



Remarks on Special Issue on Titanium and Specialty Stainless Steel

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As part of the inauguration of Nippon Steel & Sumitomo Metal Corporation last October, the corporation's Titanium Division and Specialty Stainless Steel Division were reorganized to become the Titanium & Specialty Stainless Steel Division, thereby making a fresh start. In Japan, titanium manufacturing began in 1984 at the former Nippon Steel Corporation, and previous to that, in 1968 at the former Sumitomo Metal Industries, Ltd. The manufacturing of specialty stainless steels began in 1934 at Sumitomo Metal. Those businesses have steadily expanded and reinforced their foundations after going through many turns and twists. The successful establishment of such solid business foundations is largely owing to the powerful support and instructive guidance of all the persons concerned within and outside the company.

Titanium is widely used not only in general industries, such as chemicals, electric power, sea-water desalination plants, and soda electrolytic equipment, but also in the aerospace industry, for fuselages and engine parts. Specialty stainless steels have a growing number of uses, and markets for these steels have extended to materials used for automotive engine gaskets, construction, civil engineering, and electronic components. Specialty stainless steels handled by the company vary widely in form, to include sheets, plate metal, welded tubes, bars, wire rods, and sections. The company's ability to supply products of widely varying shape for such diverse applications in such diverse fields comes from the technical strengths the company has accumulated in the process of manufacturing iron and steel. Namely, I feel confident that the above ability is the fruit of strenuous efforts by the people in the manufacturing and research departments, who are expected to create and hand down technical strengths.

Titanium is a "young" metal that has been in industrial use only for 60-odd years. With features such as light weight, excellent corrosion resistance, high specific strength, and good biocompatibility, titanium is a very promising metal in terms of application scope and market scale. Here is a list of some of the efforts required to further promote our growth in the titanium business sector: 1) expand our markets through the development of new applications; 2) maintain and enhance competitive strengths so that we surpass the strengths of rival manufacturers in the general industry field; 3) take advantage of our titanium alloys to enter the aerospace field; 4) adopt innovative new titanium manufacturing processes to further reinforce competitiveness; and 5) address diverse challenges on a global basis, such as achieving optimum inte-

grated manufacturing in cooperation with materials makers, and providing against hikes in resource prices. Tackling these challenges demands powerful support of the outside persons concerned as well as the staff of the R&D departments of the company.

With regard to specialty stainless steels, Nippon Steel & Sumikin Stainless Steel Corporation has been promoting its business in specialized, high-function, high-value-added products since its establishment in 2003. This business is still small in scale, producing some 30,000 tons of stainless steel annually. Nevertheless, as an integrated manufacturing and research organization that has the resources to develop advanced new steels, the company has made continuing efforts to carefully respond to the needs of every customer. As a result, the company has come up with various one-of-a-kind products, such as the spring for automotive engine gasket, super-heat-resisting steel, clad steel sheet, and steel foil for fuel cell. Our company will continue its R&D on new and original products in the future. Capitalizing on the recent integration, we intend to promote mutual cooperation with Nippon Steel & Sumikin Stainless Steel and Nippon Steel & Sumikin Materials Co., Ltd., thereby maximizing the synergism and enhancing the competitiveness of the entire group.

As mentioned above, titanium and specialty stainless steels are very promising metallic materials. However, to turn a mere possibility into reality, it is indispensable to press ahead with the development of new applications and products, while also cutting manufacturing costs. To this end, continued backing of the manufacturing and research departments is important. With regards to this special issue, I was given a valuable opportunity to describe the development of new applications and the contents of R&D activities in our titanium and specialty stainless steel business, hoping that the reader will re-recognize the charms of our metallic materials. I am looking forward to the continuing support and guidance of all concerned persons within and outside the company.