

Biography

Prof. Dr. Fritz Sennheiser's biography as a developer and entrepreneur was indeed one of the most remarkable careers in Germany. From its modest beginnings in a university laboratory with a staff of just seven, the company he founded became what is now Sennheiser electronic GmbH & Co. KG, a major international company. The family firm located in Wedemark near Hanover generated a total sales revenue of over EUR 385 million in 2008, with a workforce of more than 2,100 employees. The company's own sales subsidiaries and long-established authorised sales partners look after Sennheiser customers throughout the world in a close-knit sales network. Sennheiser has production sites in Germany, Ireland and the USA, manufacturing microphones, headphones, conference and information systems, headsets and audiology products. In addition, the company provides extensive consulting and planning services for worldwide projects. The Sennheiser Group also includes the studio specialist Georg Neumann GmbH, Berlin, and the joint venture Sennheiser Communications (headsets for PCs, offices and call centres).

From Landscape Gardening to Telecommunications

"As an eleven-year-old boy, I witnessed the introduction of the radio. I built my own receiver out of the simplest of components: a slide coil, a tungsten tip, a crystal and a 20-metre-long radio frequency antenna," Fritz Sennheiser once recalled. In spite of his enthusiasm for technology, Fritz Sennheiser's real passion was for gardens and plants. When he finished grammar school in Berlin in 1932, he hoped to become a landscape gardener. But the depression in Germany meant that career prospects were poor, and so instead he decided in favour of his "second love", and began to study electrical engineering with the focus on telecommunications at the Technical University in Berlin.

At the Heinrich Hertz Institute, the "Mecca for telecommunications engineers", where he wrote his dissertation and worked as a research assistant with Prof. Dr. Oskar Vierling, he and his fellow students helped develop a reverberation unit that was used at the opening ceremony of the 1936 Olympic Games in Berlin. The games were to open with a ceremonious piece of organ music. The institute's staff members took their latest development, an electric organ, to the Olympic Stadium, where they modified a grand piano to form a reverberation unit – with the result that the piece of music sounded as if it were being played in a huge church.

After graduating, Fritz Sennheiser worked as a chief engineer at the Institute. When Prof. Dr. Vierling was offered a chair at the Technical University of Hanover in 1938, Fritz Sennheiser supported him in setting up the Institute for Radio Frequency Technology and Electroacoustics. During the war, Fritz Sennheiser and his boss worked in the field of cryptography, in the radio transmission of coded messages. Fritz Sennheiser gained his doctorate in 1940 and took over the lectures of Prof. Dr. Vierling, who was busy setting up a second institute in the south of Germany. Even as a successful businessman, the scientist Fritz Sennheiser maintained close links with the academic world of teaching and research until 1980 as an honorary professor at the University of Hanover.

The Early Days in Wennebostel

The Institute for Radio Frequency Technology and Electroacoustics in Hanover was destroyed by bombing in 1943. After an intensive search, alternative accommodation for the laboratory was found in Wennebostel (now part of the municipality of Wedemark). It was here that the fifty or so members of staff at the Institute experienced the end of the war. Afterwards, most of the researchers returned to their families, as their work in the field of cryptography was now prohibited by the Allied Forces and subject to the death penalty.

Only seven co-workers from the nearby region and Fritz Sennheiser, the deputy director of the institute, remained. And because he felt a certain responsibility for "his people", he decided to risk a new beginning in Wennebostel and founded "Laboratorium Wennebostel" or "Labor W" for short ("Laboratory W"), a small craftsman's workshop in the rooms of the institute. But things were not as easy as that. The building was immediately occupied by a British military telecommunications unit, and Fritz Sennheiser was forced to hand over all the keys. When the troops were to be replaced one day, they put up a sign prohibiting anyone from entering the premises "on penalty of death". But the new unit never arrived. "We waited for a while and wondered how seriously we should take the threat of the death penalty. One night, I went and took the sign down. The next day, everyone was amazed to find that the sign had gone. As I still had a spare key, we decided to go inside. And that's how it all began."

The First Products

From what was left of the institute's equipment, the resourceful engineers began building valve (tube) voltmeters, which Fritz Sennheiser then sold to Siemens in Hanover. Siemens, which itself had been barred from using its own factories, was

highly delighted and immediately placed orders for further measuring equipment. News of the excellent quality of the "Labor W" products quickly spread at Siemens, and the Karlsruhe plant commissioned Sennheiser to build a replica of a dynamic microphone, the DM 1. At first, the RF specialists only copied the Siemens design, but as they gradually gained a deeper knowledge of the technology, they were soon able to offer Siemens a microphone of their own, the MD 2.

The Birth of Sennheiser Microphones

The MD 2 was to be the first in a long line of Sennheiser microphones, and was a success also outside the Siemens world. An important customer group was the radio stations, with their extremely high demands in terms of quality. The MD 2 was then followed by the MD 3, also known as the "invisible microphone", since its transducer was located beneath a very slim neck. In 1951, Sennheiser launched its first compensation microphone, the MD 4. Because of its sturdy design, this almost indestructible microphone was very popular among market stallholders, who no doubt found other uses for it too, as it also became known as the "bug crusher". 1953 saw the launch of the MD 21, which also became a legend – and is still in the product range today. This "longest serving" reporter's microphone has accompanied many historic moments and personalities, such as John F. Kennedy or Louis Armstrong. The revolutionary MD 82 "tele-microphone" (1956) made it possible to record sound from a distance with pin-point accuracy; the shotgun microphone was based on a Sennheiser laboratory design from the year 1949.

Rapid Growth

At the end of the 1950s, the young company's sales had already reached an impressive 9.9 million marks. Fritz Sennheiser never planned or even aimed at this success. "In the early years, I just wanted to make enough money with my Lab W to make sure that we could all feed our families," he remembered. "Later, we were virtually forced to grow in order to stay ahead of our competitors." In 1958, Labor W was renamed Sennheiser electronic, as the company had long since ceased being just a small laboratory. The change in the company's name was also accelerated by a report from the Australian sales partner. Apparently, the then prime minister of Australia had refused to speak into a Sennheiser microphone because he had seen the name "Labor W" and assumed that it belonged to the opposition Labor Party.

Revolutionary Products

As time went on, Sennheiser engineers became involved in more and more fields of electroacoustics, finally returning once more to RF wireless technology. In 1957, the

company's first wireless microphone system was presented to the public. Professor Dr. Fritz Sennheiser: "There was some nice free publicity for us on television involving a sketch by the famous German TV presenter Peter Frankenfeld. He had a wireless microphone with a long cable attached. While he was telling his jokes, he kept getting tangled up in the cable. So he picked up a pair of scissors and cut the cable – and carried on with the show! Of course, everybody was talking about this new microphone afterwards, and that helped us a lot."

The popular Saturday evening TV shows benefited not only from wireless microphone technology but also from the new MKH series of shotgun microphones. They made it possible to have wider camera shots as the microphone no longer needed to be close to the speaker. This soon made the Sennheiser brand a familiar name in Hollywood too, an achievement that was to be recognised in 1987, when Fritz Sennheiser was awarded the "Scientific and Engineering Award" by the "Academy of Motion Picture Arts and Sciences" for the MKH 816 shotgun microphone.

In 1960, Sennheiser achieved a further milestone with the MD 421 studio microphone. Apart from offering outstanding sound quality, this "all-rounder" for speech and vocals was exceptionally robust. This microphone is also still part of today's product range.

The World's First Open Headphones

"Our engineers have always been given a lot of freedom. They are allowed to give free rein to their creative ideas, no matter how crazy they might seem. Often, it is these very ideas that result in the best developments and the best products. Any reservations expressed by financial managers who first of all had an eye on profit were thus reliably dispersed. After all, a company doesn't only sell products but primarily sells ideas." It was this philosophy of Fritz Sennheiser's that enabled the company to develop and patent the world's first open headphones. While playing around, one engineer discovered that headphones – which at the time were all bulky, closed models – sounded better when the ear-pieces were open. The result was the HD 414, which even today is at the top of the bestseller list for headphones. "The success of the HD 414 came as quite a surprise, and when manufacturers from all over the world started to sign licensing agreements with us for our patent on the "open headphones", things really started to get interesting", said Fritz Sennheiser.

Sennheiser Goes Global

During the 1970s, Fritz Sennheiser put particular effort into promoting the globalisation of his company. Sales partners in Europe and overseas provided a wide-ranging network. More than 40% of the company's sales revenue was already being generated abroad.

In the meantime, work went on in further perfecting wireless microphone technology: noise reduction systems, Diversity receivers and miniaturisation made Sennheiser wireless technology the star on all stages. Musicals in particular benefited from the inconspicuous microphone technology. In 1975, wireless sound also became available for the end user, as Sennheiser launched the prototype of cordless headphones that used infrared transmission. At the same time, professional microphone technology became affordable for home use with the introduction of the electret condenser microphone.

"Money – just figures to calculate with"

Ever since he had founded the company, Fritz Sennheiser considered its independence to be one of the most important values. Therefore, he consistently turned down offers of takeovers or partnerships. "For me, money was always just figures to calculate with." The company remained financially independent, invested only what its capital allowed it to, and enjoyed sound growth from its own resources. The final decision to remain a family company was taken in 1973, when Fritz Sennheiser converted the company into a limited partnership. The founder's son, Prof. Dr. Jörg Sennheiser, became a limited partner and, on March 1, 1976, Technical Director.

In 1982, at the age of 70, Fritz Sennheiser retired from active service in the company, handing the management over to his son. "I had prepared myself for retirement – although I must admit that I would have been happy to have carried on even longer, simply because I enjoyed it, and of course because we had always been successful. After all, it took me two and a half years to get used to not being able to make the decisions any longer..."

But of course Prof. Dr. Fritz Sennheiser maintained close links with his company, attending shareholder meetings and visiting the factories and offices. The Sennheiser employees will remember him as a courteous, frank and responsible person of high integrity.