

26-218
1947
c.3

DOMINION BUREAU
OF STATISTICS

Published by Authority of the Rt. Hon. C. D. Howe, M.P. A14-17-8-48
Minister of Trade and Commerce

AUG 25 1948

Price -
15 cents

Department of Trade and Commerce
Dominion Bureau of Statistics

PROPERTY OF THE
LIBRARY

Mining, Metallurgical and Chemical Statistics
Ottawa - Canada

Dominion Statistician:	Herbert Marshall
Director - Division of Census of Industry and Merchandising:	W. H. Losee
Chief - Mining, Metallurgical and Chemical Statistics:	H. McLeod

THE TALC AND SOAPSTONE INDUSTRY IN CANADA, 1947

During 1947 the shipments of talc and soapstone by Canadian producers amounted to 26,709 tons valued at \$266,377, compared with 29,353 tons worth \$303,684 in 1946. The operators in Quebec shipped 13,279 tons of talc and soapstone worth \$123,467, and mines in Ontario sold 13,430 tons, mostly high-grade milled talc, valued at \$142,910.

Imports of talc and soapstone in 1947 amounted to 8,472 tons valued at \$196,697, and the exports of talc totalled 5,807 tons worth \$68,394.

The 5 operating firms employed 73 persons, to whom \$110,527 were paid in salaries and wages. Fuel and electricity cost \$22,786 and the expenditure for freight and process supplies amounted to \$18,904.

The Bureau of Mines, Ottawa, has given the following information on the talc industry:

"The Quebec talc and soapstone bodies occur in highly metamorphosed basic rocks, mainly serpentine and pyroxenite. The talcose material is rather high in iron due to the presence of residual chlorite, and there is often considerable carbonate present. It yields a slightly off-colour, grey powder.

"In Ontario, output of prime white foliated talc products from the Madoc area during the 41 years since operations were commenced is estimated at about 460,000 tons. Since 1937, Canada Talc Limited, which operates the adjoining Conley and Henderson mines, now combined into a single operation, has been the only important producer. The company's new grinding mill, with a capacity of about 5 tons an hour of finished products, came into operation early in 1945. About 75 per cent of the mill feed is from the Conley mine and 25 per cent from the Henderson. Coarse rejects are screened and de-dusted for the production of granular roofing grades.

"The Madoc talc occurs in a series of closely spaced veins traversing white Grenville crystalline dolomite limestone, and varies from coarsely foliated, to massive, compact material. Tests by the Bureau of Mines, Ottawa, several years ago, showed that the carbonate content can be reduced by flotation to below the tolerance demanded for even the most exacting uses, including steatite insulators, but no commercial use of beneficiation has been made.

"In British Columbia, some ground soapstone for local roofing and building use is produced in Vancouver by George M. Richmond and Company, 4190 Blenheim Street, from waste imported from the state of Washington.

Note: This report was prepared by A. R. Deir, Mining Statistician.

"Ground talc, including soapstone and pyrophyllite, is used chiefly in the paint, roofing, paper, rubber, insecticide, and ceramic industries, and these six uses consumed 84 per cent of the production in the United States in 1946. It is used also in foundry facings, bleaching fillers for textiles, cosmetics and pharmaceuticals, soaps and cleansers, plaster, polishes, plastics and for rice polishing.

"Steatite is the mineralogical name given to compact, massive talc having no visible grain, which can be sawn, turned, drilled, and otherwise machined into any desired form. Such material is used for the production of fired shapes which are employed mainly as electrical insulators and for burner tips. Because of the small amount of natural steatite available, its high cost, and excessive machining and firing losses, the aforementioned articles are made largely from high-talc ceramic bodies. Suitable ground talc for the purpose must be high-grade, low in lime and iron, and in the trade such talc is commonly termed steatite, or steatitic talc, irrespective of its texture. There is still a limited demand, however, for sawn steatite shapes, and suitable crude is relatively scarce, the chief sources being India, Sardinia, Maryland, Montana and California.

"Soapstone is used extensively in the form of sawn blocks and bricks for lining the alkali recovery furnaces and kilns of kraft pulp and paper mills. It is used for brick and slab liners for fireboxes, stoves, and ovens, and for switchboard panels, laboratory benches, etc. Considerable quantities of soapstone quarry and sawing waste are ground and used as low-grade talc in the rubber, roofing, foundry, and other trades.

"Compact, massive talc, sawn into square pencils and slices, is an important material for steelmakers' crayons. Recent shortages of suitable raw material have led to the introduction of extruded crayons compounded of ground talc with a suitable binder.

"The market value of ground talc varies widely and is dependent upon purity (determined by freedom from lime and gritty or iron-bearing substances, slip, and colour), particle shape, and fineness of grinding, the specifications for which vary in the different consuming industries. Roofing and foundry talcs are the cheapest grades, the users being satisfied with coarser, grey or off-colour material, often soapstone powder or sawing dust, which sells at about \$8 a ton f.o.b. rail. Domestic grey talc suitable for roofing, rubber, and paper use, sold in 1947 for \$7.50 to \$10 a short ton, according to fineness; similar talc from Vermont was quoted at \$11.50 to \$12.50 in bulk. White talc from Madoc, Ontario, continued to be quoted at from \$8.50 for the coarser, roofing grade, \$9.50 to \$28 for finer mesh sizes, to \$44 for minus 400-mesh material. New York fibrous talc, 325 mesh, sold for \$18.50 to \$20. Imported superfine Italian and French cosmetic talcs may cost as high as \$80 per ton, delivered.

"Average value of the ground talc produced in Ontario in 1947 was \$10.65 per ton, and of the ground material (comprising both talc and soapstone) supplied by Quebec, \$8.34 per ton. Average value of sawn soapstone furnace blocks was \$30 per ton, or \$2.70 per cubic foot, and of talc crayons about \$250 per ton, or \$1.06 per gross. Soapstone waste for grinding sold for \$2 per ton, f.o.b. mine. Average declared unit value of exports of ground talc was \$11.60 per ton.

"Under the new Multilateral Trade Agreement, effective January 1, 1948, the duty on ground talc exported to the United States was reduced from 17½ per cent to 10 per cent ad valorem on material valued at not over \$14 a ton. On material

valued at over \$14 a ton, the duty remains at 35 per cent. The duty on crude material is $\frac{1}{4}$ per cent a pound, whereas cut soapstone or talc in the form of bricks, crayons, blanks, etc., is dutiable at one cent a pound. Talc, ground or unground, enters Canada under the British Preferential tariff at 15 per cent; imports from the United States are dutiable at 20 per cent."

Table 1 - PRINCIPAL STATISTICS OF THE TALC AND SOAPSTONE INDUSTRY IN CANADA, 1945-1947

	1945	1946	1947
Number of firms	5	5	5
Number of employees - Administrative..	11	11	12
Workmen	92	76	61
Total	103	87	73
Salaries and wages - Salaries	\$ 28,714	27,455	32,766
Wages	\$ 106,068	90,096	77,761
Total	\$ 134,782	117,551	110,527
Selling value of products (gross)	\$ 294,888	303,684	266,377
Cost of fuel and purchased electricity \$	27,978	25,401	22,786
Cost of freight and process supplies..	\$ 51,604	38,167	18,904
Selling value of products (net)	\$ 215,306	240,116	224,687

Table 2 - PRODUCERS' SHIPMENTS OF TALC AND SOAPSTONE(*), 1945-1947

	1945		1946		1947	
	Quantity	Value	Quantity	Value	Quantity	Value
	tons	\$	tons	\$	tons	\$
Soapstone (Quebec)(x)	14,225	153,694	14,914	150,004	13,279	123,467
Talc (Ontario)	12,863	141,194	14,439	153,680	13,430	142,910
TOTAL CANADA	27,088	294,888	29,353	303,684	26,709	266,377

(*) Includes both crude and milled grades.

(x) Shipments by some firms usually include a considerable quantity of material classified as talc.

Table 3 - PRODUCTION(*) OF TALC AND SOAPSTONE IN CANADA, 1933-1947

Year	Tons	Value	Year	Tons	Value
		\$			\$
1933	16,829	190,836	1941	34,632	360,809
1934	15,532	180,777	1942	29,868	310,224
1935	15,301	171,532	1943	26,163	266,685
1936	16,587	177,270	1944	32,597	357,249
1937	15,939	163,814	1945	27,088	294,888
1938	13,814	144,848	1946	29,353	303,684
1939	18,241	170,066	1947	26,709	266,377
1940	23,791	229,639			

(*) Producers' shipments.

Table 4 - IMPORTS INTO CANADA AND EXPORTS OF TALC, 1946 and 1947

	1946		1947	
	Tons	\$	Tons	\$
<u>Imports</u> - Talc or soapstone	6,737	150,972	8,472	196,697
<u>Exports</u> - Talc	6,402	74,991	5,807	68,394

Table 5 - AVAILABLE STATISTICS ON THE CONSUMPTION OF GROUND TALC AND SOAPSTONE IN CANADA, 1945 and 1946

	1945	1946
	(Tons)	
(a) <u>By Uses</u>		
Paints	5,885	5,445
Roofing	6,168	8,065
Pulp and paper	2,454	2,872
Rubber	2,656	2,529
Toilet and medicinal preparations	1,373	1,226
Electrical apparatus	199	259
Imported clay products	713	1,107
Soaps and cleaning preparations	735	683
Textiles	267	250
Insecticides	943	2,616
Polishes	23	31
Prepared foundry facings	10	17
Iron foundries	106	106
Plastics	10	...
Adhesives	45	45
Linoleum .....	...	19
TOTAL	21,587	25,270
(b) <u>By Provinces</u>		
Nova Scotia	59	52
New Brunswick	475	375
Quebec	8,133	9,204
Ontario	10,731	13,285
Manitoba	1,439	1,548
Saskatchewan	42	75
Alberta	67	83
British Columbia	641	648
TOTAL	21,587	25,270

Table 6 - NUMBER OF WORKMEN IN THE TALC AND SOAPSTONE INDUSTRY, BY MONTHS,
1946 and 1947

Month	1 9 4 6			1 9 4 7		
	Surface	Underground	Mill	Surface	Underground	Mill
January	28	11	19	28	13	24
February	22	12	17	34	13	25
March	24	13	19	36	13	25
April	24	17	34	20	13	25
May	22	19	36	46	13	25
June	26	13	36	38	11	27
July	31	14	37	27	13	23
August	35	13	39	22	11	23
September	36	10	38	30	9	21
October	33	13	38	19	10	22
November	33	14	37	9	8	18
December	27	14	37	6	9	18
AVERAGE	29	14	33	27	11	23

Table 7 - FUEL AND ELECTRICITY USED, 1946 and 1947

Item	Unit of measure	1 9 4 6		1 9 4 7	
		Quantity	Value	Quantity	Value
			\$		\$
Gasoline	Imp. gal.	10,875	3,097	7,385	2,482
Kerosene	Imp. gal.	30	6	40	8
Fuel oil and diesel oil..	Imp. gal.	19,610	2,767	10,800	1,413
Wood	cord	25	125	...	...
Electricity purchased ...	K.W.H.	1,599,300	19,406	1,442,143	18,883
TOTAL .....	...	...	25,401	...	22,786
Electricity generated for own use	K.W.H.	122,380	...	186,500	...

Table 8 - POWER EQUIPMENT, 1947

	Ordinarily in Use		In Reserve or Idle	
	Number of units	Horse power	Number of units	Horse power
Diesel engines	3	274	...	...
Other gasoline engines	8	114	...	...
Electric motors operated by purchased power	65	910	4	320
Electric motors operated by own power	12	122	...	...
TOTAL	76	1,298	4	320



1010657419

Talc and Soapstone

- 6 -

DIRECTORY

FIRMS IN THE TALC AND SOAPSTONE INDUSTRY, 1947

Name of Firm	Head Office Address	Location of Plant or Mine
<u>Quebec -</u>		
Baker Mining & Milling Co. Ltd.	4010 St. Catherine St. W., Montreal	Highwater
Broughton Soapstone & Quarry Co. Ltd.	Broughton Station Robertsonville	Broughton Thetford Tp.
Fortin, Charles	1 Victoria St., Thetford Mines	Leeds Tp.
Pharo, L. C., Co. Ltd.		
<u>Ontario -</u>		
Canada Talc Limited	Madoc	Huntingdon Tp.