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FLOUR MILLS

1960

Formerly The Flour Milling Industry

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 available.
- ... 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.

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

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 1950.

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.

¹To 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.

FLOUR MILLS

1960

This industry, which has existed to meet domestic needs for more than 300 years, is one of the Dominion's oldest manufactures, but it is only within recent times that its progress has become spectacular. The 58 flour mills, many of them of the most modern type and of the highest efficiency, have a capacity far in excess of Canada's demands.

The war of 1914-18 and the demand it created gave a great impetus to this trade. During 1928 productive capacity reached about 121,000 barrels per day. During the depression the industry was adversely affected by the difficulties which beset the Canadian grain trade and the great decline in the prices of grains. Exports of wheat flour declined from 10,737,266 barrels in 1928 to 3,911,886 barrels in 1938, but in spite of this decrease, Canada continued to be one of the leading exporters of wheat flour. A further impetus was given to the industry as a direct result of the large import requirements of Great Britain and other allied countries during the second great war. Exports of wheat flour to all countries, which averaged about 14,000,000 barrels during the war years, decreased to 11,144,214 barrels in 1953 and to 10,074,061 barrels in 1954. The heavy demand for Canadian flour in foreign markets during the war years was a great boon to Canadian agriculture, inasmuch as it made it possible for flour mills to make available large quantities of mill feeds which otherwise would not have been produced. Farmers were thus able to obtain sufficient livestock feeds to fulfill Canada's commitments for the export of cheese and bacon.

Previous to the publication of the 1953 report, and in addition to the Breakfast Foods Industry, there were two annual publications dealing with grain mill products:

- (a) The Flour and Feed Milling Industries.
- (b) The Prepared Stock and Poultry Feeds Industry.

The first report mentioned above included separate statistical data on the Flour Milling Industry and analyzed in detail all those establishments which manufacture flour. In addition, these establishments manufacture any or all of the commodities usually associated with the feed industry. In the same report, a summary of the Feed Milling Industry, which included establishments that manufacture principally chopped grain feeds on a merchant or custom basis, was included. These establishments may have also produced prepared stock and poultry feeds, but if the volume of such prepared feeds exceeded four hundred tons, they were classified to the Prepared Stock and Poultry Feeds Industry.

The report on the Prepared Stock and Poultry Preds Industry presented the detail of firms specializing in the manufacture of prepared stock and poultry feeds. These firms did not manufacture flour and their production of feeds had to be in excess of 400 tons. This group of establishments may have produced, at the same time, any other grain mill products.

Currently, it became necessary for the Bureau to publish data which would allow industry to assess what proportion of the livestock population the output of their plant was feeding. While this situation could not be met entirely, since feed production is spread over numerous industries, approximately 98 per cent by volume of all primary and secondary feeds could be presented in one report by removing feed milling establishments from the Flour and Feed Milling Industry and combining these with those of Prepared Stock and Poultry Feeds. From 1953 to 1959, reports on the grain milling industries were published as follows:

- (a) The Flour Milling Industry includes all establishments which produce wheat flour in any quantity. Therefore it would necessarily include feeds in any form manufactured by these establishments, with one exception. Some of the larger milling companies which conduct separate feed milling divisions, provide two reports; one covering their flour milling activity and the second covering their feed production activities. In this latter case, the feed report is included in the Feeds Industry.
- (b) The Feeds Industry This group includes all establishments which manufacture prepared feeds, chopped grain feeds on own account and carry on a service operation of custom milling and chopping. This group, however, does not include those establishments which manufacture flour and which may produce, in addition, prepared and chopped grain feeds. Historically, the Feed Milling Industry as it existed prior to 1953, has now been removed from its statistical association with flour milling and has been combined with the former Prepared Stock and Poultry Feed Industry. The Industry will henceforth be referred to as the Feeds Industry.
- (c) The Breakfast Foods Industry includes all firms which manufacture prepared breakfast foods. The industry also includes some of the large flour milling companies which maintain separate specialized cereal divisions.

In 1950, the statistical treatment of the Flour Milling Industry and that of the Feed Milling Industry changed considerably, primarily in the treatment of custom grinding and custom milling. Up to and including 1949, custom grinding and milling had been converted, for statistical purposes, to a merchant grinding and milling basis, whereby the volume of custom ground and milled grains was valued at the

average cost of merchant grains reported. These two values were added to give the total gross value of shipments. In 1950, the method of estimating gross value was changed. Only the amount received for service rendered is considered as part of the gross value of shipments, no account being taken of the value of grains supplied for custom. The principal statistics for previous years as shown in Table 1 have been made comparable beginning with the 1953 report. It should be noted that this change in the statistical treatment does not affect the net value of production for the industry. The volume of grains used for custom chopping and milling, and the custom charges are shown in Table 4, page 9.

The 1960 Statistics in this report, formerly The Flour Milling Industry, have been compiled on the basis of the Standard Industrial Classification, revised 1960. Since implementation of the new S.I.C. has resulted in changes in the content of this industry, principal statistics for 1957, 1958 and 1959 have been re-compiled on the revised basis for purposes of comparability. It is noted however that the changes in the industry resulting from the revision in classification have been relatively unimportant.

Value added by manufacture (net value) is shown in column 6, Table 1. Prior to 1952 the value added by manufacture was computed by subtracting the cost of fuel and electricity and the cost of materials from the gross value of production. In 1952 and 1953 value of production was not available and value of shipments was used. In 1954 and 1955, only the change in opening and closing inventories

of finished goods was taken into account in calculating the value added. In 1956 and later years the change in goods in process inventories was added to the change in finished goods inventories and the total applied to the "Value of factory shipments" to arrive at the "Value of production". When the "Value of production" was determined in this manner, the total of the cost of raw materials and fuel and electricity was subtracted to arrive at the "Value added by manufacture".

It will be noted that data contained in Tables 4, 10 and 12 vary greatly from similar tables presented in 1958 and previous years. This results from the fact that beginning in 1959 only the larger firms are surveyed on the subject matter contained in these three tables.

The gross value of shipments in Flour Mills in 1960 amounted to \$224,657,381. By commodities, wheat flour accounted for 78 per cent of the total gross value of shipments and amounted to more than \$177 million; of this total, more than \$110 million was reported for all grades of enriched flour. Almost \$27 million worth of bran, shorts and middlings were shipped and ranked this commodity second in importance in the industry. Shipments of rolled oats and prepared cake mixes amounted to \$7,432,445 and \$4,775,886 respectively. In 1960 the total cost of raw materials used amounted to \$174,270,710. This included 2,756,354 tons of wheat valued at \$147 million which was the largest single item consumed. Cost of fuel and electricity in 1960 was \$1,823,583 and salaries and wages paid were \$17,416,164 while the number of employees reported was 4,173.

TABLE 1. Principal Statistics for the Years, 1926 - 601

	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity	Cost at plant of materials used	Value added by manufacture	Selling value of factory shipments
		Ba	sis: Standard Ir	ndustrial Class	ification in use	prior to 1960	
	nur	nber			dollars		
1926 1928 1929 1930 1933 1934 1937 1939	442 423 409 382 413 435 335 303 288	5,118 5,285 5,308 4,673 4,153 4,263 4,469 4,540 4,896	6,486,285 6,745,415 6,714,960 5,885,224 4,422,689 4,443,991 5,069,315 5,621,370 6,733,703	1,315,523 1,515,995 1,374,168 1,263,406 1,032,262 1,060,177 966,093 1,020,119 1,244,710	145, 989, 909 144, 868, 517 130, 437, 426 102, 823, 717 51, 719, 587 61, 392, 000 94, 016, 740 59, 164, 699 91, 222, 378	11,640,418 16,734,990 16,814,326 13,544,439 11,074,398 12,418,591 12,359,527 16,064,541 17,056,209	158, 945, 856 163, 019, 502 148, 625, 926 117, 631, 562 63, 826, 247 74, 870, 768 107, 342, 366 76, 249, 359 109, 523, 297
1942 1944 1945 1946 1947 1948 1948 1949 1950	281 224 195 184 174 170 133 118 108	4,999 5,461 5,654 6,012 6,220 5,334 5,033 4,903 4,864	7,465,544 8,925,161 9,630,553 10,884,848 12,603,961 11,882,590 11,965,400 11,917,625 13,596,597	1,237,630 1,449,907 1,540,758 1,740,270 1,899,560 1,701,302 1,526,578 1,515,218 1,656,382	98, 182, 809 153, 579, 588 158, 499, 853 185, 219, 470 230, 467, 746 220, 068, 533 215, 404, 869 213, 755, 757 242, 132, 072	21, 355, 939 17, 948, 448 21, 321, 130 24, 613, 288 30, 762, 112 29, 425, 720 24, 318, 787 31, 336, 800 37, 078, 324	120,776,378 172,977,943 181,361,741 211,573,028 263,129,418 251,195,555 241,250,234 247,107,775 280,866,778
1952 1953 1954 1955 1956 1957 1958 1959	100 95 85 77 76 73 71	4,961 4,962 4,934 4,853 4,572 4,417 4,412 4,234	14,688,635 14,946,310 15,436,871 15,478,817 15,102,725 15,214,225 15,949,136 16,819,241	1,652,958 1,650,066 1,676,219 1,721,399 1,775,351 1,775,220 1,818,495 1,815,297	236, 194, 234 224, 518, 387 195, 322, 299 185, 004, 008 187, 100, 113 168, 634, 527 173, 438, 129 169, 769, 857	36,360,848 40,262,095 35,031,653 35,538,807 33,071,027 34,189,050 43,364,618 51,547,538	274, 208, 040 266, 430, 548 232, 363, 041 221, 894, 538 221, 769, 944 204, 376, 285 218, 321, 216 222, 897, 517
		I I	Basis: Standard	Industrial Cl	assification - re	vised, 1960	
1957 Canada	62	4, 332	14, 951, 093	1, 731, 484	167, 132, 398		202, 640, 090
Quebec Ontario Manitoba Saskatchewan and British	4 33 6	746 1,664 500	2,660,002 6,098,624 1,527,342	264, 529 676, 518 187, 060	31,314,933 65,660,141 17,392,093	• •	38, 499, 833 78, 273, 943 20, 187, 495
Columbia	10 9	775 647	2,733,279 1,931,846	387, 362 216, 0 15	31,621,608 21,143,623	÷ e	39,385,290 26,293,529
Canada	60	4, 325	15, 648, 680	1, 765, 013	171, 993, 400		216, 540, 215
Quebec Ontario Manitoba Saskatchewan and British	32 5	677 1,717 487	2,645,355 6,516,068 1,419,117	237,121 736,999 180,820	31,771,917 69,813,766 15,928,250	* * * * * * * * * * * * * * * * * * *	38, 953, 617 85, 947, 790 19, 478, 863
Columbia Alberta	10	789 655	2,950,378 2,117,762	379, 098 230, 975	30,931,407 23,548,060	e e	41,255,487 30,904,458
1959 Canada	60	4, 157	16, 526, 958	1, 760, 850	168, 452, 606		221, 230, 718
Quebec Ontario Manitoba Saskatchewan and British	4 32 5	653 1,684 453	2,757,717 7,037,497 1,508,807	234, 584 708, 003 208, 319	31,416,542 68,432,346 15,333,808	* * * * * * * * * * * * * * * * * * *	38, 871, 527 88, 467, 711 19, 787, 076
Columbia Alberta	11	725 642	2,935,297 2,287,640	377,604 232,340	31, 119, 771 22, 150, 139	4 0	41,207,537 32,896,867
1960 Canada	58	4, 173	17, 416, 164	1, 823, 583	174, 270, 710	48, 610, 433	224, 657, 381
Quebec Ontario Manitoba Saskatchewan and British	4 32 5	673 1,634 472	3,108,509 7,109,215 1,598,788	238,696 718,259 221,940	32,332,058 68,514,631 17,009,640	6,074,917 19,968,590 3,001,614	38,678,143 89,130,354 20,185,102
Columbia Alberta	9 8	731 663	3,105,854 2,493,798	388,773 255,915	31,201,594 25,212,787	9,531,650 10,033,662	41,777,323 34,886,459

¹ Profits or losses cannot be estimated from Census figures, as no data are collected for certain expense items such as interest, rent, depreciation, taxes, insurance, advertising, etc.

TABLE 2. Factory Shipments of Products Made in Flour Mills, 1960

Spring No. 1 or Top Patent including semolina	Products		Quantity	Selling value at mill
Spring No. 2 Patent Spring No. 2 Patent Spring No. 2 Patent Spring No. 3 Patent (Strong Bakers or Export Patent) 10,892,911 44,156,692				\$
Spring No. 2 Patent Spring No. 3 Patent (Strong Bakers or Export Patent) '1 35, 133, 459 58, 722, 878 Spring No. 3 Patent (Strong Bakers or Export Patent) '1 13, 513, 459 58, 222, 878 Spring No. 3 Patent (Strong Bakers or Export Patent) '1 10, 892, 911 44, 156, 692 44, 156, 692 77, 78, 78, 78, 78, 78, 78, 78, 78, 78,	Wheet Cour			
Spring No. 2 Patent		cwt.	8,100,601	38, 420, 670
1		44	13,513,459	58, 722, 878
Monte wheat and four				
District with the state of th			562, 458	
Lower grades of flour			2,533,037	
Total flour				
Search S				
Contact Cont			40.000.000	450 504 050
Non-enriched flour, all grades combined				
Prepared or self-raising flour		44		
Prepared or self-calsing flour	Slave and mank others			
Barley flour 1			1	1
Barley meal			1	1
Rye meal			-	_
Corn flour	Rye flour	ton	7,479	579, 790
Corn Holf		4.6		74,010
Breakfast foods: Prepared breakfast food Oatmeal				1
Steakfast foods: Prepared breakfast food			*	*
Prepared breakfast food Oatmeal ton 9,004 989,204 Rolled oats "38,604 7,432,445 Rolled oats "136 22,676 Unprepared breakfast foods ton 2,717 434,097 Unprepared cake mixes "10,522 4,775,886 Barley, pot and pearl "1 10,522 1,775,886 Barley, pot and pearl "1 10,522 1,775,886 Barley, pot and pearl "1 10,668 528,677 1,7886 Bran "10,668 528,677 1,788 Bran "10,668 5	Suckwheat Hour			
Oatmeal ton 9,004 989,204 Rolled oats " 38,604 7,432,445 Rolled or flaked wheat " 136 22,676 Unprepared breakfast foods ton 2,717 434,097 Other products: " 10,522 4,775,886 Barley, pot and pearl " 1 1 Com, cracked " 10,622 4,775,886 Bran " 293,519 10,847,872 Shorts and middlings ton 392,611 15,818,106 Bran " 293,519 10,847,872 Chopped grain feed " 10,668 528,677 Alfalfa meal " 10,668 528,677 All other products " 677 74,343 All other products " 677 74,343 Pepared stock and poultry feeds: " 677 74,343 Swine feeds " 5,260 351,392 Poultry feeds: " 5,260 351,392		- 1		
Rolled oats		ham	0 004	000 004
Rolled or flaked wheat		ton		
Unprepared breakfast foods ton 2,717 434,097 Other products: Prepared cake mixes "10,522 4,775,886 Barley, pot and pearl "293,519 15,818,106 Bran "293,519 10,847,872 Chopped grain feed "10,668 528,677 Alfalfa meal "10,668 528,677 Alfalfa meal "36,932 2,619,081 Orepared stock and poultry feeds: "36,932 2,619,081 Orepared stock and poultry feeds: "36,932 2,619,081 Orepared stock and poultry feeds: "36,648 563,794 Swine feeds "36,484 563,794 Swine feeds "36,484 563,794 Swine feeds "48,648 563,794 Swine feeds "52,60 351,392 Chick starter "52,60 351,392 Chick starter "72,4343 55,404 Laying and hatching mash ton 783 55,404 Laying and hatching mash "74,235 302,524 Fattening and finishing feeds ton 316 19,310 All turkey feeds ton 15,852 1,240,240 Mixed concentrates "72 Amount received in payment for work done on materials owned by others "73,431 Chops and hatching mayment for work done on materials owned by others "74,443 544,440 Summer or of the feeds ton 15,852 1,240,240 Street or of the feed ton 15,852 1,240,240		6.6		
Prepared cake mixes " 10,522		ton		
Prepared cake mixes " 10,522	Other products			
Barley, pot and pearl	Prenated cake mixes	44	10 522	4 775 886
Conf. cracked Shorts and middlings ton 392,611 15,818,106 Bran " 293,519 10,847,872 Chopped grain feed " 10,668 528,677 Alfalfa meal " 36,932 2,619,081 Chopped grain feed ton 48,897 1,285,761 All other products " 36,932 2,619,081 Chopped grain feed Ton 48,897 1,285,761 All other products " 36,932 2,619,081 Chopped grain feed " 36,848 563,794 Chopped grain feed " 3,526 351,392 Chick starter 2			1	1, 110, 000
Shorts and middlings				_
Chopped grain feed		ton	392,611	15, 818, 106
Alfalfa meal Offal, not otherwise specified ton All other products '' 36, 932 2, 619, 081 Prepared stock and poultry feeds: Calf feeds '' 677 74, 343 Dairy and cattle feeds '' 8, 648 563, 794 Swine feeds '' 5, 260 351, 392 Poultry feeds: Chick starter '' 5, 260 351, 392 Broller feeds '' 7, 743 35 351, 392 Crowing mash ton 783 55, 404 Laying and hatching mash '' 4, 235 302, 524 Fattening and finishing feeds ton All turkey feeds '' 19, 310 Other mixed feeds ton 15, 852 1, 240, 240 Mixed concentrates '' 2 Amount received in payment for work done on materials owned by others '' 51, 391		**		
Offal, not otherwise specified ton 48,897 1,285,761 2,619,081 Prepared stock and poultry feeds: " 677 74,343 36,932 2,619,081 Prepared stock and poultry feeds: " 677 74,343 343 343 343 343 344 343 343 351,392 352,404 351,392 352,404 351,392 352,404 352,404 352,404 352,404 352,404 352,404 352,404 352,404 352,404 352,404 352,404 352,404 <td></td> <td>64</td> <td>10,668</td> <td>528, 677</td>		64	10,668	528, 677
All other products		A	40.005	1 005 501
Calf feeds " 8,648 563,794 Dairy and cattle feeds " 8,648 563,794 Swine feeds " 5,260 351,392 Poultry feeds: 2 2 Chick starter 2 2 Broiler feeds 2 2 Growing mash ton 783 55,404 Laying and hatching mash " 4,235 302,524 Fattening and finishing feeds 2 2 Scratch feed ton 316 19,310 All turkey feeds ton 15,852 1,240,240 Mixed concentrates 2 2 Amount received in payment for work done on materials owned by others - 61,391		ton		
Calf feeds " 8,648 563,794 Swine feeds " 5,260 351,392 Poultry feeds: 2 2 Chick starter 2 2 Broiler feeds 2 2 Growing mash ton 783 55,404 Laying and hatching mash " 4,235 302,524 Fattening and finishing feeds 2 2 Scratch feed ton 316 19,310 All turkey feeds ton 15,852 1,240,240 Mixed concentrates 2 2 Amount received in payment for work done on materials owned by others - 61,391				
Dairy and cattle feeds " 8,648 563,794 Swine feeds " 5,260 351,392 Poultry feeds: 2 2 Chick starter 2 2 Broiler feeds ton 783 55,404 Laying and hatching mash " 4,235 302,524 Fattening and finishing feeds " 316 19,310 All turkey feeds ton 316 19,310 Other mixed feeds ton 15,852 1,240,240 Amount received in payment for work done on materials owned by others - 51,391		11	677	74, 343
Poultry feeds: Chick starter	Dairy and cattle feeds			563, 794
Chick starter Broiler feeds Growing mash Laying and hatching mash Fattening and finishing feeds Scratch feed All turkey feeds Chick starter 2 2 2 2 2 3 302,524 55,404 4,235 302,524 52 52 52 52 52 52 52 52 52 52 53 53 53 54 64 65 66 67 68 68 68 68 68 68 68 68 68 68 68 68 68		11	5, 260	351,392
## Broiler feeds			2	2
Growing mash ton 783 55, 404 Laying and hatching mash " 4, 235 302, 524 Fattening and finishing feeds ton 316 19, 310 All turkey feeds ton 15, 852 1, 240, 240 Other mixed feeds ton 15, 852 1, 240, 240 Mixed concentrates 2 2 Amount received in payment for work done on materials owned by others - 61, 391			2	2
Laying and hatching mash Fattening and finishing feeds Scratch feed ton All turkey feeds Other mixed feeds ton Italy, 310 I		ton	783	55 404
Fattening and finishing feeds Scratch feed ton All turkey feeds Other mixed feeds ton 15,852 1,240,240 Amount received in payment for work done on materials owned by others - 51,391		8.8		
Scratch feed ton 316 19,310 Other mixed feeds ton 15,852 1,240,240 Mixed concentrates 2 Amount received in payment for work done on materials owned by others 51,391			2	2
Other mixed feeds ton 15,852 1,240,240 Mixed concentrates 2 Amount received in payment for work done on materials owned by others 51,391	Scratch feed	ton	316	19,310
fixed concentrates	All turkey feeds		2	7
Amount received in payment for work done on materials owned by others	Other mixed feeds	ton	15,852	1, 240, 240
Amount received in payment for work done on materials owned by others	Mixed concentrates		2	2
others — 51,391				
Totals				61,391
Totals				
	Trotale			294 655 201

Included with "All other products".
 Included with "Other mixed feeds".

TABLE 3. Materials Used in Flour Mills, 1960

Materials	Quantity	Value
	tons	\$
heat	2,756,354	147, 464, 616
ats	85, 360	4, 430, 894
arley	5, 793	266, 399
	9, 832	420, 845
ye	14. 730	767, 751
nonn	548	26, 622
uckwheat	348	20,022
eas	1 0 10	20 000
ixed grain for chopping	1, 246	38, 092
ther grains	2, 715	58, 869
lfalfa	463	27, 933
itamins	0 0 0	980, 817
ill feeds (bran, etc.)	3, 040	117, 224
oncentrates (all kinds)	2,069	184, 362
ther ingredients used	3, 098	238, 482
ll other materials including chemicals	_	5, 196, 840
ost of containers purchased		12, 598, 083
perating, maintenance and repair supplies	_	1, 452, 881
peracting, mannerance and repair supplies		1, 102, 001
Total ¹		174, 270, 710

¹ Does not include office supplies used which amounted to \$168,874.

TABLE 4. Grains Used for Custom Chopping and Milling for Canada and the Provinces, 19601,1

	Wheat	Oats	Barley	Rye	Corn	Buck- wheat	Peas	Mixed grains	Total grains	Amount received for custom work
					tons					\$
Canada	1, 275	1,602	1,559	-	_	-	_	2,605	7, 041	16, 035
Quebec	186	_	_	_	_	_	_	_	186	745
Ontario	1,040	1, 298	960	_	-	_	_	1,490	4, 788	10, 793
Manitoba		_	_	_	_	-	_	_	_	_
Saskatchewan and British Columbia	_	_	-	_	_	_	_	_	_	_
Alberta	49	304	599	_	_	-	_	1,115	2, 067	4, 497

TABLE 5. Principal Statistics classified according to Type of Ownership, 1957 and 1960 Basis: Standard Industrial Classification-revised, 1960

Туре	Estab- lish- ment	pl	Em- loyees	Salaries and wages	Cost of fuel and electricity	Cost at plant of materials used	Selling value of factory shipments
	nur	nbe	r		doll	ars	
1957							
Individual ownershipPartnerships	10		39 53	76, 635 147, 568	16, 983 20, 862		961, 409 1, 048, 468
Incorporated companies	44	}	4, 240	14, 726, 890	1,693,639	165, 451, 547	200, 630, 213
Totals	62		4,332	14, 951, 093	1, 731, 484	167, 132, 398	202, 640, 090
1960							
Individual ownership Partnerships	8 5		31 36	76,285 121,520	13, 770 21, 843		925, 922 949, 526
Incorporated companies	44	}	4, 106	17, 218, 359	1, 787, 970	172, 815, 786	222, 781, 933
Totals	58		4, 173	17, 416, 164	1, 823, 583	174, 270, 710	224, 657, 381

See also Feed Manufacturers.
 Collected only for establishments generally reporting value of shipments of \$500,000 and over.

TABLE 6. Consumption of Flour in Canada for Years, 1957-60

	1957	1958	1959	1960
		hundred	weight	
Production	37, 358, 649	41, 145, 815	40,530,625	41,049,775
mports	1,541	719	943	1.859
Totals	37, 360, 190	41, 146, 534	40,531,568	41,051,634
Exports	14,914,793	17, 227, 221	16,579,985	15, 775, 471
Available for consumption	22, 445, 397	23, 919, 313	23, 951, 583	25, 276, 163

TABLE 7. Size of Establishments, 1957 and 1960

Basis: Standard Industrial Classification - revised, 1960

Establishments having a production of	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity	Cost at plant of materials used	Selling value of factory shipments
1957	nun	ber		dol	lars	
Under \$50,000	11	36	82. 139	11, 418	188, 527	300, 126
\$ 50,000 to \$ 99,999	2	68	177. 386	29, 607	1, 085, 942	1, 350, 310
100,000 '' 199,999	8	58	152, 758	33, 426	1, 454, 072	1, 804, 292
200,000 '' 499,999	5	109	411, 529	59, 958	4, 511, 995	5, 171, 696
1,000,000 '' 4,999,999	7	913	3. 023, 520	403, 435	39, 084, 906	47, 407, 754
5,000,000 and over	16	3.148	11. 103, 761	1, 193, 640	120, 806, 956	146, 605, 912
Totals	13	4,332	14. 951, 093	1,731, 484	167, 132, 398	202, 640, 090
Under \$50,000 \$ 50,000 to \$ 99,999 100,000 '' 199,999 200,000 '' 499,999 500,000 '' 999,999 1,000,000 '' 4,999,999 5,000,000 and over Totals	8	18	34, 852	7,085	85, 405	147, 575
	3	14	46, 215	6,925	155, 770	217, 046
	4	34	83, 635	17,510	519, 440	648, 856
	7	67	248, 542	53,155	1, 850, 685	2, 354, 973
	5	85	302, 485	40,130	2, 667, 292	3, 320, 553
	13	512	1, 992, 386	265,102	24, 706, 067	30, 321, 407
	18	3,443	14, 708, 049	1,433,676	144, 286, 051	187, 646, 971
	58	4,173	17, 416, 164	1,823,583	174, 270, 710	224, 657, 381

TABLE 8. Employees, Salaries and Wages, 1959 and 1960

37.00 and	Emplo	yees o	n salaries	Employees on wages			Total employees salaries and wages		
Year and provinces	Male	Fe- male	Total salaries	Male	Fe- male	Total wages	Male	Fe- male	Salaries and wages
1959	num	ber	\$	num	ber	\$	numb	er	\$
Canada	906	412	6, 016, 110	2,704	135	10,510,848	3,610	547	16, 526, 958
Quebec Ontario Manitoba Saskatchewan and British Columbia Alberta	178 325 93 189 121	65 177 47 66 57	1, 161, 231 2, 522, 932 388, 373 1, 228, 836 714, 738	406 1, 141 287 436 434	4 41 26 34 30	1,596,486 4,514,565 1,120,434 1,706,461 1,572,902	584 1,466 380 625 555	69 218 73 100 87	2,757.717 7,037,497 1,508,807 2,935,297 2,287,640
1960									
Canada	917	412	6, 279, 657	2,713	131	11, 136, 507	3,630	543	17, 416, 164
Quebec Ontario Manitoba Saskatchewan and British Columbia Alberta	177 330 96 195 119	63 169 48 67 65	1, 274, 059 2, 514, 508 413, 232 1, 342, 047 735, 811	429 1.096 301 432 455	39 27 37 24	1, 834, 450 4, 594, 707 1, 185, 556 1, 763, 807 1, 757, 987	606 1, 426 397 627 574	67 208 75 104 89	3, 108, 509 7, 109, 215 1, 598, 788 3, 105, 854 2, 493, 798

TABLE 9. Production Workers by Months, 1960

	Male	Female
Establishments reporting monthly detail:	nur	nber
January	2,530	114
February	2, 572	118
March	2, 563	114
April	2,607	122
May	2,630	114
June	2, 713	124
July	2, 688	123
August	2, 808	128
September	2, 771	150
October	2,659	157
November	2,639	143
December	2,460	115
average for establishments reporting monthly detail	2, 640	128
verage estimated for small establishments ²	73	3
wwwrage for all establishments	2,713	131

¹ The number of production workers, by months, was collected only for establishments generally reporting value of shipments of \$500,000 and over.

² For establishments generally reporting value of shipments of less than \$500,000, 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 10. Daily Capacity and Production of Flour Mills, by Size Groups, 19601

Capacity of mills per day of	Number	D	aily capaci	lty	Wheat	Wheat flour production				
24 hours by size groups	of mills	Total	Per cent	Average per estab- lishment	Total	Per cent	Average per estab- lishment			
		cwt.		cwt.	cwt.		cwt.			
Jnder 200 cwt,	_	-	-	_	_	-	_			
200 to 399 cwt	1					1340				
400 '' 599 ''	1	5, 150	3. 2	644	1, 067, 454	2.6	133, 432			
600 '' 999 ''	6			+ 11-13			- 90			
1,000 '' 1,999 ''	6	7, 260	4.5	1, 210	1, 864, 286	4.6	310, 714			
2,000 ' 5,999 '	13	45, 170	27.8	3, 475	11, 135, 399	27. 3	856, 569			
6,000 " 9,999 "	7	55, 900	34.4	7,986	15, 537, 710	38, 2	2, 219, 672			
0,000 cwt. and over	4	49, 000	30, 1	12, 250	11, 098, 762	27. 3	2, 774, 691			
Totals and averages	38	162, 480	100, 0	4, 276	40, 703, 611	100.0	1, 071, 148			

¹ Collected only for establishments generally reporting value of shipments of \$500,000 and over.

TABLE 11. Inventory Values, 1960

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total inventory
Opening inventory:1		dol	lars	
Canada	30, 214, 303	35, 000	4, 518, 689	34, 767, 992
Quebec Ontario Manitoba Saskatchewan and British Columbia Alberta	6, 210, 200 12, 935, 753 1, 121,081 5, 734,823 4, 212, 446	35, 000 - - -	499, 951 1, 624, 399 278, 428 1, 125, 088 990, 823	6,710,151 14,595,152 1,399,509 6,859,911 5,203,269
Closing inventory:				
Canada	28, 399, 157	15, 000	4, 586, 034	33, 000, 191
Quebec Ontario Manitoba Saskatchewan and British Columbia Alberta	6, 311, 429 11, 459, 496 1, 253, 331 5, 568, 797 3, 806, 104	15,000	467, 479 1, 715, 525 326, 520 971, 794 1, 104, 716	6, 778, 908 13, 190, 021 1, 579, 851 6, 540, 591 4, 910, 820

¹ The opening inventory for the current year differs from the closing inventory published last year due to transfers, discards, corrections, or addition of new firms.

TABLE 12. Equipment and Capacity of Flour Mills, 19601

Province	Establish- ments	Pairs of rolls	Pairs of stones	Estimated maximum capacity per day
		number		cwt.
Quebec Ontario Manitoba Saskatchewan and British Columbia Alberta	20 3 4 7	396 1,147 229 376 498	22 3 5	6,600 3,091 5,867 6,105 4,607
Canada	38	2, 646	30	4, 276

¹ Collected only for establishments generally reporting value of shipments of \$500,000 and over.

TABLE 13. Imports of Milled Products and Grains by Quantity and Value, 1959 and 1960

Articles imported	1959		1960	
	Quantity	Value	Quantity	Value
		\$		\$
Milled products:	0.42	5 055	1 050	11 010
Wheat flour	943	5, 955	1,859	11,018
Cornmeal bbl,	68, 047	444, 560	80. 588	535, 792
Malt flour	226, 970	19.729	281,000	23, 105
Rye flour	220,010	- 1		20,100
Oatmeal and rolled oats	2,075	246	2, 323	287
Barley, pot and pearl	_			_
Hominy, cracked, ground, etccwt.	165, 562	528, 763	155, 141	487, 420
Bran and mill feed	41.598	68,501	25, 208	69,723
Cereal food in packageslb.	4, 032, 300	843, 186	4, 172, 924	945, 321
Cereal foods, n.o.p.	-	343,814		362, 407
Semolina	- }	-	_	_
Total value of milled products imported	_	2, 254, 754	_	2,435,073
Grains:			į	
Wheat bu.	2, 657	9, 574	2,550	6. 153
Oats	2, 119	2, 180	2,809	9,095
Barley, buckwheat and rye "	3,806	3, 745	3,017	6,641
Corn for all purposes	12, 054, 166	14, 730, 040	14, 946, 643	17,608,748
Total value of grains imported	-	14, 745, 539	_	17, 630, 628

TABLE 14. Exports of Milled Products and Grains by Quantity and Value, 1959 and 1960

ketialas avpadad	19	1959		1960	
Articles exported	Quantity	Value	Quantity	Value	
		\$		\$	
Milled products:					
Rye flour Wheat flour Oatmeal and rolled oats Bran, shorts and middlings Malt bu.	90,710	64,903,079 1,144,096 1,873,267 10,923,206	15, 775, 471 73, 069 1, 653, 821 6, 192, 556	62, 238, 940 970, 807 3, 516, 382 10, 908, 130	
Screenings Cornmeal bbl. All other meals, n.o.p. cwt Cereal foods, prepared, all kinds		298,811 21,158 286,784	28, 223	217, 241 436, 325	
Total value of milled products exported		79,450,401	-	78,287,825	
Grains:					
Wheat bu. Oats " Barley " Corn " Rye " Buckwheat "	263,720,885 9,014,882 62,570,487 103,319 4,440,398 95,170	441,829,508 7,320,031 66,309,751 791,130 4,961,184 141,400	242,859,021 6,291,326 47,798,519 78,847 3,397,191 159,073	410, 453, 253 5, 785, 675 51, 441, 085 627, 089 4, 001, 530 216, 624	
Total value of grains exported	_	521, 353, 004	_	472,525,256	

TABLE 15. Consumption of Fuel and Electricity, 1960

Kind	Quantity	Cost at plan
		\$
. Establishments reporting commodity detail;1		
Bituminous coal:		
(a) From Canadian mineston	82	1,081
(b) Imported	5,818	69,733
Sub-bituminous coal (from Alberta mines only)		_
Anthracite coal ton	392	7, 219
Lignite coal	6,657	36, 325
Coke	_	_
Gasoline (including gasoline used in cars and trucks) Imp. gal.	470.876	172, 609
Fuel oil including kerosene or coal oil	1,922,791	153, 198
Wood	_	_
Gas (a) Liquefled petroleum gases	_	-
(b) Other manufactured gas	_	_
(c) Natural gas M cu, ft.	221,414	60,814
Other fuel		9, 335
Electricity purchased kwh.	134,614,322	1, 247, 359
Steam purchased	* *	-
Estimate for establishments for which no data were collected:		
Cost of fuel and electricity		65,910
. All establishments:		
Total cost of fuel and electricity		1,823,583

¹ Establishments generally reporting value of shipments of \$500,000 and over. ² Establishments generally reporting value of shipments of less than \$500,000.

List of Firms in Flour Mills, 1960

Name of firm	Address
Quebec:	
Eastern Canada Flour Mills Ltd.	4204 Ct. Ambasias Ct. Mantanal
McDonald & Robb Limited	
The Ogilvie Flour Mills Co., Ltd.	
Robin Hood Flour Mills Ltd.	2110 Notre Dame St. West, Montreal
Ontario:	
Acton Flour Mills	62 Mill St., Acton
Almonte Flour Mills, Limited	P.O. Box 60, Almonte
- Ancaster Mountain Mills	548 Mill St., Ancaster
Caledonia Milling Co. Ltd.	Caledonia
Cherry & Sons Limited, S.J.	
Collingwood Milling Co., The	
Cullen & Sons Limited, James	
Dutton Flour Mills	
Great Star Flour Mills, Limited	
Hawken Milling Company	
Hayhoe Bros.	
Hogg & Sons Ltd., George	
Hortop & Son, W.H.	
Howson & Howson, Ltd	
Knechtel & Son, Limited, Wm.	
Lake of the Woods Milling Co. Ltd.	
McCarthy Milling Co, Limited	
Maple Leaf Milling Co. Ltd.	
Maple Leaf Milling Co. Ltd.	
Morris & Son, Ltd, J.A.	
Paris Flour Mills	2 Grand River N., Paris
Phenix Mills, Limited	69 Ainslie St., South, Galt
Pillsbury of Canada Ltd	206 King St., Midland
Quaker Oats Company of Canada Limited, The	Peterborough
Reid Milling Co. Limited	Streetville
-Robin Hood Flour Mills, Limited	Milton
Robin Hood Flour Mills, Limited	Port Colborne
Smith & Son, E.L.	R.R. No. 4, Scotland
Snider Flour Milling Co. Ltd., The	St. Jacobs
Strathroy Flour Mills, Limited	Albert St., Strathroy
Taylor Co. Limited, The T.H.	14 William St. N., Chatham
Vanstone Flour & Feed Mill	116 King St. W., Bowmanville
Manitoba:	
Harrison Milling & Grain Co,	Holmfield
Kent Flour Mills, Ltd., B.P.	Virden
Ogilvie Flour Mills Co. Ltd., The	39 Higgins Ave., Winnipeg
Maple Leaf - Purity Mills, Limited	480 Archibald St., St. Boniface
Soo Line Mills, Limited	7 Higgins Ave., Winnipes

List of Firms in Flour Mills, 1960 - Concluded

Name of firm	Address
Saskatchewan:	
Esterhazy Flour Mill	Esterhazy
Quaker Oats Co. of Canada, Ltd., The	18th Street & Avenue "N", Saskatoon
Robin Hood Flour Mills, Ltd.	Fifth Ave. and High St. West, Moose Jaw
Robin Hood Flour Mills, Ltd.	First Ave. and 33rd St., Saskatoon
Saskatchewan Wheat Pool	P.O. Box 170, Saskatoon
-Wynyard Flour Mill	Box 84, Wynyard
Yorkton Milling Company Limited	Livingstone St., Yorkton
Alberta:	
Ellison Milling & Elevator Co. Ltd.	1301 Second Ave. S., Lethbridge
Maple Leaf Milling Co. Ltd.	Medicine Hat
Maple Leaf Milling Co. Ltd.	14th St. E., at 17th Avenue, Calgary
Ogilvie Flour Mills Co. Limited, The	10527 - 103rd St., Edmonton
Ogilvie Flour Mills Co. Limited, The	Medicine Hat
Pillsbury of Canada Ltd	Bonnybrook Road, Calgary
Robin Hood Flour Mills, Ltd.	Ninth Avenue & Fourth St. W., Calgary
Vulcan Flour Mill	Vulcan
British Columbia:	
Master Baker Flour Mills, Ltd	1315 E. Hastings St., Vancouver
Millstream Flour Mills	2550 Millstream Rd., Victoria

