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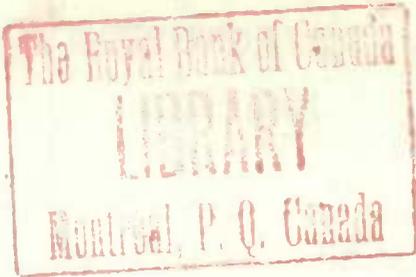
THE CEMENT MANUFACTURING INDUSTRY 1951

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Minister of Trade and Commerce

Prepared in the Mining, Metallurgical and Chemical Section
Industry and Merchandising Division
Dominion Bureau of Statistics
Ottawa

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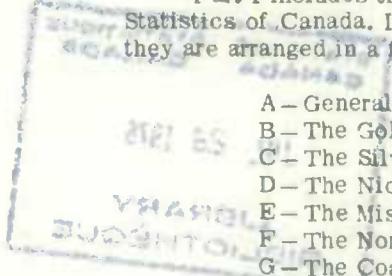
NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 4 volumes, as follows: **Volume I**—The Primary Industries, including mining, forestry and fisheries; **Volume II**—Manufacturing; **Volume III**—Construction; **Volume IV**—Merchandising and Services. The volumes are made up of parts, and the parts in turn are subdivided according to the industries which they comprise.

Volume I consists of the following parts

- Part I—Mineral Statistics
- Part II—Forestry Statistics—Operations in the Woods
- Part III—Fisheries Statistics

Part I includes the following reports which constitute the complete series on Mineral Statistics of Canada. Individual reports are issued as the information becomes available; they are arranged in a form suitable for binding.



- A—General Review of the Mining Industry, 50¢.
- B—The Gold Mining Industry, 50¢.
- C—The Silver-Lead-Zinc Mining Industry, 25¢.
- D—The Nickel-Copper Mining, Smelting and Refining Industry, 25¢.
- E—The Miscellaneous Metal Mining Industry, 25¢.
- F—The Non-ferrous Smelting and Refining Industry, 25¢.
- G—The Coal Mining Industry, \$1.00.
- H—The Crude Petroleum and Natural Gas Industry, 25¢.
- I—The Asbestos Mining Industry, 25¢.
- J—The Feldspar and Quartz Mining Industry, 25¢.
- K—The Gypsum Industry, 25¢.
- L—The Peat Industry, 25¢.
- M—The Salt Industry, 25¢.
- N—The Talc and Soapstone Industry, 25¢.
- O—The Miscellaneous Non-Metal Mining Industry, 25¢.
- P—The Cement Manufacturing Industry, 25¢.
- Q—The Clay and Clay Products Industry, 25¢.
- R—The Lime Industry, 25¢.
- S—The Sand and Gravel Industry, 25¢.
- T—The Stone Industry, 25¢.
- U—Contract Diamond Drilling in the Mining Industry, 25¢.

(18 July '52)

THE CEMENT MANUFACTURING INDUSTRY

1951

Cement plants in Canada exceeded previous records of production during 1951 when producers' shipments amounted to 17,007,812 barrels valued at \$40,446,288 compared with 16,741,826 barrels worth \$35,894,124 in 1950.

Quebec continued to lead the other provinces with shipments in 1951 amounting to 7,055,164 barrels. Ontario was next with 5,438,101 barrels and Alberta was in third place with 1,649,909 barrels. Manitoba and British Columbia shipped 1,539,612 and 1,325,026 barrels respectively.

The new plant of Ciment Quebec Inc. at St-Basile, Quebec, started operations late in 1951. Some clinker was made at the new works of the Canada Cement Company Limited at Havelock, New Brunswick, in preparation for regular production of cement in 1952. At Harbourmouth, Newfoundland, the new kiln erected by the provincial government was also made ready for production early in 1952.

Plants at St. Marys, Ontario, and at Exshaw, Alberta, were being expanded.

Raw materials used in 1951 included 4,246,501 tons of limestone, 146,603 tons of gypsum, 405,159 tons of clay, 10,552 tons of iron oxide, 60,015 tons of silica sand and 87,081 tons of shale.

In 1951, the industry employed an average of 1,931 persons to whom \$6,242,900 were distributed in salaries and wages. Purchased materials, process supplies and containers cost \$7,324,048; fuels cost \$7,489,513; and 315,102,941 k.w.h. of purchased electricity cost \$1,578,783. Imports of cement increased in 1951 to 2,327,431 barrels valued at \$7,447,859. Exports declined to 2,590 barrels worth \$12,386.

The apparent consumption, as computed from shipments plus imports, less exports, amounted to 19,332,653 barrels in 1951 compared with 18,104,136 barrels in 1950.

TABLE 1. Principal Statistics for the Cement Manufacturing Industry, 1942-1951

Year	Number of plants	Number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost ¹ of process supplies, materials and containers at works	Gross value of products sold during year including containers (f.o.b. works)	Net ² value of production
			\$	\$	\$	\$	\$
1942	8	1,241	2,059,337	3,127,264	2,287,223	15,628,403	10,213,916
1943	8	1,209	2,154,218	3,089,380	2,467,709	12,709,852	7,152,763
1944	8	1,207	2,254,775	3,197,955	2,566,432	12,646,741	6,882,354
1945	8	1,317	2,398,117	3,210,929	2,794,676	15,422,031	9,416,426
1946	8	1,524	2,929,020	4,487,496	4,306,467	21,724,021	12,930,058
1947	8	1,650	3,679,446	5,777,917	4,354,657	23,582,011	13,449,437
1948	8	1,723	4,356,086	7,158,156	5,699,042	30,561,717	17,704,519
1949	8	1,721	4,754,611	8,038,190	5,949,640	35,065,152	21,077,322
1950	8	1,781	5,235,735	8,605,095	6,504,314	38,200,513	23,091,104
1951	10	1,931	6,242,900	9,068,296	7,324,048	43,023,845	26,631,501

1. Includes only process supplies and containers for 1942; but process supplies, containers and raw materials for later years.

2. Gross value less cost of materials, fuel and electricity.

TABLE 2. Producers' Shipments¹ of Cement, by Provinces, 1949-1951

Province	1949		1950		1951	
	Barrels	Value	Barrels	Value	Barrels	Value
		\$		\$		\$
Quebec	6,901,192	13,722,635	6,920,413	14,523,855	7,055,164	16,633,377
Ontario	4,599,322	9,155,613	5,313,521	10,953,896	5,438,101	12,494,677
Manitoba	1,502,308	3,538,122	1,642,312	3,963,464	1,539,612	4,108,752
Alberta	1,659,503	3,456,141	1,589,713	3,364,613	1,649,909	3,898,043
British Columbia	1,254,239	3,029,425	1,275,867	3,088,296	1,325,026	3,311,439
Canada.....	15,916,564	32,901,936	16,741,826	35,894,124	17,007,812	40,446,288

1. Does not include the value of containers. Includes amounts used by the producers.

TABLE 3. Production, Imports and Exports of Portland Cement, 1950 and 1951

	1950		1951	
	Barrels ¹	Value	Barrels ¹	Value
		\$		\$
Output	16,723,807	—	17,123,931	—
Shipments (sold or used by producers).....	16,741,826	35,894,124	17,007,812	40,446,288
Stocks on hand December 31	739,291	—	855,410	—
Imports:				
Portland cement and hydraulic or water lime	1,386,219	3,788,981	2,327,431	7,447,859
Portland cement clinker (white)	44,745	154,174	45,812	157,202
Exports:				
Portland cement.....	23,909	111,351	2,590	12,386
Apparent consumption².....	18,104,136	—	19,332,653	—

1. 1 barrel — 350 pounds.

2. Exclusive of clinker imported.

TABLE 4. Producers' Shipments and Apparent Consumption of Cement, 1942-1951

Year	Shipments (sold or used)		Imports	Exports	Apparent consumption ¹
	Barrels	Value	Barrels	Barrels	Barrels
		\$			
1942.....	9,126,041	14,365,237	26,320	273,880	8,878,481
1943.....	7,302,289	11,599,033	18,577	172,601	7,148,265
1944.....	7,190,851	11,621,372	14,004	210,449	6,994,406
1945.....	8,471,679	14,246,480	32,653	281,944	8,222,388
1946.....	11,560,483	20,122,503	350,057	114,370	11,796,170
1947.....	11,936,245	21,968,909	1,248,625	88,030	13,096,840
1948.....	14,127,123	28,264,987	1,120,671	72,999	15,174,795
1949.....	15,916,564	32,901,936	2,284,000	19,212	18,181,352
1950.....	16,741,826	35,894,124	1,386,219	23,909	18,104,136
1951.....	17,007,812	40,446,288	2,327,431	2,590	19,332,653

1. Shipments plus imports less exports.

TABLE 5. Producers' Shipments of Cement, by Months, 1950 and 1951

Month	1950	1951	Month	1950	1951
	Barrels			Barrels	
January	652,920	895,498	July	1,681,110	1,599,009
February	790,500	960,037	August	1,614,646	1,762,223
March	1,233,425	1,385,209	September	1,615,506	1,550,402
April	1,383,134	1,542,365	October	1,558,140	1,657,181
May	2,136,103	1,890,568	November	1,435,354	1,288,048
June	1,849,368	1,686,081	December	791,620	791,191
			Total	16,741,826	17,007,812

TABLE 6. Materials Used in Cement Plants, 1942-1951

Year	Value of materials listed in following columns	Shale	Limestone	Gypsum	Sand	Clay	Iron oxides ¹
	\$	(Tons)					
1942	—	30,498	2,155,750	49,816	20,711	188,202	2,094
1943	—	75,460 ²	1,918,742	47,034	19,473	165,345	1,502
1944	—	74,303	1,865,597	42,672	23,942	173,728	3,924
1945	—	70,600	1,849,258	45,883	29,424	161,980	3,197
1946	505,994	99,355	2,525,653	65,431	31,222	227,645	3,862
1947	651,521	43,154	3,057,675	81,946	36,223	279,635	5,145
1948	990,557	78,377	3,449,947	119,821	47,749	277,178	9,182
1949	1,161,010	76,200	3,985,407	137,785	48,124	325,037	11,885
1950	1,246,520	79,325	4,119,216	137,170	52,509	360,927	12,145
1951	1,391,842	87,081	4,246,501	146,603	60,015	405,159	10,552

1. Produced from iron pyrites by the chemical industry.

2. Prior to 1943 shale consumed in British Columbia plants was included with limestone.

TABLE 7. Coal Used in Cement Plants, 1942-1951

Year	Canadian		Foreign	
	Tons	Value	Tons	Value
		\$		\$
1942	156,544	1,003,490	192,105	1,305,383
1943	98,135	595,385	225,741	1,664,546
1944	108,292	731,706	219,802	1,634,690
1945	121,299	823,988	206,995	1,566,420
1946	172,081	1,237,718	289,046	2,233,402
1947	188,457	1,485,039	371,849	3,130,050
1948	328,422	2,965,986	300,191	2,842,549
1949	440,038	1	231,870	1
1950	453,930	1	228,797	1
1951	421,812	1	244,250	1

1. Value is not available.

TABLE 8. Number and Capacity of Kilns in Cement Plants, 1942-1951

Year	Total kilns		Kilns in use during the year	
	Number	Total capacity— barrels per 24 hours	Number	Total capacity— barrels per 24 hours
1942	19	34,650	17	32,450
1943	19	33,750	15	30,296
1944	19	33,250	15	30,150
1945	19	33,250	15	30,150
1946	18	33,550	16	31,640
1947	19	33,000	19	38,000
1948	20	41,000	19	40,300
1949	21	47,000	19	45,600
1950	19	45,800	19	45,800
1951	21	48,700	21	48,700

TABLE 9. Employees and Their Earnings in the Cement Manufacturing Industry, 1947-1951

Year	Number of employees					Earnings		
	Office and administrative		Workmen		Total	Office and adminis- trative	Workmen	Total
	Male	Female	Male	Female				
						\$	\$	\$
1947	107	9	1,518	16	1,650	328,748	3,350,698	3,679,446
1948	114	9	1,589	11	1,723	346,453	4,009,633	4,356,086
1949	103	9	1,602	7	1,721	356,287	4,398,324	4,754,611
1950	102	10	1,665	4	1,781	384,563	4,851,172	5,235,735
1951	109	11	1,809	2	1,931	468,679	5,774,221	6,242,900

TABLE 10. Number of Workmen in the Cement Manufacturing Industry, by Months, 1950 and 1951

Month	1950				1951			
	Quarry	Mill		Total	Quarry	Mill		Total
		Male	Female			Male	Female	
January	213	1,391	4	1,612	250	1,506	2	1,758
February	208	1,428	3	1,639	270	1,467	2	1,739
March	221	1,414	4	1,639	297	1,465	1	1,763
April	211	1,446	4	1,661	302	1,475	1	1,778
May	221	1,474	4	1,699	302	1,484	2	1,788
June	216	1,467	4	1,687	309	1,509	2	1,820
July	218	1,501	4	1,723	316	1,514	2	1,832
August	216	1,493	4	1,713	318	1,538	2	1,858
September	217	1,423	3	1,643	328	1,526	1	1,855
October	214	1,478	2	1,694	337	1,516	2	1,855
November	211	1,437	3	1,651	348	1,519	2	1,869
December	209	1,431	3	1,643	323	1,493	2	1,818
Average	216	1,449	4	1,669	307	1,502	2	1,811

TABLE 11. World Production of Hydraulic Cement, by Countries¹, 1946-1949, in Metric Tons

(From the annual review published by the United States Bureau of Mines)

	1946	1947	1948	1949
North America:				
Canada.....	1,835,302	1,894,956	2,242,773	2,541,536
Cuba.....	240,406	276,369	284,954	313,300
Dominican Republic.....	—	2	43,452	53,561
Guatemala.....	29,000 ³	27,600	31,573	35,852
Mexico.....	738,000	707,800	833,444	1,227,600
Nicaragua.....	9,975	15,959	16,220	16,462
Panama.....	—	—	41,300	53,600
United States.....	28,403,616	32,314,655	35,626,454	36,312,780
South America:				
Argentina.....	1,140,529	1,363,400	1,251,770	1,445,862
Bolivia.....	30,742	38,828	39,130	41,546
Brazil.....	826,382	913,525	1,111,503	1,281,047
Chile.....	579,906	602,299	539,789	495,208
Colombia.....	332,265	346,227	363,749	475,777
Ecuador.....	38,497	33,231	40,369	52,250
Peru.....	260,617	255,644	282,373	280,500
Uruguay.....	272,490	279,353	278,203	2
Venezuela.....	128,329	145,881	214,513	285,000
Europe:				
Austria.....	387,680	281,271	721,379	1,091,012
Belgium.....	1,889,777	2,609,174	3,330,948	2,924,998
Bulgaria.....	2	2	325,000 ³	2
Czechoslovakia.....	920,000	1,404,000	1,650,000	1,738,000
Denmark.....	501,835	643,200	809,923	834,000
Finland.....	329,792	417,737	555,800	655,984
France.....	2,116,428	3,920,829	5,379,000	6,443,352
Germany:				
Federal Republic.....	2,595,600	2,996,200	5,581,200	8,460,000
Soviet Zone.....	2	2	2	2
Greece.....	110,000 ³	2	2	2
Hungary.....	163,590	209,060	2	640,000 ³
Ireland.....	2	2	2	2
Italy.....	2	2,754,091	3,143,808	4,036,501
Luxembourg.....	2	89,272	102,000	121,000
Netherlands.....	402,654	519,262	588,997	564,900
Norway.....	436,211	472,612	526,187	592,184
Poland.....	1,398,915	1,521,822	1,823,857	2,200,000
Portugal.....	330,100	427,734	496,800	518,400
Roumania.....	315,000	422,000	452,000	560,000
Spain.....	2,145,140	2,186,338	2,330,850	2,227,675
Sweden.....	1,461,726	1,550,103	1,486,450	1,700,000
Switzerland.....	694,000	994,790	1,000,000 ³	950,000 ³
U.S.S.R. ³	3,400,000	4,800,000	2	2
United Kingdom.....	6,681,545	7,071,708	8,657,762	9,364,000
Yugoslavia.....	586,092	1,233,180	1,188,000	2

TABLE 11. World Production of Hydraulic Cement, by Countries ¹, 1946-1949, in Metric Tons

(From the annual review published by the United States Bureau of Mines)

	1946	1947	1948	1949
Asia:				
China	208,057	608,692	2	216,000 ^{3,4}
Formosa ³			235,000	280,800
French Indochina	36,430	39,871	97,259	154,000
Hong Kong	2	34,800	52,200	58,700
India ⁵	1,969,387	1,470,895	1,577,831	2,135,737
Indonesia	2	10,000	37,751	2
Iran	42,700 ⁷	72,714 ^{6,7}	64,795 ⁷	2
Israel	265,935	328,394	159,865	241,393
Japan	929,000	1,236,000	1,848,000	3,274,572
Korea:				
North	150,000 ³	150,000 ³	2	2
South	10,696	18,191	17,350	24,132
Lebanon	144,000	167,116	208,800	233,000
Pakistan	8	8	327,168	2
Philippines	56,261	133,918	120,384	206,002
Syria	44,800	45,667	49,252	51,632
Thailand	2	58,800	82,800	127,200
Turkey	321,462	350,456	344,924	372,584
Africa:				
Algeria	115,410	127,815	129,867	128,075
Belgian Congo	81,514	115,441	126,942 ³	156,914 ³
Egypt	587,577	648,353	768,283	800,000 ³
Eritrea	2	—	2	2
Ethiopia ³	2	2	8,000	8,000
French Morocco	175,180	218,877	262,232	264,000
Mozambique	26,275	35,858	35,858	2
Tunisia	83,540	115,100	162,000	167,631
Union of South Africa	1,180,200	1,251,743	1,308,000	1,363,200
Oceania:				
Australia:				
New South Wales	373,794	439,271	447,609	1,076,302
Victoria	152,763	194,777	195,488	
New Zealand	229,900	219,409	247,205	254,039
Total ⁹	72,638,000	85,034,000	99,446,000	111,300,000

1. In addition to countries listed, hydraulic cement is produced in Albania, Madagascar, Queensland, South Australia, and Tasmania, but data are not available.

2. Data not available. Estimate included in total.

3. Estimate.

4. Manchuria only.

5. Beginning September 1947, excludes Pakistan.

6. Production in Government-operated plants only.

7. Fiscal year ended March 29 of year following that stated.

8. Included in India.

9. Estimated total. Excludes estimates for countries listed in footnotes.

Directory of Cement Producers, 1951

Name of Firm	Head Office Address	Location of Plant
Newfoundland:		
North Star Cement Co. Ltd. ¹	Corner Brook	Harbourmouth
New Brunswick:		
Canada Cement Company Limited ¹	Box 290, Station B, Montreal, Quebec.....	Havelock
Quebec:		
Canada Cement Company Limited	Box 290, Station B, Montreal, Quebec.....	} Hull Montréal Est St-Basile
Ciment Québec Inc.....	St-Basile, Cté Portneuf, Québec	
Ontario:		
Canada Cement Company Limited	Box 290, Station B, Montreal, Quebec.....	} Belleville Port Colborne St. Marys
St. Mary's Cement Co. Limited	357 Bay St., Toronto, Ontario	
Manitoba:		
Canada Cement Company Limited	Box 290, Station B, Montreal, Quebec.....	Fort Whyte
Alberta:		
Canada Cement Company Limited	Box 290, Station B, Montreal, Quebec.....	Exshaw
British Columbia:		
British Columbia Cement Co. Limited.....	500 Fort St., Victoria, British Columbia.....	Bamberton ✓

1. These new plants made some clinker in 1951 but were not yet on a regular production schedule.

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