

THE LEAD/ACID BATTERY INDUSTRY IN JAPAN

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In view of the trend in the U.S. automotive lead/acid battery market towards maintenance-free (MF) systems, the Japanese industry has, since early 1980, aggressively studied such batteries. Year by year, the production ratio of MF to conventional batteries has been continuously increased. Some Japanese companies have employed the expanded-metal technique for the mass-production of batteries. The MF batteries so produced have been mostly of the "hybrid" type in which the positive grids use a lead-antimony alloy and the negative grids use a lead-calcium alloy.

In this year of 1986, two main forces are exerting an influence on the production of automotive batteries in Japan. The first is the rapid strengthening of the Japanese yen against the U.S. dollar; the second is the strong likelihood of a new company coming into the market.

The 1985 market share of each of the five major lead/acid battery companies in Japan is shown in Table 1. The data given for each company are gross figures and therefore include batteries other than automotive types. The total production of automotive batteries in 1985 was 26 430 000 of which 13 130 000 were for original equipment in new cars, 9 660 000 were for replacement, and 3 640 000 were exported.

For each Japanese battery company, the market situation in 1986 and in the immediately following years will be seriously affected by three factors, namely, the exchange rate, the influence of overseas competition, and the emergence of a new major manufacturer.

TABLE 1

Market status of the major lead/acid battery companies in Japan

Company	Gross sales (\$US × 10 ⁶)*	Lead consumption (tonne × 10 ³)
Japan Storage Battery	445	74.7
Yuasa	443	73.4
Shinkobe	325	51.6
Matsushita	Not known	Not known
Furukawa	160	33.3

*Exchange rate 1 U S \$ = 160 yen

Because of the present high value of the Japanese yen against foreign currencies, and especially against the US dollar, most of the companies exporting batteries will incur substantial financial losses. The increased production of batteries of competitive quality and price in both Korea and Taiwan will further harm the Japanese industry. Indeed, some Japanese battery manufacturers have been looking for Taiwanese and/or Korean partners to produce units at a lower cost in these two countries. Encouraged by the attractive exchange rate and the absence of import duty on automotive batteries, certain trading companies have started to import these systems into Japan.

In June 1986, it was announced in the press that a sixth major Japanese manufacturer will soon appear. This news has caused apprehension among the existing companies, since a newcomer threatens to disrupt the present principle of co-existence and co-prosperity in the Japanese battery market. It is claimed that the establishment of the proposed company is being aided by a large Japanese automobile manufacturer and that the required technology is being supplied by a US battery company. Why such a company should be formed during the present very severe marketing situation is unclear, but the cause may lie in the demand of automobile manufacturers for batteries with better performance, smaller size, and lower weight.