LEROY STEBBING 46-YEAR LIFE MEMBER



LEROY STEBBING is president of Stebbing Engineering, a division of Accelerated Technologies Corp. He earned his A.S. degree in liberal arts (1975), B.S. degree in operations management (1977) and B.S. degree in physics (1989) from Excelsior College, The University of The State of New York, Albany, N.Y., USA. He began his career in the steel industry as a mechanics helper, and then progressed to mechanic, then millwright, millwright leader and then shift supervisor. He served as project engineer at Eastern Stainless Steel Co. in Baltimore, Md., USA. From 1973 to 1979, he worked for Nucor Steel, first as maintenance manager and then as construction manager. Stebbing was given responsibility for the design and construction for one of the world's first mills that charged the hot billets directly from the billet caster to the rolling mill without the need for a reheat furnace. An induction heater was used for the occasional supplemental heating to rolling temperature. Considerable savings were realized, at a time when energy was at a premium. From 1979 to 1981, Stebbing served as contract manager for Kinning and Reil Inc. From 1983 to 1998, he was special projects engineer, engineering supervisor for Nucor Steel, where he worked on an experimental 54-inch molten-metal-to-strip caster, spraying molten metal directly into strip without the need for intermediate rolling. Stebbing invented and patented a process for using scrap automotive tires as a chemical fuel source for melting steel in electric furnaces.

first heard of AISE when I was a maintenance shift foreman at Eastern Stainless. Charles A. Earnest, the maintenance superintendent at the time, showed me *Iron and Steel Engineer* magazine and encouraged me to join AISE. I read the articles and used the information where applicable. In those days, it was not possible to find technical information easily, like it is now with the Internet. In the old days, research for projects meant a lot of digging in college libraries, and I do mean a lot of digging.

"Over the years, I attended the annual conventions when I could. I learned much from the technical presentations and exhibits. My company encouraged me to attend seminars on various technical subjects — all were very valuable to my career, especially as an engineer and maintenance manager. You just can't get that information anywhere else!

"I am delighted to say that I am still active in AIST, and I was able to give something back by writing a paper for the AIST Crane Symposium entitled 'Heads Up for Tapered Tread Crane Wheel Users.'

"When I started in the industry in 1955, there was a lot of manual labor input. I have seen many operations become automated. Safety is much more emphasized now. In 1955, we didn't even consider hard hats, non-flammable clothing or asbestos exposure. But I do know we were very cognizant of our surroundings and fast on our feet!"

Stebbing recalled the photo (top left photo on next page) of a smokeless slab-cutting torch arrangement, which was important because it replaced open-air torching of the slabs that emitted huge amounts of smoke into the atmosphere. Stebbing invented a conveyor that used a dust collector suction arranged under the cutting area so the smoke was immediately captured at the source.

"I believe steel quality will continue to improve, by removing localized

 Bar yard smokeless slab cutting torch, circa 1960.



internal stresses. I also believe steel will use more recyclable materials similar to how steel scrap is recycled now; I am thinking about scrap tires and plastics and other carbon-bearing waste materials that can provide chemical energy or charge carbon. I expect that steel will be sprayed into 3D products, similar to 3D layered printing that uses plastic materials now. It would work similarly to sprayed strip. I cannot imagine a time when steel will not be essential to the myriad of world products!

"I found steel to provide the greatest career I could imagine! I started out with very little education or experience at age 18. While working, I was encouraged to attend school and take on as

much responsibility as I could handle. I eventually became an engineer with heavy experience in multiple disciplines: mechanical, electrical, structural, environmental, metallurgical, quality, etc. There is no place like a steel mill to stretch the equipment or the people to the maximum limits. It is difficult work, but the satisfaction and rewards are tremendous. I became a man there. I supported seven wonderful kids on my steel mill salary so my wife could be a stay-at-home mom and raise them. All of them are successful - two of my sons, Doug and Scott, and one grandson, Josh, are career steel mill men."





