

LEAD INDUSTRIES ASSOCIATION

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USE OF LEAD IN THE SMALL ARMS AMMUNITION INDUSTRY*

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According to statistics compiled by the Bureau of Mines uses of lead in the ammunition industry in the United States, including primary and secondary lead and antimonial lead, in the year 1951 totaled approximately 40,185 tons as compared to 38,438 tons in the year 1950.

The post-war annual average use for the years 1946 through 1951, was 34,837 tons.

The pre-war annual average use during the years 1935 to 1938, inclusive was 33,100 tons.

During the years 1939, 1940 and 1941 consumption increased to an annual average of 56,500 tons, which was followed by a further increase in the annual average use in the years 1942 to 1945 inclusive to 91,750 tons.

Beginning in the year 1939 uses of lead in the ammunition industry increased considerably due to demands for military purposes, resulting in a peak consumption of 178,000 tons in the year 1943 and an average annual use of 76,686 tons during the period of 1939 to 1945 inclusive.

On a percentage basis the use of lead in the industry is relatively small, but it may be of some interest to note the consumption in pre-war and post-war years and the percentage of the total consumption in the United States in those years.

The annual average use of 33,100 tons in the pre-war years 1935 to 1938 inclusive represented approximately 5.52% of the total consumption, while the annual average use of 34,837 tons in the post-war years 1946 to 1951 inclusive represents about 3.16% of the total consumption. These percentage figures, of course, indicate an increase in consumption by other industries during the post-war years.

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The use of 178,000 tons in the year 1943 represented 16.18% of the total consumption in that year, and during the war years 1939 to 1945 inclusive consumption in the industry averaged about 7.85% of the total consumption in the United States.

OUTLOOK FOR 1952

Production of small arms ammunition for civilian uses in 1952 will be restricted by government controls on uses of strategic metals, such as brass, even though lead and other materials are freely available.

One most important factor is, of course, the game population, which influences game laws and affects the shooting activities of the sportsmen and farmers.

Increased costs are also a factor, as this is reflected in the price to the consumer.

The Defense Program will probably not require as much lead for small arms ammunition as was used during World War II years because of the changes in types of such ammunition.

TECHNOLOGICAL DEVELOPMENTS

Due to inadequate supplies of lead in some recent years, particularly in 1946 and the latter months of 1951, our Company carried on some research and development work on possible substitutes for lead in ammunition, which we referred to in our remarks at the annual meeting of this Association last year. While our industry will undoubtedly continue to use lead as the preferred metal in small arms ammunition, we have been compelled by circumstances to provide a substitute as protection against the possibility of lead not being available in sufficient quantities or becoming prohibitive from a cost standpoint.

While such substitution, if due to shortage of lead supplies, would probably not affect market conditions inasmuch as demands from other classes of consumers would probably require all available metal, it would, of course, result in a decrease in the amount of lead used in the ammunition industry.