# DEPARTMENT OF TPADE AND COMNRCE <br> DOMINION BUREAU OF STATISTICS <br> CENSUS OF INDUSTRY <br> mining, wetallurgical and chmical branch OTTAFI - CANADA 

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

## CHEMICALS AND ALLIED PRODUCTS

FINAL SUMMARY STATISTICS -1937

Final figures for 1937 indicate that the production of chemicals and allon products in thet year was valued at $\$ 148,973,220$, or 17 per cent above the corresponding total for 1936. This year's total was the highest on record, being 7.5 per cent thve the former high of $\$ 138,545,281$ established in 1929 . The advance over the latter year is even more imprassive when consideration is given to the decline in prices, amounting to 14.7 per cent, which has occurred in the interval. By allowing for this factor, and thus placing the comparison on a volume basis, the calculation shows that the 1937 output was actually 26 per cent greater than in 1929.

The improvement in 1937 was general, with 12 of the industries showing stantial increases over the previous year and only one reporting a small decline. The gains were as follows: coal tar distillation, 15.5 per cent to $\$ 3,399,541$; acids, alkalies and salts industry, or the heavy chemicals industry, I8 per cent to ${ }^{3} 2 \mathrm{R}, 410,168$; compressed gases, 16.9 per cent to $\$ 3,929,242$; fertilizers, 45 per cent to $\$ 10,266,953$; medicinals, 11.5 per cent to $\$ 24,814,647$; paints, 12.7 per cent to $\$ 25,531,117$; soans, 20.7 per cent to $\$ 19,693,888$; toilet preparations, 4.5 per cent to $\$ 6,842,937$; inks, 6.1 per cent to $\$ 3,270,506$; adhesives, 5.8 per cent to $\$ 1,904,137$; polishes and iressings, 10.2 per cent to $\$ 2,736,269$; and the miscellaneous group, 26.2 per cent to $\$ 23,424,731$. The hardwood distillation industry showed a decline from 1936, the value of output being $\$ 749,084$ compared with $\$ 857,647$, a drop of 12.7 per cent.

In the whole chemical group there were 754 factories operating in 1937, with a capital investment of $\$ 161,165,068$ and employing 21,968 workers. A total of $\$ 64,460,947$ was spent on ravi materials, $\$ 28,612,719$ for salaries and wages, and \$5,222,033 for fuel and electricity. The increase in the average number of employees, compared with 1936, was 10.3 per cent and the advance in salaries and wages amounted to 13.4 per cent.

About 58 per cent of the production was from Ontario's 387 establishments, their output being valued at $\$ 85,751,105$ in 1937 ; Quebec, with 234 factories and a production of $\$ 45,096,665$, accounted for 30 per cent of the total for Canada.

Caneda's imports of chemicals and allied products during 1937 were valued at $\$ 37,393,423$, or $\$ 5.4$ millions more than in 1936 . Purchses frow the United States at $\$ 22,502,132$ made up 60.1 per cent of the total, and shipments from the United Kingdom at $\$ 7,857,577$ accounted for 21 per cent.

Exports increased in value to $\$ 21,666,897$ from $\$ 17,749,628$ in 1936. About 44.8 per cent of the exports went to the United States and 24.2 per cent to the United Kingdom. The value of shipments to the United States was $\$ 9,724,310$ and to the Uriter Kingdom, $\$ 5,248,845$.

Table 1 - PRTNCIPAL STATISTICS FOR THE MANUFACIURE OF CHFMICALS AND ALLIED PRODUCTS IN CANADA, BY INDUSTRIES, 1936 and 1937.

| Industry | No, of plants | Capital employed | Average number of employees | Salaries and wares | Cost of materiels <br> at works | Gross selling value of products at works |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$ |  | है | \$ | \$ |
| 1936 |  |  |  |  |  |  |
| Coal tar distillation | 10 | 4,507,861 | 216 | 287,819 | 1,516,122 | 2,942,255 |
| Acids, alkalies and |  |  |  |  |  |  |
| Sompressed | 28 | $1,596,308$ $\mathbf{4}, 565,549$ | , 568 | 823,714 | 490,041 | 3,360,220 |
| Fertilizers | 20 | 14,800,141 | 930 | 1,196,286 | 4,996,084 | 7,075,831 |
| Medicinals and phama ceuticals ........... | 169 | 20,760,912 | 3,857 | 4,797,458 | 7, 384,370 | 22,251,550 |
| Paints, pigments and varnishes | 78 | 23,274,558 | 3,124 | 4,4:8,387 | 10,817,694 | 22,651,225 |
| Soaps and washing compounds | 102 | 11,564,606 | 1,993 | 2,540,559 | 9,121,22? | 16,313,502 |
| Toilet preparations.. | 87 | 5,624,306 | 1,171 | 1,199,915 | 2,379,755 | 6,544,377 |
| Inks | 33 | 2,965,168 | 535 | 855,722 | 1,225,072 | 3,082,042 |
| Hardmood distillation | 6 | 2,064,721 | 176 | 138,151 | 406,680 | 857,647 |
| Adhesives | 19 | 2,266,199 | 420 | 457,170 | 813,291 | 1,799,200 |
| Polishes and dressings | 548 | 2,2.36, 209 | 432 | 501,142 | 1,146,356 | 2,481,044 |
| Miscelleneous | 125 | 20,437,905 | 3,524 | 4,012,636 | 7,505,877 | 18,556,386 |
| TOTAL | 745 | 147,664,533 | 19,910 | 25,227,267 | 52,482,873 | 126,874,791 |

## 1937

| al tar distillation | 10 | 4,392,474 | 254 | 357,744 | 2,189,237 | 3,399,541 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acids, alkalies and salts | 21 | 35,094,008 | 3,359 | 4,893, 418 | 6,008,977 | 22,410,168 |
| Compressed gases | 27 | 4,605,170 | 606 | 919,773 | 527,410 | 3,929,242 |
| Fertilizers | 20 | 16,689,720 | 1,023 | 1,447,625 | 6,693,841 | 10,266,953 |
| Medicinals and pharmaceuticals | 174 | 22,780,119 | 4,290 | 5,311,120 | 8,808,929 | 24,814,647 |
| Paints, pigments and varnishes | 82 | 23,853,360 | 3,324 | 4,827,199 | 12,307,011 | 25,531,117 |
| Sosps and washing compounds | 101 | 14,201,659 | 2,284 | 2,836,208 | 11,255,146 | 19,693,888 |
| Toilet preparations.. | 82 | 5,962,591 | 1,207 | 1,269,340 | 2,577,943 | 6,842,937 |
| Inks | 31 | 2,921,1.73 | 520 | 882,449 | 1,278,720 | 3,270,506 |
| Wood distillation | 5 | 1,546,353 | 183 | 139,992 | 421,321 | 749,084 |
| Adhesives | 18 | 2,357,662 | 416 | 483,819 | 901,194 | 1,904,137 |
| Pollshes and dressings | 46 | 2,475,656 | 462 | 528,462 | 1,400,923 | 2,736,269 |
| Miscellaneous | 137 | 24,285, 1.23 | 4,034 | 4,715,570 | 10,092,295 | 23,424,731 |
| TOTAT | 754 | 161,165,068 | 21,968 | 28,612,719 | 64,460,947 | 148,973,220 |

\% change 1937 from
$1936 \ldots \ldots \ldots \ldots \nrightarrow 1.2 \nmid 9.1$ t10.3 f13.4 t22.8 t17.4

Table 2 - PRINCIPAL STATISTICS FOR THE MANUFACTURE OF CHEMICALS AND ALEIED PRODUCTS IN CANADA, BY PROVINCES, 1936 and 1937.

| Province | No. of plants | Capital <br> employed | Average number of employees | Salaries and wages | Cost of materizls <br> at wiorks | Gross selling value of products at works |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$ |  | \$ | \% | \$ |
| 1936 |  |  |  |  |  |  |
| Nova Scotia and |  |  |  |  |  |  |
| Prince Edward Island | 13 | 1,934,617 | 260 | 277,434 | 1,090,597 | 1,975,011 |
| New Brunspick | 7 | 1,172,853 | 128 | 160,409 | 867,981 | 1,289,163 |
| Quebec | 227 | 53,206,827 | 7,081 | 8,565,670 | 15,479,121 | 38,487,587 |
| Ontario | 385 | 70, 207,971 | 10,509 | 13,664,809 | 29,645,777 | 72,831,167 |
| Manitoba | 36 | 4,922,841 | 630 | 712,042 | 1,963,032 | 4,241,879 |
| Saskatchewan | 11 | 543,157 | 49 | 61,315 | 99,412 | 228,953 |
| Alberta | 18 | 515,851 | 72 | 86,505 | 260,493 | 604,924 |
| British Columbia | 48 | 15,160, 116 | 1,181 | 1,699,083 | 3,076,460 | 7,216,107 |
| CANADA | 745 | 147,664,533 | 19,910 | 25, 227,267 | 52, 482,873 | 126,874,791 |

## 1937

| Nova Scotie and |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island | 13 | 2,096,732 | 287 | 335,799 | 1,378,151 | 2,374,241 |
| New Brunswick | 7 | 1,483,513 | 158 | 195,033 | 1,293,969 | 1,772,346 |
| Quebec | 234 | 56,726,682 | 7,851 | 9,590,912 | 18,939,520 | 45,096,665 |
| Ontario | 387 | 78,905,378 | 11,631 | 15,577,035 | 36,709,072 | 85,751,105 |
| Manitoba | 37 | 4,920,330 | 645 | 782,135 | 2,181,784 | 4,569,710 |
| Saskatchewan | 9 | 577,427 | 76 | 103,400 | 102,764 | 227,029 |
| Al berta | 19 | 556,712 | 88 | 92,681 | 242,449 | 658,064 |
| British Columbia | 48 | 15,898,294 | 1,232 | 1,935,724 | 3,613,238 | 8,52.4,060 |
| CANADA | 754 | 161,165,068 | 21,968 | 28,612,719 | 64,460,947 | 148,973,220 |

