On the Publication of This 50th Anniversary Commemorative Issue



Kanji Emoto
President and C. E. O.

It was in 1958 that I joined Kawasaki Steel. While I was still a student, I had an opportunity to see the experimental operation of a top blowing basic oxygen furnace at Yawata Works of Nippon Steel Corp. during a study tour. At that time, the open hearth furnace-ingot making process was at its peak, and was used to produce three steel types, rimmed, semi-killed, and killed steel. The most suitable type was selected according to the required properties of the product. Today, however, rimmed and semi-killed steel have become dead words as a result of progress in the revolutionary basic oxygen furnace-continuous casting process.

Today's engineers would find it hard to believe that there was a group of conservative people, even in technical sectors, who opposed switching from ingot making to continuous casting. They insisted, on the basis of experience gained in the ingot making process, that costs would be higher with continuous casting than with ingot cast rimmed steel. Nobody would believe it today, but such arguments were frequent. However, in a relatively short time these negative opinions were silenced by the weight of experimental evidence and accumulation of actual production results.

What was the reason for this progress?

Because, even in the midst of conservative-minded people, there are groups of innovative people in every sector, and not only in the technical sectors, who want to move forward with the motto "Let's try anyway!" Innovation-minded top managers are especially important, because their leadership accelerates technical progress, particularly where revolutionary change is concerned.

We might say that the role of management is to guard the conventional technology, and the role of leadership is to make innovation happen. This is not to criticize management. It is not too much to say that management plays an extremely important role in ensuring a high level of product quality and stable operation of production lines.

On the other hand, strong leadership in technical innovation is required in senior engineers. In our experience we can see, without exception, that strong leadership from senior engineers was a key factor in successfully completed large-scale technical developments.

Innovation in the steel industry in the second half of the 20th century has been truly remarkable. In this innovation, as I see it, innovation in process technology has tended to stimulate innovation in material technologies.

What will development be like in the 21st century? I cannot help imagining that the development of revolutionary materials, such as ultra-fine grain steel, will promote the development and deployment of innovative new process technologies.