“Growth Through Innovation.”

From startup to medium-sized technology leader

Right from the outset, OTEC Präzisionsfinish GmbH has differentiated itself through innovative grinding and polishing systems with the “Made in Germany” stamp of quality. OTEC processes are not “off the shelf”. We deliver tailored surface finishing solutions based on customer-specific requirements. Our revolutionary, high-precision machines produce the kind of results that only used to be achievable through manual craftsmanship. And they do it consistently as well as faster and more reliably.

The company was founded in 1996 by Helmut Gegenheimer and Soran Jota in Straubenhardt, near Pforzheim in the Southern German state of Baden-Württemberg. Since then, as a specialist in surface processing, it has grown from a mechanical engineering startup serving the jewellery and watchmaking industry to a global technology leader in deburring, grinding, smoothing and polishing. Today, international customers from industries as diverse as jewellery and watchmaking, medical devices, pharmaceuticals, automotive and aerospace, electronics, toolmaking and additive manufacturing rely on the expertise we’ve acquired over the course of more than twenty years.

Here’s an insight into the OTEC story, with CEO Helmut Gegenheimer:

Helmut, how did you initially come to set up OTEC?

It’s a long story. In hindsight, the kernel of the idea came out of some bad experiences I had during my apprenticeship. I suffered under an authoritarian management style and the conditions it forces on employees. I was determined to do things differently in my own life – to rely on personality rather than authority.

So armed with my practical skills, I took a degree course to add some other strings to my bow. At university I expanded my practical expertise, but also studied development and design. After graduation I started my first permanent job. I gradually took on more and more responsibilities in purchasing, design and sales until I was all three areas rolled into one.

The company was growing, but as an individual and an employee, I didn’t feel part of that. The firm didn’t reward my performance, enthusiasm and commitment. So the next logical step was ...

Let me guess – going it alone?

Exactly! I'd already devised the outline of an idea for stream finishing machines, mass finishing systems and pulse finishing, so that became the cornerstone for OTEC. My brother Soran Jota has been my business partner ever since. We've moved the business forward together. We share the same outlook and values.

We and our employees are one big OTEC family! Lots of business decisions are actually just human decisions. Everyone's opinion is equally valuable. So my views and perspectives are regularly put to the test.

What's your vision?

Our first year as independent founders was all about proving that the personality over authority approach worked in practice. Lots of customers from my time as an employee came with us and became OTEC customers. From day one, we felt it was important that the company should break new ground rather than acquiring or emulating other companies and technologies. We wanted to be driven by customer requirements and our own innovative spirit – to grow by being a technical pioneer. Then in late 1997, OTEC won the Baden-Württemberg Innovation Award. Our technology is often imitated these days, but never equalled. We're the real thing. We set the industry standard. One in five of our employees works in pre-development. We view that investment in the future as a priority.

Tell us about a few of OTEC's innovations

Well, a highlight from 1997 was the CF Series, which is designed with a zero-gap system for rapid mass finishing on very fine workpieces. Or wet processing with a 0.05 millimetre ceramic gap, where the ring design minimises wear costs, and the ceramic and seal ring bearing extends service life.

Then in 2002 we made a quantum leap with the DF Series. We developed and manufactured the first dual motor drag finishing machine with swivelling workpiece holders. OTEC was the first to produce rounded edges on tools with a DF machine.

Another trailblazer was our pulse finishing process for the SF Series, which dates from 2013. Pulse finishing is an amazingly fast process, with an average process time of 60 seconds. But it also produces a top-quality finish with a surface roughness of less than 0.1 µm. The process obtains uniform results even on complex workpieces like gear wheels, because it's highly effective at using very small grinding bodies.

What's your approach to business? What drives you?

I'd say my approach is unconventional – I'm driven by permanent dissatisfaction! What could we do better? Which sequences and processes could we optimise? How

can we speed up our development? How can we make our products even more valuable to customers and prospects? We're not about getting rich quick.

Were you always convinced of the opportunities for a new firm offering a processing technology that people said was dead and buried?

Contrary to the opinions flying around in the mid-90s, mass finishing stayed the course and wasn't replaced by other processes like brushing. There were and still are plenty of opportunities in this area of mechanical engineering. OTEC is living proof of that. We haven't stopped growing.

But aside from innovative spirit, there are two other reasons for that: satisfied customers and passionate, entrepreneurially minded employees. We have both, and we never take that for granted.

What's next for OTEC?

The next generation! I'm delighted that my sons Nico and Florian are nurturing the OTEC philosophy while taking the company forward in key areas like Industry 4.0 and digitalization.

Our core business – the automotive industry – is going through big changes. Future technologies are leading the way and have an enormous impact on us all. But they also give us fresh perspectives, and opportunities to go on developing.

Everything we do revolves around the contribution we can make through innovation – how we can use OTEC's progressive technologies to make end products that futureproof our customers and increase their bottom line. We intend to stay in the lead where that's concerned.

Helmut, many thanks for talking to us!