

# Globe

+GF+

The global magazine for GF employees

02/22



## Trust one another

Why trust is important for a company and how  
it contributes to GF's success

### HEART AND DISCIPLINE

Check out why Sreileak Lea Vong from GF Piping Systems is considered a hidden hero **20**

### FIRST-CLASS SITE

How GF Casting Solutions in Romania transformed a tiny foundry into a multinational business **30**

### FUTURE-ORIENTED TECHNOLOGY

GF Machining Solutions developed solutions for environmentally friendly electric vehicles for Schaeffler **32**

HELLO!

# Strong women at GF

How are employees living the GF values in their daily work? For International Women's Day, GF Machining Solutions celebrated team spirit with colleagues from southern China like Tiffany Mai.



### Tiffany Mai

**Position:** Operations Support Assistant  
**Division:** GF Machining Solutions  
**Standort:** Dongguan (China)  
**Joined GF in:** 2008



This picture of my colleagues and I (second from left) was taken on International Women's Day – the balloons show the date (8 March). All female colleagues of GF Machining Solutions South China were invited to a special get-together.

We enjoyed some delicious snacks and joined an interesting online lecture titled "The secret of how to stay young" together with GF colleagues from other regions in China. We also discussed mental health topics, which provided

valuable tips on how to fight stress and stay positive in everyday life.

It was the first time such an event had taken place. I also liked meeting colleagues from other regions and exchanging ideas with them. It was a great experience that showed GF cares for us and that we are all part of a great team across locations and regions!

**+**

**What about you?**

**How do you live the GF values in your everyday life?** Share your story with us and include a photo. Send your photo (high resolution: approximately 2 MB) along with a short description of it to: [globe@georgfischer.com](mailto:globe@georgfischer.com).

EDITORIAL

# Let's show some trust!

Dear colleagues,

What was the biggest risk you've ever taken? Did you dabble in speculative trading on the stock market, embark on a completely new career, or fall head over heels in love with someone and move in with them? In my case it's a vineyard that I recently acquired, having no prior knowledge, but a lot of motivation. Will the effort pay off? I won't know for another year and a half.

In order to take risks and dare to try something new, we need trust – both privately and professionally. At GF, we want to create an environment of trust with our caring culture. We explain why this is important and what the challenges are in this issue's focus topic.

Our cover story starting on **page 8** shows three concrete examples from Switzerland to Tahiti of why trust is the decisive factor for success. I felt Lea's story was very moving. Our hidden hero embarked on a new path in life that took her 11'500 kilometers away from her home in Cambodia. You can find out whether it was worth the trouble starting on **page 20**.

The Globe team also has some news to share. My colleague Isabel Proske will be taking over project management for the foreseeable future so that I can go on parental leave. I am sure that, with her, my pet project is in the best hands possible, and I look forward to reading the next few issues. After all, unlike wine, an issue of Globe only needs about five months to mature.

We hope you enjoy reading and exploring this issue!

**Lena Koehnen**  
Globe Project Manager



Isabel Proske

Lena Koehnen



Let us know what you think of the new Globe and what we can do to make it even better: [globe@georgfischer.com](mailto:globe@georgfischer.com).

### From our readers

We appreciate all the feedback that we've received on the new design and content available in Globe. Here are a few of your thoughts:



**"We received our issue of Globe in Portuguese, and our team was so happy! The attention and content dealing with local teams makes all the difference."**

(Brazil)

**"I've received pleasant messages from colleagues around the world. Thank you for your commitment and making the GF family feel like it's even closer together!"**

(US)



WITH CONTRIBUTIONS BY

**Noriko Hayashi**

The photographer works for news outlets such as the New York Times, and takes pictures for Globe. **24**



**Sasan Saidi**

The illustrator hopes that readers will keep discovering something new in his look-and-find picture puzzle. **16**



**Juliane Gringer**

The Hidden Hero author is impressed by the passion and willpower exhibited by Lea. **20**



SPOTLIGHT



**08**

The key to success is having trust in employees, customers, and partners, as well as in one's own skills. Our Spotlight feature shows how GF builds up and advances trust, with examples from GF divisions from Europe to Oceania.

CARE



**20**

A lot of heart and willpower – Hidden Hero shows how Sreileak Lea Vong from GF Piping Systems helps out new employees.



**23**

**My Best Lesson: "Finding a good work-life balance"**

**Lisa Schnell**  
SAP consultant at GF Casting Solutions



Globe is also available online!

You can read Globe from anywhere in the world at:

[globe.georgfischer.com](http://globe.georgfischer.com).

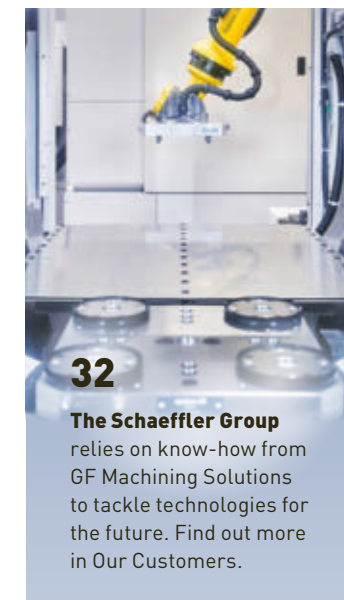
CREATE



**30**

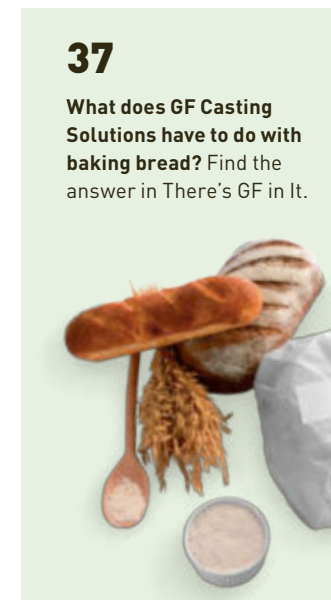
One of GF Casting Solutions' locations in Romania is conquering new markets. On Site describes how.

CONNECT



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The Schaeffler Group relies on know-how from GF Machining Solutions to tackle technologies for the future. Find out more in Our Customers.



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What does GF Casting Solutions have to do with baking bread? Find the answer in There's GF n It.

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Trust promotes success. Examples from all divisions show how this happens.

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CARE

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CREATE

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IN BRIEF



Team experiments that center around the new values have been taking place at GF Piping Systems in Buenos Aires (Argentina).

# The Culture Movement is picking up pace

GF launched the Culture Movement with 75 Change Agents from all divisions in November 2021. More than 100 team experiments have been performed around the world so far – all aiming at better anchoring our values in our everyday lives. GF locations in the Asia Pacific region also kicked off the Culture Movement in March with 47 additional Change Agents and the first set of hackathons.

A Corporation-wide survey was held in May. It showed that most GF employees had already come into contact with the Culture Movement and our values and felt that they were well-informed. From now on, the survey will be conducted every quarter in an effort to evaluate how well our values are already anchored in the company.

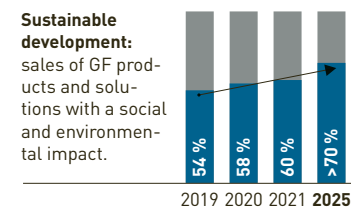
## Interested in finding out more?

Would you like to learn more about the Culture Movement at GF? Just scan the QR code and off you go.



## Progress in sustainability

GF defined three focus areas in its **Sustainability Framework 2025**: product portfolio, climate and resources, as well as people and well-being. In 2021, GF achieved good results across all three areas. Six of eight sustainability targets could be met or exceeded. For example, CO<sub>2</sub> emissions dropped by 17% compared to 2019 and the percentage of sales generated by products with social or environmental benefits rose to 60%. The targets related to water usage and accident rate show most potential for improvement. Find out more in the Sustainability Report 2021 at [sustainability-report.georgfischer.com](https://sustainability-report.georgfischer.com).



Source: GF Sustainability Report 2021

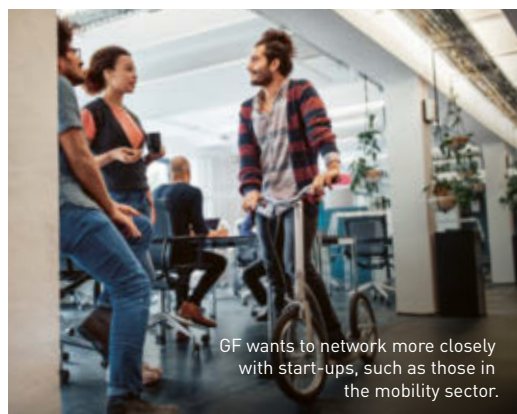
## Connections for life

With a current campaign, GF Piping Systems shows **how it addresses key global challenges**. A dedicated microsite and videos illustrate the division's approach to topics like solving water loss, improving water quality and ensuring clean water, together with its customers. More topics and videos are planned and will be shared on the LinkedIn channel of GF Piping Systems, for example. Be sure to follow and find out how the division builds connections and partnerships for life.

# GF expands start-up network

Since mid-February, GF has been part of an **innovation network that promotes start-ups**: MassChallenge Switzerland was launched in 2009 and has since then brought together numerous start-ups around the world with leading companies. It gives GF access to the best start-ups in Switzerland, setting the stage for the joint development of innovative business models, products and services.

Cooperations with start-ups are also important to help the divisions develop innovative products. For example, GF Casting Solutions has entered into a strategic partnership with STARTUP AUTOBAHN, an innovation platform that is powered by Plug and Play. The leading international platform connects a network of strong mobility and technology companies with start-ups from around the world.



GF wants to network more closely with start-ups, such as those in the mobility sector.

# Joint efforts to increase work safety



After GF Piping Systems launched a new program for occupational safety in 2021, the other divisions are now following suit. Safety training in combination with videos, posters and e-mail banners clearly and creatively point out dangers in everyday working life. The aim is to raise the awareness of all employees about uncertain situations and to promote the exchange of best practices. Sustainability officers from all divisions have opted for the joint approach. As part of a newly founded Sustainability Committee, they regularly exchange views on measures to achieve the 2025 GF Sustainability Goals.

Posters like this are intended to help people recognize potentially dangerous situations. After all, only superheroes can sense impending danger.

## GF Transparency Line

GF places great importance on a trustful relationship with employees, customers, suppliers and other business partners. **GF's Code of Conduct** describes the values, principles and policies to which GF is committed as a global company. Issues and wrongdoing that you do not want to discuss openly (e.g. discrimination, bullying, sexual assault, legal violations) can be submitted securely and anonymously through a confidential channel, the GF Transparency Line, reachable via email, telephone or mail. The Transparency Line is active since the end of 2021 – In nine languages, 24 hours a day, seven days a week.

## Contact and information

About the GF Transparency Line:



## Award-winning design



In March, one of the latest generations of laser machines from GF Machining Solutions was awarded the **2022 Red Dot Design Award**. A panel of experts lauded the LASER S 2500 U for its outstanding design in the Product Design category. The Red Dot Design Award is presented by a panel of renowned experts in a total of three categories every year. It is one of the most important design awards worldwide.

YOUR FEEDBACK

# More diversity, please!



FEEDBACK:

Hi Globe team,

I like Globe in general, but feel that most people shown are young, beautiful and Swiss, unless there is a specific article about them (even then you might have to be good-looking to be chosen). I feel there could be more diversity portrayed for a global company, rather than every page showing a company made up of young Europeans.

Participant of Globe reader survey 2021

ANSWER:

Dear colleagues,

We're glad that you enjoy reading Globe. Some readers had the impression that we select our employees based on external appearances and/or ethnic backgrounds. This gave us food for thought.

Our aim is to offer an interesting mix of topics in each issue. The key selection criterion for a Globe topic is always the story. In each and every issue of Globe, we try to feature topics and employees from all divisions and from as many regions as possible. It's not always an easy task. For example, we want to offer a portrayal of more colleagues from areas with a greater focus on production. So we rely on suggestions from readers in our endeavor to find stories that will interest you.

The next issue of Globe (03/22) will focus on diversity and inclusion. We'd love to hear from you if you yourself have suggestions for topics or an exciting story: [globe@georgfischer.com](mailto:globe@georgfischer.com).

Sincerely,  
your Globe editorial team

+

## What about you?

Do you have feedback for Globe, or would you like to ask the Globe editorial team a question? Then send an e-mail to [globe@georgfischer.com](mailto:globe@georgfischer.com).



### A world full of trust

Trust at GF demonstrated by a look-and-find picture puzzle

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### Safety creates spaces

An interview with Prof. John Weeks about trust

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### The biggest risk I've taken

Four employees from various divisions share their stories

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# Trust

## as a game changer

**SPOTLIGHT:** To innovate, we need the courage to try new paths and the assurance that we are encouraged to do so. That's why trust - in employees, customers and partners - is essential in GF's corporate culture. Three examples from Europe to Oceania show how trust is key to the success of projects in every division.

**T**rust is the glue that keeps people and societies together, both in private life and in the business world. A fair, honest and reliable environment conveys security - and is a basic prerequisite for motivation, allowing people to take on responsibility and develop their potential. At GF, trust is essential and underpins the company culture.

Three examples from across the world show how trust, in its many forms, is shaping relationships and projects at GF: From new innovations suggested by employees at GF Machining Solutions, through ambitious research projects with external partners at GF Casting Solutions to challenging customer projects at GF Piping Systems. The last refers to a project that the Specialized Solutions team at GF Piping Systems worked on in early 2021. The job was to contribute to the construction of a sustainable air-conditioning system in Tahiti by ensuring the quality of the welds that hold its central pipe together. →

### Oceans away

Inspectors in Tahiti were on-site to check the weld beads of the pipes for the Sea Water Air Conditioning system, while project management from GF Piping Systems coordinated activities from Europe - trust through communication.





→ Sanjay Patel (left) and Riccardo Barbone standing next to an extra-large pipe with a diameter of 710 mm.



**Sanjay Patel**

**Position:** Global Business Development Manager – Specialized Solutions  
**Division:** GF Piping Systems  
**Location:** Schaffhausen (Switzerland)  
**Joined GF in:** September 1992



**Riccardo Barbone**

**Position:** Chief Technical Officer – Specialized Solutions  
**Division:** GF Piping Systems  
**Location:** Schaffhausen (Switzerland)  
**Joined GF in:** September 1999

The Sea Water Air Conditioning system (SWAC), as it is called, was to become the biggest of its kind worldwide, supposed to cool the capital’s new hospital with seawater from the depths of the ocean. For this, an almost four-kilometer long, flexible plastic pipe had to be built and immersed 900 meters below sea level. From there, the system would pump 5°C water onto the island to cool the rooms of the French Polynesian Hospital – without CO<sub>2</sub> emissions and the additional electricity that conventional air conditioning would need in a tropical region where average temperatures range from 26–29°C (78.7–84.2° F).

GF Piping Systems used their technique called ultrasonic non-destructive testing (NDT) to check the welds of such a long plastic pipe for the first time. There was no margin for error: The assignment was part of a flagship project by the French-Polynesian government. Once installed, the SWAC would save 2 percent of Tahiti’s annual energy bill – the equivalent of \$3.2 million per year.

Sanjay Patel, Global Business Development Manager in the Specialized Solutions Team at GF Piping Systems, recalls the tension at the beginning of the project: “The pressure was high because we had never done a job like this before.” He managed the project, making sure the NDT scanners and external inspectors GF had hired and trained to operate them arrived on time. A difficult task: When the deadline was only four

months away, the COVID-19 pandemic was disrupting international travel and global shipments.

**Those who dare, win**

Sanjay and the GF team in France, who had received the project request and guided the negotiations with



↑ Inspectors in Tahiti use scanners to check the weld beads on pipes. The scanners needed to be prepared for this task.

the customer, stayed on top of things: “Communication created the trust we needed to complete the project.” They were on the phone with customer Geocan, which built the SWAC and the pipe using GF welding machines, up to ten times per day, keeping everyone updated on progress and changes.

Communication within GF was also essential. Due to the pandemic, most team members were working from home, but they remained constantly in touch. This enabled them to quickly solve unforeseen issues together, such as finding alternative routes for last-minute flight cancellations or localizing lost parcels.

Riccardo Barbone, Chief Technical Officer Specialized Solutions at GF Piping Systems, took care of the technical details and had daily contact with the on-site inspectors. His team had matched the scanning heads – the pieces of equipment the NDT scanners sat in – to the pipe’s diameter of 710 mm. This meant the inspectors could easily check whether stones, grains of sand, or air pockets were hiding inside the more than 400 welds. In addition, they had developed an algorithm that analyzed the scanning results on-site, giving a green or red light for each single weld. This was a key advantage because once the pipe was submerged in the sea, it would be nearly impossible to fix faulty joints.

Riccardo is still enthusiastic about the cooperation within GF, as well as with the inspectors: “They sent us pictures of themselves posing with our GF →



↑ A pipe measuring nearly 4 kilometers in length cools the capital’s new hospital using seawater.

**An international project**

Experts from all over the world worked together on a project enabling the hospital in Tahiti’s capital to be cooled using seawater.

**Six countries, one common job** The customer initially contacted GF Piping Systems in Paris (France) for testing of the Sea Water Air Conditioning system (SWAC) in Tahiti (French Polynesia). The local team then brought the Specialized Solutions team from Schaffhausen (Switzerland) on board for the challenging job. Inspectors from Poland, Serbia and the Czech Republic then tested the pipes in Tahiti.



**Countries:**

- 1 Tahiti
- 2 France
- 3 Switzerland

**Inspectors:**

- 4 Czech Republic
- 5 Poland
- 6 Serbia



→ Jose Gonzalez, an expert in milling, has already contributed two ideas to the Kickbox initiative.



**“It’s great that our management gives personal feedback to all participants.”**

**Jose Gonzalez**  
Expert in milling and participant in the Kickbox initiative at GF Machining Solutions



← Adina Dorthe holds the mascot of the Kickbox initiative at GF Machining Solutions in Biel/Bienne [Switzerland].

Jose is currently working on a new method for reducing the weight of machine components to save energy when operating the finished machine. On the day known as Demo Day in December 2021, he presented this idea – and made it through to the next phase.

Admittedly, Jose doubts that his idea will ultimately be implemented because it would be very expensive. But for him it feels like a victory nonetheless: “Working on my idea is both fun and fulfilling. I especially enjoyed getting to know colleagues from other sites.” He adds that today he is much more satisfied with his work than he was before his Kickbox participation.

Indeed, Jose’s daily work routine has permanently changed due to new methodologies he got to know and the exchange with colleagues. This proves that a work environment with a high degree of psychological safety is essential for employees like Jose to take the plunge and strive for innovation.

**A complex part made of powder**

Sometimes a team needs external members to score a win. This is the case with a current project from GF Casting Solutions. The A<sup>3</sup>-4AM project is a collaboration among the GF Casting Solutions technology team in Schaffhausen (Switzerland), the GF AMotion →

equipment. They very much liked working with it and called our patented chain equipment “the magic chain.” They did a great job on site.” Thanks to the trustful collaboration among all parties, GF Piping Systems even managed to finish the job ahead of schedule. “We were confident enough to dare something – and succeeded thanks to that,” says Riccardo.

This is a good description of a concept called “psychological safety” in science. It was developed by Amy Edmondson, a professor of leadership and management at Harvard Business School. The concept holds that teams only work together successfully if each member can contribute without fear of negative consequences. According to Edmondson, this perceived safety at the workplace has a positive effect on the company’s performance, because employees are more willing to participate and point out potential risks. This, in turn, is a prerequisite to learn and innovate.



**Adina Dorthe**

**Position:** Head of Innovation and R&D, Digital Services  
**Division:** GF Machining Solutions  
**Location:** Biel/Bienne [Switzerland]  
**Joined GF in:** August 2019

**From ideas to innovations**

With the goal of encouraging the development of innovative ideas, GF Machining Solutions’ Kickbox initiative has been fostering trust between management and employees in Switzerland since 2019.

The Kickbox team calls for ideas on how to improve a specific area, sustainability for example. Every employee is encouraged to submit ideas. After a first check by the Kickbox team, the employee joins the program, which has three phases. At the end of each phase, employees pitch their ideas in front of a jury with members of the top management. The ideas with the greatest potential and business value receive the green light to enter the next phase.

During this process, employees become the CEOs of their own ideas: they can devote up to 20 percent of their working hours to the development of the idea and get access to funds, a mentoring program and expert knowledge if required.

Adina Dorthe, Head of Innovation and R&D, Digital Services at GF Machining Solutions, is responsible for Kickbox. She summarizes its purpose: “We aim to use the power of the crowd, in our case all our employees, to come up with new ideas that might turn into technical innovations or new business models.” Participants use customer-centric and agile methodologies such as Design Thinking, which they can then apply to their regular work. “It is a unique experience for our colleagues to develop their ideas into something real and valuable – and to feel the trust that is placed in them.”

Jose Gonzalez, Expert Milling at GF Machining Solutions, has already presented two ideas to Kickbox. He’s a fan of the initiative: “It’s great that our management invests so much time in the project and gives personal feedback to all participants. They trust us and reward our efforts.”



**Jose Gonzalez**

**Position:** Expert Milling  
**Division:** GF Machining Solutions  
**Location:** Biel/Bienne [Switzerland]  
**Joined GF in:** August 2007



↑ Developers standing together with the heads of the third Kickbox round in Biel/Bienne [Switzerland], which include Adina Dorthe (2nd from l.) and Jose Gonzalez (7th from l.).

← Developer Jose Gonzalez shows one of the prototypes to Adina Dorthe from the Kickbox team.



Center in Stabio (Switzerland) and a research team from Inspire, the leading Swiss competence centre for technology transfer to the mechanical, electrical and metal (MEM) industries. They are cooperating to develop a new aluminum alloy for additive manufacturing.

Put simply, additive manufacturing is industrial 3D printing, and the alloy is the ink. Except that in this case, it's not a liquid, but a powder. To print a metal component, a laser heats this powder and forms the desired shape, layer by layer. "This way it's possible to create highly complex shapes that are both lightweight and extremely stable," says Sebastian Wierschke, Technical Expert Additive Manufacturing at GF Casting Solutions, who oversees the project.

At its AMotion Center in Stabio, GF works with the latest additive manufacturing technologies and machines from GF Machining Solutions to create highly complex components. However, the alloys currently in use are not an optimal choice for the print process as they are expensive and not very sustainable.

Therefore, Sebastian and the colleagues in Stabio wanted to invent a new high-strength aluminum alloy.



**Sebastian Wierschke**

**Position:** Technical Expert Additive Manufacturing & Failure Analysis

**Division:** GF Casting Solutions

**Location:** Schaffhausen (Switzerland)

**Joined GF in:** January 2015

It should not contain any rare earths, should meet the high requirements of the aerospace industry, and be priced similarly to alloys that are currently in use. The goal is to use the additive manufacturing process to create highly complex components that can withstand blazing temperatures – aircraft turbine blades with built-in cooling lines or particularly shaped exhaust pipes for Formula 1 racing cars.

Sebastian explains that trust plays a major role in this project because the GF team shares sensitive information with Inspire. "Without mutual trust, this close collaboration would be impossible," he says. The shared data is valuable. In addition to details of material selection and processing procedures, it also includes the essence of years of customer feedback. Inspire has been in contact with GF for years for other research projects. "Thanks to this good and ongoing cooperation, both sides took a leap of faith," says Sebastian. Contracts lay down the rules of the cooperation. They also determine what happens if the research is successful and a new alloy developed: GF is entitled to sign a patent while Inspire is remunerated.

The current project started in March 2021 and is scheduled for completion in July 2023. Sebastian and the colleagues in Stabio regularly discuss its progress and the next development loops with Inspire. For now, the research looks promising. Regardless of the final result, Sebastian is already benefitting from the collaboration: "I'm gaining a lot of new insights from the partnership that I can apply to other areas of my work."

The examples of Sebastian, Sanjay and Riccardo, and Jose and Adina show how trust creates a working environment in which employees take risks and succeed as a team. The three examples also illustrate that project success is not the only goal. The knowledge gained and the encounters along the way are valuable and help to create a collegial workplace where people – and their ideas – can thrive. ■

**0.5**

**Millimeter** – some highly complex components can be manufactured with walls that are this thin when produced by additive manufacturing.



**CEO CORNER**

## The energy that propels us forward

**T**rust – whether among peers, or with customers and partners – keeps an organization together and has an impact on every relationship. Without it, there is no collaboration and no progress. At GF, I think of trust as the energy that propels us forward, a key element that underpins our culture and makes us faster.

GF is trusted by its customers, who can count on its technical excellence and expertise. GF people trust each other, both when things go well and when they go not so well, building the foundation on which our business develops. We trust that our partners work with us towards common goals, and share our same vision. As CEO, I trust my colleagues every day to give their best and go the extra mile when needed. It is a prerequisite for all interactions. I trust you to own your ideas and try new paths, to correct mistakes and celebrate successes.

It is great to see how you integrate our new values in the way you do business, and create a winning culture every day. I want to thank you for your trust in GF, and for believing that our organization puts its efforts where it really matters: its people. Together, we are empowered to seek change, to move forward and, importantly, to become better, while building a respectful and healthy environment today and tomorrow. ■

**Andreas Müller**  
CEO GF

**“We share sensitive information with our research partners. Even with contracts signed, trust is a must.”**

**Sebastian Wierschke,**  
Technical Expert Additive Manufacturing at GF Casting Solutions



→ Sebastian Wierschke chats with a colleague at GF Casting Solutions in Schaffhausen (Switzerland).



← The alloys that are developed are used to print highly complex shapes that are lightweight yet sturdy.



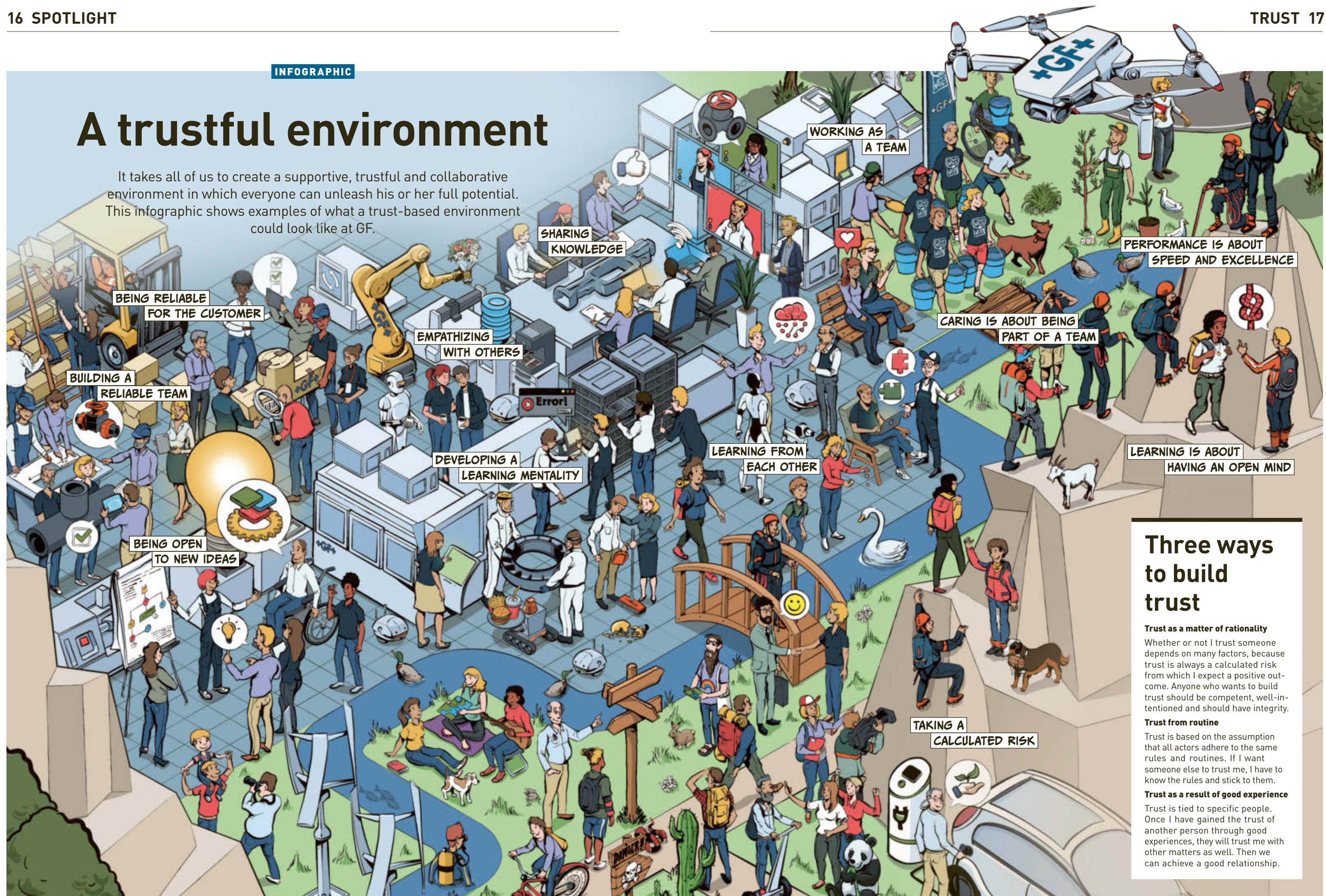
← Sebastian Wierschke is researching new types of alloys that do not require rare earth metals.



INFOGRAPHIC

# A trustful environment

It takes all of us to create a supportive, trustful and collaborative environment in which everyone can unleash his or her full potential. This infographic shows examples of what a trust-based environment could look like at GF.



BEING RELIABLE FOR THE CUSTOMER

BUILDING A RELIABLE TEAM

BEING OPEN TO NEW IDEAS

EMPATHIZING WITH OTHERS

DEVELOPING A LEARNING MENTALITY

SHARING KNOWLEDGE

LEARNING FROM EACH OTHER

WORKING AS A TEAM

CARING IS ABOUT BEING PART OF A TEAM

TAKING A CALCULATED RISK

PERFORMANCE IS ABOUT SPEED AND EXCELLENCE

LEARNING IS ABOUT HAVING AN OPEN MIND

## Three ways to build trust

### Trust as a matter of rationality

Whether or not I trust someone depends on many factors, because trust is always a calculated risk from which I expect a positive outcome. Anyone who wants to build trust should be competent, well-intentioned and should have integrity.

### Trust from routine

Trust is based on the assumption that all actors adhere to the same rules and routines. If I want someone else to trust me, I have to know the rules and stick to them.

### Trust as a result of good experience

Trust is tied to specific people. Once I have gained the trust of another person through good experiences, they will trust me with other matters as well. Then we can achieve a good relationship.



INSIDER'S VIEW

# Feeling safe to think big

A trust-based workplace is a key success factor in any organization. In this interview, Prof. John Weeks explains how companies can unleash their teams' full potential.

**Your work revolves around "psychological safety." What is this?**

**Prof. John Weeks:** In psychology and leadership studies, the term dates back to 1999, although the underlying concepts are much older. We distinguish four kinds: first of all, "learning safety," or feeling safe enough to admit that there is something you are not doing as well as you could. The second one is "challenging safety": is it safe to raise a different point of view in this team? There are connections between psychological safety in a team and trust, as they mutually increase each other.

**And what are the other two?**

Next is "being me safety": is it okay to be my true self, or do I have to pretend to be somebody I am not? Will my peers, my boss, my reports, accept who I am and see my potential to grow? Finally, "collaborating safety": are there repercussions for offering or asking for help?

**Why does this matter in a business context?**

Research shows that psychologically safe teams perform better, across cultures and regions of the world. If you scale that up to the entire organization, it's a powerful advantage. When people are willing to learn, try new paths, stretch themselves to reach an even higher level of performance, imagine where they can get. If you want them to

think big, having that safety is key. Also, if leaders do more "caring," they can expect more "daring" from their teams.

**How can you achieve that?**

As a leader, part of your job is to build a caring and supportive environment, where people feel acknowledged and trusted. Another part is to challenge, inspire and dare your people to take risks and reach higher. If someone feels unsafe working with you and you know it, you'll both behave defensively and will fail to take a step forward.

**Is psychological safety a responsibility only for senior leaders?**

Peers are the ones who play the biggest role in making you feel safe. However, it has to start at the top, otherwise it won't happen across the rest of the organization. Senior leaders should model the behavior they wish to see in their teams. All employees can influence and shape the level of trust and safety in their part of the company.

**How can they do so?**

Here's a tip: Teams with high levels of psychological safety tend to have roughly balanced conversational turn-taking, which means that over the course of a month of meetings, everyone on the team spoke about the same amount. If that's not the case, ask yourself what you need to do to balance it out. Do you need to talk less and listen more? Or do you need to speak more and let others hear your views and ideas?

**What's the advantage for employees?**

The goal is to enable people to give their best, empower them to take calculated risks, explore and seek change. Helping them to meet their potential is what pushes everyone else forward. ■



**Prof. John Weeks**

**Position:** Professor of Leadership and Organizational Behavior at the International Institute for Management Development in Lausanne (Switzerland)

**Background:** Started his career as an engineer and lived on three continents before settling in Switzerland

**Expert in:** Leadership, change and company culture; he runs a leadership development program for GF, focused on GF's new culture and values

YOUR VIEW

# What was the biggest risk you've ever taken?

In life, there are always situations in which you need to take a risk. Four GF employees from different regions talk about risks they've taken in their professional and private lives, and how they eventually mastered them with a bit of trust.

**Marcel Storck**

"In 2008, I moved from where I was living in Münster (Germany) to my girlfriend's place in Regensburg – 640 kilometers away. The change was not easy: new surroundings, a new job, and the Bavarian dialect, which I had to get used to. I know now that it was the right move. I've been happily married to my girlfriend for nine years, and I've found a great employer in GF."



**Position:** Technical Sales Building Technology  
**Division:** GF Piping Systems  
**Location:** Albershausen (Germany)  
**Joined GF in:** 2014

**Hongguang Yao**

"I purchase materials and services at the request of internal stakeholders. The biggest risk for me comes from vague requests, as unclear requirements can lead to a wrong purchasing decision. The strong support of my supervisor and my wish to constantly learn and develop helps me to face even difficult situations."



**Position:** Sourcing Manager  
**Division:** GF Casting Solutions  
**Location:** Kunshan (China)  
**Joined GF in:** 2008

**Vania Alves**

"The biggest risk to my life was not one that I took deliberately: I was infected with COVID-19 and came close to giving up hope. The people by my side made me understand that it was in my own mental power to change things. Finally, I left the hospital after two weeks with my lungs 75 percent restored – and I carry on being grateful for this second chance."



**Position:** Sales Coordinator  
**Division:** GF Machining Solutions  
**Location:** São Paulo (Brazil)  
**Joined GF in:** 2004

**Doğukan Doğan**

"When we prepared the production of a new Silenta product, I had to take decisions that involved risks due to a lot of unknown factors. Thanks to the flexibility and experience of our maintenance and product development teams, we succeeded in quickly finding a solution. For me, this was an amazing experience!"



**Position:** Production Line Manager  
**Division:** GF Piping Systems  
**Location:** Çerkezköy (Turkey)  
**Joined GF in:** 2021

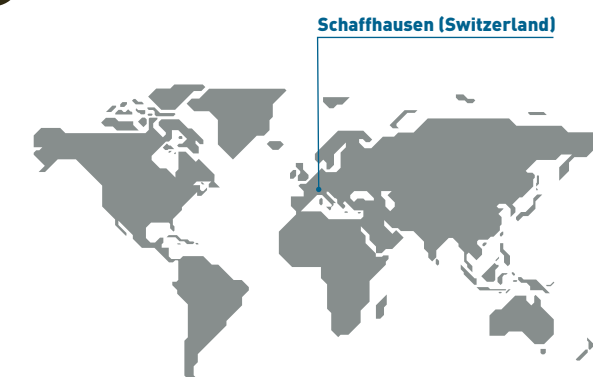


**Flexibility is worth it**  
 During the lockdown, Lisa Schnell reinvented how she worked  
**Page 23**

**Teamwork without borders**  
 How teams from Chicago and Tokyo can cooperate  
**Page 24**

## Friendly hero with discipline

**HIDDEN HERO:** Sreileak Lea Vong has applied a great deal of discipline and faced many challenges while working toward her goals. And now, at 27, having completed her own training, she is already passing on her know-how to apprentices at GF Piping Systems. A native of Cambodia, she had it anything but easy when she embarked on a new life more than 11'500 kilometers away from where she grew up.



In just seven years, Sreileak Lea Vong – or Lea for short – has managed to settle in a country that was completely foreign to her, learn German in no time at all, and complete an apprenticeship at GF. And now, at just 27, she is passing on her know-how to apprentices at GF Piping Systems in Schaffhausen (Switzerland) as a vocational trainer and mentor. Lea wants to serve as a role model for women in particular and get them more interested in technical professions.

Despite the language barrier, Lea completed her four-year training as an engineer in plastics technology in 2020 with a final grade of 5.1 – the top grade in Switzerland is a 6. “I don’t enjoy things when they’re too easy,” Lea says. “And if someone says, ‘You can’t do that,’ this motivates me to prove them wrong.”

### A childhood dream

Lea grew up in Siem Reap in northwestern Cambodia. She dreamed of traveling to foreign countries even as a child. “I spent my childhood in a village that was visited by many tourists. I was determined one day to see for myself how people in other countries live.” As a teenager, she explored the world through books. One book that really impressed her is called “Willpower,” which discusses the power of self-control and discipline. “It showed me how to act when I would be the head of a team myself one day,” Lea says. She faced hardship back in Cambodia. She wanted to study economics, but



↑ Sreileak Lea Vong, as a mentor, shares her know-how with colleagues.

had to abandon her plan after a year. She wasn’t making enough as a waitress to cover both her tuition and the cost of living. She also explains that women in Cambodia are under a lot of pressure to marry young and not →

### Sreileak Lea Vong

**Position:** Vocational trainer for plastics technicians  
**Division:** GF Piping Systems  
**Location:** Schaffhausen (Switzerland)  
**Joined GF in:** September 2021



go to work. "I consider it to be a great privilege that I can fully concentrate on my job here in Switzerland," Lea says. "I don't always have to be the best, but I do want to give it my best every day."

**A crucial step in her career**

Lea discovered her enthusiasm for technology one day at an open house in GF's training center. She applied for an apprenticeship at GF Piping Systems and was accepted after an initial internship. The apprenticeship as an engineer in plastics technology didn't pose any problems for Lea. Shortly after completing it, she did a year-long stint at another company. However, the team spirit she knew from GF didn't exist there. At the end of 2021, GF posted an opening for an inhouse trainer, so Lea applied – and got the job. Many colleagues already knew her from her apprenticeship, and they felt she was just the right person for the job. Lea quickly proved them right.

**Always ready to listen**

Lea genuinely enjoys working with the apprentices, and this is plain to see. She explains technical content with professional precision, her positivity opening a direct channel to the apprentices, while staying ready to listen at all times. "Lea has patience and nerves of steel. She successfully completed her apprenticeship – despite the language barrier – and I have great respect for that. She serves as a role model for us," says Liridon Muzlijaj, who is currently in his first year of apprenticeship.

The majority of Lea's colleagues are men. "I had to prove myself first in the beginning, maybe a bit more than had I been a man," Lea recalls. "I am now part of a great team in which everyone contributes their individual strengths." She wants to use her standing as a trainer to show women in particular how they can employ their strengths in technical professions. Lea doesn't consider body size or strength to be an obstacle. "If the work is physically difficult, I ask for help or just use some equipment such as a pallet jack."



↑ Technology has always fascinated Lea, and she enjoys working with apprentices.

↓ As a teenager, Lea explored the world through books. They helped her learn German when she was just getting started in Switzerland.

Living in Cambodia when she was younger, Lea had dreamed of living abroad. With discipline and confidence, she fulfilled that dream on her own within a few years. Her next goal is already in sight. "I want to keep learning so I can take on even more responsibility in the future." And with her typical smile, she adds in Swiss German: "I'm very happy here, both at work and in my private life."

**WHY SHE IS MY HERO:**

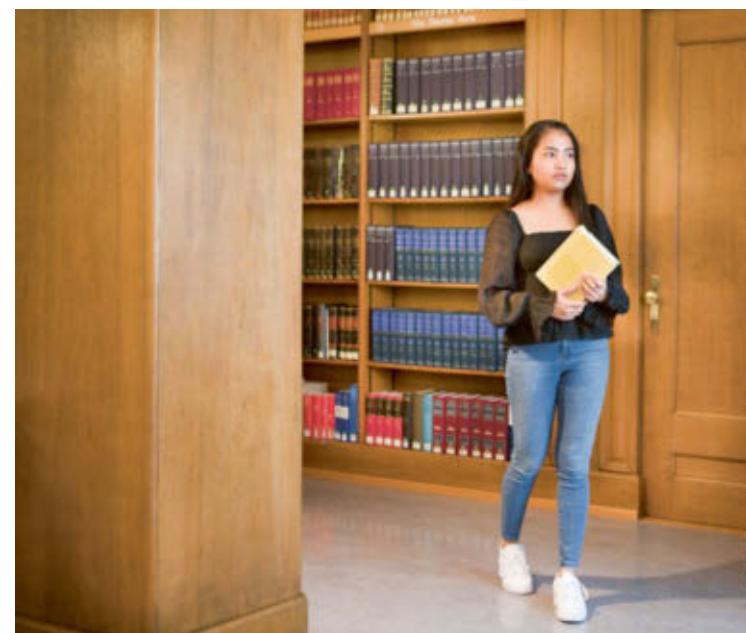
**"Lea is capable of getting our apprentices and colleagues excited about complex technical issues. Her smile is infectious and motivates us all to excel."**

**Edin Hasific**  
Lead Engineer  
Microelectronics and  
Head of Vocational Training  
Schaffhausen for  
GF Piping Systems



**What about you?**

Which colleague is your hidden hero? Send us an e-mail with your explanation to [globe@georgfischer.com](mailto:globe@georgfischer.com)



**MY BEST LESSON**

**Flexibility opens the door to opportunity**

The COVID-19 lockdown turned Lisa Schnell's everyday life upside down. The SAP consultant at GF Casting Solutions had to find new structures – an experience that has opened up new opportunities for her today.



**Lisa Schnell**

**Position:** SAP Consultant Business Services (Sales and Logistics)  
**Division:** GF Casting Solutions  
**Location:** Singen (Germany)  
**Joined GF in:** 2017

Working from home with daycare centers closed – the first major lockdown presented Lisa Schnell with a serious new challenge back in March 2020. But she is used to adapting quickly to new situations. She has been a ski instructor in the Allgäu (Germany) every year during the winter breaks since she was 16 years old. Lisa knows her stuff, whether in foggy or icy conditions, and shows others how to react in extreme situations. But it was an unfamiliar situation when she suddenly found herself not going into the office anymore.

her daughter was only four years old. Sometimes she would burst into an important meeting in her pajamas, or she would be hungry or bored and demand attention from her parents. "There was a fair amount of mutual understanding, because many colleagues felt the same way," Lisa remembers. "The situation was a big challenge for everyone." And it was something that could only be mastered as a team, both at home and at GF.

Meetings were held virtually instead of in-person and at the office. She had to coordinate with her husband, who is a teacher, exactly who could focus on their work and when. At the time,

It took two weeks, but she then had a great idea for how to keep her daughter busy during working hours: a schedule with specific games and crafts, including defined breaks. "We had to buy a few more Lego sets, but it was worth it. After that, the days were more relaxing for all of us."

**"Now we have the necessary flexibility for a good work-life balance."**

Lisa also started to settle in better into her new job routine. Online training made it easier to use the new communication tools such as Microsoft Teams. "There was some initial skepticism, but our meetings quickly became more efficient," says Lisa. Her team soon started to set specific meeting times to coordinate things. "You automatically get to the point faster if you only have 30 minutes for each topic," Lisa says.



She learned during the pandemic that it pays to tackle challenging situations with an open mind and creativity while focusing on the positive aspects. For example, when she is working from home, she can distribute her working hours throughout the day with greater flexibility and can sometimes attend meetings in the late afternoon. Before the pandemic, she

was a part-time employee and was only in the office until midday. Now it is possible to deal with personal matters between meetings or extend her lunch break if necessary. "The new flexibility has taken the pressure off my private life, so now I'm also much more relaxed at work."

And there was also a new career move for Lisa. Just in time for her return to the office in April 2022, Lisa was appointed manager of a team of three. She goes into the office for half the time, and the other half she works from home. She even increased her workload from 50 to 70 percent, because she had been a part-time employee since becoming pregnant. "That was why I was not interested in a team leadership position. Now I have a good feeling about it. We have the necessary flexibility for a good work-life balance." Lisa is grateful for this opportunity. "I think it's great that GF practices its values like this and is open to hybrid work models."



**What about you?**

What life experiences would you like to share with your colleagues? Write to us at: [globe@georgfischer.com](mailto:globe@georgfischer.com).



# From Chicago to Tokyo – bridging the distance as a team

**A STRONG TEAM:** A complex machine and a joint effort to set it up from 10'000 kilometers away: The first installation of an MLTC machine in Japan, an ultrafast laser tube cutter, is a victory of team spirit and collaboration over complexity and time differences.

The process is normally straightforward when it comes to setting up the Microlution Ultrafast Laser Tube Cutter (MLTC). An applications engineer from GF Machining Solutions visits the customer's site to set up the machine, typically used for producing high-precision medical components. He or she trains the users in both hardware and software. Given the complexity of the machining process, the in-person aspect is critical.

But when a Japanese customer decided to enter the medical market in late 2019, the COVID-19 pandemic was only a few months away. The Tokyo-based company was interested in the MLTC laser tube cutting platform

to produce medical marker bands: tiny tubes used in catheter surgeries.

**1 femtosecond** is a unit of time equal to one millionth of one-billionth of a second, or 0.000000000000001 seconds. The MLTC machine uses laser pulses in this range.

## Precision in the femtosecond range

These marker bands help surgeons place the catheters during procedures such as angioplasties. The MLTC machine uses laser impulses in the femtosecond range to prevent heat damage and minimize the need to rework parts. This means marker bands that are machined faster, more sustainably, more precisely and more cost-effectively due to less material loss. "I was confident that the customer could produce high-value products with our MLTC machine," says Yasuhiro

Wada, Microlution Business Development Manager at GF Machining Solutions in Tokyo. Wada was the customer's first point of contact in Japan, from initial inquiry to installation. But for the project to succeed, he needed support from 10'000 kilometers away. This is because the MLTC laser tube cutting platform is produced at GF Machining Solutions Microlution in Chicago (US). Mike Lerner, Sales Support Manager Microlution, and his team had the necessary expertise.

In early 2020, shortly after the project entered its crucial phase, Japan closed its borders. The world was in lockdown. Transferring the complex set-up processes for the MLTC machine remotely from the United States to Japan, with a team unable to travel and facing language and technical barriers, was a daunting prospect. "Setting up everything from afar and remotely was a big concern, but we always went forward with the assumption that we could make it work as a team," says Lerner.

## Relationships matter

Meanwhile, in Japan, Wada negotiated with the customer. At first, other machines from competitors were also in the running. However, having worked with GF in the past, the customer trusted the high quality of customer service at GF Machining Solutions – one of the key factors from his perspective.

What followed was an active phase of fine-tuning the machining process. That's when the collaboration between the teams in Chicago and Tokyo kicked into gear. Among the driving forces at GF Machining Solutions Microlution were Alessio De Curtis, Applications Engineer and Ivan Sanchez, Test Engineer, who worked many nights to accommodate the time difference with Japan. Through frequent exchanges between Wada and the customer's technical lead, as well as efficient

closed-loop feedback, the team was able to define the requirements quickly and precisely.

## The crucial test

The pandemic was in full swing once it was time for the Factory Acceptance Test (FAT) of the machine – the real-time proof that all the requirements had been met. Typically, the customer attends the test on-site in Chicago. Without the option of international travel, the customer joined remotely. The live video lasted several hours and was crucial because it showed the machine's accuracy and high quality. Based on the positive virtual FAT results, the customer gave the go-ahead to ship the machine.

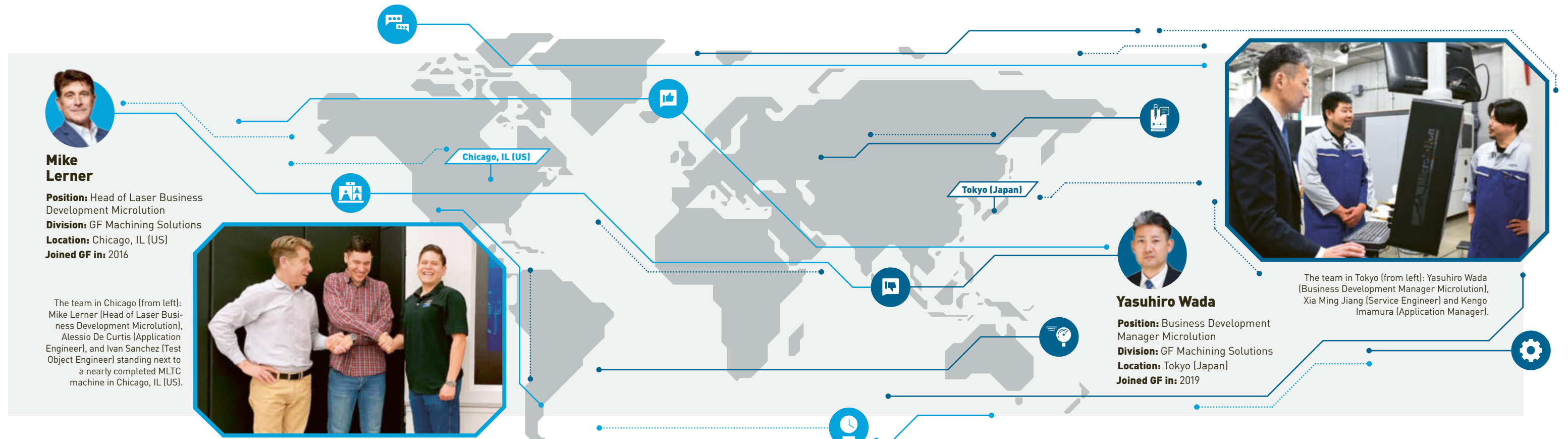
In early 2021, the Japanese team successfully installed it as the first MLTC laser outside of the US, even though they had never seen one before. Detailed documentation, remote training with the Chicago-based team and live video communication all helped it to cross the finish line. For parts programming, De Curtis trained Wada and Kengo Imamura, Application Manager at GF Machining Solutions Tokyo, at the same time as the customer. Helping each other is the "spirit of GF," says Wada.

## Model for future success

The customer now has an ultrafast laser tube cutter that allows the mass production of medical marker bands. Measures such as more detailed documentation and remote video FATs and programming are expected to improve the efficiency of installations and supplement the work of cross-regional GF teams, even beyond the pandemic. Meanwhile, the newly established expertise is helping to attract new business. The US team recently installed a Microlution ML-5 machine for an industrial micro-drilling and micro-cutting application in China – again remotely from Chicago.

**0**

**pieces of scrap.** The MLTC machine produces nearly no scrap. Why? Because it utilizes an ultrafast and ultraprecise laser process and an intelligent clamping tool for small parts with thin walls.







Most still come from Asia: an employee inspects the batteries produced at a factory in Nanjing (China).

**Fire protection**  
How GF is producing heat-retardant pipes for ships  
Page 29

**Transformed**  
GF's success in the heart of Romania's car industry  
Page 30

## How GF plans to conquer the battery market

**OUR MARKETS:** Environmentally friendly production processes are necessary for manufacturing climate-friendly electric cars. This is especially true when it comes to battery production. The products and solutions from GF Piping Systems can contribute greatly to this. Will this be a new giga sales market for the division?

**B**atteries are of huge importance for the energy and transport transition. The move away from fossil fuels such as coal, oil and gas is leading to greater demand for electricity from renewable sources. This means that electricity storage systems are necessary to ensure the availability of electricity everywhere and at all times, even when

the wind is not blowing or the sun not shining. The International Energy Agency estimates that, by 2040, close to 10'000 gigawatt hours of batteries and other forms of energy storage will be needed worldwide – 50 times more than is available today.

Modern production sites for lithium-ion batteries – the battery type used in electric cars – are being built around the world to meet this demand, which has soared in the last two years due to the high demand for electric cars. These facilities are referred to as gigafactories, testament to the sheer scale of their construction. GF Piping Systems is taking an important role in equipping such gigafactories, as the ambient air in the production halls must meet special requirements when producing lithium-ion batteries. It is only possible to manufacture high-quality cells in a safe manner when the humidity is maintained at a very low level. GF Piping Systems has the right product to ensure the necessary quality of the ambient air: COOL-FIT piping systems.



↑ Battery manufacturer CATL- is constructing a factory in Arnstadt, Thuringia (Germany) with a view of Wachsenburg Castle.

### A highly competitive market

Marthinus Venter is Senior Business Development Manager at GF Piping Systems in Schaffhausen (Switzerland), responsible for the booming market in lithium-ion batteries. "The electric car battery segment is one of the fastest growing markets in Europe, and →



**Marthinus Venter**

**Position:** Senior Business Development Manager Battery Production  
**Division:** GF Piping Systems  
**Location:** Schaffhausen (Switzerland)  
**Joined GF in:** 2021



probably worldwide," he says. Global sales of electric cars reached 6.6 million in 2021, more than double the market share in 2020. The vast majority of lithium-ion batteries are currently produced in Asia, but Europe is catching up, with more than 30 new gigafactories planned. The EU Commission is accelerating the development of competitive battery cell production capacity in the EU with funding for R&D and production sites.



↑ Some cars need complex rechargeable batteries, like the BMW iX Flow.



**Valuable geographic proximity**

Both the type and the quantity of energy consumed in battery production are crucial for the carbon footprint of the batteries. For this reason, locations in the EU that produce with electricity from renewable energies are gaining in importance. Energy efficiency also plays a vital role. It is here that the performance of COOL-FIT impresses. Due to their low thermal conductivity, the plastic pipes are already 30 percent more energy-efficient than comparable pipes made of copper, iron or steel.

"The dehumidification process accounts for more than 40 percent of energy consumption during the production of lithium-ion batteries. Cooling systems are necessary to dehumidify the air. For this reason, gigafactory operators place great importance on the efficiency of the cooling system," says Venter. GF Piping Systems produces COOL-FIT with robust pre-insulation, meaning that battery producers can keep their energy consumption low.

**A market for the future**

Marthinus Venter and his team plan to use COOL-FIT as a door-opener to the highly competitive European battery market. The market was extensively analyzed to find out who are the potential customers and to understand their needs.

The solution from GF has already convinced two globally successful companies: CATL, the world's largest manufacturer of batteries for electric cars, and Northvolt from Sweden. COOL-FIT is already being used by both of these companies.

**Small, compact, high performance**

Lithium-ion batteries have the highest energy density compared to other technologies. They can store the most energy per kilogram of battery, making them the top choice for use in electric cars.

**A booming market**

The future looks very promising for batteries, rechargeable batteries, and energy storage systems. Most of them still come from Asia, but Europe is catching up. Factories are being built in many regions.

**50**

The International Energy Agency estimates that, by 2040, close to 10'000 gigawatt hours of batteries will be needed – 50 times more than is available today.

**4**

Patenting activity in batteries and other electricity storage technologies grew four times faster than the average of all technology fields between 2005 and 2018.

**2030**

According to market research firm Benchmark Mineral Intelligence (BMI), European battery cell production capacity is expected to be enough by 2030 to produce almost 15 million fully electric vehicles.

**European gigafactories**

Battery plants in Europe are expected to meet demand locally by 2025. To do so, many new gigafactories will be built and supported by new precursor factories, active cathode production facilities, lithium refineries and battery recycling plants – creating a new high-potential value chain in which GF can participate.



GF aims to score points in the battery market with the energy efficiency of COOL-FIT.

**INNOVATOR'S INSIGHT**

**Fireproof on the high seas**

A team from GF Piping Systems has developed a heat-retardant protective jacket that protects plastic pipes in cruise ships, merchant fleets, or offshore vessels in the event of a fire at sea. Andreas Faude, Product Manager for Marine Products, describes the journey from idea to product.

**0%**  
The HEAT-FIT Jacket System contains no environmentally hazardous materials

**30%**  
How much lighter ecoFIT pipes combined with the HEAT-FIT Jacket System are compared to metal pipes

**Up to 1'000°C**  
At this temperature the HEAT-FIT Jacket System protects plastic piping systems for up to 30 minutes.

**HEAT-FIT Fire Retardant System**

**The challenge:**

Different safety requirements apply to piping systems on ships depending on the application area. Our ecoFIT plastic pipes offer a durable alternative to metal pipes, but only for non-essential application areas such as air conditioning systems. To also be able to offer the pipes for essential applications on ships – areas that are essential in keeping the ship safe in emergencies – we decided to develop a fire-retardant protective jacket for plastic pipes.

**The process:**

It took six years to develop the system. We ran more than 100 trials in the last two years to achieve the desired properties for the jacket system. We

had to optimally match the individual components, such as fiberglass fabric and TPU (a synthetic plastic), so that it would protect piping systems made of PE at temperatures of up to 1'000° Celsius for at least 30 minutes – ensuring an adequate amount of time to extinguish a fire.

**The result:**

Our HEAT-FIT Jacket System fulfills the strict regulations in effect for the international shipping industry. It is fire retardant, durable, and lightweight. Thanks to the jacket system, our customers can now use plastic pipes in essential areas of the ship. The system has been available to order since the end of April 2022.

**Andreas Faude**

**Position:** Product Manager Marine  
**Division:** GF Piping Systems  
**Location:** Schaffhausen [Switzerland]  
**Joined GF in:** 2020







Pitești (Romania)

The foundry in Pitești (Romania) has belonged to GF Casting Solutions since 2017.

# GF in the heart of Romania's car industry

**ON SITE:** Since its acquisition by GF, a family business in Pitești (Romania) has become a successful and continually developing site – not least thanks to a motivated team with high quality standards.

When a company is acquired by an international corporation, it often sows uncertainty among employees. And it was like that in 2017, when GF Casting Solutions took over Eucasting's foundry in Pitești (Romania). "Even I was concerned. We were facing a huge change – going from a family-run business to a multinational company," recalls Production Manager Robert Popescu, who is in charge of coordinating and planning the entire production process at the site.

The foundry produces aluminum cast components for kitchen appliances or the automotive industry, for example. "Our advantage over our market competitors is that we can cover all processes within the company. This includes casting, trimming, precision machining, deburring, coating, and final inspection." In the process, customers can cut costs and save valuable time because everything is delivered from a single source.

## Further development of the site

In 2019, GF Casting Solutions opened in a tool shop and a new administration building in Pitești, with modern workplaces and conference rooms. The opening of the tool shop was an especially important move in terms of acquiring new customers. Pitești is considered a hub of the automotive industry in Romania, as companies such as Renault and Ford are located in the immediate vicinity. These companies rely heavily on important components for body and structure and powertrains, produced using die-casting tools, and cannot wait for them for weeks. Previously, the team in Pitești had sent away their molds and tools to be repaired. It could often take up to three weeks for the repair work to be completed. With its own tool shop, repairs can now be carried out on-site and in just a few hours – affording the GF team and customers extra time and giving them a decisive edge. For example,

about

# 450

employees currently work at the Pitești and Scornicești plants.

about three out of 600 molds for lightweight aluminum vehicle parts need to be reworked every day. "Production of components for electric vehicles started this year, and we're already in talks with Renault and Ford regarding other upcoming products," says Popescu. There are plans to soon start casting even larger components on-site – engine mounts for vehicles, for example – using larger die-casting machines.

The company has also invested in new technologies at the site, in line with the Strategy 2025, which aims to make GF a leader in sustainability and innovation. Each month nearly 250 cubic meters of water are required to meet the needs of the production facilities – for example, in cooling the installations. For this reason, a 150-meter well was drilled in February 2021 "Now we have our own water. We clean the wastewater ourselves, which means we can reuse it," says Popescu.

## New opportunities for employees

GF took over all employees in 2017, and more than 150 new employees have been added in the meantime. Being part of a large international corporation delivered numerous benefits to existing employees. These quickly outshone initial concerns. According to Popescu, in addition to more planning security, access to continuing education opportunities is something his colleagues greatly appreciate.

These include professional development for specific job groups, language courses, and training sessions on collaborative culture and values, among other topics. There is even the opportunity to visit other GF sites, for example in Austria or Germany, to share expertise and learn about new production

technologies. Popescu gained a lot of new insights about die-casting and work processes from his colleagues in Altenmarkt (Austria) in December 2019.

Safety at work is particularly important to Popescu as production manager. He says that this area has improved significantly since the site became part of GF. For example, the amount of particulate matter produced during metal processing has been greatly reduced. "Since we installed aluminum dust filtration systems in the finishing area, we have had 0% aluminum particles in the air. Before, the figure was as high as three micrograms," says Popescu. According to Romanian health regulations, there must be no particles of any kind in the air, because this particulate matter can cause lung disease.

These positive changes meant it wasn't difficult for Popescu to feel like he belonged to a big family at GF. "I am happy that we have such an important company as GF in our region. It's my obligation to support the company and keep it moving forward."

Currently, for example, he is helping his colleagues, in his capacity as an internal trainer for "7 Habits for Highly Effective People", to understand the GF values even better and to fully unleash their own potential – just as GF once recognized and promoted the potential of the foundry in Pitești. ■



**Robert Popescu**

**Position:** Production Manager  
**Division:** GF Casting Solutions  
**Location:** Pitești (Romania)  
**Joined GF in:** 2017

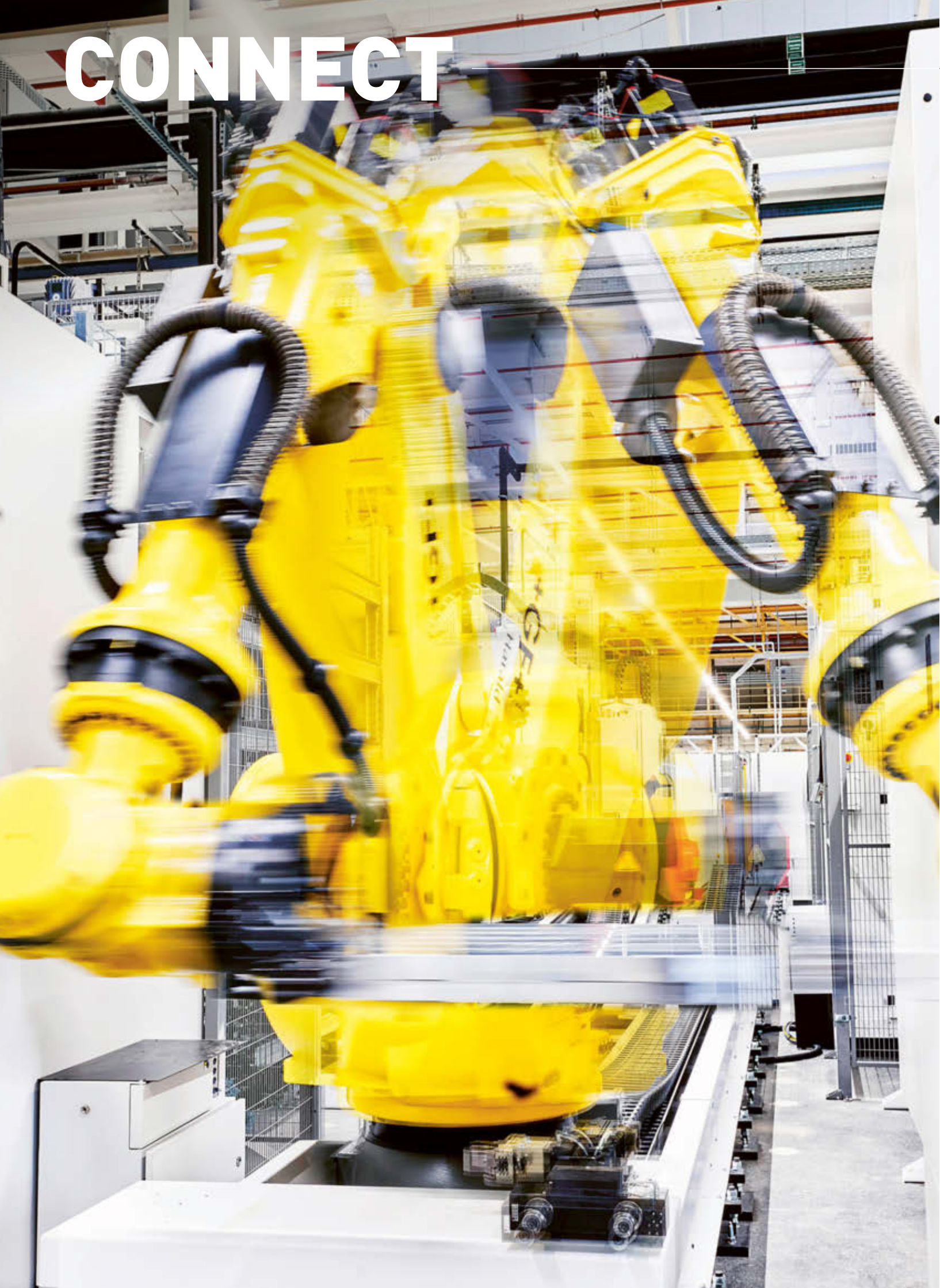


Aluminum parts are produced in the foundry in Pitești – from casting to final inspection.



Robert Popescu (right), Hans Mikota (second from right), site manager, and employees in a meeting.





**The right choice**

GF checks whether new products are sustainable

Page 36

**There's GF in bread**

How GF plays a role in putting bread on the table

Page 37

## New technologies for electric vehicles

**OUR CUSTOMERS:** GF is developing unique solutions for customers to help them make more environmentally friendly vehicle components. For the Schaeffler Group plant in Höchststadt (Germany), GF Machining Solutions supplied machines as well as the integration and automation solution. This is one of the largest orders for the division in recent years.

The sci-fi movie "Back to the Future" came out almost 40 years ago, but has by no means lost its cult status. The final scene in particular is now legendary. "Roads? Where we're going, we don't need roads," says Doc Brown as he and Marty McFly lift off. With a bang and a flash, the two time travelers find themselves in the future. It's 2015 and the skyscape is full of flying cars.

**Pure fiction? Not quite.**

The reality today has little to do with what we once thought the future would look like. While our cars remain on the ground rather than up in the sky, the world is looking for ways to replace fossil fuels and make mobility more environmentally friendly. However, what the film showed back then and what we now know for sure is that internal combustion engines have had their day. The future is electric, among other alternative forms of propulsion, and low CO<sub>2</sub>.

GF has been working towards this future for many years. It develops and produces innovative and sustainable solutions such as lightweight cast components to reduce the weight of vehicles or machine tools for making automotive components – for mobility that's fit for the future. All around the world, companies in the automotive and supplier sectors count on GF's expertise.

One of these companies is Schaeffler, a global supplier to the automotive and industrial sectors,



↑ Stephan Eckert (left) and Moritz Matthes (right), both from GF, discuss the current order with Cyriaque Steffen from Schaeffler.

**GF focuses on electro-mobility**

GF recognized early on that mobility is one of the most important drivers of social change, and that it is in great need of fresh ideas. GF has therefore focused its research and development activities on giving customers the right solutions for their environmentally friendly vehicles and associated components.

which is developing mobility solutions for the future in accordance with its Roadmap 2025. The family company headquartered in Herzogenaurach (Germany), about 200 kilometers north of Munich, employs some 84'000 people worldwide. With its technologies and services for CO<sub>2</sub>-efficient drives, electromobility, Industry 4.0, digitalization, and renewable energies, Schaeffler is working to make mobility more effi- →



→ Cyriaque Steffen from Schaeffler inspects one of the three linear cells that GF Machining Solutions supplied to Schaeffler.



“We experience GF as a reliable partner that looks for and finds solutions.”

**Cyriaque Steffen**  
Head of the Tool Technology Center at Schaeffler in Höchststadt (Germany)

cient, more intelligent, and more sustainable. GF and Schaeffler have a rich history and a shared commitment to innovation and sustainability, underscored by GF's Strategy 2025 and Schaeffler's Roadmap 2025.

Schaeffler is already operating more than 80 production machines and twelve automated systems from GF Machining Solutions across nine locations. Last year, GF provided Schaeffler Group with ten Milling machines, twelve wire EDM machines and three linear automation cells, as well as System 3R Tooling packages, among others. Schaeffler will use these in the manufacture of tools for automotive components, including electric motors.

“At the new location in Höchststadt, we are utilizing modern development and production technologies that make optimal use of digital processes and significantly increase our efficiency,” says Cyriaque Steffen, who is in charge of construction and management for Schaeffler's Tool Technology Center in Höchststadt (Germany). “That's where GF Machining Solutions is helping us. We get a package of solutions from a single source.”

**Cyriaque Steffen**

**Position:**  
Head of the Tool Technology Center

**Company:**  
Schaeffler

**Location:**  
Höchststadt (Germany)

**Joined Schaeffler in:**  
1999

**An unprecedented contract**

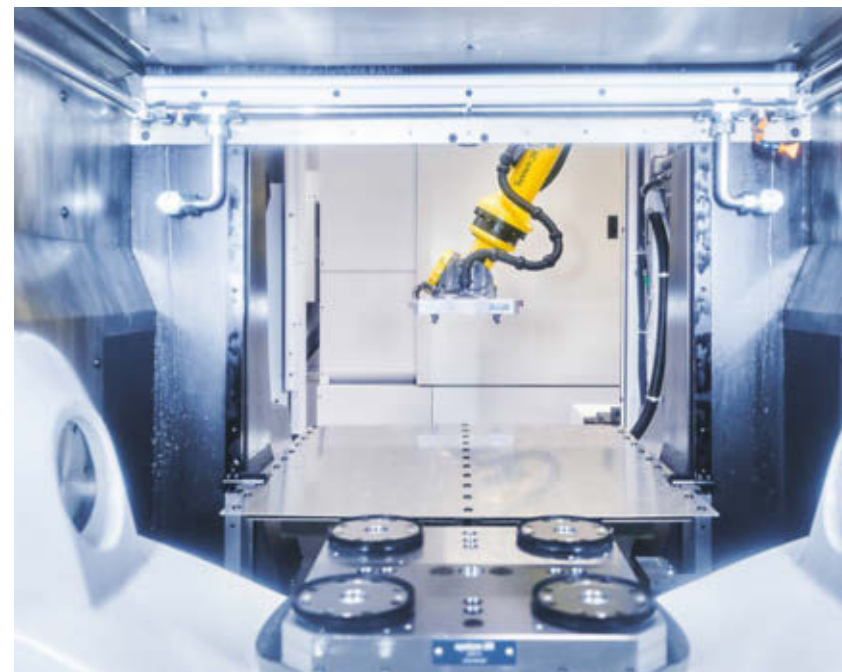
For GF Machining Solutions, this solution package is one of the largest contracts in recent years. Schaeffler ordered the new Milling machines due to their very good experience with similar machines. “We see this as a very strong sign of trust,” says Stephan Eckert, Head of Automation & Product Support at GF Machining Solutions in Schorndorf (Germany) and project manager for Schaeffler. “All this reflects a strong customer relationship and reliable, partnership-based project work.” Moritz Matthes, Technical Project Manager at GF Machining Solutions, is part of this team and values the solution-oriented interaction. “From the very beginning, I had the feeling that everyone had the same goal and that they were all pulling together,” says Matthes.

Cooperation between Schaeffler and GF stretches back an impressive 40 years. If difficulties ever arose during that time, they were overcome together. For example, in 2018 the team went through an exemplary learning process. In cooperation with Schaeffler, GF planned and implemented measures for improvement.



← Moritz Matthes (left) and Stephan Eckert look over a production order at a MILL P Milling machine from GF Machining Solutions.

↓ Schaeffler uses the GF machines to produce tools for automotive components.



Regular meetings and service calls ensured that machines and automated systems functioned properly again. “In the end, this phase really helped us to move forward together,” says Eckert. “It is also why we have the privilege of continuing to support Schaeffler with our expertise and new machines.”

For Cyriaque Steffen, this mutual openness is the foundation for success. “During our regular meetings, we experience GF as a reliable partner that looks for and finds solutions.” In the spirit of Going Forward, both partners are now working together with a view to the future. GF Machining Solutions will continue to innovate for Schaeffler.

**Stephan Eckert**

**Position:**  
Head of Automation & Product Support

**Division:**  
GF Machining Solutions

**Location:**  
Schorndorf (Germany)

**Joined GF in:**  
2018

→ Stephan Eckert (left) from GF and Cyriaque Steffen from Schaeffler are planning to keep cooperating closely in the future.



**TWO POINTS OF VIEW**

**Partner in future-oriented technology**

An interview with Stephan Eckert from GF Machining Solutions and Cyriaque Steffen from Schaeffler.

**Against the backdrop of the transformation in the automotive industry, what are the challenges faced by suppliers?**

**Cyriaque Steffen:** With the changes in the automotive industry, suppliers have to develop completely new products that can be manufactured. Today, that might be parts for an electric vehicle's drive train. But tomorrow, entirely different innovative products could be in demand. We're also expected to be agile and to respond with new solutions as toolmakers.

**Can you give an example?**

**Cyriaque Steffen:** The requirements have changed. The primary focus is materials and surfaces, as well as general manufacturability. GF Machining Solutions has a good package of total solutions.

**What does that look like?**

**Stephan Eckert:** GF Machining Solutions has many different high-precision manufacturing technologies in its portfolio, and with System 3R, it also covers Automation/Tooling. The digital solutions are from Symmedia, among others. This combination enables us to cover a broad scope of customer requirements with our own technologies and expertise, even for complex projects. Since we can count on proven partnerships for advanced technologies, as a general contractor, we can offer customer-specific solutions from a single source.



DID YOU KNOW?



## A radar to improve sustainability

Ever since the summer of 2021, the sustainability of each new generation of machines from GF Machining Solutions has been checked before it goes into development. To do this, the division is using a new tool, which was developed in another GF division. We present it here around four aspects.



This radar model contributes to providing a quantifiable means for increasing the sustainability of new product ideas. The teams use an Excel spreadsheet to enter the values of dozens of criteria, such as raw materials. Each criterion is given a score. The final score is used to calculate the result, which is then compared to the values of the predecessor product. A committee of experts then decides how the product idea will be pursued.



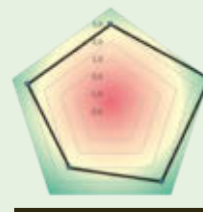
A project manager can utilize the "sustainability radar" to run through dozens of possibilities in an attempt to increase the sustainability of the tool if the result underperforms the predecessor product. The change's positive or negative impact is indicated by a color-coded system. It is possible to theorize through a visual aid at an early stage how adjusting individual criteria, such as the country of production, could affect the sustainability of the product.



A Sustainability Assessment at GF Piping Systems helped give rise to the idea for a tool that makes the sustainability of new products quantifiable. In the meantime, each division has adopted the principle and adapted it for its own purposes. The energy efficiency of the machines plays an important role at GF Machining Solutions; at GF Piping Systems it is the choice of raw material or its recyclability; and at GF Casting solutions material selection and energy efficiency take precedence.



Often it only takes changes in just a few criteria to increase sustainability. For example, the radar can be used to run through different logistics scenarios and compare the carbon footprint. There are advantages to shipping by sea as opposed to by air, but only if the delivery time is not a major factor. It is important that the results are ranked by GF experts who have the entire value chain in mind.



### The result

The analysis using the sustainability radar yields a diagram – you can see above – that shows the results in various categories. The calculations are based on values from recognized institutions such as Carbon Footprint, Ltd., which compares the carbon footprint of different countries.

THERE'S GF IN IT

## Turning grain into bread

Bread is an element of nearly every cuisine in the world, whether it's soft bread for sandwiches or wholemeal and crispy straight from the oven. Find out how GF Casting Solutions contributes to your favorite type of bread.



### Did you know?

- It takes some 5'500 grains of wheat to produce the flour for 500 grams of bread. On average, you can harvest 16'000 grains per square meter.
- With 3'200 varieties, Germany has the biggest range of bread types. In 2014, German bread culture was declared an intangible cultural heritage by UNESCO.
- With 104 kilograms of bread consumed per capita per year, Turkey is the leader in Europe. In contrast, the Chinese people only consume 7.2 kilograms per year. Mantous are traditional - soft, sweet steamed bread for breakfast.

Bread is one of the world's most important staple foods. Even though each country has its own specialties – such as naan in India, crispbread in Finland, baguettes in France, or flatbread in Turkey – the main ingredient is usually flour produced from one type of grain. In the past, farmers harvested that grain by hand in the field. Today, it is usually done by a machine: the combine harvester.

Powerful agricultural machines, such as the Lexion 750 from CLAAS, consist of more than 50'000 components. GF Casting Solutions from Leipzig (Germany) supplies some of

them, ensuring the functioning of the combine harvesters. For the crawler chassis of the Lexion 750, GF produces large iron castings such as the drive, idler and intermediate wheels, which often weigh several hundred kilograms despite their optimized design.

One advantage of advanced harvesting machines is that they cut the grain precisely, separate the grains from chaff and straw, and directly remove everything that is not needed. The use of agricultural machinery does have a negative impact on the eco balance of a loaf of bread, but you can, for example, make sure that

the grain in your favorite bread is organically grown. Our recommendation: Why not bake the bread yourself using local flour from a mill in your area? There's nothing quite like the smell of oven-fresh bread. Enjoy it! ■

### Feeling hungry now?

You can find tasty bread recipes from around the world online at [globe.georgfischer.com](http://globe.georgfischer.com).





## TIME MACHINE

1944

**Name:** Hermann Küng  
**Anniversary:** 30th  
**Job:** Lathe operator  
**Location:** GF Steel Mill Ebnet, Schaffhausen (Switzerland)

## Wine and cake for special anniversaries

GF has been thanking long-serving employees since 1920. By 1970, GF had more than 3'000 employees with 25 or more years of service, out of a total workforce of up to 10'000. Plant and office employees were gifted an IWC watch and a little money for anniversaries such as the 25th. At even bigger ones, the workplace would be decorated in a festive manner, as it was the case for Hermann Küng's anniversary. He operated the lathe in a GF plant in Schaffhausen for 38 years, and in 1944 celebrated 30 years at the company. Like all employees celebrating an anniversary, Hermann Küng took part in the annual jubilee celebration – a tradition that exists at GF sites in Switzerland to this day. ■

## AFTER WORK

## In love with the deep blue sea

A passionate scuba diver, Ahmad Hachem has been discovering the underwater world at many exotic places around the world. After work, he likes to supports colleagues with their start in the open waters.

Here you see me next to my colleague Steve Bissonnette (left). I was giving him some diving lessons in preparation for his open water certification, which he received not too long after. After some first steps in a pool we started in the open water during weekends and evenings after work.

I discovered my passion for scuba diving 12 years ago. In 2014, I did my official

trainer licence with PADI (Professional Association of Diving Instructors), as I enjoy sharing this passion with others. I love this sport for everything that it offers: discipline, exploring new worlds and having a brilliant time. ■

## Ahmad Hachem

**Position:** Senior Engineer – Engineering and Technical Support

**Division:** GF Urecon

**Location:** Coteau-du-Lac (Canada)

**Joined GF in:** 2017

## + What about you?

What do you do after work? Send your photo (good resolution: about 2 MB) together with a short description to: [globe@georgfischer.com](mailto:globe@georgfischer.com).



## IMPRINT

Issue 02/22

## Publisher

Georg Fischer AG  
 Beat Römer, Corporate Communications  
 Amsler-Laffon-Strasse 9  
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 GmbH & Co. KG  
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 Anika Berger, Helena Rosengrün,  
 Philipp Blanke (editorial team),  
 Lisa Moder, Jennifer David (art direction),  
 Lydia Hesse (photo editing)

## Printing: Chinese edition

DE Druck Europa GmbH

## Printing: other editions

optimal media GmbH

## Image credits

Cover: Tobias Gerber; pp. 2–3: private [2],  
 illustration: Uli Knörzer; pp. 4–5: Tobias  
 Gerber, private, shutterstock, illustration:  
 Uli Knörzer; pp. 6–7: Getty Images, private,  
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 PR; pp. 16–17: Sasan Saidi; pp. 18–19:

private [5]; pp. 20–23: Tobias Gerber, illustration: Uli Knörzer; pp. 24–25: Noriko Hayashi, private; pp. 26–28: Getty Images, picture alliance [2], BMW PR, GF PR; p. 29: GF PR; pp. 30–31: Alex Galmeanu; pp. 32–35: Anna Schroll; pp. 36–37: shutterstock, Getty Images; pp. 38–39: Eisenbibliothek, private; p. 40: Samsung PR, illustration: Uli Knörzer

**Globe is published three times a year** in German, English, French, Italian, Romanian, Portuguese, Turkish and Chinese, and has a total print run of 11'000 copies.

**Editorial deadline** for issue 03/22 is the beginning of September 2022.



Partner of the Nature Park Nossentiner / Schwinzer Heide



# Thank you!

... to all our colleagues at GF who shared their stories with us in this issue and supported us in publishing it.



## Your topics

Do you have an exciting story you would like to share with all GF employees? Write to us!



## Your feedback

In your opinion, what was the best thing about this issue? What could we improve? We look forward to your feedback!



**The Globe team (from left to right):**

Lena Koehnen, Klara Kaefer, Susanne Düggelin, Carsten Glose, Marta Falconi, Johanna Lüder, Isabel Proske

The Globe editorial team is looking forward to your message! Send us an e-mail at:

**[globe@georgfischer.com](mailto:globe@georgfischer.com)**.



## Competition

All employees who send us an e-mail at **[globe@georgfischer.com](mailto:globe@georgfischer.com)** by **1 September 2022** with input for the sections **Hello!**, **Hidden Hero**, **My Best Lesson** or **After Work** will be included in a prize draw to win a **Samsung Galaxy Watch Active 2**.

Take part and, with a bit of luck, be in the next Globe!

### **This issue's winner is:**

Ailsa Tipping, GF Piping Systems, Dubai (United Arab Emirates)

### **Conditions of entry**

Georg Fischer AG (GF) is the organizer of the competition. All GF employees are eligible to participate. Participants consent to publication of their name if they win. The winner will be chosen from a random drawing from all eligible entries received before the deadline. The prize cannot be paid out in cash. There shall be no legal recourse. Participating in the competition implies your agreement to these conditions of entry. Your data will be processed for the purposes of the competition. For more information, please see the privacy statement on the GF website (<https://www.georgfischer.com/privacy-statement>).



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