

Japan watching

Forecast of 1973 scrap metal usage in the steel industry

The Steel Scrap Supply-Demand Coordinating Committee run by the blast furnace operators recently published its forecast of scrap usage for Fiscal 1973, based on a crude steel out put of 115,000,000 metric tons:

Supply	
Revert Scrap	21,050,000 MT
Domestic Scrap	20,930,000 MT
Imported Scrap	4,150,000 MT
	<u>46,130,000 MT</u>
Consumption	
In open hearths	1,230,000 MT
In oxygen converters	15,280,000 MT
In electric furnaces	21,650,000 MT
For Foundry Iron	5,560,000 MT
Other Usage	940,000 MT
Exports	
Year end stock level at steel mills	200,000 MT
	3,500,000 MT

As compared to earlier years, with the exception of 1971 and 1972, these figures continue a trend of declining usage in open hearth furnaces as these are slowly replaced by other type equipment. The decline in scrap usage for open hearth furnaces started following the peak year of 1961 in which some 8.5 million tons of scrap was consumed in open hearth steel production. Both oxygen converters and electric furnace operations have shown steady growth during the 1960s and so far in the 1970s. The ratio of charge in the oxygen converters is estimated to be 14.5% during 1973 as there will be several new blast furnaces placed in operation making the use of hot metal necessary. The recent changes in monetary exchange rates will help to make hot metal less costly than scrap as ore and coal costs have declined by nearly 30% in the last eighteen months.

Copper, lead, zinc: outlook for Fiscal 1973

The Mine and Coal Bureau of the Japanese Ministry of International Trade and Industry has put out a final revision of the 1972 control figures as follows (metric tons of metal):

	Copper	Lead	Zinc
Production	824,100	224,400	821,800
Imports	152,000	4,000	10,000
Domestic Demand	908,000	224,400	720,000
Exports	34,800	3,600	93,900

For refined copper in Fiscal 1973 the Bureau estimates the domestic demand at 965,000 metric tons, up 6.3%, and the production at 855,000 metric tons, up 3.8 percent. The gap between production and demand will, therefore, be larger than in 1972. Some industry surveys report production capacity will be at least 1.1 million tons in Fiscal 1973.

Domestic lead production should reach 233,000 metric tons in Fiscal 1973, and domestic demand is estimated at about the same figure. With no smelters planning immediate increases in capacity, the total capacity should be at the present 252,000 metric tons per year level.

The refined zinc production is estimated to be 853,000

metric tons in fiscal 1973, up 3.8% over 1972. The domestic demand is estimated at 773,000 tons, up 7.4 percent. Surveys by MITI indicate the production capacity will be at the 900,000 tons per year level, an increase of only 2.7% from the past year.

Steel mill generation of scrap declining year by year

The Steel Scrap Cartel functioning under the auspices of blast furnace operators recently published statistics showing the year by year decline in the amount of scrap generated at steel mills. While there have been large year by year changes in the amount of imported scrap, there has not been an increasing use of imported scrap in line with the steady rise in steel production. The domestic scrap industry has been the one to benefit most from the decline in self-generated scrap. The following shows this declining trend:

Fiscal Year	Crude Steel Production (1,000 MT)	Steel Scrap Generation (1,000 MT)	Ratio %
1950	5,298	1,801	34.0
1952	6,912	2,288	33.1
1954	7,875	2,273	28.9
1956	11,678	2,977	25.5
1958	12,773	3,499	27.4
1960	23,161	6,141	26.5
1962	27,250	6,778	24.9
1964	40,532	9,017	22.2
1966	51,898	10,397	20.0
1968	68,987	13,960	20.2
1970	92,406	19,184	20.8
1972	102,600	18,970	18.5
1973*	115,000	21,040	18.3

* Estimate

The main factor in this declining trend is believed to be an increase in yield at the blooming stage through the use of continuous casting facilities. The electric furnace operators have been rapidly installing continuous casting units in the last few years to secure certain tax benefits.

Continuous casting installations spread in Japan

The Japanese steel industry continues to install continuous casting units in ever growing numbers and capacity. At the end of 1971 there were 60 units installed. These were being used to produce blooms at 8 installations, slabs at 21, and billets at 31. The new Oita Works, which became an integrated works last spring, will be the first in the world to depend on continuous casting for its entire production of slabs and blooms.

Nippon Yakin, Creusot-Loire agree on special steel

Nippon Yakin Kogyo Co. has reached basic agreement with the French company Creusot-Loire on a business connection between the two centering on mutual consignment of special steel production. According to the Japanese firm the agreement grew out of a decision in favor of technological cooperation by which Creusot-Loire's technology would be used by Nippon Yakin to produce a special type of alloy for making liquefied natural gas tanks.

If the agreement is implemented, it will mark the first instance of international division of production for the Japanese steel industry. One of the aims of the tie-up is to mutually improve business efficiency by exploiting the French firm's special alloy expertise. After mastering the French process, Nippon Yakin expects to be capable of producing tank-making alloy and will thereupon produce it in behalf of the French firm if the high cost of transportation and other factors warrant proxy production and distribution and sale within Japan and in neighboring regions.

The agreement between the Japanese and French firms will also apply to other types of steel goods. ■