ASBESTOS

By Oliver Bowles and B. H. Stoddard

SUMMARY OUTLINE

	Page		Page
Summary	989	World production	992
Consumption trends	990	Canada	993
Market conditions	990	Africa	993
Prices	990	U. S. S. R. (Russia)	994
Review by States	991	Cyprus	995
Foreign trade	991	Other countries	995
Imports	991		
Exports	992		

As the United States furnishes only 2 to 4 percent of its own requirements of raw asbestos, sources of supply in foreign countries are of the utmost importance to the asbestos-product-manufacturing industries. Small quantities of high-grade spinning asbestos are obtained in Arizona, and an increasing tonnage of short fiber chrysotile is secured in Vermont. Amphibole asbestos (anthophyllite) is mined in a small way in Washington, Montana, Georgia, North Carolina, and Maryland. The United States depends mainly on Canada for its supply of nonspinning fiber and upon South Africa, Canada, and Russia for nearly all of its spinning asbestos.

The varieties, properties, occurrences throughout the world, uses, mining and milling methods, classification, and marketing of asbestos and the manufacture of asbestos products are discussed in a series of three reports issued recently.[1]

Domestic production of asbestos amounted to 9,415 short tons in 1935 compared with 6,544 tons in 1934, an increase of 43.9 percent. The quantity sold or used by producers in 1935 (8,920 tons valued at $292,927) increased 75.3 percent in quantity and 85 percent in value over 1934. Compared with 1934 the apparent consumption of asbestos in 1935 increased 41 percent in quantity and 55 percent in value. The value of exports of asbestos products increased 5.6 percent.

Salient statistics of the asbestos industry in the United States, 1934–35

	1934		1935	
	Short tons	Value	Short tons	Value
Domestic asbestos (chrysotile and amphibole) [1]—				
Produced	6,544	(2)	9,415	(2)
Sold or used by producers	5,087	$158,347	8,920	$292,927
Imports (unmanufactured)	120,334	3,377,994	166,585	5,125,413
Exports (unmanufactured)	1,669	94,182	850	87,896
Apparent consumption	123,752	3,442,159	174,655	5,330,444
Exports of asbestos products	(2)	2,142,514	(2)	2,261,929

[1] Bureau of Mines not at liberty to publish figures separately for chrysotile and amphibole.
[2] Figures not available.

[1] Bowles, Oliver, Asbestos—Domestic and Foreign Deposits: Inf. Circ. 6790, Bureau of Mines, 1934, 24 pp. Asbestos—General Information: Inf. Circ. 6817, Bureau of Mines, 1935, 21 pp. Asbestos—Milling, Marketing, and Fabrication: Inf. Circ. 6869, Bureau of Mines, 1935, 26 pp.

Minerals Yearbook: Asbestos Chapters, 1936
ACL Doc 10976 · Page 1 of 7
Published by AsbestosClaims.Law
asbestosclaims.law/library/10976/1

Consumption trends.—The following table of apparent consumption of raw asbestos, value of products manufactured, and value of products exported shows major trends in recent years. Apparent consumption is determined by adding imports to domestic asbestos sold or used by producers and subtracting exports. No data are available to make adjustments for variation in consumers' stocks.

Raw asbestos consumed in the United States and asbestos products manufactured in and exported from the United States, 1931–35

Year	Raw asbestos—apparent consumption	Asbestos products		Year	Raw asbestos—apparent consumption	Asbestos products	
		Manufactured [1] (value)	Exported (value)			Manufactured [1] (value)	Exported (value)
	Short tons				*Short tons*		
1931	137,875	$56,164,690	$2,606,166	1934	123,752	(2)	$2,142,514
1932	98,606	(2)	1,608,880	1935		(2)	(2)
1933	122,909	41,598,866	1,743,140				

[1] Figures of Bureau of the Census (collected biennially for odd years) include value of certain gaskets, packing, and similar products in which little asbestos was employed.
[2] Figures not yet available.

The principal use of spinning asbestos is for the manufacture of automobile brake-band linings. During recent years increasing quantities of the shorter fiber are used for molded brake linings. Accordingly a close relationship exists between activity in the automobile industry and consumption of asbestos in the United States. Other important uses are in roofing and wallboard manufacture and for heat insulation; therefore consumption of asbestos tends to follow fluctuations in building activity. Figure 146 illustrates these relationships.

Market conditions.—The pronounced recovery in building construction in 1935, particularly during the latter part of the year, created a growing demand for asbestos used in building materials and for heat insulation. Similarly, the pronounced gain in automobile sales stimulated the market for the longer grades.

Prices.—Price quotations for Canadian asbestos were constant throughout the year as follows: Crude No. 1, $500; Crude No. 2, $200–$225; spinning fibers, $90–$135; magnesia and compressed sheet fibers, $90–$100; shingle stock, $45–$75; paper stock, $32.50–$37.50; cement stock, $19–$23; and floats, $16–$18.50.

Rhodesian Crude No. 1 was quoted at $210 throughout the year and Crude No. 2 at $160 until October and $185 during November and December.

Russian Crude No. 1 was not quoted until July. The price was $185 July to October and $200 November and December. Crude No. 2 was $165–$170 and Crude No. 3, $125–$135 all year. Shingle stock ranged from $45 to $60 throughout the year. Beginning July 1935 a new classification designated Crude "AA" was quoted regularly at $450 a ton.

Vermont shingle stock was quoted at $45–$47.50, paper stock at $35, and cement stock at $23 throughout the year. Canadian prices are f. o. b. Quebec mines, tax and bags included; Rhodesian and Russian, c. i. f. New York; and Vermont prices, f. o. b. mines, Vermont.

Published by AsbestosClaims.Law
asbestosclaims.law/library/10976/2

REVIEW BY STATES

Arizona.—A small production was recorded in 1935, and sales were somewhat larger than mine output.

Maryland.—The Powhatan Mining Corporation continued production and preparation of filter asbestos mined near Pylesville.

Montana.—The anthophyllite property operated for several years by Peter F. Karst was acquired by the Karstolite Co. in 1936. This firm manufactures the asbestos into a wall and ceiling insulation sold under the trade name "Karstolite."

North Carolina.—Mill equipment for treating mass-fiber anthophyllite at Minneapolis, Avery County, was improved considerably

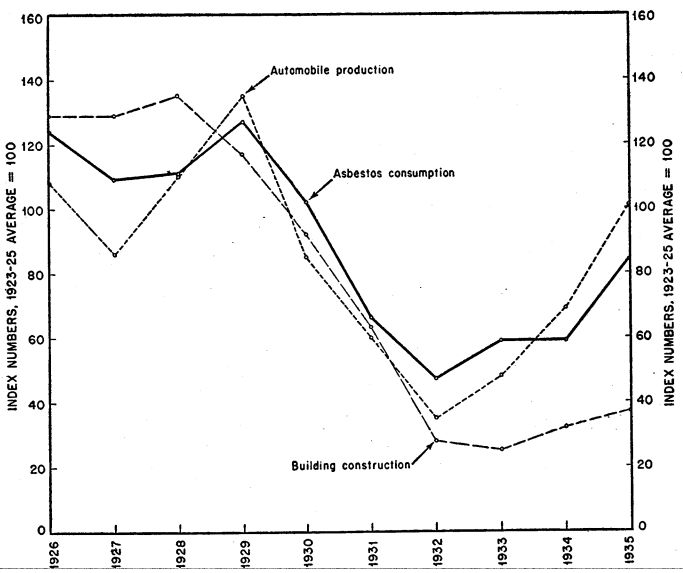


FIGURE 146.—Asbestos consumption compared with automobile production and building construction, 1926–35. Unlike units are reduced to percentages of the 1923–25 average. Statistics of asbestos are from the Bureau of Mines, automobiles from the Bureau of the Census, and building contracts from the Federal Reserve Board.

in 1935, and steps were taken to develop a market for prepared asbestos to be used in home insulation and in many other ways.

Vermont.—Production of nonspinning chrysotile fiber near Hyde Park, Lamoille County, is attaining increasing importance. In February 1936 the property of the Vermont Asbestos Corporation of America was acquired by Vermont Production Co., Inc., a subsidiary of the Ruberoid Co., and, with plant additions and improvements, an increase in output is anticipated.

Washington.—The material produced near Burlington, formerly included in the Asbestos chapter, is a mixture of talc and asbestos. As the major part of the marketed product is talc, the material has been included in the Talc chapter.

FOREIGN TRADE [2]

Imports.—The following table shows for 1934 and 1935 the imports of unmanufactured asbestos into the United States.

[2] Data on imports and exports compiled by M. B. Price, of the Bureau of Mines, from records of the Bureau of Foreign and Domestic Commerce.

Published by AsbestosClaims.Law
asbestosclaims.law/library/10976/3

Asbestos (unmanufactured) imported into the United States, 1934–35, by countries and classes

Country	Crude (including blue fiber)		Mill fiber		Stucco and refuse		Total	
	Short tons	Value	Short tons	Value	Short tons	Value	Short tons	Value
1934								
Africa, British:								
Union of South Africa	595	$62,667					595	$62,667
Other British	1,199	135,812					1,199	135,812
Canada	1,093	218,649	41,960	$1,807,512	70,007	$1,000,402	113,060	3,026,563
Egypt					100	1,417	100	1,417
Finland					38	1,920	38	1,920
Italy	16	9,775			246	1,774	262	11,549
Malta, Gozo, Cyprus					2,463	43,611	2,463	43,611
U. S. S. R. (Russia)	657	26,434			1,938	63,005	2,595	89,439
United Kingdom	22	5,016					22	5,016
	3,582	458,353	41,960	1,807,512	74,792	1,112,129	120,334	3,377,994
1935								
Africa, British:								
Union of South Africa	945	121,577					945	121,577
Other British	1,183	172,654					1,183	172,654
Canada	1,548	301,352	58,484	2,713,895	94,204	1,470,865	154,236	4,486,112
Finland					11	446	11	446
Italy	22	11,464			523	5,202	545	16,666
Malta, Gozo, Cyprus					4,628	87,844	4,628	87,844
Morocco	22	2,131					22	2,131
U. S. S. R. (Russia)	18	7,351	4,614	206,347	181	834	4,813	214,532
United Kingdom	202	23,451					202	23,451
	3,940	639,980	63,098	2,920,242	99,547	1,565,191	166,585	5,125,413

Exports.—The following table shows exports of asbestos products in 1934 and 1935.

Manufactured asbestos products exported from the United States, 1934–35, by kinds

Product		1934		1935	
		Quantity	Value	Quantity	Value
Brake lining:					
Molded and semimolded		(1)	$607,193	(1)	$651,338
Not molded	linear feet	1,641,333	255,018	1,426,520	231,381
Paper, millboard, and roll board	short tons	602	96,154	767	130,578
Pipe covering and cement	do	1,389	[2] 126,190	1,233	143,357
Textiles, yarn, and packing	do	619	[2] 594,625	715	662,321
Magnesia and manufactures	do	1,277	241,410	922	146,068
Asbestos roofing	squares	26,457	75,254	31,141	106,678
Other manufactures	short tons	[2] 799	146,670	921	190,208

[1] Quantity not recorded.
[2] Revised figure.

WORLD PRODUCTION

Asbestos production is centered chiefly in Quebec (Canada), Southern Rhodesia, the Union of South Africa, the U. S. S. R. (Russia), and Cyprus. Relatively small quantities are produced in Italy, Australia, Finland, and several other countries. The following table shows world production, by countries, from 1931 to 1935 insofar as figures are available.

Published by AsbestosClaims.Law
asbestosclaims.law/library/10976/4

World production of asbestos, 1931–35, in metric tons [1]

[Compiled by M. T. Latus, Foreign Mineral Service Division]

Country	1931	1932	1933	1934	1935
Argentina		[2] 7			[3]
Australia:					
New South Wales	8				[3]
South Australia	6	20	13		[3]
Western Australia	116	112	270	157	[3]
Bulgaria				3	[3]
Canada [4]	149,047	111,562	143,667	141,502	190,931
China	264	[5] 500	[5] 500	[5] 500	[5] 500
Chosen			12	4	[3]
Cyprus [6]	3,628	1,626	4,640	7,712	[3]
Czechoslovakia	[3]	[3]	1,200	2,100	2,600
Finland	581	756	1,340	1,735	[3]
France	500	300	[3]	[3]	[3]
Greece	10	9	14	[3]	[3]
India, British	6	91		25	[3]
Italy	632	1,284	3,267	2,252	[3]
Japan [7]	1,000	1,000	1,000	1,000	1,000
Southern Rhodesia	21,810	14,303	27,381	29,224	38,644
Swaziland		5			[3]
Turkey	4	58	120	4	[3]
Union of South Africa	14,221	10,950	14,411	15,960	20,683
U. S. S. R. (Russia)	64,674	60,000	74,000	[3]	[3]
United States (sold or used by producers)	2,928	3,229	4,305	4,615	8,092

[1] In addition to countries listed, Bolivia, Brazil, and Madagascar are reported to produce small quantities of asbestos.
[2] Rail and river shipments.
[3] Data not available.
[4] Exclusive of sand and gravel, production of which is reported as follows: 1931, 6,540 tons; 1932, 3,151 tons; 1933, 5,850 tons; 1934, 4,238 tons; 1935, 2,744 tons.
[5] As estimated by Imperial Institute, London.
[6] Exports.
[7] Approximate production.

CANADA

Production of asbestos in Canada in 1935 increased about 35 percent in quantity and 43 percent in value over 1934. The entire output was from the eastern townships of the Province of Quebec. Considerable interest was shown in a chrysotile deposit in Bannockburn Township, about 30 miles from Timmins, Ontario, and erection of a mill is contemplated. The following table shows production in 1935 as published in the preliminary report of the Quebec Bureau of Mines.

Production of asbestos in the Province of Quebec for 1935

Grouping of grades	Shipments and sales		Average value per ton
	Short tons	Value	
Crudes	2,278	$539,558	$236.86
Fibers	102,270	4,873,255	47.65
Shorts	105,919	1,641,801	15.50
Total	210,467	7,054,614	33.52
Sand, gravel, and stone (waste rock only)	3,025	2,053	.68
Total	213,492	7,056,667	

Quantity of rock mined during the year 1935, 2,852,118 tons. Quantity of rock milled during the year 1935, 2,256,994 tons.

AFRICA

Rhodesia.—Production of asbestos in Southern Rhodesia in 1935 was the highest on record, except for the year 1929, when it was exceeded by 36 tons. The value, however, was less than 55 percent of that attained in 1929. The following table shows Rhodesian production from 1926 to 1935.

Published by AsbestosClaims.Law
asbestosclaims.law/library/10976/5

Asbestos produced in Rhodesia, 1926–35

Year	Short tons	Value	Year	Short tons	Value
1926–30 (average)	37,376	£949,770	1933	30,182	£555,993
1931	24,042	386,494	1934	32,214	402,745
1932	15,766	197,092	1935	42,598	646,658

Union of South Africa.—More asbestos was produced in the Union of South Africa in 1935 than in any previous year except 1929, when the output was 26,984 tons. The following table shows the output from 1926 to 1935.

Asbestos produced in the Union of South Africa, 1926–35, by sources

Year	Short tons				Total value
	Transvaal	Cape Province	Natal	Total	
1926–30 (average)	17,435	5,082	5	22,522	£359,510
1931	12,025	3,651		15,676	246,583
1932	9,106	2,964		12,070	116,401
1933	12,662	3,225		15,887	197,120
1934	14,783	2,810		17,593	203,033
1935	20,379	2,420		22,799	226,771

Production of all varieties mined in the Transvaal increased substantially. Blue asbestos was mined only in October, November, and December. Production of blue asbestos in the Cape Provinces decreased somewhat from the tonnage of 1934. The following table shows production from 1933 to 1935 by varieties:

Asbestos produced in the Union of South Africa, 1933–35, by varieties and sources

	1933		1934		1935	
	Short tons	Value	Short tons	Value	Short tons	Value
Amosite (Transvaal)	3,090	£31,099	3,757	£37,104	4,684	£46,170
Chrysotile (Transvaal)	9,572	105,715	11,025	114,241	15,620	137,903
Blue (Transvaal)			1	15	75	984
Blue (Cape)	3,225	60,306	2,810	51,673	2,420	41,714
	15,887	197,120	17,593	203,033	22,799	226,771

U. S. S. R. (RUSSIA)

No statistics of the Russian asbestos industry in 1935 are available. Some of the figures in the following table have been revised in accordance with more recent information than was available a year ago.

Production and exports of Russian asbestos, 1930–35, in metric tons

Year	Production	Exports	Year	Production	Exports
1930	54,083	15,749	1933	[1] 74,000	[2] 21,458
1931	64,674	13,239	1934	[3]	[2] 33,715
1932	[1] 60,000	[2] 16,551	1935	[3]	[3]

[1] Unofficial estimate.
[2] U. S. Bureau of Foreign and Domestic Commerce, Foreign Trade Notes: Vol. 4, no. 9, 1935, p. 14.
[3] Data not available.

Published by AsbestosClaims.Law
asbestosclaims.law/library/10976/6

CYPRUS

Early in 1936 the assets of the Cyprus & General Asbestos Co., Ltd., operating short-fiber chrysotile deposits at Amiandos, were acquired by the Tunnel Asbestos Cement, Ltd., a subsidiary of the Tunnel Portland Cement Co. of West Thurrock, England. Asbestos is shipped from Cyprus to England for manufacture of asbestos cement products. The following table, compiled mainly from the Annual Report of the Inspector of Mines and Labour—1934, shows exports during recent years.

Asbestos exported from Cyprus, 1930–35

Year	Long tons	Value	Year	Long tons	Value
1930	5,400	£116,092	1933	4,604	[1] £44,088
1931	3,571	66,381	1934	7,590	[1] 73,562
1932	1,600	27,214	1935	[2]	[2]

[1] Reported by Cyprus & General Asbestos Co., Ltd.
[2] Data not available.

OTHER COUNTRIES

According to the Bureau of Foreign and Domestic Commerce,[3] Czechoslovakia has become a producer. "Asbest" Gewinnung und Verwertung von Asbest Gesellschaft m. b. H. at Dobsina reports an output of 2,600 metric tons in 1935, 2,100 in 1934, and 1,200 in 1933. No data are available as to the nature or quality of the product.

Asbestos production in Finland is increasing. The fiber, which is of the anthophyllite type, is used chiefly in an asbestos-products factory in Helsingfors.

Discovery of a greenish white chrysotile in Bayerischer Wald, East Bavaria, was reported in 1935. This is said to be the only asbestos occurrence known in Germany and is of great importance because of increasing demands for home consumption.

A small output of asbestos is recorded for Italy, Australia, New Zealand, China, and Austria.

[3] U. S. Bureau of Foreign and Domestic Commerce, Foreign Metals and Minerals: Circ. 3, April 1936, p. 9.

75731—36——64

Published by AsbestosClaims.Law
asbestosclaims.law/library/10976/7