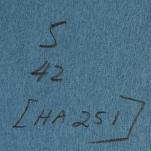


BOARD OF TRADE



# Report on the Census of Production 1963

70 Bolts, nuts, screws, rivets, etc.

LONDON: HER MAJESTY'S STATIONERY OFFICE

Price 3s. 6d. net

BOARD OF TRADE

# Report on the Census of Production 1963

70 Bolts, nuts, screws, rivets, etc.

Presented by the Board of Trade to Parliament in pursuance of the Statistics of Trade Act 1947 (10 & 11 Geo. 6 Cha. 39 Sec. 7)

LONDON: HER MAJESTY'S STATIONERY OFFICE 1968

These notes give the main information needed for interpreting the figures in the industry reports. (More detailed information about the Census is given in a separate booklet - 'Introductory Notes': Part 1 of the Report on the Census of Production for 1963.)

#### GENERAL INFORMATION

#### Changes in the 1963 census

There were few changes resulting from amendments to the Standard Industrial Classification and only minor changes in the scope of certain industry reports compared with 1958. Any such changes are explained in the introductions to the industry reports concerned or by footnotes to the tables.

#### Industrial Classification

Establishments were classified to industries on the basis of major activity in conformity with the second edition of the Standard Industrial Classification (Consolidated Edition 1963, incorporating Amendment 1). Each industry was basically defined in terms of its principal products, these being of a similar nature or commonly associated in production. Normally, an establishment was classified to an industry if its sales of the principal products of that industry accounted for a greater proportion of its total sales than did its sales of the principal products of any other industry. However, where the application of this rule would have resulted in a change of classification between 1958 and 1963, the establishment was reclassified only if the sales of principal products of the newly predominant industry was more than one third greater than the sales of principal products of the previously predominant This modification of the general rule was introduced for 1958 to avoid discontinuities which would result from marginal changes in sales between successive censuses.

The principle of classification by major output was also normally followed in compiling the analysis by sub-divisions of an industry.

In certain industries, classification was dealt with in a different way. Details of any non-standard treatment are given in the introductions to the relevant industry reports.

#### TERMS USED IN THE CENSUS REPORT

#### Average number employed

ii

Firms were required to state the number of persons on the payroll (i.e. whose National Insurance cards were held by them) on the average during the year of return, whether fulltime or part-time employees. Separate figures were required for (a) administrative, technical and clerical employees and (b) operatives (see below). Averages could be calculated from figures relating to the last week of each calendar month; figures shown in respect of the average number employed relate to the sum of these averages. Firms were also required to state the number of working proprietors (see below) where appropriate and these are included in total employment figures. Outworkers are excluded.

The figures include persons engaged in merchanting or factoring and canteen workers where particulars in respect of these activities could not be excluded from the return.

#### Working Proprietors

These include all persons regarded as 'self-employed' for National Insurance purposes, and members of their families who worked in the business without receiving a fixed wage or salary; but persons who worked less than half the normal number of working hours are excluded. For Great Britain, directors working in the business but not in receipt of a definite wage, salary or commission are included under this heading for 1963, but are excluded for 1958. For Northern Ireland, directors of limited companies, other than those paid by fee only, are included for both years. (Directors paid by fee only are not included in any of the employment figures for either year.)

#### Employees

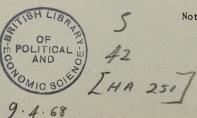
- (i) Administrative, technical and clerical employees include managers, superintendents and works foremen; research, experimental, development, technical and design employees (other than operatives); draughtsmen and tracers; editorial staff, staff reporters, canvassers, competition and advertising staff; travellers; and office (including works office) employees. For Great Britain, but not for Northern Ireland, they include also managing and other directors in receipt of a definite wage, salary or commission.
- (ii) Operatives include all other classes of employees, that is, broadly speaking, all manual wage earners. They include those employed in and about the factory or works; operatives employed in power houses, transport work, stores, warehouses, shops and canteens; inspectors, viewers and similar workers; maintenance workers; and cleaners. Operatives engaged in outside work of erection, fitting, etc. are also included, but outworkers (i.e. persons employed by the firm who worked in their own homes, etc. on materials supplied by the firm) are excluded. Information about the numbers of outworkers employed was collected only for the gloves

#### Capital Expenditure

#### (i) New building work.

This represents the cost incurred during the year of new building and other new constructional work (including office buildings, canteens and the like used in connection with the business covered by the return but not dwelling houses for employees). The value is that charged to capital account during the year of return; it includes expenditure on new buildings or on the extension or reconstruction of old buildings, the value of work of a capital nature carried out by firms' own staff, and the cost of any newly constructed buildings purchased. The figures shown include any legal charges, stamp duties, agents' commissions, etc.

Notes - continued on pages iii and iv



# 70

Bolts, nuts, screws, rivets, etc.

This Report on the Bolts, Nuts, Screws, Rivets, etc. Industry relates to establishments engaged wholly or mainly in manufacturing bolts, nuts, screws, metal washers, rivets, split pins, cut nails, zinc nails, etc., but excluding wire nails.

This industry corresponds to minimum list heading 393 in the Standard Industrial Classification (Consolidated edition, 1963).

There were no larger establishments in this industry in Northern Ireland in 1954, 1958 and 1963.

In interpreting the data in the tables it is essential to bear in mind the notes and definitions which appear on pages (ii), (iii) and (iv).

Table No.	Title	Page
1	Industry summary: United Kingdom. Estimates for all firms, 1958 and 1963	70/3
2	Summary of returns received from larger firms, 1958 and 1963	70/4
3	Analysis of larger firms by size of enterprise within the industry, 1963	70/5
4	Percentage analysis of employees, by age and sex, all firms, 1963: United Kingdom	70/6
5	Sales of principal products of the industry by larger firms, including sales by establishments classified to other industries, 1958 and 1963	70/7
6	Sales of principal products of the industry by establishments classified to other industries, 1958 and 1963	70/10
7	Sales of other than principal products by larger firms in the industry, 1958 and 1963	70/11
8	Production of certain principal products of the industry by larger firms, including production by establishments classified to other industries, 1958 and 1963	DOES NOT APPLY
9	Purchases of selected principal products of the industry by larger firms, 1963	DOES NOT APPLY
10	Purchases by larger firms in the industry, 1954 and 1963	70/12
11	Transport costs and employment of larger firms, 1963	70/13
12	Payments for certain services, etc. by larger firms, 1963	70/14
13	Percentage analysis of twelve-month periods covered by returns from larger firms, 1963	70/14
14	Sales of all parts of machinery and plant by larger firms, including sales by establishments classified to other industries, 1958 and 1963	DOES NOT APPLY

TABLE 1 Industry summary: United Kingdom Estimates for all firms, 1958 and 1963 (a)

SERVE SERVE SERVE SERVE SERVE SERVE	3.1 et 2. Company de la company de l	Unit	1958	1963
Number of enterprises	OF THE STATE OF TH	No.	654	367
Number of establishments	The second of th	•	700	441
Gross output	Harry 13	£,000	91,342	101,850
Net output	Approved successive to a long of the control of	•	42,329	52,337
Net output per head		3	913	1,200
Sales and work done	soods produced and work done	£,000	84,757	94,447(b)
Sales and work done	merchanted goods and canteen takings		5,343	7,252
Purchases	materials for processing and packaging, and fuel	.992	45,706	38,585
rurchases	goods for merchanting and canteen purchases		45,706	7,779
Payments to other	for work done on materials given out		1,345	1,995
organisations	for transport		1,210	1,033
Stocks and work in progress	a roughly as			
Total stocks and work in	change during year	•	+ 491	+ 30
progress	at end of year	•	22,202	26,605
Goods on hand for sale	change during year	•	+ 1,307	- 223
	at end of year	•	10,173	12,715
Work in progress	change during year	•	- 65	+ 374
	at end of year		3,338	4,497
Materials, stores and fuel	change during year		- 751	- 121
· MAGRESSACHURCHERSERSCHUNG	at end of year	ayes•	8,691	9,393
	total, including working proprietors	Th.	46.3	43.6
Average number employed	operatives	•	37.8	34.8
	other employees (c)		8.4	8.4
Wages and salaries	of operatives	£,000	18,265	20,451
the same	of other employees (c)	• 81	6,145	7,339
Employers' contributions to Pension schemes, etc. (d)	National Insurance and private		and solver	2,109
Capital expenditure (e)	The second of th		* E450	so sastoteu
Total	pensity of the second s		7 2007.2007.20	3,828
New building work			565	584
Land and existing buildings	s (f)	•	1.00	- 405
Plant and machinery (f)	ROTA LALENCE		3,101	3,429
Vehicles (f)	District the second of the second	1 .	251	220

<sup>(</sup>a) For 1963, estimates for small firms and for firms not making satisfactory returns accounted for about 6 per cent. of the total figures in which they were incorporated. (For 1958 the comparable figure was 10 per cent.) A summary of the detailed returns received is given in Table 2.

<sup>(</sup>b) Including services rendered to other organisations (amounts charged for hiring out plant, machinery and other goods, for providing transport, or for technical or other services rendered).

<sup>(</sup>c) Administrative, technical and clerical employees.

<sup>(</sup>d) Including pensions and gratuities paid other than from pension funds.

<sup>(</sup>e) Excluding expenditure for establishments not yet in production.

<sup>(</sup>f) Acquisitions <u>less</u> disposals.

TABLE 2 Summary of returns received from larger firms, 1958 and 1963 Firms employing 25 or more persons: United Kingdom (a)

1801 8801	140	Unit	1958	1963
Number of enterprises		No.	185	132
Number of establishments		н	227	195
Gross output		£'000	83,034	95,875
Net output			38,480	49,266
Net output per head		2	913	1,200
Sales and work done	f goods produced and work done	€,000	77,048	88,907(b)
Sales and work done	merchanted goods and canteen takings		4,857	6,826
Index of specialisation (c)		Per cent.	90	90
Purchases	materials for processing and packaging, and fuel	£'000	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	36,322
Service Servic	goods for merchanting and canteen purchases			7,323
Payments to other	for work done on materials given out	н	1,223	1,878
organisations	for transport		1,100	972
Stocks and work in progress		elia (	or free time	export later
Coolers had for rela	schange during year	35.4	+ 1,188	- 210
Goods on hand for sale	at end of year	asia, M	9,248	11,969
W. L	schange during year	2 g H	- 59	+ 352
Work in progress	at end of year	5,5,15 <b>"</b>	3,035	4,233
W	f change during year	н	- 682	- 114
Materials, stores and fuel	at end of year	****	7,900	8,842
	(total, including working proprietors	No.	42,131	41,049
Average number employed	<pre>d operatives</pre>	· ·	34,465	33,019
	other employees (d)	п	7,653	7,958
w - l-l-i-	f of operatives	£'000	16,649	19,387
Wages and salaries	of other employees (d)	30 <b>"</b>	5,601	6,957
W 1 - 1 - 1 - 1 - 1	f operatives	£	483	587
Wages and salaries per head	other employees (d)	40(*36)	732	874
Employers' contributions to Nat	tional Insurance (e)	£'000		1,117
Employers' contributions to pri	ivate pension schemes, etc. (f)	н		882
Capital expenditure (g)			10 10 10 10 10 10 10 10 10 10 10 10 10 1	Va (6) 1 La Cara
New building work		11	514	549
	∫ acquisitions	н	(3)	545
Land and existing buildings	disposals	н		926
THE THE REPORT OF THE PARTY OF THE PARTY.	\( \) acquisitions	N Exercise to the last	2,869	3,460
Plant and machinery	disposals	н	50	233
262 3021 1072	∫ acquisitions		347	324
Vehicles	disposals		119	117

For notes to this table - see page 70/6

TABLE 3 Analysis of larger firms by size of enterprise within the industry, 1963

(i) Output, employment, capital expenditure and stocks

Firms employing 25 or more persons: United Kingdom

Average number employed by the enterprise in the industry (a)	Enter- prises	Estab- lish- ments	Average number employed (a)	Gross output	Net output	Net output per head	Capital expendi- ture (b)	Total value of stocks and work in progress a end of yea
	Number	Number	Number	٤٬000	₹,000	£	\$,000	£'000
25-49	40	42	1,515	3,033	1,415	934	109	448
50-99	35	39	2,426	5,901	2,757	1,136	143	810
100-199	26	34	3,577	8,142	3,848	1,076	256	1,737
200-299	5	10	1,174	2,361	1,164	992	88	829
300-399	6	9	2,040	3,467	1,515	743	222	702
400 and over	20	61	30,317	72,971	38,567	1,272	2,786	20,519
Total	132	195	41,049	95,875	49,266	1,200	3,603	25,044

## (ii) Employees, wages and salaries, and employers' contributions Firms employing 25 or more persons: United Kingdom

Average number employed by	Empl	oyees	Wages and	d salaries	Emplo contrib		Wages and salaries per head		
the enterprise in the industry (a)	Oper- atives	Others (c)	Oper- atives	Others (c)	National Insurance (d)	Private pension schemes, etc. (e)	Oper- atives	Others (c)	
Sec. 18	Number	Number	£'000	£'000	\$,000	\$,000	3	2	
25-49	1,277	211	632	204	38	7	495	966	
50-99	2,036	366	1,080	344	61	15	530	939	
100-199	2,834	727	1,591	547	93	41	561	752	
200-299	966	206	552	188	30	22	572	913	
300-399	1,743	297	898	193	48	13	515	651	
400 and over	24,163	6,151	14,634	5,481	848	783	606	891	
Total	33,019	7,958	19,387	6,957	1,117	882	587	874	

- (a) Including working proprietors.
- (b) Acquisitions less disposals.
- (c) Administrative, technical and clerical employees.
- (d) Including both flat rate and graduated contributions.
- (e) Including pensions and gratuities paid other than from pension funds. These amounted in total to £167,000.

TABLE 4 Percentage analysis of employees, by age and sex, all firms, 1963: United Kingdom (a)

Ages	Males	Females	All employees
turer	Per cent.	Per cent.	Per cent.
Under 18	4	2	6
18 and over	59	35	94
All ages	63	37	100

Source: Ministry of Labour

(a) The percentages relate to the numbers employed (excluding working proprietors) at mid-June, 1963.

### Footnotes to Table 2.

(a) The following information relates to small firms (employing fewer than 25 persons) in this industry. It includes an estimate for small firms not making satisfactory returns which account for 7 per cent. of the employment shown for 1963 and 26 per cent. for 1958.

> 1958 1963 459 237

Number of firms

Average persons employed:

Working proprietors
Other persons employed  $3,745 \begin{cases} 307 \\ 1,836 \end{cases}$ 

- (b) Including services rendered to other organisations (amounts charged for hiring out plant, machinery and other goods, for providing transport, or for technical or other services
- (c) This is the ratio of total sales of principal products by the industry to total sales of goods produced and work done.
- (d) Administrative, technical and clerical employees.
- (e) Including both flat rate and graduated contributions.
- (f) Including pensions and gratuities paid other than from pension funds.
- (g) Excluding expenditure for establishments not yet in production.

TABLE 5 Sales of principal products of the industry by larger firms, including sales by establishments classified to other industries, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

angual say of angual Allowship		22 1 1 1	1958	Linux			1963		
	-	Quant	ity	Value	Quant	ity	Value	Enter- prises	Entries
Iron and steel		Th. to	ons	£'000	Th.to	ons	£,000	Number	Number
				040	0.	Q	295		Samuel S
Bifurcated rivets made from wire				(a){			429	} *	100000
Boot and shoe grindery				200,070				Parent Land	8 (0.1
Made from wire		4.	1	593		19.5 ( 19	404	10(10)	KRONEH
Other (including clog irons)	{	0.	3	42 79	5	. 4	464	7	7
Cut nails	{	7.	3	523 95	} 7.	.6	546	11	11
Cut tacks		3.	1	378			318	8	8
Rivets (other than tubular and bifurcated rivets manufactured from wire)				baser -			CA 200		
Of % inch diameter or over		18.	6	1,252	5.	7	418	8	8
Under ½ inch diameter		7.	4	766	} { 4.	.4	583	} 20	22
Unclassified			-	-	Ji.	•	348	J 20	22
Washers (other than washers assembled with bolts, etc.)	{	11.	7	1,244 735	16.	5	816 1,715	39	42
Tubular rivets	{	Mn. 83		308 133	} Mn.	*101	529	8	9
Bolts, whether threaded or not, bolt ends, hexagon or square head set screws and screw studs, hexagon and square nuts, whether tapped or not, and washers assembled with any of these articles  Bright	{	Th. gross 4,019 4,515	Th. tons 7.8 3.4	3,327 3,757 933 2,029	Th. gross 4,015 3,123	Th. tons 15.3 2.4	4,178 1,661 643 4,682	} 59	75
Black or metal coated (but not painted, japanned or otherwise coated, except with metal)	{	4,834 2,831	13.1	2,210 3,595 14,457 1,248	13,180 1,091	67.4	14,556 1,047 6,657 218	} 40	51
All other kinds	{	2,147 785	6.5	1,881 759 1,648 355	5,138 8,381 	14.4	4,664 3,454 644 608	34	37
Unclassified	{	877.4.	7.6	1,400 304	}		2,514	9	9
Other set screws, screw studs and screws for metal (including self- tapping screws), nuts, and washers assembled with any of these articles		800.1 800.2		48.8	-orqu ibsol	i Bosa vi	wire tank	nding of	oni oin oila
Black or metal coated (but not painted, japanned or otherwise coated, except with metal)	{	308 9,630	0.4	68 1,766 271	{ 5,397	1.9	683 1,957	} 12	12
All other kinds Screws for wood and screw hooks, screw rings and screw knobs		{53,171 	::	7,674 1,335	20,642	9.8	3,018 5,909 641	} 24	30

	105			1000		
	195	Tomas de la companya del companya de la companya del companya de la companya de l	OVERS 25 OF SO	1963	Enter-	The state of the s
tool control on the	Quantity	Value	Quantity	Value	prises	Entries
epinos wreing salev, witrosco	Th.tons	\$,000	Th.tons	£'000	Number	Number
Iron and steel (continued)	Towns !	The second				
Manufactures of iron and steel, not elsewhere specified		1,589		817	17	19
Brass and other copper alloys including nickel silver and cupro- nickel, but excluding other nickel alloys	Th.cwt.	nervi regere	Th.cwt.	its made f	wit ban	Sifare Book a
Rivets (other than tubular) and washers	5.0	147 {	5.5	186 249	} 21	23
Bolts and nuts	Th. gross cwt.  333 10.2 4,336	326 1,004	Th. gross cwt. (2,859 38.1 482	1,161 85	} 23	29
	3.5	106 175	hos 1s	262	18070)	eravis .
	Th.cwt.		beioss	stumum ers	(27 bala	ourlid Franci
Screws for wood (other than coach screws, screw hooks, screw rings and screw knobs	7 385 .:	1,321	{ 286   1.4	88 1,418	} .	e io soos
	EFFE TE LO	Tarkey be	Th.cwt.		inilian	Long
Nails and tacks	1	TO THE REAL PROPERTY.	2.5	68	6	6
Manufactures of brass and other copper alloys, not elsewhere specified	188	324		327	12	12
Copper						alugut-
Nails and tacks	7.8	148	6.9	146	7	2 2 7
Rivets (other than tubular) and washers	3.0	86 116	1.3	<b>45</b> 58	} 10	12
Manufactures of copper, not else- where specified	A SECTION OF THE SECT	40	to yes as	28	5	5
Other manufactures	1612	leasty 1			28	I va
Rivets of aluminium	5.3	264 433	7.2	1,024	15	16
	Mn.	2,881	Mn.	berson le	en to d	sia ico.
Brass and copper tubular rivets	1,588	1,616	1,280	837	10	11
Screw machine products (e.g. turned screws, rivets, washers) not else-where specified	Th.gross	741,2	Th.gross	latio.	d sadso	LIA
Of iron and steel	2,775	1,082 1,778	1,941	1,060 2,429	28	31
Of brass and other copper alloys, including nickel silver and cupro- nickel, but excluding other nickel alloys	<b>3,549</b>	1,008	3,078	1,177 1,733	} 27	30
Of copper		52	selpists ser	39	8	8
Of other metals	426	236 39	1,470	228 991	} 22	27
	Th.cwt.		Th.cwt.		i redico	LIA
Taper pins of all metals Other products	1 and 1	571 437	elled et	3,471	25	30
Products			2		1000	17 St St St St

TABLE 5 (continued)

Warns manager of the	1958		present II palve	1963				
	Quantity	Value	Quantity	Value	Enter- prises	Entries		
Principal	Th.tons	£'000	Th. tons	£'000	Number	Number		
Scrap metal sold	CATABOOK   DA		Bullon L E		2002	1000		
Iron and steel	95.6	849	81.9	726 34	} 108	143		
Brass	5.7	698 77	} 5.8	866	59	71		
Other scrap metals {	1.1	70 21	0.8	61 132	} 44	55		
Work done	37 111 33					en and		
General and jobbing work (including repair work)	1 47	1,084		335	11	12		
Other work done, on commission, sub- contract work, etc.	non mind their	755		19	151 W 50	Lemman.		
Total	or elsewhere	74,013	indian and a second	84,294	28372 a	sa fasa		
Sales in other industries (see Table 6)	II-(91	4,295	1 1/4	3,748	13 LW 65	Lámra an		
Principal products of this industry sold by establishments in the industry	1.43	69,719	abir salar	80.546	132	170(b		

- (a) Included in 'Manufactures of iron and steel, not elsewhere specified' for 1958.
- (b) This figure represents the total number of returns made by larger firms in this industry, which is less than the total number of establishments in Table 2 on account of combined returns covering more than one establishment.

Sales of principal products of the industry by establishments classified to other industries, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

Charles and the same of the sa	-		_			
	1:	958	E SCHOOL S		1963	
tenns result (Succession )	Quantity	Value	Quantity	Value	Entries	Principal industries in which produced (a)
	Th. tons	£,000	Th.tons	€,000	Number	I leaps bee no
Iron and steel	1 88		9 1			202
Nails, tacks and rivets (including tubular rivets and bifurcated rivets manufactured from wire)  Boot and shoe grindery	5.8	546 289 }	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	182 753	} 8	37, 52, 60, 74
Washers (other than washers assembled with bolts, etc.) {	1.1	151 210	}	380	14	37, 74
Bolts, whether threaded or not, bolt ends, hexagon or square head set screws and screw studs, hexagon and square nuts, whether tapped or not, and washers assembled with any of these articles	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	710} 313}	1.60	2011 2012	animi se	Toral Sales (n ori
Other set screws, screw studs and screws for metal (including self-tapping screws), nuts, and washers assembled with any of these articles	31	20	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	580 1,852	} 26	37, 52, 62, 74
Rivets, bolts and nuts of brass and other copper alloys; taper pins of all metals; and screw machine products of brass and other copper alloys not elsewhere specified	bace apad te tyliargi ile Z an a	1,997(ъ)	Della kees To angone Saf Tokana Jos		athetes laket and eas	
Total		4,295	100	3,748		# 1 10 1

<sup>(</sup>a) The references given are to the list of industries at the back of this report.

Sales of other than principal products by larger firms in the industry, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

	19	58	19	63
	Quantity	Value	Quantity	Value
Manufactures of iron and steel	Th.tons	€,000	Th. tons	€,000
Nails, tacks and staples (including insulated staples) made from wire	1.2	131(a)	}	472
Wire and other manufactures of wire	freenis	168	]	Preside
Railway spikes	7.9	756	1.8	166
Stampings and pressings	inela.	83	163 ···	746
Builders' ironmongery	the market	125	rdal inst	161
Tools and implements	254 2 2-2 perk	519		fine toos
Steel forgings, other than drop forgings		603		1,078
Other iron and steel manufactures, not elsewhere specified	11.5	1,220 }		Estate 1
Manufactures of non-ferrous metals, not elsewhere specified		137	ila tana en	444
Parts and accessories of motor vehicles and tractors		390(b)	TOTAL DES	1,735
Plant and machinery, including parts		1,570	( wyo i sa	907
Metal smallwares		554	The Laxe	0.000
Other products Work done		796 . 16	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	2,396
Services rendered to other organisations (c)	winsin av	14 00000	saidte fat	255
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)		4,651	favolis	6,588
Canteen takings	especa Lile	206	mg to but o	239
Total	and dissail and the	12,187(d)		15,187

<sup>(</sup>a) Excluding insulated staples for 1958.

TABLE 8 Production of certain principal products of the industry by larger firms, including production by establishments classified to other industries, 1958 and 1963

This table is not applicable to this industry.

TABLE 9 Purchases of selected principal products of the industry by larger firms, 1963

This table is not applicable to this industry.

<sup>(</sup>b) Including aluminium rivets and an amount charged for general and jobbing work.

<sup>(</sup>b) Including parts for cycles.

<sup>(</sup>c) Amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered to other organisations.

<sup>(</sup>d) Excluding amounts charged for services rendered to other organisations.

TABLE 10 Purchases by larger firms in the industry, 1954 and 1963 Firms employing 25 or more persons: United Kingdom

A STATE OF THE PARTY OF THE PROPERTY OF THE PARTY OF THE	19	954	19	963
1081 8561	Quantity	Cost	Quantity	Cost
	Th.tons	£'000	Th.tons	£'000
aterials for processing		Search how y	ort Joseph	(Sed octa
Steel Steel	eri yalbaşı	11 10 000 07	Ma saysa	, alley
Ingots, blooms, billets, slabs, and sheet and timplate { bars	9.5	288 298	} 14.6	704
Bars and rods (including wire rods), angles, shapes and sections, girders, beams, joists and pillars rolled (not fabricated) including tube rounds and		32 Crantias	entique y	eriter Special
squares (a)	187	7,733	167	10,157
Iron and steel not elsewhere specified except finished parts, wire and scrap	33.1	1,460 580	}	1,670
Light metals and non-ferrous metals in all forms except finished parts, wire and scrap		selunas les	rt bas asri	38010 1080s
Aluminium and aluminium alloys	0.2	85 28(b)	}	480
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other		rotob To sa		ne arres
nickel alloys)	9.7	2,506	10.0	2,659
Copper (excluding blister) (c)	1.3	403	100 a 110 a	108
Wire				
Steel (single wire)	110	5,164	139	9,790
Brass and other copper alloys (including nickel		use Sedan c	- Consultant	
silver and cupro-nickel, but excluding all other nickel alloys)	6.8	1,821	5.9	1,830
Heavy chemicals (acids, alkalis, alcohols, other		esponent s	กลุ่วมาวิธีวิสตร	
inorganic and organic chemicals, compressed gases, etc.)		••	egnties	179
Lubricating oils and greases (including cutting oils		(	Th.gal. 1,286	308
and emulsions)	STATE OF THE PARTY	{		82
Replacement parts for firms' machinery, plant and vehicles, and accessories and consumable tools bought as replacement		1,600	eni gaibula clucing pa	2,343
All other materials for processing	niq and go apartmen	2,929	ence to	2,790
ckaging materials	vuer vol h	37-20 5100	ma gribula	S (3)
Boxes, cartons, packing cases, and drums and canisters				
(with or without metal ends) of paper, cardboard and fibreboard		279		66:
Jute and hessian piece goods, sacks and bags		237		229
All other packaging materials	mingres.	193	19 8 31	84
el and electricity (d)	Th. tons	ass chara	Th. tons	
Coal	46.5	159	43.7	208
Coke (including screenings) and manufactured fuel	10.4	55	3.8	33
	Th.gal.		Th.gal.	
Derv fuel and motor spirit for use in road vehicles	587	120	695	126
Other liquid fuels (including creosote/pitch mixtures, etc., and liquefied petroleum gases)	6,217	249 {	5,845	293 54

TABLE 10 (continued)

		1954		1963	
		Quantity	Cost	Quantity	Cost
the Martine were an extreme and market plane.		Th. therms	€,000	Th. therms	£'000
Fuel and electricity (d) (continued)	1,423	43			
Gas	{	4,636	246 26	4,989	317 74
Carterian and was an and an area		Th.kWh		Th.kWh	
Electricity		109,033	584	187,682	1,147
Total cost of materials and fuel			27,045	4678669	36,322
Goods purchased for merchanting					7,066
Canteen purchases	1				257
Total cost of purchases		online a	10 2 10 0	7. 1. 80 (2007)	43,645

- (a) 'Tube rounds and squares' were not included in 1954.
- (b) So far as recorded separately.
- (c) Described in 1954 as 'Copper in all forms except finished parts and scrap'.
- (d) The total quantity of electricity generated in firms' own establishments in this industry was 848 Th.kWh in 1954 and 606 Th.kWh in 1963.

TABLE 11 Transport costs and employment of larger firms, 1963 Firms employing 25 or more persons: United Kingdom

	Unit	1963
Average number employed mainly on transport	No.	418
Transport costs		
Wages and salaries	£'000	343
Derv fuel and motor spirit	H VALUE	126
Payments to other organisations for transport	1897	972
Costs of operating road goods vehicles	- 日本地域計算	
Insurance	п	20
Vehicle licences	n n	13
Depreciation	n	145
Payments to other organisations for repairs and maintenance	1	36
Total	п	1,656

TABLE 12 Payments for certain services, etc. by larger firms, 1963 (a)

Firms employing 25 or more persons: United Kingdom

Short (amade of ) Short a learned of	Amounts payable	
Repairs and maintenance to	£'000	
Buildings	343	
Road goods vehicles	36	
Plant, machinery, and other capital equipment	618	
Insurance, licensing and depreciation of road goods vehicles (b)	179	
Rates, excluding water rates	559	
Hire of plant and machinery	155	
Postage, telephone, telegrams and cables	310	
Total	2,199	

<sup>(</sup>a) No deduction is made for these payments to arrive at the figures of net output given in this report.

TABLE 13 Percentage analysis of twelve-month periods covered by returns from larger firms, 1963 Firms employing 25 or more persons: United Kingdom

Year ended	Percentage of total number employed	er   Year ended   total num		
1963	1963 Per cent. 1963 (contd.)		Per cent.	
April (a)	0.6	November	0.8	
May	0.3	December	69.4	
June	4.3			
July	5.4	1964	Busseses	
August	5.8	January	0.3	
September	5.6	February	0.5	
October	0.7	March	6.3	
ent and another entry.	and a trade	Total	100	

<sup>(</sup>a) Including returns made for twelve-month periods ended 1st to 5th April, 1964.

TABLE 14 Sales of all parts of machinery and plant by

larger firms, including sales by establishments classified to other industries, 1958 and 1963

## Capital Expenditure (continued)

(ii) Land and existing buildings.

The items shown are the capital cost of freeholds purchased and the capital cost or premium payable for leaseholds acquired (excluding the value of any assets acquired in taking over an existing business), and the amounts receivable for any freeholds or leaseholds disposed of. The value is that charged to capital account during the year of return.

#### (iii) Plant, machinery and vehicles.

The items shown are the value of plant and machinery and of vehicles acquired, both new and second-hand, and the amount received for items disposed of during the year. The value of plant and machinery acquired includes plant, etc. which firms produced for their own use in connection with the business covered by the return. The value of plant, etc. acquired is the expenditure charged to capital account during the year of return less any discounts received, but including the cost of transport and installation. No deduction is made for depreciation, amortisation or obsolescence. The proceeds of items disposed of during the year exclude amounts written off for items scrapped.

Capital expenditure during the year in respect of manufacturing establishments where production had not started before the end of the year is excluded in this report for both 1958 and 1963.

#### Characteristic Products

The characteristic products of a sub-division are those in terms of which the sub-division is defined. They are products commonly associated in production and are usually similar in nature or manner of production. In most cases the characteristic products of each subdivision are indicated in Table 5 of the industry reports. For those industries for which an analysis by sub-divisions has been made, Table 2 shows the total sales of such characteristic products for each sub-division. The totals include, besides the products which define the sub-division, other items of output assumed to be closely related to them, e.g. waste products and work done.

#### Enterprise

The term enterprise is used in this report to mean one or more firms under common ownership or control. An enterprise normally consists either of a single firm, or of a parent company together with its subsidiary companies.

The number of entries shown in Tables 5, 6 and 8 against a particular output or production heading is the number of returns on which figures were recorded for that item.

#### Establishment

The census was based on the establishment, comprising in most cases the whole of the premises under the same ownership or management at a particular address (e.g. a factory or mine); but firms were asked to exclude from all sections of their returns particulars relating to any department not engaged in production for which they kept a separate set of accounts. Where separate accounts were not kept, they were asked to include merchanting or factoring, canteens operated by them and other

ancillary activities such as bottling, packing and the manufacture of containers for packing their own products, whether or not these activities are carried on at the same address as the works. Building and engineering maintenance departments and selling and transport departments were treated similarly.

#### Gross Output

The gross output of an industry is the aggregate value of goods made and other work done during the year by the establishments classified to the industry. It is derived by subtracting from the value of sales and work done, the value of stocks of goods on hand for sale and work in progress at the beginning of the year and adding the value at the end of the

#### Larger Firms

These are firms in which twenty-five or more persons were employed on the average during the

#### Net Output

The net output of an industry represents the value added to materials by the process of production. It includes the gross margin on any merchanted or factored goods sold; it constitutes the fund from which wages, salaries, insurance, pensions, hire of plant and machinery, payments for repairs and maintenance, costs of operating road vehicles, rents, rates and taxes, advertising and other selling expenses and all other similar charges have to be met, as well as depreciation and profits. There is no appreciable duplication in net output. Net output has been obtained by deducting from the gross output the cost of purchases adjusted for stock changes, payments for work given out to other firms, and payments for transport.

Normally any customs or excise duty on materials purchased is included in the cost of materials. Similarly, finished goods sold have been valued as they were sold, duty paid or duty free. The amounts of duty, subsidies, allowances and levies receivable or payable. where of substantial importance in the industry, were required to be stated separately, and these items were taken into account when calculating net output.

#### Net output per person employed

The figures for net output per person employed are derived by dividing the net output by the average number of persons employed (full-time and part-time) on all activities covered by the returns, including operatives, administrative, technical and clerical employees and working proprietors, but excluding outworkers.

#### Principal Products

The principal products of an industry are those in terms of which the industry is defined. They are products commonly associated in production, and are usually similar in nature or manner of production.

#### Production

This means the total quantity of a product made during the year, whether sold in the year, added to stock, transferred to another department of the same firm, or used in the manufacture of other products within the business covered by the return. It includes goods produced from materials supplied by other firms.

<sup>(</sup>b) For details see Table 11.

#### Purchases

Purchases include the cost of materials and components bought for use in production; of fuel and electricity for all purposes; of packaging materials, including the full cost of returnable cases and containers when first purchased; of workshop materials, office materials and materials for repairs to firms' own buildings, plant and vehicles when carried out by their own workpeople included in the return; of consumable tools; and of parts for machinery purchased during the year as replacements. Water charges are also included. In general purchases of goods for merchanting or factoring and canteen supplies are included. Materials supplied by customers for processing are excluded.

The values shown include any duty paid (less rebate, etc.) but exclude trade discounts allowed. The cost of transport is included only if included in the cost of materials as invoiced; amounts paid to transport organisations, including firms' own separate transport organisations, for delivery of materials and fuel are, therefore, excluded. Materials purchased overseas are included at their c.i.f. cost plus any duty payable if the cost of transport from the docks was not included in the invoiced price, but at their full delivered cost if invoiced 'carriage paid home'. Materials and fuel transferred from another department of the firm not covered by the same return are included at the estimated selling value recorded by the other department.

#### Sales

Sales are in respect of goods made by the business covered by the return, goods made for it by outworkers or by other firms from materials given out to them (sometimes described as goods made on commission) and waste products. Any machinery or other capital items produced for use in the business covered by the return are included, the value being that adopted in the firm's capital asset account. Goods sold without being subjected to any manufacturing process (merchanted or factored) and canteen takings are included as in 1958.

The value shown for sales is the net selling value, defined as the amount charged to customers whether on an ex-works or delivered basis, net of any trade discounts, agents' commissions, allowances for returnable cases, purchase tax, etc.; the net amount charged for packing materials is included. Goods charged on a delivered basis to customers overseas are included at the f.o.b. value. For work done on commission or for the trade the value shown is the net amount charged.

Where goods produced in one department were transferred to another department of the same firm not covered by the return, these transfers were treated as sales by the producing department and valued as far as possible as if they had been sold to an independent purchaser. Goods transferred to wholesale or retail selling organisations for which separate accounts were kept were valued on the same basis. Estimations of a similar kind were also sometimes necessary in valuing transfers between different firms belonging to the same enterprise. To the extent that the sales of finished products of one establishment may constitute the materials purchased by another, total figures of the value of sales (and of materials and fuel purchased) include an element of duplication.

#### Services rendered

This represents the amounts charged for hiring out plant, machinery and other goods, providing transport, or for any technical or other

services rendered to other organisations. It includes amounts credited for similar services rendered to other departments of the same firm not covered by the return.

These are firms in which fewer than twenty-five persons were employed on the average during the

#### Stocks and Work in Progress

Values are given of stocks of goods on hand for sale, and of materials and fuel, at the beginning and end of the year of return, including any stocks of goods held for merchanting or factoring. The values include duty in the case of dutiable goods held out of bond. The value of work in progress at the two dates is also usually shown. This excludes any progress payments made to sub-contractors, and no deduction is made on account of progress payments received.

#### Transport Payments

These represent the total amount paid or credited during the year for both outwards transport of finished goods sold and inwards transport of materials and fuel purchased. They include payments to other firms, and to any separate transport organisation of the same firm, not covered by the return, but exclude the value of transport services provided by the business covered by the return. The items included are payments for hired cartage and for inwards and outwards carriage by all forms of inland transport, i.e. railways, road haulage, canals, coast-wise shipping, air, etc. Payments made for sea freight on goods sold to customers overseas and on materials and fuel purchased from overseas suppliers are excluded.

#### Wages and Salaries

These are the amounts paid during the year to operatives and to administrative, technical and clerical employees. Payments to working proprietors, whether called salaries or not. are excluded; in Northern Ireland this exclusion extends also to payments to directors of limited companies. The values shown include all overtime payments, bonuses and commissions, whether paid regularly or not, and no deduction is made for income tax, insurances, contributory pensions, etc. The value of any payments in kind, travelling expenses, lodging allowances, etc. and employers' contributions to National Insurance and pension schemes is excluded.

### Work given out

The figures shown represent the total amount paid for work done by other firms on materials supplied to them, and also by firms' own establishments for which separate returns were made. They do not include payments to individual outworkers or payments for business and other services.

#### Symbols used

The following symbols are used throughout the

- .. Not available
- Nil or negligible (less than half the final digit shown)
- \* Figures cannot be shown owing to the risk of disclosing information about individual enterprises.

#### Rounding of Figures

The figures in the tables have, where necessary, been rounded to the nearest final digit. There may, therefore, be apparent slight discrepancies between the sums of the constituent items and the totals shown.

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