

Obituary

Gunnar Rasmussen, 1925–2024



Gunnar Rasmussen was an acoustician and inventor from a time when “innovation” and “disruption” were a lifestyle driven by desire and curiosity. He was a shrewd and modest person with a voracious appetite for the unknown, character traits that helped him throughout his life.

Born in Esbjerg, Denmark, in 1925, Gunnar attended Aarhus Teknikum, Aarhus, Denmark, where he was captivated by Jacobsen’s lecture on the rapid postwar technological development in the United States. After completing his studies in 1950, Gunnar joined Brüel & Kjær and moved to the United States, where he gained insight into the advanced automotive and aircraft industries and the important standardization of laboratories.

Inspired and full of ideas, Gunnar returned to Denmark and soon after revealed his invention in 1956 of the one-inch measurement microphone. It was superior to all previous microphone types in terms of precision, durability, and stability. It quickly became the go-to reference microphone and was the basis for the International Electrotechnical Commission (IEC)-1094 series of standards for measurement microphones and still is today.

Gunnar’s quest continued, and he developed the half-inch measurement microphone. It is still the world’s most widely used measurement microphone and has been copied countless times. But as Gunnar said: “It’s never a shame to be copied — then you know you’ve done something right.” Gunnar’s microphone is on display at the Metropolitan Museum of Modern Art (MoMA) in New York, New York.

Gunnar further developed and created an impressive number of diverse acoustic measurement instrumentation. All of these are notable milestones in the acoustic world. Additionally, Gunnar was deeply engaged in standardization work and knowledge sharing, and he could be found at conferences and conventions around the world.

Gunnar had been nicknamed “Mr. Microphone” by industry colleagues, professors, and close customers who had all benefited from his seminars, white papers, and inexhaustible application knowledge. In 1994, at the age of 68, he and his wife Hanna Hertz founded GRAS Sound & Vibration. With this, Gunnar seized the opportunity to develop new ways of producing microphones in new materials, and thus another generation of measurement microphones was born, this time in his own name. The family business thrived and grew from a few handpicked employees to more than 90 by 2011.

Gunnar was driven and passionate to the very end. He was honored with several awards and honorary titles throughout his life; of great importance and meaning was his title as an Acoustical Society of America Fellow. He leaves a lasting imprint on all our lives, from the smallest hearing aid to the largest rockets. When we want a quiet hedge trimmer or a quieter dishwasher or simply want to improve our hearing and social life with a small discreet hearing instrument, then Gunnar has played a role. All these products were developed, approved, and produced using measurement microphones and thus Gunnar Rasmussen’s very sustainable microphone design.

Gunnar joins the ranks of inventors and entrepreneurs who had committed themselves to making a difference for the rest of us. He will be deeply missed by his wife, children, grandchildren, and great-grandchildren, many of whom were inspired and involved in acoustics because of him.

Selected Publications by Gunnar Rasmussen

- Brüel, P. V., and Rasmussen, G. (1959). Free field response of condenser microphones. *B&K Technical Review* 1-1959, 12-17. Available at <https://www.bksv.com/media/doc/TechnicalReview1959-1.pdf>.
- Rasmussen, G. (1959). A new condenser microphone. *B&K Technical Review* 1-1959, 3-10. Available at <https://www.bksv.com/media/doc/TechnicalReview1959-1.pdf>.
- Rasmussen, G. (1963). Miniature pressure microphones. *B&K Technical Review* 1-1963, 3-10. Available at <https://www.bksv.com/media/doc/TechnicalReview1963-1.pdf>.
- Rasmussen, G. (1980). Acoustical instruments and measurement: Microphones. *The Journal of the Acoustical Society of America* 68, 70-75.

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