

BOARD OF TRADE

Report on the Census of Production 1963

42[HA 251]

102 Bricks, fireclay and refractory goods



LONDON: HER MAJESTY'S STATIONERY OFFICE Price 4s. 6d. net

BOARD OF TRADE

Report on the **Census of Production** 1963

102 Bricks, fireclay and refractory goods

> 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)

1968

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LONDON: HER MAJESTY'S STATIONERY OFFICE

Notes

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 industry. 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

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.

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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 'selfemployed' 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 industry.

Capital Expenditure

(i) New building work.

10.2.69

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

Bricks, fireclay and refractory goods

This Report on the Bricks, Fireclay and Refractory Goods Industry relates to establishments engaged wholly or mainly in manufacturing building bricks, clay flooring and roofing tiles, chimney pots, stoneware pipes and conduits, fireclay sanitary ware and other similar clay products; and heat-resisting products such as ganister, magnesite and silica bricks, fireclay and graphite crucibles, gas retort and kiln linings, steel moulders', composition and radiants for gas and electric fires. Glazed earthenware tiles and concrete and sand-lime bricks are excluded.

This industry corresponds to minimum list heading 461 in the Standard Industrial Classification (Consolidated edition, 1963).

Pits and quarries operated by firms in this industry are included in this report unless they had their own separate set of accounts, in which case they were included in either the Stone and Slate Quarrying and Mining Industry or the Chalk, Clay, Sand and Gravel Extraction Industry.

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).

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Number of enterprises		
Number of establishmen	ts	
Gross output		
Net output		
Net output per head		
Sales and work done	12200004	goods produced and work done merchanted goods and canteen takin
		materials for processing and
000.1 2035		packaging, and fuel
Purchases	9919990(d 80974	goods for merchanting and canteen purchases
Payments to other organisations	{	for work done on materials given of for transport
Stocks and work in pro	gress	
Total stocks and wor progress	kin {	change during year at end of year
Goods on hand for sa	le {	change during year at end of year
w l	5	change during year
Work in progress)	at end of year
Materials, stores and	d fuel	change during year
Materials, stores and		at end of year
	1	total, including working proprieto
Average number employed	a {	operatives (c)
	17848	other employees (d)
Wages and salaries	{	of operatives of other employees (d)

Capital expenditure (f)

Total

New building work

Land and existing buildings (g)

Plant and machinery (g)

Vehicles (g)

(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 7 per cent.) A summary of the detailed returns received is given in Table 2.

(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).

(c) Including operatives employed in the quarries or clay pits which were associated with the brick works.

(d) Administrative, technical and clerical employees.

- (e) Including pensions and gratuities paid other than from pension funds.
- (f) Excluding expenditure for establishments not yet in production.
- (g) Acquisitions less disposals.

ngs

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

BRICKS, FIRECLAY AND REFRACTORY GOODS 102/3

	a grante	and and a second	
	Unit	1958	1963
1	No.	- 695	534
	•	1,220	963
	000'3	116,505	147,318
		61,718	84,839
	3	869	1,266
100.0	£'000	113,173	143,684(b)
	•	2,169	5,083
ti i i i	ara.	41,025	43,305
also		Jl	4,598
		255	283
	•	13,518	14,256
070 74		teres 1	and a second
ul fin	•	+ 1,174	- 1,486
sedere	• • • • • • • • • • • • • • • • • • •	18,356	21,689
n 110 m		+ 1,491	- 1,327
124	Incases	7,987	9,799
	•	- 328	- 122
18 17 # B	•	2,375	2,757
in the second	orte b	+ 11	- 37
in yea		7,994	9,133
19	Th.	71.0	67.0
in jon		61.9	57.9
3.54	ne to b	8.9	8.8
n gig h	000'3	35,638	42,907
.53(3)	(25×1)	6,606	8,284
) (1994) (1993-1995	erigens militaxo	indus J	2,966
payoto	the t on	in Jul and	see and sage
	morta		8,111
1 1 2 1 3	es loes	1,432	2,081
at ter	Natio	to any address	- 126
1990 D.J	avi m	3,202	5,433
		668	723

TABLE 2 Analysis of larger firms by sub-divisions within the industry, 1958 and 1963

Firms employing 25 or more persons: United Kingdom (a)

Cale Long I and			Sub-di	visions of	the indust	ry (b)
		Unit .		ry goods O	Building bricks (in- cluding flooring and wall partition blocks) 22	
		the Lar	1958	1963	1958	1963
Number of enterprises	s (c)	No.	73	62	224	180
Number of establishme			149	129	525	434
Gross output		£'000	35,640	40,451	50,908	70,754
Net output			15,722	18,966	29,519	44,862
Net output per head		£.	998	1,407	855	1,250
028 4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	f goods produced and work done	£'000	34,097	39,560(d)	50,675	71,215(d)
Sales and work done	merchanted goods and canteen takings	a sention	703	903	327	886
Sales of characteris	tic products		32,411	37,413	48,175	67,177
Index of specialisat.		Per cent.	95	95	95	94
Las De Prese	materials for processing and packaging, and fuel	£'000] 16 800 [17,769] 13,202	15,716
Purchases	goods for merchanting and canteen		16,890 {	818	13,202	804
	[purchases (for work done on materials given out			41	J L	51
Payments to other organisations	and has been been at record to be	1000 # 2.7%	3,169	2,744	8,068	9,309
	for transport	any Mil	0,100	2,	0,000	
Stocks and work in p	f change during year	H	+ 917	- 60	- 104	- 1,267
Goods on hand for sale	at end of year		2,650	3,838	1,962	2,421
	(change during year		- 77	+ 48	+ 10	- 80
Work in progress	at end of year	-31-361	822	782	918	1,197
Necesiale stores	change during year	1 0)	+ 152	- 114	- 67	- 12
Materials, stores and fuel	at end of year)	4,539	5,471	1,969	2,145
	(total, including working proprietors	No.	15,749	13,483	34,528	35,877
Average number	operatives (g)	aieye îga	12,918	10,835	31,082	32,102 '
employed	other employees (h)	5	2,828	2,627	3,429	3,727
	f of operatives	£'000	7,540	7,718	18,188	24,439
Wages and salaries	of other employees (h)		2,127	2,545	2,561	3,490
Wages and salaries	(operatives	3	584	712	585	761
per head	other employees (h)		752	969	747	936
Employers' contribut	ions to National Insurance (i)	£'000		405		1,145
Employers' contribuț etc. (j)	ions to private pension schemes,	,=		244	•••)	437
Capital expenditure	(k)	792,00	antik iin	ates for sh	1963, estim	(a) Fee
New building work		12 211 I	626	316	343	1,241
Land and existing	∫ acquisitions	20 200	sedio b	23	bloog soft	95
buildings	disposals		nis al"tem	64	tropo gillo	121
Plant and	∫ acquisitions		1,569	1,511	974	2,901
machinery	disposals	resizo b	23	62	30	89
Vehicles	f ^{acquisitions}	ios"sta	161	174	429	486
	disposals		48	52	68	66

1

For no	otes to	this	table	-	see	page	102/7
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C. Suggard and a	y (b)	f the industr	ivisions of	Sub-d			
Other 25	C	ware (other ht, concrete thenware) 24	than cemer	in the local data and the local			
	1958	1963	1958	1963	1958		
37 23	37	59	70	11 00	15		
53 36	53	80	85	18	43		
403 9,018	6,403	16,971	13,005	1,643	2,384		
574 5,373	3,574	9,829	7,146	925	1,432		
807 1,326	807	1,138	769	835	702		
007 7,891(d)	6,007	15,368(d)	12,127	1,380(d)	2,336		
292 1,104	292	1,713	678	184	16		
502 5,697	4,502	12,400	10,288	1,038	1,854		
75 72	75	81	85	75	79		
[2,190]	1 1	4,669	1 1	468	١	1	
266	2,266	199.1	5,020	10, 2, 01	773	}	
[972]]. (1,564		175	l	1	
154 44	154	131	20	-	-energy		
387 493	387	814	772	76	175		
329 + 34	+ 329	- 34	+ 215	+ 76	30	+	
733 679	733	1,979	1,731	317	352		
225 - 11	- 225	- 76	- 15	+ 3	2	+	
97 126	97	426	237	67	134		
22 + 53	- 22	+ 36	- 48	+ 2	- 4	-	
179 214	179	754	712	24	34		
428 4,052	4,428	8,640	9,294	1,108	2,038		
879 3,479	3,879	7,332	8,011	1,000	1,835		
Mar and a start of the start of the	545	1,294	1,281	107	203		
136 2,506	2,136	5,213	4,351	670	993		
CRASS STORES AND A REAL OF A	443	1,141	876	95	148		
The second se	551	711	543	670	541		
Charles Constanting and	814	881	684	890	731		
135	1 AND SEL	262		34	••		
46		86	**	61 7 1.02			
		125	162	10	52		
intradict de linget des	148	310	162				
13	the time	14	. 13	10			
15		47		25			
	133	518	323	51	42		
2 7		12	5	9	3		
60 82		127	84	10	54		
18 38	18	40	21	3	13		

BRICKS, FIRECLAY AND REFRACTORY GOODS 102/5

То	t	a	1	

То	tal	
Carport 1		ast diverse act
1958	1963	init yransin
393	313	
855	697	
108,341	138,838	
57,393	79,955	
869	1,266	
105,242	135,413(d)	
2,017	4,790	
(e)	(e)	
98	98	
38,150	40,812	
	4,333	
237	267	
12,571	13,435	
	ing of seeds	
+ 1,387	- 1,250	
7,428	9,235	
- 305	- 115	
2,208	2,599	
+ 10	- 35	
7,434	8,607	
66,037	63,160	
57,725	54,748	
8,286	8,314	
33,209	40,546	
6,156	7,829	
575	741	
743	942	
	1,982	
122	821	
10 . 22 T		
1,331	1,961	
	156	
	274	
3,041	5,299	
63	178	
788	880	
167	199	

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 at end of year
and the second second	Number	Number	Number	£'000	000'3	3	000'3	000'3
25-49	116	128	4,409	8,458	4,831	1,096	319	1,096
50-99	80	106	5,565	10,547	6,068	1,090	463	1,400
100-199	50	83	6,922	12,221	7,389	1,068	907	1,738
200-299	23	57	5,509	10,448	6,080	1,104	619	1,840
300-399	11	35	3,864	7,955	4,370	1,131	711	1,467
400-499	8	31	3,565	7,399	4,586	1,287	663	596
500-749	12	73	6,952	12,923	7,570	1,089	1,183	1,829
750-999	4	30	3,130	12,035	4,824	1,541	552	2,530
1,000-1,499	3	26	3,787	10,570	5,809	1,534	626	2,925
1,500 and over	6	128	19,457	46,281	28,427	1,461	1,600	5,019
Total	313	697	63,160	138,838	79,955	1,266	7,644	20,440

(ii) Employees, wages and salaries, and employers' contributions

Firms employing 25 or more persons: United Kingdom

Average number	Employees		Wages and salaries		Employers' contributions		Wages and salaries per head	
employed by 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)
	Number	Number	£'000	£'000	£'000	000'3	2	2
25-49	3,846	521	2,609	476	136	36	678	913
50-99	4,927	619	3,366	602	171	65	683	972
100-199	6,116	791	4,072	738	206	75	666	933
200-299	4,712	796	3,353	749	152	90	712	941
300-399	3,284	578	2,330	477	110	39	710	826
400-499	3,240	325	2,466	295	107	49	761	909
500-749	5,953	986	4,057	876	198	91	682	888
750-999	2,601	525	1,954	539	107	44	751	1,026
1,000-1,499	3,038	749	2,249	732	125	69	740	978
1,500 and over	17,031	2,424	14,089	2,343	670	264	827	967
Total	54,748	8,314	40,546	7,829	1,982	821	741	942

(a) Including working proprietors.

(b) Acquisitions less disposals.

(c) Administrative, technical and clerical employees.(d) Includes both flat rate and graduated contributions.

(e) Includes pensions and gratuities paid other than from pension funds. These amounted in total to £159,000.

		Ages	Males	Females	All employees
	- Andrews	1412	Per cent.	Per cent.	Per cent.
	Und	ler 18	6	1	7
housenand	18	and over	84	9	93
	and the second		The second s	185 (00 60 60)	
	A11	ages	90	10	100
				Source: Mini	istry of Labour
	(2)	The percent working pr	ntages relate to roprietors) at m	the numbers emp id-June, 1963.	oloyed (excluding
	Foo	tnotes to 1	Table 2.		
	(a)	The follow	uing information		
	(2)	lewer than	ing information 25 persons) in	this industry.	It includes an
		which acco	or small firms r ount for 3 per ce lso 3 per cent.	ent. of the empl	factory returns, oyment shown for
				1958	1963
		Number	of firms	350	257
		Averag	e number employ	red:	
			ing proprietors r persons employ	red } 4,441	<pre> { 186 3,183 </pre>
	(b)	The method	of classifying	returns to sub-	divisions of the this report; t
		characteri	stic products of		ion are identifi
	(C)	in Table 5 The sum of	• the figures for	the sub-divisi	on exceeds the
	1.207.02	total for	the industry to r more than one	the extent that	enterprises mad
	(d)	Including charged fo	services rendere r hiring out pla	d to other orga nt, machinery a	nisations (amoun nd other goods, or other servic
		rendered).	100 10 20		
	(e)	Characteri industry.	stic products re	late only to su	D-divisions of t
	(f)		visions of the i haracteristic pr		
		produced a is the rat	nd work done. io of total sale	For the industr s of principal	y as a whole, th products by the
	(g)		o total sales of 2,761 operatives		
		employed i	n the quarries o rick works.		
	(h)		tive, technical	and clerical em	ployees.
	El as ser al a ser al		both flat rate a		
	(1)	Including	pensions and gra	tuities paid ot	her than from
	())	pension fu			

TABLE 4 Percentage analysis of employees, by age and

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

Firms employing 25 or more persons: United Kingdom

Industry	The court of the c	1958		1963			
sub- livision (b)		Quantity	Value	Quantity	Value	Enter- prises	Entries
10	Refractory goods	Th.tons	000'3	Th.tons	000'3	Number	Number
	Firebricks up to and including bricks of 9in. x 4½in. x 3in.	663	5,737	534	5,787	56	68
And a start of the second s	Firebricks or lumps, including tiles and bricks exceeding 9in. x 4½in. x 3in.	215	4,109	191	3,886	47	61
gnildi	High alumina bricks containing between 44 per cent. and 60 per	18.8	871	15.9	919	14	19
	cent. alumina High alumina bricks containing 60 per cent. or more of alumina	23.8	1,174	37.7	1,841	12	16
	Silica bricks up to and including bricks of 9in. x 4½in. x 3in.	122	1,869	42.2	734	11	13
	Silica bricks or lumps, including tiles and bricks exceeding 9in. x 4%in. x 3in.	134	3,107	54.5	1,299	12	15
	Siliceous bricks and shapes (75-92 per cent. silica)	12.9	148	17.8	186	•	5
	Insulating bricks	31.6	1,364	27.2	1,288	14	16
a section of	Magnesite bricks	34.6	1,629	41.8	2,117	7	12
ninales	Magnesite-chrome bricks	12.5	622	32.1	1,564	6	11
The Arts	Chrome-magnesite bricks	98.8	4,039	93.9	3,786	7	10
765 . (j)	Dolomite bricks	6.9	179	20.0	548	*	*
1999 (1999 (1999)	Other refractory bricks, including chrome bricks	75.2	1,869	11.1	471	7	11
	Total refractory bricks	1,449	26,717	1,119	24,425		Construction of the local distance
10	Retorts, fireclay, silica and siliceous	14 sell (12)	265		295	*	5
10	Refractory cement	Th.tons 147	2,481	Th.tons 143	4,059	33	58
10112400	Blocks and crucibles of graphite and other materials		[• ••	7,404	5	9
10	Radiants for gas and electric fires	}	10,792 (c)	1.3	387 117	} 7	7
10	Other and unclassified refractory goods]	ł	639 ••	6,882 1,925	} 44	60
22	Bricks, building		A at the	1	11.2	S	
	Of brick-earth, clay, shale or marl	Millions	-	Millions		1 1.00	
in her i	Common (d)	3,958	26,537	4,035	30,474	164	234
1.01	Facing (d)	1,678	17,533	2,367	31,087	139	192
- Annak	Engineering	203	2,493 486	} 266	4,167	70	87
	Perforated		(e)	45.6	610	11	12
	Glazed or enamelled bricks	3.7	282	1.5	146		•
1074	All other building bricks except sand-lime and concrete bricks	45.7	377 672	} 54.8	605	13	14
644	Total building bricks	5,888	47,221 1,158	6,770	67,089		

TABLE 5 (continued)

dustry sub-	EAST. Stree suplaying	25 or 15	1958	nana 🕴 🖽	1963				
vision (b)	Quantity Yalas prises for	Quant	tity	Value	Quan	tity	Value	Enter- prises	Entrie
	NoH zadauH 00073	Millions	Th. tons	000'3	Millions	Th. tons	£'000	Number	Number
22	Clay and terra-cotta flooring and wall partition blocks	30.4	163 23.5	858 107	} 29.3	185	1,077	10	10
23	Roofing tiles of clay		part 1	Ed al par			Alt Dahe	Q. 10800	
	Plain {	123 30.6	131	1,144 327	103 11.6	113	1,183 147	} 18	19
	Single lap	7.2 5.8	21.0	296 168	} 11.5	24.6	427	8	10
	Other, including ridges, hips, valleys, etc.	8.9 1.5	12.6 0.7	228 9 59	}{ ^{2.0}	6.2	163 96	} 22	23
25	Floor quarries and street paving tiles (other than of pre-cast concrete)	40.5 ••	43.4	581 488	32.4	27.1	550 508	} 13	14
	and great when an an a state of the second	Th.sq. yds.							
25	All other tiles (f)	35.6	3.3	25 103 167	}		1,096	11	12
	Total tiles (other than glazed wall and fireplace tiles of all kinds) and unglazed floor tiles and mosaics		212	2,361 1,235		171	2,323 1,847	}	
	inin and beganing an arout (a)	Th.t	ons	in to us	Th.t	ons	Lins Toxy	1	
25	Agricultural drain pipes of clay, { unglazed	12		747 78	} 16	5	1,208	38	43
24	Sanitary ware	NOR IN S	sider	al almont	Alterre 1	o todau	1. 18301 - SI	10424 1 12 (12421) 12	1912 (18) 1973
	Drain pipes, angles, bends, elbows and traps (except pre- cast concrete)	48	4	7,732	63	5	12,134	64	81
	Other sanitary ware Of fireclay, glazed or enamelled	d 1963 Ringdon	ns. 859 1611-60		1000 10 10 1000 10 300 1000 10 30		TO 2512 Milizza i: Mas verti		
	Wash basins	3.	State of the state of the	396 88	} 1.	6	288	14	15
	Sinks	23.	Contraction of the second	1,532 288	} 18.	5	1,398	14	15
	W.C. pans	2.	Charles and the second s	340 51	} 2.	5	290	13	14
	Other	12.	3	1,001	13.	5	1,425	14	15
	Total sanitary ware (other than cement, concrete or earthenware	1	e	11,428	67	2	15,535	•••	301611 132
25	Pipes and tubes of stoneware or fireclay for electrical and other purposes, not sanitary ware	14	19.6	2,761	21		4,127	19	26
25	Flower pote ungloced	Th.c		510	Th.c				
20	Flower pots, unglazed	43	8	540 261	31	2	447	8	8

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Continued on next page

TABLE 5 (continued)

Industry		195	8		1963		1422
sub- livision (b)	an Charles Para	Quantity	Value	Quantity	Value	Enter- prises	Entries
1 million	sedece 2005's Ands American, 200	all and a set	£'000	Quanta by	£'000	Number	Number
25	Architectural terra-cotta and faience, glazed or unglazed	23.6 ··	424	ontigational ••	263		5
	Other products		580		597	40	50
	Waste products		206		321	99	128
- 23	Work done on commission, sub-contract work, etc.	13	(g)	383	79	7	10
	Total	Poler	110,262	19.0	140,811		
144	Sales in other industries (see Table 6)	12.00	7,198	1.75 Satisfies	8,259	i laya.	19.19
	Principal products of this industry sold by establish- ments in the industry	1.5.13	103,063	1994 Carrol 1	132,552	313	469(h)

(a) For sand-lime bricks and bricks, tiles etc. of cement or concrete see the Miscellaneous Building Materials etc. Industry, Part 107.

- (b) 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 firms, not merely sales by establishments classified to the sub-division.
- (c) Revised figure.
- (d) Described as 'Fletton' type and 'Non Fletton' type for 1958.
- (e) Not recorded separately for 1958.
- (f) Excluding glazed wall and fireplace tiles of all kinds and tiles for tessellated pavements for which see the Pottery Industry, Part 103.
- (g) Included in the contract work shown in Table 7.
- (h) 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 TABLE 6 classified to other industries, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

	1958	1963			
	Value	Value	Entries	Principal industries in which produced (a)	
efractory bricks, blocks and crucibles of	000'£	£'000	Number	Eller adab	
raphite and other materials, refractory cement nd other sorts of refractory goods	6,310(b)	6,669	14	27, 44, 106, 107	
uilding bricks of brick-earth, clay, shale r marl	139]	20 8133		
oofing tiles of clay, floor quarries and treet paving tiles (other than of pre-cast oncrete), all other tiles, sanitary ware, architectural terra-cotta and faience, glazed or unglazed	749	1,590	13	3, 39, 103, 107	
Total	7,198(b)	8,259		benaliste	

(a) The references given are to the list of industries at the back of this report. (b) Revised figures.

Firms employing 25 or more persons: United	Kingdom
Ata-Incritery and opposite	Quanti
	Th.ton
ireclay (including saggar marl)	229
ther clay, fullers' earth, brick-earth, marl and shale ther than oil shale	(4) (1)
iled hearths and fireplace surrounds and glazed wall and earth tiles of all kinds	the loss
arthenware, red ware and terra-cotta ware, glazed and aglazed: stoneware, brown and yellow ware	
e-cast concrete goods	
undstone and quartzite (including ganister)	1
ther goods	}
ork done as main and sub-contractors	ľ
ervices rendered to other organisations (a)	
otal value of goods sold without having been subjected o any manufacturing process (merchanted or factored)	
nteen takings	533.9
cified: (0)	lere spo
Total	

F

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s, for providing transport, tions. (b) Excluding amounts charged for services rendered to other organisations.

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

AND REFRACTORY GOODS

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ger firms in the

1958 1963 ty Value Quantity Value ns 2'000 Th.tons 000'3 539 177 482 202 164 .. 181 ... 145 265 713 .. 137 .. 404 41.3 166 461 85 ... 395 ••• 456 246 .. 1.873 ... 4,418 143 372 4,196(b) 7.650

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

	195	54	1963	
2012 8201	Quantity	Cost	Quantity	Cost
	and the second	£,000	6.04.2	000'3
aterials for processing	144		203	
Clay, brick-earth, marl and shale	(1) (1)	an reflere is		
Fireclay (including saggar marl) (a)	••	1,921		2,341
All other clay, fullers' earth, brick-earth, marl and	me ennine tra	821	time editmo	1,234
shale other than oil shale (b)	i.	596	a to inti:	253
Silica stone	48 61300-E	265 308 949	207 .016	189
Sand		(c)		90
Quicklime, hydrated lime and chalk	••	(c)		
Magnesite	CORT	1,102		2,869
Chrome		966		1,266
Dolomite	183012823	116	a.e.e	711
Bauxite		216		637
Sulphite lye	381 996 (P)	(c)	19.19.19.48 10.104 10040	77
Sillimanite, kyanite and andalusite		535	- Long Billing	620
Refractory materials, not elsewhere specified	7 2810	(c)	ana classia	1,073
Glaze and materials for glaze	••	214	LatoT.	199
Heavy chemicals (acids, alkalis, alcohols, other in-	1000	(c)		164
organic and organic chemicals, compressed gasses, etc.)	nig roo in		Th.gal.	
	vine vol fo	nand charge	1.570	229
Lubricating oils and greases		(c)	1,570	135
Replacement parts for firms' own machinery, plant and	2 440 240-940 2 440 240-940	a of combin		corez kag
vehicles, and accessories and consumable tools bought		4,010		5,368
as replacement All other materials for processing		5,357		2,963
	a many the se	a state indicates		
Packaging materials	1	1		
Boxes, cartons, packing cases, and drums and canisters (with or without metal ends) of paper,	- standar			272
cardboard and fibreboard	a circle and	a creation and and and	1E 8 P	-
Timber	12 MET	an ser in	Himinal	and president of the second
Containers wholly or mainly of wood, including plywood boxes and drums, baskets and wickerwork crates		503 4		180
			Th.cu.ft.	
Timber (sawn or planed) for manufacture into packing cases, etc.	der stans inn	{	68.4	28 23
All other packaging materials				568
Fuel and electricity (e)	Th.tons		Th.tons	
Coal	3,259	11,247	1,961	9,867
Coke (including screenings) and manufactured fuel	107	521	174	1,307
core (meruding percentage) and annual	Th.gal.		Th.gal.	
Derv fuel and motor spirit for use in road vehicles	5,264	979	5,054	881
Other liquid fuels (including creosote/pitch mixtures, etc., and liquefied petroleum gases)	10,465	511 {	69,946	2,853

TABLE 10 (continued)

	1954		1963		
pression percepte for lessenaid required	Quantity	Cost	Quantity	Cost	
in taking section extends business and the	Th. therms	£'000	Th.therms	£'000	
Fuel and electricity (e) (continued)	n in Barrier				
Gas	5,917	177	5,779	248	
	Th.kWh		Th.kWh	aganistrus	
Electricity	390,331	2,090 {	522,815	3,176 665	
Total cost of materials and fuel	They'r soldel	31,881	the generation	40,813	
Goods purchased for merchanting		••	(d) a	3,968	
Canteen purchases	are tre firs		ister ynii 1856s haf	365	
Total cost of purchases	aslde	the eres	(a) .anone	45,145	

(a) 'Saggar marl' was not specifically included in 1954.

(b) Described in 1954 as 'Brick-earth, clay, shale or marl'.

(c) Not recorded separately in 1954.

(d) The total quantity of electricity generated in firms' own establishments in this industry was 13,151 Th.kWh in 1954 and 9,566 Th.kWh in 1963.

TABLE 11Transport costs and employment of larger
firms, 1963

Firms employing 25 or more persons: United Kingdom

waste predicts and every blass 1.13	Unit	1963
Average number employed mainly on transport	No.	2,420
Transport costs	- Lezvera in	
Wages and salaries	£'000	2,097
Derv fuel and motor spirit		881
Payments to other organisations for transport	н	13,435
Costs of operating road goods vehicles		
Insurance	H	90
Vehicle licences		143
Depreciation		519
Payments to other organisations for repairs and maintenance	n	320
Total	THE TOPPET	17,484

BRICKS, FIRECLAY AND REFRACTORY GOODS

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

Firms employing 25 or more persons: United Kingdom

The thorms 2'000 The the ras \$ '000 '	Amounts payable	
Repairs and maintenance to	£,000	
Buildings	390	
Road goods vehicles	323	
Plant, machinery, and other capital equipment	1,190	
Insurance, licensing and depreciation of road goods vehicles (b)	752	
Rates, excluding water rates	1,624	
Hire of plant and machinery	486	
Postage, telephone, telegrams and cables	367	
Total	5,131	

(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.

TABLE 13 Percentage analysis of twelve-month periods covered by returns from larger firms, 1963

Firms employing 25 or more persons: United Kingdom

	0		
Year ended	Percentage of total number employed	Year ended	Percentage of total number employed
1963	Per cent.	1963 (contd.)	Per cent.
April (a)	1.8	November	0.4
May	0.1	December	61.1
June	3.6	1964	
July	0.6	1001	
August	0.6	January	0.1
September	6.9	February	1.1
October	1.4	March	22.3
	13, 435	Total	100
	the second s	Second state of the	

(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

This table is not applicable to this industry.

Notes - continued from page ii

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.

Entries

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

vear.

Larger Firms vear.

Net Output transport.

net output.

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.

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.

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

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

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

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 per person employed

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.

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 depart-ment 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.

Small Firms

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

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 report:

- .. 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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