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

	Great Britain							Number
	1951	1950	1949	1948	1937	1935	1935	
Males								
Under 18	20	11	11	15	12	2	2	
All ages	988	899	826	778	373	315	364	
Females								
Under 18	63	49	68	41	11	1	1	
All ages	457	402	408	386	141	106	110	
Total								
Under 18	83	60	79	56	23	3	3	
All ages	1,445(e)	1,301(e)	1,234(e)	1,164(e)	514	421	474	

(continued overleaf)

TABLE 13 (contd.)  
(iii) Total employees

Number

	Great Britain						1935
	1951	1950	1949	1948	1937	1935	
Males							158
Under 18	135	121	146	137	226	151	158
All ages	4,113	3,868	3,407	3,357	1,826	1,644	1,947
Females							93
Under 18	158	127	148	121	135	93	93
All ages	1,490	1,495	1,336	1,272	501	413	420
Total							251
Under 18	293	248	294	258	361	244	251
All ages	5,603(e)	5,363(e)	4,743(e)	4,629(e)	2,327	2,057	2,367

(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 merchandising):-

Canteen workers } 29 Males 121 Females  
Other workers }

(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) Working proprietors. In addition working proprietors, shown in Table 13 (iv) below, were engaged in this trade in larger establishments. The 1937 and 1935 figures include working proprietors.

	Great Britain				Number
	1951	1950	1949	1948	
Males	-	-	2	2	
Females	-	-	-	-	
Total	-	-	2	2	

## Average employment

## Larger establishments (a)

TABLE 14

Number

	Great Britain						
	All sections of the trade				Sections of the trade covered by the 1937 Inquiry		All sections of the trade
	1951	1950	1949	1948	1937	1935	1935
Operatives	4,268	4,063	3,624	3,465	1,813	1,636	1,893
Administrative, technical and clerical employees	1,428	1,268	1,235	1,164(b)	514(b)	421(b)	474(b)
Total	5,696	5,331	4,859	4,629	2,327	2,057	2,367

(a) For employment in small firms (employing on the average ten or fewer persons) see Table 2.

(b) In week ended September 25, 1948, October 16, 1937, and October 12, 1935. The 1937 and 1935 figures include working proprietors.

Outworkers. In addition to the employees shown above the firms in this trade employed outworkers whose numbers are shown below.

	Great Britain						
	1951	1950	1949	1948	1937	1935	1935
Males	-	-	1	1	..	..	..
Females	47	55	59	35	..	..	..
Total	47	55	60	36	..	..	..

## 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	1,015	8,366	3
Continuous 4 shift systems per 24 hours averaging 6 hours per shift	-	-	-
All 2 shift systems	459	4,244	3
Other shift systems	-	-	-
Total	1,474	12,610	(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	15	5	4,158	973	275
Percentage of total in trade	100.0	33.3	100.0	23.4	6.6
Percentage of total on returns showing shift-work				100.0	28.3

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

## Larger establishments

TABLE 16

£'000

	Great Britain			
	1951	1950	1949	1948
Wages and salaries (a) of				
Operatives	1,545	1,337	1,159	1,059
Administrative, technical and clerical employees	977	741	724	699
Total	2,522	2,078	1,883	1,758
Employers' contributions to all National Insurance Schemes	62	56	44	38

(a) Including bonus and commission payments, but excluding payments to outworkers shown below.

Great Britain			
1951	1950	1949	1948
4	4	5	3

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

## Larger establishments

£'000

TABLE 17	Great Britain		
	1951	1949	1948
	£'000	£'000	£'000
Plant, machinery and vehicles			
Acquisitions			
Plant and machinery			
New	218	475	192
Second-hand	-	8	4
Vehicles			
New	29	18	9
Second-hand	3	3	2
Total acquisitions	250	504	207
Disposals			
Plant and machinery	5	2	4
Vehicles	8	(a)	5
Total disposals	13	(a)	9
New building work			
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	195	316	130

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

## COUNTRY TABLES

1951

Note - There were no establishments in Wales and no larger establishments in Scotland in the register for this trade.

TABLE 18 - Summary: Larger establishments

See Table 1.

TABLE 19 - Summary: Small firms

Owing to the risk of disclosure of information relating to individual firms this table cannot be given. For information relating to Great Britain as a whole, see Table 2.

Sales in the trade  
Larger establishments

TABLE 20

	England	
	Quantity	Value
	Th.ozs. troy	£'000
Principal products		
Gold		
Refined, in bars, etc.	1,167.6	14,730
Partly refined, in bars, etc.	74.0	923
Manufactures of gold not specified above		
Gold leaf	302.3	3,211
Gold sheet		
Gold fuse wire (a)	..	570
Other gold wire (a)	40.8	299
Other	311.4	2,747
Platinum	..	648
Refined, in grain, ingot, bar or powder	219.6	6,876
Other sorts, including alloys and manufactures, not elsewhere specified	112.7	3,379
Silver		
Refined	20,720.1	6,513
Manufactures of silver		
Fine silver sheet	2,155.9	604
Fine silver wire	395.0	150
Alloyed silver, including solders	8,611.8	1,880
Other manufactures of silver	881.9	237
Palladium, iridium, rhodium, osmium and ruthenium, and alloys thereof other than platinum alloys (a)	..	608
Rolled gold	304.3	3,867
Silver, partly refined	1,586.1	1,061
Other precious metals	..	203
Concentrates, metallic residues, wastes, etc.	10,237.2	2,558
Work done for the trade or on commission (b)	116.2	332
Refining of precious metals	..	173
Other	Th. tons	
Total principal products	1.1	228
Other output	..	21
Copper and manufactures thereof	2.4	664
Brass and other copper alloys (including nickel silver, but excluding other nickel alloys) and manufactures thereof	..	554
Other non-ferrous metals and manufactures thereof	7.4	2,185
Chemical manufactures	..	16
Other goods	..	554
Work done (b)	..	3,352
Total	..	2,380
		63
		62,069

(a) So far as recorded separately.  
(b) Amount charged.

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

Larger establishments

		England
Products on hand for sale	{ at beginning of year	4,372
	{ at end of year	5,032
Work in progress	{ at beginning of year	2,709
	{ at end of year	2,227
Total products on hand for sale and work in progress	{ at beginning of year	7,081
	{ at end of year	7,259
Materials and fuel	{ at beginning of year	2,011
	{ at end of year	2,477

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 finished goods sold and materials and fuel purchased

Larger establishments

		England
Amounts paid to other firms and undertakings		33
Amount paid or credited to firms' own separate transport organisations		3
Total		35

## 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 merchandising 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, 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 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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