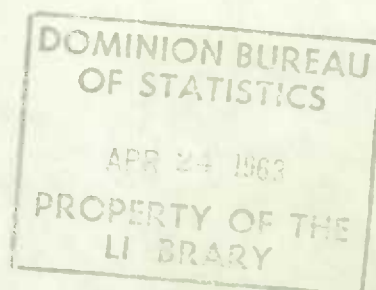


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GLASS AND GLASS PRODUCTS MANUFACTURERS 1960

Formerly The Glass and Glass Products Industry

STATISTICAL TABLES

ANNUAL CENSUS
OF MANUFACTURES

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SYMBOLS

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

... figures not appropriate or not applicable.

— nil or zero.

EXPLANATORY NOTES

This report is one in a series of about 140 publications which present the results of the 1960 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. Adoption of the revised Standard Industrial Classification for 1960 compilations has necessitated changes in titles of many reports in this annual series. The content of many industries has also been affected (see following note on Industrial Classification).

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 1960 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, ware-

housing 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 or 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 revised Standard Industrial Classification which has been introduced with the 1960 Census of Manufactures provides for a breakdown of the universe into 140 industries arranged in 20 major groups compared with 135 industries in 17 major groups in the old classification which was used in the compilations for the years 1949 to 1959 inclusive. It incorporates changes considered desirable on the basis of experience in using the earlier classification as well as those which take account of changes in the structure of Canadian industries associated with the rapid developments of the past decade. Full details are contained in the Standard Industrial Classification Manual, Catalogue No. 12-501, which is available from either the Queen's Printer or the Dominion Bureau of Statistics. Reporting establishments are classified or allotted to specific industries on the basis of the value of principal products made or shipped.

Many industries remain unchanged in the new classification but in many instances there have been substantial changes in content because of the shifting of establishments from one industry to another or in re-grouping of establishments. Where

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*.

changes have occurred the principal statistics for 1957, 1958 and 1959 have been re-compiled to provide data on a basis comparable with those for 1960.

Short Forms

Between 1949 and 1957, in an effort to ease the reporting burden for smaller firms, a short form was used asking for the total value of shipments only or, in a few cases where losses of detail were significant, for quantities and values of principal products. For purposes of publication, missing data were estimated on the basis of appropriate ratios. In general the cut-off point for these short forms was set at \$50,000 value of shipments. About 40% of the total number of establishments reported on the short form and accounted for less than 3 per cent of the total value of shipments.

In 1958, in order to establish a new base year, the small firms were asked to report all items of principal statistics together with some detail on materials and products.

For the 1959 Census, the short form was used again, but further steps were taken to ease the respondents' burden. First, the general limit for short forms was raised to \$100,000 value of shipments. In addition, a new intermediate form was developed. This form is a shortened version of the long form in that most of the general questions were pared down and the detailed lists of materials and products were limited to the more important items. The general limits for firms in this category were set at between \$100,000-\$500,000 value of shipments, but in the case of both the short and intermediate forms there were lower cut-offs for a number of industries in which the smaller firms accounted for a larger share of total shipments. On the other hand, limits were raised where this could be done without a significant loss of coverage. On most of the short forms for 1959, in addition to total value of shipments, data on principal products were requested. In a few industries, where loss of employment and earnings data were considered too large because of higher cut-offs, a question on total payroll was placed on the short form. This practice was followed again in 1960.

The intermediate and long forms provide complete data for the compilation of all elements of principal industry statistics and the details of materials and products. The one-page short form, although containing data on principal products and total value of shipments, does not request information on other elements of principal statistics such as value of inventories, materials, fuel and electricity and, in most cases, employment and salaries and wages, nor does it contain detailed data on volume and value of materials used. For purposes of compiling aggregates of principal statistics by industry and by geographic location, the missing data for each establishment were estimated for 1959 by using, in general, ratios based on the change in the value of shipments between 1958 and 1959. The proportion of the estimated data was generally less than 5 per cent of the total in each category of principal statistics.

GLASS AND GLASS PRODUCTS MANUFACTURERS

1960

Data presented in this report under the heading of Glass and Glass Products Manufacturers reflect implementation of the revised Standard Industrial Classification (SIC) which is being used by the Dominion Bureau of Statistics in its compilation of 1960 industry statistics—see item "Standard Industrial Classification" in the Explanatory Notes section of this report. For statistical purposes the industry titled Glass and Glass Products Manufacturers in the revised Standard Industrial Classification covers the operations of establishments primarily engaged in manufacturing flat glass, plate glass, glass containers, glassware, ovenware, glass brick, fibrous glass products except textile fabrics, mirrors, stained, leaded and ornamented glass, glass novelties and other articles made from glass. This industry includes establishments primarily engaged in etching or painting glass or glassware. Establishments primarily engaged in manufacturing optical lenses and ophthalmic lenses are classified in the Scientific and Professional Equipment Manufacturers industry. And establishments primarily engaged in spinning glass yarns or weaving glass fabrics are classified in the Synthetic Textile Mills industry.

In many instances, adoption of the revised Standard Industrial Classification effected a radical shifting of manufacturing establishments as between industry groupings. However, in the case of establishments engaged in manufacturing glass and glass products, changes brought about by the implementation of the revised Standard Industrial Classification were minimal as evidenced in the comparative series of statistics presented in Tables 1A and 1B. Table 1A shows data for these establishments according to the "old" concept while Table 1B carries figures re-compiled on the "new" or revised Standard Industrial Classification basis.

There were 109 establishments classified as Glass and Glass Products Manufacturers in 1960; there being 37 in Quebec, 54 in Ontario, 5 in Mani-

toba, 1 in Saskatchewan, 6 in Alberta and 6 in British Columbia. Employees in the industry numbered 9,014; salaries and wages totalled \$36,711,533; fuel and electricity cost \$4,869,518; materials used in manufacturing processes cost \$40,248,466; and factory shipments were valued at \$104,542,563.

Pressed, blown and drawn glass was produced by 12 establishments classified as Glass Manufacturers in 1960. Shipments by these establishments were valued at \$62,553,640 and consisted of bottles and jars, ovenware, sheet and window glass. A total of 6,571 people were employed; salaries and wages paid amounted to \$26,558,555; and materials used cost \$21,687,153.

Ninety-seven other establishments classified as Glass Products Manufacturers were occupied mainly in manufacturing cut and bevelled glass such as mirrors and insulating multi-pane window units in 1960. Factory shipments of all products made in these establishments were valued at \$41,988,923. Employees numbered 2,443 and payments for salaries and wages totalled \$10,152,978. Materials used in manufacturing processes cost \$18,561,313 and fuel and electricity at plants amounted to \$719,557.

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.

TABLE 1A. Principal Statistics of the Glass and Glass Products Industry, Significant Years 1929-59
(Basis: Standard Industrial Classification in use prior to 1960)

Year	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost at plant of materials used	Value added by manufacture ¹	Selling value of factory shipments
	number				dollars		
1929	60	3,948	4,740,676	1,323,150	5,355,156	8,829,136	15,507,442
1933	66	2,597	2,586,370	717,701	2,950,309	4,162,785	7,830,795
1937	77	3,799	4,289,031	1,030,993	5,768,738	7,637,519	14,437,250
1939	73	3,372	3,948,603	888,316	4,559,732	7,081,002	12,529,050
1945	103	5,830	9,043,864	1,866,240	10,467,286	15,947,871	28,281,397
1946	114	5,921	9,278,360	1,863,561	10,583,240	15,158,454	27,605,255
1949	102	5,854	13,126,027	2,858,765	16,607,403	22,932,161	42,398,329
1955	108	7,870	26,291,404	4,173,712	31,000,677	45,139,201	80,830,622
1956	112	8,173	28,331,205	4,853,921	35,480,541	47,333,842	87,168,541
1957	115	7,946	28,317,234	4,973,762	34,881,568	51,191,256	90,823,646
1958	102	7,879	30,328,355	4,636,867	36,085,066	53,165,011	93,818,849
1959	101	8,842	34,967,391	4,948,320	42,896,582	61,670,605	107,747,430

¹ See note to text.

TABLE 1B. Principal Statistics, Glass and Glass Products Manufacturers, by Provinces, 1957 - 60
Basis: Standard Industrial Classification revised 1960

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost at plant of materials used	Value added by manufacture ¹	Selling value of factory shipments
1957	number		dollars				
Quebec	42	2,777	9,686,476	2,290,172	9,541,320		26,014,397
Ontario	60	4,500	16,627,136	2,618,957	22,559,240		57,898,320
British Columbia	8	69	183,795	5,419	255,435		474,937
All other provinces	6	609	1,850,232	61,823	2,724,096		6,674,210
Canada	116	7,955	28,347,639	4,976,371	35,080,091		91,061,873
1958							
Quebec	38	2,939	10,956,406	2,071,092	10,754,146		29,558,643
Ontario	52	4,262	17,170,240	2,501,663	22,290,482		56,720,286
British Columbia	5	35	127,237	3,608	248,530		459,052
All other provinces	8	651	2,112,639	63,835	2,976,558		7,344,945
Canada	103	7,887	30,366,522	4,640,198	36,269,716		94,082,926
1959							
Quebec	38	3,267	12,507,867	2,046,770	11,505,302		30,014,691
Ontario	50	4,817	19,891,967	2,836,138	27,639,651		68,815,564
British Columbia	5	31	98,548	5,717	270,570		459,082
All other provinces	9	735	2,510,115	61,879	3,670,579		8,689,216
Canada	102	8,850	35,008,497	4,950,504	43,086,102		107,978,553
1960							
Quebec	37	3,349	13,229,602	2,054,594	11,557,665	16,336,695	29,048,476
Ontario	54	4,824	20,497,117	2,706,772	24,336,921	38,779,538	65,374,514
British Columbia	6	36	105,585	5,026	255,333	204,132	463,862
All other provinces	12	805	2,879,229	103,126	4,098,547	5,525,161	9,655,711
Canada	109	9,014	36,711,533	4,869,518	40,248,466	60,845,526	104,542,563

¹ See note to text.

² The changeover to the new classification has delayed the recompilation of "value added" figures for years prior to 1960 and same will not be available until the next issue of this report.

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, Glass and Glass Products Manufacturers, by Sub-groups, 1959 and 1960

Basis: Standard Industrial Classification revised 1960

Year	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost at plant of materials used	Value added by manufacture ¹	Selling value of factory shipments
1959	number		dollars				
Glass manufacturers	10	6,339	24,828,185	4,256,588	20,962,410		61,999,557
Glass products manufacturers	92	2,511	10,180,312	693,916	22,123,692		45,978,996
Totals	102	8,850	35,008,497	4,950,504	43,086,102		107,978,553
1960							
Glass manufacturers	12	6,571	26,558,555	4,149,961	21,687,153	37,854,382	62,553,640
Glass products manufacturers	97	2,443	10,152,978	719,557	18,561,313	22,991,144	41,988,923
Totals	109	9,014	36,711,533	4,869,518	40,248,466	60,845,526	104,542,563

¹ See note to text.

² The changeover to the new classification has delayed the recompilation of "value added" figures for prior years and same will not be available until the next issue of this report.

TABLE 3. Inventories¹: Glass and Glass Products Manufacturers, 1960

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
dollars				
By provinces				
Opening:				
Quebec	2,607,147	96,001	3,605,103	6,308,251
Ontario	6,913,017	552,221	3,944,216	11,409,454
British Columbia	53,235	—	800	54,035
All other provinces	969,510	12,208	1,043,952	2,025,670
Canada	10,542,909	660,430	8,594,071	19,797,410
Closing:				
Quebec	2,524,619	75,902	4,525,680	7,126,201
Ontario	6,445,221	966,553	3,978,601	11,390,375
British Columbia	43,953	—	1,429	45,382
All other provinces	850,657	15,754	1,111,529	1,977,940
Canada	9,864,450	1,058,209	9,617,239	20,539,898
By sub-groups				
Opening:				
Glass manufacturers	4,549,301	163,203	7,436,926	12,149,430
Glass products manufacturers	5,993,608	497,227	1,157,145	7,647,980
Canada	10,542,909	660,430	8,594,071	19,797,410
Closing:				
Glass manufacturers	4,592,105	227,818	8,510,167	13,330,090
Glass products manufacturers	5,272,345	830,391	1,107,072	7,209,808
Canada	9,864,450	1,058,209	9,617,239	20,539,898

¹ Book value of all manufacturing inventories owned and held at plant and plant warehouses.

TABLE 4. Factory Shipments: Glass and Glass Products Manufacturers, 1960

Product	Value of factory shipments
	\$
Glass products manufacturers:	
Mirrors:	
Plate glass	3,463,054
Sheet glass	606,091
Other products of glass:	
Bevelled or polished edge plate	383,906
Bevelled or polished edge sheet glass	438,613
Leaded glass, including memorial windows	286,110
Cut glass (tumblers, bowls, etc.)	800,133
Decorated glassware (including engraved, etched, sand-blasted, applied colour, etc.)	1,345,839
Druggists', physicians' and laboratory glassware	652,588
Insulating multi-pane window units, air seal (hermetically sealed)	4,998,871
Other glass products	28,337,115
All other products	676,403
Total	41,988,923
Glass manufacturers:	
Pressed, blown and drawn glass (including bottles, sealers, ovenware, window glass, etc)	62,553,640
Grand total	104,542,563

TABLE 5. Materials Used: Glass and Glass Products Manufacturers, 1960

Material		Cost at plant
		\$
Glass products manufacturers:		
Bevelled or polished edge plates		672,041
Bevelled or polished edge sheets		68,564
Figured and cathedral glass, leaded glass, etc.		59,314
Glass blanks for making cut glass articles		270,632
Glass tubing		61,000
Plate glass used for bevelling, silvering, laminating, etc.		8,306,852
Sheet glass used for bevelling, silvering, laminating, etc.		2,703,534
Grinding and polishing materials		99,896
Silver nitrate		74,914
Containers, boxes, packages, etc.		523,572
All other materials ¹		5,720,994
Total		18,561,313
		Quantity
		Cost at plant
		\$
Glass manufacturers:		
Arsenic	lb.	224,663
Barytes	"	732,608
Borax	"	943,914
Cobalt oxide	"	6,542
Chromite	ton.	108
Cullet	"	28,444
Fluorspar	"	733
Lime	"	54,413
Nepheline syenite	"	27,810
Salt cake	lb.	5,625,724
Selenium (metal and salts)	"	6,662
Silica sand	ton.	286,674
Shipping containers and packing materials .....	...	4,266,587
All other materials .....	...	12,955,697
Total .....	...	21,687,153
Grand total .....	...	40,248,466

¹ No detailed information on materials used was collected from firms generally reporting value of shipments of less than \$100,000. The total value of materials used by these firms in 1960 was \$885,806 and this amount is included in "all other materials".

TABLE 6. Factory Shipments of Metal Windows (from All Industries), 1952 - 1960
(Residential, Factory and Commercial Use)

Year	Aluminum	Steel	Combination storm and screen		Insulating multi-pane window units air seal (hermetically sealed)
			Aluminum	Steel	
			dollars		
1952	2, 145, 000	2, 794, 000	2, 307, 000	479, 000	¹
1953	4, 591, 000	2, 896, 000	2, 558, 000	681, 000	¹
1954	7, 192, 000	3, 414, 000	4, 098, 000	628, 000	¹
1955	12, 304, 000	2, 903, 000	5, 686, 000	720, 000	¹
1956	13, 193, 000	5, 107, 000	6, 710, 000	²	¹
1957	19, 441, 000	4, 931, 000	7, 399, 000	²	¹
1958	22, 416, 000	4, 245, 000	8, 877, 000	²	¹
1959	22, 152, 000	4, 036, 000	12, 051, 000	²	¹
1960	11, 453, 000	5, 650, 000	15, 847, 000	²	5, 851, 000

¹ New category for 1960 — Included in other categories previously.

² Included in "Steel", column 2.

**TABLE 7. Principal Statistics Classified according to type of Ownership;
Glass and Glass Products Manufacturers, 1957 and 1960**

Type	Establishments	Employees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	number		dollars		
1957					
Individual ownership	30	144	388, 248	462, 699	1, 108, 355
Partnerships	16	94	211, 673	271, 052	644, 938
Incorporated companies	70	7, 717	27, 747, 718	34, 346, 340	89, 308, 580
Totals	116	7, 955	28, 347, 639	35, 080, 091	91, 061, 873
1960					
Individual ownership	27	117	328, 515	385, 708	943, 269
Partnerships	8	37	129, 940	137, 141	366, 071
Incorporated companies	74	8, 860	36, 253, 078	39, 725, 617	103, 233, 223
Totals	109	9, 014	36, 711, 533	40, 248, 466	104, 542, 563

TABLE 8. Principal Statistics grouped according to Selling Value of Factory Shipments:
Glass and Glass Products Manufacturers, 1957 and 1960

Establishments reporting value of factory shipments	Establish- ments	Employees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	number		dollars		
1957					
Under \$10,000.....	11	16	26,679	24,690	68,756
\$ 10,000 to \$ 24,999.....	21	59	135,209	118,582	356,341
25,000 " 49,999.....	18	109	286,786	271,209	657,148
50,000 " 99,999.....	17	161	426,214	572,297	1,179,746
100,000 " 199,999.....	17	330	1,095,277	1,226,434	2,370,456
200,000 " 499,999.....	17	450	1,302,314	2,567,153	4,826,259
500,000 " 999,999.....	3	155	479,991	1,170,561	2,238,569
1,000,000 " 4,999,999.....	6	2,119	7,783,192	8,137,624	24,056,376
5,000,000 and over.....	6	4,471	16,294,493	20,991,541	55,308,222
Head offices.....	—	85	517,484	—	—
Totals.....	116	7,955	28,347,639	35,080,091	91,061,873
1960					
Under \$10,000.....	7	12	20,077	19,033	43,466
\$ 10,000 to \$ 24,999.....	18	44	120,412	97,444	285,022
\$ 25,000 " 49,999.....	18	95	267,015	274,816	647,951
50,000 " 99,999.....	12	111	321,154	425,889	875,443
100,000 " 199,999.....	15	221	714,107	1,013,545	2,164,092
200,000 " 499,999.....	17	398	1,218,000	2,455,005	4,609,306
500,000 " 999,999.....	7	385	1,489,384	2,147,365	4,878,599
1,000,000 " 4,999,999.....	9	1,965	8,868,279	10,731,259	27,922,658
5,000,000 and over.....	6	5,680	23,041,486	23,084,110	63,116,026
Head offices.....	—	103	651,619	—	—
Totals.....	109	9,014	36,711,533	40,248,466	104,542,563

TABLE 9. Employees and their Earnings: Glass and Glass Products Manufacturers, by Provinces,
1959 and 1960

Province	Employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
	number					dollars		
1959								
Quebec.....	438	204	2, 293	332	3, 267	2, 862, 143	9, 645, 724	12, 507, 867
Ontario.....	541	272	3, 314	690	4, 817	3, 852, 032	16, 039, 935	19, 891, 967
British Columbia	5	1	18	7	31	23, 854	74, 694	98, 548
Other provinces	70	18	372	275	735	397, 347	2, 112, 768	2, 510, 115
Canada.....	1, 054	495	5, 997	1, 304	8, 850	7, 135, 376	27, 873, 121	35, 008, 497
1960								
Quebec.....	470	197	2, 364	318	3, 349	3, 104, 740	10, 124, 862	13, 229, 602
Ontario.....	608	303	3, 239	674	4, 824	4, 480, 381	16, 016, 736	20, 497, 117
British Columbia	10	1	16	9	36	40, 988	64, 597	105, 585
Other provinces	85	25	443	252	805	513, 083	2, 366, 146	2, 879, 229
Canada.....	1, 173	526	6, 062	1, 253	9, 014	8, 139, 192	28, 572, 341	36, 711, 533

TABLE 10. Production Workers, by Months: Glass and Glass Products Manufacturers, 1960

Month	Establishments reporting monthly detail ¹		Establishments reporting quarterly detail ²	
	Male	Female	Male	Female
January	5,607	998		
February	5,534	934		
March	5,566	995	243	90
April	5,678	1,081		
May	5,666	1,107		
June	5,969	1,291	269	114
July	5,817	1,258		
August	5,679	1,247		
September	5,707	1,114	283	112
October	5,633	1,188		
November	5,661	1,208		
December	5,436	1,057	260	98
Average for establishments reporting monthly detail			5,666	1,126
Average for establishments reporting quarterly detail			264	103
Average estimated for small establishments ³			132	24
Average for all establishments			6,062	1,253

¹ The number of production workers, by months, was collected only for establishments generally reporting value of shipments of \$300,000 and over.

² The number of production workers, by quarters, was collected only for establishments generally reporting value of shipments between \$100,000 and \$300,000.

³ For establishments generally reporting value of shipments of less than \$100,000, no data on number of workers were collected. Average was estimated by using change in value of shipments to arrive at value of payroll which was then used in conjunction with estimated average earnings to arrive at number of workers.

TABLE 11. Fuel and Electricity Used: Glass and Glass Products Manufacturers, 1960

Kind	Quantity	Cost at plant
		\$
1. Establishments reporting commodity detail: ¹		
Bituminous coal—Imported	ton 3,124	36,486
Anthracite coal	" 72	1,234
Gasoling (including gasoline used in cars and trucks)	Imp. gal. 252,157	88,696
Fuel oil including kerosene or coal oil	" 31,569,246	2,492,512
Gas (a) Liquefied petroleum gases	" 68,526	11,583
(b) Natural gas	M cu. ft. 1,473,726	920,287
Other fuel .....	... ..	18,001
Electricity purchased	kwh. 183,979,408	1,196,198
Steam purchased .....	... ..	1,909
2. Establishments reporting group detail: ²		
Cost of fuel .....	... ..	33,379
Cost of electricity .....	... ..	25,253
3. Estimate for establishments for which no data were collected: ³		
Cost of fuel and electricity .....	... ..	43,980
4. All establishments:		
Total cost of fuel and electricity .....	... ..	4,869,518

¹ Establishments generally reporting value of shipments of \$300,000 and over.

² Establishments generally reporting value of shipments between \$100,000 and \$300,000.

³ Establishments generally reporting value of shipments of less than \$100,000.

TABLE 12. Imports of Glass and Glass Products, 1959 and 1960

Item	1959	1960
Glass, cut, pressed or blown:		
Glass plates or discs, rough cut or unwrought, for the manufacture of optical instruments	\$ 573,157	572,579
Decanters and machine-made tumblers of glass, not cut or decorated, n.o.p.	\$ 583,117	539,781
Lamp chimneys	\$ 43,768	49,133
Glass demi-johns, carboys, bottles, flasks, phials and jars, and balls, not cut	\$ 7,282,302	6,606,623
Glass tableware and cut glassware, n.o.p.	\$ 4,642,024	5,193,198
Incandescent lamp bulbs and glass tubing for the manufacture of incandescent lamps, vials and ampoules and glass tubing, n.o.p., in straight lengths of not less than three feet	\$ 2,803,406	2,764,778
Glass shades or globes, opal and illuminating glassware, n.o.p.	\$ 155,842	177,510
Lenses, glass, n.o.p.	\$ 503,009	465,452
Fresnel type lenses, sections and globes, of glass	\$ 129,465	138,737
Hollow shapes of glass and of plastics, moulded, for the manufacture of electric light fixtures	\$ 2,190,387	2,457,993
High thermal shock-resisting glassware	\$ 5,865,126	6,400,707
Glass, stained, ornamental and silvered:		
Ornamental, figured and enamelled coloured glass and memorial or other ornamental window glass	\$ 259,812	171,369
Painted or vitrified, chipped, figured, enamelled and obscured white glass	\$ 982,216	884,458
Stained or ornamental glass windows	\$ 165,248	263,649
Silvered glass, bevelled or not, and framed or not, n.o.p.	\$ 1,808,465	1,791,721
Other glass and glassware:		
Glass balls or marbles for the manufacture of glass fibres of glass yarn	\$ 467,538	503,878
Articles of glass, not plate or sheet, designed to be cut or mounted; articles of glassware for the manufacture of receptacles made of, or electroplated with precious metals	\$ 444,429	413,790
Blanks of uncoloured clear glass for the manufacture of reflectors or refractors, for lighting systems	\$ 358,526	348,909
Beads, drops or other shapes of glass, for the manufacture of imitation pearls	\$ 15,301	45,484
Artificial eyes for human use and contact eye glasses or lenses	\$ 56,542	71,035
Photographic dry plates	\$ 231,710	199,745
Spectacles, eye glasses and ground or finished spectacle or eye glass lenses, n.o.p.	\$ 1,100,440	1,409,496
Glass blocks	\$ 514,527	500,088
Manufactures of glass, n.o.p.	\$ 3,376,478	3,737,012
Glass wool or fibre glass	lb. 3,586,734	2,519,082
	\$ 1,460,381	1,217,061
Plate, sheet and window glass:		
Sheet glass transparent, in rectangles, not over 34 oz. per sq. ft.	sq. ft. 67,174,964	54,597,970
	\$ 5,275,248	4,509,252
Sheet glass, transparent, in rectangles, over 34 oz. per sq. ft., and sheet glass transparent, n.o.p.	sq. ft. 12,954,515	12,227,247
	\$ 3,175,809	2,968,369
Plate glass, not bevelled, in sheets or panes not exceeding 7 sq. ft. each, n.o.p.	sq. ft. 1,195,102	659,666
	\$ 495,803	262,660
Plate glass, not bevelled, in sheets or panes exceeding 7 sq. ft. each, and not exceeding 25 sq. ft. each, n.o.p.	sq. ft. 8,695,328	6,947,470
	\$ 3,829,821	2,947,826
Plate glass, n.o.p.	sq. ft. 24,664,490	17,708,222
	\$ 12,057,822	8,458,968
Laminated glass, sheet or plate, and manufactures, n.o.p.	\$ 324,408	281,498
Glass in sheets, wired	\$ 628,768	720,179
Glass, cast, and sheet glass, n.o.p.	\$ 96,283	126,932
Insulating window units	No. 52,735	34,707
	\$ 1,075,001	717,239

TABLE 13. Exports of Glass and Glass Products, 1959 and 1960

Item		1959	1960
Common and colourless window glass	sq. ft. \$	7,921,079 873,919	6,830,828 706,998
Table ware of glass	\$	12,526	6,979
Lenses of glass, rough or finished	\$	862,643	998,645
Glass bottles, empty	\$	82,398	88,954
Glass and glassware, n.o.p.	\$	103,026	94,384

Directory of Firms: Glass and Glass Products Manufacturers, 1960

Name of firm	Location of plant
(a) Glass Manufacturers	
Quebec:	
Canadian Pittsburgh Industries Ltd.	300 Ste. Croix Blvd. Ville St. Laurent
Consumers Glass Company, Limited	258 Second Ave., Ville St. Pierre
Dominion Glass Company, Limited	2376 Wellington St. Montreal
Iroquois Glass Ltd.	Candiac
Ontario:	
Consumers Glass Company, Limited	Etobicoke
Dominion Glass Company, Limited	Hamilton
Dominion Glass Company, Limited	Wallaceburg
Pilkington Glass Manufacturing Co. Ltd.	Scarborough
Alberta:	
Altaglass	Medicine Hat
Dominion Glass Company, Limited	Redcliff
Peace River Glass Company	Fort Saskatchewan
Prairie Stucco Supplies Ltd.*	South Edmonton
(b) Glass Products Manufacturers	
Quebec:	
Acme Glass Company Limited, The	1311 Bonaventure St., Montreal
Belgian Glass Works, Reg'd	822-2E Ave., Pointe-aux-Trembles
Canadian Plate Glass and Mirror Company Reg'd	715 St. Maurice St., Montreal
Citadel Glass Inc.	186 St. Paul St., Quebec, P.Q.
Columbia Frame Inc.	636 St. Paul St. W., Montreal
Consolidated, Glass Industries Ltd.	2270-43rd Ave., Lachine
Crystal Glass and Plastics Ltd. - Technical Glass Div.	708 Walnut St., Montreal
David Cie Enr'g, R.	10130 Lille, Montreal
Despres Glass Co., J.R.	1493 Laurier Est., Montreal
Dugal Auto Glass	969 Rue Rachel Est., Montreal
Franklin Glass and Paint Co.	1135 Rue Taillon, Quebec
Glass Hall Co., Ltd.	6832 Gamier, Montreal
Insulation Manufacturers & Processors Ltd.	75 Stinson Blvd., St. Laurent
Lafayette Glass Co.	2165 Rue Parthenais, Montreal
La Vitrierie Moderne	535 St. Germain, Quebec
Magog Glass Co.	Magog
Leclair Enr'g, G.	179 Est., Ave. Laurier, Montreal
Miroirs Laurier Enr'g.	Laurier Station
Miroirs Victoriaville Limitée	84 rue Laurier, Victoriaville
Murano Glass Inc.	6272 St. Laurent, Montreal

* Do not actually make glass. Included in compilations of this industry in error, will be reclassified in 1961.

Directory of Firms: Glass and Glass Products Manufacturers, 1960 — Concluded

Name of firm	Location of plant
(b) Glass Products Manufacturers — Continued	
Quebec — Concluded:	
Phillips Cut Glass Co. Ltd.	2251 Papineau Ave., Montreal
Pion, Georges	912 Est Rachel, Montreal
Star Glass Ltd.	4040 Namur St., Montreal
Stotter Glass Products Ltd.	2625 Albert St., Montreal
Villeray Glass	10865 Lajeunesse, Montreal
Vitra Glass Ltée.	6026 Hochelaga, Montreal
Vitrierie Bouchard Glass Inc.	7640 Lajeunesse St., Montreal
Vitrierie Canadienne Enr'g.	Champligny
Vitrierie Contrecoeur Enr'g.	Contrecoeur
Vitrierie Générale Enr'g.	Daveluyville
Walker Glass Co. Ltd.	5972 Second Ave. Rosemount
White Mirror and Glass Company	4081 St. Urbain St., Montreal
Winter and Company	234 Laurier Ave. W., Montreal
Ontario:	
Acadian Glass and Mirror Co.	5 Roslyn Ave., Toronto
Armalux Glass Industries Limited	17 Racine Rd., Rexdale
Bath and Sons Glass Mirrors and Manufacturing Ltd.	1388 Main St. E., Hamilton
Beach Neon	54 Alice Crescent, Scarborough
Belgium Mirror and Glass Co.	407 Dundas St. W., Toronto
Bennett Glass Co. Ltd., The	1004 Walker Rd., Windsor
Canadian Pittsburg Industries Ltd.	59 York St., London
Central Ornamental Glass Co.	83 McCaul St., Toronto
Clapperton and Sons Ltd.	23 River St., Toronto
Colonial Art Glass and Windows	1191 Gladstone Ave., Ottawa
Corning Glass Works of Canada Ltd.	135 Vanderhoof Ave., Leaside
Cutler Brands Limited	126 Geary St., Toronto
De Paoli Industries	542 Brant St., Windsor
Duplicate Canada Ltd.	Oakville
Duplicate Canada Ltd.	Oshawa
Duplicate Canada Ltd.	Windsor
Emerald Glass Company	544 Rogers Rd., Toronto
Excelsior Glass Company, Limited	127 Rivalda Rd., Weston
Flex-o-Lite of Canada, Ltd.	15 Ontario St., St. Thomas
Glass Cell Fabricators Ltd.	25 Ingram Drive, Toronto
Holliday Flint Glass Works of Toronto	103 River St., Toronto
Holophane Co. Ltd., The	418 Kipling Ave. S., Etobicoke
Hughes and Sons "Corn flower" Ltd., W.J.	102 Tycos Drive, Toronto
Jewell and Son, Ernest C.	374 Montrose Ave., Toronto
Johns Glass Co. Ltd., The O.H.	219 Broadview Ave., Toronto
Lipman Sterling Limited	191 George St., Toronto
London Glass and Mirror Co.	679 York St., London
Lloyds Glass Co.	180 King St. W., Hamilton
Luxfer Prism Co., Ltd.	162 Parliament St., Toronto
McCausland, Ltd., Robert	214 John St., Toronto
McConnell Mirrors and Glass	164 St. Patrick, Stratford
Modern Mirror and Glass Co.	206 Main St., Toronto
Monogram Glass Co. Of Canada, Ltd.	7 Staffordshire Place, Toronto
North American Glass Industries Ltd.	18 Rivalda Rd., Weston
Pilkington Brothers (Canada) Ltd.	111 Millward Rd., Leaside
Precision Glasscraft Co.	121 Judge Rd., Toronto
Pringle and London	162 Parliament St., Toronto
Queen City Glass Company, Limited	243 Victoria St., Toronto
Richards Glass Co. Ltd., The	102 Atlantic Ave., Toronto
Sealite-Glass Limited	1293 Caledonia Rd., Toronto
Service Glass and Mirror Ltd.	1185 Rose Lawn Ave., Toronto
Sheriff Limited, R.G.	216 Adelaide St. W., Toronto
Smith, Co. Ltd., Kenneth M.	30 Industrial St., Leaside
Smits and Ramsdale	442 Sherbourne St., Toronto
Strathroy Glass Company	56 Canaan St., Strathroy
Thermo-Rite Manufacturing Co.	134 Hartzel Rd. St. Catharines
Tooke, Gerald E.	186 Dupont St., Toronto
Toronto Glass and Mirror Co.	67 Racine Rd., Rexdale
Versteeg Studios Ltd., Charles	Carleton Place
X. L. Glass Company	59 King St. W., Hamilton

Directory of Firms: Glass and Glass Products Manufacturers, 1960 — Concluded

Name of firm	Location of plant
(b) Glass Products Manufacturers — Concluded	
Manitoba:	
Brooker Window Ltd.	602 Desmeurons St., St. Boniface
Consolidated Plate Glass (Western) Ltd.	450 Deschambault St., St. Boniface
Paramount Glass Limited	362 Panet Rd., St. Boniface
Seal-Dow Ltd.	Fennell and Somerville, Fort Garry
Westcan Industries Ltd.	309 Elgin Ave., Winnipeg
Saskatchewan:	
Solarpane Manufacturing Co. Ltd.	500 10th Ave. E., Regina
Alberta:	
Continental Glass Mfg. Co.	520-35th Ave. N.E., Calgary
Para Glass Ltd.	1632-42nd Ave. S.E., Calgary
British Columbia:	
Busy B's Glass	Campbell River
Consolidated Twin Seal Industries Ltd.	Granville Island
Fraser Glass Works	2132 Granville St., Vancouver
Hastings Glass and Mirrors	1146 E. Cordova St., Vancouver
Vitic Manufacturing Ltd.	2628 Yew St., Vancouver
Wallin's Glass Co., Ltd.	1069 S.W. Marine Dr., Vancouver

GLASS AND GLASS