# DEPARTMENT OF TRADE AND COMITRCE DOMINION BUREAU OF STATISTICS CENSUS OF INDIISTRY MINING, METALLURGICAL AND CHFMICAL BRANCH OTTANA - CANADA 

Dominion Statistician: R.H. Coats, LL.D., F.R.S.C., F.S.S. (Hon.) Chief - Mining, Metallurgicel and Chemical Branch: W. H. Losee, B.Sc. Statisticinn - Metal and Chemicel Products: H. McLeod, B.Sc.

CONSUMPTION OF COKE IN CANADA - 1937.

The apparent consumption of coke in Canada during 1937 amounted to 3,172,892 tons compared with $3,242,823$ tons in 1936.

Production of cokc (includine petroleum coke) during 1937 totalled 2,632, 400 tons, imports entered for consumntion amounted to 591,838 tons, and producers' stocks declined 39,241 tons, making an available supply of $3,203,479$ tons. But exports and re-exports totalled 86,916 tons and producers' stocks increased 3,671 tons, leaving $3,172,892$ tons as the quantity available for use in Canada during the year. The distribution of this tonnage by areas was as follows:-Maritimes, 458,119 tons; Quebec, 477,829 tons; Ontario, 2,041,592 tons; and the Western Provinces, 192,352 tons. This calculation, of course, does not take into considerotion any interprovincial shipments of coke or any changes in stocks held by dealers or users, as no records are available concerning such movements.

Actual consumption records, as compiled from the Census of Industry reports for 1937, show that 1,338,345 tons of coke were used in blast furnaces and cupolas, 335, 661 tons were used as raw materials in manufacturing, and 327,388 tons vere used as fucl in manufacturing, minine and smelting industries. Thus a total of 1,999, 394 tons can be accounted for and the difference of $1,173,498$ tons must represent the cuantity available for use as domestic fuel or in commercial establishments such as retail stores, repair shops, warchouses, etc., which are not covered by the industrial census.

The distribution by areas of the domestic consumption of $1,1.73,498$ tons was as follows:-Maritimes, 60,457 tons; Quebec, 275,198 tons; Ontario, 761, 294 tons, and the Western Provinces, 76,549 tons. Here, again, no allowance has been made for interprovincial shipments.

Coke charged to smelting fumaces and cupolas during 1937 amounted to $1,358,345$ tons, of which 890,384 tons were used in iron blast furnaces, 4,517 tons in steel furnaces, 9,480 tons in ferro-alloy furnaces, 331,776 tons in furnaces used for smolting non-ferrous ores, and 102,188 tons in foundry cupolas. The consumption, by districts, was as follows:-Maritimes, 358,425 tons; Quebec, 33,087 tcns; Ontario, 878,234 tons; and the Western Provinces, 68,599 tons.

Coke used as a raw material in manufacturing in 1937 totalled 333,661 tons, of which 159,690 tons were used in the manufacture of calcium carbide, 3,604 tons in making carbon dioxide, 96,422 tons in making illuminating and fuel gas, 31,644 tons in making artificial abrasives, and 42,301 tons in the manufacture of carbon electrodes. Plants in Ontario used 178,306 tons; in Quebec, 118,959 tons; in the Maritimes, 337 tons; and in the Vestern Provinces, 36,059 tons.

Coke used for fuel purposes by the manufacturing, mining and smelting industries amounted to 327,388 tons in 1937. Works in the Maritimes used 38,900 tons for this purpose; in Ontario, 226,758 tons; in Quebec, 50,585 tons, and in tho West, 11,145 tons.

Table 1 -
PRODUCYION OF COKE IN CANADA, 1937.

P.E.I., Quebec Ontario | Nan., Sask., |
| :--- |
| N.S. |
| and B. |
| and B.. | CANADA

| Coke and | Gas Industry | Tons 事 | $\begin{array}{r} 451,799 \\ 2,652,431 \end{array}$ | $\begin{array}{r} 401,323 \\ 2,895,611 \end{array}$ | $\begin{array}{r} 1,504,334 \\ 11,522,965 \end{array}$ | $\begin{array}{r} 212,929 \\ 1,395,061 \end{array}$ | $\begin{array}{r} 2,570,385 \\ 18,466,068 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Petroleum Refining |  |  |  |  |  |  |  |
| Industry |  | Tons | $\begin{array}{r} 373 \\ 1,504 \\ \hline \end{array}$ | $\begin{aligned} & 2,246 \\ & 8,499 \end{aligned}$ | $\begin{array}{r} 56,556 \\ 357,078 \end{array}$ | $\begin{array}{r} 2,840 \\ 13,059 \end{array}$ | $\begin{array}{r} 62,015 \\ 380,140 \end{array}$ |
| TOTAL |  | Tons $\$$ | $\begin{array}{r} 452,172 \\ 2,653,355 \end{array}$ | $\begin{array}{r} 403,569 \\ 2,904,110 \end{array}$ | $\begin{array}{r} 1,560,890 \\ 11,880,043 \end{array}$ | $\begin{array}{r} 215,769 \\ 1,408,120 \end{array}$ | $\begin{array}{r} 2,632,400 \\ 18,846,208 \end{array}$ |

Table 2-APPAREINT CONSUMPTION OF COKE IN CANADA, BY PROVINCES, 1937. (Shor't tons)

# P.E.I., 

 Han., Sask.,N.S. Quebec Ontario
and N.B.
Alberta
CANADA

1937
Production ....................... 452,172 403,569 1,560,890 215,769 2,632,400
Add - Declines in producers'
$\qquad$

| $\cdots$ | 10,564 | 28,677 | $\ldots$ | 39,241 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 452,172 | 414,133 | $1,589,567$ | 215,769 | $2,671,641$ |

Deduct - Surpluses in producers' stocks ................... $\frac{875}{451,297} 414,1331,589,567 \quad 212,973 \quad 2,667,970$
Add - Imports entered for consumption ...................

| 7,061 | 69,003 | 500,424 | 15,350 | 591,838 |
| ---: | ---: | ---: | ---: | ---: |
| 458,358 | 483,136 | $2,089,991$ | 228,323 | $3,259,808$ |
| 239 | 5,307 | 45,393 | 35,971 | 86,916 |
| 458,119 | 477,829 | $2,044,592$ | 192,352 | $3,172,892$ |

NOTE - The imports "entered for consumption" represent tonnages cleared from customs" ports. The tomages entered under this heading differ slightly from actual imports.

Table 3 - CONGUMPTION OF COKE IN CATADA IN SMELTING FURNACES AND CUPOLAS, BY INDUSTRIES, 1937.
Industry

| P.E.I., |
| ---: |
| N.S. |
| and N.B. |

Pig iron, ferro-alloys and steel ingots and castings -

| Castings a | Tons | 353,851 | 4,273 | 545,822 | 435 | 904,381 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | 1,778,773 | 28,533 | 3,151,517 | 6,600 | 4,965,425 |
|  | Tons | 1,303 | 9,838 | 27,903 | 2,810 | 41,854 |
|  | \$ | 18,278 | 104,079 | 333,739 | 41,921 | 498,017 |
| Heating and cooking apparatus ........ | Tons | 1,221 | 1,388 | 5,745 | 260 | 8,614 |
|  | \$ | 20,163 | 15,999 | 69,382 | 4,266 | 109,810 |

Table 3 - CONSUMPTION OF COKE IN CANADA IN SMELTING FURNACES AND CUPOLAS, BY INDUSTRIES, 1937. (concluded)

| Industry |
| :--- | :--- | ---: | :--- | ---: | ---: | ---: | ---: |

Table 4 - CONSUMPTION OF COKE IN CANADA AS MANUFACTURING MATERIAL, BY INDUSTRIES, 1937.


Acids, elkalles and


Table 5 - CONSUMPTION OF COKE IN CANADA AS INDUSTRIAL FUEL IN THE NANUFACTURING, MINING and SMELTING INDUSTRIES, 1937.
P.E.I.,
N.S. Quebec Ontario
and N.B.

Man., Sask.,
Alberta CAMADA and B.C.

MANUFACTURING
Chemicals and allied products products and steel, and products Tons

| 18 | 4,500 | 3,963 | 251 | 8,732 |
| ---: | ---: | ---: | ---: | ---: |
| 271 | 25,239 | 25,727 | 2,938 | 54,175 |
| 26,396 | 10,033 | 53,162 | 1,053 | 90,644 |
| 70,007 | 55,922 | 223,208 | 13,847 | 362,984 |

Table 5 - CONSUMPTION OF COKE IN CANADA AS INDUSTRIAL FUEL IN THE MANFACTURING, MINING AND SMELTING INDUSTRIES, 1937. (concluded)


| Non-ferrous metal products | Tons |  | 2,858 | 6,832 | 309 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (excluding smelters) ....... | \$ |  | 24,065 | 68,659 | 3,931 | 9,999 96,655 |
| Non-metallic mineral products |  |  |  |  |  |  |
| clay and salt)......... | \$ | 4,443 27,399 | 23,166 | 122,756 | 5,804 28,247 | 156,169 |
| Animal products | Tons ${ }^{\text {- }}$ | 15 | 454 | 603 | 648 | 1,720 |
|  | \$ | 169 | 2,098 | 5,257 | 3,518 | 11,042 |
| Textile products | Tons | ... | 333 | 310 | 5 | 648 |
|  | * | $\ldots$ | 3,146 | 3,150 | 74 | 6,370 |
| Vegetable products | Tons | 4,315 | 8,351 | 27,413 | 2,609 | 42,688 |
|  | \$ | 41,257 | 82,866 | 271,658 | 26,613 | 422,394 |
| Wood and paper products | Tons | 15 | 306 | 1,729 | 92 | 2,142 |
|  | * | 166 | 3,053 | 13,422 | 964 | 17,602 |
| Miscellancous products | Tons | ... | 138 | 232 | 18 | 388 |
|  | $\$$ |  | 1,382 | 2,117 | 126 | 3,625 |
| Total Manufacturing |  |  |  |  |  |  |
| Industries | Tons | 35,202 | 50,139 | 217,000 | 10,789 | 313,130 |
|  | \$ | 139,269 | 288,368 | 1,243,338 | 80,258 | 1,751,230 |
| MINING INDUSTRIES | Tons | 3,698 | 446 | 9,758 | 356 | 14,258 |
|  | \$ | 19,149 | 3,852 | 84,754 | 5,593 | 113,348 |
|  | Tons | 38,900 | 50,585 | 226,758 | 11,145 | 327,388 |
|  | $\leqslant$ | 158,418 | 292,220 | 1,328,092 | 85,851 | 1,864,578 |

Table 6 - ANALYSIS OF COKE CONSUMPTION IN CANADA, BY PRINCIPAL USES, 1937, with comparative data for 1936. (Short tons)
P.E.I.,
N.S.

and N.B. Quebec Ontario Man.,Sask., | Alberta |
| :---: |
| and B.C. | CANADA

1937
Furnace charges ................. 358,425 33,097 873,234 68,599 1,338,345
Manufacturing material ........ 337 118,959 178,306 36,053 333,661
Industrial fuel .................. 38,900 50,585 226,758 11,145 327,388
Available for domestic use (by
difference) .................... 60,457 275,198 761,294 76,549 1, 173, 498 APPARTNT CONSUIPTION ........ $458,119 \quad 477,829 \quad 2,044,592 \quad 192,352 \quad 3,172,892$

1936
Furnace charges ......................300,129 20,718 652,353 76,793 1,049,993
Manufacturing material ......... 281 101,343 141,635 27,688 270,947
Industrial fuel .................. 34,032 46,328 247,621 17,416 345,397
Available for domestic use (by
difference) ...................... $50,406 \quad 331,908 \quad 1,102,044 \quad 92,128 \quad 1,576,486$ APPARENT CONSUMPTION …... $384,848 \quad 500,297$ 2, 143, 653 214,025 3,242,823
NOTES - 1. Figures showing the tonnage of coke available for domestic use are obtained by difference and include the coke used for purposes other than specified in these tables.
2. No allowance has been made for changes during the year in stocks of coke held by dealers or users.
3. No allowance has been made for interprovincial shipments of coke.

