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1. THE CEMENT MANUFACTURING INDUSTRY, 1939

Producers' sales of cement, as reported by the Canadian Cement Industry, totalled 5,731,264 barrels valued at \$8,511,211 in 1939, compared with 5,519,102 barrels worth \$8,241,350 in 1938. Of the 1939 sales, 3,027,759 barrels were produced in Quebec plants, 1,709,263 barrels in Ontario, 543,717 barrels in Manitoba, 377,846 barrels in Alberta and 272,679 barrels in British Columbia. The high and low prices per barrel in both 1939 and 1938 were \$2.35 and \$1.25 respectively.

The number of firms reporting commercial production of cement in Canada during 1939 was three and the plants in operation totalled eight. Capital employed aggregated \$51,251,558 and the industry distributed \$1,297,542 in salaries and wages to 1,001 employees. The total value of fuel and electricity purchased during the year under review amounted to \$1,705,981, of which \$1,092,407 were expended for coal and \$589,190 for electricity. Process supplies consumed, including explosives, etc., were valued at \$532,058 and the following tonnage of primary materials of mineral origin were used in the manufacture of the final product: limestone, 1,379,858; clay, 105,982; gypsum, 31,492; shale, 27,241; sand, 7,942, and iron pyrites, 16. Imports of Portland cement into the Dominion in 1939 totalled 16,620 barrels worth \$58,516 compared with 43,497 barrels valued at \$105,326 in 1938. Exports in 1939 totalled 156,556 barrels valued at \$159,579 as against 89,419 barrels worth \$101,059 in the preceding year.

In 1939, as in the preceding year, the wet process was employed in all Canadian cement plants with the exception of one plant in Alberta where the dry method was continued.

"Portland cement is the product that is obtained by pulverizing to a fine consistency a clinker produced by calcining to incipient fusion an intimate mixture of properly proportioned argillaceous and calcareous substances, with only such additions subsequent to calcining as may be necessary to control setting and certain other properties. Such additions, which usually comprise about 3 to 3½ per cent by weight of the calcined product, consist principally of gypsum or mixtures of gypsum and anhydrite. The principal combinations of raw materials are (1) limestone with clay or shale, (2) cement rock (argillaceous limestone either alone or with high calcium limestone), (3) blast-furnace slag and limestone, (4) marl and clay, and (5) oyster shells and clay."

"Some years ago all Portland cement had fairly constant and uniform properties; in other words, there was only one standard Portland cement. In recent years the varied demands of construction have led to the development of a variety of Portland cements each adapted to a particular use. These include high-early-strength, masonry, low heat, and oil well cements." (U.S. Bureau of Mines).

In Ontario, Medusa Products Company of Canada, Limited, began operations at Paris, in June, 1938, manufacturing white Portland cement, waterproofed white Portland cement, white masonry cement, cement paints, etc., from imported clinker. Since this Company does not process domestic materials, the statistics relating to their operations have been included in the Cement Products Industry, as reviewed in the following pages.

According to the Bureau of Mines, Ottawa, a recent development of interest to all manufacturers of cement is the application of froth flotation to remove a portion of the siliceous material from limestone. This process is now in use in several parts of the world and limestone deposits, advantageously situated but too impure in their natural state for cement manufacture, can now be utilized.

Table 1 - PRINCIPAL STATISTICS OF THE CEMENT MANUFACTURING INDUSTRY IN CANADA,
1937 - 1939

	1937	1938	1939
Number of firms	4	3	3
Number of plants	9	8	8
Capital employed \$	54,150,672	52,299,046	51,251,358
Number of employees - On salary ..	100	100	91
On wages ...	983	934	910
Total ...	1,083	1,034	1,001
Salaries and wages - Salaries ... \$	211,778	218,445	198,141
Wages \$	1,161,666	1,087,886	1,099,401
Total ... \$	1,373,444	1,306,331	1,297,542
Selling value of products (Gross). \$	9,025,867	8,241,350	8,511,211
Cost of fuel and electricity \$	1,904,418	1,764,427	1,705,981
Cost of process supplies (x) \$	540,915	529,157	532,058
Net value of products sold \$	6,650,534	5,947,766	6,273,172

(x) Other than fuel and electricity.

Table 2 - WAGE-EARNERS ON 15th OF EACH MONTH, OR NEAREST REPRESENTATIVE DATE, 1937
1938 and 1939

Month	1937	1938	1939	
			Quarry	Mill
January	757	843	55	719
February	784	860	56	743
March	847	888	82	738
April	991	957	120	796
May	985	1,060	128	915
June	1,090	1,018	150	932
July	1,095	939	140	897
August	1,090	956	144	922
September	1,086	1,033	134	898
October	1,082	1,035	105	852
November	1,064	916	65	693
December	947	711	58	592

Table 3 - NUMBER OF WAGE-EARNERS WHO WORKED THE NUMBER OF HOURS SPECIFIED, DURING
ONE WEEK IN MONTH OF NORMAL EMPLOYMENT

Hours	1939	Hours	1939	No.
				No.
30 hours or less .....	...	51 - 54 hours		15
31 - 45 hours	127	55 hours .....		...
44 hours	285	56 - 64 hours		169
45 - 47 hours	49	65 hours and over		42
48 hours	391	GRAND TOTAL		1,084
49 - 50 hours	6	Total wages paid in that week	\$	28,764

Table 4 - TOTAL FUEL AND ELECTRICITY USED IN THE CEMENT MANUFACTURING INDUSTRY,
1938 and 1939

	Unit of measure	1 9 3 8		1 9 3 9	
		Quantity	Value	Quantity	Value
Bituminous coal - Canadian ...	short ton	127,812	\$656,187	190,538	\$1,010,071
Imported ...	short ton	89,172	493,812	16,141	82,336
Gasoline	Imp.gal.	109,616	21,699	108,306	21,422
Kerosene	Imp.gal.	3,135	577	2,990	523
Fuel oil and diesel oil	Imp.gal.	18,521	2,132	20,684	2,337
Wood (cords of 123 cu.ft.) ...	cord	50	162	30	102
Electricity purchased, includ- ing service charges	K. W. H.	59,705,200	\$583,898	58,438,700	\$589,190
TOTAL .....	\$	... 1,764,427		... 1,705,981	
Process supplies used, ex- plosives, etc. ....	\$	... 529,157		... 532,058	

Table 5 - COAL USED IN CANADIAN CEMENT PLANTS, 1931 - 1939

	CANADIAN		FOREIGN	
	Tons	\$	Tons	\$
1931	288,851	1,569,214	195,163	962,076
1932	120,296	652,734	90,718	440,546
1933	48,905	236,947	46,955	229,399
1934	69,853	367,880	60,877	330,432
1935	78,477	435,347	53,338	291,741
1936	119,903	635,631	66,460	367,740
1937	145,791	760,766	90,925	513,417
1938	127,812	656,187	89,172	499,812
1939	190,538	1,010,071	16,141	82,336

Table 6 - KILNS USED BY CANADIAN CEMENT INDUSTRY, 1932 - 1939

Year	Total Daily Capacity	
	Number	Barrels
1932	47	43,822
1933	41	43,622
1934	41	43,922
1935	20	32,650
1936	19	33,000
1937	18	33,900
1938	21 (a)	35,200
1939	21 (b)	35,000

(a) 10 in use with a daily capacity of 23,100 barrels.

(b) 11 in use capacity 23,700 barrels.

Table 7 - QUANTITY AND VALUE OF ELECTRICITY PURCHASED BY CANADIAN CEMENT COMPANIES,
1931 - 1939

Year	Kilowatt hours	\$(x)	Year	Kilowatt hours	\$(x)
1931	152,884,534	741,790	1936	62,038,700	553,212
1932	85,630,342	590,891	1937	61,045,600	606,969
1933	48,160,143	508,841	1938	59,705,200	583,858
1934	48,457,250	496,138	1939	58,438,700	589,190
1935	51,958,859	494,538			

(x) Includes service charges.

Table 8 - POWER EQUIPMENT IN CANADIAN CEMENT PLANTS, 1939

Description	Ordinarily in Use		In Reserve or Idle	
	Number of units	Total horse power(x)	Number of units	Total horse power(x)
Steam engines and steam turbines..	2	57	...	...
Diesel engines	3	825	...	...
Gasoline, gas and oil engines, other than diesel engines	41	1,934	6	327
Hydraulic turbines or water wheels	...	...	...	...
Electric motors -				
(a) Operated by purchased power..	1,338	59,272	360	14,062
Total	1,354	62,088	366	14,389
(b) Operated by power generated by the establishment	11	796	...	...
Boilers	10	342	5	214

(x) According to manufacturers' rating.

Table 9 - SUMMARY STATISTICS OF CEMENT PRODUCTION, SALES, ETC., IN CANADA, 1938 and 1939

	1 9 3 8		1 9 3 9	
	Barrels(x)	Value	Barrels(x)	Value
\$		\$		\$
Output.....	5,588,047	...	5,721,447	...
Sold or used	5,519,102	8,241,350	5,731,264	8,511,211
Stocks on hand December 31st	1,875,288	...	1,865,471	...

IMPORTS -

Portland cement and hydraulic or water lime	48,497	105,326	16,620	58,316
Manufactures .....	...	6,650	...	14,968
TOTAL IMPORTS .....	...	111,976	...	73,284

EXPORTS -

Portland cement	89,419	101,059	156,556	159,579
APPARENT CONSUMPTION	5,478,180	...	5,591,328	...

(x) 1 barrel - 350 pounds.

Table 10 - PRODUCTION AND APPARENT CONSUMPTION OF CEMENT IN CANADA, 1929 - 1939

Year	SOLD OR USED		APPARENT CONSUMPTION	
	Barrels	\$	Barrels	\$
1929	12,284,081	19,337,235	12,105,950	
1930	11,032,538	17,713,067	10,977,238	
1931	10,161,658	15,826,243	10,085,986	
1932	4,498,721	6,930,721	4,466,738	
1933	3,007,432	4,536,935	2,974,020	
1934	3,783,226	5,667,946	3,727,521	
1935	3,648,086	5,580,043	3,610,217	
1936	4,508,718	6,908,192	4,479,656	
1937	6,168,971	9,095,867	6,157,485	
1938	5,519,102	8,241,350	5,478,180	
1939	5,731,264	8,511,211	5,591,328	

Table 11 - PRODUCERS' SALES OF CEMENT IN CANADA, BY PROVINCES, 1937 - 1939

Province	1937		1938		1939	
	Barrels	Value	Barrels	Value	Barrels	Value
Quebec	2,578,625	3,537,798	2,750,320	3,693,188	3,027,759	4,035,294
Ontario	2,650,652	3,657,067	1,818,032	2,555,214	1,709,263	2,437,777
Manitoba	328,513	745,736	330,889	754,427	343,717	773,363
Alberta	267,106	531,541	304,373	611,790	317,846	744,357
British Columbia	344,072	625,725	325,488	626,731	272,679	520,420
CANADA	6,168,971	9,095,867	5,519,102	8,241,350	5,731,264	8,511,211

Table 12 - SELLING PRICE PER BARREL OF CANADIAN CEMENT, F.O.B. WORKS, 1931 - 1939

Year	High	Low	Year	High	Low
	\$	\$		\$	\$
1931	2.60	1.28	1936	2.68	1.25
1932	2.55	1.25	1937	2.68	1.25
1933	2.55	1.25	1938	2.35	1.25
1934	2.36	1.25	1939	2.35	1.25
1935	2.79	1.25			

Table 13 - SPECIFIED MATERIALS USED IN CANADIAN CEMENT PLANTS, 1931 - 1939

Year	Shale	Limestone	Gypsum	Sand	Clay	Pyrites
	Tons	Tons	Tons	Tons	Tons	Tons
1931	(a)	2,489,147	56,677	(a)	(a)	(a)
1932	(a)	1,141,376	27,538	(a)	(a)	(a)
1933	(a)	616,364	13,319	(a)	(a)	(a)
1934	(a)	806,546	19,172	(a)	(a)	(a)
1935	(a)	818,443	21,611	5,047	(a)	(a)
1936	(a)	1,180,358	25,447	8,549	94,945	(a)
1937	(a)	1,465,168	33,691	9,281	195,877	444
1938	13,321	1,344,868	51,975	9,485	143,421	22
1939	27,241	1,379,358	31,492	7,942	105,982	16

(a) Data not recorded.

Table 14 - VALUE OF CONSTRUCTION CONTRACTS AWARDED, BY PROVINCES, 1935 - 1939
(MacLean Building Reports Ltd.)

Province	1935	1936	1937	1938	1939
	\$	\$	\$	\$	\$
Maritimes	14,373,500	17,908,800	21,557,200	19,522,800	16,146,300
Quebec	44,471,900	45,749,500	71,940,800	65,778,900	62,846,600
Ontario	70,872,800	72,595,300	97,777,400	73,070,100	82,605,500
Manitoba	8,744,400	8,394,400	7,945,100	6,115,200	5,574,400
Saskatchewan ...	3,841,300	2,200,600	6,704,900	3,369,000	3,246,100
Alberta	5,893,000	6,297,400	4,901,000	8,180,000	5,234,900
British Columbia	12,108,100	11,044,000	13,230,300	10,641,900	11,724,700
CANADA	160,505,000	161,588,000	224,056,700	187,277,900	187,178,500

The total quantity of cement made in 1914 was 8,727,269 barrels of which 641,869 barrels were made from marl and 8,085,400 barrels from limestone and slag. The drop in consumption in the use of marl for the manufacture of cement is indicated by the fact that in 1908 forty-five per cent of the total production was made from marl and in 1914 this had decreased to seven decimal three per cent. In 1914 twenty-four plants were in operation but of these three were in commission for a few days only, and of the others, seven were in operation less than five months. Five plants were in operation throughout the year. The total daily capacity of 29 completed plants was 51,415 barrels in 1914. These were distributed as follows: one in Nova Scotia using blast furnace slag; three in Quebec using limestone and clay; sixteen in Ontario, of which ten used marl and six limestone; two rock plants in Manitoba, one of which made a "Natural Portland"; four in Alberta including one marl plant and three limestone plants; and three rock plants in British Columbia. The average price per barrel for all plants was \$1.28 in 1914. In 1917 cement was produced in nine plants; seventeen other plants were idle. Of the total production, 96,755 barrels were made from marl and 4,890,500 barrels from limestone; the average price per barrel was \$1.62. In 1918 sales from Canadian cement mills were 3,591,481 barrels, at an average price of \$1.97 per barrel, a decline in sales from the previous year of 24.68 per cent.

Table 15 - PRODUCTION OF CEMENT IN CANADA, 1912 - 1921

Year	Barrels	Value	Year	Barrels	Value
		\$			\$
1912	7,132,732	9,106,556	1917	4,768,488	7,724,246
1913	8,658,805	11,019,418	1918	3,591,481	7,076,503
1914	7,172,480	9,187,924	1919	4,995,257	9,802,433
1915	5,681,032	6,977,024	1920	6,651,980	14,798,070
1916	5,369,560	6,547,728	1921	5,752,885	14,195,143

Table 16 - INDEX NUMBERS OF CANADIAN WHOLESALE PRICES OF SPECIFIED BUILDING AND CONSTRUCTION MATERIALS AND OF GENERAL WHOLESALE PRICES, 1926 = 100

Year	Building and Con- struction Materials	Lumber Index	Miscel- laneous Materials Index (x)	Paint Materials Index	Cement Index	General Wholesale Price Index
1913	67.0	67.4	67.1	57.5	90.9	64.0
1926	100.0	100.0	100.0	100.0	100.0	100.0
1927	96.1	97.5	95.7	92.2	94.0	97.7
1928	97.4	102.3	95.4	86.2	97.0	96.4
1929	99.0	103.5	96.3	92.0	100.2	95.6
1930	90.8	90.1	92.5	86.9	100.8	86.6
1931	81.9	77.4	89.4	69.1	102.3	72.1
1932	77.2	68.8	88.7	63.5	105.3	66.7
1933	78.3	70.8	88.4	66.2	105.5	67.1
1934	82.5	78.6	88.2	75.0	105.2	71.6
1935	81.2	77.8	87.0	71.1	105.2	72.1
1936	85.3	86.3	88.6	68.2	105.8	74.6
1937	94.4	98.1	95.9	74.6	106.2	84.6
1938	89.1	89.8	93.3	69.6	102.4	78.6
1939 /	89.7	94.0	90.9	68.0	96.7	75.4

(x) Determined partly from cement prices.

/ Subject to revision.

Table 17 - WORLD'S PRODUCTION OF CEMENT, 1929, 1938 and 1939 (Taken from the Statistical Year-Book of the League of Nations)

NOTE - This table covers, as far as possible, both natural and artificial (Portland, etc.) cements. Cement is made by burning a mixture of calcareous and argillaceous materials and grinding the resulting clinker. For natural cement, the mixture used is found as such in nature; for artificial cements, the constituents are mixed in the desired proportions.

(Metric tons - 000's omitted)

Country	1929	1938	1939
Africa	760	1,600	1,700
Algeria	58	...	...
Belgian Congo	60	25	35
Egypt	180	376	372
Morocco (French)	65	165	...
Mozambique	21	25	...
Tunis .....	...	69	...
Union of South Africa	376(a)	878	949
North America	34,426	19,161	22,101
Canada	1,945	882	908
United States	29,481	18,279	21,193
Mexico	225	374	400
South America	800(x)	2,594	2,600
Argentina	350	1,179	1,135
Brazil	96	608	...
Chile	145	364	341
Colombia .....	...	144	167
Peru	49	101	120
Uruguay .....	...	158	164
Venezuela .....	...	40	38
Asia(x)	5,570	8,000	7,600
China	185	24	37
India	570	...	...
Netherlands Indies	149	...	...
French Indo-China	184	266	...
Japan and Col.	4,274	5,519	5,074
Palestine	69	98	112
Philippines	76	187	...
Thailand	62	82	92
Syria and Lebanon .....	...	...	...
U.S.S.R.	2,367	5,696	...
Europe (x) (2)	32,360	45,500	...
Germany and Saar	7,206	15,600	...
Austria	582	650	...
Belgium (4)	5,248	2,911	...
Bulgaria	151	194	...
Denmark	799	640	696
Spain f	1,820	...	...
Estonia	62	79	77
Finland	278	500	...

Table 17 - WORLD'S PRODUCTION OF CEMENT, 1929, 1938 and 1939 - (Concluded)
(Metric tons - 000's omitted)

Country	1929	1938	1939
Europe - (Concluded) -			
France	5,787	...	...
Greece	155	308	...
Hungary	403	395	...
Italy	3,497	4,587	...
Latvia	40	155	165
Norway	519	(x) 332	(x) 390
Netherlands	210	456	541
Poland	1,008	1,719	...
Portugal	88	268	297
Roumania	317	532	531
United Kingdom	4,766	7,900	...
Sweden	570	993	...
Czechoslovakia (x)	1,250	...	...
Turkey	65	287	284
Yugoslavia	874	712	663
Oceania (x) (2)	800	1,086	...
Australia (a)	720	866	...
New Zealand (b) .....	...	220	...
(x) TOTAL	74,310	84,000	...

(x) Estimate (a) Twelve months ending June 30, 1940 (b) Twelve months ending March
Country not included in totals. 31st, 1940.

(1) China: total shipments from "Customs ports", excluding Manchuria.

(2) Europe, Oceania; total includes estimate for other countries not mentioned.

NOTE - Most belligerent countries and certain neutral countries have forbidden publication of certain data, in whole or in part.

Table 18 - IMPORTS INTO CANADA AND EXPORTS OF CEMENT, BY PRINCIPAL COUNTRIES, 1938
and 1939

	1938		1939	
	Quantity Cwt.	Value \$	Quantity Cwt.	Value \$
IMPORTS				
Cement, Portland, and hydraulic or water lime -				
From - United Kingdom	20,362	31,263	11,336	15,802
United States	28,080	34,563	21,978	31,598
Belgium	121,204	39,441	24,245	10,312
Other countries	95	59	618	604
TOTAL	169,741	105,326	58,177	58,316
Cement manufactures, n.o.p. .....	...	6,650	...	14,968
TOTAL IMPORTS...	...	111,976	...	73,284

In addition, there was imported, from July 22 to December 31, 1939, 1,388,500 pounds
of white Portland cement clinker valued at \$1,389.

Table 18 - IMPORTS INTO CANADA AND EXPORTS OF CEMENT, BY PRINCIPAL COUNTRIES, 1938
and 1939 - (Concluded)

	1 9 3 8		1 9 3 9	
	Quantity Cwt.	Value \$	Quantity Cwt.	Value \$
<u>EXPORTS</u>				
Cement, Portland -				
To - United Kingdom .....	...	...	...	...
United States	12,299	10,401	9,012	7,325
Trinidad and Tobago	107,623	34,372	232,586	61,845
British Guiana	18,190	6,000	46,187	13,068
Other British West Indies	63,757	18,485	149,838	41,808
Newfoundland	30,201	9,845	57,175	19,771
Colombia	52,250	13,506	...	...
Peru	9,475	2,521	30,400	7,712
Other countries	19,167	5,929	22,747	8,050
TOTAL	312,967	101,059	547,945	159,579

DIRECTORY OF CANADIAN PORTLAND CEMENT MANUFACTURING COMPANIES, 1939

Name of Company	Head Office Address	Location of Plant
<u>QUEBEC</u> -		
Canada Cement Co. Ltd.	Box 290, Station B, Montreal	Hull and Montreal East
<u>ONTARIO</u> -		
Canada Cement Company, Ltd.	Box 290, Station B, Montreal, Belleville, Lakefield(x), and Port Colborne P.Q.	
St. Marys Cement Co. Ltd.	357 Bay St., Toronto	St. Marys
<u>MANITOBA</u> -		
Canada Cement Company, Ltd.	Box 290, Station B, Montreal P.Q.	Fort Whyte and Steep Rock
<u>ALBERTA</u> -		
Canada Cement Company, Ltd.	Box 290, Station B, Montreal, Exshaw P.Q.	
<u>BRITISH COLUMBIA</u> -		
British Columbia Cement Co. Ltd.	805 Government St., Victoria	Bamberton and Tod Inlet

(x) Idle in 1939.

2. THE CEMENT PRODUCTS INDUSTRY, 1939

Production of manufactured cement products in Canada during 1939 was valued at \$3,716,692, compared with \$3,200,419 during 1938.

A total of 122 plants operated in this industry during 1939 - there being 72 in Ontario, 27 in Quebec, 9 in British Columbia, 7 in Alberta, 1 in Nova Scotia, 3 in New Brunswick, 1 in Manitoba and 2 in Saskatchewan. Many of these works were quite small, there being 41 with outputs of less than \$5,000 each, while 62 were in the \$5,000 to \$50,000 group and only 19 were above \$50,000. The Ontario plants accounted for 51 per cent of the total production; establishments in Quebec contributed 34 per cent, and works in British Columbia accounted for more than 7 per cent, the remaining 8 per cent being distributed among New Brunswick, Nova Scotia, Manitoba, Saskatchewan and Alberta.

Products included ready-mixed concrete worth \$1,198,809, cement pipe of all kinds at \$481,095, hollow building blocks of cement at \$653,185, cinder blocks at \$240,012, artificial stone at \$149,644, cement bricks at \$76,186, and other items such as haydite blocks and slabs, laundry tubs, burial vaults, etc.

Data presented for this industry cover manufacturing only and do not include figures for the cement work done on the building of bridges, dams, foundations, etc.; this type of work has been covered in the annual survey of construction.

Table 19 - PRINCIPAL STATISTICS OF THE CEMENT PRODUCTS INDUSTRY, 1929 - 1939

Year	No. of operating plants	Capital employed	Average number of em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross sell- ing value of products at works
	\$	\$	\$	\$	\$	\$	\$
1929 ...	153	5,024,497	1,347	1,608,238	84,130	1,502,952	4,419,417
1930 ...	146	5,157,051	1,252	1,414,043	86,188	1,261,910	3,718,704
1931 ...	157	5,081,227	1,166	1,296,250	83,032	1,245,483	3,807,188
1932 ...	118	4,461,574	710	684,371	57,072	697,483	1,771,297
1933 ...	83	3,545,805	460	392,941	42,482	625,525	1,596,998
1934 ...	88	3,285,150	489	405,028	42,107	444,274	1,042,258
1935 ...	94	3,024,286	519	451,625	37,176	459,296	1,154,138
1936 ...	97	3,053,745	602	569,209	50,036	763,021	1,713,547
1937 ...	109	3,695,565	840	804,024	57,511	1,566,870	3,299,531
1938 ...	119	3,476,390	834	796,902	97,023	1,452,169	3,200,419
1939 ...	122	3,731,652	951	961,143	115,038	1,698,179	3,716,692
Per cent change -							
1939 from 1938 ...	+2.5	+7.3	+14.0	+20.6	+18.5	+16.9	+16.1

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, etc.

Table 20 - PRINCIPAL STATISTICS OF THE CEMENT PRODUCTS INDUSTRY, BY PROVINCES,
1938 and 1939

Province	No. of operating plants	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
<u>1938</u>						
Nova Scotia	1)	17,814	8	4,402	203	4,492
New Brunswick ..	2)					12,665
Quebec	29	1,102,605	248	212,812	46,328	472,937
Ontario	69	2,031,993	487	482,159	44,712	683,145
British Columbia	11	212,498	52	64,646	3,521	261,288
Manitoba	2)					440,898
Saskatchewan ...	2)	95,872	25	22,436.	1,970	20,226
Alberta	3	15,608	14	10,447	289	10,031
CANADA	119	3,476,390	834	796,902	97,023	1,452,169
						3,200,419
<u>1939</u>						
New Brunswick ..	3	18,661	6	2,080	132	2,451
Quebec	27	1,219,138	291	257,996	54,478	559,647
Ontario	72	2,068,306	496	530,973	52,130	839,400
British Columbia	9	211,248	71	73,337	3,429	139,968
Nova Scotia	1)					285,197
Manitoba	1)	85,977	22	22,677	1,840	12,341
Saskatchewan ...	2)					53,942
Alberta	7	128,322	65	74,080	3,029	144,372
CANADA	122	3,731,652	951	961,143	115,038	1,698,179
						3,716,692

Table 21 - CAPITAL EMPLOYED IN THE CEMENT PRODUCTS INDUSTRY, BY PROVINCES, 1938 and
1939

Province	Present value of lands, buildings fixtures, machinery and tools	Inventory value of materials on hand, finished products and stocks in process	Cash, bills, and accounts receivable, prepaid expenses, etc.	TOTAL CAPITAL EMPLOYED
<u>1938</u>				
Nova Scotia and New Brunswick...	12,299	5,015	500	17,814
Quebec	758,585	164,491	179,529	1,102,605
Ontario	1,187,053	307,907	537,033	2,031,993
British Columbia.	182,686	12,913	16,894	212,498
Other provinces..	93,089	7,935	10,456	111,480
CANADA	2,233,712	498,266	744,412	3,476,390
<u>1939</u>				
New Brunswick ...	14,598	2,163	1,900	18,661
Quebec	792,900	196,294	229,944	1,219,138
Ontario	1,207,724	335,257	525,325	2,068,306
British Columbia.	169,890	17,272	24,086	211,248
Alberta	63,481	28,663	36,178	128,322
Other provinces..	76,619	5,708	3,650	85,977
CANADA	2,325,212	585,357	821,083	3,731,652

Table 22 - EMPLOYEES, SALARIES AND WAGES IN THE CEMENT PRODUCTS INDUSTRY,
BY PROVINCES, 1938 and 1939

Province	Average number of employees						TOTAL				
	On Salaries		On Wages		Salaries	Wages	SALARIES		and WAGES		
	Male	Female	Male	Female			TOTAL	\$	\$		
<u>1938</u>											
Nova Scotia and											
New Brunswick	1	..	7	..	8	800	3,602	4,402			
Quebec	46	2	200	..	248	50,710	162,102	212,812			
Ontario	101	13	367	6	487	166,678	515,481	482,159			
British Columbia ...	14	2	35	1	52	28,393	56,253	64,646			
Other provinces	11	2	26	..	39	15,745	17,138	32,885			
CANADA	173	19	635	7	834	262,326	534,576	796,902			
<u>1939</u>											
New Brunswick .....	..	..	6	..	6	...	2,080	2,080	
Quebec	54	3	234	..	291	65,062	192,934	257,996			
Ontario	97	12	381	6	496	187,332	343,641	530,973			
British Columbia ...	16	3	51	1	71	27,270	46,067	73,337			
Alberta	12	1	51	1	65	30,607	43,473	74,080			
Other provinces	6	1	15	..	22	11,634	11,045	22,677			
CANADA	185	20	738	8	951	321,305	639,238	961,143			

Table 23 - WAGE-EARNERS IN THE CEMENT PRODUCTS INDUSTRY, BY MONTHS, 1938 and 1939
(On the last work-day of each month)

Month	1 9 3 8			1 9 3 9		
	Male	Female	TOTAL	Male	Female	TOTAL
January	461	6	467	438	7	445
February	471	6	477	433	7	445
March	542	6	548	486	7	493
April	593	6	599	636	7	643
May	677	6	683	761	7	768
June	724	6	730	898	7	905
July	765	6	771	1,000	7	1,007
August	727	7	734	974	9	983
September	729	7	736	925	7	929
October	715	7	722	872	7	879
November	647	7	654	781	6	787
December	520	7	527	637	6	643
AVERAGE	635	7	642	738	8	746

Table 24 - REGULAR HOURS WORKED PER WEEK BY WAGE-EARNERS, 1939 (In one week in month of highest employment; overtime not included)

Regular hours worked per week	Number of wage-earners	Per cent of total	Regular hours worked per week	Number of wage-earners	Per cent of total
30 hours or less	79	6.9	51 - 54 hours...	191	16.8
31 - 43 hours ..	111	9.8	55 hours	62	5.5
44 hours	115	10.1	56 - 64 hours ..	226	19.8
45 - 47 hours ..	36	3.2	65 hours or over	4	0.4
48 hours	167	14.7	Total	1,157	100.0
49 - 50 hours ..	146	12.8	Total wages paid in selected week	\$ 20,326	

Table 25 - FUEL AND ELECTRICITY USED IN THE CEMENT PRODUCTS INDUSTRY, 1938 and 1939

Kind	Unit of measure	1 9 3 8		1 9 3 9	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal - Canadian ..	short ton	2,881	19,301	2,326	15,726
Imported ..	short ton	1,756	11,650	2,998	19,840
Anthracite coal	short ton	103	1,208	66	787
Lignite coal	short ton	4	23	14	85
Coke	short ton	112	1,007	108	1,014
Gasoline	Imp.gal.	131,791	27,032	172,058	35,822
Kerosene or coal oil	Imp.gal.	223	52	560	197
Fuel oil	Imp.gal.	34,482	1,859	43,363	2,293
Wood	cord	152	728	309	747
Gas - Manufactured	M cu.ft.	685	583	548	467
Natural	M cu.ft.	123	125	2,052	621
Other fuel .....	\$	...	484	...	976
Electricity purchased	K. W. H.	985,240	32,971	1,104,309	36,457
TOTAL .....	\$	...	97,023	...	115,038

Table 26 - POWER EQUIPMENT IN THE CEMENT PRODUCTS INDUSTRY, 1938 and 1939

Kind	1 9 3 8		1 9 3 9	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and turbines	2	40	3	44
Gasoline engines	30	233	36	431
Total Primary Equipment	32	273	39	475
Electric motors run by purchased power	333	3,241	367	3,802
TOTAL	365	3,514	406	4,277
Stationary boilers	28	1,589	27	1,690

Table 27 - POWER EQUIPMENT SHOWING 'ORDINARILY IN USE' separately from 'IN RESERVE OR IDLE', 1939

Kind	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and steam turbines	3	44	...	...
Gasoline engines	33	412	3	19
Total Primary Equipment	36	456	3	19
Electric motors run by purchased power	333	3,613	34	184
TOTAL	369	4,074	37	203
Stationary boilers	22	1,471	5	219

Table 28 - MATERIALS USED IN THE CEMENT PRODUCTS INDUSTRY, 1938 and 1939

Material	Unit of measure	1 9 3 8		1 9 3 9	
		Quantity	Cost at works \$	Quantity	Cost at works \$
Portland cement	btl.	380,286	771,893	444,608	891,870
Quicklime	ton	87	1,808	139	2,627
Sand	cu.yd.	175,525	184,026	190,492	206,606
Gravel	cu.yd.	54,376	50,742	83,333	92,895
Crushed stone	cu.yd.	122,537	140,805	152,159	166,358
Cinders	cu.yd.	34,939	27,720	46,775	44,328
Reinforcing steel	ton	...	57,118	...	66,359
Other materials .....	\$	...	202,297	...	208,560
Boxes, crates, lumber, etc.	\$	...	15,760	...	18,076
TOTAL .....	\$	...	1,452,169	...	1,698,179

Table 29 - MATERIALS USED IN THE CEMENT PRODUCTS INDUSTRY, BY PROVINCES, 1939

Material	Quebec \$	Ontario \$	British Columbia \$	Other provinces \$	CANADA \$
Portland cement	279,167	432,118	75,764	104,821	891,270
Quicklime	531	1,337	739	20	2,627
Sand	91,172	80,901	16,963	17,570	206,606
Gravel	1,279	48,586	12,010	31,020	92,895
Crushed stone	108,938	55,111	2,094	215	166,358
Cinders	7,668	26,000	10,649	11	44,328
Reinforcing steel	38,236	24,941	...	3,632	66,859
Other materials	31,956	156,641	18,518	1,445	208,560
Boxes, crates, lumber, etc.	650	13,765	3,231	430	18,076
TOTAL	559,647	839,400	139,968	159,164	1,698,179

Table 30 - PRODUCTS MADE IN THE CEMENT PRODUCTS INDUSTRY, 1938 and 1939

Products	Quantity	1 9 3 8	Selling value at works \$	1 9 3 9	Selling value at works \$
Cement bricks	86,383	...	76,186	
Cement hollow building blocks, etc.	...	431,547	...	653,185	
Cement drain pipe, sewer pipe, water pipe and culvert tile	464,916	...	481,095	
Artificial stone	155,660	...	149,644	
Cement laundry tubs	76,323	...	89,991	
Cinder blocks	2,404	238,092	2,247	240,012	
Cement stucco	14,318	...	22,469	
Ready mixed concrete	1,162,028	...	1,198,809	
All other products	570,652	...	805,301	
TOTAL	3,200,419	...	3,716,692	

Table 31 - PRODUCTS MADE IN THE CEMENT PRODUCTS INDUSTRY, BY PROVINCES, 1939

Products	Quebec	Ontario	British Columbia	Other provinces	CANADA
	\$	\$	\$	\$	\$
Cement bricks	18,986	56,960	...	240	76,186
Cement hollow building blocks, etc.	173,470	470,106	2,419	7,190	653,185
Cement drain pipe, sewer pipe, water pipe and culvert tile..	172,470	139,365	111,470	57,790	481,095
Artificial stone	60,747	84,659	1,218	3,020	149,644
Cement laundry tubs	18	76,319	13,654	...	89,991
Cinder blocks	30,150	209,862	...	...	240,012
Cement stucco	305	14,438	7,526	200	22,469
Ready mixed concrete	558,614	331,523	112,341	196,331	1,198,809
All other products	233,656	499,603	36,569	35,473	805,301
TOTAL	1,248,416	1,832,835	285,197	300,244	3,716,692

Table 32 - OUTPUT OF PRINCIPAL CEMENT PRODUCTS, 1920 - 1939

Year	Cement hollow building blocks	Cement sewer pipe, water pipe, drain pipe and culvert tile	Cement bricks	Artificial stone	Cinder blocks
	\$	\$	\$	\$	\$
1920	852,304	457,312	...	69,382	
1921	511,283	463,091	11,575	71,741	Not
1922	596,063	378,818	75,742	27,725	
1923	652,420	432,602	70,502	53,326	speci-
1924	523,326	473,719	53,066	77,484	
1925	859,706	596,256	40,261	256,118	fied
1926	1,066,901	647,798	55,412	479,287	
1927	941,194	766,269	94,302	473,051	69,145
1928	1,158,508	1,204,076	40,007	1,173,645	192,358
1929	902,413	1,546,376	178,257	1,134,328	306,228
1930	802,604	1,181,943	129,409	877,659	273,097
1931	709,976	1,373,136	30,763	824,056	231,782
1932	194,750	921,244	58,057	226,057	80,322
1933	179,052	1,014,443	8,685	101,548	39,617
1934	231,901	202,345	13,949	86,511	76,684
1935	277,925	305,203	17,178	148,480	102,615
1936	315,141	432,424	63,032	133,629	167,350
1937	380,008	377,806	146,522	188,021	208,149
1938	431,547	464,916	86,383	155,660	238,092
1939	653,185	481,095	76,186	149,644	240,012

DIRECTORY OF FIRMS IN THE CEMENT PRODUCTS INDUSTRY, 1939

<u>Names of Firms</u>	<u>Location of Plants</u>
<u>NOVA SCOTIA</u> -	
Kentville Concrete Products	Meadow Road, Kentville
<u>NEW BRUNSWICK</u> -	
Blakeny & Son, Ltd.	806 Main St., Moncton
Pelletier, Alfred B.	St. Basile
Scott Concrete Works	Barker's Point
<u>QUEBEC</u> -	
Aerocrete Construction Co. Ltd.	Lakefield Ave., Montreal E.
Arco Stone Company Ltd.	2565 Belanger St., Montreal
Asselin-Lapierre	St. Charles St., Bellechasse
Bilodeau, L. Alfred	144 Renaud Ave., Quebec
Brunet, R.	Ormstown
Concrete Engineering Ltd.	2049 Harvard Ave., Montreal
"Doric" Stone Co.	2745 Grand Trunk St., Montreal
Duntile Company Ltd.	6905 Clanranald Ave., Montreal
Genest, Emile	St. Basile, Co. Portneuf
Giguere, Limoges	1392 Beaubien St. E., Montreal
Grandmaison, F. M.	5081 Iberville St., Montreal
Laflamme & Bourassa	484 Laviolette St., St. Jerome
La Brique du Nord Ltee	Rouyn
La Cie des Produits de Ciment	St. Jerome
La Societe de Construction Moderne	27 St. Sacrement St., Chicoutimi
Marchand & Laberge	Chateauguay
Montreal Dual Mixed Concrete Ltd.	Ottawa St., Montreal
Paquette, Emile	9 Beaubien St., Montreal
Pizzagalli Terrazzo Tile Mfg. Co. Ltd.	6824 Briand St., Montreal
Potier & Freres	105 Jean Talon St. W., Montreal
Pressure Pipe Co. of Canada, Ltd.	8645 Casgrain St., Montreal
Produits de Ciment Economiques, Ltee	Head of Coolbrook Ave., Montreal
Proulx, Romeo	10 Aberdeen St., Lachine
Ready-Mix Concrete Ltd.	St. Polycarpe
St. Louis, Rosaire	425 Selby St., Montreal
Standard Clay Products	Ste. Ursule
Tisserand, Felix	St. Jean
	5936 Des Ecores St., Montreal
<u>ONTARIO</u> -	
Aristocrat Mfg. Co. Ltd.	7 Fraser Ave., Toronto
Ashman, T. J. & Son	520 Grosvenor St., London
Bahcock Supply Co.	Wallaceburg
Baird Barton Stone	225 MacPherson Ave., Toronto
Barr, William	1856 Yonge St., Toronto
Bishop Vault & Memorial Works	Ridgeville
Boyd Bros.	Osgoode
Brans, J.	22 Savoy Ave., East York (Toronto)
Brown, A. E.	215 Spruce St., Sudbury
Brown, D. L.	54 Lorne St., Sudbury
Burwell, C. H.	Tillsonburg

DIRECTORY OF FIRMS IN THE CEMENT PRODUCTS INDUSTRY, 1939 - (Continued)

<u>Names of Firms</u>	<u>Location of Plants</u>
<u>ONTARIO</u> (Continued) -	
Calder, James	Fergus
Calkins, H. W., Ltd.	30 Industrial St., Leaside, Toronto
Canada Block & Tile Co. Ltd.	70 Verona Ave., Toronto
Century Concrete Vault Ltd.	Industrial St., Leaside, Toronto
Clemens & Miller	Lincoln St. W., Welland
Concrete Pipe Ltd.	198 Riddell St., Woodstock
Concrete Pipe Ltd.	400 Old Park Road, Toronto
Cooksville Co. Ltd.	Cooksville
Cooper Concrete Block & Supply Co. Ltd.	1001 Roselawn Ave., Fairbank, Toronto
Cowley, John	Westport
Crawford, Stanley	Glen Road & Macklin St., Hamilton
Cross Supplies & Paving Ltd.	1272 Windsor Ave., Windsor
Dell, E. E.	Aylmer
Dominion Concrete Co. Ltd.	Kemptville
Dominion Concrete Co. Ltd.	Prescott
Dual Mixed Concrete & Materials Ltd.	445 Fleet St. W., Toronto
Dundas Concrete Block Co. Ltd.	400 Scarlett Road, Toronto
D. W. S. Concrete Products Limited	640 Dufferin St., Toronto
Economy Fuel Co.	100 Wallace Ave., Hamilton
Fairbank Block & Supply Co. Ltd.	318 Hopewell Ave., Toronto
Florry, A., & Son (Scarlett Road Block Co.)	16 Scarlett Road, Toronto
Frazer Duntile Co. Ltd.	Clyde Ave., Westboro
Frid Bros. Ltd.	Main W. and Macklin Sts., Hamilton
Garnett, Thos., & Sons	Barrett St., Port Hope
Grimo, Frank	1500 Ferry St., Niagara Falls
Hall, J. H.	George St. N., Peterborough
Hayley, Harry	Hurdman Road, Ottawa
Hill Bros.	1512 Dufferin Place, Windsor
Jackson, Jas. H.	19 Orchard St., London
Kilbourne, H., & Son	145½ Wharncliffe Rd. S., London
Kitchener Concrete Block Co.	R. R. 4, Kitchener
Leaside Block & Tile Ltd.	Industrial St., Leaside
Leblond, J.	68 Hanna St., Eastview
London Cement Burial Vault-Works	345 Hamilton Rd., London
Medusa Products Co. of Canada Ltd.	Paris
Miller, A.	50 Harvey St., Chatham
Northern Cement B. B. & Tile Co.	Timmins
Ontario Ready Mix Concrete Ltd.	Ottawa and Toronto
Peerless Construction Co.	4740 Riverside Drive, Riverside
Peerless Stone Ltd.	510 Rhodes Ave., Toronto
Pinchin, R.	Clarkson
Red-D-Mix Concrete Ltd.	501 Main St. W., Hamilton
Rideau Concretes Ltd.	119 Fourth Ave., Ottawa
Robinet, Frank	3179 Sandwich St. W., Windsor
Robinson, Ernest	R.R. 3, Mitchell
Russells, Howard	Leamington
Sarnia Cement Products Co. Ltd.	Albert St., Point Edward
Sauve, Dennis	Belle River
Schmidt, J. T. (St. Jacobs Tile Yard)	R. R. 1, Waterloo
Sudbury Brick & Block Supply	337 Bond St., Sudbury

DIRECTORY OF FIRMS IN THE CEMENT PRODUCTS INDUSTRY, 1939 - (Concluded)

<u>Names of Firms</u>	<u>Location of Plants</u>
ONTARIO (Concluded) -	
Superior Stone Ltd.	528 Victoria St., Kitchener
Tooke, Thos.	57 Government Rd., Kirkland Lake
Toronto Brick Company Ltd.	Ormskirk Ave., Village of Swansea Islington
Toronto Concrete Burial Vault Co.	River Rd., Eastview
Twin City Dunbrik Co.	42 St. Julien St., London
Walmsley, Frank	Spring St., Picton
White, Homer & Co.	113 Hounslow Ave., Willowdale, Toronto
Willowdale Block Co.	2171 Ottawa St., Walkerville
Woollatt Fuel & Supply Co. Ltd.	
MANITOBA -	
Lo'ns Stone Works Limited	St. Mary's Road, Norwood Grove
SASKATCHEWAN -	
Concrete Products Ltd.	Fifth and St. John Sts., Regina
Precast Concrete Co.	826 Dewdney Ave. E., Regina
ALBERTA -	
Alberta Concrete Products Ltd.	104th Ave. & 111th St., Edmonton
Bell, T. A.	122 .. 3rd Ave. E., Calgary
Concrete Products & Supplies	Rifle Range, East Calgary & Edmonton
Marllite Memorial Products	9664 Jasper Ave., Edmonton
Sorensen, R.	Wetaskiwin
Woods Cement Works	1926 .. 28th Ave. S.W., Calgary
BRITISH COLUMBIA -	
B.C. Cement Co. Ltd.	305 Belmont Bldg., Victoria
B.C. Concrete Co. Ltd.	77th and Oak Sts., Vancouver
Canadian Stucco Products	Granville Island, Vancouver
Dawson Art Stone Works	294 East 1st Ave., Vancouver
Diethers Ltd.	Granville Island, Vancouver
Hunter, George	2613 East 22nd Ave., Vancouver
Pressure Pipe Co. of Canada Ltd.	Fell Ave. N., Vancouver
Sanderson, Warren	1780 Broadway E., Vancouver
Williams Concrete Co. Ltd.	1401 Main St., Vancouver

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