

Remarks on Special Issue on Materials for Automotive Use



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The automotive industry stands at the summit of the industrial world. It is positioned at the apex of the linkage of all the industrial technologies just as the human being is positioned at the top of the food chain. From a different standpoint, the auto industry may be viewed as being supported by widely varied fields of technology; most of all conceivable technical fields are involved in the materials, their working and forming, assembly, process control, the equipment for all these activities, its maintenance, quality control, logistics, etc. etc. The steel industry, in which we work, constitutes one of these fields; steel accounts for 73% of the materials for the automobile industry and, although the percentage somewhat decreased in the past, the position of steel as the main automobile material has not been shaken, and will not be in the foreseeable future. However, the kinds of steel products used in the automotive industry have changed significantly from what they were some years ago, and so has steel industry's manner of serving the auto industry.

Material suppliers have endeavored not only to simply supply materials but also to propose how to use the materials as effectively as possible and work out better ways of utilizing them together with their users, and the results are there for all to see. Further to understanding and meeting the needs of customers, Nippon Steel have promoted the activities,

which are often termed "user-in," to improve the ways of effectively utilizing steel materials and develop new products by joining hands with the users. These joint activities may be expressed as "customer-supplier resonance." The Nippon Steel Group is one of material suppliers but the Group holds all the technologies related to the production of the materials that it supplies. Equipment engineering and maintenance technologies, instrumentation and process control technologies, production system technologies, materials analysis technologies, etc., all these technologies of the Group have been worked out and refined through its activities to supply quantities of widely varied materials of higher and higher quality and functionality. The repertoire of the Group has expanded from steel products to aluminum, titanium, ceramics, carbon fiber and so forth. Thus, the Group now holds overall technical capability encompassing all these fields, and there is yet much room for better utilizing the Group's strength for further progress of the auto industry. We will continue strengthening our capabilities through harmonious resonance with carmakers and other industries serving the auto industry, which will, we believe, contribute also to the evolution of the country as a whole.

While the joint work with the customers is highly effective for the development of new technologies, we will not stay idle in the pursuit of further technical breakthroughs in our own fields of the production and stable supply of high-quality materials.

This special issue presents some aspects of our technical challenges in line with the above philosophy in the fields of the materials for automobiles.

Taking this opportunity, we would like to express our sincere gratitude to all the customers and related parties for their patronage and assistance, hoping to be able to enjoy the privilege of their continued guidance and support.