

Steeling to Maintain Lead

By Hideo Yagi

With the expansion of domestic demand and brisk exports during the decade of high economic growth beginning in 1965, new modern steel mills were built one after the other, and the volume of production sharply increased. Despite the two oil crises, vigorous efforts to conserve energy and to undertake capital investments for the rationalization of operations enabled the industry to maintain its competitive edge in international markets while other materials industries were suffering a structural recession.

In total output in terms of crude steel in 1983, Japan outranked the U.S. to become the top producer in the Free World and second only to the Soviet Union. Japan accounted for 20% of the total volume of steel exports worldwide, becoming a major exporter of steel.

Demand structure

The state of Japan's steel industry is revealed by its demand structure, which in fiscal 1983 was approximately 70% domestic and 30% overseas sales. A breakdown of domestic demand shows that it was largest in the construction industry with 45%, followed by the automotive industry (18%), industrial machinery (9%) and shipbuilding (6%).

By GNP final demand category, that from the private capital investment is the highest (35%), followed by indirect exports (27%) and public capital formation (18%). Thus, it can be seen that in domestic demand, the construction industry, which is closely associated with investment in plant and equipment in the private and public sectors, plays a major role.

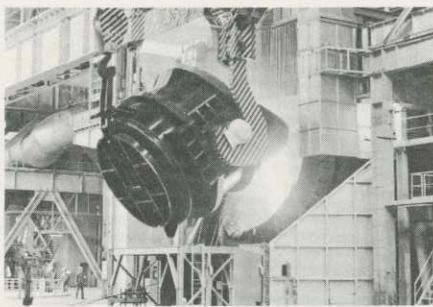
Crude steel production in Japan recovered in fiscal 1979 from the impact of the

first oil crisis, and rose to 113 million tons. But from that peak, it again declined to under 100 million tons in fiscal 1982. Since then, the steel industry has been in a severe recession (Fig. 1).

In fiscal 1983, however, exports (especially to the U.S. and China) served as a locomotive in pulling production gradually back up to the 100 million tons level. For 1984, the outlook is even brighter. In addition to favorable exports, domestic demand is on the way to full recovery, and, as a result, production is rising sharply. For the full year, output of 106 million tons of crude steel is anticipated.

With the growth of production, the sales and earnings of the steel manufacturers are improving rapidly. As a result of increased earnings, also due to more efficient operations, of higher prices for steel exports to the U.S. now the domestic market remains depressed and of rationalization and cost-cutting efforts, the performance of the major blast furnace operators is expected to register a turnaround from a deficit of ¥22.4 billion (\$93 million) in fiscal 1983 to ¥240 billion (\$1 billion) in fiscal 1984.

In viewing the supply and demand outlook for 1985, there is unease over the



Japan's crude steel production is expected to reach 106 million tons in fiscal 1984, as a result of brisk exports and growing domestic demand.

possible emergence of protectionism in the advanced nations, such as import restrictions by the U.S. Furthermore, increasing competition in other international markets is anticipated from South Korea, Taiwan, Brazil and other newly industrializing steel manufacturing nations, with lower exports than in 1984. More imports from these nations are also expected, but it is believed that stepped-up domestic demand will enable fiscal 1984 production levels to be maintained.

Although Japan's steel industry occupies a leading position in the world, its crude steel production has remained at around 100 million tons in recent years. For structural reasons explained below, a large volume growth cannot be envisaged in the foreseeable future; the industry is in a difficult situation.

Consumption slows

The foremost reason for this is the move of industries away from steel, a trend that is becoming more pronounced throughout the world (Fig. 2). With the slowing down of investment in plant and equipment, which had sustained the high economic growth, demand from the construction (building and engineering) and industrial machinery industries, which are large steel consumers, is sluggish. Efforts to conserve energy and other resources have led to a decline in the consumption of steel materials per basic unit and, accordingly, in the overall demand for steel.

The economic trend is expected to be toward the development of service and downstream industries. Thus, economic expansion based on large steel consumption is unlikely. Steel demand will, therefore, remain depressed.

A second reason is the deterioration of the export climate. The advanced nations of Europe and America, seeking to protect their own steel industries, are expected to tighten controls on trade, including further restrictions on imports. Also, the newly industrializing steel manufacturing nations, with greater export capacity, will become increasingly competitive with Japan on the international market. The steel export market will thus become extremely harsh.

A third reason is increased imports. The newly industrializing steel manufacturing nations will not only compete with Japan



internationally but are very likely to enter the Japanese market on a bigger scale.

The steel industry now must carry out various tasks if it is to continue to develop.

First, to maintain and strengthen its international competitiveness. This would involve: 1) disposal of excess capacity and integration of production facilities, as well as establishment of a streamlined and efficient production system; 2) prompt action in responding to needs for renovation and modernization of production facilities; and 3) vigorous import of new technology.

Second, better quality and higher added value steel products. The production ratio of high added value items, such as high tensile steel and special surface treated steel plates, should be raised, with efforts to shift from volume to quality.

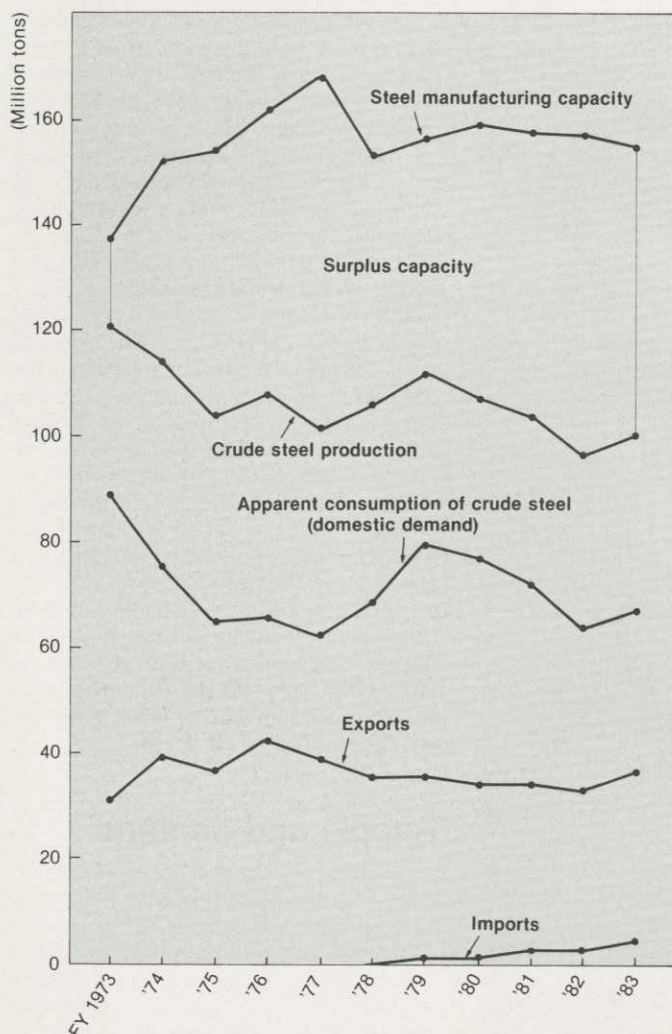
Third, extension of business frontiers. Because the steel industry is engaged in a broad range of operations, it possesses a large pool of talented manpower, considerable capital and technology. The effective utilization of these vital resources is essential.

Major steel manufacturers have already

developed engineering activities as their second pillar of operation. They are expected to become integrated materials producers by diversifying into such growth industries as petrochemicals, new materials and energy. In a maturing world steel market, another course would be greater capital and technological collaboration with foreign companies for the establishment of new businesses.

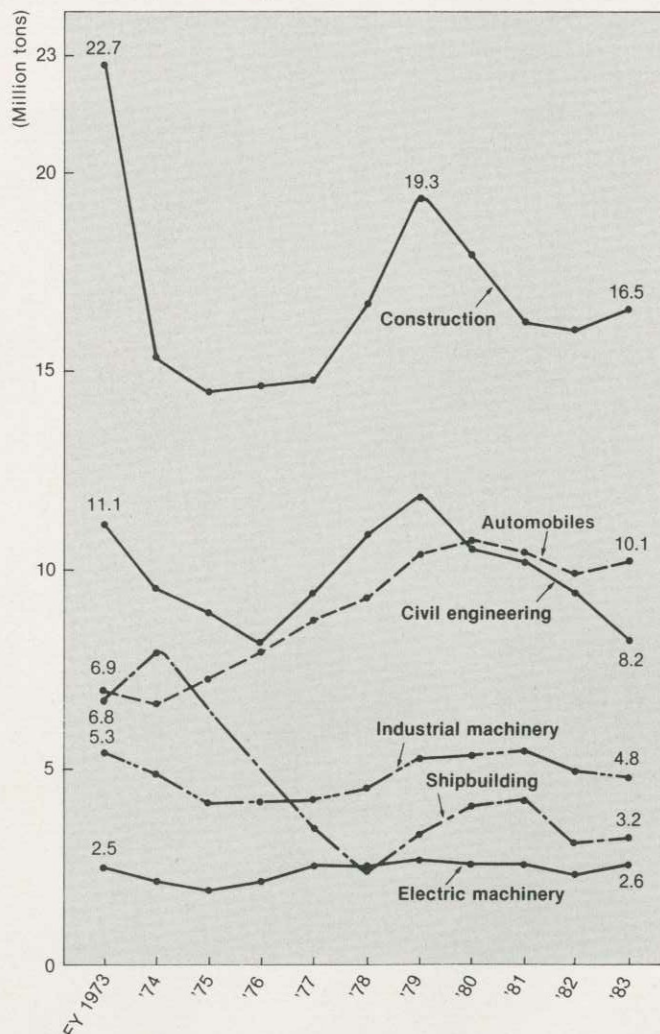
If the steel industry of Japan is able to deal with the foregoing problems in an appropriate and timely manner, it will maintain its present leading position. ●

Fig. 1 Trend of Crude Steel Supply and Demand and Output Capacity



Note: Capacity at end of each year.
Sources: Steel Statistics Handbook, Steel Statistics Annual Reports, etc.

Fig. 2 Ordinary Steel Consumption Demand by Industry



Sources: Steel Statistics Handbook, etc.