

# 40 years of Siltech

Jason Kennedy

**S**iltech was founded in 1983 by Hans de Ligt and Michael de Goei, two young Dutchmen who made a lot of experiments with conductors and cables and came to the conclusion that high purity silver was the best material available. Scroll forward eight years and electronics engineer Edwin van der Kley Rynveld joined the company, buying it from its founder in 1992. Today Edwin and his wife Gabi Rynveld run both Siltech and Crystal Cables, researching and manufacturing both ranges from their base in Elst near Arnhem in the Netherlands.

Edwin's interest in materials science led him to create a laboratory to research cables, electronics and loudspeakers but the company's main product range is cables where they produce several series at a range of price points. Siltech's conductor of preference remains silver and their investigations into different types have led to the use of monocrystal silver in the highest Royal Crown range. I caught up with Edwin and Gabi to find out more about the brand.

**JK: How did you get involved with Siltech in the first place?**

**Edwin:** I worked for Philips Research and two other big companies and my education and hobby was electronics, I did a lot of development

work for German, Dutch, Swedish and English hi-fi companies as a freelance engineer. I solved problems for companies and occasionally redesigned products and got to know a lot of people in the industry.

When I was young, I studied music and played the clarinet as a hobby, never as a profession, I was also in an amateur symphony orchestra and played on TV a couple of times. But my father thought that playing music was not a job, he was an engineer himself. Nowadays they say do what your heart says but in those days it was different. I built remote control planes and built everything myself, that's how I learnt to use my hands and brain together.

**JK: You produced a cable to mark Siltech's 35th anniversary, will you do the same for its 40th?**

**Edwin:** It's not decided yet, it's the plan but we only put a product on the market if it's significantly better than what we have already. Every new series that we introduce is way better than the previous one. It's why people trust us, people often upgrade without even listening first.

It has become increasingly difficult because we already use the most advanced insulation materials and conductors and very advanced techniques to make them. We have already done everything we know to make connectors as well as possible, you start hitting a kind of ceiling with >>

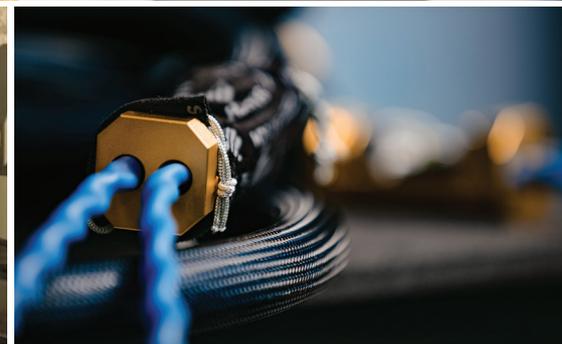


**SILTECH**  
EST. 1983





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» quality. The reason we only offer big steps in quality with new models is because our series run for about 10 to 12 years. Originally when I joined the company we thought we would follow the sales curve and when it starts to flatten out I know that I have to design a new series. But this never happened, with one exception which was portable cables where fashion seems to be important, people want something new every year.

**JK: Have you looked into carbon based conductors?**

**Edwin:** We do, we test all different types of conductor materials. The problem with carbon fibre is that it has a very high impedance and you cannot solder it, some brands have worked out how to connect it but it's never a very good connection.

We experimented with graphene in 2009 and we used it briefly in the Classic line as a coating for the shield

to get rid of static noise, but we found that we could do this more cheaply with carbon doping. At the moment we are working with a new material that's based on metal, but it works as an insulator, and it looks very promising. They can only make it in very small quantities now but it's something we will use when it can be scaled up.

Silver has one advantage over other metals, it has the lowest impedance. Is that a very important figure? No, »



The magnetic radiation field of a power cable is about 50cm, so don't place your equipment close to walls that have wires running in them.

» because if you make it 10% bigger in diameter you equal copper, but copper if you oxidise it, it disconnects, the distortion increases over time. Also, it oxidises at room temperature.

**JK: I thought silver did the same thing?**

**Edwin:** It does but it still conducts, silver oxide doesn't degrade the cable. Low quality silver oxidises easily but the high purity silver that we use does not oxidise at room temperature, it only does this at 450 degrees.

**What degree of purity do you use?**

**Edwin:** It starts at six nines (99.9999%) and goes up to nine nines in the highest quality cables. In silicon chip wafers they claim that they go to 12 nines under very special conditions. I had a colleague in cable sales that said he had a 20 nines cable years ago, which is like saying he had a Mini that goes 10,000 miles an hour! It's a fantasy.

**JK: Which do you think are the most important cables in a system?**

**Edwin:** This is a difficult question. AC cables create distortion, if you have 100m of cable before the power enters your house, your question should be what can the last 1.5m do? As an engineer this made no sense, so we didn't make power cords until 20 years ago.

When I discovered there were big differences, I started to look into it and found what the problem is. The magnetic radiation field of a power cable is about 50cm, so don't place your equipment close to walls that have wires running in them. If you move your system 30cm away it will improve the sound. All the magnetic field is picked



up by the cables and components, it's quite strong. Also don't tie the cables together, it's the worst thing you can do, make sure that the power cords are as far away from other cables as possible.

But to get back to the question, the most important is the power cord because it can generate noise in other cables. Then it starts at the source, cables can only degrade quality, they can't add musical notes (if it does it's a big problem!). What comes out of the source is as good as you can get so the first interconnect has to get that signal to the next component without distortion or colourations. Basically the first interconnect is the most important, then you can guess the rest. The pre- to power cable is the second most important, then the speaker cable. This is a rule of thumb, but it generally applies.

**JK: Does Gabi get involved with Siltech?**

**Edwin:** Of course, she does the sales and marketing for Siltech and Crystal.

**Gabi:** And I do the listening!

**Edwin:** You don't want Gabi listening, haha! The men that do the research tend to find that new products are always better, but she comes in and says that there's still something she doesn't like. And that makes us all nervous. But she is usually right!

**JK: Gabi, I thought that you were trying to retire a couple of years ago?**

**Gabi:** It was a kind of sabbatical which turned out quite well, corona virus came so I went to the gym and my Bösendorfer. It was good to have a break, I learnt about how to look at things in a new way.

In 2019, Edwin appointed an experienced foreign CEO for a year and a half. After this period, both Gabi and Edwin felt re-energized and reinvented themselves to bring the company forward to the next level. From then on, the company sales have over 30% year-on-year.

**JK: What does high fidelity give us that mobile phones and earphones don't?**

**Edwin:** it's a bit like having a dirty window and opening it, the essence of high end is to get a clearer natural view of the music.

**Gabi:** I'm used to playing on stage and getting the response of the audience, when I had a lot of musician friends I never came across audio, if you listen to real instruments you listen to the performance, to the beat, not the quality. When I came to audio it became a mission to get people as close as possible to the feeling that they get at a concert, I know we will never be 100%, but that's the point of high-end audio, as long as it gets closer there is still a mission. +