Nonferrous Metals Less Smoke, **Fewer Smelters**

apan is one of the world's top consumers of nonferrous metals. Its annual consumption of aluminum comes to 1.8 million metric tons, conner 1.3 million tons and zinc 780,000 tonsall second highest in the world.

Reflecting the recent slowdown in economic growth and the tendency to use less and thinner nonferrous metal materials, the growth in Japan's consumption has slowed. Yet the country will continue to be a leading market for nonferrous metals in the years ahead.

It is this fact that has enabled Japanese nonferrous metal industries to enjoy relative stability, with the notable exception of the increasingly noncompetitive aluminum industry. Now, however, most companies have been hit hard by the ven's precipitous appreciation against the U.S. dollar since September 1985.

The impact is doubly great because of the direct linkage of the Japanese market for nonferrous metal ingots to the London Metal Exchange (LME) and other overseas markets. Fluctuations in foreign exchange rates are also given proportionate consideration in setting the prices of nonferrous metal ingots.

According to this pricing formula, the yen's rise against the U.S. dollar almost immediately sends the domestic market that much lower. The LME copper price, for instance, is now 2.5 times higher than in 1955, yet the Japanese price is down by 21% due to the yen's rise against the American currency.

Under the circumstances, it is hardly surprising that Japanese nonferrous metal smelters fared very badly in 1986. A number were driven out of business. while others were forced to severely reduce operations. Two of Japan's five aluminum-smelting companies suspended production entirely.

It was a dramatic change for an industry that in its peak year of 1977 produced 1.19 million metric tons of primary aluminum ingots-the world's second-highest output. However, depressed overseas markets caused by global oversupply and continued high electricity charges in Japan have forced the industry to scale back. The rapid rise of the ven against the U.S. dollar made its already difficult position all the graver. At the same time, the strong ven forced domestic nonferrous metal ore mines to close down or cut production.

Japan's nonferrous metal smelters generally rely on imported ores. But in the case of zinc. domestic ores have accounted for as much as 30% of all zinc ores smelted domestically, and as of early 1986 there were 59 mines in operation. Most were run as subsidiaries of major smelting companies.

Under present domestic market conditions, however, it is practically impossible to process even high-grade domestic zinc ores, with a zinc content of close to 10%. at a profit. As a result, at least a dozen mines closed down in the first half of 1986, and several more were to shut down



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later in the year. Domestic nonferrous ore mines are now on the borderline between life and death.

Japan's nonferrous metal smelters are taking steps to counter the impact of the strong yen. They are using more imported ore, and are trimming or shutting down their domestic mining divisions to minimize red ink. When buying foreign ores, smelters have even asked foreign suppliers to take Japan's higher smelting costs into account in their prices. They have also asked to pay in ven instead of in dollars as hitherto, in a bid to cover the loss in their yen revenues stemming from the strength of the Japanese currency.

At the same time, smelting companies are increasingly diversifying into new fields, such as electronic materials, industrial machinery and power metallurgy, in an effort to improve their earnings. Some have absorbed subsidiaries that have made a good showing in such fields in order to restore their financial health.

Japan's nonferrous smelters are restructuring themselves in a desperate effort to survive. But with no marked change likely in exchange rates, those companies that still rely heavily on smelting division sales have yet to find the key to improving their profit positions. Nonferrous metal smelting remains a key basic industry. But without a radical change in the business environment, it will take time for many smelters to pull through.

Domestic and Overseas Metal Ingot Prices

		1955	1965	1975	Sept. 1980	Sept. 1981
Copper	LME (£/t) Domestic market price (¥1,000/t)	357.3 (100) 314.2 (100)	475.6 (133) 331.0 (105)	556.9 (156) 390.4 (124)	1,001.6 (280) 380.0 (121)	916.4 (256) 248.6 (79)
Lead	LME (£/t) Domestic market price (¥1,000/t)	107.5 (100) 131.7 (100)	117.0 (109) 125.0 (95)	186.1 (173) 144.4 (110)	293.5 (273) 135.0 (103)	277.0 (258) 95.0 (72)
Zinc	P.P. (\$/t) Domestic market price (¥1,000/t)	257.9 (100) 140.5 (100)	312.9 (121) 121.2 (86)	818.9 (318) 258.1 (184)	815.7 (316) 231.0 (164)	901.8 (350) 172.0 (122)
Aluminum	LME (£/t) Domestic market price (¥1,000/t)	164.3 (100) 217.0 (100)	192.9 (117) 199.7 (92)	390.9 (238) 262.0 (121)	722.5 (440) 277.0 (128)	820.9 (500) 222.0 (102)

Notes: 1. Figures in parentheses denote indexes against the 1955 average of 100.

2. P.P. represents European producer price.

Source: Statistics by the Japan Mining Industry Association

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