

LEAD INDUSTRIES ASSOCIATION, INC.

292 MADISON AVENUE

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SUBJECT: REPRINT ON LEAD

To Members of the Lead Industries Association, Inc.:

Enclosed is a reprint of the article on lead from the annual review issue of "Engineering and Mining Journal," February, 1962.

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Very truly yours,



Executive Vice President

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Look Ahead with Lead

Reprinted from

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**Annual Survey
And Outlook**

LEAD-1961



Robert L. Zingfeld
Executive Vice President
Lead Industries Association

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LEAD-1961

R. L. Ziegfeld

ALTHOUGH A CURSORY GLANCE at the lead statistics for 1961 would appear somewhat disappointing, there are many features that, on close examination, point to a brighter outlook. Stocks in the hands of producers remain high. U. S. consumption fell only slightly short of 1960, and was on an upward trend during the year. The price remained constant throughout most of the year, dropping a cent in early November but recovering 1¢ later in that month. Production in the U. S. was higher due to the settlement of long strikes that occurred in 1960, but foreign production declined moderately.

To be more specific, domestic consumption at more than 1-million tons was off about 1% from the 1960 figure of 1,021-million tons. However, consumption in 1960 had declined consistently throughout that year but reversed this trend in the first quarter of 1961 after reaching a low in the last quarter of 1960. The last three quarters of 1961 averaged substantially higher than the first quarter with the highest rate of consumption estimated for the last quarter. October consumption, the latest month for which complete figures are available at the time of writing, was the highest in over two years. It is thus reasonable to assume that if the general business level in 1962 is maintained or improves, lead consumption should be higher in the coming year.

On the domestic supply side, mine production, which hit a 60-yr low in 1960, recovered somewhat to about 260,000 tons, largely as the result of strike settlements just before the start of the year. On the other hand, secondary lead production was off by a like amount at 450,000 tons, so that these two sources made available the same amount of lead as in 1960.

Imports for consumption, of course, were controlled by quotas at a little

more than 350,000 tons, but an additional 25,000 tons entered for Government stockpile as compared with some 9000 tons in 1960. Most of this difference was accounted for by pig lead entries under barter agreement between the U. S. and Canada and Australia.

Stocks in the hands of U. S. producers rose another 50,000 tons during the year while consumers stocks increased by 15,000 tons. The latter are still low and the former excessively high. On the other hand, Free World stocks outside the U. S. declined so that total stocks in the Free World including the U. S. showed an increase of some 20,000 tons.

Deliveries by primary refiners in the Free World outside the U. S. showed a modest increase while the corresponding increase in the U. S. was more substantial. Accounting for the U. S. increase probably was the increase in consumer stocks and the reduction in secondary production.

Production of refiners outside the U. S. showed a small decline which may reflect voluntary action taken as a result of the meetings of the International Lead Study Group sponsored by the U. N. and held in March at Mexico City. At that meeting, the need for some curtailment of production was recognized. Australia and Canada agreed to such curtailment in exchange for a U. S. agreement to barter certain agricultural commodities for 100,000 tons of their excess stocks of lead. Since it took some time to effect both the barter agreements and curtailment, these actions were not apparent in either the production figures or deliveries until late in the year and should be more noticeable in 1962.

A further meeting of this group was held in Geneva in October but no additional measures were taken to

improve the statistical position of lead by international action. This inaction had a depressing effect on the London market where the price of lead hit a post-war low. This in turn caused the New York price to drop 1½¢ on Nov. 1 from 11¢, where it had been since Dec. 13, 1960, to 10½¢, and another 1½¢ on Nov. 13, 1961, to 10¢. Thereafter the London price and domestic buying boosted the price 1¢ on Nov. 28, to 10½¢.

Consumption in the U. S., as previously stated, was off about 10,000 tons as compared with 1960, and amounted to approximately 1,010-million tons, but showed an improving trend throughout the year. That most uses, with the exception of storage batteries, lead anti-knock compounds, ammunition, caking lead and collapsible tubes, shared about equally in the small decline indicates that business conditions rather than any important substitution accounted for the reduced consumption in most applications.

The increased consumption in four of the five categories mentioned above may be significant. In the last few years, erection of plants to make anti-knock compounds in foreign countries has shifted some of the earlier U. S. consumption abroad, and new plants producing high-octane products have reduced the need for lead compounds here. Thus the increase in U. S. consumption of lead in 1961 to make anti-knock compounds may herald the end of this trend and point to further increases in the coming years. Another sign that may be significant is the entry of a third U. S. producer, the Houston Chemical Co., into the lead anti-knock business to join the older producers, Ethyl and Du Pont.

The increase in consumption for ammunition may reflect the intense efforts of the sporting arms and am-

U.S. Lead Supply and Demand

(short tons of lead content)

Supply:	Estimated	
	1960*	1961*
Mine production	246,700	260,000
Secondary production	463,000	450,000
Quota imports		
Ore, recoverable	130,000	130,000
Pigs and bars	200,000	222,000
Other imports (mainly for stocks pile):		
Ore, recoverable	8,700	11,000
Pigs and bars	—	15,000
Total	1,054,000	1,082,000
Changes in stocks at primary smelters and refineries	23,000 (incr.)	50,000 (incr.)
Total	1,081,000	1,010,000
Exports	3,500	4,000
Total available	1,028,500	1,029,000
Demand:		
Industrial consumption		
Estimated stockpile shipments	8,700	26,000
Consumer and secondary smelter stocks	20,200 (decr.)	15,600 (incr.)
Unaccounted for	27,800	22,000
Total	1,028,500	1,029,000

* Based on American Bureau of Metal Statistics.
U. S. Bureau of Mines and Lead Industries Assn. statistics.

munition manufacturers to increase the popularity of sports shooting.

The calking lead increase probably is in sympathy with the high level of building and unsatisfactory results with substitutes, which have about disappeared from the picture.

The resurgence of lead collapsible tubes is particularly interesting as it apparently results from the fluoridization of tooth paste. The most recent popular tooth pastes must be packaged in lead alloy tubes because they chemically attack aluminum. This trend should continue and be felt even more in 1962.

The interest in lead and its compounds for noise and vibration control has been nothing short of astonishing. At least two manufacturers of removable partitions introduced lead-loaded vinyls into their products during the year. Nearly a dozen gas-pressure reducing stations were sound-proofed with this material. At least a dozen important bank and office buildings, a department store and a large motel,

U.S. Lead Use*

(short tons of lead content)

	Estimated	
	1960*	1961*
White lead	11,800	11,200
Red lead and litharge	74,900	72,000
Storage batteries	153,200	156,000
Cable	60,400	59,000
Building	48,700	46,000
Tetraethyl lead	163,800	166,000
Ammunition	43,000	46,000
Food	3,700	2,800
Bearing metals	20,700	17,000
Rubber	60,000	55,000
Type metal	28,200	28,000
Calking lead	66,500	70,000
Brass and bronze	20,500	19,200
Castings	7,000	8,700
Collapsible tubes	8,700	11,000
Misc. uses	49,500	46,000
Total	1,021,200	1,010,000

* Based on U. S. Bureau of Mines statistics.

Quarterly U.S. Lead Use

(short tons)

	1960	1961
1st quarter	262,500	246,400
2nd quarter	260,400	252,600
3rd quarter	251,500	251,000
4th quarter	245,200	259,000 (est.)
Total	1,021,200	1,010,000

Lead Price Changes

(cents per lb. N. Y.)

Dec. 15, 1960	11.00
Nov. 1, 1961	10.50
Nov. 15, 1961	10.00
Nov. 28, 1961	10.25

lead imports are controlled by quotas but manufactures such as litharge, solder and pipe are not, imports of those products have increased substantially in the last two or three years. For example, statistics on the consumption of lead by the U. S. ceramic industries show relatively constant consumption of about 18,000 to 20,000 tons in recent years. These figures, however, present a badly distorted picture. Several of the largest U. S. ceramic frit manufacturers are now buying all their lead oxides from Mexican instead of U. S. lead manufacturers since the Mexican imports can come in ex-quota, avoid the Mexican export tax on pig lead, and enjoy a lower pig lead price. In addition, imports of finished ceramic products from Japan and Europe have hurt domestic manufacturers who thus buy less lead in the U. S. All in all, this one industry would probably be using some 10,000 to 15,000 tons more lead in the U. S. were it not for the foregoing reasons. The same applies to a number of other industries.

A word about lead's largest consumer, storage batteries, appears in order. Shipments of automotive replacement batteries in 1961 were close to the 1959 record and, when final figures are available, may even have established a new record. However, new-car production was off so that total battery shipments in 1960 and 1961 were about equal and took slightly more lead in the latter year. It thus seems that the trend to lighter batteries which has been apparent in recent years may be slowing down. This, together with an anticipated higher new-car production rate for 1962, may indicate some improvement in lead consumption for batteries in the next 12 months.

The next year, then, can be approached with at least some degree of reserved optimism. Consumption should increase moderately, world production may show a small decrease, and, as a consequence, some reduction of producers' stocks can be expected. In addition, better purchases for the Government stockpile should have some further effect.

The lead industry itself is further increasing its efforts to bolster lead consumption. The Lead Industries Association, Inc., will put on the largest advertising, promotional and technical service drive in its history and, through its expanded research program, supported by lead producers throughout the Free World, the largest technical research program to date. Associations of lead producers in Europe and Great Britain are also intensifying their programs. **END**

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