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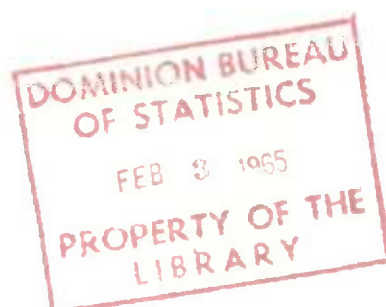
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THE GYPSUM MINING INDUSTRY 1962



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EXPLANATORY NOTES

Establishment

The reporting unit in the Census of Manufactures is the **establishment**. Beginning with the 1961 Census, the establishment is defined as follows:

The smallest unit which is a separate operating entity capable of reporting all the following:

- Materials and supplies used,
- Goods purchased for resale as such,
- Fuel and power consumed,
- Number of employees and their pay,
- Inventories,
- Shipments or sales.

The establishment is to be distinguished from smaller subdivisions or departments which do not have records which permit them to report all items required of an establishment. Prior to 1961, some establishments were required to submit two or more separate reports when they were engaged in operations which were classifiable to different industries. Beginning with 1961, separate reports for such operations will be required only in cases where accounting records can provide all the elements of principal statistics enumerated above. Special reporting arrangements were made with respondents when the acceptance of combined reports would have seriously affected the statistics for particular industries or

areas. Where continuity of industry statistics was affected by this change in reporting procedures, adjustments to the data were made back to 1957 in order to maintain comparability of the series for recent years.

A manufacturing establishment is typically a factory, mill or plant principally engaged in manufacturing operations. Prior to 1961, the Census of Manufactures attempted to cover the manufacturing activities of all establishments, whether or not they were principally engaged in manufacturing operations. Beginning with the 1961 Census, establishments (accounting entities) which are not primarily engaged in manufacturing are no longer included as manufacturing establishments in the basic industry statistics. Again adjustments to the industry statistics were made to reflect the removal of such reporting units for the period 1957-1960. These reporting units are now listed as establishments in other Bureau industry surveys, such as Wholesale Trade, Construction, etc. In order, however, to maintain complete coverage of certain commodity items produced mainly in manufacturing establishments, many non-manufacturing establishments are now surveyed for commodity shipments only and the latter are included in those tables of industry reports showing shipments of certain commodities "from all industries".

SYMBOLS

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

- ... figures not appropriate or not applicable.
- nil or zero.

THE GYPSUM MINING INDUSTRY

1962

This report includes statistics for industry 073—Gypsum Mines of the Standard Industrial Classification Manual (catalogue No. 12-501).

The Canadian producers of crude gypsum and anhydrite shipped 5,332,809 tons valued at \$9,349,775 in 1962 compared with 4,940,037 tons valued at \$7,750,748 in 1961. A large portion of the shipments are inter-plant transactions, thus are assigned nominal values.

Nova Scotian mines and quarries shipped 4,451,072 tons in 1962 compared with 4,113,188 tons in 1961. Shipments increased in New Brunswick, Ontario and Newfoundland, declined in British Columbia and remained the same in Manitoba.

There has been some changes in the methods of compilation of statistics on gypsum. Some firms operate a manufacturing plant, plaster, or wallboard, at or near the quarry. Data on the quarry at such a plant have been included in the manufacturing statistics and are classified to gypsum products industry. Thus the principal statistics of the gypsum mining industry are directly affected by this re-classification. Gypsum was produced by firms classified in the gypsum products industry, thus the commodity figures are larger than the gross value of products shown in the table of principal statistics.

The average number of employees in the gypsum mining industry was 608 to whom \$2,407,662 were

paid as salaries and wages. Fuel and electricity cost \$353,821 which included 9,010,747 kwh. of purchased electricity valued at \$165,653. Process supplies cost \$1,883,670.

Additional information on gypsum is shown in Review 38 published by the Department of Mines & Technical Surveys, Ottawa.

Calcined gypsum or plaster of paris, is the main constituent of gypsum board and lath, gypsum tile, roof tile, and all types of industrial plasters. Gypsum plaster is mixed with water and aggregate (sand, vermiculite or expanded perlite) and applied over wood, metal or gypsum lath to form an interior-wall finish. Gypsum board, lath and sheathing are formed by introducing a slurry consisting of plaster of paris, water, foam, accelerator, etc. between two sheets of absorbent paper, where it sets, producing a firm strong wallboard. Gypsum board and sheathing are used in the building construction industry.

Crude uncalcined gypsum is used in the manufacture of portland cement. The gypsum, acting as a retarder, controls the set of the cement. Crude gypsum, reduced to 40-mesh or finer, is used as a filler in paint and paper. Ground gypsum is used to a limited extent as a substitute for salt cake in glass manufacture. Powdered gypsum is used as a soil conditioner to offset the effect of black alkali, as a means of restoring imperious, dispersed soil, and as a fertilizer of peanuts and other leguminous crops.

TABLE 1A. Principal Statistics for the Gypsum Mining Industry, Significant Years, 1921-59

Basis: Standard Industrial Classification in use prior to 1960

Year	Firms	Mines or quarries	Em- ployees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies and containers	Gross value of production (including containers)	Net production ¹
	number			dollars				
1921	11	11	700	774,551	140,430	428,905	...	1,785,538
1929	17	22	987	1,054,213	281,019	...	...	3,345,696
1931	15	19	676	656,590	188,524	...	...	2,111,517
1933	10	10	415	263,279	91,518	...	...	675,822
1937	8	13	602	595,396	156,115	106,962	1,540,483	1,277,406
1939	10	17	714	692,158	193,488	105,831	1,935,127	1,635,808
1941	8	15	648	745,008	222,564	229,444	2,248,428	1,796,420
1944	8	12	328	490,872	148,743	239,198	1,511,978	1,124,037
1946	8	14	753	1,246,673	260,479	546,092	3,696,727	2,890,156
1949	9	14	925	2,226,703	411,417	1,070,457	5,425,045	3,943,171
1951	8	13	1,018	2,648,803	455,915	1,704,669	5,881,546	3,720,962
1954	9	14	932	2,929,829	355,302	1,811,188	7,095,779	4,929,289
1956	9	15	1,030	3,317,673	454,428	1,903,098	7,260,236	4,902,710
1957	8	13	816	2,653,320	468,366	1,440,177	7,745,105	5,836,562
1958	7	13	627	2,300,288	424,164	841,785	5,189,159	3,923,210
1959	7	15	874	3,228,713	488,175	710,686	8,393,703	7,194,842

¹ Gross production less cost of process supplies, etc., fuel and electricity.**TABLE 1B. Principal Statistics for the Gypsum Mining Industry, 1957-62**

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies and containers	Gross value of production (including containers)	Net production ¹
	number		dollars				
1957	9	712	2,226,875	327,962	1,308,512	6,716,371	5,079,897
1958	8	501	1,790,669	246,758	664,022	3,939,241	3,028,461
1959	11	755	2,691,420	313,342	529,297	7,245,486	6,402,847
1960	9	685	2,431,729	300,623	446,594	8,340,568	7,593,351
1961	9	613	2,272,477	312,798	1,450,653	6,597,398	4,833,947
1962	10	608	2,407,662	353,821	1,883,670	8,151,601	5,914,110

¹ Gross production less cost of process supplies, etc., fuel and electricity.

TABLE 2. Producers' Shipments of Gypsum, by Provinces, 1961 and 1962

Province	1961		1962	
	Tons	Value f.o.b. shipping point	Tons	Value f.o.b. shipping point
		\$		\$
Newfoundland	40,699	101,696	83,992	284,564
Nova Scotia	4,113,188	5,693,653	4,451,072	7,113,517
New Brunswick	85,330	136,856	91,835	161,649
Ontario	425,287	991,944	435,140	1,007,818
Manitoba	122,233	366,699	122,870	338,527
British Columbia	153,300	459,900	147,900	443,700
Totals	4,940,037	7,750,748	5,332,809	9,349,775
Total crude gypsum and anhydrite mined and quarried	5,059,758	...	5,155,073	...

TABLE 3. Producers' Shipments of Gypsum, 1953 - 62

Year	Tons	Value f.o.b. shipping point	Year	Tons	Value f.o.b. shipping point
		\$			\$
1953	3,841,457	7,399,884	1958	3,964,129	5,189,159
1954	3,950,422	7,094,671	1959	5,878,630	8,393,703
1955	4,667,901	8,037,153	1960	5,205,731	9,498,711
1956	4,895,811	7,260,236	1961	4,940,037	7,750,748
1957	4,577,492	7,745,105	1962	5,332,809	9,349,775

TABLE 4. Producers' Shipments of Gypsum, by Months, 1960 - 62

Month	1960	1961	1962	Month	1960	1961	1962
	tons				tons		
January	322,122	286,484	276,461	August	571,451	511,966	511,657
February	328,035	146,543	160,154	September	447,240	500,019	570,578
March	295,215	266,809	310,310	October	549,929	535,848	543,860
April	310,254	372,180	430,365	November	473,502	392,276	589,385
May	468,740	460,206	428,620	December	332,230	372,970	374,556
June	520,889	525,118	554,679				
July	586,124	569,618	582,184	Totals	5,205,731	4,940,037	5,332,809

TABLE 5. Imports and Exports of Gypsum, 1961 and 1962

	1961		1962	
	Tons	Value	Tons	Value
		\$		\$
Imports:				
Gypsum, crude, and gypsum, ground, not calcined	66,075	217,888	69,947	300,976
Plaster of Paris and wall plaster	9,570	352,244	7,051	309,963
Total accounted for .....	...	570,132	...	610,939
Exports:				
Gypsum, crude	3,819,345	5,553,551	4,162,997	5,630,205
Plaster of Paris, wall plaster .....	...	...	...	...
Total accounted for .....	...	...	...	...

TABLE 6. Consumption of Gypsum in the Portland Cement Industry, 1953-62

Year	Tons	Year	Tons
1953	199,743	1958	293,514
1954	210,373	1959	278,298
1955	219,461	1960	262,171
1956	234,545	1961	297,785
1957	287,786	1962	324,000

TABLE 7. Employees and their Earnings, in the Gypsum Mining Industry, 1957-62

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Employees					Man- hours worked (all em- ployees)	Earnings		
	Administrative and office		Workmen		Total		Adminis- trative and office	Workmen	Total
	Male	Female	Male	Female					
	number						dollars		
1957	100	8	602	2	712	1,593,303	467,240	1,759,635	2,226,875
1958	85	7	407	2	501	1,316,227	427,010	1,363,659	1,790,669
1959	99	10	644	2	755	1,663,309	522,136	2,169,284	2,691,420
1960	99	10	574	2	685	1,375,529	519,377	1,912,352	2,431,729
1961	94	8	510	1	613	1,173,122	500,161	1,772,316	2,272,477
1962	99	11	491	7	608	1,248,424	571,584	1,836,078	2,407,662

TABLE 8. Number of Workmen, by Months, in the Gypsum Mining Industry, 1961 and 1962

Month	1961				1962				
	Mine		Mill	Total	Mine			Mill	Total
	Surface		Male		Surface		Under-ground	Male	
	Male	Female			Male	Female			
January	445	1	42	488	321	1	11	39	372
February	427	1	33	461	331	1	11	39	382
March	429	1	37	467	338	1	11	50	400
April	393	1	57	451	394	1	14	55	464
May	464	1	59	524	450	1	13	64	528
June	451	1	63	515	478	1	1	71	551
July	484	1	67	552	498	1	2	72	573
August	494	1	66	561	503	1	1	72	577
September	492	1	63	556	503	1	1	73	578
October	481	1	68	550	467	1	10	76	554
November	471	1	67	539	450	1	13	71	535
December	400	1	57	458	391	1	—	58	450
Average	454	1	56	511	428	1	7	62	498
Man hours worked				938, 279					1, 028, 245

TABLE 9. Fuel and Electricity Used in the Gypsum Mining Industry, 1962

Kind	Quantity	Cost at plant
		\$
Bituminous coal (a) From Canadian mines	—	—
(b) Imported	—	—
Sub-bituminous coal (from Alberta mines only)	—	—
Anthracite coal	—	—
Lignite coal	—	—
Coke (for fuel only)	—	—
Gasoline, (includes gasoline used in cars and trucks) Imp. gal.	45,561	18,325
Kerosene or coal oil	85	19
Fuel oil	Imp. gal.	1,093,810
Wood (cords of 128 cubic feet of piled wood)	—	—
Gas (a) Liquefied petroleum gases (propane, etc.)	—	—
(b) Other manufactured gas	—	—
(c) Natural gas	—	—
Other fuel	—	—
Electricity purchased for power and lighting kwh.	9,010,747	165,653
Electricity purchased for other purposes	—	—
Total (cost only) .....	...	353,821
Electricity generated (a) For own use	—	—
(b) For sale	—	—

TABLE 10. World Production of Gypsum, by Countries¹

Country ¹	1958	1959	1960	1961	1962
	thousand short tons ²				
North America:					
Canada ³	3,977	5,983	5,093	5,060	5,184
Cuba	45 ⁴	45 ⁴	5	5	5
Dominican Republic	84	175	358	451	485 ⁴
Guatemala	18	20	16	13	11 ⁴
Jamaica	672	525	275	250	220 ⁴
Mexico	821	913	871	857	876
Nicaragua	—	—	—	—	4
Trinidad	3	5	7	4	4 ⁴
United States	9,600	10,900	9,825	9,500	9,969
Totals^{1,4}	15,220	18,565	16,445	16,135	16,753
South America:					
Argentina	196	127	120 ⁴	120 ⁴	120 ⁴
Brazil	143	202	114	178	176 ⁴
Chile ⁴	55 ⁴	87	45	88	127 ⁴
Colombia	66	77	77	83	83 ⁴
Peru	69	61	90	65	67
Venezuela	—	1 ⁴	6	8	11
Totals^{1,4}	529	555	452	542	584
Europe:					
Austria ³	597	621	730	750	754
Bulgaria	90	120	130	500 ⁴	550 ⁴
Czechoslovakia	277	319	364	385 ⁴	410 ⁴
France ³ (saleable)	4,046	4,126	4,163	4,771	4,740 ⁴
Germany, East ⁷	249	279	275 ⁴	275	275 ⁴
Germany, West ⁷	958	1,058	1,152	1,131	1,150 ⁴
Greece	24	2	—	—	—
Ireland	118	152	200	184	130
Italy	1,366	2,184	2,098	2,205 ⁴	2,205 ⁴
Luxembourg	6	7	9	8	9
Poland	386 ⁴	518 ⁴	573 ⁴	516	605
Portugal	48	60	68	79	77 ⁴
Spain	2,104	2,357	2,296	2,822	2,756 ⁴
Switzerland	99	110	110 ⁴	110 ⁴	110 ⁴
U.S.S.R.	7,055	7,275 ⁴	7,715 ⁴	8,000 ⁴	8,275 ⁴
United Kingdom ³	3,641	3,794	4,026	4,179	4,454
Yugoslavia	84	102	137	138	110 ⁴
Totals^{1,4}	21,230	23,170	24,130	26,135	26,720
Asia:					
Burma	—	2	1	1	1 ⁴
China ⁴	450	550	650	550	450
Cyprus ⁴	155	217	220	220	220
India	876	945	1,099	953	1,239
Iran ^{4,5}	415	440	440	606	606
Iraq ⁴	440	440	440	—	—
Israel ⁴	44	66	66	44	44
Japan	528	596	810	799	878
Jordan	—	—	—	8	10
Pakistan	74	109	100	112	167
Philippines	2	2	10	9	16
Saudi Arabia	—	—	—	—	12 ⁴
Syrian Arab Republic ⁹	3 ⁴	7 ⁴	15	9	17
Taiwan (Formosa)	11	11	12	13	14
Thailand (Siam)	10	9	16	13	23
Turkey	50	57 ⁴	67	66 ⁴	154
Totals^{1,4}	3,058	3,451	3,946	3,843	4,291

See footnotes at end of table.

TABLE 10. World Production of Gypsum, by Countries¹ - Concluded

Country ¹	1958	1959	1960	1961	1962
	thousand short tons ²				
Africa:					
Algeria	140	189	195	195 ⁴	195 ⁴
Angola	5	15	14 ⁴	14 ⁴	18
Congo, Republic of the	11 ⁴	—	—	—	—
Kenya	12	15	19	22	22 ⁴
Morocco: Southern Zone	28 ⁴	28 ⁴	28 ⁴	28 ⁴	28 ⁴
South Africa, Republic of	256	224	216	191	212
Sudan	2 ⁴	2 ⁴	—	6	2 ⁴
Tanganyika	10	8	5	1	2
Tunisia	18	13	15	15 ⁴	15 ⁴
United Arab Republic (Egypt)	584	577	441	510	440 ⁴
Totals	1,066	1,071	933	982	934
Oceania:					
Australia	566	579	651	681	683 ⁴
New Caledonia	—	—	—	—	—
Totals	566	579	651	681	683⁴
World totals (estimate)^{1,2}	41,670	47,400	46,560	48,320	49,965

¹ Gypsum is produced in Rumania, but production data are not available. Estimates are included in the totals. Production in Ceylon, Ecuador, and Korea is negligible.

² This table incorporates revisions. Data do not add to totals shown due to rounding where estimated figures are included in the detail.

³ Includes anhydrite.

⁴ Estimate.

⁵ Data not available; no estimates included in total.

⁶ Data not available; estimate included in total.

⁷ Crude production estimates based on calcined figures.

⁸ Year ended March 20 of year following that stated.

⁹ Some pure, some 80 per cent gypsum and 20 per cent limestone.

Source: The "Minerals Yearbook" published by the United States Bureau of Mines.

Operators of Gypsum Mines or Quarries, 1962

Name of firm	Head office address	Plant location
Newfoundland:		
Flintkote Company of Canada, Ltd.	Box 60, Toronto 14, Ontario	Flat Bay
Nova Scotia:		
Bestwall Gypsum Co.	120 East Lancaster Ave., Ardmore, Penna. USA	River Denys
Domtar Construction Materials Ltd.	1 Place Ville Marie, Montreal, P.Q.	Windsor, Nappan
Fundy Gypsum Co. Ltd.	Box 400, Windsor, N.S.	Hants
Little Narrows Gypsum Co. Ltd.	790 Bay St., Toronto, Ontario	Little Narrows
National Gypsum (Canada) Ltd.	Box 637, Dartmouth, N.S.	East Milford
New Brunswick:		
Canada Cement Co. Ltd.	Box 490, Station B, Montreal, Quebec	Westmorland
Canadian Gypsum Co. Ltd.	Box 4034, Postal Station A, Toronto, Ontario	Hillsborough
Ontario:		
Canadian Gypsum Co. Ltd.	Box 4034, Postal Station A, Toronto, Ont.	Hagersville
Domtar Construction Materials Ltd.	1 Place Ville Marie, Montreal, P.Q.	Caledonia
Manitoba:		
Domtar Construction Materials Ltd.	1 Place Ville Marie, Montreal, P.Q.	Gypsumville
Western Gypsum Products Ltd.	2650 Lakeshore Hwy., Clarkson, Ont.	Amaranth
British Columbia:		
Western Gypsum Products Ltd.	2650 Lakeshore Hwy., Clarkson, Ont.	Windermere

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