

## LIFE MEMBERS

# TOM GRAHAM SR. AND TOM GRAHAM JR.

Tom Graham Jr. joined the Association of Iron and Steel Engineers (AISE), a predecessor of AIST, in 1977. “My father had been active in the steel business for his entire career, and had been a member of AISE since 1956, so he suggested that I should join,” he said. His involvement initially consisted of reading the magazine, *Iron and Steel Engineer*, and attending Member Chapter meetings. When he was transferred to the Detroit area in the mid-1980s, he presented a paper at one of the local meetings. He continued to attend chapter meetings when he moved back to Pittsburgh.

His father’s initial involvement in AISE was similar. In 1956, he co-authored a paper titled “The Design of Mill Buildings” with John J. Murray while he was at J&L Steel. The paper won the third-place Kelly Award in 1957. “It was an



1. Hotwork provided the temporary heat to help SunCoke start up its coke ovens in Granite City, Ill., in 2009. The facility, called Gateway Energy, is adjacent to U. S. Steel – Granite City Works.



2. Employees of Hotwork gathered for a company picnic in 2012. Hotwork specializes in refractory dryout and other furnace services utilizing proprietary equipment.

3. Kevin Lievre of Air Products was awarded the 2012 BTU (Business & Technology United) Award. The award is presented annually at the Hotbels Glass Industry Seminar, sponsored by Hotwork and Fosbel. Pictured left to right: George Kopser, Hotwork; Kevin Lievre, Air Products; Bob Chambers, Fosbel; and Tom Graham Jr.

4. Tom Graham Sr. was inducted into the American Metal Market Steel Hall of Fame in 2012. Pictured left to right: James Wainscott, chairman and CEO of AK Steel; Tom Graham Sr.; John Surma, retired chairman and CEO of United States Steel Corporation; and David Brooks, editor of AMM. (Photo courtesy of AMM.)

important part of my job at the time to design mill buildings,” the elder Graham told *Iron & Steel Technology*. “Believe it or not, it was a subject full of controversy, and this was an attempt to sell a point of view.”

During the 1980s and 1990s, Graham Jr. participated in the Project Management Technology Committee, presenting a paper at the Project Management conference in the late '90s. Around 2000, he became an executive committee member of AISE and was involved during the merger with the Iron & Steel Society and the formation of AIST.

Graham Jr. found that participation in AIST was highly beneficial to his career. “It gave me a much better awareness of what was going on in the industry outside of my employer,” he explained. “I always valued the technical programs, but the informal networking with suppliers and peers always provided valuable insight to help me perform my job better. Benchmarking our own practices and performance against others was enabled and improved via the network developed through association activities.”

According to Graham Sr., “A pronounced positive of membership in AIST is that the participation exposes you to a level of ‘competitive scrutiny,’ which is healthy.”



Over their careers, both men have seen the industry change dramatically. Said Graham Sr., “In my era, the single most important technical development was the arrival of continuous casting. That was a game changer. Prior to that, I would say the most significant development was the first generation of modern hot strip mills (HSMs). That began with the Great Lakes HSM, which was the first of a generation of modern HSMs.”

Graham Jr. describes in detail how the industry has changed since he began his career: “Today’s steel industry is radically different than the one that I entered in 1976. Only a few of the major companies still exist. Some of the largest and most important names in the business today didn’t even exist yet when I started in the industry. The technology has evolved

remarkably in this time frame also — continuous casting, EAF mini-mills, thin-slab casting, continuous rolling, vacuum degassing, corrosion-resistant coatings, high-strength steels, DRI, coal injection, bell-less blast furnace tops, intensified BF cooling, variable speed AC drives and computer process control are just a few of the technologies that I have witnessed during my career. In my first job in the tin mill, we were making steel beverage cans, which have long since been displaced by aluminum and glass. But I’ve also seen the advent of corrosion-resistant lightweight steels in automobiles and the growth of metal buildings and steel roofing.”

With all these changes, it’s important to “remain current and demonstrate your value to your employer,” said Graham Jr. “You need to know the best practices and technology that are



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5. All of the adult Graham descendents and their spouses gathered for this photo during the wedding festivities for Tom Graham Jr.’s daughter.

6. Tom Graham Sr. and his wife, Irene, in California in 2011. They have been married since 1948.

available worldwide, and one of the best ways to obtain that knowledge is via the networking that is the natural result of participation in AIST activities. You may be surprised how the relationships that you develop will aid you in unexpected ways later in your career.”

Graham Sr. reiterated that membership in AIST is “an educational opportunity because of the competitive exposure that it provides.”

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Thomas C. Graham Jr. holds a bachelor’s degree in economics from Allegheny College and an M.B.A. from Indiana University. Upon graduation from Allegheny in 1976, he joined National Steel Corp. as a management trainee at the Midwest Steel Division in Indiana. He held management positions in the Tin Finishing and Galvanizing Department before being transferred to the Great Lakes Division in Michigan, where he was the superintendent for the start-up of a newly constructed electrogalvanizing line. He was then transferred to the corporate headquarters, where he held positions including director of product and process technology, director of engineering, and general manager of marketing and sales for the construction market.

Graham Jr. was recruited to AK Steel Corp. in 1996 to design and start up Rockport (Ind.) Works, a US\$1.2 billion steel finishing plant. During his tenure at AK Steel, Graham was responsible for the corporate-wide capital spending program, research and development, and he also assumed the role of president of the Sawhill Tubular Division until its divestiture. His most recent position with AK Steel was vice president of research and engineering.

Graham Jr. was the 2004–2005 president of AIST. In 2005, he acquired a majority ownership interest and became CEO of Hotwork. He now serves as president and CEO.

His father, Thomas C. Graham Sr., is widely known as one of the steel industry’s most successful and innovative executives. A former draftsman and civil engineer, he was named president of Jones & Laughlin Steel Corp. in 1974. In 10 years, he took the company through a merger with Youngstown Sheet & Tube Co., and then an acquisition of Crucible Steel’s Midland plant. He departed J&L in 1983 to restructure the United States Steel Corporation, where he served as president of the U. S. Steel Group of USX Corp. until 1991. Over that period, finished products went from 8 man-hours per ton down to 4 man-hours per ton, contributing to a dramatic swing in profitability for the company. Graham had similar results as chairman and CEO of Washington Steel Co. (1991–1992).

From 1992 to 1994, Graham Sr. was president and CEO of Armco Steel Co. L.P., predecessor of AK Steel. He was the founder and served as chairman and chief executive officer of AK Steel Corp. (1994–1995), and remained as chairman until his retirement in 1997. After his arrival at Armco Steel in 1992, the company went from being the least profitable U.S. steel company to earning the most profit per ton, and



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7. Tom Graham Jr. and his wife, Joan, attended the Phoenix Award ceremony in Berlin, Germany, in 2013. The couple has been married since 1977. The Phoenix Award annually honors the “Glass Person of the Year.”

8. Thomas C. Graham Jr. with his father at the elder Graham’s home in Naples, Fla., in 2004.

producing steel with the fewest man-hours per ton, of any of its major competitors over the following five years. He is now with TC Graham Associates as a founding member.

The two industry executives recently spoke with Iron & Steel Technology regarding their careers and their involvement with AIST. ♦