This Report on the Copper, Brass and Other Copper Alloys Industry relates to establishments engaged wholly or mainly in refining copper, making copper alloys (brass, bronze etc), and in the production in copper and its alloys of ingots, bars, billets, sheets, strip, foil, circles, sections, rods, pipes, tubes, etc, and of die castings. The production of engineers' castings, stampings and pressings is included but wire drawing and the production of finished goods such as hollow-ware are excluded.

This industry corresponds to minimum list heading 322 in the Standard Industrial Classification (Revised 1968) which has been used for the first time as a basis of classification in the 1968 Census.

The industry formed part of the Non-ferrous Metals Industry (Part 40) in the Reports on the last detailed Census of Production for 1963 and the remainder is now the subject of two other Reports for 1968, Aluminium and Aluminium Alloys (Part 47) and Miscellaneous Base Metals (Part 49).

Throughout this Report the figures given for 1963 have been reclassified as far as possible, according to the Standard Industrial Classification (Revised 1968) so that data for 1963 and 1968 are on the same industrial basis. However the reclassification of small firms which provided limited information only has been arbitrary.

There were no larger establishments in this industry in Northern Ireland in 1963 and 1968.

METHOD OF CLASSIFICATION

The classification of returns to this industry followed the standard procedure as outlined in the notes on page (i). A different procedure was used in classifying returns to the sub-divisions of the industry shown in Table 4. Returns in which combined sales of copper, brass and other copper alloys manufactures were less than one-tenth of their sales of such metals in unwrought or partly wrought form were classified as 'Smelters and refiners' and all other returns were classified as 'Fabricators and founders'.

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

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LIST OF TABLES

COPPER, BRASS AND OTHER COPPER ALLOYS

COPPER, BRASS AND OTHER COPPER ALLOYS

TABLE 1 Industry summary, 1963 and 1968 United Kingdom (a) (b)

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(c) Including services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered).

(d) Administrative, technical and clerical employees.

(e) Excluding expenditure for establishments not yet in production.

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

			All establishments		
	And Statement Statement	Unit	1963	1968	
Number of enterprises		No.	396	425	
Number of establishments		п	465	506	
Gross output		000*3	334,718	580,693	
Net output		п	79,536	108,738	
Net output per head		£	1,602	2,241	
Sales and work done	\int goods produced and work done (c)	000*2	316,095	533,359	
Jares and work done] merchanted goods and canteen takings	n	14,955	36,878	
Purchases	∫ materials for use in production and packaging and fuel	п	239,132	432,390	
180	goods for merchanting and canteen purchases	п	14,387	35,856	
	for work done on materials given out	п	1,639	2,577	
Payments to other organisations	for transport by road	п		2,354	
	by rail and other means excluding postal services	n	$\left. \right\} 2,151 \left\{ \right\}$	179	
Stocks and work in progress					
Total stocks and work in progress	{ change during year	n	+ 5,796	+ 11,859	
	l at end of year	"	51,005	90,107	
Goods on hand for sale	∫ change during year	u	+ 599	+ 3,621	
doous on nand for sure	l at end of year	n	11,064	23,693	
W	∫ change during year		+ 3,070	+ 6,835	
Work in progress	at end of year	n	18,249	35,731	
control design of the re-	[change during year	п	+ 2,127	+ 1,403	
Materials, stores and fuel	at end of year	11	21,692	30,682	
	[total, including working proprietors	Th.	49.6	48.5	
Number employed on average	operatives	н	37.9	36.3	
during the year	other employees (d)	п	11.3	11.9	
	[of operatives	£"000	29,097	36,254	
Wages and salaries	of other employees (d)	n	11,511	16,385	
Capital expenditure (e)	~				
Total			9,066	9,304	
New building work		п	2,045	1,307	
Land and existing buildings	s (f)	п	420	- 182	
Plant and machinery (f)			6,107	7,535	
Vehicles (f)		и	495	643	

(a) For 1968, estimates for establishments not making satisfactory returns and for small establishments, from which only employment data were collected, accounted for 8 per cent. of the total figures in which they were incorporated: of this, unsatisfactory returns accounted for 2 per cent. For 1963 the comparable figures were 6 per cent. and 1 per cent. respectively.

(b) The following information relates to small establishments (emplindustry. It includes an estimate for small establishments no

Number of establishments Average number employed: Working proprietors Other persons employed

Footnotes continued on page 48/2.

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loying fewer than 25 pe ot making satisfactory	rsons) in returns.	this
1963	1968	
238	269	
238	269	

338	291
2,233	2,905

TABLE 2 Analysis by size of establishment within the industry, 1968

(i) Output and employment

All establishments: United Kingdom

Number employed on average during the year by the establishment (a)	Estab- lish- ments	Estab- Enter- emplo lish- prises ave men'ts (b) durin		l number loyed on Gross verage output ing the ar (a)		Net output per head	
A COLOR MAN	Number	Number	Number	£'000	£'000	£	
1-5	73	72	256				
6-10	75	75	592		••		
11-24	121	120	2,092		and the second		
25-49	51	47	1,895	17,650	3,983	2,102	
50-99	49	47	3,391	25,090	6,306	1,860	
100-199	37	32	5,045	64,722	11,340	2,248	
200-299	17	13	4,260	58,070	9,170	2,153	
300-399	6	3	2,202	39,694	5,859	2,661	
400-499	4	4	1,808	53,786	5,031	2,783	
500-749	9	6	5,456	48,663	11,927	2,186	
750-999	4	• 4	3,551	58,098	8,213	2,313	
1,000 and over	6	6	16,765	166,002	37,652	2,246	
Insatisfactory returns	54	53	1,199				
Total	506	425	48,512	580,693(c)	108,738(c)	2,241(c)	

(ii) Employees, wages and salaries

All establishments: United Kingdom

Number employed on average during the	Empl	oyees	Wages and	d salaries	Wages and salaries per head		
year by the establishment (a)	Oper- atives	Others (d)	Oper- atives	Others (d)	Oper- atives	Others (d)	
e	Number	Number	£'000	£'000	£	£	
1-5			·		antine. to		
6-10							
11-24							
25-49	1,500	363	1,369	534	913	1,472	
50-99	2,718	639	2,299	810	846	1,267	
100-199	4,063	975	4,158	1,360	1,023	1 "395	
200-299	3,425	832	3,206	1,070	936	1,286	
300-399	1,549	653	1,592	910	1,028	1,394	
400-499	1,480	328	1,493	435	1,009	1,326	
500-749	4,318	1,138	4,486	1,357	1,039	1,193	
750-999	2,808	743	3,057	875	1,089	1,177	
1,000 and over	11,505	5,259	11,712	7,738	1,018	1,471	
satisfactory returns						1996	
Total	36,251(c)	11,865(c)	36,254(c)	16,385(c)	1,000(c)	1,381(c)	

(a) Including working proprietors.

(b) The sum of the figures for the size groups exceeds the total for the industry to the extent that enterprises made returns for establishments in more than one size group.

(c) Including estimates for establishments employing fewer than 25 persons and for establishments not making satisfactory returns.

(d) Administrative, technical and clerical employees.

CO	D	D	F	D		
CO	r	Г	Ľ	n	,	

ABLE 3Percentage analysis of employees, by age and sex, 1969 (a)All establishments:United Kingdom							
Ages	Fem al es	All employees					
	Per cent.	Per cent.	Per cent.				
Under 18	2	1	3				
18 and over	77	20	97				
All ages	79	21	100				

(a) The percentages relate to the numbers employed (excluding working proprietors) at June 1969, the earliest date for which the information is available on the basis of the Standard Industrial Classification, (Revised 1968).

Footnotes to Table 4.

- services rendered).
- industry.
- done.
- production.
- (i) Acquisitions <u>less</u> disposals.

Source: Department of Employment

(a) Some establishments employing fewer than 25 persons were included in returns for larger establishments. These amounted to 11 establishments in 1968 and 14 in 1963.

(b) The method of classifying returns to sub-divisions of the industry is explained in the notes; the characteristic products of each sub-division are identified in Table 5.

(c) The sum of the figures for the sub-divisions exceeds the total for the industry to the extent that enterprises made returns for more than one sub-division.

(d) Including services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other

(e) Characteristic products relate only to sub-divisions of the

(f) For sub-divisions of the industry, this is the ratio of sales of characteristic products to total sales of goods produced and work done. For the industry as a whole, this is the ratio of total sales of principal products by the industry to total sales of goods produced and work

(g) Administrative, technical and clerical employees. (h) Excluding expenditure for establishments not yet in

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TABLE 4 Analysis of larger establishments, 1963 and 1968

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom (a)

			Sub-	divisions o	f the indus	stry (b)		
		Unit refi		ers and iners 01		Fabricators and founders 02		otal
	and the second second		1963	1968	1963	1968	1963	1968
Number of entern	prises (c)	No.	31	20	126	116	151	13
Number of establ	lishments	п	42	26	176	168	218	19
Gross output		£,000	52,965	124,546	262,441	408,135	315,406	532,68
Net output		п	6,939	10,961	68,008	88,787	74,947	99,74
Net output per h	lead	£	1,628	3,182	1,600	2,163	1,602	2,24
Sales and work done	goods produced and work done (d) merchanted goods and	£'000	49,676	99,253	248,181	390,007	297,857	489,26
	canteen takings	п	2,785	24,275	11,307	9,554	14,092	33,82
sales of charact	teristic products	н	45,703	95,641	199,417	306,879	(e)	(e
Index of special	isation (f)	Per cent.	92	96	80	79	89	8
	fraterials for use in production and packaging, and fuel	£'000	44,789	89,330	180,547	307,310	225,335	396,64
Purchases	goods for merchanting		- And the Contract of Contract		and the second s	a summeries		
	and canteen purchases	"	2,702	23,759	10,854	9,132	13,557	32,891
	materials given out for transport	"	105	257	1,439	2,107	1,544	2,36
ayments to ther	by road		h r	525	h	1,635		2,16
rgani sations	by rail and other means excluding postal services	H	> 527	32	> 1,500	132	2,027	2,10
tocks and work		a financia				102	J	10
Goods on hand for	<pre>{ change during year</pre>	"	+ 470	+ 56	+ 94	+ 3,266	+ 564	+ 3,32
sal e	Lat end of year	"	2,459	3,063	7,966	18,672	10,425	21,73
Work in	∫change during year	п	+ 34	+ 962	+ 2,859	+ 5,308	+ 2,893	+ 6,27
progress	at end of year	п	409	2,475	16,650	30,302	17,059	32,77
Materials,	change during year	п	+ 2,097	+ 318	- 93	+ 969	+ 2,004	+ 1,28
stores and fuel	at end of year		4,776	7,861	15,664	20,285	20,440	28,14
	total, including working proprietors	No.	4,263	3,445	42,512	41,056	46,775	44,50
umber employed n average	operatives	п	3,456	2,651	32,534	30,818	35,990	33,46
uring the year	other employees (g)	н	798	790	9,908	10,165	10,706	10,95
ages and	∫of operatives	£'000	2,625	2,831	24,963	30,641	27,587	33, 47
alaries	of other employees (g)	H	899	1,234	10,017	13,894	10,916	15,12
ages and alaries	{operatives	£	760	1,068	767	994	767	1,00
er head	lother employees (g)	п	1,126	1,562	1,011	1,367	1,020	1,38
apital expenditu	re (h)	- entry	mapph (A)					
New building wo	rk	£'000	194	310	1,733	889	1,927	1,19
Land and existing	{acquisitions	п	1	} 53 (i)	579	- 219	580	34
buildings	di sposal s	н	2		183	∫ (i)[184	51
Plant and	∫acquisitions	п	394	1,051	5,619	6,120	6,013	7,17
machinery	di sposal s	н	8	9	251	249	259	259
Vehicles	∫ acquisitions	н	81	136	546	664	627	799
Select and the second	disposal s		19	26	142	183	161	20

TABLE 5Sales of principal products of the industry by larger establishments, including
sales by establishments classified to other industries, 1963 and 1968

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

Quantity Value Diter- biter- prime biter Entries biter- biter- calmin copper/10 Theory along the prime biter calmin copper/10 Diter- prime biter biter- prime biter biter biter biter biter	Industry	1.000 1.000 1.000 1.000	19	63	States and	1968		
ing nickel silver and cupro-nickel, but caditum corper) (b) 01 Incois, blocks, slabs, billets, bars (Including wire bars), other refinery shapes and cast strip Brass including manganese bronze 01 Continuous castings not included above Brass including manganese bronze In bar and red In plates or strip 02 Flater, sheets, foil, strip, diace and circles 10 Other 11 In the 11 In plates or strip 02 Flater, sheets, foil, strip, diace and circles 10 Other 11 Royans and red 11 In the 12 Shape and marks 10 25,466 10 Other 11 Other rods, sections and wire not 10 Other 11 orbits 12 Shape and marks in the strip 13 Stappes of drams probeller blades 14 Stappes of pressings which are the 15 Solution of the strip 14 Stappings of pressings which are the 15 Solution of the strip 14 Stappings of pressings which are the 15 Solution of the strip 16 Stappes and pressings which are the 16 Stappes and pressings which are the 17 The stappes of drams probeller blades 10 Other 14 Stappings of pressings and the corper 15 Solid drawn of circular section 22 Other of pressings and circular section 23 Other 24 Solid drawn of circular section 24 Solid drawn of circular section 25 Solid drawn of circular section 26 Other 27 Tubes 29 Other 20 Other of pressings and ther corper 20 Other 20 Other of pressings and circular section 22 Other samufactures of brass and 22 Other and propeller blades 23 Solid drawn of circular section 24 Solid drawn of circular section 22 Other and propeller blades 23 Solid drawn of circular section 24 Solid drawn of circular section 24 Solid drawn of circular section 24 Solid drawn of circular section 25 Solid drawn of circular section 26 Other 27 Solid drawn of circular section 27 Solid drawn of circular sectio		There are a second	Quantity	Value	Quantity	Value		Entries
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		ing nickel silver and cupro-nickel, but excluding all other nickel alloys, and	Th.tons	£'000	Th.tons	£,000	Number	Number
Other1.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.11.1.1 <th< td=""><td>01</td><td>(including wire bars), other refinery</td><td></td><td>117</td><td></td><td></td><td></td><td></td></th<>	01	(including wire bars), other refinery		117				
01 Continuous castings not included above In the continuous castings not included above In the continuous castings not included above In the continuous casting In the contin the continuous casting In th		Brass including manganese bronze	78.1	14,922	68.4	25,554	30	38
above Brass including magnese bronze 1 2.3 1.170 6 6 In bar and rod 1 1.398 1.3 699 6 6 Other In bar and rod 1.398 1.3 699 6 6 In bar and rod 1 1.398 1.3 699 6 6 In bar and rod 1 1.13 699 6 6 In bar and rod 1 1.13 699 6 6 In bar and rod 1 1.13 699 6 6 In bar and rod 1 1.13 699 6 6 In bar and rod 1 1.11 1.11 1.11 1.11 02 Plates, sheets, foil, strip, discs 82.6 24,308 69.4 36.863 23 27 02 Other ords, sections and wire not 9.0 3,523 19.8 9.669 11 14 02 Other of sigs 67.7 4,470 3.8 3.320 5 6 04 Machined castings Propeller an		Other	56.4	12,888	45.6	21,945	22	25
$\begin{bmatrix} In bar and rod \\ In tube \\ In plates or strip \\ Other \\ In bar and rod \\ In tube \\ In plates or strip \\ Other \\ In bar and rod \\ In tube \\ In plates or strip \\ Other \\ In bar and rod \\ In tube \\ In plates or strip \\ Other \\ Subpes and circles \\ and c$	01	above						100
$\begin{bmatrix} In tube \\ In plates or strip \\ Other \\ In bar and rod \\ In tube \\ In plates or strip \\ Other \\ In bar and rod \\ In tube \\ In plates or strip \\ Other \\ In coils \\ Shapes and angles \\ Other \\ Other rods, sections and wire not in coils \\ Other \\ Machined castings of else-where specified \\ Machined castings of else-where specified \\ Other \\ Propellers and propeller blades for ships \\ Other \\ Pressings in sheet metal \\ Other \\ Pressings in sheet metal \\ Other \\ Pressings in sheet metal \\ Other \\ Products of drop stamping or hot pressing shich are the products of drop stamping or hot pressing shich are the products of drop stamping or hot pressing shich are the products of drop stamping or hot pressing shich are the products of drop stamping or hot pressing shich are the products of drop stamping or hot pressing shich are the products of drop stamping or hot pressing shich are the products of drop stamping or hot pressing shich are the products of drop stamping or hot pressing shich are the order of ther copper alloys not elsewhere specified \\ Other $								
$\begin{bmatrix} In plates or strip \\ 0ther \\ In bar and rod \\ In tube \\ In plates or strip \\ 02 \\ Plates, sheets, foil, strip, discs and circles \\ and circles \\ and circles \\ and circles \\ 02 \\ Shapes and angles \\ 02 \\ 02 \\ Shapes and angles \\ 02 \\ 02 \\ Other rods, sections and wire not in coils \\ 02 \\ 01 \\ other rods, sections and wire not in coils \\ 02 \\ 02 \\ 01 \\ other \\ 02 \\ 01 \\ 01 \\ other \\ 02 \\ 01 \\ other \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01 \\ 02 \\ 01 \\ 01$					2.3	1,170	6	6
$\begin{bmatrix} In bar and rod \\ In tube \\ In plates or strip \\ 02 \\ Plates, sheets, foil, strip, discs and circles \\ and circles \\ and circles \\ 02 \\ Shapes and angles \\ 02 \\ Shapes and angles \\ 02 \\ Other colls \\ 02 \\ Other colls \\ 0 \\ Other \\ Rough castings of else- which are the products of drop stamping on tot else- which are the products of drop stamping or hot pressing \\ 04 \\ Pressing in sheet metal \\ 05 \\ Other \\ Pressing in sheet metal \\ 04 \\ Other \\ Solid drawn of circular section \\ 0 \\ Other \\ Othe$			2.8	1,398	} 1.3	699	6	6
$\begin{bmatrix} In tube \\ In plates or strip \\ Plates, sheets, foil, strip, discs and circles \\ Shapes and angles \\ O2 \\ Round brass rods \\ O2 \\ Shapes and angles \\ O3 \\ Shapes and angles \\ O4 \\ Propellers and propeller blades \\ Prossing \\ Pressing \\ Pressing in sheet metal \\ Pressing in sheet metal \\ Pressing in sheet metal \\ O2 \\ Tubes \\ Solid drawn of circular section \\ Other \\ Solid brass and other copper \\ alloys and duch copper \\ dial brass and other copper \\ dial brass and other copper \\ dial brass and other copper \\ alloys and manufactures of brass and other copper \\ alloys and manufactures \\ dial brass and other copper \\ dial brass and brass and brass copper \\ dial brass and brass and brass copper \\ dial bras and brass and brass copper \\ dial brass and brass $	Sec.	Other					L. Part	Sector Sector
In plates or stripIII02Plates, sheets, foil, strip, discs and circles 82.6 $24,308$ 69.4 $36,863$ 23 27 02Round brass rods110 $25,466$ 70.6 $29,003$ 9 11 02Shapes and angles19.5 $5,670$ 15.6 $6,901$ 10 11 02Other rods, sections and wire not in coils 9.0 $3,523$ 19.8 $9,669$ 11 14 02Cestings (other than continuous) and pressings and stempings not else- where specified 7.7 $4,470$ 3.8 $3,320$ 5 6 0Other 9.4 $4,448$ $\left\{ 15.3$ $8,793$ $\cdot 2,799$ 105 114 03Stampings and pressings which are the products of drop stamping or hot pressing 9.4 $4,448$ $\left\{ 15.3$ $\cdot 2,026$ 3.620 $\cdot 2,799$ 3.621 $\cdot 2,799$ 3.623 105 114 02Stampings and pressings which are the products of drop stamping or hot pressing 9.4 $4,448$ $\left\{ 15.3$ $\cdot 2,026$ 3.620 $\cdot 1,333$ 36 41 03Tubes Solid drawn of circular section other 22.4 $10,633$ $\cdot 2,739$ 105 114 04Peeder of brass and other copper alloys and elsewhere specified 364 $177,173$ 40 46	S Links	In bar and rod	17	ا د	18.7	9,452	5	5
In plates or stripIII02Plates, sheets, foil, strip, discs and circles 82.6 $24,308$ 69.4 $36,863$ 23 27 02Round brass rods110 $25,466$ 70.6 $29,003$ 9 11 02Shapes and angles19.5 $5,670$ 15.6 $6,901$ 10 11 02Other rods, sections and wire not in coils 9.0 $3,523$ 19.8 $9,669$ 11 14 02Cestings (other than continuous) and pressings and stempings not else- where specified 7.7 $4,470$ 3.8 $3,320$ 5 6 0Other 9.4 $4,448$ $\left\{ 15.3$ $8,793$ $\cdot 2,799$ 105 114 03Stampings and pressings which are the products of drop stamping or hot pressing 9.4 $4,448$ $\left\{ 15.3$ $\cdot 2,026$ 3.620 $\cdot 2,799$ 3.621 $\cdot 2,799$ 3.623 105 114 02Stampings and pressings which are the products of drop stamping or hot pressing 9.4 $4,448$ $\left\{ 15.3$ $\cdot 2,026$ 3.620 $\cdot 1,333$ 36 41 03Tubes Solid drawn of circular section other 22.4 $10,633$ $\cdot 2,739$ 105 114 04Peeder of brass and other copper alloys and elsewhere specified 364 $177,173$ 40 46		In tube	111	2,192	1	2 885	11	11
and circles 82.6 $24,308$ 69.4 $36,863$ 23 27 02Round brass rods110 $25,466$ 70.6 $29,003$ 91102Shapes and angles19.5 $5,670$ 15.6 $6,901$ 101102Other rods, sections and wire not in coils9.0 $3,523$ 19.8 $9,669$ 111402Castings (other than continuous) and pressings and stampings not else- where specified 9.0 $3,523$ 19.8 $9,669$ 111402Machined castings Propellers and propeller blades for ships 7.7 $4,470$ 3.8 $3,320$ 5 6 0Other 8.967 21.2 $13,366$ 52 55 Rough castings sold as such pressing 9.4 $4,448$ $\left\{ 15.3$ $8,793$ $$ 105 114 02Tubes 22.2 $1,918$ 2.1 $2,488$ 366 41 02TubesSolid drawn of circular section other 22.4 $10,633$ $$ $16,930$ 17 18 02Powder of brass and other copper alloys and manufactures of brass and other copper alloys not elsewhere specified $23,714$ 6.2 $4,379$ 40 46	in the	In plates or strip	JL		}	2,000	11	11
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	02	Plates, sheets, foil, strip, discs and circles	82.6	24,308	69.4	36,863	23	27
0.2Other rods, sections and wire not in coils9.03,52319.89,669111402Castings (other than continuous) and pressings and stampings not else- where specified9.03,52319.89,669111402Castings (other than continuous) and pressings and stampings not else- where specified9.03,52319.89,669111402Castings (other than continuous) and pressings and stampings not else- where specified 9.0 3,52319.89,669111404Machined castings for ships 0.669 11 14 14 14 05Rough castings sold as such pressing 9.4 $4,448$ $\{15.3, 2,799$ $3,620$ $1.1,563$ 52 55 Rough castings sold as such pressing 9.4 $4,448$ $\{15.3, 2,799$ $3,664$ 114 02Stampings and pressings which are the pressing 20.8 $8,367$ $1.1,793$ 21.2 $1.1,793$ $13,316$ 1.619 36 41 02Tubes solid drawn of circular section other 22.4 $10,633$ 1.93 $16,930$ 17 18 18 02Powder of brass and other copper alloys ont elsewhere specified 364 $177,173$ 40 46	02	Round brass rods	110	25,466	70.6	29,003	9	11
02in coils9.0 $3,523$ 19.8 $9,669$ 111402Castings (other than continuous) and pressings and stampings not else- where specifiedMachined castings $7,7,7,4,470$ 3.8 $3,320,55$ 6Machined castingsPropellers and propeller blades for ships $7,7,7,994$ 3.8 $3,320,55$ 6Other $9,4$ $4,448$ $\{15,3,3,620,7,799,94\}$ $52,555$ Rough castings sold as such products of drop stamping or hot pressing $9,4$ $4,448$ $\{15,3,2,799,9,7,99,9,7,99,9,7,99,9,7,99,9,7,99,9,7,99,9,7,99,9,7,99,9,7,99,9,7,99,9,7,99,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,9,7,9,7,9,9,7,9,7,9,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9,7,9$	02	Shapes and angles	19.5	5,670	15.6	6,901	10	11
$\begin{bmatrix} \text{pressings and stampings not else-where specified} \\ \text{Machined castings} \\ \text{Propellers and propeller blades} \\ \text{for ships} \\ \text{Other} \\ \text{Rough castings sold as such} \\ \text{Stampings and pressings which are the products of drop stamping or hot pressing} \\ \text{Pressings in sheet metal} \\ \text{Pressings in sheet metal} \\ \text{Other} \\ \text{Pressings in sheet metal} \\ \text{Other} \\ \text{Pressings in sheet metal} \\ \text{Other} \\ \text{Other} \\ \text{Pressings in sheet metal} \\ \text{Other} \\ \text{Other} \\ \text{Other} \\ \text{Pressings in sheet metal} \\ \text{Other} \\ \text{Solid drawn of circular section} \\ \text{Other} \\ Oth$	02		9.0	3,523	19.8	9,669	11	14
$\begin{bmatrix} Propellers and propeller blades for ships \\ 0 ther \\ Bough castings sold as such \\ Stampings and pressings which are the products of drop stamping or hot pressing \\ Pressing \\ Pressings in sheet metal \\ 02 \\ Tubes \\ Solid drawn of circular section \\ 0ther \\ 02 \\ Total brass and other copper alloys not elsewhere specified \\ 02 \\ Total brass and other copper \\ Total brass and other copper \\ alloys and manufactures \\ 03 \\ 04 \\ 04 \\ 04 \\ 05 \\ 05 \\ 05 \\ 05 \\ 05$	02	pressings and stampings not else-	34	antitude 75	eren i fan y	82144.4768 04862		
$\begin{bmatrix} \text{for ships} \\ 0 \text{ther} \\ \text{Rough castings sold as such} \\ \text{Stampings and pressings which are the products of drop stamping or hot pressing} \\ \text{Pressings in sheet metal} \\ 02 \\ \text{Tubes} \\ \text{Solid drawn of circular section} \\ 02 \\ \text{Other manufactures of brass and other copper alloys not elsewhere specified} \\ 02 \\ \text{Total brass and other copper } \\ Total $		Machined castings		A Starten Aller dal	-	lings rage		8.01
$01her$ $1, 563$ 32 33 Rough castings sold as such 9.4 $4, 448$ $\left\{ 15.3 \\ \\ 2,799 \\ \\ 2,799 \\ \\ 2,799 \\ \\ 2,799 \\ \\ 2,799 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,363 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 \\ \\ 1,619 $] {7.7	4,470}	3.8	3,320	5	6
Notion Cast lings solid as such 3.4 $4,443$ 1 $2,799$ 103 114 Stampings and pressings which are the products of drop stamping or hot pressing 20.8 $8,367$ 21.2 $13,316$ 36 41 Pressings in sheet metal 2.2 $1,918$ 2.1 $2,488$ 36 41 02Tubes Solid drawn of circular section Other 22.4 $10,633$ $$ $16,930$ 17 18 02Powder of brass and other copper alloys $2,739$ $$ $2,341$ 8 8 02Other manufactures of brass and other copper alloys not elsewhere specified 434 $123,918$ 364 $177,173$ 40		Other	J L	994	3.3	1,563	52	55
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		Rough castings sold as such	9.4	4,448		8,793 2,799	} 105	114
02Pressings in sheet metal Tubes Solid drawn of circular section Other1,7931,61910810902Solid drawn of circular section Other22.410,63316,930171802Powder of brass and other copper alloys2,7392,3418802Other manufactures of brass and other copper alloys not elsewhere specified $\left\{ 8.8$ 3,7146.24,379404602Total brass and other copper alloys and manufactures $\left\{ 434$ 123,918364177,173 $\left\{,,,,$		products of drop stamping or hot	20.8				36	41
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Pressings in sheet metal		1,918 1,793	and the second states of the second se		} 108	109
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	02	Tubes				to started		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Solid drawn of circular section	22.4	10,633		16,930	17	18
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Other		2,739		2,341	8	8
02 Other manufactures of brass and other copper alloys not elsewhere specified Total brass and other copper { 434 123,918 364 177,173 }	02	alloys] [8.8	3,714	6.2	4.379		10
alloys and manufactures	02	other copper alloys not elsewhere					<u>}</u> 40	46
alloys and manufactures			434	123,918	364	177,173	1	
						13.538 JS20 (1997)	J	

For notes to this table - see page 48/5.

Continued on next page

TABLE 5 (continued)

Industry	and and shift and share an and a second second second second second	1963			1968		
sub- diviston (a)		Quantity	Value	Quantity	Value	Enter- prises	Entries
1.19.2.5	Copper (including cadmium copper) (c)	Th.tons	£'000	Th.tons	£'000	Number	Number
01	Unwrought: ingots, blocks, slabs, ingot bars, wire bars, billets, cakes,cathodes and anodes (including rough copper of 94 per cent. copper	Grand de la composition	rion12. secti	00000 00 000000 h	ente alte bas ve	1.00	
	content or over)	A STREET	AGENICANA.		Lis Rainul	102	Section 1
	Blister (including rough copper)	12.8	3,096	7.6	3,442	*	*
	Electrolytic	33.5	7,954	52.5	26,771	8	10
	Fire refined	115	27,644	71.4	36,587	7	10
	Continuous castings	1.18	(d)	estilati e i i i i i i i i i i i i i i i i i i	4,466	*	*
02	High conductivity strip and foil	33.3	12,276	17.4	11,183	11	13
02	Plates, sheets or strip (other than high conductivity)	- 810 C	bologina	inasesmi teo	nak hinisologi sosol	per der	Aller
	3/8 inch thick and over	4.4	1,346	1.7	1,396	5	5
	Other sheets, strip, foil, discs and circles	42.4	14,238	54.2	33,985	12	15
02	Rods, sections, shapes and angles, and wire not in coils			ginie no e	ste in al.		- Section
	Wire rods	100 100	1101. 230	180.541	and applied	I'm Sign	
	High conductivity	123	31,953	105	55,562	6	8
	Other	0.4	141		428	*	*
	Shapes and angles	2.0	1,066	1 Para and a	and the second	S. Anto	
	Other rods, sections and wire not in coils	5.0	tyl p. diac	.1101 .03	internet abuse		
	Rolled	52.3	13,771	13.0	7,254	*	*
	Extruded	4.0	1,380	10.9	6,742	8	9
02	Tube shells	24.8	5,598	22.2	11,194	7	10
02	Tubes			in most in and	And And And	1. 184	and the second
	Solid drawn of circular section	77.4	29,584	56.3	40,381	17	23
	Other		424		5,244	7	7
02	Copper castings (other than contin- uous castings and engineers' and mechanicians' goods, etc) (e)		464		2,098	19	19
02	Copper powder	0.8	280	1.5	932	*	*
02	Other manufactures of copper not	5.0	1,770	10.5	5,133	26	30
02	elsewhere specified		556(f)		2,144	<u>ر 20</u>	
	Total copper and manu- factures thereof	531	152,098 1,445	424	$240,563 \\ 14,380$	}	
	Other products		1,412		149	10	12
	Waste products	a share		· · · · · · · · · · · · · · · · · · ·	and and a fill		
	Scrap metals	100					
	Copper	31.3	6,441	25.9	11,328	41	52
	Brass and other copper alloys (including nickel silver and cupro- nickel, but excluding all other			20.4	0.977	70	88
	nickel alloys)	17.6	2,563	20.4	6,277	73	13
	Lead	1.0	59	1.8	160	10	13
	Zinc	0.7	42	0.2	11	7	
	Other scrap metals		306		1,124	60	. 74
	Concentrates metallic residues, wastes etc not elsewhere specified		1,591	to a constant and the second tool	2,547	28	42 12
	Other waste products				126	11	12

ABLE 5 (continued)

3 34

Industry		19	63	1968			
sub- division (a)		Quantity	Value	Quantity	Value	Enter- prises	Entries
	Work done		£'000		£'000	Numbe r	Numbe r
	Repair work		133		117	*	*
02	Casting of ingots, billets, etc of brass and other copper alloys		901		682	10	11
02	Rolling of copper, brass and other copper alloys (including nickel silver and cupro-nickel, but exclud-					10	
	ing all other nickel alloys)		237		134	13	14
	Other work done		592		457	19	23
	Total		302,478		491,420		
	Sales in other industries (see Table 6)		36,232		56,964		
	Principal products of this industry sold by establish- ments in the industry		266,245		434,455	132	171(g)

(a) The number given is that of the sub-division of which the item is a characteristic product. The sales shown are total sales by larger establishments, not merely sales by establishments classified to the sub-division.

(b) For 1963 cadmium copper was not specifically excluded.

(c) For 1963 cadmium copper was not specifically included.

(d) Not separately distinguished for 1963.

(e) For 1963 continuous castings were not specifically excluded.

(f) For 1963 includes unclassified 'other rods, sections and wire not in coils'. (g) This figure represents the total number of returns made for larger establishments in this industry which is less than the total number of establishments shown in Table 4 on account of combined returns covering more than one establishment.

COPPER, BRASS AND OTHER COPPER ALLOYS

TABLE 6Sales of principal products of the industry by larger
establishments classified to other industries, 1963 and 1968

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

		19	63			1968	
		Quantity	Value	Quantity	Value	Entries	Principal industries in which produced (a)
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other nickel alloys, and cadmium copper)		Th.tons	£,000	Th.tons	£,000	Number	
Ingots, blocks, slabs, billets, bars, (including wire bars), other refinery shapes and cast strip	0.3	9.6	2,117	3.3	1,819	10	47,49,80
Continuous castings not included above	{	2.0	1,043 327	} 0.7	485	11	45,47,52
Plates, sheets, foil, strip, discs and circles		0.9	458	0.8	794	4	49,93
Round brass rods and other rods, sections and wire not in coils		5.5	1,490	1.1	827	7	47,49,91
Castings (other than continuous) and pressings and stampings not elsewhere specified	Edia di Renda			an a	aria aria manularina aria		
Machined castings	{	2.2	1,033 147	1.6 	$\substack{1,349\\400}$	32	45,47,80,82
Rough castings	{	2.4	$\substack{1,173\\100}$	2.7	2,095 1,087	72	44,46,47,82
Stampings and pressings which are the product of drop stamping or hot pressing		4.2	2,178 {	1.5	734 535	} 20	65,82,95,97
Pressings in sheet metal	{	1.0	975 1,134	0.6	715 926	94	47,93,97,150
Other manufactures of brass and other copper alloys, not elsewhere specified			2,081		3,138	19	45,49,82,97
Total brass and other copper alloys and manufactures thereof	{	27.8	10,467 3,789	12.3 	8,818 6,086	}	
Copper (including cadmium copper):				46.2			
Unwrought: ingots, blocks, slabs, ingot bars, wire bars, billets, cakes, cathodes and anodes, including rough copper of 94 per cent. copper content or over		16.3	3,888	14.7	7,520	8	27,49,72
High conductivity strip and foil		11.4	3,893	5.5	4,016	5	72,91
Plates, sheets or strip (other than high conductivity): rods, sections, shapes and angles, and wire not in coils		46.5	11,656	47.1	25,055	8	·49,72,91,93
Copper castings (other than continuous castings and engineers' and mechanicians' goods, etc)			157		686	11	47,63
Other manufactures of copper not else- where specified		Bartone (2,382		4,783	17	27,45,72,96
Total copper and manufactures thereof	{	72.6 	19,394 2,582	67.3 ••	36,573 5,488	}	
Total			36,232	30,8	56,964		

(a) The references given are to the list of industries at the front of this report.

	1963	1968
	Value	Valu
CILIDAD AND IN THE REAL PROPERTY OF	£'000	£'00
Metallic compounds and other chemical products	1,276	17
Metal manufactures	a dan makan panan di sana	
Of iron and steel		
Castings of steel, ingots, tubes, etc	280	69
Stampings and pressings	472	85
Iron castings (including patterns)	445	66
Miscellaneous metal manufactures	4,595	7,59
Of aluminium and aluminium alloys	2,980	5,47
Mechanical engineering products	2,047	2,51
Wire	a anara	152.0
Wire in coils	1 1 1 7 R 2 4	
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other nickel alloys, and cadmium copper)		
Circular section, thinner than No. 20 gauge	553	1,54
Circular section, No. 20 gauge and thicker	an annaithe an	LIPE
Of brass	751	52
Of other alloys of copper	309	1,59
Copper wire	1,946	11,44
Other wire and wire manufactures (including stranded wire)	761	2,35
Jewellery, plate and precious metal refining products	1,221	2,01
Engineers' and mechanicians' goods	5,946	9,24
Other products	6,652	6,98
Services rendered to other organisations (a)	1,378	1,11
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)	13,555	33,28
Canteen takings	537	54
Total	45,704	88,63

TABLE 8

Production of certain principal products of the industry by larger establishments, 1963 and 1968

This table is not applicable to this industry.

TABLE 9 Purchases by larger establishments of selected principal products of the industry 1968 (a)

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

Standard Industrial Classi- fication Minimum	Purchasing industry (b)	alloys (i nickel si cupro-ni excluding nickel al	Brass and other copper alloys (including nickel silver and cupro-nickel but excluding all other nickel alloys and cadmium copper)		ncluding copper)
List Heading	and the second in the second	Quantity	Cost	Quantity	Cost
		Th.tons	£,000	Th.tons	£,000
321	Aluminium and aluminium alloys	3.9	1,818		(c)
322	Copper, brass and other copper alloys	80.8	34,556	366	181,564
333	Pumps, valves and compressors	29.6 	$\substack{13,380\\1,944}$	}	(c)
339/9	Miscellaneous (non-electrical) machinery	4.1 	$2,315\\417$	}	(c)
349	General mechanical engineering	17.0	7,916 1,060	}	(c)
354	Scientific and industrial instruments and systems	11.2	5,082 1,643	}	(c)
361	Electrical machinery	11.8	6,559	17.9	11,457
362	Insulated wire and cables		1,709	224	114,543
363	Telegraph and telephone apparatus and equipment	4.3	2,985	100 100 100 100 100 100 100 100 100 100	(c)
364	Radio and electronic components		3,535	and the second	(c)
368	Electric appliances primarily for domestic use	4.4	2,902 369	5.4 	4,273 1,121
369	Miscellaneous electrical goods	13.6	7,430 1,199	}	(c)
370	Shipbuilding and marine engineering	2.7	$\substack{1,749\\570}$	}	(c)
381	Motor vehicle manufacturing	23.7	11,176	9.5	4,883
393	Bolts, nuts, screws, rivets etc	9.2	4,007		(c)
394	Wire and wire manufactures	6.4 	$2,667 \\ 110$	} 31.0	15,260
396	Jewellery and precious metals		2,833	9.6	4,726
399/8	Miscellaneous metal goods	62.9	27,062 228	} 15.4	9,661
500	Construction	o test	(c) {	19.4	8,430 7,898
	Other industries {	31.3	$14,698 \\ 2,567$	191 ••	$29,405 \\ 2,937$
	Total	317 	$146,302 \\ 18,186$	889	384,203 11,957

(a) The figures include purchases of imported as well as of home produced goods.

(b) Specified census industries for which purchases are one per cent. or more of the total of at least one of the commodities shown.

(c) Included in the total for 'Other industries'.

TABLE 10 Purchases by larger establishments in the industry, 1963 and 1968 Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

-

Ma

	19	63	1968	
	Quantity	Cost	Quantity	Cost
laterials for use in production	Th.tons	£'000	Th.tons	£,000
Aluminium and aluminium alloys				
Ingots and notch bars - virgin		162	3.8	862
Ingots, notch bars and sticks - secondary		188	1.1	220
Blocks, slabs, billets and wire bars	2.0	384	2.0	476
Sheets, plates, strip, blanks, discs, circles, slugs and foil	0.1	24	0.4	137
Bars (other than notch bars and wire bars), rods, angles, shapes, sections and tubes		178	1.0	421
All other descriptions except finished parts, wire and scrap		25	3.4	900
Antimony ore and concentrates	0.1	28	sure	5
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other nickel alloys and cadmium copper) (a)	nene ned so sego			
Ingots, blocks, slabs, billets, bars (including wire bars), rods and cast strip (b)	65.5	13,458	53.5	22,034
Plates, sheets, strip (other than broken down strip), discs, circles and foil	9.0	2,514	6.7	2,809
Other descriptions including broken down strip and tube shells but excluding finished parts, wire and scrap	16.6	4,196	20.6	9,714
Copper unwrought (including cadmium copper): ingots, blocks, slabs, bars, billets, cakes, cathodes and anodes (including rough copper of 94 per cent. copper content or over) (c)	eronidons of eldonomer		ant parts to end norme commu	
Blister (including rough copper) (d)	1		43.3	19,711
Electrolytic (d)	> 307	71,820	210	105,124
Fire refined	156	37,468	65.5	32,714
High conductivity copper rods and strip	2.1	569	1.2	692
Copper plates, sheets, strip, discs and circles (other than of high conductivity)	4.7	1,267	3.3	1,723
Other descriptions of copper including broken down copper cake and tube shells but excluding finished parts, wire and scrap	21.1	5,882	43.1	21,599
Lead unwrought in pigs, ingots, blocks, bars, slabs and cakes	a Infection I to		ta ana i dadi a ta beatana yan	
Imported refined and re-melted lead (e)	6.3	382	3.5	350
English refined lead including lead refined from imported bullion	5.1	303	1.5	156
Other descriptions of lead and lead alloys except	0.5	83	0.6	93
finished parts, wire and scrap Magnesium ore, magnesia, magnesium and magnesium alloys (excluding finished parts, wire and scrap)		18	0.1	48
Nickel and nickel alloys (excluding nickel silver and cupro-nickel), in all forms except finished parts, wire and scrap	1.6	1,073	2.6	0 607
wite and scrap	Th.cwt.	1,075	Th.cwt.	2,627
Tin ore and concentrates and tin in all forms except finished parts, wire and scrap	25.8	1,061	31.7	2,166
Zinc and zinc alloys	Th.tons		Th. tons	
Zinc of not less than 99.99 per cent. purity	16.7	1,384	14.3	1,700
Other electrolytic and refined zinc, and low grade prime western, debased and G.O.B. zinc	49.0	3,877	44.0	5,134
Re-melted	1.1	81	0.6	66
Other descriptions except finished parts, wire and scrap		53	1.0	159

COPPER, BRASS AND OTHER COPPER ALLOYS 48/14

TABLE 10 (continued)

	190	63	1968	
and a second	Quantity	Cost	Quantity	Cost
Materials for use in production (continued)	Th.tons	£,000	Th.tons	£'000
Alloying materials not elsewhere specified (egsilicon, cadmium chrome, manganese, cobalt)	4.7	1,423	2.5	1,328
Scrap (including all forms of scrap material purchased, not elsewhere specified)	2010-00		Su dina lapateria	
Aluminium and aluminium alloys	0.1	12	10.8	1,761
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other nickel alloys and cadmium copper) (a)	176	27,415	225	61,488
Copper (including cadmium copper) (c)	162	28,473	168	73,948
Lead	7.2	418	2.2	10,040
	entry program patients of	collectors _ service		
Zinc	1.5	87	1.5	100
Zinc base alloys		25		24
Other	wedler	2,203		1,795
Iron and steel in all forms except finished parts, wire and scrap	8.1	1,022	18.3 Th. cwt.	1,580
Explosive powders	a all story of another	(f)	5.1	233
	Th.gal.	(1)	Th.gal.	200
	299	82	1,370	311
Lubricating oils and greases	L	128		62
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement				
Tyres and other spare parts for firms' own road	η. Ι			1.47
goods vehicles		3,202	Real Street	147
Other	D	ι		3,413
All other materials for use in production		7,096		9,627
ackaging materials	and break more		and make	
Wrapping and packing paper (including paper coated with plastics and any laminates incorporating paper but not metal)				73
Other packaging materials of paper and paperboard		92 <	the second second	
(including moulded pulp units and labels, but excluding boxes, cartons, packing cases, drums, canisters, bags and multiwall paper sacks and paper and board for				
converting into packaging materials)]	l		77
Matal harmala, have and down	Thousands	20	Thousands	07
Metal barrels, kegs and drums Containers wholly or mainly of wood (including plywood boxes and drums), baskets and wickerwork crates	63.7	30 277	67.5	37 178
All other packaging materials		281	Carls of the	553
uel and electricity (g)	A CONTRACTOR OF A	201	The tong	000
	Th.tons		Th. tons	
Coal	142	562	60.6	374
Coke (including screenings) and manufactured fuel	24.9	249	14.5	181
Down fuel and notes minit for the line is a line	Th.gal.	200	Th.gal.	
Derv fuel and motor spirit for use in road vehicles	1,263	223	1,280	333
Other liquid fuels (including creosote/pitch mixtures, etc, and liquefied petroleum gases)	27,407	1,249	36,449	1,700
	Th.therms		Th. therms	
Gas	19,451	1,228	18,403	1,236

Fuel and electricity (g) (continued) Electricity All other fuels Total cost of materials and fuel Goods purchased for merchanting Canteen purchases Total cost of purchases (a) For 1963 cadmium copper was not specifically excluded. (b) For 1963 rods were not specifically included. (c) For 1963 cadmium copper was not specifically included. (d) For 1963 described as 'Other than fire refined'. (e) For 1963 imported refined lead was described as 'Imported virgin lead (excluding lead bullion)'. (f) Not recorded separately for 1963. (g) Owing to the risk of disclosure relating to individual firms the total quantity of electricity generated in firms own establishments in 1968 and 1963 cannot be given. TABLE 11 Transport costs and employment of larger establishments, 1963 and 1968 Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

	Unit
verage number mainly employed on transport	No.
ransport costs	ntener 12
Wages and salaries	£'000
Derv fuel and motor spirit	8.02"
Tyres and other spare parts for road goods vehicles	n
by road	п
Payments to other organisations for transport by rail and other means excluding postal services	9-1 8-0 "
Costs of operating road goods vehicles	3.40
Insurance	"
Vehicle licences	н. н. На селоти
Depreciation	
Payments to other organisations for repairs and maintenance	u
Total	

(a) Excluding tyres and other spare parts for road goods vehicles, not collected separately for 1963.

TABLE 10 (continued)

Av T

19	63	1968		
Quantity	Cost	Quantity	Cost	
Th.kWh	£'000	Th.kWh	£,000	
560,491	3,082	575,753	4,138	
	(f)		103	
	225,335	10	396,640	
	13,091	states abo	32,384	
	465	- Zrestitow	507	
a Tra marana	238,892	t reenating	429,531	

a sector sector sector	
1963	1968
729	796
T CONSISTER	1.4 100 50
590	987
223	333
	147
	2,160
2,027	165
34	47
39	84
245	516
111	121
3,268(_a)	4,560

TABLE 12

Payments for certain services, etc by larger establishments, 1963 and 1968 (a)

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

	Amounts	payable	
and the second second second in the second second second second second	1963	1968	
Repairs and maintenance to	£'000	£,000	
Buildings	371	344	
Road goods vehicles	111	121	
Plant, machinery and other capital equipment	1,394	1,928	
Insurance, licensing and depreciation of road goods vehicles (b)	318	647	
Rates, excluding water rates	913	1,387	
Hire of plant and machinery	73	248	
Postage, telephone, telegrams, cables and telex (c)	446	641	
Total	3,625	5,316	

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

(b) For details see Table 11.

(c) Excluding telex for 1963.

TABLE 13Percentage analysis of twelve-month
periods covered by returns from larger
establishments, 1968

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

Year ended	Percentage of total returns received	Percentage of total number employed
1968	Per cent.	Per cent.
April (a)	1.8	0.4
May	0.0	0.0
June	4.1	0.9
Jul y	6.4	20.8
August	1.2	0.1
September	6.4	3.0
October	1.8	1.2
November	1.2	0.3
December	54.4	59.7
1969		
January	2.9	2.4
February	2.4	0.8
March	16.2	10.1
April (b)	1.2	0.3
	100	100

(a) From 6 April.

(b) To 5 April.

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