



## Remarks on Special Issue on Steel Pipes and Tubes

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*Our business integration in October 2013 has made it possible for the Pipe & Tube Division of Nippon Steel & Sumitomo Metal Corporation to use its world-class seamless pipe and welded pipe technologies to fully respond to world market demand for all types of steel pipes and tubes.*

*To meet customer needs for steel pipes and tubes in diverse fields, we have offered many new products and technologies based on the technical strengths we developed over many years. In this way we are contributing significantly to developments in the world today. We are very grateful to all of our customers for their support and guidance.*

*Steel pipes and tubes have become increasingly important for social progress, specifically in the fields of energy, automotive industry, and infrastructure construction. I believe that the primary mission of our Pipe & Tube Division is to supply the pipes and tubes that are needed in those fields.*

*In the energy field, new OCTG for gas wells deeper than 5,000 m are being developed. On another front, the development of shale oil/gas has gained momentum. We have developed and supplied new steel materials for OCTG, which are superior in strength, corrosion resistance, and collapse resistance, to these sectors. For threaded connections, we have developed premium connections with excellent sealing performance and exhibiting a new surface treatment technology that is free from any environmentally hazardous substances. For line pipes, we have developed ultrahigh-strength steel pipes to improve transportation efficiency, and have commercialized high-toughness steel pipes that can be used even in deep seas, and in extremely cold regions where temperatures are below  $-40^{\circ}\text{C}$ . Regarding boiler tubes for thermal power generation, we proactively participate in a number of national projects, and have developed new materials with superior corrosion resistance to high temperatures that help improve energy efficiency and reduce  $\text{CO}_2$  emissions.*

*In the automotive industry field, we have commercialized high-strength steel pipes and tubes, and have proposed total solutions including new applications and processing techniques for sheets, bars and wire rods, to meet the increasing and rigorous demands for reduced car weight and better collision safety. In particular, our Three-Dimensional Hot Bending and Direct Quench (3DQ) process, which has attracted worldwide attention as a unique and novel technol-*

*ogy, is already being put into practical use.*

*In the infrastructure construction field, we have promoted the development of new tubular products with higher functionality, while having promoted innovative applications and processing techniques for pipe connections, etc., to meet such diversified needs as improved earthquake resistance and lower construction and repair costs. Among others, the stepped steel tube that features good adhesion with concrete is being increasingly used as a foundation pile for housing since it helps save resources and shortens work duration.*

*This Special Issue presents several of the latest achievements in our research and development for steel pipes and tubes. We are determined to continue developing new tubular products that meet the expectations and trust of our customers. The continued support and guidance of all our customers would be highly appreciated.*