

LEAD INDUSTRIES ASSOCIATION

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NOT FOR PUBLICATION

MIXED METALS*

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Before gazing into the well known crystal ball and determining the inside confidential low-down on the outlook for mixed metals, I would like to discuss for a few moments a phase of our business that makes me feel proud to be a part of a real worthwhile industry.

The mixed metal or white metal alloy business, while related to the primary lead smelting industry, poses many complex problems of a completely different nature.

You gentlemen in the primary field have virgin ore extracted from Mother Earth as your source of raw material. We, on the other hand, while large users of virgin metals, depend to a considerable extent on the crumbs from the table of American industry. Our raw materials consist of drosses, shavings, and nonferrous residues of the metal working industry. From these humble beginnings come the solders which give your new automobile its sleek lines, the bearing metals which keep America rolling and the type metals which make your morning newspaper possible.

By supplying the technical know-how for the conversion of these scrap materials into high-quality products for industry, the white metal members of this Association are performing a great service to the Nation. We can be properly classified as a conservation industry. We are helping, to a large extent, in conserving the metal resources of the Nation.

By educational processes during the past 50 years, we have taught the metal consuming industries how to save, conserve, and turn into cash, scrap and residues resulting from their operations. Today, virtually nothing in the nonferrous field is thrown away.

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That was not true 40 or 50 years ago. To illustrate, in Los Angeles there is an old garbage dump between our plant in Los Angeles County and downtown. It was used by the City during the latter part of the last century and the first part of the present. Sagebrush and weeds covered it for many years. Several enterprising individuals got the idea that it might contain enough non-ferrous metals to warrant a mining enterprise. They sought and received permission to conduct tests. The result was that for several years prior to my leaving Los Angeles in 1945, this garbage dump had been profitably mined by this enterprising company. They may still be working there since the project was not half completed at that time. There are undoubtedly many other similar locations throughout the country where similar waste has occurred in the past.

Today we know that as a result of the educational work done by the secondary smelters, no such flagrant waste of the country's resources is possible.

To give you some idea of the extent to which the mixed metal business is contributing to the conservation of national resources, I am going to quote the Bureau of Mines 1948 tonnage figures on some types of scrap used as raw material:

Solder and Tin Scrap and Drosses	20,596 tons
Babbitt Scrap	24,532 "
Type Metal Scrap	17,435 "
Type Metal and Lead Base Babbitt Dross	19,550 "

This gives a total of 82,113 tons of raw material. Please note that these figures do not include hard or soft scrap lead, lead drosses, or battery plates but only tin-containing scrap generated from the use of mixed metal alloys.

In utilizing such raw materials, one probably wonders about the quality of the end products. The answer lies in performance. We know that the graphic arts industry has reached a perfection in printing that was not thought possible a short 20 years ago. Yet, virtually all type metals are made from secondary metals and drosses.

We find such cars as Oldsmobile, Buick, Cadillac, and many others having high compression engines developing horsepower that was available only in the dreams of research engineers 20 years ago. Still today these engines perform in a highly satisfactory manner on bearings made from lead base Babbitt produced from secondaries.

Many additional advantages of performance could be cited, but I believe that this is not necessary here. We all know that by utilizing modern metallurgical procedures in the smelting and refining of secondary metals, alloys are produced on a commercial basis without difficulty to a purity consistent with the same alloy made from primary metals.

Now that we have discussed the raw materials and the high standard of quality of our end products, let us examine the market potential.

According to statistics issued by this Association, approximately 65,000 tons of solder was used in 1947, approximately 75,000 in 1948, and approximately 61,000 in 1949. Solder sales in 1949 held up somewhat better than most nonferrous metals. Among some of the reasons are:

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1. Peak automobile production, 2. The unabated demand for housing with the resultant large building program, 3. The astounding growth of a new industry - television, 4. The steady growth of the fruit juice canning industry, plus continued heavy demand for other canned food products. To show how an industry can blossom forth almost overnight, I will cite the approximate production of television sets: 197,000 in 1947, 953,000 in 1948, and a tremendous total of 2,667,400 in 1949. The projected figure for 1950 is 3,750,000 sets, or almost 40% more than in 1949. I am told by an engineer for one of the leading producers that there are 250 soldered connections on the average television set.

The same forces that kept solder on a reasonably even keel in 1949 are even more active in 1950. The automobile industry may build another 6,250,000 cars and trucks this year. While a few months ago economists were talking about the demand for new cars being caught up by June or July, now it is perhaps the late third or fourth quarter of the year. Many makes of automobiles are setting new sales records month after month.

The building industry should continue at an expanding pace during 1950. With the population of the country increasing at the rate of between 1,500,000 and 2,000,000 annually, there should be no slackening in the demand for food products, thus the canning industry should prosper.

This all adds up to continued good business in the solder industry in 1950.

The Babbitt phase of our industry showed a sharp decline in 1949 from the high level of 1947 and 1948. The approximate figures are: 1947 - 76,000 tons, 1948 - 84,000 tons, and 1949 - 54,000 tons.

While the general slump in business from April to September, 1949 contributed to this reduction, other important factors are involved. In 1947 and 1948 there were very large shipments of freight cars and Babbitt lined car brakes shipped to France and other foreign countries. These can be considered non-recurring orders. The dieselization program on American railroads has drastically reduced the consumption of Babbitt by this industry. While consumption of Babbitt by the automotive industry should continue at peak rates, and the general increase in industrial activity should increase Babbitt consumption over that for 1949, I do not believe that we will see nearly the tonnage reached during 1947 and 1948.

For long term thinking and planning, shall we say over the next two decades, it is well to consider the probability of a revolutionary change in the power plants of automobiles, trucks and other modes of transportation. I refer to the possibility of jet propulsion replacing the internal combustion engines. Such a change would have a drastic effect on the solder business for automobile radiators, Babbitt for bearings, and even the battery industry could be seriously affected.

Should it be possible for us to explore still further in the future, we would probably find the utilization of atomic energy causing a great upheaval in the mixed metal industry. It is doubtful, however, if those of us present here need to lose sleep over that probability.

The other member of the mixed metal family is type metal. One favorable factor in the outlook for type metal is the fact that in 1946 and early 1949 when prices were at their astronomical peak, the printing industry killed off and used up every conceivable pound of metal possible, without hurting their business. Thus, when metal is required today, it is usually purchased instead of emanating from standing forms.

While competition is keen among radio, television, newspapers, and magazines for the advertiser's dollar, the printed media seem to be getting their share and lineage is increasing. It seems reasonable to conclude that as long as we have good potential buying power on the part of the masses and a high rate of demand for such consumer products as automobiles, washing machines, and television sets - to mention just a few - and several companies in each field competing for the available business, we will continue to see heavy advertising schedules. This means steady type metal business.

In conclusion, I would like to state that price-wise competition is extremely keen. While costs have steadily mounted since 1945, we find today many instances where producers have cut their spread between raw material cost and the selling price. Such a situation does not lend itself to a stabilized industry. Tomorrow-wise, I believe the mixed metal business in 1950 will be greater than 1949, but not equal to the peak years of 1947 and 1948.