



BOARD OF TRADE

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Report on the Census of Production 1963

34 Synthetic resins and plastics materials

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*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)*

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 full-time or part-time employees. Separate figures were required for (a) administrative, technical and clerical employees and (b) operatives (see below). Averages could be calculated from figures relating to the last week of each calendar month; figures shown in respect of the average number employed relate to the sum of these averages. Firms were also required to state the number of working proprietors (see below) where appropriate and these are included in total employment figures. Outworkers are excluded.

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

Working Proprietors

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

Employees

(i) Administrative, technical and clerical employees include managers, superintendents and works foremen; research, experimental, development, technical and design employees (other than operatives); draughtsmen and tracers; editorial staff, staff reporters, canvassers, competition and advertising staff; travellers; and office (including works office) employees. For Great Britain, but not for Northern Ireland, they include also managing and other directors in receipt of a definite wage, salary or commission.

(ii) Operatives include all other classes of employees, that is, broadly speaking, all manual wage earners. They include those employed in and about the factory or works; operatives employed in power houses, transport work, stores, warehouses, shops and canteens; inspectors, viewers and similar workers; maintenance workers; and cleaners. Operatives engaged in outside work of erection, fitting, etc. are also included, but outworkers (i.e. persons employed by the firm who worked in their own homes, etc. on materials supplied by the firm) are excluded. Information about the numbers of outworkers employed was collected only for the gloves industry.

Capital Expenditure

(i) New building work.

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

34 Synthetic resins and plastics materials

This Report on the Synthetic Resins and Plastics Materials Industry relates to establishments engaged wholly or mainly in manufacturing synthetic resins and plastics materials in the form of moulding and extrusion compounds, solid and liquid resins, sheets (including laminated sheet), rods and tubes, solutions, emulsions and dispersions. Plastic mouldings, castings or extrusions produced from these plastics materials, decorative unsupported sheet and film of polyvinyl chloride and co-polymers, supported sheet of thermoplastic materials, thermoplastic flooring and tiling and articles cut from plastic sheet are excluded. The manufacture of textile fibres from plastics materials is also excluded.

The definition of this industry for 1963 represents a change from previous years when decorative sheet and film of polyvinyl chloride and co-polymers and supported sheet of thermoplastic materials were treated as principal products of this industry.

This industry corresponds to minimum list heading 276 in the Standard Industrial Classification (Consolidated edition, 1963) except for the exclusion of synthetic resin adhesives which are classified to Gelatine, Adhesives, etc. (Part 36) and of decorative sheet and film of polyvinyl chloride and co-polymers and supported sheet of thermoplastic materials which are classified to Linoleum, Leathercloth, etc. (Part 120).

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

TREATMENT OF FOAMBACK FABRICS

In the 1963 census sales of foamback fabrics are shown as principal products of the same industry as the fabric rather than the material used for the backing. Thus foamback knitted fabrics are shown in Table 5 of the report on the Hosiery and Other Knitted Goods Industry (Part 81), and the corresponding tables in the reports on the Woollen and Worsted Industry (Part 78) and the Weaving of Cotton, Linen and Man-made Fibres Industry (Part 77) show, respectively, sales of foamback woollen or worsted fabrics and sales of foamback fabrics of cotton, linen and man-made fibres. Total sales of all foamback fabrics reported in the census, together with those reported by textile converters in a separate inquiry, are brought together in a supplement to Table 5 in the report on the Weaving of Cotton, Linen and Man-made Fibres Industry (Part 77).

Sales of foamback fabrics were not taken into account in classifying returns to the three textile industries in which they are shown. Where foamback fabrics were made on commission, returns reporting doing this work were classified to the Textile Finishing Industry (Part 87).

METHOD OF CLASSIFICATION

The classification of returns to this industry followed the standard procedure except for the special treatment of foamback fabric referred to above. The classification of returns to sub-divisions of the industry followed the standard procedure.

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

	Unit	1958	1963	
Number of enterprises	No.	117	155	
Number of establishments	"	138	197	
Gross output	£'000	140,214	197,957	
Net output	"	48,696	77,151	
Net output per head	£	1,608	2,383	
Sales and work done	{ goods produced and work done	£'000	135,032	187,739(b)
	{ merchanted goods and canteen takings	"	4,713	9,361
Purchases	{ materials for processing and packaging, and fuel	"	88,335	109,948
	{ goods for merchenting and canteen purchases	"		8,174
Payments to other organisations	{ for work done on materials given out	"	1,181	653
	{ for transport	"	1,986	3,085
Stocks and work in progress				
Total stocks and work in progress	{ change during year	"	+ 453	+ 1,912
	{ at end of year	"	22,091	26,263
Goods on hand for sale	{ change during year	"	+ 603	+ 743
	{ at end of year	"	10,215	13,727
Work in progress	{ change during year	"	- 134	+ 114
	{ at end of year	"	2,778	2,822
Materials, stores and fuel	{ change during year	"	- 16	+ 1,055
	{ at end of year	"	9,098	9,714
Average number employed	{ total, including working proprietors	Th.	30.3	32.4
	{ operatives	"	19.2	19.6
	{ other employees (c)	"	11.1	12.6
Wages and salaries	{ of operatives	£'000	12,271	16,558
	{ of other employees (c)	"	9,065	13,556
Employers' contributions to National Insurance and private pension schemes, etc. (d)	"	..	2,409	
Capital expenditure (e)				
Total	"	..	16,406	
New building work	"	2,402	2,062	
Land and existing buildings (f)	"	..	257	
Plant and machinery (f)	"	6,693	13,817	
Vehicles (f)	"	200	270	

(a) For 1963, estimates for small firms and for firms not making satisfactory returns accounted for about 3 per cent. of the total figures in which they were incorporated. (For 1958 the comparable figure was 2 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) Administrative, technical and clerical employees.

(d) Including pensions and gratuities paid other than from pension funds.

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

(f) Acquisitions less disposals.

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

	Unit	1958	1963
Number of enterprises	No.	57	60
Number of establishments	"	78	98
Gross output	£'000	136,904	191,305
Net output	"	47,547	74,559
Net output per head	£	1,608	2,383
Sales and work done	£'000	131,844	181,430(b)
	"	4,602	9,047
Index of specialisation (c)	Per cent.	96	94
Purchases	£'000	86,249	106,253
	"		7,900
Payments to other organisations	"	1,153	631
	"	1,940	2,982
Stocks and work in progress			
Goods on hand for sale	"	+ 589	+ 718
	"	9,974	13,266
Work in progress	"	- 131	+ 110
	"	2,712	2,727
Materials, stores and fuel	"	- 15	+ 1,020
	"	8,883	9,387
Average number employed	No.	29,570	31,290
	"	18,762	19,073
	"	10,807	12,199
Wages and salaries	£'000	11,989	16,076
	"	8,858	13,161
Wages and salaries per head	£	639	843
	"	820	1,079
Employers' contributions to National Insurance (e)	£'000	..	1,020
Employers' contributions to private pension schemes, etc. (f)	"	..	1,319
Capital expenditure (g)			
New building work	"	2,345	1,993
Land and existing buildings	"	..	319
	"	..	71
Plant and machinery	"	6,685	13,799
	"	150	446
Vehicles	"	270	367
	"	75	105

For notes to this table - see page 34/6

TABLE 3 Analysis of larger firms by size of enterprise within the industry, 1963
(i) Output, employment, capital expenditure and stocks

Firms employing 25 or more persons: United Kingdom

Average number employed by the enterprise in the industry (a)	Enterprises	Establishments	Average number employed (a)	Gross output	Net output	Net output per head	Capital expenditure (b)	Total value of stocks and work in progress at end of year
	Number	Number	Number	£'000	£'000	£	£'000	£'000
25-49	12	14	434	2,605	767	1,767	87	391
50-99	16	21	1,090	6,021	1,926	1,767	813	624
100-199	13	16	1,880	9,560	3,774	2,007	1,791	1,900
200-299	6	8	1,582	9,543	2,948	1,863	470	1,779
300-399	3	8	978	6,597	2,930	2,995	390	562
400-749	3	4	1,774	9,122	3,955	2,229	559	1,198
750-1,999	3	8	3,883	19,290	9,066	2,335	681	2,813
2,000 and over	4	19	19,669	128,567	49,194	2,501	11,064	16,114
Total	60	98	31,290	191,305	74,559	2,383	15,855	25,381

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

Firms employing 25 or more persons: United Kingdom

Average number employed by the enterprise in the industry (a)	Employees		Wages and salaries		Employers' contributions		Wages and salaries per head	
	Operatives	Others (c)	Operatives	Others (c)	National Insurance (d)	Private pension schemes, etc. (e)	Operatives	Others (c)
	Number	Number	£'000	£'000	£'000	£'000	£	£
25-49	286	141	195	114	14	7	683	807
50-99	759	324	517	310	32	19	681	956
100-199	1,228	649	882	564	54	39	718	869
200-299	996	585	872	587	52	52	875	1,004
300-399	723	255	585	271	27	20	809	1,061
400-749	1,047	727	847	731	50	68	809	1,005
750-1,999	2,540	1,343	2,102	1,172	115	101	828	872
2,000 and over	11,494	8,175	10,077	9,413	675	1,012	877	1,151
Total	19,073	12,199	16,076	13,161	1,020	1,319	843	1,079

(a) Including working proprietors.

(b) Acquisitions less disposals.

(c) Administrative, technical and clerical employees.

(d) Including both flat rate and graduated contributions.

(e) Including pensions and gratuities paid other than from pension funds. These amounted in total to £148,000.

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

Ages	Males	Females	All employees
	Per cent.	Per cent.	Per cent.
Under 18	2	1	3
18 and over	82	15	97
All ages	84	16	100

Source: Ministry of Labour

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

Footnotes to Table 2.

(a) The following information relates to small firms (employing fewer than 25 persons) in this industry. It includes an estimate for small firms not making satisfactory returns which account for 4 per cent. of the employment shown for 1963 and 8 per cent. for 1958.

	1958	1963
Number of firms	60	99
Average number employed:		
Working proprietors	} 715	{ 150
Other persons employed			} 938

(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) This is the ratio of total sales of principal products by the industry to total sales of goods produced and work done.

(d) Administrative, technical and clerical employees.

(e) Including both flat rate and graduated contributions.

(f) Including pensions and gratuities paid other than from pension funds.

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

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

Firms employing 25 or more persons: United Kingdom

	1958		1963			
	Quantity	Value	Quantity	Value	Enterprises	Entries
Synthetic resins: thermosetting	Th.tons	£'000	Th.tons	£'000	Number	Number
Alkyds (including styrenated alkyds) and unsaturated polyesters						
Solid and liquid resins including solutions, emulsions and dispersions	28.5	6,586	25.1	6,865	31	35
Unsaturated polyester resins (excluding pre-impregnated glass cloth, etc.)(a)	5.5	2,239	13.2	3,587	10	10
Aminoplastics (melamine and urea formaldehyde): solid and liquid resins (including modified resins) and solutions	25.0	3,587	49.6	4,694	11	12
Phenolics and cresylics: straight and modified resins including solutions, emulsions and dispersions	15.8	3,306	19.0	3,726	16	16
Polyurethanes						
Flexible and semi-flexible foams (excluding moulded or fabricated goods)			..	3,209	*	5
Rigid foam compositions	{ 8.8	{ 1,978	..	3,942	10	10
Epoxide resins	{ ..	{ 466}				
Other thermosetting materials not elsewhere specified, including casein plastics			{ 4.2	{ 1,195	9	9
..			{ ..	{ 299}		
Synthetic resins: thermoplastic						
Cellulose plastics - cellulose ester and ether sheet, film (including photographic film base), foil, rod, tube and profile shapes and moulding and extrusion compounds, etc.	10.6	6,173	11.3	6,870	9	11
Polyvinyl acetate-solutions, emulsions and dispersions	16.6	3,629	28.6	5,767	13	14
Polystyrene						
Non-toughened straight resins and moulding and extrusion compounds			33.1	4,082	10	11
Toughened resins, moulding and extrusion compounds	33.1	8,346	26.9	5,422	10	11
Co-polymer resins and non-toughened co-polymer moulding and extrusion compounds, including styrene as a major constituent; expandable polystyrene; solutions, emulsions and dispersions			14.0	3,182	12	15
Polyvinyl chloride polymers and co-polymers	54.6	9,274	118	13,425	*	*
Acrylics - moulding and extrusion compounds: cast sheet, rod and tube; solutions, emulsions and dispersions			25.5	10,933	13	14
Polyamides (excluding continuous filament yarn)			68.0	27,374	6	8
Polypropylene (including co-polymers with polypropylene as major constituent) - granules, moulding and extrusion compounds	104	43,798	12.7	2,424	*	*
Polyethylene (including co-polymers with polyethylene as major constituent) - granules, moulding and extrusion compounds			201	29,491	13	15
Other thermoplastic materials not elsewhere specified, including polytetrafluoroethylene			16.8	8,493	10	13

Continued on next page

TABLE 5 (continued)

	1958		1963			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
		£'000	Th.tons	£'000	Number	Number
Plastics materials other than synthetic resins: thermosetting						
Alkyds (including styrenated alkyds and unsaturated polyesters): moulding and extrusion compounds (including dough moulding compounds)	..	(b)	1.4	511	*	*
	Th.tons					
Aminoplastics (melamine and urea formaldehyde): moulding and extrusion compounds	21.6	3,907	29.5	5,268	8	8
Laminated thermosetting sheet (excluding polyester laminates)						
Decorative	13.0	8,973	12.0	6,829	6	6
Other			7.7	4,531	5	5
Laminated and cast thermosetting rod, tube and profile shapes not elsewhere specified, and cast sheet			..	1,389	5	5
Phenolics and cresylics: moulding and extrusion compounds	26.2	4,510	28.3	5,105	7	7
Plastics materials other than synthetic resins: thermoplastic						
Polypropylene (including co-polymers with polypropylene as major constituent)						
Sheet, film and lay flat tubing (excluding bags, wrappers, etc., made from film)	..	(b)	0.3	159	6	6
Rod, tube and profile shapes (excluding moulded or fabricated goods)						
Polyethylene (including co-polymers with polyethylene as major constituent)						
Sheet, film and lay flat tubing (excluding bags, wrappers, etc., made from film)	5.2	2,771	13.6	4,339	9	9
Rod, tube and profile shapes (excluding moulded or fabricated goods)			..	625	10	10
Polyvinyl chloride (and co-polymers)						
Solutions, emulsions and dispersions	35.1	7,916	1.1	417	*	*
Plasticised moulding and extrusion compounds			68.8	11,865	9	9
Plasticised unsupported sheet and film not printed or embossed i.e. non-decorative (c)	22.8	11,031	12.6	4,095	12	12
Rigid sheet and unplasticised film: rigid rod, tube and profile shapes (excluding moulded or fabricated goods) (c)			7.8	4,164	13	14
Polystyrene						
Sheet, toughened	..	(d)	3.9	1,178	*	*
Other sheet			0.5	584	6	7
Unclassified plastics materials	..	5,839	..	7,959	23	24

TABLE 5 (continued)

	1958		1963			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
		£'000		£'000	Number	Number
Other products	..	1,069	..	653	18	18
Waste products		227		255	14	14
Work done on commission, sub-contract work, etc.		1,470		649	8	9
Total		137,074		205,556	..	..
Sales in other industries (see Table 6)		10,472		35,606	..	..
Principal products of this industry sold by establishments in the industry		126,602		169,950	60	73(e)

(a) Described for 1958 as polyesters (excluding epoxide resins).

(b) Not recorded separately for 1958.

(c) Described for 1958 as polyvinyl chloride sheet, rod, tube and profile shapes. Plasticised unsupported sheet and film printed or embossed, including decorative, was not separately distinguished for 1958 but for 1963 is included in the report on the Linoleum, Leathercloth, etc. Industry (Part 120).

(d) Included with polystyrene synthetic resins for 1958.

(e) 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.

TABLE 6 Sales of principal products of the industry by establishments classified to other industries, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

	1958		1963			
	Quantity	Value	Quantity	Value	Entries	Principal industries in which produced (a)
Synthetic resins: thermosetting	Th. tons	£'000	Th. tons	£'000	Number	
Alkyds (including styrenated alkyds) and unsaturated polyesters, other than moulding and extrusion compounds	5.5	958	13.3	2,834	24	25,27,31,126
Other thermosetting resins			..	5,900	10	25,27,119,120
Synthetic resins: thermoplastic						
Acrylics			3.4	970	*	25,27,124
Cellulose plastics		(b)	0.3	137	*	28,125
Polyamides (excluding continuous filament yarn)	..		1.9	407	*	25,27,33
Polyvinyl acetate			13.9	1,696	8	27,31,119
Polystyrene resins, moulding and extrusion compounds; polystyrene co-polymer resins and non-toughened moulding and extrusion compounds including styrene as a major constituent; expandable polystyrene; and polystyrene solutions, emulsions and dispersions (c)	0.7	153	42.2	6,392	7	27,119,126
Polypropylene (including co-polymers with polypropylene as major constituent): granules, moulding and extrusion compounds	..	(d)	6.7	734	*	27
Plastics materials other than synthetic resins: thermosetting						
Aminoplastics (melamine and urea formaldehyde): moulding and extrusion compounds	..	(e)	0.9	289	*	27,31,36
Laminated thermosetting sheet (excluding polyester laminates)	..	(d)	1.7	822	*	108,120
Other thermosetting materials	14.2	2,526	..	358	*	31,124
Plastics materials other than synthetic resins: thermoplastic						
Polyvinyl chloride (and co-polymers)						
Plasticised unsupported sheet and film not printed or embossed	..	(d)	1.9	651	7	119,120,124
Rigid sheet and unplasticised film: rigid rod, tube and profile shapes (f)	2.0	735	0.8	285	*	59,120,124
Polyethylene (including co-polymers with polyethylene as major constituent) sheet, film and lay flat tubing	..	(b)	8.8	2,859	*	27,124,125
Other	3.6	178(g)	..	425	7	75,116,120,124
Other thermoplastic materials	13.4	3,569	31.8	5,879	8	24,25,27,124
Other and unclassified plastics materials	..	2,353	..	4,968	16	25,39,56,75
Total		10,472		35,606	..	

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

(b) Included with other thermoplastic materials for 1958.

(c) Described for 1958 as polystyrene other than moulding and extrusion compounds.

(d) Not recorded separately for 1958.

(e) Included with thermosetting synthetic resins for 1958.

(f) Described for 1958 as polyvinyl chloride, sheet, rod, tube and profile shapes.

(g) Described for 1958 as polyvinyl chloride moulding and extrusion compounds, solutions, emulsions and dispersions.

TABLE 7 Sales of other than principal products by larger firms in the industry, 1958 and 1963

Firms employing 25 or more persons: United Kingdom

	1958	1963
	Value	Value
	£'000	£'000
Chemical manufactures	880	3,402
Linoleum, leathercloth, etc.		357
Plastic goods	4,362	1,930
Other goods		3,916
Services rendered to other organisations (a)	..	1,875
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)	4,284	8,667
Canteen takings	319	380
Total	9,844(b)	20,527

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

(b) Excluding amounts charged for services rendered to other organisations.

TABLE 8 Production of certain principal products of the industry, including production by establishments classified to other industries, 1963 (a)

All firms in the United Kingdom

	Quantity
	Th.tons
Synthetic resins: thermosetting	
Alkyds (including styrenated alkyds and unsaturated polyesters)	
Solid and liquid alkyd resins including solutions, emulsions and dispersions (b)	152.6(c)
Unsaturated polyester resins including reactive monomer but excluding filler	13.7
Aminoplastics	
Alkylated resins including solutions (d)	36.5
Other solid resins	4.5
Other liquid resins and solutions (d)	54.7
Total aminoplastics	95.8
Phenolics and cresylics	
Straight liquid resins including aqueous solutions and dispersions (e)	27.7
Straight resins, solid or in organic solutions (f)	24.6
Modified resins, including those in solution (f)	5.4
Total phenolics and cresylics	57.7
Polyurethanes: flexible and semi-flexible foams	15.8
Epoxide resins (g)	4.9
Other, including casein plastics and rigid polyurethane foam compositions (f)	6.9
Total synthetic resins, thermosetting	347.4
Synthetic resins: thermoplastic	
Cellulose ester and ether sheet, film (including photographic film base), foil, rod, tube and profile shapes	7.6
Cellulose ester moulding and extrusion compounds	6.2
Polyolefines (polyethylene and polypropylene)	197.9
Polyvinyl acetate including solutions and dispersions (h)	20.7
Styrene polymers and co-polymers	
Non-toughened straight polystyrene resins, moulding and extrusion compounds	30.9
Toughened grades of resins, moulding and extrusion compounds	33.9
Co-polymer resins and non-toughened co-polymer moulding and extrusion compounds, including styrene as a major constituent; expandable polystyrene; solutions, emulsions and dispersions (f)	11.7
Total styrene polymers and co-polymers	76.4
Other materials including acrylics, polyvinyl chloride polymers and co-polymers, polyamides, polytetrafluoroethylene, coumarone-indene resins, solutions, emulsions and dispersions and rosin ester gums	191.5
Total synthetic resins, thermoplastic	500.3

TABLE 8 (continued)

	Quantity
	Th.tons
Plastics materials other than synthetic resins: thermosetting	
Alkyds (including styrenated alkyds): moulding and extrusion compounds including dough moulding compounds	1.6
Aminoplastics: moulding and extrusion compounds	29.2
Laminated thermosetting sheet (excluding polyester laminates)	
Decorative	12.1
Other	10.9
Total laminated thermosetting sheet	23.0
Laminated thermosetting rods, tubes and profile shapes (excluding polyester laminates)	1.2
Phenolics and cresylics	
Moulding and extrusion compounds	30.8
Cast sheet, rod, tube and profile shapes	2.0
Total phenolics and cresylics	32.8
Total thermosetting materials	87.8
Plastics materials other than synthetic resins: thermoplastic	
Polyolefines (polyethylene and polypropylene)	
Sheet, film and lay flat tubing	31.8
Rod, tube and profile shapes	1.5
Total polyolefines	33.3
Polyvinyl chloride	
Solutions, emulsions and dispersions (h)	3.2
Plasticised moulding and extrusion compounds	75.4
Plasticised film (0.010 inches thickness or less)	16.5
Plasticised unsupported sheet (above 0.010 inches thickness)	30.7
Rigid sheet and unplasticised film	6.2
Rigid rod, tube and profile shapes	5.8
Total polyvinyl chloride	137.8
Polystyrene sheet, toughened and other	5.2
Total thermoplastic materials	176.3

(a) The figures in this table are derived from short period returns and differ in coverage and timing from those shown in the rest of this report. Similar information is not available for 1958.

(b) Net resin content including oil but excluding solvent.

(c) Including 102,000 tons recorded by firms in the Census of Production classified to the Paint and Printing Ink industry.

(d) Actual weight including solvent.

(e) Actual weight including water.

(f) Net resin content.

(g) Net resin content excluding added non-active solvent and/or filler.

(h) Net resin content excluding plasticiser.

TABLE 9 Purchases of selected principal products of the industry by larger firms, 1963 (a)
Firms employing 25 or more persons: United Kingdom

Standard Industrial Classification	Purchasing industry (b)	Synthetic resins and plastics materials (excluding leathercloth and reinforced plastics)							
		Polyethylene and polypropylene and co-polymers				Polyvinyl chloride (including co-polymers)			
		Granules, moulding and extrusion compounds		Sheet, rod, film, foil, profile shapes and monofilament		Resins, solutions, emulsions, dispersions, moulding and extrusion compounds		Plasticised and unplasticised sheet, film, rod, foil, tube, profile shapes and foam	
		Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
			£'000		£'000		£'000		£'000
273	Explosives and fireworks	..	(c)	..	(c)	..	(c)	..	(c)
		Th.cwt.				Th.cwt.			
276	Synthetic resins and plastics materials	489	3,947	..	(c)	340	2,301	..	(c)
						..	844		
								Th.cwt.	
311	Iron and steel (general)	..	(c)	..	(c)	..	(d)	5.0	141
								..	55
313	Iron castings, etc.	..	(c)	..	(c)	..	(c)	..	(c)
338	Office machinery	..	(c)	..	(d)	..	(c)	..	(d)
339	Miscellaneous (non-electrical) machinery	..	(c)	..	(e)	..	(c)	..	(e)
341	Industrial plant and steelwork	..	(c)	..	(d)	..	(c)	..	(d)
				Th.cwt.					
349	General mechanical engineering	..	(c)	4.4	245	..	(c)	2.5	39
								..	13
351	Scientific, surgical and photographic instruments, etc.	..	(c)	..	(c)	..	(c)	..	(c)
361	Electrical machinery	16.8	220	..	(c)	..	(d)	..	(c)
362	Insulated wires and cables	152	1,657	..	(c)	888	5,937	..	(c)
363	Telegraph and telephone apparatus	84.2	1,039	..	(c)	..	(d)	..	(c)
364	Radio and other electronic apparatus	14.2	193	..	(c)	124	978	..	(c)
		..	428	..	(c)	..	218	..	(c)
365	Domestic electrical appliances	..	(d)	..	(c)	30.6	388	..	(c)
369	Miscellaneous electrical goods	..	(d)	..	(c)	120	1,267	..	(c)
383	Aircraft manufacturing and repairing	..	(c)	..	(c)	..	(c)	9.5	280
399	Miscellaneous metal manufactures	18.1	225	4.5	143	..	(d)	6.4	127
		..	90	..	38	..		..	40
419	Carpets	..	(c)	..	(c)	57.3	342	..	(c)
						..	63		
432	Leather goods	..	(c)	0.4	20	..	(c)	13.9	233
				..	49	..		..	806
450	Footwear	..	(c)	..	(c)	93.5	319	1.1	35
						..	319	..	82
463	Glass	..	(c)	..	(c)	..	(d)	..	(c)

Synthetic resins and plastics materials (excluding leathercloth and reinforced plastics) (continued)											
Polystyrene				Phenolics and cresylics				Melamine and urea formaldehyde (aminoplastics)	Thermosetting polyesters (including epoxide resins and resin glass fibre mixtures)		
Moulding and extrusion compounds		Sheet, film, tape, foil and foam		Resins, solutions, emulsions, dispersions, moulding and extrusion compounds		Decorative and other laminated sheet, cast sheet, laminated or cast rod, tube and profile shapes					
Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
	£'000		£'000		£'000		£'000		£'000		£'000
..	(c)	..	(c)	19.0	197	..	(c)	..	(d)	..	(c)
		Th.cwt.						Th.cwt.			
140	1,091	..	(c)	45.3	471	..	(c)	30.0	261	..	(c)
..	(c)	..	(c)	..	(c)	..	(c)	..	(c)	..	(c)
..	(c)	..	(c)	310	659	..	(c)	..	(c)	..	(c)
				..	195						
..	(c)	..	(d)	..	(d)	..	(d)	..	(c)	..	(e)
..	(c)	..	(e)	..	(e)	..	(e)	..	(c)	..	(e)
						Th.cwt.		Th.cwt.			
..	(c)	..	(d)	..	(d)	3.4	27	..	(c)	3.4	49
						..	45			..	13
..	(c)	..	(d)	36.3	187	0.5	52	..	(c)	1.5	37
				..	33	..	29			..	10
..	(c)	..	(c)	12.2	296	..	(c)	0.3	10	8.7	115
				..	266			..	17	..	20
17.0	197	..	(c)	53.8	511	55.6	981	..	(c)	13.8	192
				..	316	..	1,155			..	458
..	(d)	..	(c)	..	(e)	..	(e)	..	(c)	8.4	116
8.8	89	..	(c)	..	(d)	10.9	404	..	(c)	1.3	63
										..	523
10.1	140	..	(c)	23.5	234	56.5	974	..	(c)	8.6	255
	703			..	365	..	267			..	29
19.3	230	..	(c)	18.2	310	..	(d)	..	(c)	..	(d)
				..	207						
7.2	93	..	(c)	147	1,221	9.5	178	..	(c)	4.5	56
	28					..	79			..	94
..	(c)	..	(c)	..	(c)	..	(c)	..	(c)	5.5	157
..	(d)	..	(c)	..	(d)	..	(c)	..	(c)	2.4	33
										..	18
..	(c)	..	(c)	..	(c)	..	(c)	..	(c)	..	(c)
..	(d)	..	(c)	..	(d)	..	(c)	..	(c)	..	(d)
..	(d)	..	(c)	..	(e)	..	(c)	..	(d)	7.9	108
										..	69

Continued on next page

TABLE 9 (continued)

Standard Industrial Classification	Purchasing industry (b)	Synthetic resins and plastics materials (excluding leathercloth and reinforced plastics)							
		Polyethylene and polypropylene and co-polymers				Polyvinyl chloride (including co-polymers)			
		Granules, moulding and extrusion compounds		Sheet, rod, film, foil, profile shapes and monofilament		Resins, solutions, emulsions, dispersions, moulding and extrusion compounds		Plasticised and unplasticised sheet, film, rod, foil, tube, profile shapes and foam	
		Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
			£'000		£'000		£'000		£'000
469	Building materials, etc.	..	(c)	..	(c)	..	(d)	..	(c)
471	Timber	..	(c)	..	(c)	..	(c)	..	(c)
479	Miscellaneous wood and cork manufactures	..	(c)	..	(c)	..	(c)	..	(c)
481	Paper and board	..	(c)	..	(e)	..	(c)	..	(c)
483	Miscellaneous manufactures of paper and board	..	(c)	Th.cwt. 40.7	749	..	(c)	..	(c)
				..	891	Th.cwt.		Th.cwt.	
491	Rubber	..	(c)	..	(c)	227	1,804	34.6	838
								..	150
492	Linoleum, leathercloth, etc.	..	(c)	..	(c)	..	(e)	..	(c)
493	Brushes and brooms	..	(e)	..	(c)	..	(d)	..	(c)
494	Toys, games and sports equipment	Th.cwt. 54.7	434	..	(c)	50.9	455	..	166
		..	69	..		..		..
495	Miscellaneous stationers' goods	..	(d)	..	90	..	(d)	..	(e)
496	Plastics moulding and fabricating	1,236	11,321	56.0	849	447	3,914	43.7	812
				..	526			..	972
499	Miscellaneous manufacturing industries	46.4	390	..	(c)	..	(c)	1.3	25
								..	40
	Other industries	51.4	608	0.1	8	962	6,010	0.9	23
		..	215	..	826	..	164	..	253
	Total	2,163	20,034	106	2,014	3,342	23,715	119	2,554
		..	802	..	2,419	..	1,608	..	2,578

- (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 any commodity heading.
- (c) Not recorded separately.
- (d) Included in the total for 'Other industries'.
- (e) Owing to the risk of disclosure of information relating to individual firms separate figures cannot be given and are included in the total for 'Other industries'.

Synthetic resins and plastics materials (excluding leathercloth and reinforced plastics) (continued)											
Polystyrene				Phenolics and cresylics				Melamine and urea formaldehyde (aminoplastics)		Thermosetting polyesters (including epoxide resins and resin glass fibre mixtures)	
Moulding and extrusion compounds		Sheet, film, tape, foil and foam		Resins, solutions, emulsions, dispersions, moulding and extrusion compounds		Decorative and other laminated sheet, cast sheet, laminated or cast rod, tube and profile shapes					
Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
	£'000		£'000		£'000		£'000		£'000	Th.cwt.	£'000
..	(c)	..	(c)	..	(c)	..	(c)	..	(c)	14.6	146
..	(c)	..	(c)	Th.cwt. 29.6	98	Th.cwt. 68.6	783	Th.cwt. 116	304	..	(c)
				..	17	..	877	..	74		
..	(c)	..	(c)	..	(d)	1.2	34	..	70	..	(c)
						..	47				
..	(c)	..	(d)	..	(c)	..	(c)	..	(c)	..	(c)
..	(c)	..	(c)	..	(c)	..	(c)	..	(c)	..	(c)
Th.cwt. 22.9	231	..	(c)	..	(c)	..	(c)	..	(c)	..	(c)
72.2	724	..	44	..	(c)	..	(c)	..	(c)	..	(c)
..	122	..		..		..		..		..
..	(e)	..	(d)	..	(d)	..	(d)	..	(c)	..	(e)
410	3,933	Th.cwt. 54.1	1,001	256	2,315	6.7	144	200	1,924	24.3	373
..	484	..	558	..		..	77	..		..	390
..	(d)	..	(c)	..	(d)	..	(c)	..	(c)	..	(c)
7.8	65	1.3	17	128	998	1.6	64	5.2	31	4.6	86
..	218	..	310	..	400	..	322	..		..	371
715	6,793	55.4	1,018	1,129	8,076	215	3,640	352	2,530	110	1,786
..	1,555	..	959	..	1,942	..	2,898	..	161	..	1,997

TABLE 10 Purchases by larger firms in the industry, 1954 and 1963

Firms employing 25 or more persons: United Kingdom

	1954		1963	
	Quantity	Cost	Quantity	Cost
Materials for processing		£'000		£'000
Feedstock from petroleum, including gaseous feedstock			..	3,319
Synthetic resins and plastics materials (excluding leathercloth and reinforced plastics) other than scrap	..	(a)	Th.cwt.	
Polyethylene and polypropylene and co-polymers: granules, moulding and extrusion compounds			489	3,947
Polyvinyl chloride (including co-polymers)				
Resins, solutions, emulsions, dispersions	..	866(b)	340	2,301
Moulding and extrusion compounds			..	844
Polystyrene: moulding and extrusion compounds (excluding expandable beads)			140	1,091
Phenolics and cresylics: resins (straight and modified), solutions, emulsions, dispersions	..	(a)	45.3	471
Melamine and urea formaldehyde (aminoplastics): solid and liquid resins, solutions and syrups			30.0	261
Cellulose acetate and nitrate: moulding and extrusion compounds			8.4	102
Other polymers and co-polymers: moulding and extrusion compounds, etc.	12.8	135	220	3,434
Scrap for re-processing	..	(a)	..	116
Heavy chemicals (acids, alkalis, alcohols, other inorganic and organic chemicals, compressed gases, other than feedstock, etc.)				
Inorganic chemicals				
Acids				
Nitric	..	(c)	..	2,184
Other inorganic acids	..	33	..	195
Calcium carbide	..	(c)	..	1,380
Sodium compounds (excluding phosphates)	..	31	..	330
Other inorganic chemicals not elsewhere specified	..	85	..	2,290
Organic chemicals				
Primary aliphatic hydrocarbons (ethylene, propylene, butadiene, etc.)	..	(a)	..	9,731
Primary cyclic hydrocarbons (benzoles, toluoles, xyloles, etc.)	..	(c)	..	2,434
Alcohols other than sulphated alcohols	..	747	..	2,372
Cellulose esters and ethers (including cellulose acetate and cellulose nitrate)	..	1,733	..	2,101
Formaldehyde and paraformaldehyde	..	1,402	..	974
Isocyanates	..	(a)	..	35
Melamine	..	640	..	724
Pentaerythritol	..	(a)	..	270
Phenol	..	1,668	..	1,928
Phthalic anhydride	..	203	..	593
Maleic anhydride	..	64	..	267

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
Materials for processing (continued)		£'000		£'000
Heavy chemicals (acids, alkalis, alcohols, other inorganic and organic chemicals, compressed gases, other than feedstock, etc.) (continued)				
Organic chemicals (continued)				
Styrene (monomer)	..	2,311	..	2,764
Vinyl acetate (monomer)	..	733(b)	..	1,800
Vinyl chloride (monomer)	..	(a)	..	7,067
Other monomers for plastics	..	(a)	..	2,708
Urea	..	643	..	840
Other organic chemicals not elsewhere specified	..	306	..	5,385
Compressed gases, other than feedstock (e.g. oxygen, acetylene)	-	-	..	973
Unclassified heavy chemicals	..	6,038	-	-
Dyestuffs	..	364	..	1,939
Pigments and earth colours (including lithopone, zinc oxide, titanium dioxide; including blacks, mineral or carbon)	..	265	..	926
Crude tar acids, including cresylic acid and other coal tar derivatives not elsewhere specified	..	841	..	1,050
Plasticisers, not elsewhere specified (other than vegetable and seed oils used as plasticisers)	..	2,628	..	4,345
Glycerine, crude or refined	..	213	..	242
Vegetable and seed oils (including drying oils)	..	233	..	1,742
Natural gums and resins (including rosin and tall oil)	..	(c)	..	910
Glass fibre fabrics, rovings and chopped strand	..	23	..	327
Woven piece goods (other than narrow fabrics) wholly or mainly of				
Cotton (including cloth in the grey)	..	128		
Jute (including hessian)			..	619
Synthetic fibres (nylon, etc.)				
Other man-made fibres (rayon, etc.)	..	(a)		
Timber				
Plywood, including blockboard, laminboard and battenboard			..	45
Chipboard				
Fillers not elsewhere specified (e.g. wood flour, clay, asbestos fibre, textile waste)	..	256	..	940
Paper (including paper for impregnation with plastics materials), other than paper for packaging			..	2,173
Lubricating oils and greases	..	(a)	Th.gal. 67.8 Th.cwt. 0.7 ..	19 5 25
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement	..	919	..	2,256
All other materials for processing	..	20,120	..	14,616

Continued on next page

TABLE 10 (continued)

	1954		1963	
	Quantity	Cost	Quantity	Cost
Packaging materials		£'000		£'000
Paper and board				
Boxes, cartons, packing cases, and drums and canisters (with or without metal ends) of paper, cardboard and fibreboard			..	522
Multiwall paper sacks	..	612	28,502	1,118
Wrapping paper (including paper coated with plastics and any laminates incorporating paper but not metal), moulded pulp units, labels and other packaging materials of paper, cardboard and fibreboard			..	118
Metal				
Cans and boxes			..	130
Barrels, kegs and drums			639	779
Other packaging materials of metal, (except aluminium) including crown corks, wire, foil and any laminates incorporating foil, foil labels and closures, tensional steel strappings, etc.	..	(a)	..	90
Containers wholly or mainly of wood, including plywood boxes and drums, baskets and wickerwork crates (d)	..	156	..	31
Jute and hessian piece goods, sacks and bags			..	231
Sheet, film, foams, etc., wholly or mainly of polyethylene (including bags and lay flat tubing)	..	(a)	..	53
All other packaging materials	..	805	..	411
Fuel and electricity (e)	Th.tons		Th.tons	
Coal	142	569	144	726
Coke (including screenings) and manufactured fuel	2.5	12	0.5	4
			..	2
Derv fuel and motor spirit for use in road vehicles	Th.gal.		Th.gal.	
	391	81	601	125
Other liquid fuels (including creosote/pitch mixtures, etc., and liquefied petroleum gases)	3,027	128	9,501	375
			..	136
Gas	Th.therms		Th.therms	
	1,468	84	3,008	173
			..	186
Electricity	Th.kWh		Th.kWh	
	211,760	884	849,229	3,417
Total cost of materials and fuel		46,957		106,253
Goods purchased for merchanting		..		7,549
Canteen purchases		..		351
Total cost of purchases		..		114,153

(a) Not recorded separately in 1954.

(b) So far as recorded separately.

(c) Included in 'All other materials for processing' in 1954.

(d) Described in 1954 as 'Timber including containers made of timber'.

(e) The total quantity of electricity generated in firms' own establishments in this industry in 1954 and 1963 cannot be given owing to the risk of disclosure of information relating to individual firms.

TABLE 11 Transport costs and employment of larger firms, 1963

Firms employing 25 or more persons: United Kingdom

	Unit	1963
Average number employed mainly on transport	No.	236
Transport costs		
Wages and salaries	£'000	222
Derv fuel and motor spirit	"	125
Payments to other organisations for transport	"	2,982
Costs of operating road goods vehicles		
Insurance	"	28
Vehicle licences	"	13
Depreciation	"	159
Payments to other organisations for repairs and maintenance	"	42
Total	"	3,570

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

Firms employing 25 or more persons: United Kingdom

	Amounts payable
Repairs and maintenance to	£'000
Buildings	300
Road goods vehicles	42
Plant, machinery, and other capital equipment	1,155
Insurance, licensing and depreciation of road goods vehicles (b)	200
Rates, excluding water rates	789
Hire of plant and machinery	98
Postage, telephone, telegrams and cables	499
Total	3,083

(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

Year ended	Percentage of total number employed	Year ended	Percentage of total number employed
1963	Per cent.	1963 (contd.)	Per cent.
April (a)	0.6	November	0.7
May	2.0	December	66.1
June	2.3		
July	0.3	1964	
August	—	January	0.2
September	6.6	February	0.2
October	1.1	March	20.2
		Total	100

(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 sub-division 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

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 year.

Larger Firms

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

Net Output

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

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

Net output per person employed

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

Principal Products

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

Production

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

Purchases

Purchases include the cost of materials and components bought for use in production; of fuel and electricity for all purposes; of packing 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 merchandising or factoring and canteen supplies are included. Materials supplied by customers for processing are excluded.

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

Sales

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

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

Where goods produced in one department were transferred to another department of the same firm not covered by the return, these transfers were treated as sales by the producing department and valued as far as possible as if they had been sold to an independent purchaser. Goods transferred to wholesale or retail selling organisations for which separate accounts were kept were valued on the same basis.

Estimations of a similar kind were also sometimes necessary in valuing transfers between different firms belonging to the same enterprise. To the extent that the sales of finished products of one establishment may constitute the materials purchased by another, total figures of the value of sales (and of materials and fuel purchased) include an element of duplication.

Services rendered

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

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

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 merchandising 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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