

FOREWORD

Shinsuke Kimura
Managing Director



With this special issue on steel plates, Kawasaki Steel Technical Report has now published a total of six numbers devoted this subject. The first was published in 1970 and concerned weathering steel plates. This was followed by a second special issue on steel plates for low temperature service in 1971, and a third, on extra heavy steel plates, which appeared in 1974. At the time, Japan was at the very height of the era of high economic growth, and Kawasaki Steel was operating several plate mills to meet the requirements of quantitative expansion. On the other hand, in terms of quality, this was also a period of remarkable technical development as the company strove to cope with a wider range of applications, which can be seen in the high frequency with which we published special issues. Subsequently, however, as a result of the two Oil Crises of the 1970s, the times demanded energy saving and a change in direction to nuclear energy. In 1980, we marked this change by publishing a fourth special issue on steel plates for pressure vessels, centering on steel plates for nuclear power plant components. Our fifth special issue appeared in 1986, the year after the “yen-daka” crisis. That issue introduced high performance steel plates manufactured using controlled cooling technology, a field in which Kawasaki Steel had achieved rapid progress at the time.

In Japan, the twelve years since our last special issue on steel plates have truly be an era of change, during which we have experienced a succession of changes on the global scale. In plate production, we have seen a wintry period of stagnant demand, during which Kawasaki Steel closed its plate mill at Chiba Works and resolutely concentrated production at a single mill at Mizushima Works, followed by a complete turnaround as the “bubble economy” heated up. However, this ended with the collapse of the bubble, and we now find ourselves caught up in the economic crisis which has recently engulfed the Asian region. Even amid these intense changes in the social environment, it goes without saying that everyone at Kawasaki Steel who is involved in plate production is working tirelessly, not only to ensure that our customers can enjoy reliable performance in plates which meet the requirements of a fundamental industrial product, but also to improve productivity and cost competitiveness. At the same time, we are also striving to develop and supply “attractive high performance steel plates.”

This special issue introduces as many as possible of the manufacturing technologies which we have developed in recent years, along with our most recently developed high performance steel plates. With quenched and tempered tensile strength steel plates, attention has been given to improving material properties and welding executability to the greatest extent possible without inviting the reduction in applicability that accompanies strength enhancement. In the case of as-rolled high tensile strength steels, which are manufactured using the thermomechanical control process, welding executability has been improved, making it possible to realize higher efficiency in the production process by omitting heat treatment from the outset. Expanded application of these new products in various areas is expected, while on the other hand, we are also confident that they will contribute to reducing the life cycle cost of steel structures.

In this special issue, as described above, we have introduced Kawasaki Steel's most recent technologies in the field of steel plates. We look forward to the comments and suggestions of readers in various fields, and we sincerely request your continuing support and patronage.