



**THOMAS J. USHER**, Executive Vice President—Heavy Products, USS, USX Corp., Pittsburgh, Pa., received a B.S. degree in industrial engineering, an M.S. degree in operations research and a Ph.D. in systems engineering from the University of Pittsburgh. He began his career with USS in the industrial engineering department at the Pittsburgh headquarters in 1966 where he held a variety of positions. In 1975, he transferred to the South Works where he served as assistant to the general superintendent, superintendent of transportation and general services, and superintendent of the 30-in. plate mill. In 1978, he was named assistant division superintendent of the primary works at Gary works. He returned to Pittsburgh in 1979 as director of corporate strategic planning. He was named assistant to the president in May 1981 and was appointed managing director—facility planning, engineering, research and industrial engineering for the resource development group later that year. He was elected vice president—engineering and research for U. S. Steel Mining Co., Inc. in 1982 and named president of U. S. Steel Mining Co., Inc. in Jan. 1983. In April 1984, he became vice president—engineering, steel. He was named senior vice president—operations, steel, in Nov. 1984, and senior vice

## **THOMAS J. USHER •**

*ASSOCIATION OF IRON AND STEEL ENGINEERS*

president—heavy products in July 1986. He has held his current position since Feb. 1988.

### **President's Message 1990**

I am honored to be President of the Association of Iron and Steel Engineers for 1990. We stand at the threshold of the 1990's, a decade which likely will be a pivotal time of remarkable change for the steel industry and its technology.

Our industry is vastly different than the one in existence at the beginning of the 1980's. It is smaller and greatly more competitive. Yet, it continues to face enormous market challenges.

Technology, of course, will play a decisive role in helping us meet these challenges. We of the AISE will be expected to assume critical leadership roles in shaping an effective technological response.

The decade ahead, in my judgment, could prove to be as momentous a period of change as when the industry advanced from open hearth production to basic oxygen furnaces or when continuous casting began to supplant primary conversion mills. The advances ahead may well require much greater technological reach than those earlier changes.

Major research initiatives, in which AISE members are playing significant roles, are under way in such developments as direct steelmaking. This activity could be moving the industry closer to a new era of steelmaking where even blast furnaces and coke ovens would become anachronisms—perhaps also the oxygen furnace process.

On another front, near net shape continuous casting is moving from the research and development phase to operational reality. Some of our members are actively engaged in the advent of thin section casting. Others continue work to extend the technological horizon toward

strip casting. This advance would be dramatic and will be enormously challenging. Nonetheless, it is a step we must take.

In the market-oriented industry of the 1990's, AISE members will continue their efforts to design facilities and produce steels that anticipate and respond to the needs of customers. Recent achievements in this regard have included highly sophisticated coated steels, bake hardenable steels, tubular products adaptable to extremely hostile environments, plate products of extremely close gauge and dimensional tolerances, and internal soundness, plus many others.

The years ahead also will witness a time of heightened environmental concern. We have legitimate questions about certain environmental proposals under consideration in Washington and several state capitals. A major mission, for the industry's technical leadership, however, will be one of moving American steel to the forefront of environmental progress.

The industry must move ahead of environmental regulations and attempt to exceed the air and water quality performance legally required. We must design and install new facilities with a positive environmental focus. We must demonstrate that competitive and environmental advances can go hand in hand. There has been much progress to date. As members of the Association of Iron and Steel Engineers of the 1990's, we must work to enhance that record of progress as we enter the new decade.

Thomas J. Usher