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THE ADHESIVES INDUSTRY

1958

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> The results of the annual Census of Industry are published by the Dominion Bureau of Statistics in a series of industry reports which are released each year as the compilations are completed. Reports for industries classified to the Chemicals and Allied Products Major Group are listed below, along with current and annual publications of related interest. Similar reports are issued for other industries. A complete catalogue of publications of the Bureau is available on request from the Information Services Division, Dominion Bureau of Statistics, Ottawa, or from the Queen's Printer, Ottawa.

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JUL 2 9 1960

EXPLANATORY NOTES

This report is one in a series of about 130 publications which present the results of the 1958 Census of Manufactures. Most reports in this series refer to specific industries, but there are summary reports for Canada and the provinces and for major industry groups. An annual Census of Manufactures has been carried out by the Dominion Bureau of Statistics since 1916.

Industry statistics given in these reports refer to number of establishments, employees, salaries and wages, cost of materials, supplies, fuel and electricity, gross value of shipments, inventories and value added by manufacturing. Details of materials used and products shipped are also given. Descriptions of the principal industry statistics, with special reference to 1958, are as follows:

Period Covered

Firms are asked to submit figures for the calendar year, if at all possible, and most reports are on this basis. Financial year reports for periods differing from the calendar year are accepted in instances where the firms find it impossible to supply calendar year data from accounting records. However the data on employees, salaries and wages are requested on a calendar year basis in all cases.

Establishment

Data for the annual census is collected on an establishment basis. A firm with more than one plant is required to file a report for each plant. In most cases an establishment is a complete factory. Sometimes, however, a plant is divided into two or more establishments when it carries out operations classifiable to different industries and when separate accounting records are available. Usually the statistics for an establishment relate only to the manufacturing activities. Other activities such as construction at the plant by its own employees, wholesale or retail activities carried on at the plant location, etc., are not included. Plants engaged solely in repair work (except in the case of furniture, shipbuilding, boat building, aircraft and railway rolling stock industries) are not included but plants occupied in assembling parts into complete units are included.

Employees

Administrative and office employees include all executives and supervisory officials such as presidents, vice-presidents, secretaries, treasurers, etc., together with managers, professional and technical employees, superintendents and factory supervisors above the working foremen level and clerical employees. Working owners and partners are also included in this category. Production and related workers include all other factory workmen whether paid on a monthly, weekly, hourly or piece-work basis. Working foremen doing work similar to that of the employees they supervise are included, as are maintenance, warehousing and delivery staffs. Employees on new construction work, in retail or wholesale operations, on outside piece work etc., are not included.

Production workers are reported by months, an average for the year being obtained by summing the monthly figures and dividing by twelve. This procedure is followed even though the plant did not operate in all months. Figures on employment refer to calendar years whether or not some establishments reported other data on a financial year basis.

Salaries and Wages

Salaries and wages refer to gross earnings of the employees described above, including salaries, wages, commissions, bonuses, the value of room and board where provided, deductions for income tax and social services such as sickness and unemployment insurance, pensions, etc., as well as any other allowances forming part of the employees' wages. Payments for overtime are included.

Salaries refer to amounts paid to administrative and office employees. Withdrawals by working owners or partners for normal living expenses for self and family are included but not their withdrawals for income tax. Wages refer to the amounts paid to production and related workers as defined above. Data on earnings refer to the calendar year whether or not some establishments reported other data on a financial year basis.

Cost of Fuel and Electricity

Figures for fuel refer to amounts actually used, (including fuel used in cars and trucks), not to purchases unless the quantities are the same. Values refer to the laid-down cost at the works, including freight, duty, etc.

Materials and Supplies Used

Figures represent quantities and laid-down cost values, at the works, of materials and supplies actually used during the year whether purchased from others or received as transfers from other plants of the reporting company. Amounts paid to other manufacturers for work done on materials owned by the reporting company are included. Returnable containers or any other items charged to capital account are not included. Fuels are not included. Goods bought from others or received as transfers from other plants of reporting companies for resale without further processing are not included. Maintenance and repair supplies not chargeable to capital account are included.

Factory Shipments

Factory shipments refer to shipments of goods made from own materials either in the reporting plant or by other manufacturers on the basis of a charge to the reporting plant for work done. All products and by-products shipped from the establishment are included whether for domestic use, export, or for government departments. Transfer shipments to sales outlets, distributing warehouses or to other manufacturing units of the reporting firm are included. Goods bought or received as transfers and resold without further processing are not included. Values are computed on f.o.b. plant or plant warehouse basis, and do not include sales tax or excise duties. Values of containers not returnable are included. Amounts received in payment for work done on materials owned by others are included.

In a few industries such as shipbuilding, aircraft, etc., where work on principal products extend over a relatively long period, the value of production is recorded rather than the value of shipments. For those industries production is computed from the value of deliveries of complete units during the year plus the value of work done during the year on unfinished units less the value of work done in previous years on finished units delivered in the year under review.

Inventories

Values represent the book values of manufacturing inventories owned and held at the reporting plant. Figures include inventories held in warehouses or selling outlets which have been included with plant operations for purposes of reporting shipments.

Value Added by Manufacturing

Figures are computed from value of shipments plus or minus changes in inventories of finished goods and goods in process less cost of materials, fuel and electricity. This figure is sometimes referred to as net production.¹

Standard Industrial Classification

The Standard Industrial Classification Manual, prepared by the Dominion Bureau of Statistics, provides for 135 three-digit industries in the manufacturing sector, arranged in 17 major groups. Reporting establishments are classified or allotted to specific industries on the basis of the value of principal products made or shipped.

Short Forms

Prior to 1949 all manufacturing firms, regardless of size, were required to complete a standard form annually covering all census details, but for later years an effort was made to ease the reporting burden for smaller firms which usually do not maintain regular records in the required detail. A modified or short form was introduced in 1949 asking for the total value of shipments only, or in industries with a large number of small firms, for total value of shipments and quantities and values of a few principal products. Using the ratio of value of shipments in the current year to value of shipments in the base year, 1948, estimates of other census data were made for each plant for inclusion in the regular compilations. In general, the cut-off point for short forms was set at \$50,000 gross value of shipments annually, but there were lower cut-offs for a number of industries in which the small firms accounted for a larger share of total shipments. About 40 per cent of the total number of establishments reported on the modified or short form. They accounted for less than 3 per cent of the total value. In 1958, to establish a new base year, the small firms were again asked to report data on employees, salaries and wages, and other principal statistics together with some detail on material and products.

SYMBOLS

The interpretation of the symbols used in the tables throughout this publication is as follows:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.
- P preliminary figures.
- revised figures.

¹ To arrive at the National Accounts concept of "gross domestic product at factor cost", it would be necessary to subtract also the cost of office supplies used, advertising, insurance and other goods and services obtained from other businesses. Data on these inputs are not collected on the annual Census of Manufactures. Value added figures for "The primary industries and construction" are published in D.B.S. publication 61-202, Survey of Production.

THE ADHESIVES INDUSTRY

1958

This report on the Adhesives Industry in Canada covers the operations of all factories which made glue, mucilage, paste or special adhesives cements as their chief products. In 1958 there were 28 establishments in this group, 14 being located in Ontario; 10 in Quebec; 3 in British Columbia and 1 in Manitoba.

Factory shipments by firms in the Adhesives Industry were valued at \$14,380,563 in 1958, an increase of 4.9 per cent over the \$13,707,648 reported in 1957. The number of employees increased from 627 to 642, with a corresponding increase in salaries and wages from \$2,321,588 in 1957 to \$2,556,561 in 1958. The cost of fuel and electricity at \$439,027 showed a decrease from the \$456,150 reported in 1957 and the value of materials used directly in manufacturing processes was 10 per cent higher at \$7,120,720.

Output of adhesives during 1958, including small amounts from other industries, was as follows: linoleum cement, 15,323,000 pounds at \$818,000; rubber cement, 1,105,000 gallons at \$2,888,000; bone and hide glue, 10,192,000 pounds at \$2,437,000; casein glue, 891,000 pounds at \$240,000; flexible glue, 2,715,000 pounds at \$638,000; synthetic resin glue, 37,666,000 pounds at \$5,641,000; vegetable glues, 22,692,000 pounds at \$2,744,000; mucilage and paste valued at \$652,000; fish glue valued at \$326,000 and miscellaneous adhesives at \$2,519,000. The total value of all adhesives, including mucilage and paste was \$18,903,000 in 1958 compared with \$19,463,000 in 1957 and \$17,392,000 in 1956.

Note: Due to lack of inventory data, figures for value added by manufacture prior to 1954 were obtained by subtracting the cost of materials used, including fuel and electricity, from the total value of factory shipments. In 1954 and 1955 the "Value added" adjustment incorporated the increase or decrease to shipments values resulting from changes in the value of inventories over the period. For these two years, the adjustments that were made used only the change in finished product inventory owned by manufacturers. Beginning with 1956 the calculation of the "Value added" figure was further adjusted to take into account the "Goods in process" as well as the finished goods held at plant or plant warehouse.

| CABLE 1. | Principal | Statistics of the | Adhesives | Industry, | Significant | Years | 1929-58 |
|----------|-----------|-------------------|-------------|-----------|-------------|-------|---------|
| | | and by Prov | inces, 1957 | and 1958 | | | |

| Year and province | Estab- lish- ments | Em- ployees | Salaries and wages | Cost of fuel and electricity at plant | Cost of materials at plant | Value added by manufacture ¹ | Gross selling value of products ¹ |
|--|--|--|---|---|--|---|---|
| | nun | nber | | | dollars | | |
| 1929 1932 1937 1939 1943 1944 1945 1955 1956 | 13 14 18 19 22 22 25 28 29 29 | 267 229 416 427 651 674 749 621 576 611 | 321, 296 263, 142 483, 819 520, 662 1, 091, 721 1, 223, 091, 721 1, 727, 848 1, 987, 142 1, 934, 597 2, 152, 918 | $\begin{array}{c} 68, 157\\ 53, 300\\ 116, 842\\ 89, 573\\ 211, 889\\ 222, 384\\ 339, 839\\ 367, 922\\ 369, 578\\ 412, 238\\ \end{array}$ | 962,940 457,146 901,194 905,411 3,037,649 3,749,579 4,218,359 6,213,522 5,030,858 5,423,688 | $\begin{array}{c} 799, 547\\ 576, 769\\ 886, 101\\ 1, 115, 822\\ 2, 486, 613\\ 2, 812, 350\\ 3, 266, 366\\ 5, 946, 176\\ 5, 368, 263\\ 6, 456, 530\\ \end{array}$ | $\begin{array}{c} 1,830,644\\ 1,087,215\\ 1,904,137\\ 2,110,806\\ 5,736,151\\ 6,784,313\\ 7,824,564\\ 12,772,801\\ 10,908,938\\ 12,329,512 \end{array}$ |
| 1957 | 10.0 | | | | | | |
| Quebec Ontario British Columbia Manitoba | 10 15 3 1 | 133 478 } 16 | 477,883 1,794,008 49,697 | 47,527 405,439 3,184 | 1,623,128 4,637,970 214,246 | 1,458,489 4,956,575 305,297 | 3, 137, 698 10, 051, 918 518, 032 |
| Canada | 29 | 627 | 2, 321, 588 | 456, 150 | 6, 475, 344 | 6, 720, 361 | 13, 707, 648 |
| 1958 | | | 1.00 | | | | |
| Quebec Ontario British Columbia Manitoba | 10 14 3 1 | 140 485 } | 585, 299 1, 913, 368 57, 894 | 52, 763 382, 770 3, 494 | 1, 883, 061 4, 984, 929 252, 730 | 1,610,921 4,862,758 398,945 | 3, 504, 397 10, 235, 749 640, 417 |
| Canada | 28 | 642 | 2, 556, 561 | 439, 027 | 7, 120, 720 | 6, 872, 624 | 14, 380, 563 |

¹ See note to text.

T

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

| | Raw materials and supplies | Goods in process | Finished goods of own manufacture | Total |
|-----------------|----------------------------------|---------------------|---|-------------|
| | | dol | lars | |
| Opening: | | | | |
| Quebec | 262, 333 | 2,588 | 150, 019 | 414,940 |
| Ontario | 726, 327 | 60, 894 | 870, 809 | 1,658,030 |
| Other provinces | 48, 514 | - | 28, 165 | 76, 679 |
| Canada | 1, 037, 174 | 63, 482 | 1, 048, 993 | 2, 149, 649 |
| Closing: | | | | |
| Quebec | 277, 972 | 15,874 | 179,081 | 472, 927 |
| Ontario | 744, 161 | 49, 312 | 877, 099 | 1, 670, 572 |
| Other provinces | 48,666 | - | 42, 917 | 91, 583 |
| Canada | 1, 070, 799 | 65, 186 | 1,099,097 | 2, 235, 082 |

TABLE 2. Inventories,¹ 1958

¹ (a) Book value of all manufacturing inventories owned and held at plant and plant warehouses.
 (b) Beginning with 1954, information on the value of year-end inventory holdings at plant and plant warehouses is being collected as part of the annual Census of Industry. These data were formerly collected by a separate survey. The summarized results for the Adhesives Industry for the year under review are shown in the above table.
 (c) The opening inventory for 1958 does not necessarily agree with the closing inventory for 1957, because of the addition of new plants, the transfer of plants to other industries and plants going out of business, etc. However, the value added figures for the previous year have not been recalculated to allow for the changes mentioned above.

| TABLE 3. Products Made | in the | Adhesives | Industry, | 1957 | and | 1958 |
|-------------------------------|--------|-----------|-----------|------|-----|------|
|-------------------------------|--------|-----------|-----------|------|-----|------|

| | 195' | 7 | 19 58 | |
|---------------------------------|--------------|----------------------------------|--------------|----------------------------------|
| Product | Quantity | Value of factory shipments | Quantity | Value of factory shipments |
| | | \$ | | \$ |
| Cement: | | | | |
| Linoleum lb. | 8, 875, 850 | 409,831 | 8, 902, 975 | 418, 230 |
| Other (rubber, etc.) | | 1, 198, 211 | | 1, 281, 054 |
| Glue: | | | | |
| Bone and hide ¹ lb. | 11, 311, 955 | 2, 649, 121 | 10, 191, 811 | 2, 436, 807 |
| Casein | 533,356 | 148,916 | 561,019 | 140, 266 |
| Flexible | 2,668,561 | 624, 473 | 2, 715, 410 | 638, 122 |
| Synthetic resin | 10, 240, 538 | 2, 614, 898 | 8, 845, 889 | 2,603,333 |
| Vegetable: | | | | |
| Dry | 2,863,603 | 375, 174 | 2, 351, 994 | 300, 303 |
| Liquid | 20, 373, 670 | 2, 489, 749 | 20, 340, 326 | 2, 443, 841 |
| Other | | 521, 568 | | 278, 088 |
| Mucilage and paste lb. | 3, 759, 849 | 337, 083 | 4, 473, 384 | 547, 077 |
| All other products ² | | 2, 338, 624 | | 3, 293, 442 |
| Totals | | 13, 707, 648 | | 14, 380, 563 |

¹ See footnote to Table 11.

² Includes sealing wax, grease, tallow, tankage, blended starches, dextrines, steamed bone and other such products which were reported by only one or two firms in this industry.

THE ADHESIVES INDUSTRY

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TABLE 4. Materials Used in the Adhesives Industry, 1957 and 1958

| | | 1957 | | 1958 | |
|--|-----------|-------------|------------------|-------------|------------------|
| Material | | Quantity | Cost at works | Quantity | Cost at works |
| | | | \$ | | \$ |
| Acid, hydrochloric (mutiatic) | 1b. | 26,357 | 1,007 | | |
| Acid, sulphuric (as 100%) | | 1,846,882 | 26, 819 | 1, 299, 040 | 18, 87 |
| Alcohol, ethyl, denatured or not (including tax) | Imp. gal. | 38,879 | 33, 988 | 41,691 | 31, 5: |
| Alcohol, isopropyl | | 29, 241 | 2, 877 | | |
| Alcohol, methyl | | 14,000 | 10, 319 | 23.515 | 13, 2 |
| Bones | ton | 15, 193 | 498, 949 | 14,432 | 448,0 |
| Borax | 1b. | 766,074 | 33, 470 | 862, 308 | 41,6 |
| lides and hide trimmings | ton | 18, 509 | 247, 543 | 21, 531 | 303.0 |
| Casein | lb. | 466, 775 | 116, 183 | 487, 194 | 130, 8 |
| China-clay | 44 | 6, 457, 940 | 91,855 | 5, 488, 224 | 95, 2 |
| Dextrine | | 8, 311, 374 | 793, 633 | 7, 799, 630 | 727,8 |
| Flour: | | | - PA 1 | | |
| Potato | 44 | 165, 582 | 13, 153 | 261, 596 | 19,8 |
| Soyabean | 6.0 | 6,679 | 517 | | |
| Tapioca | | 421,820 | 46, 626 | 382,748 | 41,8 |
| Wheat | 44 | 2, 777, 735 | 124, 541 | 3, 786, 725 | 163, 3 |
| Other | 14 | 263, 305 | 16, 048 | 242, 174 | 13, 3 |
| °ormaldehyde ¹ | ** | 2, 460, 578 | 108, 743 | 100, 733 | 9,7 |
| ilucose | 4.6 | 619,724 | 45, 114 | 609, 494 | 44, 0 |
| Glue: | | | | | |
| Bone and hide | | 1,068,423 | 265, 320 | 1, 245, 111 | 333, 6 |
| Fish | • 4 | 736, 453 | 144, 319 | 852, 265 | 175,7 |
| lycerine | | 135, 987 | 39,667 | 147, 723 | 42, 2 |
| Jums and resins, natural | 44 | 292, 411 | 67, 895 | 547,717 | 72,9 |
| Jignin liquor | Imp. gal. | 343, 634 | 43, 279 | 294, 377 | 34, 3 |
| lime | ton | 587 | 9,738 | 611 | 11,4 |
| Phenol | 1b. | 15, 217 | 3, 218 | 17,929 | 3,9 |
| Resins, synthetic | 6.6 | 4, 992, 169 | 916,070 | 5, 972, 763 | 1, 172, 0 |
| Rubber or latex | 6.6 | 1,016,774 | 289, 414 | 1, 268, 175 | 341,0 |
| odium carbonate (soda ash) | 11 | 75, 973 | 2, 727 | 98, 414 | 3, 7 |
| Sodium fluoride | | 46, 843 | 6, 380 | 42, 314 | 6, 2 |
| Sodium hydroxide (caustic soda) | | 183, 367 | 10, 310 | 158,993 | 12, 2 |
| Solvents (benzol, naphtha, etc.) | Imp. gal. | 227, 921 | 166,095 | 320, 912 | 220, 3 |
| Starch, corn | lb. | 1, 320, 468 | 97,668 | 1, 317, 743 | 98,9 |
| Sulphur | 4.4 | 153,730 | 2,824 | 122,600 | 2, 1 |
| Fallow and fat | 14 | 105,047 | 18, 185 | | |
| Jrea, crystal | 4.6 | 1, 302, 058 | 85,620 | 395, 561 | 26,4 |
| Whiting | | 230, 140 | 4, 877 | 358, 513 | 10,0 |
| Zinc sulphate | | 147, 113 | 8, 279 | 138,740 | 7, 3 |
| Containers and packing materials | | | 715, 371 | | 895, 3 |
| All other materials | | | 1, 366, 712 | | 1, 547, 5 |
| Totals | | | 6, 475, 344 | 6 5 6 | 7, 120, 7 |

¹ 1958 data reported in terms of 100% solids content as compared with gross weight in previous years.

| The second second second second | 1 95 | 57 | 1958 | | |
|---------------------------------|--------------|----------------------------------|----------------|----------------------------------|--|
| Item | Quantity | Value of factory shipments | Quantity | Value of factory shipments | |
| | | \$ | | \$ | |
| Cement: | | | C. S. C. N. S. | | |
| Linoleum lb. | 15, 959, 000 | 861,000 ¹ | 15, 323, 000 | 818,000 | |
| Rubber | 1,405,000 | 3,060,000 | 1,105,000 | 2, 888, 000 | |
| Other | | 627,000 | | 837,000 | |
| Glue : | | | | | |
| Bone and hide ¹ lb. | 11, 312, 000 | 2,649,000 | 10, 192, 000 | 2,437,000 | |
| Casein | 839,000 | 237,000 | 891,000 | 240,000 | |
| Flexible | 2,669,000 | 624,000 | 2,715,000 | 638,000 | |
| Fish | 2, 410, 000 | 761,000 | 1, 185, 000 | 326,000 | |
| Synthetic resin 1b. | 37, 930, 000 | 5, 579, 000 | 37,666,000 | 5,641,000 | |
| Vegetable: | | | 11124 | | |
| Dry | 2,864,000 | 375,000 | 2,352,000 | 300,000 | |
| Liquid | 20, 374, 000 | 2, 490, 000 | 20, 340, 000 | 2, 444, 000 | |
| Other | | 522,000 | | 278,000 | |
| Mucilage and paste | | 435,000 | | 652,000 | |
| Adhesives, other | | 1,243,000 | | 1,404,000 | |
| Totals | | 19, 463, 000 | | 18, 903, 000 | |

TABLE 5. Factory Shipments of Adhesives, from All Industries, 1957 and 1958

¹ See footnote to table 11.

TABLE 6. Principal Statistics of the Adhesives Industry, classified according to Type of Ownership 1957 and 1958

| Туре | Estab- lish- ments | Employees | Salaries and wages | Cost at plant of materials used | Selling value of factory shipments |
|-------------------------------------|--------------------------|-----------|--------------------------|---------------------------------------|--|
| the set of the first the set of the | nu | mber | | dollars | |
| 1957 | | | | | |
| Individual ownership Partnership | 4 | } 14 | 33,475 | 64, 041 | 157, 866 |
| Incorporated companies | 24 | 613 | 2,288,113 | 6,411,303 | 13,549,782 |
| Totals | 29 | 627 | 2, 321, 588 | 6, 475, 344 | 13, 707, 648 |
| 1958 | | | 1.1 | | |
| Individual ownership | 3 | } 12 | 33, 0 <mark>60</mark> | 58,732 | 1 33, 960 |
| Incorporated companies | 24 | 630 | 2, 523, 501 | 7,061,988 | 14, 246, 603 |
| Totals | 28 | 642 | 2, 556, 561 | 7, 120, 720 | 14, 380, 563 |

| Establishments reporting value of factory shipments | Estab- lish- ments | Employees | Salaries and wages | Cost at plant of materials used | Selling value of factory shipments |
|--|--------------------------|------------------------|--|--|--|
| | nur | nber | | dollars | |
| 1957 | | | | | |
| Under \$10,000 \$10,000 to \$24,999 \$25,000 '' \$49,999 | 2 2 | } 7 | 12,675 | 12,868 | 43, 251 |
| \$25,000 ** \$49,999 \$50,000 ** \$99,999 | 1 | 12 | 31, 180 | 60,116 | 174, 842 |
| \$100,000 '' \$199,999 \$200,000 '' \$499,999 \$500,000 '' \$999,999 \$1,000,000 '' \$4,999,999 | 6 7 4 5 | 43 68 129 368 | 154.021 233.708 561,562 1,328,442 | 604,974 1,345,906 1,492,741 2,958,739 | 1,040,392 2,192,557 3,304,792 6,951,814 |
| Totals | 29 | 627 | 2, 321, 588 | 6, 475, 344 | 13, 707, 648 |
| 1958 | | | | | |
| Jnder \$10,000 \$10,000 to \$24,999 | 2 1 | }4 | 9,700 | 9,550 | 28, 270 |
| \$25,000 '' \$49,999 \$50,000 '' \$99,999 | 2 | 16 | 40,427 | 67, 360 | 210, 175 |
| \$100,000 '' \$199,999 \$200,000 '' \$499,999 | 38 | 20 87 | 81,982 319,562 | 296, 119 1, 493, 266 | 487, 495 |
| \$500,000 ** \$999,999 \$1,000,000 ** \$4,999,999 | 4 | 119 396 | 566, 542 | 1,468,597 3,785,828 | 2,862,796 |
| Totals | 28 | 642 | 2, 556, 561 | 7, 120, 720 | 14, 380, 563 |

TABLE 7. Principal Statistics of the Adhesives Industry in Canada, grouped according to Size of Establishment, 1957 and 1958

TABLE 8. Capital and Repair Expenditures in the Adhesives Industry, 1953-58

| Year | Total capital and repair expenditures | Year | Total capital and repair expenditures | |
|------|---|-------|---|--|
| | \$'000 | | \$'000 | |
| 1953 | 578 | 1956 | 872 | |
| 1954 | 598 | 1957 | 1,010 | |
| 1955 | 445 | 1958P | 595 | |

TABLE 9. Employees and their Earnings in the Adhesives Industry, 1957 and 1958

| and the second | | E | Imployee | s | | S | Earnings | |
|--|---------------------------|---------------|-----------------------|--------------|------------------|---------------------------------|------------------------------------|------------------------------------|
| Province | Supervisory and office | | Production workers | | Total | Supervisory and | Production | Total |
| | Male | Female | Male | Female | | office | workers | 7 0 161 |
| | | | number | | | | dollars | Li a pe |
| 1957 | | | | | | | | |
| Quebec Ontario Manitoba and British Columbia | 36 91 5 | 33 56 3 | 63 308 8 | 1 23 - | 133 478 16 | 246,403 636,200 24,108 | 231,480 1,157,808 25,589 | 477, 883 1, 794, 008 49, 697 |
| Canada | 132 | 92 | 379 | 24 | 627 | 9 <mark>06,</mark> 711 | 1, 414, 877 | 2, 321, 588 |
| 1958 | | | | | | | | |
| Quebec Ontario Manitoba and British Columbia | 40 104 5 | 31 58 4 | 67 300 8 | 2 23 — | 140 485 17 | 323, 918 802, 859 28, 619 | 261, 381 1, 110, 509 29, 275 | 585, 299 1, 913, 368 57, 894 |
| Canada | 149 | 93 | 375 | 25 | 642 | 1, 155, 396 | 1,401,165 | 2, 556, 561 |

| Month | | 1957 | | 1958 | | |
|--|---|--|--|---|--|--|
| MOILI | Male | Female | Total | Male | Female | Total |
| | number | | | | | |
| January February March April May June June July August September October November December | 387 375 379 371 372 375 372 376 382 385 388 388 388 | 23 23 22 23 23 23 24 22 24 25 25 25 25 | 410 398 401 394 395 399 394 400 407 410 413 411 | 403 376 367 365 369 329 372 378 389 390 381 | 26 26 25 24 21 22 22 27 27 27 27 28 28 28 25 | 429 402 392 389 386 391 351 399 405 417 418 406 |
| Average | 379 | 24 | 403 | 375 | 25 | 400 |

TABLE 10. Production Workers in the Adhesives Industry, by Months, 1957 and 1958

TABLE 11. Imports of Adhesives, 1957 and 1958

| Item | 1957 | | 1958 | | |
|-----------------------------|-------------|----------|-------------|-------------|--|
| | pounds | \$ | pounds | \$ | |
| Glue: | | | | | |
| Animal ¹ | 4, 126, 209 | 707,837 | 7, 181, 373 | 1, 147, 011 | |
| Synthetic resin | 2, 460, 582 | 776, 522 | 2,836,508 | 886, 310 | |
| Vegetable | 22, 869 | 3,133 | | | |
| Other | 180, 701 | 59, 713 | 104,099 | 36,758 | |
| Mucilage and adhesive paste | 352,755 | 90,130 | 393, 250 | 92, 400 | |
| Rubber cement | | 932,067 | | 838, 475 | |

¹ Some of the material shown under this heading was mixed with domestically produced bone and hide glue to increase the bonding strength of the latter and, therefore, appears again in the figures shown in tables 3 and 5 for bone and hide glue.

| TABLE 12. Fuel and Electricity | Used in the Adhesives | Industry, 1957 and 1958 |
|--------------------------------|-----------------------|-------------------------|
|--------------------------------|-----------------------|-------------------------|

| Vind | 19 | 957 | 1958 | | |
|--|--------------------------------|-------------------|-----------|---------------|--|
| Kind | Quantity | Cost at works | Quantity | Cost at works | |
| | | \$ | | \$ | |
| Bituminous coal: | | | | | |
| (a) From Canadian mines ton (b) Imported | 5,905 21 ,254 | 66,258 231,019 | 25,605 | 271,813 | |
| Coke | 46 | 1,012 | 6 | 111 | |
| Gasoline (including gasoline used in cars and trucks) | 91, 721 | 34, 456 | 96,148 | 35, 515 | |
| Fuel oil | 442,060 | 55,519 | 517,174 | 60,079 | |
| Wood cord | 8 | 176 | 10 | 200 | |
| Liquefied petroleum gas Imp. gal. | - | _ | 870 | 329 | |
| Natural gas | 1,753 | 1,905 | 3,962 | 4,212 | |
| Other fuel | | 8, 331 | | 381 | |
| Electricity kwh. | 5, 203, 080 | 57, 474 | 4,813,960 | 57.392 | |
| Steam purchased | | | | 8,995 | |
| Totals | | 456, 150 | | 439, 027 | |
| Electricity generated for own use kwh. | 1,140,000 | _ | 1,288,000 | 1 | |

THE ADHESIVES INDUSTRY

| Type of equipment | Driving generators | Not driving generators |
|---|-----------------------|------------------------|
| | horse | power |
| Prime movers: | | |
| Steam engines | 800 | 250 |
| Totals | 800 | 250 |
| Electric motors (one quarter horsepower and over) | _ | 3,807 |

TABLE 13. Total Horsepower Rating of Power Equipment in Use or Available for Use at the End of 1958

List of Firms in the Adhesives Industry, 1958

| Name | Address | | |
|--|---------------------------------|--|--|
| Quebec: | | | |
| Arol Chemical Co. Ltd. | 2520 Bates Rd. Montreal | | |
| B.B. Chemical Co. of Canada | | | |
| Canadian Adhesives Ltd. | | | |
| Dominion Flour Paste Co., The | | | |
| Dural Products Ltd. | | | |
| General Adhesives | | | |
| Industrial Adhesives Ltd. | | | |
| National Starch & Chemical (Canada) Ltd. | | | |
| Swift Canadian Co. Ltd. | | | |
| Wolverine Products & Sales Limited | | | |
| | | | |
| Ontario: | | | |
| Borden Chemical Co. (Canada) Ltd., The | West Hill | | |
| Canada Glue Co. Limited | | | |
| Continental Chemical Company | | | |
| Deplex Adhesives Ltd. | | | |
| Harris, W., & Co., Limited | | | |
| Industrial Adhesives Ltd. | | | |
| Le Page's Inc. | 404 Kipling Ave., Toronto | | |
| Machon Sealing Wax Company, The | 678 Parliament St., Toronto | | |
| McCormick & Co. (Canada) Limited | 164 Bentworth, Toronto | | |
| National Starch & Chemical (Canada) Ltd. | 363-379 Wallace Ave., Toronto | | |
| Stadex-Pirie Ltd. | 119 Water St., Brockville | | |
| Stein-Hall Limited | 1130 Dupont St., Toronto | | |
| Swift Canadian Co. Ltd. | 1960 St. Clair Ave. W., Toronto | | |
| Wolverine Cement Company Limited | 200 Grand River Ave., Brantford | | |
| | | | |
| Manitoba: | | | |
| Swift Canadian Co. Ltd. | Archibald St., St. Boniface | | |
| | | | |
| British Columbia: | | | |
| G.R. Chemicals Ltd. | 450 Vernon Dr., Vancouver | | |
| Swift Canadian Co. Ltd. | Brunette St., New Westminster | | |
| Universal Enterprises Ltd. | 236 Esplande E., N. Vancouver | | |





