





NORMAN C. MICHELS was born in Spokane, Wash. He received a Bachelor of Science degree in electrical engineering from Purdue University in 1936. After graduation he worked for Crocker Wheeler Electrical Manufacturing Co. as a sales engineer and studied commerce at night at Loyola University. Believing additional graduate studies would be of value in his career, he resigned from Crocker Wheeler in 1940 to take a year of graduate work in business administration at Massachusetts Institute of Technology.

He started as a special engineer at Carnegie Illinois Steel Corp., Pittsburgh, in 1941, was transferred in

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1942 to Gary, Ind., as an expediter, then assistant project engineer in 1944. In 1947 he resigned from United States Steel to work for Laclede Christy Clay Products Co. where he became manager of operations.

He returned to Pittsburgh in 1950 where he went to work again with United States Steel as planning engineer. On January 1, 1952, he was appointed chief engineer project development. His next move was to Birmingham on December 1, 1954, where he was appointed assistant vice presidentengineering, Tennessee Coal & Iron Div. He became vice president—engineering on September 1, 1955. He returned to Pittsburgh January 1, 1961, as vice president facility planning and appropriations, United States Steel Corp. On September 18, 1963, he was appointed vice president—long range facility planning.

President's Message 1964

Since the beginning of this century, the steel industry, except during disturbances

caused by war, has exhibited first, a relatively constant rate of growth over the span of the business cycle; second, intense competition among the many producers and, recently, with new materials and offshore capacity; and third, an accelerating rate of technological innovation.

The Association of Iron and Steel Engineers is, of course, concerned with technology—of equipment and process—which is one of the more important factors in our industry's current business environment. Exceptional performance will be required to compete effectively and thereby to maintain a continuing growth in steel consumption.

Our contribution to the industry's improvement has been significant and it seems to me that we have a job ahead of us just to maintain the pace—a job that will require the utmost effort of every member of AISE.

> *Norman C. Michels* President, AISE