## BOARD OF TRADE

# The Report on the Census of Production for 1954 

Volume 6: Industry D
RAYON, NYLON, ETC., PRODUCTION

Presented by the Board of Tragorncpontiament in pursuance of the
Statistics of Trade Act, 194 ( 10 \& $17_{\mathrm{s}}$ Geo. 6 Ch. 39, Sec. 7)


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## The Report on the Census of Production for 1954

VOLUME 6, INDUSTRY D
RAYON, NYLON, ETC., PRODUCTION
THIS REPORT on Rayon, Nylon, etc., Production relates to establishments engaged wholly or mainly in the manufacture of continuous filament yarn and staple fibre of rayon, nylon, etc.

Details of establishments engaged wholly or mainly (a) in throwing and spinning silk, in doubling Details of establishments engaged wholly or mainly (a) in throwing and spinning silk, in doubling yarn of rayon, nylon, etc., and in manufacturing sewing thread of silk and rayon, nylon, etc., and
(b) in weaving fabrics of silk and rayon, nylon, etc., have been excluded from this report and shown separately in the report on the Rayon, Nylon, etc., Weaving and Silk Industry (Volume 6, Trade E).

This industry corresponds to minimu list heading 113 in the Standard Industrial Classification.

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IMPORTANT NOTES and definitions appear on the next page. In interpreting the data in the tables, it is essential to bear these in mind.

6/D/2


 duction
net.
Industrial Classification: Establishments are classifut and. as far as possible. In conformity with th tandard Industrial Classification. Certain product
are identified as the principal products of individua

 industry accounted for a greater proportion of the value
of its output than did is output of the principal pro-
oncts of any other industry its output than did its
ducts of any other industry.
Specialist producers normally comprise those establish
nente 50 per cent. or more of whose total output by value is accounted for by the characteristic products o
the specialist aroup. he specialist group
Intermediate products:
given showing the total ine industries figures are
quantities made during the year
 fur ther proce
are produced.
Larger establishments: The information given in the re portablishments of firms employing on the average more than 10 persons. In most cases an establishment com
prises the shole of the paremise under the same ouner-
hip or management at a particular address (e.g., a mine
 other ancillary places of business situated apart from
the producing oork are no rearded tureparate estab-
lishments and are included in the return for the works. Small firms are those employing on the average 10 or ferer persons.
The estimates for the industry as a whole given in
Table are normally obtained by increasing the othe items shown in the same proportion as total employment.
Gross output (prockection in the total avaue of goods
made and other work done during the year it is obtainod by adjusting the value of sales and work done during
the year for changes in the value of stocks of products the year for changes in the value of
on hand for sale and work in progress
Net output is the amount left after deducting from the
value of grose outhut the aggregate of the cost of antvalue of gross output the aggret paid for work given out and. for 1951 and 195, any transport payments made.
This represents the value added to materials by the pro.
cess of production, and constitutes the fund from which
 ther selling expenses and all other similar charges
ave to be met. as well as depreciation and profite
Sales means sales during the year of goods made in the
establishment covered by the return or made on comisiss ion for it, whether produced in the year or not. Th
value of sales is the net selling value, i.e. The

 cust tomersover
f.o.b. value.
Materials and fuel. The total cost of materials and
fuer purchased includes all purchases during the year
of materials for use in production, and of fuel (includ-
ng oil. gas and electricity) for all purposes: packing aterials, including the full cost of returnable case
nhen first purchased. Norkshop and office materain
hater water charges, materials for repairs to buildings plant and venicles when carried out by firms. own work
people included in their returns: consumable tools

 obtained by adjusting purchases for changes during the
eear in the value of stocks. Stods: Firms were required to give stocks of materials
and fuel. product 5 on hand for sale. and work in pro. gusto
Customs and Excise Duty paid on materials purchased is
normally included in the cost of materials. Finished goods are similiarly valued as orey were sold, duny-paid
or duty-free. The net amount of any duty paid is de ucter free



 surance cards were held by emplogers), whether employed
full-time or part-time.
Horking proprietors are proprietors of businesses other
than limited companies, together with members of theit than limit ted companies. together with members of the
families who worked in the business without receiving
 half the normal hours are excluded. For Northern
Ireiland directors of timited comanies (other than those
paid by fee only) are also included.
Admini strative, technical and clerical employees include
directors, other than those paid by fee only (except in directors, other than those paid by fee only (except in
Northern ireland: manaeres. superintendents and works
Noren
 men and tracers: trave
works office) employees.
Operatives include all other classes of employees, i.e.
broadly speaking. all manual workers Outworkers are persons employed by the firm vho work on
materials supplied by the firm in their own homes. Wages and salaries include all overtime payments, bonus
es and commissions without any deductions for income tax, insurances, contributory pensions etc. They exclude
payments to working proprietors. Capital expendi ture includes expenditure on nee building
work. and on plant, machinery and vehicles. charged to capital account during the year. including any transpo
and installation costs involved. It includes expendi and installiation costs involved. It includes expendi
ture in respect of establishments in Great Brito in whic
 Production reports for individual industries)
Symber
Symbols used:
for nil or negligible (less than half the final
or nil or negl
digit shown).
解 $\&$ the re figures are rounded, e.g., given to the nearest \& thousand. there mayd bed aparent silight discrepan-
cies between the sums of constituent items and the tot. cies between the sume of cons tituent items and the tot-
als shown. In some cases. figures have been combined ith others of a similar nature where publication of
separate details might disclose information relating to separate de tails might di
an individual undertaking.

Estimates for the industry as a whole

|  | United Kingdom |  |  | $\begin{gathered} \text { Scot tand } \\ \text { Sas } \\ (a) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Wales } \\ 1954 \\ (a) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1948 | 1951 | 1954 |  |  |
|  | Emillion | £ million | E million | £ million | £ million |
| Gross output (production) | 42.7 | 95.2 | 102.4 | .. | .. |
| Net output | 22.4 | 47.7 | 51.4 | .. | .. |
| Total stocks ad work in progress |  |  |  |  |  |
| At beginning of year Change during year | 8.4 +2.8 | +13.1 | 16.6 $+\quad 3.5$ | . | .. |
| Capital expenditure less disposals (b) | 8.1 | 5.5 | 8.8 | $\cdots$ |  |
| Wages and salaries | 10.5 | 16.7 | 18.5 | .. | - |
| Total employment | $\begin{gathered} \text { Thousands } \\ \begin{array}{c} 33.3 \end{array} \end{gathered}$ | $\begin{gathered} \text { Thousands } \\ 40.3 \end{gathered}$ | $\begin{gathered} \text { Thousands } \\ 36.5 \end{gathered}$ | Thousands | Thousands |

(a) Owing to the risk of disclosure of information relating to indiviad
qiven.
(b) Capitai expenditure on new building mork. plant. machinery and vehicles (including (except in 1948 ) tha
inarred in Great Britain for establishments not yet in production). less amounts received for plant. incurred in Great Britain for estab.
machinery and vehicles disposed of.
Sumpary of returns received
TABLE 2 (

| Average number employed | $\begin{aligned} & \text { Estab- } \\ & \text { lish- } \\ & \text { ments } \end{aligned}$ | $\begin{gathered} \text { Gross } \\ \text { output } \end{gathered}$ | $\begin{gathered} \text { Net } \\ \text { output } \end{gathered}$ | Employees |  | Mages and salaries |  | $\begin{aligned} & \text { Capital } \\ & \text { expenditure } \\ & \text { (a) } \end{aligned}$ | $\begin{array}{\|l\|l} \text { Net output } \\ \text { per persson } \\ \text { employed } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Operatives | Others | Operatives | Others |  |  |
|  | Number | $\varepsilon^{\prime} 000$ | $\varepsilon^{\prime} 000$ | Number | Number | $\varepsilon^{\prime} 000$ | £. 000 | £. 000 | $\varepsilon$ |
| 11-24 | - | - | - |  | - | - | - | - | - |
| 25-299 | 4 | 1.167 | 591 | 453 | 149 | 240 | 112 | 998 | 982 |
| 300-499 | 3 | 1.946 | 561 | 878 | 292 | 385 | 209 | 53 | 480 |
| 500-1.499 | 5 | 10.576 | 4.697 | 4.208 | 1.132 | 1.807 | 803 | 4.031 | 880 |
| 1.500 and over | 10 | 88.748 | 45.555 | 22.490 | 6.918 | 10.487 | 4.428 | 3.365 | 1.549 |
| Total | 22 | 102.437 | 51.405 | 28.029 | 8.491 | 12.918 | 5.552 | 8.447 | 1.408 |

(a) Capital expenditure on new building work and on acquisition of plant, machinery and vehicles.

TABLE 4 - Analysis according to specialisation within the industry, 1954 Larger establishments in the United Kingdam
No specialisation within this industry was distinguished.

Sales of the principal products of the industry, including sales of these products by establishments classified to other industries

Larger establishments in the United Kingdom

| TABLE 5 |
| :--- |

[^0]plassified to other ine industris
Larger establishments in the United Kingdom in 1954
There were no sales of principal products of the industry recorded by
establishments classified to other industries.

Sales in the industry of other than principal products
Larger establishments in the United Kingdom
TABLE 7

|  | 1954 |  |
| :---: | :---: | :---: |
|  | Quantity | Value |
|  | Th. 1 t . | \&. 000 |
| Man-made fibres |  |  |
| Doubled or twisted yarn advanced beyond the stage of single yarn. wholly of continuous filament (including single yarn uptwisted, etc.) |  |  |
| Crepe | 1.601 | 628 |
| Other | 3.230 | 945 |
| Waste | 7.880 | 304 |
| Chemical goods | .. | 2.453 |
| Electricity, steam and water | . | 222 |
| Waste products, other than man-made fibre waste | .. | 206 |
| Other goods | . | 726 |
| Work done (a) |  | 2.953 |
| Total |  | 8.437 |

(a) Amount charged

Total make of intermediate products Larger establishments in the United Kingdon

|  | Returned in all industries |  |  |
| :---: | :---: | :---: | :---: |
|  | $\frac{1951}{\text { Quantity }}$ | 1954 |  |
|  |  | Quantity | Entries |
| Man-made fibres | Th.ib. | Th. lb . | Number |
| Single continuous filament yarn, other than industrial Yarn |  |  |  |
| V is cose | 95.454 | 74.064 | 12 |
| Ace tate | 67.722 | 64.564 | 5 |
| Other single continuous filament yarn including synthetic and industrial yarns | 68.028 | 89.389 | 10 |
| Staple fibre | 171.530 | 232.485 | 7 |

(51062)

|  | Quantity | Cost |
| :---: | :---: | :---: |
|  | Th.tons | £. 000 |
| Materials |  |  |
| Wood pulp | 208.1 | 15.680 944 |
| Cotton linters (raw, not bleached) | 16.8 | 944 |
| Ethyl alcohol |  |  |
| Other alcohols |  | 8.611 |
| Polymers |  |  |
| Carbon bisulphide | 49.9 | 2.342 |
| Acetic anhydride | 4.1 | 683 |
| Cellulose acetate |  |  |
| Caustic soda | 152.9 | 2.660 |
| Sulphuric acid (in terms of $100 \%$ acid) | 224.6 | 2.236 |
| Dyes and dyestuffs | $\begin{aligned} & \text { Th.cwt. } \\ & 25.6 \end{aligned}$ | 473 |
| Other chemicals, including coal tar products | .. | 2.205 |
| Starches and sizing materials, including gums | - | 268 |
| Cotton cloth (including cloth for filtering and wrapping) | $\begin{gathered} \text { Th.sq.yds. } \\ 1.183 \end{gathered}$ | $\begin{aligned} & 227 \\ & 140 \end{aligned}$ |
| Tubes, cones, etc., other than of paper | . | 512 |
| Paper and paper-board (including fibre-board). containers made thereof, and paper tubes, cones. etc. | . | 732 |
| Jute piece goods including hessian and other packing materials | .. | 484 |
| Replacement parts for own plant, machinery and vehicles and consumable tools bought as replacement | .. | 2.364 |
| All other purchased materials | . ${ }^{\text {c }}$ | 5.221 |
| Fuel and electricity | Th.tons |  |
| Coal | 968.5 | 3.171 |
| Coke | 12.7 | 38 |
| Liquid fuels (including creosote/pitch mixtures) | Th.gal. |  |
| Motor spirit (petrol) for use in road vehicles and derv. fuel | 505 | 95 |
| Other | 8 | 1 |
| Gas purchased | Th.therms |  |
| From Gas Boards | 2. 484 | 108 |
| Electricity purchased (a) | Th. kWh |  |
| From Electricity Boards | 352 | 1.096 |
| From other sources, including other departments of the firms | 12 | 46 |
| All other purchased fuel | . | 500 |
| Total Cost |  | 50.834 |

[^1]| AbLE 9 | Quantity | Cost |
| :---: | :---: | :---: |
|  | Th.tons | $\varepsilon^{\prime} 000$ |
| Materials | 208.1 | 15.680 |
| Mood pulp Cotton linters (raw, not bleached) | 16.8 | 944 |
| Ethyl alcohol |  |  |
| Other alcohols |  | 8,611 |
| Polymers |  |  |
| Carbon bisulphide | 49.9 | 2.342 |
| Acetic anhydride | 4.1 | 683 |
| Cellulose acetate | 152.9 | 2.660 |
| Caustic soda (in terms of $100 \%$ acid) | 152.9 224.6 | 2.660 2.236 |
| Sulphuric acid (in terms of $100 \%$ acid) | ${ }_{\text {Th. }}^{224.6}$. |  |
| Dyes and dyestuffs | 25.6 | 473 |
| Other chemicals. including coal tar products | .. | 2.205 |
| Starches and sizing materials, including gums | .. | 268 |
| Cotton cloth (including cloth for filtering and wrapping) \{ |  | ${ }_{127}^{227}$ |
| Tubes, cones, etc.. other than of paper | . | 512 |
| Paper and paper-board (including fibre-board). containers made thereof. and paper tubes. cones. etc. | . | 732 |
| Jute piece goods including hessian and other packing materials | . | 484 |
| Replacement parts for own plant. machinery and vehicles and consumable tools bought as replacement |  | 2.364 |
| All other purchased materials |  | 5.221 |
| Fuel and electricity | Th.tons |  |
| Coal | 968.5 | 3.171 |
| Coke | 12.7 | 38 |
| Liquid fuels (including creosote/pitch mixtures) | Th.gal. |  |
| For use in internal combustion engines |  |  |

For use in internal combustion engines
or use in internal combustion engines
Motor spirit (petrol) for use in road vehi
fuel Other
Gas purchased
From Gas Boards
Electricity purchased (a)
From Electricity Boards
From other sources, including other departme
11 other purchased fu
Total Co
(a) The total quantity of electrici

Larger establishments in the United Kingdom(a)
table 10

|  | 1951 | 1954 |
| :---: | :---: | :---: |
| Average number of employees | Number | Number |
| Operutives <br> Administrative, technical and clerical eḿployees | 32.534 7.750 | 28.029 8.491 |
| Total | 40.284 | 36.520 |
| Wages and salaries paid to | $\varepsilon^{\prime} 000$ | $¢^{\prime} 000$ |
| ( Ondministrative, technical and clerical employees | $\begin{array}{r} 12.419 \\ 4.287 \end{array}$ | $\begin{gathered} 12.918 \\ 5.552 \end{gathered}$ |
| Total | 16.706 | 18.470 |
| Wages and salaries per head | $\varepsilon$ | $\varepsilon$ |
| Operatives <br> Administrative, technical and clerical employees | $\begin{aligned} & 382 \\ & 553 \\ & 58 \end{aligned}$ | ${ }_{6}^{461} 64$ |
| Superannuation and other pension funds for employees and dependents (b) |  | 000 |
| Empioyers' contributions | .. | 966 |
| Employess covered |  | Number <br> 29.871 |
| Pension, etc. payments to former employees and dependents (b) |  | ¢'000 |
|  |  | 17 |

(a) The following persons. not included above. were also employed by larger es tablishments in this industry

(b) The figures given relate to larger establishments in Great Britain on 19

Employment in a specified week (a)
Larger establishments in the United Kingdom

|  | 1951 |  |  | Number |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1954 |  |  |
|  | Males | Fomales | Total | Males | Females | Total |
| Working proprietors | - | - | - | . | - |  |
| Operatives | 26.210 | 6.611 | 32.821 | 22.722 | 4,906 | 27.628 |
| clerical employees | 5.258 | 2.505 | 7.763 | 5.560 | 2.537 | 8.097 |
| Total employees | 31.468 | 9.116 | 40.584 | 28,282 | 7.443 | 35.725 |

(a) Weptember 22. 1951, or October 30, 1954.


## Preser ved Moat <br> Ice Cream Sugara Glucose Cocoa. Chocolate and Sugar <br> Con fectionery and Sugar J. Preserved Fruit and Vegetables <br> vouve 9 <br>  <br>  <br> Compounding ying and Soft Drink. British

L. Soft Drinks
and Cider
M. Tobacacco
volume 10
A. Timber

Timber
Furniture and Upholstery
Soft Furn ishings
So
St
Sot Furn inh ingholstery
Shop and Of fice Fititing
Wooden Contaners and Baske to
D. Shop and Office F
E. Fooden Containers
F. Faper and Board
F. Paper and Board
G. Wallppoer
H. Cardbopard Box. Carton and

B. Bag and Kindred Industries

volume 11

B. Anoleum, Lituather
C. Brushes Ind trie
and Broon


5. Inastic Goods and Fas
vowive 12

Civil Engineering)
D. Tramary. Trolley Bus and

E. Cana1. Dock and Hatrowur
Under takings (Civi
E. Cana1, Dook and
F. Gas Supply Industry
C. Electriclty supply Industry
H. Water Undertaking

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[^0]:    (a) Amount charged.

[^1]:    (a) The total quantity o
    own es tablishments in this industry in 1954

