



Remarks on Special Issue on Plate

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Since the integration of Nippon Steel Corporation and Sumitomo Metal Industries, Ltd. in October 2012, the four plate mills and research institutes boasting world-class technology for developing and manufacturing of steel plates have established a new organization that is capable of promptly and properly responding to the increasingly sophisticated demand for steel plates worldwide. To make continuing contribution to society by meeting every need of customers in diverse fields, we are determined to develop new products and technologies under the new organization.

The world economy is undergoing dramatic changes, such as the aggravation of the global environmental problems and the progress of development of infrastructure in newly industrializing economies in Asia. On the other hand, the Japanese economy finally seems to have hit the bottom, showing signs of slow but steady recovery. In view of the recovery of demand for ships, the growth of energy-related industries, the expansion of construction sector, etc., steel plates continue to be among the important materials that support the foundations of modern society.

From the perspective of protecting the global environment and reducing the life cycle cost (LCC) of steel structures, there is ever-increasing demand for not only energy saving but also the improvement of safety and the prolongation of service life. For steel plates used in steel structures too, measures to meet those demands have become very important. In addition, increasing the scale of steel structures and improving the efficiency of steel plate manufacturing processes have become important themes. With respect to specifications of steel products also, the enhancement of their functions is now indispensable. It is our company's mission to continue to properly meet these changing needs.

As an example, to improve the efficiency of welding operations, in addition to the development of new thick, high-strength steel plates, the company engages itself in the development of new technologies for welding with large heat input, reduction of the load of preheating work, etc. In particular, the company has placed special emphasis on improving the toughness of heat affected zone of welded structures. We are confident that the technology will find applications in many fields.

In addition to the conventional weathering steel plates, we have come up with a new series of nickel-based weathering steel plates, corrosion-resistant steel plates for extending cycle of re-

painting, and corrosion-resistant ship plates, all helping the customers to cut the LCC of their facilities. At present, as part of our proposals for enhancement of product values at the customers, the company has expanded its product line of abrasion-resistant steel plates and developed new ship plates having superior crashworthiness. We are making positive efforts to spread these new products in the market. In the field of crude oil tanks, the company has developed 6%–7%Ni steel plates utilizing its TMCP technology. These plates are comparable in performance to conventional steel plates that contain larger amounts of Ni. Improvements are being made on them to expand the scope of their application so that they help the customers cut costs and save resources.

This special issue describes the latest R&D on steel plates at our company. We intend to continue making a concerted effort to further strengthen our production capacity and develop new high-performance steel plates and new technologies for manufacturing them in order to fully meet the needs and expectations of the customers. At the same time, we are determined to positively propose effective solutions to the customers on a timely basis, thereby meeting social needs.

We are looking forward to the continuing support of our customers and business friends.