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Business Monitor

A publication of the Government Statistical Service

Report on the Census of Production

Refractory goods

Building bricks and non-refractory goods



Department of Industry
Business Statistics Office

HMSO

PA461

Business Monitor

A publication of the Government Statistical Service

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Enquiries:

Business Statistics Office

Cardiff Road

Newport, Gwent

NPT 1XG

Newport 56111 (STD code 0633) ext 2455

Report on the Census of Production 1971

Refractory goods

Building bricks and non-refractory goods

Presented by the Secretary of State for Industry
to Parliament in pursuance of the Statistics of Trade Act 1947
(10 & 11 Geo.6 Cha.39 sec 7)

Department of Industry
Business Statistics Office

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PA461 REFRACTORY GOODS
BUILDING BRICKS AND NON-REFRACTORY GOODS

The information in this report relates to establishments classified to the Bricks, fireclay and refractory goods industry, minimum list heading 461/1 and 2 in the Standard Industrial Classification (revised 1968). The activities of the industry include:-

- (i) Manufacturing 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.
- (ii) Manufacturing building bricks, clay flooring and roofing tiles, chimney pots, stoneware pipes and conduits, fireclay sanitary ware and other similar clay products. Glazed earthenware tiles and concrete and sand-lime bricks are excluded.

Prior to 1971, for census purposes, the manufacture of refractory goods and building bricks and non-refractory goods formed part of the Bricks, fireclay and refractory goods industry and separate figures are not available. This report is, therefore, presented in three parts:- A Bricks, fireclay and refractory goods industry, MLH 461, 1970 and 1971; B Refractory goods, MLH 461/1, 1971; C Building bricks and non-refractory goods, MLH 461/2, 1971.

In interpreting the data in the tables it is essential to bear in mind the notes and definitions which commence on page (iii).

TABLE 1a

Input and output, 1970 and 1971

All United Kingdom establishments classified to the Refractory goods, and Building bricks and non-refractory goods industries (a)

	Unit	1970	1971
Enterprises	Number	428	349
Establishments	"	585	553
Sales of goods produced and work done	£'000	208,358	228,202
Services rendered to other organisations (b)	"	537	994
Goods merchanted or factored	"	12,074	11,490
Canteen takings	"	426	448
Total sales and work done	"	221,394	241,135
Increase during the year, work in progress and goods on hand for sale	"	- 494	885
Gross output	"	220,900	242,020
Cost of purchases	"	81,965	88,340
Increase during the year, stocks of materials, stores and fuel	"	1,647	1,666
Payments to other organisations for work done on materials given out	"	505	239
for transport by road	"	18,711	19,404
for transport by rail, water, air and Post Office parcel services	"	1,264	1,169
Total costs	"	100,798	107,487
Net output	"	120,102	134,534
Total employment (including working proprietors) (c)	Thousands	51.5	49.6
Net output per head	£	2,334	2,713

(a) For 1971, estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons, accounted for 13 per cent of the total figures in which they were incorporated: of this unsatisfactory returns accounted for 7 per cent. For 1970 the comparable figures were 15 per cent and 9 per cent respectively.

(b) Amounts charged for hiring out plant, machinery or other goods, for providing transport, or for any technical or other services rendered.

(c) Average number of persons employed during the year.

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TABLE 1b

PA461

Input and output, 1971

All United Kingdom establishments classified to the Refractory goods, and Building bricks and non-refractory goods industries (a)

	Unit	Refractory goods	Building bricks and non-refractory goods
Enterprises	Number	125	231
Establishments	"	191	362
Sales of goods produced and work done	£'000	93,623	134,579
Services rendered to other organisations (b)	"	598	396
Goods merchanted or factored	"	5,897	5,593
Canteen takings	"	152	296
Total sales and work done	"	100,270	140,865
Increase during the year, work in progress and goods on hand for sale	"	2,544	- 1,658
Gross output	"	102,814	139,206
Cost of purchases	"	49,962	38,378
Increase during the year, stocks of materials, stores and fuel	"	1,193	473
Payments to other organisations for work done on materials given out	"	129	110
for transport by road	"	5,651	14,923
for transport by rail, water, air and Post Office parcel services	"		
Total costs	"		
Net output	"	48,266	86,268
Total employment (including working proprietors) (c)	Thousands	16.8	32.7
Net output per head	£	2,865	2,634

(a) For 1971, estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons in the Refractory goods industry accounted for 14 per cent of the total figures in which they were incorporated: of this unsatisfactory returns accounted for 8 per cent. In the Building bricks and non-refractory goods industry the corresponding figures are 13 per cent and 6 per cent respectively.

(b) Amounts charged for hiring out plant, machinery or other goods, for providing transport, or for any technical or other services rendered.

(c) Average number of persons employed during the year.

TABLE 2a

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Capital expenditure and stocks, 1970 and 1971

All United Kingdom establishments classified to the Refractory goods, and Building bricks and non-refractory goods industries (a)

	1970	1971	
Capital expenditure (b)	2,071	2,220	
New building work			
Land and existing buildings			
Acquisitions	493	1,409	
Disposals	545	1,915	
Plant and machinery			
Acquisitions	9,133	12,920	
Disposals	491	530	
Vehicles			
Acquisitions	1,405	1,911	
Disposals	430	655	
Total net capital expenditure (c)	11,636	15,360	
Increase in stocks and work in progress, 1970 and 1971 and value of stocks and work in progress at end of 1971	Increase	Increase	Value at end of year
Materials, stores and fuel	1,647	1,666	13,834
Work in progress	345	70	3,508
Goods on hand for sale	- 839	816	15,649
Total stocks	1,153	2,551	32,991

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

(b) Capital expenditure in respect of manufacturing establishments where production had not commenced before the end of the year, is included.

(c) Acquisitions less disposals.

TABLE 2b

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Capital expenditure and stocks, 1970 and 1971

All United Kingdom establishments classified to the Refractory goods, and Building bricks and non-refractory goods industries (a)

	Refractory goods	Building bricks and non-refractory goods
Capital expenditure (b)	£'000	£'000
New building work	964	1,256
Land and existing buildings		
Acquisitions	} 54(c)	- 560(c)
Disposals		
Plant and machinery		
Acquisitions	6,544	6,376
Disposals	122	408
Vehicles		
Acquisitions	432	1,479
Disposals	169	486
Total net capital expenditure (c)	7,702	7,657
Stocks and work in progress at end of year		
Materials, stores and fuel	9,667	4,167
Work in progress	1,742	1,766
Goods on hand for sale	9,639	6,010
Total stocks	21,047	11,944

- (a) Including estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons.
- (b) Capital expenditure in respect of manufacturing establishments where production had not commenced before the end of the year, is included.
- (c) Acquisitions less disposals.

TABLE 3a

Analysis of establishments by size, 1971

All United Kingdom establishments classified to the Refractory goods, and Building bricks and non-refractory goods industries (a)

Size group (b)	Estab-lishments	Enter-prises (c)	Total employment (b)	Employees		Wages and salaries		Wages and salaries per head		Total sales and work done (e)	Gross output	Net output	Net output per head	Capital expenditure (net) (f)	Total stocks and work in progress at end of year
				Operatives	Others (d)	Operatives	Others (d)	Operatives	Others (d)						
	Number	Number	Number	Number	Number	£'000	£'000	£	£	£'000	£'000	£'000	£	£'000	£'000
1-10	109	105	646	11,746	1,983	15,392	3,292	1,310	1,660	69,905	69,269	35,122	2,515	3,035	8,724
11-24	136	113	2,509												
25-49	109	76	4,046												
50-99	97	67	6,762	6,705	1,455	9,010	2,407	1,344	1,654	40,754	40,756	22,918	2,082	2,547	6,013
100-199	54	39	8,180												
200-399	29	24	7,098	5,739	1,351	8,183	2,390	1,426	1,769	35,543	35,684	19,318	2,722	2,478	5,009
400-499	6	5	2,599	2,029	570	2,713	912	1,337	1,599	13,996	13,960	7,832	3,014	743	1,380
500 and over	13	11	17,754	14,543	3,211	22,371	5,304	1,538	1,652	80,936	82,351	49,343	2,779	6,558	11,866
Total	553	349	49,594	40,762	8,570	57,670	14,305	1,415	1,669	241,135	242,020	134,534	2,713	15,360	32,991

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

(b) Average number employed during the year (including working proprietors) by the establishment.

(c) Some enterprises control establishments in more than one size group: the sum of the figures for the size groups will therefore exceed the total for the industry.

(d) Administrative, technical and clerical employees.

(e) Including sales of goods merchanted or factored, canteen takings and services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for any technical or other services rendered).

(f) Acquisitions less disposals.

TABLE 3b

Analysis of establishments by size, 1971

All United Kingdom establishments classified to the Refractory goods industry (a)

Size group (b)	Estab-lishments	Enter-prises (c)	Total employment (b)	Employees		Wages and salaries		Wages and salaries per head		Total sales and work done (e)	Gross output	Net output	Net output per head	Capital expenditure (net) (f)	Total stocks and work in progress at end of year												
				Operatives	Others (d)	Operatives	Others (d)	Operatives	Others (d)																		
	Number	Number	Number	Number	Number	£'000	£'000	£	£	£'000	£'000	£'000	£	£'000	£'000												
1-10	55	52	310	2,843	661	3,533	1,305	1,243	1,974	27,151	27,577	10,834	3,025	1,754	4,643												
11-24	40	37	689																								
25-49	21	18	756																								
50-99	25	16	1,827																								
100-199	26	20	4,215													3,402	803	4,173	1,367	1,227	1,703	22,234	22,538	12,206	2,896	1,401	3,913
200-499	18	14	4,291													3,287	1,004	4,712	1,835	1,433	1,827	23,478	23,901	12,314	2,870	1,904	4,142
500 and over	6	5	4,757													3,498	1,259	4,922	2,033	1,407	1,615	27,407	28,798	12,911	2,714	2,644	8,349
Total	191	125	16,845	13,030	3,727	17,339	6,540	1,331	1,755	100,270	102,814	48,266	2,865	7,702	21,047												

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

(b) Average number employed during the year (including working proprietors) by the establishment.

(c) Some enterprises control establishments in more than one size group: the sum of the figures for the size groups will therefore exceed the total for the industry.

(d) Administrative, technical and clerical employees.

(e) Including sales of goods merchanted or factored, canteen takings and services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for any technical or other services rendered).

(f) Acquisitions less disposals.

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TABLE 3c

Analysis of establishments by size, 1971

All United Kingdom establishments classified to the Building bricks and non-refractory goods industry (a)

Size group (b)	Estab-lishments	Enter-prises (c)	Total employment (b)	Employees		Wages and salaries		Wages and salaries per head		Total sales and work done (e)	Gross output	Net output	Net output per head	Capital expenditure (net) (f)	Total stocks and work in progress at end of year												
				Operatives	Others (d)	Operatives	Others (d)	Operatives	Others (d)																		
	Number	Number	Number	Number	Number	£'000	£'000	£	£	£'000	£'000	£'000	£	£'000	£'000												
1-10	54	53	336	8,903	1,322	11,859	1,987	1,332	1,503	42,754	41,693	24,288	2,340	1,281	4,081												
11-24	96	79	1,820																								
25-49	88	61	3,290																								
50-99	72	52	4,935																								
100-199	28	21	3,965													3,303	652	4,838	1,040	1,465	1,595	18,520	18,218	10,712	2,702	1,146	2,099
200-499	17	15	5,406													4,481	917	6,184	1,467	1,380	1,600	26,061	25,742	14,836	2,744	1,316	2,246
500 and over	7	6	12,997													11,045	1,952	17,449	3,271	1,580	1,676	53,529	53,553	36,432	2,803	3,914	3,517
Total	362	231	32,749	27,732	4,843	40,331	7,765	1,454	1,603	140,865	139,206	86,268	2,634	7,657	11,944												

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

(b) Average number employed during the year (including working proprietors) by the establishment.

(c) Some enterprises control establishments in more than one size group: the sum of the figures for the size groups will therefore exceed the total for the industry.

(d) Administrative, technical and clerical employees.

(e) Including sales of goods merchanted or factored, canteen takings and services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for any technical or other services rendered).

(f) Acquisitions less disposals.

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TABLE 4

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Percentage analysis of employees, by full and part time employment and sex, 1971 (a)

All United Kingdom establishments classified to the Refractory goods, and Building bricks and non-refractory goods, industries.

Sex	Full time	Part time	All employees
	per cent	per cent	per cent
Male	89	1	90
Female	8	2	10
	97	3	100

Source: Department of Employment

(a) The percentages relate to the numbers employed (excluding working proprietors) at mid-June, 1971.

TABLE 5a

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Regional distribution of employment, net capital expenditure and net output, 1971

All United Kingdom establishments classified to the Refractory goods, and Building bricks and non-refractory goods industries

Area	Average number employed (a)		Net capital expenditure (b)		Net output and employment in the region of establishments with more than 80 per cent of their employment in the region (c)		
	Thousands	per cent of United Kingdom	£'000	per cent of United Kingdom	Estimated net output	Average number employed as a percentage of total average number employed in the industry in the region	Net output as percentage of total of the industry in the United Kingdom
Standard Regions of England							
North	2.7	5.4	556	3.6	5,699	81.1	4.2
Yorkshire and Humberside	6.7	13.5	2,490	16.2	16,207	88.8	12.1
East Midlands	5.4	10.8	2,838	18.5	15,107	95.2	11.2
East Anglia	*	*	*	*	*	*	*
South East	9.5	19.2	2,374	15.5	10,903	39.4	8.1
South West	*	*	*	*	*	*	*
West Midlands	7.3	14.8	2,441	15.9	15,677	76.8	11.7
North West	4.5	9.1	878	5.7	9,095	72.9	6.8
England	39.9	80.5	13,055	85.0	75,578	67.2	56.2
Wales	*	*	*	*	*	*	*
Scotland	6.2	12.6	1,679	10.9	11,664	86.3	8.7
Great Britain	*	*	*	*	*	*	*
Northern Ireland	*	*	*	*	*	*	*
Unallocated (d)	-	-	-	-	42,162	-	31.3
United Kingdom	49.6	100.0	15,360	100.0	134,534	-	100.0

(a) Including working proprietors.

(b) New building work plus acquisitions less disposals of land and existing buildings, plant and machinery and vehicles.

(c) Where a census return covered addresses in two or more regions an estimate was made of the net output attributable to the region only where more than 80 per cent of the establishment's employees were located in the region. The estimate was made by assuming that net output at each address covered by a return was proportionate to employment at the address. The establishment's residual net output was included in unallocated net output.

(d) Includes estimates of net output for establishments not making satisfactory returns and establishments employing less than 25 employees, and unallocated net output of establishments covering addresses in two or more regions.

TABLE 5b

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Regional distribution of employment, net capital expenditure and net output, 1971
All United Kingdom establishments classified to the Refractory goods industry

Area	Average number employed (a)		Net capital expenditure (b)		Net output and employment in the region of establishments with more than 80 per cent of their employment in the region (c)		
	Thousands	per cent of United Kingdom	£'000	per cent of United Kingdom	Estimated net output	Average number employed as a percentage of total average number employed in the industry in the region	Net output as percentage of total of the industry in the United Kingdom
Standard Regions of England							
North	1.2	6.9	164	2.1	2,555	86.8	5.3
Yorkshire and Humberside	3.2	19.2	1,936	25.1	7,777	94.4	16.1
East Midlands	1.9	11.3	1,780	23.1	5,816	95.8	12.1
East Anglia	*	*	*	*	*	*	*
South East	1.0	6.0	203	2.6	2,177	56.8	4.5
South West	*	*	*	*	*	*	*
West Midlands	3.5	20.5	1,774	23.0	7,653	72.8	15.9
North West	1.4	8.1	432	5.6	3,965	86.4	8.2
England	12.4	73.7	6,317	82.0	30,735	83.6	63.7
Wales	*	*	*	*	*	*	*
Scotland	3.5	20.5	1,276	16.6	7,608	90.6	15.8
Great Britain	*	*	*	*	*	*	*
Northern Ireland	*	*	*	*	*	*	*
Unallocated (d)	-	-	-	-	8,128	-	16.8
United Kingdom	16.8	100.0	7,702	100.0	48,266		100.0

(a) Including working proprietors.

(b) New building work plus acquisitions less disposals of land and existing buildings, plant and machinery and vehicles.

(c) Where a census return covered addresses in two or more regions an estimate was made of the net output attributable to the region only where more than 80 per cent of the establishment's employees were located in the region. The estimate was made by assuming that net output at each address covered by a return was proportionate to employment at the address. The establishment's residual net output was included in unallocated net output.

(d) Includes estimates of net output for establishments not making satisfactory returns and establishments employing less than 25 employees, and unallocated net output of establishments covering addresses in two or more regions.

TABLE 5c

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Regional distribution of employment, net capital expenditure and net output, 1971
All United Kingdom establishments classified to the Building bricks and non-refractory goods industry

Area	Average number employed (a)		Net capital expenditure (b)		Net output and employment in the region of establishments with more than 80 per cent of their employment in the region (c)		
	Thousands	per cent of United Kingdom	£'000	per cent of United Kingdom	Estimated net output	Average number employed as a percentage of total average number employed in the industry in the region	Net output as percentage of total of the industry in the United Kingdom
Standard Regions of England							
North	1.5	4.6	392	5.1	3,144	76.7	3.6
Yorkshire and Humberside	3.5	10.7	553	7.2	8,429	83.7	9.8
East Midlands	3.5	10.6	1,058	13.8	9,290	94.8	10.8
East Anglia	*	*	*	*	*	*	*
South East	8.5	26.0	2,171	28.4	8,726	37.4	10.1
South West	*	*	*	*	*	*	*
West Midlands	3.9	11.9	667	8.7	8,024	80.3	9.3
North West	3.1	9.5	446	5.8	5,129	66.9	6.0
England	27.5	84.0	6,738	88.0	44,843	59.8	52.0
Wales	*	*	*	*	*	*	*
Scotland	2.8	8.5	403	5.3	4,056	80.9	4.7
Great Britain	*	*	*	*	*	*	*
Northern Ireland	*	*	*	*	*	*	*
Unallocated (d)	-	-	-	-	34,034	-	39.5
United Kingdom	32.7	100.0	7,657	100.0	86,268		100.0

(a) Including working proprietors.

(b) New building work plus acquisitions less disposals of land and existing buildings, plant and machinery and vehicles.

(c) Where a census return covered addresses in two or more regions an estimate was made of the net output attributable to the region only where more than 80 per cent of the establishment's employees were located in the region. The estimate was made by assuming that net output at each address covered by a return was proportionate to employment at the address. The establishment's residual net output was included in unallocated net output.

(d) Includes estimates of net output for establishments not making satisfactory returns and establishments employing less than 25 employees, and unallocated net output of establishments covering addresses in two or more regions.

TABLE 6

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Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments employing 25 or more persons, 1971

Accounting year ended	Refractory goods		Building bricks and non-refractory goods	
	Percentage of total returns received	Percentage of total numbers employed	Percentage of total returns received	Percentage of total numbers employed
1971 April (a)	1.2	2.8	0.5	0.1
May	0.0	0.0	1.1	0.3
June	1.2	0.5	3.7	2.3
July	2.3	0.5	3.2	0.6
August	1.2	1.2	0.5	0.1
September	2.3	0.5	7.4	7.7
October	1.2	0.3	1.1	0.2
November	0.0	0.0	2.1	0.7
December	31.3	25.2	39.1	54.0
1972 January	16.3	19.6	1.6	1.3
February	1.2	0.2	1.1	1.2
March (b)	41.8	49.2	38.6	31.5
	100.0	100.0	100.0	100.0

(a) From 6th April.

(b) Including returns made for twelve-month period ended 1st to 5th April 1972.

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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 PA1001 of the Report on the Census of Production for 1971).

GENERAL INFORMATION Changes compared with 1970

The questions asked in the 1971 census were the same as those in the 1970 census with one main exception: for 1971 establishments were asked to include in capital expenditure, expenditure on units that were not in production in the year of return; for 1970 this expenditure was collected in a separate inquiry. This change of method of collection does not affect the results for 1970 and 1971 because capital expenditure for units not yet in production is included in the aggregates for both years.

Industrial classification

The Annual Censuses of Production are conducted on the Business Statistics Office's Production Register. Normally establishments on the Register are classified to industries on the basis of major activity in conformity with the third edition of the Standard Industrial Classification (Revised 1968). 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 in its sales of the principal products of any other industry; classification is generally based on an establishment's returns to the quarterly production inquiry. Where this was not possible—for example where a quarterly production inquiry had not then been introduced—the classification of an establishment reflects its return to the Census of Production, 1968. Establishments for which information was not available either from the quarterly inquiries or the 1968 Census were classified on the basis of the description of the business given by the establishments to the Business Statistics Office, for instance, in the course of registration.

Coverage

Detailed census returns were generally sought only from establishments employing on average 25 or more persons, but in some industries where firms employing less than 25 persons account for a relatively high proportion of total employment and output the exemption limit was lowered to 11. Census returns were also sent to establishments whose employment was not known to the Business Statistics Office at the time of dispatch.

TERMS USED IN THE CENSUS REPORT

Average number employed

Establishments 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 full time or part time employees. Separate figures were required for (a) administrative, technical and clerical employees and (b) all other employees (operatives). Averages could be calculated from figures relating to the last week of each calendar month. Establishments were also required to state the number of working proprietors where appropriate and these are included in total employment figures. Outworkers (i.e. persons employed by establishments who worked in their own homes etc. on materials supplied by the establishments) are excluded.

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

Working Proprietors

These include all persons regarded as "self employed" for national insurance purposes and members of their families who worked in the business without receiving a fixed wage or salary; but such persons who worked less than half the normal number of working hours are excluded. Directors working in the business but not in receipt of a definite wage, salary or commission are included under this heading; directors paid by fee only are not included.

Employees

Administrative, technical and clerical employees include managing and other directors in receipt of a definite wage, salary or commission, 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.

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 (including roundsmen), stores, warehouses, shops and canteens; inspectors, viewers and similar workers; maintenance workers, and cleaners. Operators engaged in outside work of erecting, fitting etc. are also included, but out-workers are excluded.

Capital expenditure

Capital expenditure during the year in respect of manufacturing units where production had not started before the end of the year is included in the figures for both 1970 and 1971.

(a) New building work

This represents the cost incurred during the year of new building and other 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 works of a capital nature carried out by the establishment's own staff and the cost of any newly constructed buildings purchased. Figures shown include any legal charges, stamp duties, agents' commissions, etc.

(b) Land and existing buildings

The items shown are the capital cost of freeholds purchased and the capital cost of 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.

(c) 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 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, amortization or obsolescence. The proceeds of items disposed of during the year exclude amounts written off for items scrapped.

Enterprise

The term enterprise is used in this report to mean one or more establishments under common ownership or control. An enterprise normally consists of a single establishment, more than one establishment owned by the same firm, or a number of establishments owned by a parent company and its subsidiary companies. Information about the relationship between constituent companies of enterprises was obtained mainly from published sources such as the Stock Exchange Year Book supplemented by information from company reports and information supplied by establishments. The information available is not complete but covers the largest and most important groups of industrial establishments and is believed sufficient to provide a worthwhile basis for analysis.

Establishment

The definition of an establishment in 1970 and 1971 was that of the Standard Industrial Classification (Revised 1968): "the smallest unit which can provide the information normally required for an economic census, for example, employment, expenses, turnover, capital formation". Sometimes activities which are conducted as a single business are carried on at a number of addresses, termed local units. Where the activities of such a business are closely integrated, and detailed census information is not available for each unit, it is treated as a multi-unit establishment and a single return accepted. Separate figures are obtained, however, of employment and net capital expenditure at each unit.

Gross output

Gross output measures the total value of production (including work done) by establishments during the year. It is calculated as follows:—

Value of sales and work done
Plus/Less: Increase/decrease in value of stocks of goods on hand for sale
Plus/Less: Increase/decrease in value of work in progress
= Gross output.

Net output

Net output represents the value added to materials by the process of production (including the margin on selling any merchanted or factored goods). It is calculated as follows:—

Gross output
Less: Purchases adjusted for change in value of stocks of fuel and raw materials
Less: Payments for work given to other establishments
Less: Payments for transport
Less: Net amount of any duties, subsidies, allowances and levies payable
= Net output.

Net output per person employed

The figures of 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.

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 cost of returnable cases and containers when first purchased; of workshop materials, office materials and materials for repairs to establishment's own buildings, plants and vehicles when carried out by their own work people included in the returns; 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 merchenting or factoring and canteen supplies are included. Materials supplied by customers for processing are excluded, as are all purchases charged to capital account.

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 an establishment's own separate transport organisations for delivery of materials and fuel are, therefore, excluded. Materials purchased overseas are included at the 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 delivery cost if invoiced "carriage paid home". Materials and fuel transferred from another department of the establishment 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 establishments 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 establishment's asset accounts. Goods sold without being subjected to any manufacturing process (i.e. merchanted or factored) and canteen takings are included.

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 excluding any trade discounts, agents' commissions, allowances for returnable cases, purchase tax, etc.; the net amount charged for packaging materials is included. Goods charged on a delivered basis to customers overseas are included at the f.o.b. value.

Goods produced in one establishment and transferred to another establishment of the same firm not covered by the return were treated as sales by the producing establishment 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.

To the extent that sales of finished products of one establishment constitute the materials purchased by another, total figures of the value of sales (and of materials and fuel purchased) include an element of duplication. In some industries, e.g. motor vehicle manufacturing, and woollen and worsted, this duplication is substantial; and aggregates of the figures for a number of industries contain significantly greater amounts of duplication. For work done on commission, sub-contract work, etc., the value shown is the total amount charged for the work, including the value of any materials bought and used in such work.

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 establishments of the same enterprise not covered by the return.

Standard Industrial Classification

Industry classification is based on the Standard Industrial Classification (Revised 1968). It is published by HM Stationery Office together with a separate index in the form of an alphabetical list of industries.

Stocks and work in progress

Values are given of stocks of goods on hand for sale, and of materials and fuel, at the end of the year of return, including any stocks of goods held for merchenting or factoring. Values of the change during the year are also shown. The values include duty in the case of dutiable goods held out of bond.

The value of work in progress at the end of, and the change during, the year are 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 payment to other establishments, and to any separate transport organisation of the same establishment 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, coastwise shipping, air, etc. Payments made for sea and air freight on goods sold to customers overseas and on materials and fuel purchased from overseas suppliers are excluded.

Wages and salaries

These are 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. 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 insurances and pension schemes is excluded.

Work given out

The figures shown represent the total amount paid for work done by other establishments (whether part of the same enterprise or not) on materials supplied to them. 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 less than half the final digit shown
- * figures cannot be shown owing to the risk of disclosing information about individual enterprises
- R revised

ROUNDING OF FIGURES

Figures in the tables have, where necessary, been rounded to the nearest final digit; there may be an apparent slight discrepancy between the sum of the constituent items and the total shown.

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