



“For me, High-end Quality means ...

Claus Gunkel

Living up to Life

Leica
MICROSYSTEMS

The physicist Dr. Claus Gunkel was born on 30 March 1954 and is married. In addition to his degree in physics, he holds a further qualification in industrial engineering. He has numerous publications to his credit, as well as more than a dozen issued and pending patents.



... working with highly motivated and qualified employees who leave DIN and ISO standards far behind – day in, day out.”

Dr. Gunkel, before we talk about the personal significance that high-end quality has for you, could you briefly tell us how long you have been with Leica Microsystems and the positions you have held?

Well, a few figures are unavoidable when answering that. In January 1985, I started out as the development manager for thin films and filters. In April 1994, I was made production manager for optics. Five years later, I was put in charge of the Optic Center, assuming responsibility for around 160 commercial employees, 30 researchers, engineers, technicians and master craftsmen, as well as 17 trainees and students. In 2001, I was also given general commercial power of attorney.

What exactly does the Leica Optic Center do? And did physics, optics and perhaps precision in general already captivate you as a child? Did you have any early experiences that set the stage for your present position?

Our mission is to provide high-performance optics for microscopes and microscopy systems that meet specifications and fulfill quality standards, and to do so on time and at a competitive price. We supply them to our own Life Science Research and Industry divisions and to external customers. We're also involved in the ongoing development of Leica's optical technology and process competence at our Wetzlar, Shanghai and Singapore facilities. We not only rely on our own highly qualified people, but also take advantage of a network of leading international institutes and renowned worldwide enterprises in all of the industries relevant to us. And with regard to the second part of your question: yes, I've always had a soft spot for technology and people – and especially for development work in a team.



“Quality is never an end in itself.”

High-end quality is not only central to the Leica Microsystems identity, it's probably also an important factor in your day-to-day work. What does quality mean to you? Is it a means to an end or an end in itself?

Attaining quality calls for effective, transparent processes backed by highly qualified and motivated employees. Quality is the result of a process. It's never an end in itself, but the cornerstone of customer satisfaction ... (smiles) and when you succeed, it also contributes to your own satisfaction.

What are decisive quality criteria in your view? Are there important expressions of high-end quality that go beyond purely technical aspects?

In addition to the testing and acceptance conditions and the associated measuring and testing instruments for individual products, the entire process from advising the customer to processing the order, manufacturing the product, delivering it and setting it up on the customer's premises is geared toward high-end quality. That said, the process chain is only as strong as its weakest link.

Unconditional commitment to maximum quality is integral to the Leica vision. Our strategy, which in turn shapes our road-map, follows that vision.

The pursuit of high-end quality is a common theme throughout the Leica Microsystems world, and the motivation and qualifications of our employees are central to it. 80% of the Leica Optic Center staff consists of skilled workers, and roughly a quarter of those are certified master craftsmen or trained technicians, or have similar advanced qualifications. We see vocational training as an indispensable element of high-end quality, and we've always provided it, even during economic downturns. 7.6% of Leica Microsystems' workforce consists of trainees or students. At the Leica Optic Center, that share is one percentage point higher. In addition to traditional vocational training, we've also been providing integrated university-level campus and distance education options to qualified employees for several years now. Senior representatives of the Leica Optic Center also chair or participate in testing and ISO committees in their respective fields.

How do you assure quality in the competence center? Do you use special instruments, processes or guidelines? Which standards serve as your orientation?

Our work is based on transparent processes with unambiguous sequences of process steps performed by highly qualified, motivated staff who can rely on suitable instruments such as measuring equipment and guidelines. We've been ISO 9000-certified for nearly one and a half decades, comply with German medical technology laws and have an environmental management system in place.

Quality is a property that virtually all companies – especially those in the precision optics and microscopy industry – claim for their products. What distinguishes high-end quality as practiced at Leica Microsystems from the more common understanding of quality?

We have a living quality consciousness – testing and acceptance criteria, internal measuring concepts and inspection sequences are integrated into our production process. ISO and other international standards are our minimums. As a rule, we demand more of ourselves and our products. Leica's understanding of quality is not just related to the individual product, but also to its definition and development, and includes the entire customer-vendor relationship. We not only act as vendors to our customers – we also have vendors who we regard as strategic partners and who share our understanding of quality.



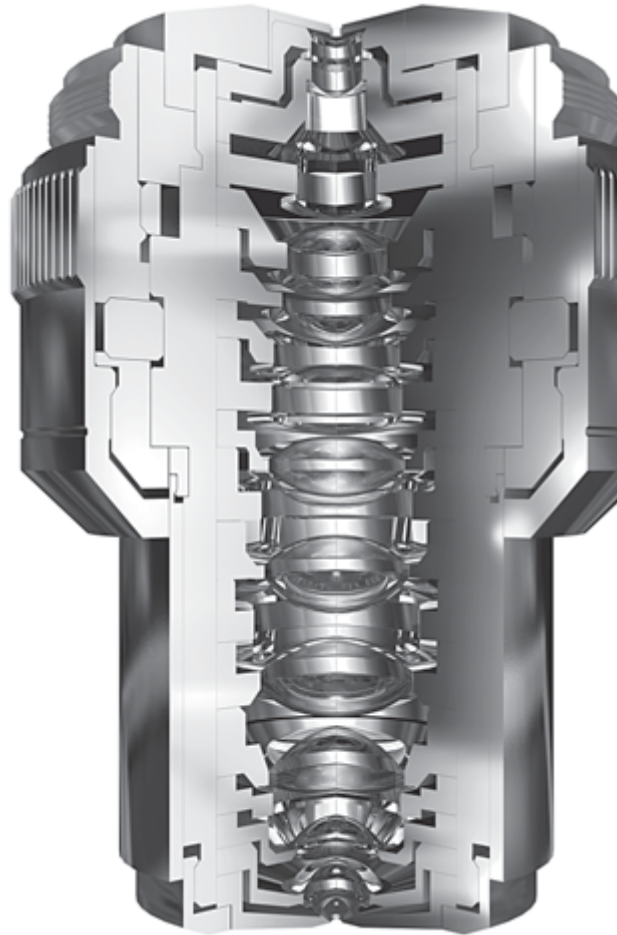
Over one hundred years ago, the stated objective of Ernst Leitz was to be active 'with the user, for the user'.
In your opinion, what role does high-end quality play in living up to that claim?

The Ernst Leitz claim remains as relevant as ever for us as the foundation of a performance-oriented partnership with our customers. And it's not surprising that it's echoed in the Danaher dictum, 'listen to the Voice of the Customer'. It's essential to pay close attention. Only then will high-end quality make us a reliable and competent partner in the quest for new answers.

“International standards are
our minimums.”

Optical quantitative determination of structures smaller than 100nm is now possible for the first time with the 150x/0.90 248nm AT DUV objective. Thanks to its revolutionary Air Space Technology, 17 different lenses can be positioned with great accuracy in an objective with a length of only 42mm. All optical surfaces are finished to nanometer precision. The dimensions of the mechanical components of the objectives are also built to dimensions within a fraction of a human hair – literally razor-sharp tolerances.

“‘Made in Germany’
has kept its
powerful aura.”



A number of Leica Microsystems' competitors are at home in Asia. Have you observed any cultural differences between European and Asian companies in their understanding of what constitutes quality?

'Made in Germany' has kept its powerful aura and Leica is an exceptionally valuable brand. I suspect that we sometimes aren't aware of its true significance. After all, I've experienced great respect, bordering on reverence, for both brands – especially in Asia.

Leica Microsystems sees itself as a worldwide company that gives people from many different cultural backgrounds space and influence at all levels. We work according to our own methods and processes and our employees around the world share a common quality consciousness.

Our competitors are, at best, companies with international reach in which managers from their respective home countries hold dominant positions in the foreign branches. Those managers often stifle the global diversity that can lead to new ideas and a deeper understanding of regional markets.

I'm also confident that individuals at Leica Microsystems have greater freedom to make decisions and less need for consensus in business-related matters than in other corporate cultures.

Coming back to you personally, what are your next projects? What are your goals and where do you personally see a need for action? Where is your journey going?

Improved optics for STED and electrophysiology are at the top of the list. That will help us work toward a deeper understanding of the processes within human cells. Understanding the causes of diseases, identifying them earlier and thus being able to provide timely, effective remedies is a noble goal. My team members and I derive great satisfaction from working at the leading edge of the fight against dangerous diseases.

From the business angle, our focus is on continuously improving our processes. It's essential that we strengthen steps that lead to greater customer benefit and eliminate wasteful ones that do not lead to the creation of value.

With our DBS tools, we have the resources we need to systematically unlock our potential.

Technologically, we intend to remain the market leader and we're working toward consolidating that position in optics. Together with our strategic partners and R&D, we're currently evaluating new processes that we will be applying in Wetzlar and other Leica Microsystems locations.



You seem to invest all of your energy into maintaining the best possible, consistent quality. Do you still have time for a personal life? Do you have any hobbies? How do you relax, and where?

Most of my time and energies are devoted to my work. But I find that fulfilling professional challenges also have an invigorating effect on my personal life. My relative shortage of free time means that I experience it with greater intensity than I otherwise might.

My hobbies include alpine skiing and spending time outdoors with a tent and sleeping bag in the summer. I also own a farmyard which is over 250 years old and has been placed under an historical preservation order. (smiles) And it's going to be a while before I have it up to 'High-end Quality' standards ...