

This Report on the Production of Man-made Fibres Industry relates to establishments engaged wholly or mainly in manufacturing staple fibre and continuous filament yarn by extrusion. The preparation of continuous filament yarn for weaving or knitting (doubling, twisting, winding, etc) is included when carried out at the same establishment.

This industry corresponds to minimum list heading 411 in the Standard Industrial Classification (Revised 1968) which has been used for the first time as a basis of classification in the 1968 census. The definition of this industry however is unchanged from the last detailed Census of Production for 1963 in which it was reported (Part 75).

Returns in full detail were received from all firms in this industry, there being no firms with less than twenty-five persons employed in 1963 or in 1968; all the tables in this report, therefore, relate to the industry as a whole.

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

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- (c) Direct sales of goods (excluding canteen takings) made to, and work done for, the general public are included. These amounted to £36,000 in 1968. Similar information is not available for 1963.
- (d) This is the ratio of total sales of principal products by the industry to total sales of goods produced and work done.
- (e) Administrative, technical and clerical employees.
- (f) Excluding expenditure for establishments not yet in production.

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

	Unit	All establishments	
		1963	1968
Number of enterprises	No.	7	5
Number of establishments	"	26	26
Gross output	£'000	209,854	339,007
Net output	"	108,767	163,044
Net output per head	£	2,918	4,043
Sales and work done	£'000	201,758	313,795
	{ goods produced and work done (b) (c)		
	{ merchantable goods and canteen takings	"	"
		7,097	21,041
Index of specialisation (d)	Per cent.	86	83
Purchases	£'000	89,430	146,099
	{ materials for use in production and packaging, and fuel		
	{ goods for merchanting and canteen purchases	"	"
		7,810	20,146
Payments to other organisations	"	2,362	9,510
	{ for work done on materials given out for transport		
	{ by road	"	"
	{ by rail and other means excluding postal services	"	"
		1,670	3,221
			166
Stocks and work in progress	"		
Total stocks and work in progress	{ change during year	+ 1,184	+ 7,348
	{ at end of year	30,203	45,151
Goods on hand for sale	{ change during year	+ 927	+ 2,280
	{ at end of year	12,833	21,211
Work in progress	{ change during year	+ 72	+ 1,891
	{ at end of year	3,194	6,252
Materials, stores and fuel	{ change during year	+ 185	+ 3,178
	{ at end of year	14,175	17,687
Number employed on average during the year	No.	37,274	40,331
	{ total, including working proprietors		
	{ operatives	"	"
	{ other employees (e)	"	"
		28,327	30,767
		8,942	9,564
Wages and salaries	£'000	23,070	36,549
	{ of operatives		
	{ of other employees (e)	"	"
		9,505	14,885
Wages and salaries per head	£	814	1,188
	{ operatives		
	{ other employees (e)	"	"
		1,063	1,556
Capital expenditure (f)			
Total	£'000	11,730	24,358
New building work	"	*	3,591
Land and existing buildings	"	-	42
	{ acquisitions		
	{ disposals	"	"
		*	61
Plant and machinery	"	10,709	21,040
	{ acquisitions		
	{ disposals	"	"
		252	399
Vehicles	"	115	185
	{ acquisitions		
	{ disposals	"	"
		25	42

(a) Returns in full detail were received from all establishments in this industry, there being no establishments with less than twenty-five persons employed in 1963 or in 1968.

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

Footnotes continued on page 98/2.

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

All establishments: United Kingdom

Owing to the risk of disclosure of information relating to individual enterprises, this table cannot be shown.

TABLE 3 Percentage analysis of employees, by age and sex, 1969 (a)

All establishments: United Kingdom

Ages	Males	Females	All employees
	Per cent.	Per cent.	Per cent.
Under 18	1	1	2
18 and over	84	14	98
All ages	85	15	100

Source: Department of Employment

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

TABLE 4 Analysis of larger establishments, 1963 and 1968

Establishments employing 25 or more persons: United Kingdom

This table is not shown separately since in this industry it is equivalent to Table 1.

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

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

	1963		1968			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
	Th.lb.	£'000	Th.lb.	£'000	Number	Number
Man-made fibres						
Single continuous filament yarn (c)						
Viscose	126,736	24,564	55,269	13,379	*	6
Acetate and triacetate	38,750	10,847	81,217	28,225	*	6
Other non-synthetic	112	97	149	171	*	*
Synthetic	134,316	74,760	277,415	119,159	*	12
Staple fibre						
Viscose and other non-synthetic fibres not separately specified	285,924	27,073	349,332	32,421	*	*
Acetate and triacetate	18,392	3,051	29,462	5,594	*	*
Synthetic	85,931	31,813	263,810	61,241	*	5
Other products		168		268	*	*
Waste products		1,657		820	*	15
Work done		200		91	*	*
Total		174,230		261,369
Sales in other industries (see Table 6) (b)		-		-		
Principal products of this industry sold by establishments in the industry		174,230		261,369	5	26

(a) This analysis is equivalent to an all-establishments analysis (see introduction at the beginning of the report).

(b) No sales of principal products of the industry were recorded by establishments classified to other industries for 1963 or for 1968.

(c) The total amount of high tenacity yarn for industrial purposes returned in 1968 was 55,358,000 lb. value £18,513,000 and in 1963 87,421,000 lb. value £20,868,000.

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

Establishments employing 25 or more persons: United Kingdom

No sales of principal products of the industry were recorded by establishments classified to other industries for 1968 or for 1963.

TABLE 7 Sales of other than principal products by larger establishments in the industry, 1963 and 1968 (a)

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

	1963		1968	
	Quantity	Value	Quantity	Value
Man-made fibres	Th.lb.	£'000	Th.lb.	£'000
Doubled yarn and single yarn bulked, textured, or given an additional twist (including doubled or twisted thread advanced beyond the stage of single yarn)	46,566	16,685	119,764	31,481
Other goods including sales of electricity and steam and services rendered to other organisations (b)	..	10,843	..	20,945
Total value of goods sold without being subjected to any manufacturing process (merchanted or factored)	..	6,270	..	20,143
Canteen takings		827		899
Total		34,625		73,467

(a) This analysis is equivalent to an all-establishments analysis (see introduction at the beginning of the report).

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

TABLE 8 Production of certain principal products of the industry by larger establishments, 1963 and 1968

This table is not applicable to this industry.

TABLE 9 Purchases by larger establishments of selected principal products of the industry, 1968

This table is not applicable to this industry.

The main purchasing industries of man-made fibre (rayon, nylon, etc) continuous filament yarn are listed in Table 9 of the report on the Spinning and Doubling on the Cotton and Flax Systems Industry (Part 99) together with the details of the quantity and value purchased by each industry.

TABLE 10 Purchases by larger establishments in the industry, 1963 and 1968 (a)

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

	1963		1968	
	Quantity	Cost	Quantity	Cost
Materials for use in production		£'000		£'000
Wood pulp	..	12,270	..	15,399
Cotton linters (raw, not bleached)	..	(b)	..	580
General chemicals (c)				
Inorganic				
Sulphuric acid and oleum	..	1,763(d)	..	2,684
Carbon disulphide			..	3,272
Sodium hydroxide (caustic soda)			..	3,862
Other inorganic chemicals (including inorganic gases)			..	3,300
Organic				
Cellulose acetate and cellulose triacetate			..	9,757
Other organic chemicals (including organic gases, acetic anhydride, ethyl and other alcohols, and coal tar products)			..	24,514
Other (eg mixtures of inorganic and organic chemicals)			..	3,455
Dyestuffs	..	787	..	1,690
Starches and sizing materials (including gums)	..	340	..	58
Granules, moulding and extrusion compounds of polyethylene and polypropylene and copolymers			Th.cwt.	
		(e)	102	926
Man-made fibres (nylon, rayon, etc) continuous filament yarn			Th.lb.	
Synthetic (nylon, etc) yarn			3,696	1,292
Other (rayon, etc) yarn			1,474	472
Woven piece goods (other than narrow fabrics) wholly or mainly of cotton (including cloth for filtering and wrapping)	Th.sq.yds.		Th.sq.yds.	
	2,351	446	1,071	131
	..	73	..	303
	Th.gal.		Th.gal.	
	183	49	189	52
Lubricating oils and greases	Th.cwt.		Th.cwt.	
	4.8	35	1.5	9
			..	25
Water	..	(b)	..	455
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement				
Tubes, cones, etc (except those of paper, etc purchased for packaging)	..	658	..	742
Tyres and other spare parts for firms' own road goods vehicles	..	3,700	..	86
Other			..	4,317
All other materials for use in production	..	34,330	..	49,963

Continued on next page

TABLE 10 (continued)

	1963		1968	
	Quantity	Cost	Quantity	Cost
Packaging materials		£'000		£'000
Paper and board				
Boxes, cartons, drums and canisters (with or without metal ends) of paper and cardboard	..	1,433	..	2,930
Fibreboard packing cases			..	108
Bags and multiwall paper sacks			..	29
Plastics (other than transparent regenerated cellulose film)	..	(e)	..	100
Jute and hessian piece-goods, sacks and bags	..	306	..	461
All other packaging materials	..	2,055	..	1,110
Fuel and electricity (f)				
Coal	Th. tons		Th. tons	
	711	3,438	580	2,694
Coke (including screenings) and manufactured fuel	43.5	165	86.3	713
Derv fuel and motor spirit for use in road vehicles	Th. gal.		Th. gal.	
	321	60	587	153
Other liquid fuels (including creosote/pitch mixtures, etc and liquefied petroleum gases)	36,088	1,299	48,734	1,828
			..	996
Gas	Th. therms		Th. therms	
	5,280	283	6,270	338
	Th. kWh		Th. kWh	
Electricity	299,441	1,319	1,123,141	5,340
	..	1,191 (g)	..	700
All other fuels	..	(e)	..	1,257
Total cost of materials and fuel		89,430		146,099
Goods purchased for merchanting		7,118		19,393
Canteen purchases		691		752
Total cost of purchases		97,239		166,244

- (a) This analysis is equivalent to an all-establishments analysis (see introduction at the beginning of the report).
 (b) Included with 'All other materials for processing'.
 (c) Described as 'Heavy chemicals' in 1963.
 (d) Did not specifically include 'Oleum' for 1963.
 (e) Not recorded separately for 1963.
 (f) The total quantity of electricity generated in firms' own establishments in this industry was 466,539 Th.kWh in 1968 and 402,875 Th.kWh in 1963.
 (g) Revised figures.

TABLE 11 Transport costs and employment of larger establishments, 1963 and 1968 (a)

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

	Unit	1963	1968
Average number mainly employed on transport	No.	224	304
Transport costs			
Wages and salaries	£'000	179	357
Derv fuel and motor spirit	"	60	153
Tyres and other spare parts for road goods vehicles	"	..	86
Payments to other organisations for transport	"	1,670	3,221
	{ by road		
	{ by rail and other means excluding postal services		
Costs of operating road goods vehicles			
Insurance	"	9	9
Vehicle licences	"	10	38
Depreciation	"	284	105
Payments to other organisations for repairs and maintenance	"	6	24
Total	"	2,218(b)	4,160

- (a) This analysis is equivalent to an all-establishments analysis (see introduction at the beginning of the report).
 (b) Excluding tyres and other spare parts for road goods vehicles, not collected separately for 1963.

TABLE 12 Payments for certain services, etc by larger establishments, 1963 and 1968 (a) (b)

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

	Amounts payable	
	1963	1968
Repairs and maintenance to	£'000	£'000
Buildings	373	501
Road goods vehicles	6	24
Plant, machinery and other capital equipment	1,015	2,325
Insurance, licensing and depreciation of road goods vehicles (c)	303	152
Rates, excluding water rates	989	1,563
Hire of plant and machinery	132	420
Postage, telephone, telegrams, cables and telex (d)	238	245
Total	3,057	5,229

- (a) No deduction is made for these payments to arrive at the figures of net output given in this report.
 (b) This analysis is equivalent to an all-establishments analysis (see introduction at the beginning of the report).
 (c) For details see Table 11.
 (d) Excluding Telex for 1963.

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

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

Year ended	Percentage of total returns received	Percentage of total number employed
1968	Per cent.	Per cent.
April (b)	0.0	0.0
May	0.0	0.0
June	0.0	0.0
July	0.0	0.0
August	0.0	0.0
September	0.0	0.0
October	3.8	0.5
November	0.0	0.0
December	34.6	53.7
1969		
January	0.0	0.0
February	0.0	0.0
March	57.7	42.3
April (c)	3.8	3.5
	100	100

(a) This analysis is equivalent to an all-establishments analysis (see introduction at the beginning of the report).

(b) From 6 April.

(c) To 5 April.