

Work at Rohde & Schwarz

MAKE IDEAS REAL

Life Future Technology Careers

ROHDE&SCHWARZ

Make ideas real



WELCOME TO ROHDE & SCHWARZ



Jolge Jelots

HOLGER SCHÖTZ

Executive Vice President for Human Resources

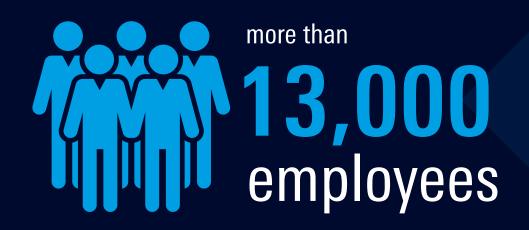
DEAR READERS,

As a family-owned and independent company, we have operated along the entire value chain for more than 85 years. We develop, manufacture and market products and solutions that enrich all of our lives. With that approach, our more than 13,000 employees are working to lay the foundations for developments such as autonomous driving, smart cities, the internet of things and the communications standard of tomorrow. These people, with their ability to convert their remarkable ideas into real innovations, represent the cornerstone of our long-term success. They assume responsibility and take ownership from start to finish. We create a flexible and employee-centered environment where they can keep learning and growing throughout their working lives. Trusted experts, curious explorers and open-minded networkers proactively contribute to our international company and are working with us to shape the future. They are the shakers and movers driving the security and communications of tomorrow. With our "Work at Rohde&Schwarz" magazine, we want to share lively and authentic insights into our company: How do our colleagues identify future technology trends? What makes the hearts of our hardware engineers beat faster? Where can you find our technologies in your everyday life? You can read about these and other topics on the following pages.

I wish you an enjoyable reading experience. Your feedback and suggestions are always welcome at career@rohde-schwarz.com.

Holger Schötz

WHO WE ARE



11.3
years
average period
of employment

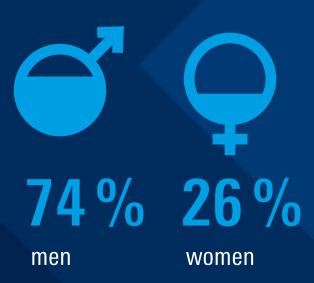
Technology/market leader in all of our business fields



Privately owned company



980 different products









Revenue of EUR 2.53 billion in fiscal year 2021 | 2022

WHERE WE WORK

Joining a high-tech company like Rohde & Schwarz means working for customers on every continent. We are present in more than 70 countries and more than 90% of our business is international.

In addition to many R&D centers, we also have sales and service offices and production sites. As a result, a company like ours offers many opportunities to gain experience working abroad.







OF STAR TREK AND QUANTUM TECHNOLOGY

R&S Market Segment Manager Christian Dille likes exploring uncharted territory

If Rohde & Schwarz had sensory organs, Christian Dille would be one of them. As Market Segment Manager for Industry, Components, Research & Universities, his duties include listening to markets to identify future technology trends. Quantum technology is very high on his list. What motivates him and what is on his mind?

When he was 15, Christian Dille made his first career steps without knowing where it would take him. He got his hands on a popular science book about Einstein's relativity theory and he was hooked. The course was perfectly clear to his young eyes, with a degree in physics that would lay the foundation for his job at Rohde & Schwarz.

Trend radar with a graduate degree

"Our professors always told us that once we finished our degrees, we would be jacks of all trades", recalls Dille with a grin. "You cannot do anything perfectly well, but will be able to learn how to do anything." This broad knowledge helps the market segment manager today. First, when trying to understand which technologies are currently trending and second when evaluating whether they might be interesting to Bohde & Schwarz in the future

A gut feeling for T&M instruments

When assessing the relevance of an invention, sustainability plays an important role. Investing time and resources into a development has to be worthwhile for the company. Experience and a solid connection to the markets, both in industry and R&D, are vital along with a strong intuition. "Facts alone are not enough to determine whether a certain trend will continue to grow in coming years", says Dille.

Dare to take risks

A certain risk is always involved. Solid risk assessment is therefore important to Dille. He sees risk as a question of mindset: "In Germany, avoiding making any mistakes is often considered the most important factor", he observed. "However, something may be a mistake but you can learn from it." This requires the high degree of freedom and trust that Rohde & Schwarz gives all of its employees.

One step where Dille played a key role was anything but a mistake. "Bringing Zurich Instruments into the Rohde & Schwarz family was a quantum leap forward for the company," says the market segment manager. "It took a while and was not always easy, but it was definitely the right decision."

A Star Trek feeling on the job

Zurich Instruments is one of the latest members of the Rohde & Schwarz group of companies. The quantum computing T&M market holds enormous potential for both companies. RF signals must be generated and measured with extremely tight tolerances to effectively create and read out quantum states. Control systems for quantum computers are part of the portfolio.

The second generation of quantum technologies will not start from scratch. Nevertheless, Dille is convinced that it will be an enormous advance and a quantum leap forward: "Things will suddenly become possible that were previously unimaginable." It gives Dille a "Star Trek feeling". Just like the tablets that were omnipresent in The Next Generation and are now an everyday item, other science fiction fantasies could also become reality.



A high degree of freedom and trust to try new things and learn from mistakes is what Rohde & Schwarz gives all of its employees.

For a golden future

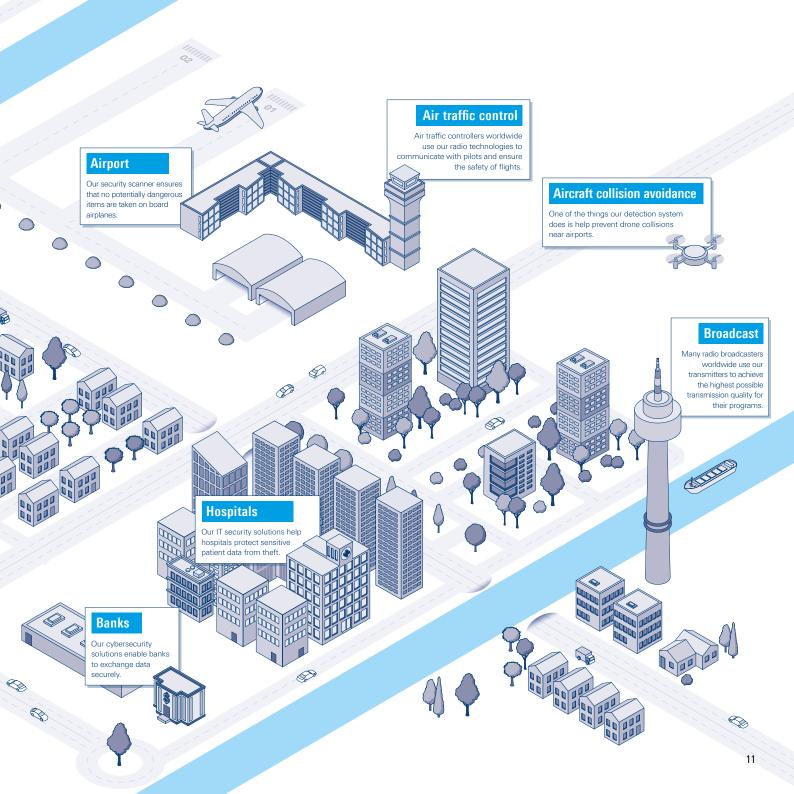
Dille cannot really say how quantum technologies or other forward-looking trends that Rohde&Schwarz has identified will evolve. He has kept alive the curiosity of his 15-year-old self and it guides him as he works to achieve a prosperous future, for Rohde&Schwarz and the coming generation that includes his own children.



"Things will suddenly become possible that were previously unimaginable",

says Christian Dille, Market Segment Manager Industry, Components, Research & Universities.







Who would have thought that a routine antenna maintenance in the Colombian desert would turn into a matter of life and death?

In September of 2018, two of our employees from Rohde & Schwarz Colombia left for a business trip to perform the last maintenance to a recently implemented antenna system located in the Colombian desert. What the application engineer and the technician didn't know at that time: It was a trip they won't soon forget.

The problems started right at the beginning. What should have initially been a 10-hour drive to the antenna system ended up taking twice as long. The reason: heavy rainfalls. After five days of working in the desert, the weather had still not improved and one thing was clear – it was now a matter of survival!

The heavy rains combined with poor road conditions meant our two employees were cut off from the outside world. And now their carefully calculated supplies were running out; they would only last three more days at most. While it continued to rain heavily, they checked in with the subsidiary every few hours by phone, as instructed in their process guidelines. Eventually their shrinking supplies left them no other option and they made a decision. They deviated from the Rohde & Schwarz process guidelines and headed toward a ranchería – one of the indigenous villages that they already knew about.

The people there saw that they were desperately in need of help and offered them a goat. A live goat. And not for free either. So they cobbled together all the pesos they had to buy it. And as they had almost nothing else left, they ate goat for eight days straight. For breakfast. For lunch. For dinner. They even collected rainwater to drink, cook and wash themselves with.

Once the matter of their survival had been dealt with, they began to ponder: "How were we to claim expenses for the purchase of this goat here in the desert?" Their unusual situation called for a little bit of creativity on their part and flexibility from their colleagues in the travel expenses department: They accepted a before-and-after photo as documentation from their





adventurous colleagues – the first showing the goat still alive and the second showing the goat ready to eat. The newly implemented transmission antenna proved reliable. And also our employees, who mastered this extraordinary situation with bravura. One thing is certain: Rohde & Schwarz engineers rarely have to prove their survival skills in everyday working life.





6 GINNOVATION MEETS BRIGHT MINDS

Introducing three of our colleagues. They all work at Rohde & Schwarz as technology managers and have been working on everything to do with 4G, 5G and 6G technology for many years. How do they see their job and what does the future hold?



3 questions for Meik, our wireless communications specialist

Meik Kottkamp

As a wireless technology manager, what challenges do you see with 6G?

I associate the previous generations of wireless communications with different periods of my own life: when 2G arrived, I was around 20. And so, when 3G, 4G and finally 5G were introduced, I was 30, 40 and 50 respectively. I'm looking forward to reaching 60 when 6G will enter the market – if it's rolled out in 2030 when everyone is expecting. Every generation poses technical challenges, but I think the biggest

challenge with the next generation will be ensuring that we can use these expanded communication channels safely and rely on them in every sense.

Describe our lives with 6G in three adjectives.

Better, faster and further are of course the three commonly used adjectives to describe each advancement. And naturally, the performance of cellular wireless systems will also improve as the next generations arrive. But I think 6G brings new challenges into focus, so I would describe our lives with 6G as interconnected, merged and sustainable.

Looking to the future... What do you think will be the most exciting innovation made possible by 6G?

From an end-user perspective – so referring primarily to smartphone users – I think it'll

be the possibilities surrounding augmented reality and gesture control. It'll also be exciting to see to what extent environment information can be used to optimize data transmission. Not to mention all the developments that will emerge almost at random but change all of our lives. Who thought in the 90s that sending fewer characters per text message would turn SMS into a global success story? The future remains exciting and I'm looking forward to playing a small role in shaping it every day.



3 questions for Reiner, our webinar enthusiast

Reiner Stulfauth

You've been with Rohde & Schwarz for more than 22 years, first as a trainer and now as a technology manager. Is there any particular challenge that comes to mind that you had to overcome?

When I started as a trainer, I remember asking myself: What do I do if someone

asks me a question that I can't answer on the spot? My mentor at the time advised me to be honest and say: 'Sorry, I don't know but I'll get back to you with an answer'. Because that's exactly why we have such a high level of expertise at Rohde&Schwarz: there's always a team member who can help.

On our intranet, your colleague Jeremy has labelled you as a webinar enthusiast and even presented you with an award. Why?

A huge number of people took part in my 2021 webinar on 5G connectivity for vehicles and the accompanying white paper was downloaded thousands of times. This showed us that both the wider public and

our customers are hugely interested in 5G for the automotive sector, which is why we're now planning further activities and events in this field.

Looking to the future... How far away is 8G? Who or what will be communicating with each other?

Our ability to communicate is what makes humans unique. That's why I'm convinced that people will always be the focus – even with 8G – and that only how we communicate with each other will change. When will we reach 8G? I think around 2050, but to be honest, it's incredibly hard to predict the future...



3 questions for Taro, our Asia specialist

Taro Eichler

You, Meik and Reiner are a team: what makes you so unbeatable?

We're all experts in wireless communications but each of us has a specialty, which means we complement each other incredibly well. On top of his technical expertise, Reiner is also an expert at delivering webinars and leading workshops. Meik has very much experience in standardization and specializes in 5G for Industry 4.0 and Europe, particularly Northern Europe. And as for me, I spent 10 years researching in the field of quantum

optics, so I'm extremely interested in the possibilities that new photonic technologies present for 6G. I also worked in Japan for 6 years which is why my focus is on Asia.

Several groups of students have already visited the campus in Munich and listened to your lectures. How important is inspiring young talent in the job of a technology manager?

It's essential! That's why academic or mixed academic-industry events are so important to me. This is of course also true for trade fairs, which are typically dominated by industry. Getting young people interested in the innovations at Rohde & Schwarz is hugely enjoyable. After all, if we want to advance autonomous driving and extended reality, we need motivated young talent eager to put their ideas into practice and drive innovation forward together.

Looking to the future... What will be the first 6G capable device in your house?

Most likely my phone. I play the violin in an orchestra, so I'm also excited to see what the future holds and whether we can play music together virtually with acceptable quality. Though the pandemic has certainly shown us you can't replace meeting in person...

Careers

Coffee and colleagues - can the recipe for happiness be that simple? Christoph Rangl thinks so. More often than not, an early morning chat with his fellow team member Tobias Störch turns into a caffeine-fueled discussion on the latest technologies. Or an upcoming project. Surrounded by all kinds of equipment - signal generators, spectrum analyzers, power supplies, power sensors, HF filters, prototypes, circuit diagrams - the hardware engineers are in their element. These are ideal conditions for tackling projects. They first encountered Rohde & Schwarz instruments back in their university days - gaining early familiarity with the equipment that now enriches their everyday work. When they talk about their working environment, their excitement is evident. Tobias: "Every day we get to work with the high-end measurement equipment made right here."

Coordination is key

"Without my colleagues, my work wouldn't be half as much fun," says Tobias. Christoph heartily agrees, noting the enormous value of the excellent team coordination over the course of a project. They all rely on

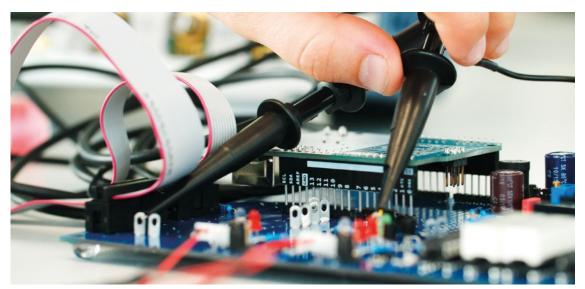
Staying power to get the big picture

"Naturally the occasional sugar boost is a must in dry spells or when things don't quite work out," says Tobias with a smile. Stamina is a must. Complex projects can sometimes go on for many months when it comes to

WHERE THE OFFICE IS A

everybody playing a role in the team's overall success by each contributing their own part to the project as a whole. Input is important to the colleagues. In weekly status sessions they exchange views and evaluate ideas before implementing them. In this team, many things are routine: trying ideas out, failing quickly, making a fresh start, never losing sight of the goal, choosing the right path and ultimately tracking down the ONE solution.

developing the hardware. From the initial idea to the first shipment to the customer, the colleagues at Rohde & Schwarz are involved. Christoph and Tobias love to watch as the products they develop are assembled at the company's own plants and are then actually put into operation by customers. They maintain close contact to the production units, making frequent phone calls or on-site visits to go over technical details. The mix of theory and practice at work is a big



Theory and practice go hand in hand in hardware development at Rohde & Schwarz.



"A fresh pair of eyes on our projects is always welcome", says Christoph Rangl.

motivator for them. Both are indispensable in hardware development: "If you haven't looked at the issue from a theoretical standpoint at the start, there's no way of telling in practice whether the result is correct," explains Christoph. He's been with

happy whenever a new face arrives. This is a real help, because we can always use a fresh and unbiased look at the issues we're dealing with." The four-member team takes a balanced approach. It's important to them to benefit and learn from one another. The pendently with the topics they are working on.

Ideas that bring happiness

Our company's claim is "Make ideas real". The two hardware engineers can fully identify with this: Their creative ideas

> become part of the product development process. The resulting products – from security scanners at the airport to smartphones –

can be found in the everyday lives of many people. Without hardware developers, their lives would be much less safe and convenient. Can the two hardware engineers recall some of their happiest moments? "When I held my first prototype in my hand," says Tobias. That makes sense to Christoph. His big memory: "The first time an entirely new module went into operation." Two hardware developers reminiscing – over a cup of coffee. of course.

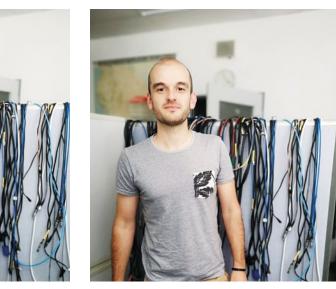
PARADISE FOR T&M EXPERTS

the company quite a while. After joining Rohde & Schwarz as an apprentice and later qualifying as a master tradesman, he is now firmly established as an engineer.

Versatility – in the team and the methods

Tobias joined Rohde & Schwarz two years ago. What does he recall from his early days here? "I was part of the team right from the start," he says. Christoph nods: "We're

team combines years of development experience with curiosity, flexibility and a structured approach. When they are not working at their computers, they engage in frequent technical consultations and discussions – often during the team's daily visit to the canteen. In the lab they also resort to pencil and paper, bringing together the digital and analog worlds. It's important to them to keep their work interesting and varied, and keep pushing ahead inde-



"We get to work with high-end measuring equipment every day", Tobias Störch is happy to say.



Early morning chats between our hardware engineers often turn into discussions on the latest technologies.

YOU WANT TO MAKE IDEAS **REAL? JOIN US!**



Job opportunities:

Check our careers page at www.rohde-schwarz.com/career to see all current openings - from internships to senior positions.



Your start at Rohde & Schwarz*:

apprenticeship, work/study degree program

internship, working student positions, thesis

University graduates:

career start

Professionals:

career start, senior positions

*Opportunities vary by location

Learn more about us:









YOUR IDEAS

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The R&S®AREG100A Automotive Radar Echo Generator is used for the development, validation and production testing of radar sensors, which enable some of the most safety relevant features on a modern vehicle such as emergency braking. If you want to be part of providing test and measurement solutions for the car of the future, join Rohde & Schwarz!



Work at Rohde & Schwarz

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