

LEAD INDUSTRIES ASSOCIATION, INC.

392 MADISON AVENUE

NEW YORK 17, N. Y.

THE UNITED STATES LEAD INDUSTRY

by

Robert L. Ziegfeld, executive vice president,
Lead Industries Association, Inc.

I would like to try to give you briefly some background information on the lead industry in the United States today and how we, as an association representing that industry, fit into the general picture. In recent years lead consumption in this country has fluctuated between about 900,000 and 1,200,000 short tons. Last year it was actually about 1,022,000 tons, a little better than the year before. If the first six months of this year are any reliable indication, it will show a further increase of between 5 and 10 percent.

Of this total only about 260,000 tons a year is now derived from domestic ores, about 400,000 tons is imported as ore and pig, and the balance is secondary lead produced in the United States from scrap. Since some of the imports went to government stockpiles and did not enter consumption, secondary production is somewhat larger than would be indicated by the figures I have quoted.

The storage battery industry, at over 360,000 tons, is our largest consumer. On the other hand, since old storage batteries account for scrap from which some 300,000 tons of secondary lead is produced, this industry is also the largest generator of lead scrap. However, battery oxides are made almost entirely from primary lead with the result that the battery industry uses around 200,000 tons of primary lead a year and produces an excess of secondary which is employed to make other products.

Lead gasoline anti-knock additives rank second in lead consumption at about 170,000 tons last year, but none of this comes back as scrap. This industry had a temporary set-back several years ago when a large number of new catalytic cracking plants were put into operation, but now that these plants seem to be at capacity the use of lead in anti-knock compounds is again on the increase.

The third most important consumer is the construction industry, which includes the lead used in chemical construction. Over 100,000 tons of lead, more than half of this as calking lead for jointing cast-iron pipe and the rest mostly as lead sheet and pipe, is employed by this industry.

About 30,000 tons of lead each are used for electrical cable sheathing for solder, and for paint, and only slightly less for ammunition. More important among smaller users are ceramics, collapsible tubes, type metal, bearings, and brasses and bronzes.

What has happened in recent years is that consumption has remained more or less static with respect to total tonnage used and per capita consumption has declined. At the same time production in the States has

declined, but improved geological and production methods have greatly increased the World's capacity to produce. This increase in production capacity has more than offset the U. S. production decline and increased consumption outside the U. S. The net result has been the accumulation of very large inventories by producers which have a depressing effect on the market. These vast inventories have been declining in recent months as a result of voluntary production control and somewhat improved consumption.

Long term improvement in the lead market depends on the industry's ability to expand its markets either through greater use of existing lead products or development of new products and uses. I personally am extremely optimistic that this can be done. In fact I feel that a good start has already been made. Most important is the fact that lead producers all over the World have recognized this situation for several years and have embarked on large promotional and technical programs both individually and through their Associations. In fact the Lead Industries Association will spend this year close to a million dollars, split about equally between research and promotion.

The money for promotion is being subscribed by lead producers all over the World who sell lead in the United States and will be devoted to developing the U. S. market. Other associations in other countries are doing the same in their own sales areas. The money for research comes from lead producers all over the world regardless of where they sell their lead because research results are internationally useful and because much of the research is being done in other countries than the U. S.

Now what is the outlook for increased lead consumption in the various potential markets? Automobile storage batteries seem well entrenched in their field. Technological advances have increased the capacity of lead-acid batteries per unit of weight and volume, made them last longer, less expensive, but using less lead per battery. There is no indication that competitive batteries will take over this market, which should continue to expand as automobile production and use expands, but will probably use somewhat less lead per unit.

Industrial batteries like those used for motive power in industrial trucks have to compete with gasoline power and other kinds of batteries. However, we believe they offer a potential new market of more than 50,000 tons a year which can be developed by aggressive promotion. This we have started to develop through both magazine and direct mail advertising and personal technical service.

We believe the market for lead additives to gasoline will continue to grow in view of the new trend to more powerful automobile engines which need better gasoline. A threat has been created by those who are concerned about dangers to public health from air pollution resulting from automobile exhausts. We believe that research studies now in progress or soon to be initiated will show that the lead additives are not a health problem as some people think.

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Cable sheathing thirty years ago was the largest consumer of lead, but a major part of the telephone cable market has been lost to plastics, aluminum and steel. Usage in power cable, despite strong competition, is still important. We believe this market can be maintained and perhaps increased by advertising and promotion which we recently initiated.

White lead in house paints has lost a major part of its market in the last thirty years, but metal protective paints like red lead and some newer lead pigments are giving a good account of themselves. There is also a strong trend to yellow traffic marking paints based on lead chromate. Like cable sheathing, we believe that lead paint pigments have suffered their worst losses and that the future will show increased usage.

In ceramics lead has shown an important upswing in the last five years or so with usage increasing by about a third. This is largely due to greater use of leaded glazes and porcelain enamels, the latter notably on aluminum, and electronic applications, like piezoelectrics. We are promoting these markets intensively through advertising and research.

To building construction we look at the moment with the greatest optimism. Although the use of lead pipe in plumbing and lead in chemical construction have declined in the face of intense competition, a new interest in lead roofing and flashing is being created. Also new major markets are developing for the use of lead to control noise and vibration. Scores of major buildings like the Pan Am Building and new Philharmonic Hall are being erected on lead-asbestos antivibration pads to isolate them from the noise and vibration of railroads, subways and heavy traffic. Machinery like air conditioning cooling towers and printing presses are being installed on such pads.

Also tests are being conducted and trial installations made of lead in various types of building partitions to prevent transmission of sound from room to room. We believe an important market for lead will be found in this application. Already, too, a whole new school of leaded plastics containing up to 90 percent lead has been developed. They are finding wide application as noise reducers in airplane cabins, folding partitions, and many industrial applications.

There isn't time to go into more detail which would probably bore you anyway. Suffice it to say that we as an association are aggressively trying to develop these and other markets. We are advertising in 14 different magazines in six major consuming areas - construction and architecture, factory management, electrical distribution, paints, ceramics, and design engineering. These ads deliver nearly 4,000,000 messages a year to potential customers. Our mailing pieces amount to hundreds of thousands of copies a year. Our technical staff made up of seven men specialized in various engineering fields handles some 15,000 inquiries annually ranging from simple requests for literature to complicated engineering problems involving the use of lead.

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