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DOMINION BUREAU OF STATISTICS — DEPARTMENT OF TRADE AND COMMERCE
CANADA



THE COMPRESSED GASES INDUSTRY 1950

Published by Authority of the RT. HON. C. D. HOWE
Minister of Trade and Commerce

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Industry and Merchandising Division,
Dominion Bureau of Statistics, Ottawa

74-502

NOTICE

The Industry and Merchandising Division of the Bureau of Statistics collects and compiles figures on (a) the primary industries in Canada—mining, forestry and fishing; (b) manufacturing; (c) construction, and (d) merchandising and services.

For the purpose of annual compilation and publication, the manufacturing industries have been classified into major groups, prefaced by two reports of a general nature, as follows:

- I Summary Report on Manufacturing Industries
- II Manufacturing Industries by Geographical Distribution
- III Foods and Beverages
- IV Tobacco and Tobacco Products
- V Rubber Products
- VI Leather Products
- VII Miscellaneous Manufactures
- VIII Textiles
- IX Wood and Paper Products
- X Printing Trades
- XI Operations in the Woods
- XII Iron and Steel Products
- XIII Transportation Equipment
- XIV Non-ferrous Metal Products
- XV Electrical Apparatus and Supplies
- XVI Non-metallic Mineral Products
- XVII Products of Petroleum and Coal
- XVIII Chemicals and Allied Products

The present report belongs in Group XVIII, Chemicals and Allied Products. It is punched to permit of filing in a ring binder along with others of the group. The reports in this group are:

- A General Review, 25¢.
- B The Acids, Alkalies and Salts Industry, 25¢.
- C The Fertilizer Manufacturing Industry, 25¢.
- D The Fertilizer Trade in Canada, 30¢.
- E The Medicinal and Pharmaceutical Preparations Industry, 25¢.
- F The Paints, Varnishes and Lacquers Industry, 25¢.
- G The Primary Plastics Industry, 25¢.
- H The Soaps, Washing Compounds and Cleaning Preparations Industry, 25¢.
- I The Toilet Preparations Industry, 25¢.
- J The Vegetable Oils Industry, 25¢.
- K The Inks Industry, 25¢.
- L The Adhesives Industry, 25¢.
- M The Polishes and Dressings Industry, 25¢.
- N The Compressed Gases Industry, 25¢.
- O The Coal Tar Distillation Industry, 25¢.
- P The Miscellaneous Chemical Products Industry, 25¢.

THE COMPRESSED GASES INDUSTRY

1950

Manufacturing plants in Canada engaged chiefly in making industrial gases reported production in 1950 at \$12,737,319 compared with \$12,091,176 in 1949, an increase of 5.3 per cent.

There were 50 factories in operation in this industry during 1950, of which 18 were located in Ontario; 12 in Quebec; 5 in Alberta; 5 in British Columbia; 3 in Nova Scotia; 3 in Manitoba; 2 in Saskatchewan, and 1 each in New Brunswick and Newfoundland. The number of employees in the industry in 1950 was 1,240, including 561 supervisory and office personnel and 679 production workers. Salaries for the year amounted to \$1,444,267 and wages totalled \$1,795,331.

The chief products were oxygen, acetylene and carbon dioxide. The output of oxygen increased 5 per cent to 690.4 million cubic feet and acetylene increased 3 per cent to 124.4 million cubic feet. Carbon dioxide, aqua ammonia, anhydrous ammonia, nitrogen, hydrogen, nitrous oxide and propane were other products of this industry. The output figures for the latter items are not published separately since there were only one or two producers in each case.

No mention is made in this report of liquid chlorine, liquid sulphur dioxide, synthetic ammonia, nor of hydrogen and nitrogen for the manufacture of synthetic ammonia. These items were produced in works that also made other kinds of chemicals and the statistics concerning the output of same have been included in the heavy chemical industry which is reviewed in a separate bulletin. A similar disposition has been accorded liquefied petroleum gases produced in the petroleum refining industry.

CHEMICALS AND ALLIED PRODUCTS

TABLE 1. Principal Statistics for the Compressed Gases Industry, 1946-1950

| Year | Number of plants | Number of employees | Salaries and wages for year | Cost of fuel and electricity at works | Cost of materials at works ¹ | Gross selling value of products at works |
|--------------------------------|------------------|---------------------|-----------------------------|---------------------------------------|---|--|
| | | | \$ | \$ | \$ | \$ |
| 1946 | 42 | 1,064 | 1,961,493 | 314,524 | 1,258,423 | 8,308,028 |
| 1947 | 44 | 1,089 | 2,262,527 | 365,903 | 1,475,523 | 9,607,229 |
| 1948 | 45 | 1,156 | 2,613,283 | 404,455 | 2,180,518 | 11,314,387 |
| 1949 | 48 | 1,223 | 3,230,904 | 431,855 | 1,979,160 | 12,091,176 |
| 1950 | 50 | 1,240 | 3,239,598 | 493,054 | 1,873,977 | 12,737,319 |
| % change, 1950 from 1949 | — | +1.4 | — | +14.2 | -5.3 | +5.3 |

1. See footnote to Table 4.

Note. Profits or losses cannot be calculated from above figures as data are not available for general expense items, such as interest, rent, depreciation, taxes, insurance, advertising, etc.

TABLE 2. Principal Statistics for the Compressed Gases Industry, by Provinces, 1949 and 1950

| Province | Number of plants | Number of employees | Salaries and wages | Cost of fuel and electricity at works | Cost of materials at works ¹ | Gross selling value of products at works |
|------------------------|------------------|---------------------|--------------------|---------------------------------------|---|--|
| | | | \$ | \$ | \$ | \$ |
| 1949 | | | | | | |
| Newfoundland | 1 | 381 | 970,051 | 130,752 | 603,724 | 3,963,372 |
| Nova Scotia | 3 | | | | | |
| New Brunswick | 1 | | | | | |
| Quebec | 11 | | | | | |
| Ontario | 18 | 500 | 1,388,649 | 207,820 | 776,876 | 4,918,165 |
| Manitoba | 3 | | | | | |
| Saskatchewan | 2 | 120 | 290,679 | 26,700 | 235,015 | 1,209,907 |
| Alberta | 5 | | | | | |
| British Columbia | 4 | 102 | 248,860 | 35,701 | 185,833 | 1,018,823 |
| Canada | 48 | 1,223 | 3,230,904 | 431,855 | 1,979,160 | 12,091,176 |
| 1950 | | | | | | |
| Newfoundland | 1 | 374 | 998,314 | 135,376 | 546,928 | 3,980,218 |
| Nova Scotia | 3 | | | | | |
| New Brunswick | 1 | | | | | |
| Quebec | 12 | | | | | |
| Ontario | 18 | 504 | 1,350,963 | 255,419 | 800,363 | 5,313,576 |
| Manitoba | 3 | | | | | |
| Saskatchewan | 2 | 132 | 307,148 | 28,969 | 208,027 | 1,144,496 |
| Alberta | 5 | | | | | |
| British Columbia | 5 | 108 | 262,273 | 38,494 | 153,497 | 1,092,061 |
| Canada | 50 | 1,240 | 3,239,598 | 493,054 | 1,873,977 | 12,737,319 |

1. See footnote to Table 4.

TABLE 3. Products of the Compressed Gases Industry, 1949 and 1950

| Product | Unit of measure | 1949 | | 1950 | |
|-----------------------------------|-----------------|-------------|------------------------|-------------|------------------------|
| | | Quantity | Selling value at works | Quantity | Selling value at works |
| | | | \$ | | \$ |
| Acetylene ¹ | cu. ft. | 120,831,500 | 3,420,827 | 124,375,066 | 3,586,705 |
| Hydrogen | cu. ft. | 87,790,070 | 318,132 | 108,103,532 | 361,222 |
| Oxygen ¹ | cu. ft. | 657,134,873 | 5,587,476 | 690,362,200 | 5,400,670 |
| Other products ² | — | — | 2,784,741 | — | 3,388,722 |
| Total | — | — | 12,091,176 | — | 12,737,319 |

1. In cylinders or delivered by pipe line.

2. Includes nitrous oxide, carbon dioxide, propane, nitrogen, and ammonia made from gas liquor.

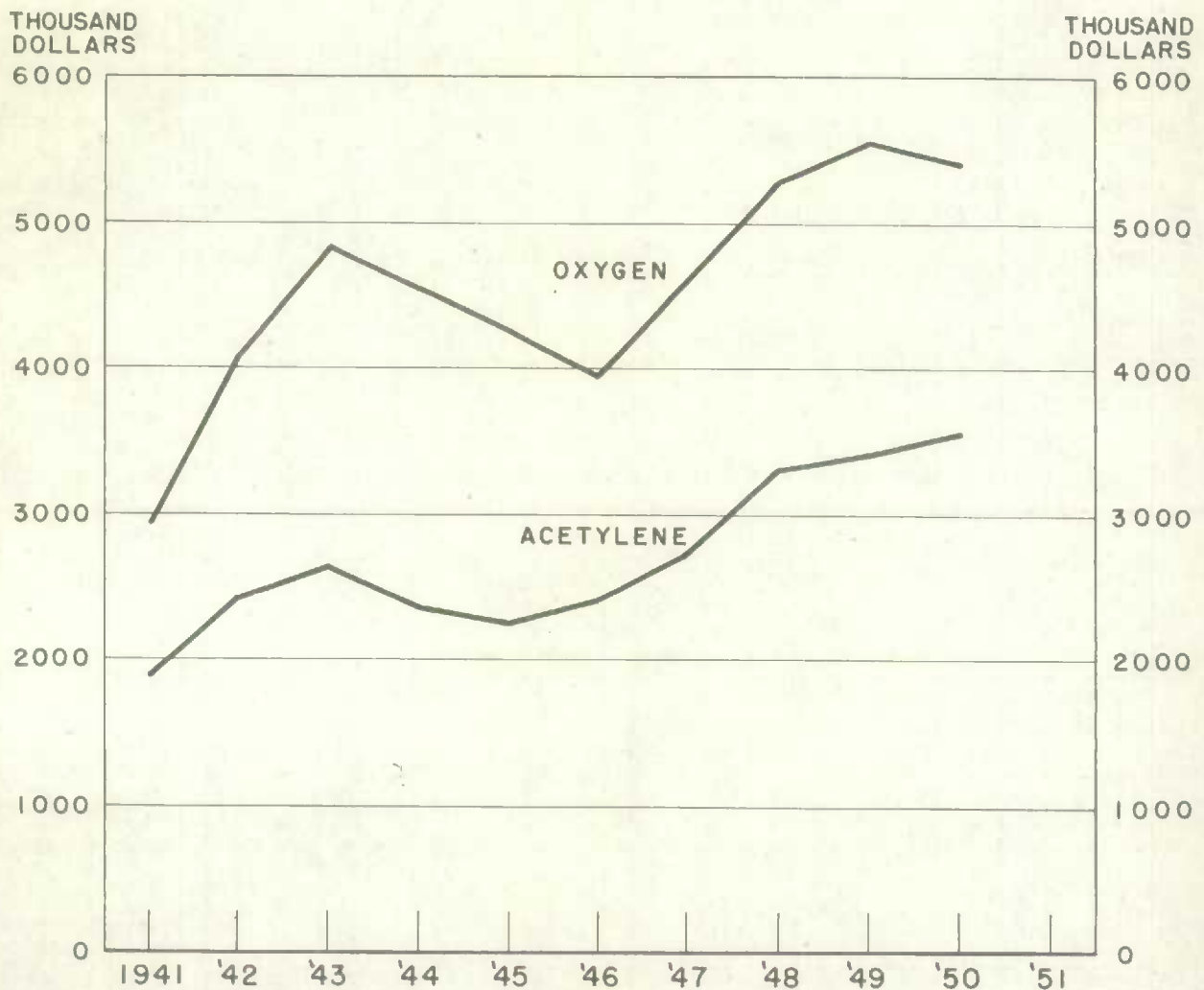
TABLE 4. Materials Used in the Compressed Gases Industry, 1949 and 1950

| Material | Unit of measure | 1949 | | 1950 | |
|--|-----------------|-----------|------------------|-----------|------------------|
| | | Quantity | Cost at works | Quantity | Cost at works |
| | | | \$ | | \$ |
| Acetone | pound | 417,446 | 65,629 | 396,561 | 59,883 |
| Calcium carbide | ton | 9,920 | 957,736 | 10,045 | 1,009,891 |
| Coke | ton | 2,914 | 61,076 | 1,097 | 24,056 |
| Oil (for making carbon dioxide and hydrogen) | Imp. gal. | 935,391 | 82,810 | 1,247,814 | 117,643 |
| Potassium hydroxide | lb. | 85,380 | 8,951 | 77,555 | 9,437 |
| Sodium hydroxide | lb. | 350,458 | 14,807 | 370,018 | 16,075 |
| Other materials ¹ | — | — | 559,169 | — | 646,429 |
| Cylinders purchased during the year | number | 7,658 | 228,982 | 2 | — |
| Total | — | — | 1,979,160 | — | 1,873,977 |
| Cylinders purchased during the year | number | See above | — | 11,246 | 295,566 |

1. Includes ammonia liquor, ammonium nitrate, unpurified brewery gas, lime, soda ash, condensing water, etc.

2. Not included in materials classification for 1950.

PRODUCTION* IN CANADA OF ACETYLENE AND OXYGEN 1941-1950



*1. INCLUDES ONLY PRODUCTION AS REPORTED BY FIRMS CLASSIFIED TO THE COMPRESSED GASES GROUP.

2. PRODUCTION = SELLING VALUE AT WORKS.

CHEMICALS AND ALLIED PRODUCTS

TABLE 5. Production¹ of Acetylene and Oxygen, 1941-1950

| Year | Acetylene | | Oxygen | |
|-----------|-------------|------------------------|-------------|------------------------|
| | Quantity | Selling value at works | Quantity | Selling value at works |
| | cu. ft. | \$ | cu. ft. | \$ |
| 1941..... | 81,791,386 | 1,898,679 | 356,633,855 | 2,945,542 |
| 1942..... | 105,751,660 | 2,429,493 | 541,184,707 | 4,098,034 |
| 1943..... | 114,111,166 | 2,657,631 | 636,281,176 | 4,811,834 |
| 1944..... | 101,981,116 | 2,377,919 | 614,110,740 | 4,568,371 |
| 1945..... | 95,889,965 | 2,273,945 | 565,601,348 | 4,297,791 |
| 1946..... | 100,276,367 | 2,403,386 | 476,822,719 | 3,973,866 |
| 1947..... | 111,370,838 | 2,748,114 | 577,806,032 | 4,603,919 |
| 1948..... | 123,185,685 | 3,301,822 | 565,869,719 | 5,297,530 |
| 1949..... | 120,831,500 | 3,420,827 | 657,134,873 | 5,567,476 |
| 1950..... | 124,375,068 | 3,586,705 | 690,362,200 | 5,400,670 |

1. Includes only production as reported by firms classified to the Compressed Gases group.

TABLE 6. Consumption of Carbon Dioxide in the Manufacture of Carbonated Beverages (Soft Drinks) 1945-1949

| Year | Quantity | Cost at works |
|--------------------|------------|---------------|
| | Pounds | \$ |
| 1945: | | |
| In cylinders | 6,133,176 | 481,088 |
| Solid | 352,258 | 23,591 |
| 1946: | | |
| In cylinders | 6,426,615 | 489,080 |
| Solid | 394,430 | 27,081 |
| 1947: | | |
| In cylinders | 8,066,953 | 606,033 |
| Solid | 468,821 | 33,184 |
| 1948: | | |
| In cylinders | 8,819,638 | 694,329 |
| Solid | 569,959 | 38,356 |
| 1949: | | |
| In cylinders | 10,774,894 | 886,461 |
| Solid | 1,239,520 | 82,149 |

TABLE 7. Employees and their Earnings in the Compressed Gases Industry, 1949 and 1950

| Province | Number of employees | | | | | Earnings | | |
|------------------------|------------------------|--------|--------------------|--------|-------|------------------------|--------------------|-----------|
| | Supervisory and office | | Production workers | | Total | Supervisory and office | Production workers | Total |
| | Male | Female | Male | Female | | | | |
| 1949 | | | | | | \$ | \$ | \$ |
| Quebec | 61 | 45 | 173 | — | 279 | 260,251 | 468,979 | 729,230 |
| Ontario | 135 | 115 | 249 | 1 | 500 | 716,794 | 671,855 | 1,388,649 |
| Alberta | 34 | 19 | 67 | — | 120 | 146,610 | 186,055 | 332,665 |
| British Columbia | 26 | 21 | 53 | 2 | 102 | 111,656 | 137,204 | 248,860 |
| Other provinces | 60 | 44 | 118 | — | 222 | 256,020 | 275,480 | 531,500 |
| Canada | 316 | 244 | 660 | 3 | 1,223 | 1,491,331 | 1,739,573 | 3,230,904 |
| 1950 | | | | | | | | |
| Quebec | 63 | 47 | 165 | — | 275 | 281,764 | 477,810 | 759,574 |
| Ontario | 131 | 114 | 259 | — | 504 | 675,236 | 675,727 | 1,350,963 |
| Alberta | 30 | 19 | 73 | — | 122 | 134,352 | 166,548 | 320,900 |
| British Columbia | 29 | 21 | 57 | 1 | 108 | 100,242 | 162,031 | 262,273 |
| Other provinces | 65 | 42 | 124 | — | 231 | 252,673 | 293,215 | 545,888 |
| Canada | 318 | 243 | 678 | 1 | 1,240 | 1,444,267 | 1,795,331 | 3,239,598 |

List of Firms in the Compressed Gases Industry, 1950

| Name of Firm | Location of Plant |
|--|---|
| Liquid Carbonic Canadian Corporation Limited, H.O. 2120 Cabot St., Montreal, Quebec. | Dartmouth, Nova Scotia; Montreal, Quebec; Quebec, Quebec; Toronto, Ontario; St. Boniface, Manitoba; Edmonton, Alberta; Vancouver, British Columbia. |
| L'Air Liquide Society & Canadian Liquid Air Co. Limited H.O. 1111 Beaver Hall Hill, Montreal, Quebec. | St. John's, Newfoundland; Halifax, Nova Scotia; Sydney, Nova Scotia; Moncton, New Brunswick; Montreal, Quebec; Sorel, Quebec; Toronto, Ontario; London, Ontario; Hamilton, Ontario; Winnipeg, Manitoba; Regina, Saskatchewan; Calgary, Alberta; Edmonton, Alberta; Vancouver, British Columbia. |
| Dominion Oxygen Company, Limited H.O. Canada Life Building, 340 University Ave., Toronto, Ontario. | Arvida, Quebec; Quebec, Quebec; Montreal, Quebec (2); Shawinigan Falls, Quebec; Sault Ste. Marie, Ontario; Toronto, Ontario; Welland, Ontario; Merriton, Ontario; St. Boniface, Manitoba; Saskatoon, Saskatchewan; Vancouver, British Columbia. |
| Imperial Oxygen Limited H.O. 8408 Decarie Blvd., Montreal, Quebec. | Montreal, Quebec (2); Toronto, Ontario; Windsor, Ontario. |
| Ohio Chemical Canada Limited, 2535 St. James St. W., Montreal, Quebec. | Montreal, Quebec; Toronto, Ontario. |
| Alberta Oxygen & Acetylene Co. Ltd., 142nd Street at 108th Avenue, Edmonton, Alberta. | Edmonton, Alberta. |
| Canadian Industries, Limited, H.O. 1135 Beaver Hall Hill, Montreal, Quebec. | Toronto, Ontario. |
| Canada Packers Limited | 2200 St. Clair Ave. W., Toronto, Ontario. |
| Lever Brothers, Limited | 299 Eastern Ave., Toronto, Ontario. |
| Peoples Gas Supply Co., Ltd. | 2-10 Mill St., Ottawa, Ontario. |
| Procter & Gamble Co. of Canada, Ltd. | Burlington St. E., Hamilton, Ontario. |
| Swift Canadian Co., Limited | 1960 St. Clair Ave., Toronto, Ontario. |
| A.C. Wickman (Canada) Limited | Etobicoke, Ontario. |
| Western Oxygen Company Limited | Armstrong, British Columbia; Cranbrook, British Columbia. |
| Western Propane Limited | Turner Valley, Alberta. |



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