

Len Beitelman

36-YEAR AIST LIFE MEMBER

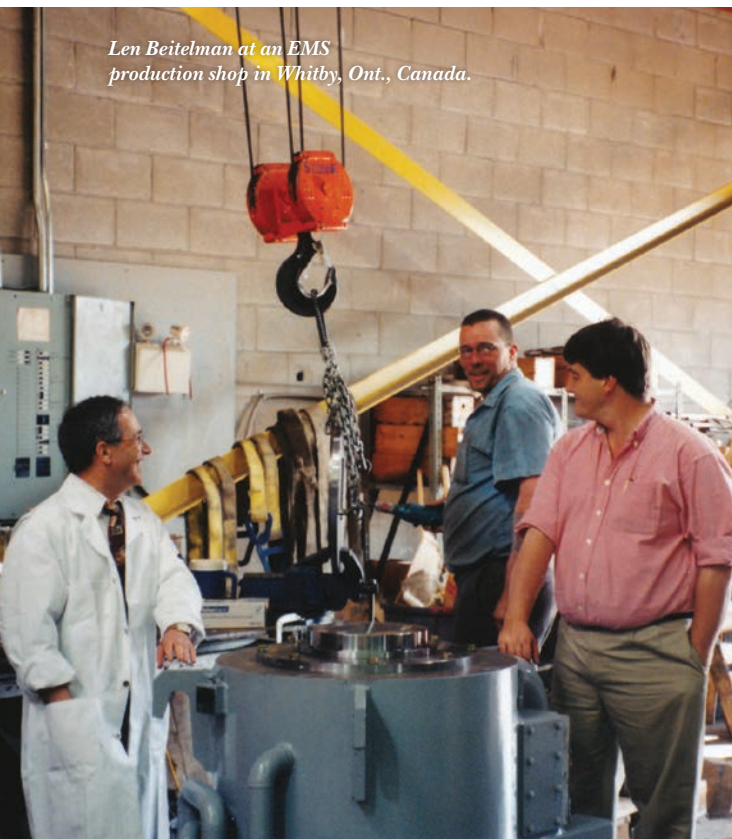


In 1979, Len Beitelman was introduced to the predecessor societies of AIST while working at Dofasco Steel. He recently described to *Iron & Steel Technology* both his career path and his experiences with AIST.

“After arriving in Canada from the former Soviet Union in 1977, I was employed by Dofasco Steel in the steelmaking group of the R&D department. My new colleagues and managers helped me to integrate into a new professional environment, and in 1979 they introduced me to AISE and ISS. I realized at that time that joining these societies would benefit my professional growth.

“My initial involvement in AISE/ISS was through participating in the conferences, presenting papers and making professional contacts with people from different steel mills, universities, companies and countries.

“In 1979, I joined Co-Steel Group, a Canadian company that pioneered mini-mills in North America. At Ferrco Engineering, a division of Co-Steel, I was assigned responsibility for development of electromagnetic stirring (EMS) for continuous casting of steel billets and blooms. Shortly after the first industrial trials of in-mold EMS in the 1980s, I joined the Continuous Casting Committee.



Len Beitelman at an EMS production shop in Whitby, Ont., Canada.



Heli-skiing in Revelstoke, B.C., Canada, 2015.



Len Beitelman and David Domanski, visiting a steel mill in China, 2005.

“In my experience, being an AIST member provides great opportunities for learning.”



“Since the time I joined the steel industry in 1958, I witnessed drastic changes in all aspects of the industry, e.g., steelmaking, casting, metallographic evaluation, etc. In the early 1960s, almost all world steel production was cast into ingots. Continuous casting at that time was only 1% of the world’s produced steel. Since continuous casting industrialization in the 1950s, equipment design, productivity, production range and product quality have drastically changed. Thus, straight molds were replaced with curved ones, and multi-point unbending was introduced along with sequence casting and process automation. Later, soft reduction technology was also introduced and became a common feature of continuous casting of both flat and long products. Numerical modeling of the continuous casting process, steel solidification and of many other aspects related to continuous casting contributed enormously to the industry upgrade and has become commonplace.

“A similar situation occurred with EMS. The very first attempts to introduce EMS to continuous casting were made by pioneers of continuous casting development in the 1950s in order to make progress in equipment design and product quality. Today, after successful industrial development and trials in Europe in the 1970s, EMS is a common feature of the continuous casting of quality-demanding steel grades. EMS was the primary transformation force of mini-mills from producers of reinforcing bars and structural shapes into modern, highly efficient producers of high-quality and special steel products.

“In my experience, being an AIST member provides great opportunities for learning from and interacting with people from different companies, steel mills, universities, etc. It also provides an opportunity to make your work known to a wide circle of people in the industry and academia. All of this greatly contributes to your professional development.”

Born and educated in the former Soviet Union, Len Beitelman graduated in 1958 from the Moscow Institute of Steel and Alloys with a degree in metallurgical engineering. After working for several years in the area of commissioning and upgrading of steelmaking facilities, he enrolled in the Ph.D. program at I.P. Bardin Central Research Institute for Ferrous Metallurgy in Moscow and received his Ph.D. in 1966. In Russia, Len was active in industrial and R&D programs in the steelmaking industry. At that time, he had published 23 papers and obtained three grants for patents.

In 1976, Len arrived in Canada as a refugee and soon after was employed by the R&D department of Dofasco Steel in Hamilton, Ont. In 1979, he joined Ferrco Engineering, a division of Co-Steel Group. At Ferrco Engineering, he was in charge of development of electromagnetic stirring technology (EMS) for continuous casting applications. Since then his professional interest has remained in that area. After leaving Co-Steel Group, Len was a founding member of J. Mulcahy Enterprises, a private company branched from Ferrco Engineering that dedicated itself to the development and implementation of EMS to the steel industry. In 2000, J. Mulcahy Enterprises was absorbed by ABB Inc.

In 2013, Len retired from ABB Inc. and became a consultant in EMS technology. He has authored or co-authored 67 papers and obtained a number of international patents concerned with the development and application of EMS technology to continuous casting of steel.