# The Report on the <br> Census of Production for 1954 

Volume 10: Industry H
CARDBOARD BOX, CARTON AND
FIBREBOARD PACKING CASE

Presented by the Board of Trade to Parliament in pursuance of the
Statistics of Trade Act, 1910 ( 11 Geo. 6 Ch. 39, Sec. 7)


LONDON: HER MAJESTY'S STATIONERY OFFICE
1957
PRICE is 6 d NET

## The Report on the Census of Production for 1954

## VOLUME 10, INDUSTRY H

CARDBOARD BOX, CARTON AND FIBREBOARD PACKING CASE

THIS REPORT on the Cardboard Box, Carton and Fibreboard Packing Case Industry relates establishments engaged wholly or mainly in the manufacture of all types of rigid or folding cardboard boxes, canisters and other containers of board.

This industry corresponds to minimum list heading 182 in the Standard Industıial Classification.

LIST of tables

| Table No. | Title <br> Industry summary: estimates for the industry as a whole | $\begin{aligned} & \text { Page } \\ & 10 / \mathrm{H} / 3 \end{aligned}$ | Table No. 6 | Title <br> Sales of principal products of the industry by establishments clessified to other industries | $\begin{gathered} \text { Page } \\ 10 / \mathrm{H} / 6 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Sumnary of returns received | 10/H/3 | 7 | Sales in the industry of other than principal products | 10/H/6 |
| 3 | Analysis by size, 1954 | 10/H/4 | 8 | Total make of intermediate products | Does not apply |
| 4 | Analys is accord ing to specialisation within the industry | 10/H/4 | 9 | Purchases of materials and fuel, 1954 | 10/H/7 |
| 5 | Sales of principal products sales of these products by establishments classifiedto other industries | 10/H/5 | 10 | Average number of employees and wages, salaries and superannuation payments | 10/H/8 |
|  |  |  | 11 | Employment in a specified week | 10/H/8 |

[^0]CARDBOARD BOX, CARTON AND FIBREBOARD PACKING CASE

The following uotes describe terms in general use
the tables of the report. 0 dore dailed explanations of the terminsed and a description of the scope
and metho of toking the cersus are given in the separ ate booklet entitled The heport on the Census of Pro-
duction for 1954 - Introductory Notes
net (price 1s. Gd. Industrial Classification: Establishments are classiff
ied to industries according to the nature of their out


 duction. The principle of classification nermally
forldowed is that an establishment is classified to an
industry if its output of the principal products of that industry accounted for a qreater proportion of the value
of its output than did its output of the principal pro-
ducts of any other industry. Specialist producers normally comprise those establish-
ments 5 Sper cent. or more of whose total out put by
not ments 50 per cent. or more of whose total output
value is accounted for by the characteristic products
the specialist the specialist group.
Intermediate products:
given show ing the industries figures are of intermediate product ts. i. ie. . products which may be
further processed in the establishments in which the further processed in the establishments in which the
are produced. Larger establi shments
 establishments of firms employing on the average more
than 10 persons. In mos tases an establishment comprises the whole of the premises under the same owner
ship or manqement at a particur addres (e.g. min
or factory)
offices or factory. Offices, warehouses. laboratoriies and
other andiliary places of business situated apart from
the producing works are not regarded as separate estab is phents and are included in the return for the works. Small firms ar
The estimates for the industry as a whole given in
Table are orormally obtained by increasing the other
items shown in the sine Gross output (production) is the total value of goods
made and other vork done during the year: it is obtain ed by adjusting the value of sales and work done during 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 gros output the aggregate of the cost of mat erials and fuel used. the amount paid for work given ou
and, for 1951 and 1954 , any transport payment and, for 19 and and 1954 any transport payments made
This represents the value added to materials by the process of production, and constitutes the fund from which
wages. salaries. rents; rates and taxes. advertising and vages. salaries. Rents, rates and taxes, advertising and
other selling expenses and all other similar charges.
have to be met, as well as depreciation and profite. Sales means sales during the year of goods made in the
estabishment covered by the return or made on commis.
isa for ion for it. whe ther produced in the year or not. The
value of sales is the net selling value, i.e., the
 commissions. allowances for returnable cases. purchase
tax. etc. For Goods charged on a delivered basis to
customers overseas. firms were required to give the
forer customers over
f.o.b. value.
Materials and fuel. The total cost of materials and
fuel purchased includes all purchases during the year
of materials for use in production, and of fuel (includ-
ing oil. gas and electricity) for all purposes: packing
materials. including the full cost of returnable casee materials. including the full cost of returnable case
when first purchased: workshop and of fice materials

 and parts for machinery purchased as replocenents.
Purchases of qoods for morchanting are excluded. The
cost of materials and fuel used iven in
 obtained by adjusting purchases for changes during the
year in the value of stocks.
Stocks: Firms were required to give stocks of materials
and fuel . products on hand for sale, and work in pro-
gress. at income tax values.
Customs and Excise Duty paid
normally included in the cost of materials purchased is
goods are simis. goods are similarly valued as they were sold. duty paic
or duy-ffee. The net anoun of any dutypaid is de-
ducted in arriving at net output ducted in arriving at net output.
Employment: Total employment includes morking propriet.
ors. administrative. technical and clerical employees.
and operativest but exeludit
 separately as excluded a firm's return. who are show sons on the pay-roll (i.e.. persons whose iat are per in
surance cards were held by employers). whe ther employed ull-time or prit-time
Morking proprietors are proprietors of businesses other
than limited companies, together with members of their
 Hixed wages or salaries. Any persons working less tha
half the normal hours are excluded. For Norther
Ireland directors of limited Ireland directors of 1 imited companies (other than those
paid by fee only) are also included.
Administrative, tednical and clerical employees include directors other than those pail by fee onloyy (except in
Northern Ireland): managers. superintendents and worke
 and design employes (rother than operatives): draugts-
men and racers: travellers: and office (including
morks office) employees.
Operatives include all other classes of employees. i.e.
broadly speaking. all manual workers. Outworkers are persons employed by the firm who work on
materials supplied by the firm in their own homes. Wages and sal aries include all overtime payments, bonus es and commissions without any deductions for income tax,
insurances. . Contributory pensions etc. They exclude
pyments to working propriters. insyents to working proprietors.
Capital expenditure includes expenditure on new building
work, and on plant, machinery and vehicles. charged to capital account during the year. including any transpor
and installation costs involved. It and installation cost is involved. It includes expendi
ture in respect of establishments in Great Britain which
had not bequn production before to had not be gun production before the end of the year
(mhich has not previcusiy been included in the Census of
Production reports for individual industries). Production re
Symbols used:
for not available
for nil or negligible (less than half the final
digit shown).
 cies between the sums of constituent $i$ items and the to
als shown. als shown. In some cases, figures have been combined
ith others of aimilar nature where publication of
separate details might disclose information relating to separate details might disclose information relating to
an individual undertaking.

|  | United Kingdom |  |  | $\begin{aligned} & \text { Scotland } \\ & 1954 \end{aligned}$ | $\underset{\text { Wales }}{1954}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1948 | 1951 | 1954 |  |  |
|  | £ million | £ million | £ million | £ million | £ million |
| Gross output (production) | 44.9 | 98.9 | 94.6 | 7.05 | 1.71 |
| Net output | 21.3 | 38.7 | 38.9 | 2.84 | 0.65 |
| Total stocks and work in progress At beginning of year Change during year | 8.7 $+\quad 1.4$ | $\begin{array}{r}11.3 \\ +\quad 13.8 \\ \hline\end{array}$ | 13.8 $+\quad 2.3$ | $\begin{array}{r}1.27 \\ +\quad 0.08 \\ \hline 0\end{array}$ | 0.16 $+\quad 0.14$ |
| Capital expenditure less disposals (a) | 2.0 | 3.2 | 3.7 | 0.28 | (b) |
| Wages and salaries | 10.5 | 16.1 | 19.9 | 1.40 | 0.29 |
| Total employment (including | Thousands | Thousands | Thousands | Thousands | Thousands |
| -orking proprietors) | 41.5 | 52.3 | 53.4 | 3.62 | 0.91 |

(a) Capital expenditure on new building work, plant, machinery and vehicles (including (except in 1948 ) that
incurred in Giteat Brita in for establishents not yet in production). less amounts received for plant,
machinery and vehicles disposed of

Summary of returns received
TABLE 2

| ( |
| :--- |

(a) For the year 1948 gross out put excludes payments for transport services outwards on finished goods sold
(b) Payments to other firms and undertakings and to firmse .

(d) Excluding outworkers and including working proprietors.
(e) Excluding expenditure for
(e) Excluding expenditure for eetablishments not yet in production
(f) Excluding Northern Ireland. No information about small firms $\qquad$

| Average number employed (a) | Estab-lishment | $\begin{aligned} & \text { Gross } \\ & \text { output } \end{aligned}$ | $\begin{gathered} \text { Net } \\ \text { output } \end{gathered}$ | Employees |  | Wages and salaries |  | Capital <br> $\substack{\text { expendi ture } \\ \text { (b) }}$ <br> $e^{2}$ | $\begin{array}{\|c} \begin{array}{c} \text { Net output } \end{array} \\ \text { per person } \\ \text { employed } \\ \text { (a) } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Operatives | Others | Operatives | others |  |  |
|  | Number | £'000 | £ 000 | Number | Number | $£^{\prime} 000$ | £. 000 | £. 000 | $\varepsilon$ |
| 11-24 | 88 | 1,832 | 925 | 1,382 | 189 | 348 | 122 | 53 | 574 |
| 25-49 | 138 | 5.756 | 2.677 | 4.338 | 559 | 1.112 | 356 | 209 | 543 |
| 50-99 | 114 | 10.492 | 4.760 | 7.237 | 942 | 2.065 | 627 | 490 | 581 |
| $100-199$ | 77 | 17.259 | 7.212 | 9.299 | 1.341 | 2.821 | 829 | 958 | 677 |
| 200-299 | 21 | 9,698 | 4.223 | 4.388 | 723 | 1,375 | 509 | 305 | 826 |
| 300-399 | 14 | 11.930 | 4.715 | 4.102 | 812 | 1.586 | 532 | 369 | 960 |
| 400-499 | 6 | 9.206 | 3.190 | 2.180 | 409 | 927 | 292 | 171 | 1.232 |
| 500-749 | 8 | 9,888 | 3.430 | 4.453 | 634 | 1.525 | 435 | 404 | 674 |
| 750-999 | 4 | 7.270 | 2,923 | 2.664 | 567 | 1.096 | 358 | 345 | 905 |
| 1,000 and over | 4 | 9.088 | 3.929 | 4,898 | 990 | 1,822 | 731 | 389 | 667 |
| Total | 474 | 92.419 | 37.985 | 44,941 | 7.166 | 14.676. | 4.791 | 3.693 | 728 |

(a) Excluding outworkers and including working proprietors.
(b) Capital expenditure on new building work and on actuisition of plant, machinery and vehicles, excluding

Capital expenditure on new building work and on acquisi
expenditure for establishments not yet in production.

Analysis according to specialisation within the industry, 195
Larger establishments in the United Kingdom

| TABLE 4 |
| :--- |




(a) In addition to the sales shown, the fol
use by firms making returns as under
(c) So far as reco
(d) Amount charged.

TABLE 5

|  | 1951 |  | 1954 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Value | Quantity | Value | Entries |
| Boxes and cartons of paper and cardboard (a) | Th.cwt. | £. 000 | Th.cwt. | £. 000 | Number |
| Rigid boxes (including rigid boxes delivered in the flat, and round boxes) | 2.480 | 19.580 2.861 | 2.382 .8 | $\begin{array}{r} 16.291 \\ 6.261 \end{array}$ | 430 |
| Cartons | 4.116 | 33.936 (b) \{ |  | 26.542 6.693 1.59 | \} 238 |
| Unclassified | 136 | 1,220 ${ }_{3}$ | 131 | 1.078 | ) 49 |
| Fibreboard packing cases (a) |  |  |  |  |  |
| Solid | 3.774 | 11.539(b) | 4.444 | 11.971 | 47 |
| Corrugated (including sleeves. fittings. etc.) | 4.306 | 24.041 | 5.773 | 24,557 | 72 |
| Unclassified | 26 | 151 | 45 | 218 | 5 |
| Composite containers (board and tin, etc.) | $522$ | 3.102 785 | 315 | 2.135 1.715 | \} 42 |
| Covers and other components for composite containers, sold separately (c) | .. ${ }^{1}$ | 53 65 |  | 110 | 10 |
| Work done for the trade or on commission (d) |  | 446 |  | 118 | 34 |
| Total |  | 98.112 |  | 98,231 | . |
| Sales in other industries (see Table 6) |  | 12.099 |  | 13,947 | .. |
| Principal products of this industry sold by establishments in the industry |  | 86,013 |  | 84,283 | 437 |


| TABLE 6 |
| :--- |

[^1](56136)

Purchases of materials and fuel, 1954 Larger establishments in the United Kingdom

|  | Quantity | Cost |
| :---: | :---: | :---: |
| Materials | Th.cwt. | £. 000 |
| Board |  |  |
| Uncoated board |  |  |
| Strawboard and chipboard | 6,933.1 | 13.822 |
| Other uncoated board | 3.648.2 | 11.448 |
| Coated board | 1.255.7 | 5,028 |
| Paper |  |  |
| Uncoated paper |  |  |
| Strawpaper | 1.890 .4 | 3,915 |
| Other uncoated paper | 2.368 .5 | 8.214 |
| Coated paper | 111.1 | 973 188 |
| Fancy paper | 22.4 | 261 160 |
| Glue and other adhesives | 1.006.0 | 1.045 |
| Tinned plates or sheets | 134.7 | 362 67 |
| Printing ink | 27.6 | 972 168 |
| Wax (a) | 23.9 | 154 68 |
| Timber (excluding timber used for packing) | $\begin{gathered} \text { Th.cu.ft. } \\ 180.5 \end{gathered}$ | 113 |
| Packing materials | .. | 236 523 |
| Replacement parts for machinery, plant and vehicles and consumable tools bought as replacements | $\ldots$ | 523 967 |
| All other purchased materials | .. | 3.778 |
| Fuel and electricity | Th.tons. |  |
| Coal | 56.7 | 2.49 |
| Coke | 6.7 | 38 |
| Liquid fuels (including creosote/pitch mixtures) For use in internal combustion engines | Th.gal. |  |
| Motor spirit (petrol) for use in road vehicles and derv. fuel <br> Other | Th.gar. $\begin{array}{r}1.295 .3 \\ 94.6\end{array}$ | 259 |
| For burning in furnaces, boilers, kilns, etc. | 3,047.5 | 129 |
| Gas purchased fron Gas Boards and other sources | Th. therms | 93 |
| Electricity purchased From Electricity Boards | $\begin{aligned} & \text { Th. } \mathrm{kWh} \text {. } \\ & 46.220 .0 \end{aligned}$ | 285 |
| From other sources. including other departments of the same firms | 3.275 .0 | 20 |
| All other purchased fue 1 |  | 64 |
| Total cost |  | 53,641 |

(a) So far as recorded separately
(56136)

|  | 1951 | 1954 |
| :---: | :---: | :---: |
|  | Number | Number |
| Average number of employees |  |  |
| Operatives Administrative, technical and clerical employees | 44.568 6.763 | 44.941 7.166 |
| Total | 51.331 | 52.107 |
| Wages and salaries paid to | \&'000 | \&. 000 |
| Operatives | 11.602 4.240 | $\underset{\substack{14.676 \\ 4.791}}{ }$ |
| Total | 15.842 | 19.467 |
| Wages and salaries per head | $\varepsilon$ | $\varepsilon$ |
| Operatives <br> Administrative, technical and clerical employees | 260 627 | ${ }_{669}^{327}$ |
| Superannuation and other pension funds for employees and dependents (b) |  | \&. 000 |
| Employers' contributions | .. | 477 |
| Enployees covered | .. | Number 16.097 |
| Pension, etc. payments to former employees and dependents (b) | .. | 88 |


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

TABLE 11 Employment in a specified week (a): Larger establishments in the United Kingdom
Shipbuilding and Ship Repairing Narine Enginoering
Textile Moch inery and Accossorios Smatil Arma
Cons tructional Enginoer ing
Mechanical Handling Equipmen

|  | United Kinqdom |  |
| :---: | :---: | :---: |
|  | 1951 | 1954 |
|  | Number | Number |
| Canteen workers Males | ${ }_{492}^{21}$ | 24 504 |
| Total | 513 | 528 |
| Other workers |  |  |
| Males Females | ${ }_{30}^{53}$ | ${ }_{47}^{77}$ |
| Total | 83 | 124 |
| Total excluded employees | 596 | 652 |
| Payene to atmorker | 8.000 | ¢.000 |
| Papments to outworkers |  |  |
| Outworkers |  |  |
| ${ }_{\text {M }}^{\substack{\text { Males } \\ \text { Fenales }}}$ | 1.628 ${ }^{5}$ | 104 1.550 |
| Total | 1.633 | 1.654 |


|  | 1951 |  |  | 1954 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Fenales | Total | Males | Females | Total |
| Working praprietors | 105 | 9 | 114 | 90 | 9 | 99 |
| Operatives | 16.026 | 29,011 | 45,037 | 16.879 | 29.424 | 46.303 |
| Ademinis | 4.053 | 2.804 | 6.857 | 4.264 | 2.976 | 7.240 |
| Total exployees | 20.079 | 31.815 | 51.894 | 21.143 | 32.400 | 53.543 |

(a) Week onded September 22. 1951. or October 30. 1954.

DS 56136/1/Wt. 3381 K. 4 5/57 cl

## Crown copyright reserved

Printed and published by Her Majesty's Stationery Office

To be purchased from York House, Kingsway, London w.c. 2 423 Oxford Street, London w.I 13A Castle Street, Edinburgh 2
109 St Mary Street, Cardiff
39 King Street, Manchester 2 Tower Lane, Bristol I 2 Edmund Street, Birmingham 3 80 Chichester Street, Belfast or through any bookseller

Printed in Great Britain


[^0]:    IMPORTANT NOTES and definitions appear on the next page. In inter preting the data in the tables, it is essential to bear these in mind

[^1]:    (a) Net selling value or amount charged for printing work done
    (b) Amount charged.

