

## SALIENT U. S. ZINC STATISTICS FOR 1957

Compared With Years 1955 and 1956

Preliminary Report of The Zinc Industry in U. S. in 1957, By U. S. B. M.

The Arizona Department of Mineral Resources has compiled three tables and a chart giving salient statistics of zinc production, imports, exports and consumption, for the year 1957, and comparable figures for the years 1955 and 1956.

The data given in Table III are graphically illustrated in the accompanying Chart No. 1, which shows that during the six years from 1952 to 1957, the United States received unneeded imports of zinc amounting to 1,135,000 tons, or an average of 189,000 tons per year. In other words, the available supplies of zinc, which consisted of U. S. mine production, plus scrap, plus imports, plus the changes in stocks, were 1,135,000 tons over the consumptive demand plus a small amount of exports. As the government stockpiles took a great deal of zinc during the six-year period, it is natural to assume that such disposal left room for the importation of enormous tonnages of zinc for the domestic market.

### ZINC INDUSTRY IN THE UNITED STATES IN 1957

(Preliminary Report)

From U.S.B.M. Mineral Market Report No. 2738

"The domestic zinc industry in 1957 was characterized by a near record smelter output of slab zinc, increased imports of the metal, substantial increase in stocks, and declines in consumption and price, according to the Bureau of Mines, United States Department of the Interior. Mine production of recoverable zinc fell 4 percent below the 1956 total. The price of slab zinc fell from 13.50 cents to 10.00 cents. Consumers' stocks were at a high level and smelters' inventories during the year rose from 68,600 tons to 166,700 tons on December 31.

Production.- Mine production of recoverable zinc in the United States fell 4 percent to 520,100 short tons. The Tri-State district of Kansas, Oklahoma and southwestern Missouri decreased 47 percent to 30,100 tons of recoverable zinc, the lowest level since the 1880's. Despite mine closures throughout the country due to low lead and zinc prices, zinc output increased in Arizona, Colorado, Idaho, New York and Tennessee. New York was the leading zinc producing State, Idaho second and Tennessee third. Montana dropped from first place in 1956 to fourth position in 1957,

Output of slab zinc at domestic smelters was 1,057,500 tons, including 70,900 tons of redistilled secondary. Production from domestic and foreign ores was 986,500 tons, less than 1 percent above the 983,600 tons produced from ores in 1956. Data on which to base estimates of the respective quantities of slab zinc derived from domestic and foreign ores are not yet available.

The quantity of zinc contained in pigments and salts produced in the United States directly from domestic and foreign ores is not available but it is estimated to be about 101,600 tons.

Operations at a number of plants were reduced due to the low price of zinc. A 30-percent cutback in Special High Grade zinc production at the American Smelting and Refining Co. plant at Corpus Christi was announced in June. The American Zinc, Lead & Smelting Co. announced a 10-percent reduction in production at the Dumas smelter, effective July 1. At the same time the announcement was made of a 40-percent reduction in the smelting operations of the Athletic Mining and Smelting Co. plant at Fort Smith. In July the American Steel and Wire Division of the United States Steel Corporation announced the permanent closing in November 1957 of the Donora smelter after 42 years of operation. At the time the smelter was built it was considered to be one of the most modern and efficient installations then in existence but new technological developments over the years had made the plant non-competitive. The Eagle-Picher Co. closed its Henryetta smelter on April 29 but resumed operations again on May 9. On July 1, however, the smelter was closed by a strike which continued until November 7, 1957. In July The New Jersey Zinc Co. announced curtailment of 2,500 tons in output of slab zinc at Depue and Palmerton.

Consumption. - The quantity of slab zinc available to consumers in 1957 was 1,037,400 tons or about 68,100 tons less than in 1956. Consumption of slab zinc as reported by approximately 600 plants totaled 913,300 tons (including about 6,800 tons of Remelt). It is estimated that an additional 10,800 tons of slab zinc was consumed at plants reporting on an annual basis only. A total of 924,100 tons of slab zinc used by all industries was 8 percent below the 1,008,800 tons used in 1956.

Die castings, the largest single use of zinc, accounted for about 41 percent of the total and galvanizing for 39 percent. Brass mills and ingot makers used 111,100 tons of zinc but showed a decrease of 10 percent from the 124,000 tons used in 1956. Rolled zinc products accounted for only 39,500 tons in 1957 compared with 47,400 tons in 1956.

Stocks. - Stocks of slab zinc at domestic smelters were 68,600 tons on January 1 and gradually increased to 166,700 tons on December 31. Inventories of slab zinc at consumers' plants were 105,000 tons at the beginning of the year, decreased to 70,600 tons on July 1 but increased to nearly 86,000 by the end of the year.

Prices. - The price of Prime Western grade slab zinc, East St. Louis began the year at 13.50 cents. On May 6 the price fell to 12.00 cents, on May 13 to 11.50 cents, on June 4 to 11.00 cents and on June 19 to 10.50 cents. On July 1 the price again dropped one-half cent to 10.00 cents at which level it remained for the balance of the year.

Average monthly zinc quotations on the London Market Exchange ranged from a high in January £103.256 per long ton (equivalent to 12.91 cents a pound computed at an exchange rate of \$2.80 to the pound sterling) to a low of £62.794 per long ton (7.85 cents a pound) in December.

Foreign trade. - Imports of zinc in ores and concentrates were 525,700 tons, virtually unchanged from 1956 total. Mexico supplied 192,500 tons (37 percent), Canada 158,200 tons (30 percent) and Peru 118,800 tons (22 percent). The remaining 11 percent came chiefly from the Union of South Africa, Guatemala, Australia, Bolivia, and Honduras.

Slab zinc imports rose from 245,000 tons in 1956 to 268,300 tons in 1957. Of the total, Canada supplied 39 percent, Belgium-Luxembourg and Belgian Congo each 12 percent, and Mexico and Peru each 9 percent. Substantial quantities were also received from Yugoslavia, Italy, Australia, and West Germany.

Exports of slab zinc were 10,800 tons compared with 8,800 tons in 1956.

Tariff. - The duty on slab zinc was 0.7 cents per pound, that on zinc in ore and concentrate at 0.6 cents per pound. Due to the over supply situation in the zinc and lead industries, the President in August asked the U. S. Tariff Commission to consider the situation for action under the escape clause of the Trade Agreements Extension Act. The National Emergency Lead-Zinc Committee, established early in the year, asked the Tariff Commission to invoke the escape clause and public hearings were held November 19 through 26. No decision had been made up to March 31, 1958 but under existing laws the Tariff Commission can recommend increases in the tariff to a maximum total of 2.1 cents per pound on slab zinc and 1.8 cents per pound on zinc in ore and concentrate."

#### ARIZONA'S PART IN U. S. ZINC INDUSTRY IN 1957

From U.S.B.M.'s Area Report No. D-67

"Events during the year that affected the lead-zinc industry of the State included the suspension of operations in June at the San Xavier mine by McFarland & Hullinger (formerly owned by Eagle Picher Co.), closing of the Head Center mine (operated by the Athletic Mining Co.) in July, and shutdown of the American Smelting and Refining Co. Trench Unit Operation in October. The State's principal producer, Iron King Mine, operated by Shattuck Dem Mining Corp., was active throughout the year. Coronado Copper & Zinc Co., closed its Johnson Camp Unit copper-zinc operation in August.

TABLE I

## SALIENT STATISTICS OF THE U. S. ZINC INDUSTRY

YEARS 1955, 1956 AND 1957

Source: U.S.B.M. &amp; A.B.M.S.

Unit: Short Tons

	Year 1955	Year 1956	Preliminary 1957
Producers' Stocks, Beginning of Period --	124,277	39,264	68,622
U. S. Mine Production, Recoverable Zinc -	514,671	542,340	520,128
Imports-Ores & Concts., Zinc Content ----	478,044	525,350	525,729
Imports-Zinc Metal -----	195,696	244,978	268,281
Redistilled Secondary -----	66,042	72,127	70,936
TOTAL SUPPLY	1,378,730	1,424,059	1,453,696
Producers' Stocks, End of Period -----	39,264	68,622	166,660
Exports-Slabs, Pigs, Blocks -----	18,069	8,813	10,786
Exports-Ore, Sheets, Plates, Scrap & Dust --	25,714	20,591	10,131
SUB-TOTAL	83,047	98,026	187,577
APPARENT CONSUMPTION -----	1,295,683	1,326,033	1,266,119
REPORTED CONSUMPTION-SLAB ZINC -----	1,119,812	1,008,790	924,063
CONSUMED DIRECTLY IN ORES -----	116,364	116,040	101,600
TOTAL REPORTED ZINC CONSUMPTION	1,236,176	1,124,830	1,025,663
UNACCOUNTED FOR (Stockpiles & Smelter Ores)	59,507	201,203	240,456
Production of Primary Slab Zinc:			
By Sources: From Domestic Ores -----	582,913	470,093	N.A.
From Foreign Ores -----	380,591	513,517	N.A.
By Methods: Electrolytic -----	389,891	410,417	409,433
Distilled -----	573,613	573,193	577,081
ARIZONA MINE PRODUCTION -----	22,684	25,580	33,300
WORLD MINE PRODUCTION -----	3,180,000	3,330,000	N.A.
U.S.Mine Production % of Reported Consumption	41.63%	48.22%	50.71%
Avg.Price of Zinc, E.St.Louis (E.& M.J.) -	12.229¢	13.494¢	11.399¢

Arizona Department of Mineral Resources

June, 1958

TABLE II

SLAB ZINC AVAILABLE TO CONSUMERSYEARS 1955, 1956 AND 1957

Source: U.S.B.M. &amp; A.B.M.S. Unit: Short Tons

	Year 1955	Year 1956	Preliminary 1957
<b>SUPPLY:</b>			
Stocks at Primary Smelters Jan. 1st. ---	121,847	37,322	66,541
Stocks at Secondary Plants Jan. 1st. ---	1,549	1,942	2,081
Production - Primary -----	963,504	983,610	986,514
- Secondary -----	66,042	72,127	70,936
Imports of Slab Zinc -----	195,696	244,978	268,281
<b>TOTAL AVAILABLE</b>	<b>1,348,638</b>	<b>1,339,979</b>	<b>1,394,353</b>
<b>WITHDRAWN:</b>			
Exports of Slab Zinc -----	17,904	8,813	10,786
Shipments to Government Account -----	87,000	157,014	179,466
Stocks at Primary Smelters-End of Period	37,322	66,541	164,164
Stocks at Secondary Plants-End of Period	1,938	2,081	2,496
<b>TOTAL WITHDRAWN</b>	<b>144,164</b>	<b>234,449</b>	<b>356,912</b>
<b>AVAILABLE TO CONSUMERS -----</b>	<b>1,204,474</b>	<b>1,105,530</b>	<b>1,037,441</b>
<b>REPORTED CONSUMPTION -----</b>	<b>1,119,812</b>	<b>1,008,790</b>	<b>924,063</b>

U. S. CONSUMPTION OF SLAB ZINC

GALVANIZERS -----	451,141	439,146	355,796
DIE CASTERS -----	430,807	360,507	370,177
BRASS PRODUCTS -----	146,243	124,004	111,114
ROLLED ZINC -----	51,589	47,359	39,544
ZINC OXIDE & OTHER -----	40,032	37,774	47,432
<b>TOTAL SLAB ZINC CONSUMPTION</b>	<b>1,119,812</b>	<b>1,008,790</b>	<b>924,063</b>

TABLE III

ZINCThe Domestic Situation    1952 - 1957

Compiled by Arizona Department of Mineral Resources From U.S.B.M. Reports

	1952	1953	1954	1955	1956	1957
U. S. Mine production <u>1/</u>	557,000	429,000	378,000	398,000	447,000	425,000
Secondary production	55,000	53,000	68,000	66,000	72,000	72,000
Imported (Ore & Metal)	564,000	748,000	611,000	686,000	770,000	792,000
Metals Stocks increase	63,000	94,000	57,000 De	84,000 De	28,000	98,000
Available Supply	1,113,000	1,136,000	1,114,000	1,234,000	1,261,000	1,191,000
Consumed & exported	919,000	950,000	930,000	1,163,000	1,018,000	934,000
Surplus	194,000	186,000	184,000	71,000	243,000	257,000

Net Unneeded Imports for the Six Years = 1,135,000 tons = 189,000 tons per year.

1/ Less zinc used for pigments

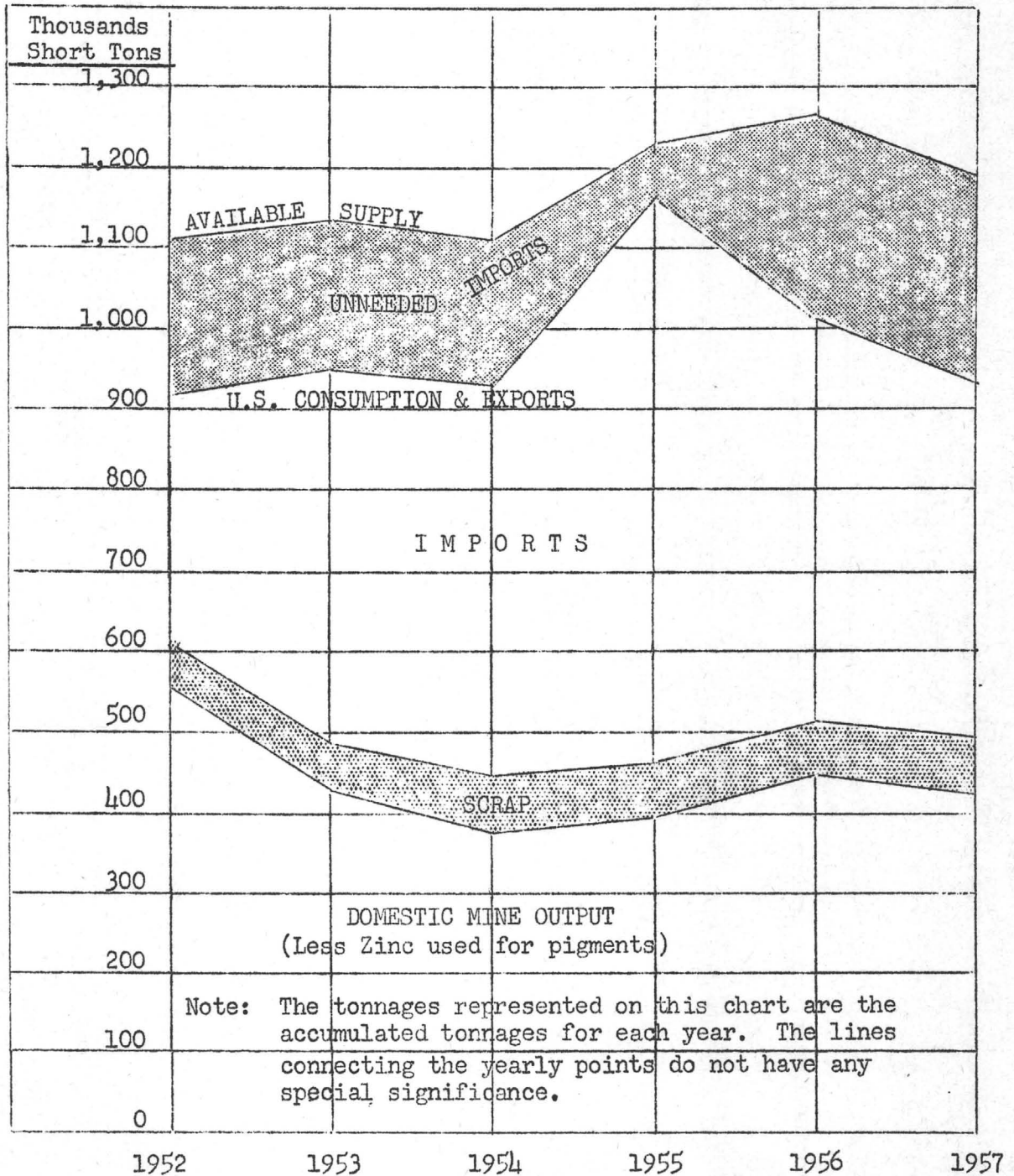
De = Decrease

Arizona Department of Mineral Resources

June, 1958

# CHART NO. I

## GRAPH SHOWING DOMESTIC ZINC SUPPLIES AND UNNEEDED IMPORTS



Arizona Department of Mineral Resources

June, 1958