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Acting Dominion Statistician

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### 1. THE CEMENT MANUFACTURING INDUSTRY, 1940

Producers' sales of cement, as reported by the Canadian Cement Industry, totalled 7,559,648 barrels valued at \$11,775,345 in 1940, compared with 5,731,264 barrels at \$8,511,211 in 1939. Of the 1940 sales, 3,854,339 barrels were produced in Quebec plants, 2,355,352 barrels in Ontario, 572,408 barrels in Manitoba, 414,183 barrels in Alberta and 365,366 barrels in British Columbia. The high and low prices per barrel in 1940 were \$2.35 and \$1.32.

The number of firms reporting commercial production of cement in Canada during 1940 was 3 and the plants in operation numbered 8. Capital employed totalled \$50,370,276 and the industry distributed \$1,515,786 in salaries and wages to 1,052 employees. The total value of fuel and electricity used during the year under review amounted to \$2,347,750, of which \$1,621,511 were expended for coal and \$690,266 for electricity. Process supplies consumed, including chemicals, explosives, etc., were valued at \$712,193 and the following tonnages of primary materials of mineral origin were used in the manufacture of the final products: limestone, 1,765,944; clay, 144,152; gypsum, 38,903; shale, 18,347; sand, 15,298 and iron pyrites, 170. Imports of Portland cement into the Dominion in 1940 totalled 13,213 barrels worth \$69,821 compared with 16,620 barrels valued at \$58,316 in 1939. Exports in 1940 totalled 299,975 barrels appraised at \$414,442 as against 156,316 barrels worth \$159,579 in the preceding year.

In 1940, as in 1939, the wet process was employed in all Canadian cement plants with the exception of one in Alberta where the dry method was continued.

Under the title "Cement as a War Time Industry" the Mining Journal - London - says, in part:- "In view of the rigid economy now desirable in the use of timber and steel in the mining industry, the varied uses of cement may be considered. Underground, considerable attention is now being devoted to re-enforced concrete pit props. Prior to the war very large quantities of pit props were imported, as there was no shortage of material and wood was cheap. Under present conditions supplies have been curtailed for obvious reasons, and timber is now far more expensive. ....experiments with re-enforced concrete props gave details of practical results at the coal face. ....the experiments demonstrated that re-enforced concrete props set with release devices can be used over and over again on working faces under normal roof conditions, that is, where the height reduction between the coal face and the edge of the waste, where the prop is withdrawn, is within the limits of the release device. The height reduction in the region where the concrete props were set was less than that in the adjacent areas where steel props were used, because the steel props, having a much smaller bearing area than the release devices, penetrated the floor. ....The sanitary system of a well known town in India is largely constructed of Hume pipes and cement tanks. The Hume pipes were made locally in a wide variety of sizes and employed for a number of purposes. Sections of the large diameter pipes with cement bottoms were very popular as storage tanks for domestic water supplies. ....one of the recent uses of cement is for the manufacture of re-enforced concrete sleepers. These sleepers can be advantageously employed in and around works and for sidings".

The new 12,000-barrel per day plant of the Permanente Corporation, Los Altos, California, has set what is probably an all-time low in raw-grinding cost. Grinding is done in two stages, the first consisting of ball mills in closed circuit with Dorr classifiers, giving a minus of 48 mesh product, and the second stage consisting of

ball mills in closed circuit with Dorr bowl classifiers, giving a product 96 per cent of which is minus 200 mesh. The power consumption is said to be 10 to 11 kilowatt-hours per barrel of cement. (U. S. Bureau of Mines).

Table 1. - PRINCIPAL STATISTICS OF THE CEMENT MANUFACTURING INDUSTRY IN CANADA,  
1938 - 1940

	1938	1939	1940
Number of firms .....	3	3	3
Number of plants .....	8	8	8
Capital employed ..... \$	52,299,046	51,251,358	50,370,276
Number of employees - On Salary ..	100	91	83
On wages ...	934	910	969
Total ...	1,034	1,001	1,052
Salaries and wages - Salaries ... \$	218,445	198,141	191,548
Wages ..... \$	1,087,886	1,099,401	1,324,218
Total ... \$	1,306,331	1,297,542	1,515,766
Selling value of products (Gross). \$	8,241,350	8,511,211	13,006,643 +
Cost of fuel and electricity ..... \$	1,764,427	1,705,981	2,347,730
Cost of process supplies (x) ..... \$	529,157	532,058	712,193
Value of containers ..... \$	-	-	1,251,298
Net value of products sold ..... \$	5,947,766	6,273,172	8,715,422

+ Includes value of containers for the first time.

(x) Other than fuel and electricity.

"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  $3\frac{1}{2}$  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).

Table 2. - WAGE-EARNERS ON 15th OF EACH MONTH, OR NEAREST REPRESENTATIVE DATE, 1938  
1939 and 1940

Month	1938	1939	1940	
			Quarry	Mill
January .....	843	774	67	669
February .....	860	793	67	644
March .....	888	820	108	637
April .....	957	916	130	844
May .....	1,060	1,043	135	886
June .....	1,018	1,062	134	907
July .....	939	1,037	133	908
August .....	956	1,066	133	919
September .....	1,033	1,032	134	977
October .....	1,035	957	137	1,009
November .....	916	763	134	966
December .....	711	650	117	806

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

Hours	1940	Hours	1940
	No.	No.	
30 hours or less .....	1	51 - 54 hours .....	71
31 - 43 hours .....	104	55 hours .....	7
44 hours .....	70	56 - 64 hours .....	337
45 - 47 hours .....	20	65 hours and over .....	133
48 hours .....	411	GRAND TOTAL	<u>1,206</u>
49 - 50 hours .....	52	Total wages paid in that week .....	\$ 34,670

Table 4. - TOTAL FUEL AND ELECTRICITY USED IN THE CEMENT MANUFACTURING INDUSTRY,  
1939 and 1940

	Unit of measure	1939		1940	
		Quantity	Value	Quantity	Value
		\$	\$		
Bituminous coal - Canadian ...	short ton	190,538	1,010,071	185,325	1,108,287
Imported ...	short ton	16,141	82,336	85,885	513,224
Gasoline .....	Imp.gal.	108,306	21,422	134,033	30,959
Kerosene .....	Imp.gal.	2,990	523	4,238	759
Fuel oil and diesel oil .....	Imp.gal.	20,684	2,337	35,116	4,108
Wood (cords of 128 cu.ft.) ...	cord	30	102	31	127
Electricity purchased, including service charges .....	K. W. H.	105,938,210	589,190	126,757,622	690,266
TOTAL .....	\$	... 1,705,981		... 2,347,730	
Process supplies used, explosives, etc. .....	\$	... 532,058		... 712,193	

Cement

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Table 5. - COAL USED IN CANADIAN CEMENT PLANTS, 1931 - 1940

	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	433,347	53,338	231,741
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	439,812
1939 .....	190,538	1,010,071	16,141	82,336
1940 .....	185,325	1,108,287	85,885	513,224

Table 6. - KILNS USED BY CANADIAN CEMENT INDUSTRY, 1932 - 1940

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
1940 .....	21 (c)	35,000

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

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

(c) 13 in use, capacity 27,950 barrels per day.

Table 7. - QUANTITY AND VALUE OF ELECTRICITY PURCHASED BY CANADIAN CEMENT COMPANIES, 1931 - 1940

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 .....	105,938,210	589,190
1935 .....	51,958,859	494,538	1940 .....	126,737,622	690,266

(x) Includes service charges.

Table 8. - POWER EQUIPMENT IN CANADIAN CEMENT PLANTS, 1940

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 ..	1	7	1	50
Diesel engines .....	2	525	1	300
Gasoline, gas and oil engines, other than diesel engines .....	47	2,134	4	222
Hydraulic turbines or water wheels	-	-	-	-
Electric motors -				
(a) Operated by purchased power .	1,340	71,552	331	12,502
Total .....	1,390	74,218	337	13,074
(b) Operated by power generated by the establishment .....	11	763	-	-
Boilers .....	11	412	3	140

(x) According to manufacturers' rating.

Table 9. - SUMMARY STATISTICS OF CEMENT PRODUCTION, SALES, ETC., IN CANADA, 1939 and 1940

	1 9 3 9		1 9 4 0	
	Barrels (x)	Value	Barrels(x)	Value
		\$		\$
Output .....	5,721,447	...	6,947,577	...
Sold or used .....	5,731,264	8,511,211	7,559,648	11,775,345
Stocks on hand December 31st .....	1,865,471	...	1,253,400	...
<b>IMPORTS -</b>				
Portland cement and hydraulic or water lime .....	16,620	58,316	13,213	69,821
Manufactures .....	...	14,968	...	16,461
<b>TOTAL IMPORTS .....</b>	<b>...</b>	<b>73,284</b>	<b>...</b>	<b>86,282</b>
<b>EXPORTS -</b>				
Portland cement .....	156,556	159,579	299,975	414,442
<b>APPARENT CONSUMPTION .....</b>	<b>5,591,328</b>	<b>...</b>	<b>7,272,886</b>	<b>...</b>

(x) 1 barrel - 350 pounds.

Table 10. - PRODUCTION AND APPARENT CONSUMPTION OF CEMENT IN CANADA, 1929 - 1940

Year	SOLD OR USED		APPARENT CONSUMPTION
	Barrels	\$	Barrels
1929 .....	12,284,081	19,337,285	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
1940 .....	7,559,648	11,775,345	7,272,886

Table 11. - PRODUCERS' SALES OF CEMENT IN CANADA, BY PROVINCES, 1938 - 1940

Province	1 9 3 8		1 9 3 9		1 9 4 0	
	Barrels	Value	Barrels	Value	Barrels	Value
	\$		\$		\$	
Quebec .....	2,730,320	3,693,188	3,027,759	4,035,294	3,854,339	5,432,105
Ontario .....	1,818,032	2,555,214	1,709,263	2,437,777	2,355,352	3,518,247
Manitoba .....	330,889	754,427	343,717	773,363	572,408	1,287,918
Alberta .....	304,373	611,790	377,846	744,357	414,183	832,508
British Columbia	325,488	626,731	272,679	520,420	363,366	704,567
CANADA ....	5,519,102	8,241,350	5,731,264	8,511,211	7,559,648	11,775,345

Table 12. - SELLING PRICE PER BARREL OF CANADIAN CEMENT, F.O.B. WORKS, 1931 - 1940

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	1940 .....	2.35	1.32

Table 13. - SPECIFIED MATERIALS USED IN CANADIAN CEMENT PLANTS, 1931 - 1940

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)	1,180,558	25,447	8,549	94,943	(a)
1937 .....	(a)	1,465,168	53,691	9,281	195,877	444
1938 .....	13,821	1,344,868	51,375	9,465	145,421	22
1939 .....	27,241	1,379,858	31,492	7,942	105,982	16
1940 .....	18,347	1,765,944	38,903	15,298	144,152	170

(a) Data not recorded.

Table 14. - VALUE OF CONSTRUCTION CONTRACTS AWARDED, BY PROVINCES, 1936 - 1940  
(MacLean Building Reports Ltd.)

Province	1936	1937	1938	1939	1940
	\$	\$	\$	\$	\$
Maritimes .....	17,908,800	21,557,200	19,532,800	16,146,500	21,142,100
Quebec .....	45,749,500	71,940,800	65,778,900	62,846,600	96,526,500
Ontario .....	72,393,300	97,777,400	73,070,100	82,805,500	146,806,100
Manitoba .....	6,994,400	7,945,100	6,115,200	5,574,400	28,003,700
Saskatchewan ...	2,200,600	6,704,900	3,969,000	3,246,100	12,566,700
Alberta .....	6,297,400	4,901,000	3,180,000	5,254,900	23,940,100
British Columbia	11,044,000	15,230,300	10,641,900	11,724,700	17,224,800
CANADA .....	162,588,000	224,056,700	187,277,900	187,178,500	346,009,800

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 .....	3,501,481	7,076,503
1914 .....	7,172,480	9,187,934	1919 .....	4,995,257	9,802,453
1915 .....	5,681,032	6,977,024	1920 .....	6,651,930	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	89.0	93.6	69.6	102.4	73.6
1939 .....	89.7	94.0	90.9	68.0	96.7	75.4
1940 .....	95.6	103.6	93.4	74.1	98.4	82.9

(x) Determined partly from cement prices.

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	3,000	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	167	...
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) .....	3,243	2,911	...
Bulgaria .....	151	134	...
Denmark .....	799	640	696
Spain / .....	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
<b>Europe - (Concluded) -</b>			
France .....	5,787	...	...
Greece .....	155	508	...
Hungary .....	403	395	...
Italy .....	3,497	4,587	...
Latvia .....	40	155	165
Norway .....	319	(x) 332	(x) 390
Netherlands .....	210	456	541
Poland .....	1,008	1,719	...
Portugal .....	83	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. Corresponding data not available or complete for 1940.

Table 18. - IMPORTS INTO CANADA AND EXPORTS OF CEMENT, BY PRINCIPAL COUNTRIES, 1939  
and 1940

	1 9 3 9	1 9 4 0		
	Quantity Cwt.	Value \$	Quantity Cwt.	Value \$
<u>IMPORTS</u>				
Cement, Portland, and hydraulic or water lime -				
From - United Kingdom .....	11,336	15,802 )		
United States .....	21,978	31,598 )		Not
Belgium .....	24,245	10,312 )		Published
Other countries .....	618	604 )		by Countries
TOTAL .....	58,177	58,316	46,245	69,821
Cement manufactures, n.o.p. .....	...	14,968	...	16,461
TOTAL IMPORTS .....	...	73,284	...	86,282

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 and in 1940, 2,447,400 pounds at \$8,716.

EXPORTS

Cement, Portland -				
To - United Kingdom .....	...	...	)	
United States .....	9,012	7,325	)	
Trinidad and Tobago .....	232,586	61,345	)	
British Guiana .....	46,187	13,068	)	Not
Other British West Indies.	149,838	41,808	)	Published
Newfoundland .....	57,175	19,771	)	by Countries
Colombia .....	...	...	)	
Peru .....	30,400	7,712	)	
Other countries .....	22,747	8,050	)	
TOTAL .....	547,945	159,579	1,049,914	414,442

DIRECTORY OF CANADIAN PORTLAND CEMENT MANUFACTURING COMPANIES, 1940

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, P.Q.	Belleville, Lakefield(x), and Port Colborne
St. Marys Cement Co. Ltd.	357 Bay Street, 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 P.Q.	Exshaw
<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, 1940

Production of manufactured cement products in Canada during 1940 was valued at \$5,303,560 compared with \$3,716,692 during 1939.

A total of 128 plants operated in this industry during 1940 - there being 75 in Ontario, 32 in Quebec, 9 in British Columbia, 6 in Alberta, 1 in Nova Scotia, 4 in New Brunswick, 1 in Manitoba and 2 in Saskatchewan. The Ontario plants accounted for 52 per cent of the total production; establishments in Quebec contributed 38 per cent, and works in British Columbia accounted for 5 per cent, the remaining 5 per cent being distributed among New Brunswick, Nova Scotia, Manitoba, Saskatchewan and Alberta.

Products included ready-mixed concrete worth \$1,757,675, cement pipe of all kinds at \$791,371, hollow building blocks of cement at \$934,702, cinder blocks at \$275,169, artificial stone at \$155,500, cement bricks at \$52,616, 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 - 1940

Year	No. of oper- ating 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	5,081,327	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	405,023	42,107	444,274	1,042,258
1935 ...	94	3,024,286	519	451,625	37,176	459,298	1,154,138
1936 ...	97	3,053,745	602	569,209	50,036	763,021	1,713,347
1937 ...	109	3,695,565	840	804,024	57,511	1,566,870	3,299,331
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
1940 ...	128	4,362,184	1,145	1,500,985	170,084	2,407,552	5,303,560
Per cent change -							
1940 from 1939 ....	...		+ 16.9	+ 20.4	+ 35.4	+ 47.8	+ 41.8
							+ 42.7

## 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,  
1939 and 1940

Province	No. of operating plants	Average Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value at works
<b>1939</b>							
New Brunswick...	3	18,661	6	2,080	132	2,451	7,869
Quebec .....	27	1,219,138	291	257,996	54,478	559,647	1,248,416
Ontario .....	72	2,068,306	496	530,973	52,130	839,400	1,882,835
British Columbia	9	211,248	71	73,337	3,429	139,968	285,197
Nova Scotia ....	1)						
Manitoba .....	1)	85,977	22	22,677	1,840	12,341	53,942
Saskatchewan ...	2)						
Alberta .....	7	128,322	65	74,080	5,029	144,372	238,433
CANADA .....	122	3,731,652	951	961,143	115,038	1,698,179	3,716,692
<b>1940</b>							
New Brunswick...	4	29,773	6	1,277	295	2,164	6,790
Quebec .....	32	1,490,666	379	413,559	88,300	871,307	2,004,550
Ontario .....	73	2,423,445	632	724,686	73,692	1,247,077	2,770,109
British Columbia	9	183,252	54	66,166	2,388	156,937	269,165
Nova Scotia ....	1)						
Manitoba .....	1)	92,054	15	15,158	806	7,323	31,646
Saskatchewan ...	2)						
Alberta .....	6	142,994	59	80,139	4,003	122,744	221,300
CANADA .....	128	4,362,184	1,145	1,300,985	170,084	2,407,552	5,503,560

Table 21. - CAPITAL EMPLOYED IN THE CEMENT PRODUCTS INDUSTRY, BY PROVINCES, 1939 and 1940

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	TOTAL CAPITAL EMPLOYED
<b>1939</b>				
New Brunswick...	14,598	2,163	1,900	13,661
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
<b>1940</b>				
New Brunswick ..	25,148	3,125	1,500	29,773
Quebec .....	940,035	232,690	317,941	1,490,666
Ontario .....	1,090,495	500,857	832,113	2,423,445
British Columbia	140,655	13,791	28,306	183,252
Alberta .....	68,713	23,438	50,843	142,994
Other provinces.	82,793	5,481	3,730	92,054
CANADA .....	2,347,839	779,362	1,234,983	4,362,184

Table 22. - EMPLOYEES, SALARIES AND WAGES IN THE CEMENT PRODUCTS INDUSTRY,  
BY PROVINCES, 1939 and 1940

Province	Average number of employees						Salaries \$	Wages \$	TOTAL SALARIES and WAGES \$		
	On Salaries		On Wages		Male	Female					
	Male	Female	Male	Female		TOTAL					
<b>1939</b>											
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	178,332	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	11,043	22,677			
CANADA .....	185	20	738	8	951	321,905	639,238	961,143			
<b>1940</b>											
New Brunswick .....	..	..	6	..	6	...	1,277	1,277			
Quebec .....	66	8	304	1	379	108,647	304,912	413,559			
Ontario .....	108	13	506	5	632	219,869	504,817	724,686			
British Columbia ..	18	2	34	..	54	27,139	39,027	66,166			
Alberta .....	9	1	48	1	59	30,720	49,419	80,139			
Other provinces ...	4	1	10	..	15	7,937	7,221	15,158			
CANADA .....	205	25	908	7	1,145	394,312	906,673	1,300,985			

Table 23. - WAGE-EARNERS IN THE CEMENT PRODUCTS INDUSTRY, BY MONTHS, 1939 and 1940  
(On the last work-day of each month)

Month	1 9 3 9			1 9 4 0		
	Male	Female	TOTAL	Male	Female	Total
January .....	458	7	445	550	6	556
February .....	438	7	445	583	6	589
March .....	486	7	493	550	6	556
April .....	636	7	643	735	7	742
May .....	761	7	768	911	7	918
June .....	898	7	905	1,042	7	1,049
July .....	1,000	7	1,007	1,093	7	1,100
August .....	974	9	983	1,073	7	1,080
September .....	925	7	929	1,126	6	1,132
October .....	872	7	879	1,111	6	1,117
November .....	781	6	787	1,111	6	1,117
December .....	637	6	643	965	5	970
AVERAGE .....	738	8	746	908	7	915

Table 24. - HOURS WORKED PER WEEK BY WAGE-EARNERS, 1940 (In one week in month of highest employment; overtime included)

Hours worked per week	Number of wage-earners	Per cent of total	Hours worked per week	Number of wage-earners	per cent of total
30 hours or less ..	119	7.6	51 - 54 hours...	219	13.9
31 - 43 hours ..	148	9.4	55 hours .....	39	2.5
44 hours .....	78	5.0	56 - 64 hours ..	458	29.1
45 - 47 hours ..	48	3.0	65 hours and over	183	11.6
48 hours .....	146	9.2	Total .....	1,576	100.0
49 - 50 hours ..	138	8.7	Total wages paid in selected week	\$35,231	

Table 25. - FUEL AND ELECTRICITY USED IN THE CEMENT PRODUCTS INDUSTRY, 1939 and 1940

Kind	Unit of measure	1 9 3 9		1 9 4 0	
		Quantity	Cost at works \$	Quantity	Cost at works \$
Bituminous coal - Canadian ..	short ton	2,326	15,726	4,006	27,631
Imported ..	short ton	2,998	19,840	2,672	19,088
Anthracite coal .....	short ton	66	787	92	1,175
Lignite coal .....	short ton	14	85	8	40
Coke .....	short ton	108	1,014	2,525	14,467
Gasoline .....	Imp. gal.	172,058	35,822	260,712	58,929
Kerosene or coal oil .....	Imp. gal.	560	197	1,796	505
Fuel oil .....	Imp. gal.	45,363	2,299	42,953	2,505
Wood .....	cord	309	747	428	1,160
Gas - Manufactured .....	M cu. ft.	548	467	893	773
Natural .....	M cu. ft.	2,052	621	1,804	542
Other fuel .....	\$	...	976	...	472
Electricity purchased .....	K. W. H.	1,104,509	36,457	1,589,959	42,799
TOTAL .....	\$	...	115,058	...	170,084

Table 26. - POWER EQUIPMENT IN THE CEMENT PRODUCTS INDUSTRY, 1939 and 1940

Kind	1 9 3 9		1 9 4 0	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and turbines .....	3	44	4	44
Gasoline engines .....	36	431	44	454
Total Primary Equipment .....	39	475	48	548
Electric motors run by purchased power .....	367	3,802	368	3,751
TOTAL .....	406	4,277	416	4,299
Stationary boilers .....	27	1,690	36	2,055

Table 27. - POWER EQUIPMENT SHOWING 'ORDINARILY IN USE' separately from 'IN RESERVE OR IDLE', 1940

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 .....	4	94	...	...
Gasoline engines .....	44	454	...	...
Total Primary Equipment .....	48	548	...	...
Electric motors run by purchased power .....	348	3,658	20	93
TOTAL .....	396	4,206	20	93
Stationary boilers .....	28	1,641	8	414

Table 28. - MATERIALS USED IN THE CEMENT PRODUCTS INDUSTRY, 1939 and 1940

Material	Unit of measure	1 9 3 9		1 9 4 0	
		Quantity	Cost at works \$	Quantity	Cost at works \$
Portland cement .....	brl.	444,608	891,870	613,465	1,247,247
Quicklime .....	ton	139	2,627	254	3,308
Sand .....	cu. yd.	190,492	206,606	246,590	304,908
Gravel .....	cu. yd.	83,333	92,895	134,556	147,706
Crushed stone .....	cu. yd.	152,159	106,358	212,209	212,729
Cinders .....	cu. yd.	46,775	44,328	53,618	40,991
Reinforcing steel .....	ton	...	66,859	...	151,186
Other materials .....	\$	...	208,560	...	274,372
Boxes, crates, lumber, etc.	\$	...	18,076	...	25,105
TOTAL .....	\$	...	1,698,179	...	2,407,552

Table 29. - MATERIALS USED IN THE CEMENT PRODUCTS INDUSTRY, BY PROVINCES, 1940

Material	Quebec	Ontario	British	Other	CANADA
			Columbia	provinces	
Portland cement .....	440,859	634,232	96,041	76,115	1,247,247
Quicklime .....	1,288	1,096	919	5	3,308
Sand .....	129,403	138,334	19,829	17,342	304,908
Gravel .....	639	95,700	18,855	32,512	147,706
Crushed stone .....	160,995	49,912	1,533	289	212,729
Cinders .....	9,507	31,454	...	30	40,991
Reinforcing steel .....	75,094	70,152	5,030	2,930	151,186
Other materials .....	52,639	208,129	11,494	2,110	274,372
Boxes, crates, lumber, etc.	883	18,038	5,236	898	25,105
TOTAL .....	871,507	1,247,077	156,987	132,231	2,407,552

Table 30. - PRODUCTS MADE IN THE CEMENT PRODUCTS INDUSTRY, 1939 and 1940

Products	Quantity	1 9 3 9		1 9 4 0	
		Selling value at works \$	Quantity	Selling value at works \$	Quantity
Cement bricks .....	...	76,186	...	52,616	...
Cement hollow building blocks, etc.	...	653,185	...	934,702	...
Cement drain pipe, sewer pipe water pipe and culvert tile .....	...	481,095	...	731,371	...
Artificial stone .....	...	149,644	...	155,500	...
Cement laundry tubs .....	No.	89,991	9,931	68,267	...
Cinder blocks .....	M	2,247	240,012	...	275,169
Cement stucco .....	...	22,469	...	8,026	...
Ready mixed concrete .....	...	1,198,809	...	1,757,675	...
Cement posts, poles, etc. ....	...	...	...	546	...
Repair work .....	...	...	...	9,801	...
All other products .....	...	805,301	...	1,249,887	...
TOTAL .....	...	3,716,692	...	5,303,560	...

Table 31. - PRODUCTS MADE IN THE CEMENT PRODUCTS INDUSTRY, BY PROVINCES, 1940

Products	Quebec	Ontario	British Columbia	Other provinces	CANADA
	\$	\$	\$	\$	\$
Cement bricks .....	29,442	23,174	...	...	52,616
Cement hollow building blocks, etc. ....	268,097	656,508	5,520	4,577	934,702
Cement drain, pipe, sewer pipe, water pipe and culvert tile.	334,119	378,345	39,022	39,385	791,371
Artificial stone .....	38,309	92,663	2,628	21,900	155,500
Cement laundry tubs .....	...	48,842	17,525	1,900	68,267
Cinder blocks .....	11,882	263,287	...	...	275,169
Cement stucco .....	...	...	8,026	...	8,026
Ready mixed concrete .....	881,593	558,555	148,928	168,819	1,757,675
All other products .....	441,108	744,814	...	16,995	274,372
Amount received for repair work .....	...	3,441	...	6,560	25,105
TOTAL .....	2,004,550	2,770,109	...	259,736	2,407,552

Table 32. - OUTPUT OF PRINCIPAL CEMENT PRODUCTS, 1920 - 1940

Year	Cement hollow building blocks	Cement sewer pipe, water pipe drain pipe and culvert tile	Cement bricks	Artificial stone	Cinder blocks
	\$	\$	\$	\$	\$
1920 .....	852,304	457,512	...	69,382	
1921 .....	511,283	463,091	11,375	71,741	Not
1922 .....	596,065	378,618	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 .....	1,068,901	647,798	53,412	479,287	
1927 .....	941,194	766,269	94,302	475,051	69,145
1928 .....	1,158,508	1,294,076	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 .....	277,923	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	238,032
1939 .....	653,185	481,095	76,186	149,644	240,012
1940 .....	934,702	791,371	52,616	155,500	275,169

DIRECTORY OF FIRMS IN THE CEMENT PRODUCTS INDUSTRY, 1940

<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. Eastern Cement Products Ltd. Pelletier, Alfred B. Scott Concrete Works	806 Main St., Moncton 111 Princess St., East St. John St. Basile Barker's Point
<u>QUEBEC</u> - Aerocrete Construction Co. Ltd. Arco Stone Company Ltd. Asselin-Lapierre Beauday, O. Bilodeau, L. Alfred Beaudul, H. Brunet, R. Castonguay, L. Concrete Engineering Ltd. "Dorie" Stone Co. Duntile Company Ltd. Genest, Emile Giguere, Limoges Grandmaison, F. M. Laflamme & Bourassa La Brique du Nord Ltée La Cie des Produits de Ciment La Societe de Construction Moderne Les Tuyaux Vibres Enrg. Marchand & Laberge Marchand, L. G. Montreal Dual Mixed Concrete Ltd.  Paquette, Emile Pizzagalli Terrazzo Tile Mfg. Co. Ltd. Potier & Freres Pressure Pipe Co. of Canada, Ltd. Produits de Ciment Economiques, Ltée Proulx, Romeo Ready-Mix Concrete Ltd. St. Louis, Rosaire Standard Clay Products Tisserand, Felix	Lakefield Ave., Montreal E. 2565 Belanger St., Montreal St. Charles St., Bellechasse 5203 Chapleau, Montreal 144 Renaud Ave., Quebec 3269 Richelieu St., Ville St. Michael Ormstown St. Edouard 2049 Harvard Ave., Montreal 2745 Grand Trunk St., Montreal 6905 Clanranald Ave., Montreal St. Basile, Co. Portneuf 1392 Beaubien St. E., Montreal 5081 Iberville St., Montreal 484 Laviolette St., St. Jerome Rouyn St. Jerome 27 St. Sacrement St., Chicoutimi Bureau 1411 rue St Valier, Quebec Chateauguay 46 Ave. St. Anne, Pointe-Claire Ottawa St., Montreal 9 Beaubien St., Montreal 6824 Friend St., Montreal 105 Jean Talon St. W., Montreal 8645 Casgrain St., Montreal Head of Coolbrook Ave., Montreal 10 Aberdeen St., Lachine St. Polycarpe 425 Selby St., Montreal Ste. Ursule St. Jean 5936 Des Ecores St., Montreal
<u>ONTARIO</u> - Aristocrat Mfg. Co. Ltd. Ashman, T. J. & Son Babcock Supply Co. Baird Barton Stone Barr, William Bishop Vault & Memorial Works Boyd Bros.	7 Fraser Ave., Toronto 520 Grosvenor St., London Wallaceburg 225 MacPherson Ave., Toronto 1856 Yonge St., Toronto Ridgeville Osgoode

DIRECTORY OF FIRMS IN THE CEMENT PRODUCTS INDUSTRY, 1940

<u>Names of Firms</u>	<u>Location of Plants</u>
<b>ONTARIO (Continued) -</b>	
Brans & Kennedy	22 Savoy Ave., East York, (Toronto)
Brown, A. E.	215 Spruce St., Sudbury
Brown, D. L.	54 Lorne St., Sudbury
Burwell, C. H.	Tillsonburg
Calder, James	Fergus
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.	138 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
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
Fletcher, Jos. H.	Box 798, Fonthill
Florry, A., & Son (Scarlett Road Block Co.)	20 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	1636 Ferry St., Niagara Falls
Hall, J. H.	577 Bethune St., 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	687 Grey St., 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.	113 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	Bell River

DIRECTORY OF FIRMS IN THE CEMENT PRODUCTS INDUSTRY, 1940 - (Continued)

<u>Names of Firms</u>	<u>Location of Plants</u>
<u>ONTARIO</u> (Concluded) -	
Schmidt, J. T. (St. Jacobs Tile Yard)	R. R. 1, Waterloo
Schulz, John	64 Kent Ave., Kitchener
Sudbury Brick & Block Supply	337 Bond St., Sudbury
Superior Stone Ltd.	528 Victoria St., Kitchener
Tooke, Thos.	57 Government Rd., Kirkland Lake
Toronto Brick Company Ltd.	Ormskirk Ave., Village of Swansea
Toronto Concrete Burial Vault Co.	Islington
Twin City Dunbrik Co.	River Rd., Eastview
Walmsley, Frank	42 St. Julien St., London
Ward, John E.	149 Simcoe St., Hamilton
White, Homer & Co.	Spring St., Picton
Willowdale Block Co.	113 Hounslow Ave., Willowdale, Toronto
Young Bros.	Ridgeway
<u>MANITOBA</u> -	
Lo'ns Stone Works Limited	St. Mary's Road, Norwood Grove
<u>SASKATCHEWAN</u> -	
Concrete Products Ltd.	Fifth and St. John Sts., Regina
Precast Concrete Co.	820 Dewdney Ave. E., Regina
<u>ALBERTA</u> -	
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
Marblite Memorial Products	9664 Jasper Ave., Edmonton
Woods Cement Works	1926 .. 28th Ave. S.W., Calgary
<u>BRITISH COLUMBIA</u> -	
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
Dicthers Ltd.	Granville Island, Vancouver
Hunter, George	2613 East 22nd Ave., Vancouver
MacLean Weir Ltd.	Box 2463 N. Vancouver
Sanderson, Warren	1780 Broadway E., Vancouver
Williams Concrete Co. Ltd.	1401 Main St., Vancouver

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