

Globe

+GF+

The global magazine for GF employees

#02/2023



New ways

How the pioneering spirit leads GF into the future

VOLUNTEERING RAISES SPIRITS

Things changed for Renate Stadelmann of GF Casting Solutions when she took in a Ukrainian family **20**

MOLECULE WITH POTENTIAL

The role that green hydrogen plays, not only for the energy transition but also for GF Piping Systems **26**

UNIQUE PARTNERSHIP

How GF Machining Solutions and a Canadian company celebrate shared success as sparring partners **32**

HELLO!

An unexpected discovery

Lilly Huggler Ackermann is our mystery woman from the past, the one we were looking for in issue #03/2022. Lilly pulled out her photo album and shared some memories from her time as one of the first women training as a drafter at GF.



In issue #03/2022, we asked Time Machine readers if they could identify the young draftswoman in our photo (above, right). Roland Ackermann quickly got in touch, because he recognized his sister, Lilly. She then sent us this wonderful photo from a party during the time she spent in the vocational training program. It shows Lilly (second from right) and other draftswomen in their second year of training at GF. Mr. Schneider (left), Mr. Nägeli (center) and Mr. Schneider (right) were the instructors at the time.



Lilly Huggler Ackermann

Position:
former GF trainee
Location:
Schaffhausen
(Switzerland)
With GF:
1961–1963

In the 1960s, most people I knew chose the traditional path of vocational training as a commercial clerk for their first step into working life. I wanted to try something new. I was lucky that at the time GF was designing a completely new vocational training program and looking for new recruits. I thought it was revolutionary and immediately applied. I passed the aptitude test for the all-female vocational training class of drafters. We went to classes for one year, followed by two years of practical experience at GF. We all got along really well, even after the training program ended.

Even today, I feel connected to GF – and I still am! We are a genuine family at GF. I even met the man who became my husband, Friedrich Huggler, in the office of my former supervisor, Mr. Paul Gloor, a divisional head in the foundry machines department. His father, who was also called Friedrich, sold lathes as an engineer at GF. Roland Ackermann, my brother, did his apprenticeship as an electrician at GF. And my niece Gabriela Ackermann now coordinates seminars and events for GF as part of the team at Klostergut Paradies, a local convention center.

And you?

Was GF ever a stepping stone for you to try something new?
Share your story and photo with us. Send your photo (high resolution: approx. 2 MB) together with a short explanation:
globe@georgfischer.com

EDITORIAL

Off to new shores!

Dear colleagues,

What makes us “us”? What defines GF? We are a company with a history steeped in tradition and a unique founder who is celebrating an impressive anniversary this year (for more on this, see page 7). And what is it that makes us keep raising the bar? Our research on this topic made the following clear: being a pioneer at GF means to burn for a cause, to be courageous and to stay curious. For us, pioneering spirit is more than just a buzzword, it’s a passion that permeates every nook and cranny of the company. Discover with us the many facets of our pioneering spirit! We will share this much up front: the topic is magical and has given rise to so many story ideas that it was hard to make a choice.

Now, guess what: the first paragraph was not penned by me. Rather, guided by a pioneering mindset, those words were generated with the help of an artificial intelligence (AI) chatbot called ChatGPT. And that’s not the only new thing we have been trying out at Globe. From now on, we’re telling the Spotlight story and the intro double page from the point of view of ONE GF, so the focus is now on GF as a whole, rather than on the single divisions.

We are also breaking new ground in our editorial team. No, not with artificial intelligence, but as before, with human wit and skill. Following my exciting interim year for Globe, my colleague Carsten Glose is taking the helm to continue to lead Globe into the future.

I’d like to take this opportunity to send out a big thank you for all the enthusiasm and creativity I have had the pleasure of sharing with you.

Stay curious!

Isabel Proske
Isabel Proske
Globe Project Manager



When will it be time for YOUR Globe topic?

We greatly enjoyed learning about your favorite topics for Globe #03/2023. Thank you for your inspiration! While you’re reading this, we’re already working on the next issue with your Globe cover topic. Stay tuned!



Plant-operated train located

In the last issue of Globe, we asked about the current location of GF’s former plant-operated train. We would like to thank Franz Böni, who provided the photo above, and Daniela Huber, among others, for their answers and pictures. They correctly told us that it can be seen on a piece of track in the Mühlental in Schaffhausen (Switzerland). Franz Dossenbach, who spent almost 50 (!) years at GF, also shared his recollections of the green locomotive.

Do you have any treasures from the history of GF you’d like to share? Then send us an email at: globe@georgfischer.com.

WITH CONTRIBUTIONS FROM

Rüdiger Schmitz-Normann

Our Spotlight author is impressed by the determination of GF to break new ground. **08**



Ewelina Karpowiak

Our Spotlight illustrator has already won over magazines such as The New Yorker and Time with her innovative style. **08**



Mick Ryan

Architectural photographer Mick Ryan was allowed to take a look at the new GF location in Shenyang even before the official opening. **30**



SPOTLIGHT



08

Pioneering spirit has been animating GF since 1802.

Our cover story looks at how employees and their innovative teams are leading GF into the future today, and at some pioneering GF feats of the past.

CARE

20

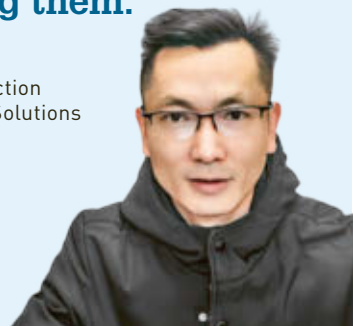
Volunteering raises spirits – Renate Stadelmann took in a Ukrainian family and helped them start a new life. Her own life also changed as a result.



23

My Best Lesson: “You overcome fears by facing them.”

Allen Zhong
Head of Production at GF Casting Solutions



Globe available online!

You can read Globe from anywhere in the world at:
globe.georgfischer.com

CREATE



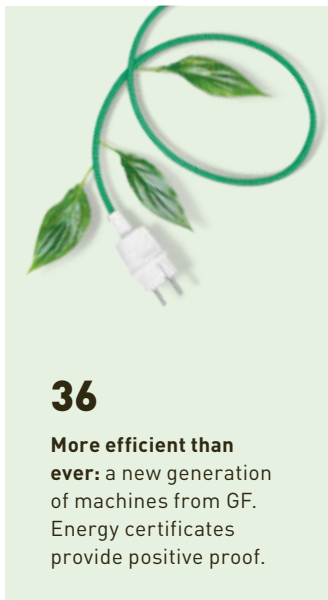
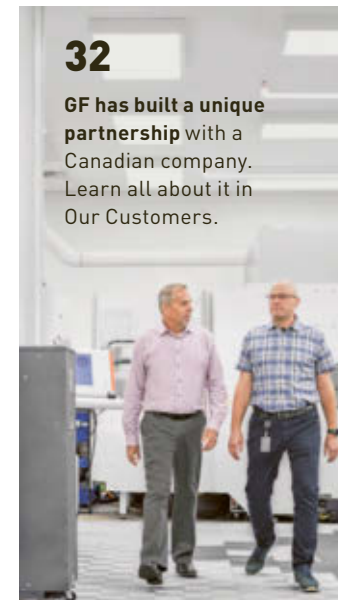
26

GF is focusing on green hydrogen as an energy carrier of the future. Our Markets provides the full story.

CONNECT

32

GF has built a unique partnership with a Canadian company. Learn all about it in Our Customers.



36

More efficient than ever: a new generation of machines from GF. Energy certificates provide positive proof.

ISSUE #02/2023

CONTENTS

SPOTLIGHT

- 08 Breaking new ground**
The pioneering spirit of many bright minds is leading GF into the future.
- 16 Pioneering spirit since 1802**
GF can look back on numerous pioneering achievements throughout its history. Our infographic shows some highlights.
- 18 Insider’s View**
Extreme athlete Anja Blacha talks about what it means to test limits.
- 19 Your View**
Four GF employees talk about how a pioneering spirit enriches their lives.

CARE

- 20 Hidden Hero**
Renate Stadelmann took in a family from Ukraine. Many lives changed as a result.
- 23 My Best Lesson**
The story of how Allen Zhong learned to overcome fears, instead of ignoring them.
- 24 A Strong Team**
The Susty Fund encourages employees to get involved in sustainability.

CREATE

- 26 Our Markets**
GF Piping Systems is preparing for a fast-growing business in green hydrogen.
- 29 Innovator’s Insight**
Spare parts can now be identified via an app at GF Machining Solutions.
- 30 On Site**
GF Casting Solutions has built a state-of-the-art plant in Shenyang, at the heart of China’s automotive industry.

CONNECT

- 32 Our Customers**
When customers become partners: GF and Milltera are on a shared road to success.
- 36 Did You Know?**
Energy certificates prove that machines from GF Machining Solutions are efficient.
- 37 There’s GF in It**
Which GF product is making waves at Europapark Rust in Germany.

INTRO/OUTRO

- 02 Hello!**
- 06 One GF**
- 38 Time Machine**
- 39 After Work**

WELL SAID

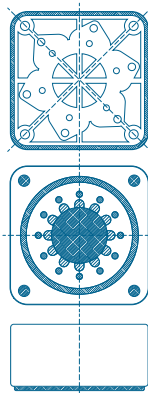


“Virtual learning is unbeatable. You can train your individual skills at your own pace in a safe and realistic environment – with almost no environmental footprint at all.”

Niko Verhaegen,
Global Business Application Manager
New Technologies

IN DEMAND

30 billion



Pipette tips are used in thousands of different diagnostic tests – from Covid-19 to food quality assurance to genetics. More than 30 billion of them are consumed worldwide every year. Many thousands of GF molds are needed to produce these high-precision instruments.

INSIGHT



The next generation

They are the future of GF. After the summer holidays, almost 100 apprentices will start the new training year at locations worldwide. They are learning the ropes of about 20 different professions related to mechanics, mechatronics, automation, construction, plastics technology, electronics, foundry technology, logistics, information technology, mediamatics or a commercial trade. We look forward to meeting our junior staff.

GREETINGS FROM THE CANTEEN



Ingredients (serves 2)

- 4-6 small eggplants
- 350 g minced meat
- 1 chopped onion
- 2 chopped green chilies
- 2 garlic cloves
- 2 diced tomatoes
- 1 tsp tomato paste, chili paste, salt and pepper each
- 2-3 cherry tomatoes
- 4-6 hot peppers
- Parsley

A tasty dish in Hakan and beyond

Karniyarik is a traditional Turkish dish – and one of the most popular in the GF canteen in Hakan. Read on to learn how to prepare it.



Interested in finding out more?

Want to learn more about the GF team behind the recipe? Then check it out online!

1. Soak eggplants peeled in strips in salted water. Then pat dry, sauté, slit lengthwise and place in a casserole dish.
2. Sauté onions and chilies, add minced meat and stew it. Season with garlic, tomato paste, chili paste, salt and pepper, then add diced tomatoes and chopped parsley.
3. Fill eggplants with the mixture, top with cherry tomatoes and hot peppers and bake for 20-25 minutes in a preheated oven at 170 degrees Celsius. Bon appétit!

TIP



Digital travel diaries

The coronation of the last German emperor in Frankfurt, the monumental construction site of the Thames Tunnel or the secret steam engines of Boulton & Watt in Soho: Take a trip through early industrial Europe with GF founder Johann Conrad Fischer. On the occasion of his 250th birthday, we are publishing an online edition of his 1794-1851 travel diaries – for the first time also in English.

www.johannconradfischer.com

PICTURE PUZZLE

And where is that?



Tip: A fountain of a special kind embellishes this GF location in a port city by the Arabian Sea. You can find out exactly where this is on the back cover.

YOUR FEEDBACK

More entertainment? You got it!



QUESTION:

Dear Globe team,

I am an avid Globe reader, but occasionally I yearn for entertaining participatory sections in the magazine. Since I make a habit of reading Globe on the train on the way home, I would like to be entertained in a light way that also includes playful contributions.

Participant in the Winter 2022 Globe reader survey

ANSWER:

Dear colleague,

We're happy to hear you are an ardent Globe fan and even incorporate the magazine into your daily routine.

We are therefore all the more pleased to be able to offer you and all our colleagues an easy and playful introduction to the new issue of Globe with this newly designed double page spread, which you are currently reading: It invites you to puzzle, try out recipes and browse – all while keeping our global GF family in mind. Just get started!

Regards,
your Globe editorial team

We invite everyone to contact us at any time with entertaining short contributions.

And how 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.

Pioneering new ways



SPOTLIGHT: Pioneering work done today leads the way to the future. When it comes to **developing new business areas**, **building markets** or **retaining market share**, GF has a strong pioneering spirit primarily because its employees embrace it with a passion – and make it the central focus of their work.

He could have played it safe and simply continued his father’s coppersmithing business, but that was not for Johann Conrad Fischer. Instead, he opened a small foundry in 1802 and began to develop new metallurgic processes, exporting products abroad and building a network of scientists, entrepreneurs and personalities throughout Europe. With daring, openness, perseverance, and a willingness to experiment – in short, with his pioneering spirit – he laid the foundation for what GF is today. And to this day, GF keeps creating new solutions that help overcome many challenges and serve many needs, constantly developing new markets and business areas – and consistently improving products and services, together with its customers.

But what exactly does “pioneering spirit” mean in the present day and age? Who is discovering tomorrow’s markets for GF? How are they developed, and how are they retained? Those are the questions we pursued when writing this story. We will share this much up front: Johann Conrad Fischer’s pioneering spirit continues to have an impact across all divisions, and it’s more alive than ever.

The pioneering spirit continues to have an impact across all roles, all divisions, and even all hierarchies. Simone Beutel, Mame-Kouna Top, Marco Lirsch, Mujia Zhang, Sabine Tunzini, Parag Patil (from left to right) here represent the many colleagues at GF who drive the company forward.

Pioneering spirit since 1802

The infographic shows over 200 years of pioneering spirit at GF.
Page 16

Trying something new

Extreme athlete Anja Blacha talks in an interview about what it means to test limits.
Page 18

The importance of breaking new ground

Four GF employees tell how the pioneering spirit enriches their lives.
Page 19

DEVELOPING NEW BUSINESS AREAS

A company can grow in one of two ways: by successfully expanding existing business areas, or by finding new ones. This can be done by developing new products and business models, or by establishing existing solutions in new markets. Head of New Ventures Simone Beutel and her team at GF are responsible for developing new markets and business models. “We work in a highly networked manner and act as the point of contact for the entire organization. It is our goal to ensure new potential business areas are identified, evaluated and validated.”

Team New Ventures: new markets

The team was set up in September 2021 as part of Strategy 2025 to identify potential for future growth. Instead of only pursuing this question selectively or locally, as in the past, Team New Ventures has implemented a systematic approach and corresponding methods. “We’re not just looking at the pure product, but rather sounding out the entire ecosystem,” Simone says. “What is the market environment like? How large is the potential for GF? Is there room for further development and new business models?”

There are six employees in the team, each with their own focus – design thinking, research, sustainability and digitalization – and working in close coordination with New Ventures colleagues in the US and Asia. This global network focuses on sustainable business areas and →

“We have a great culture. If anyone has a good idea, they are given all the freedom to implement it.”

Simone Beutel
Head of New Ventures

business models and has defined a standard process to identify new ones. “We collaborate closely at all levels with the sales companies, experts, or even research institutes and other companies to build the know-how we need,” Simone explains. “We know what questions need to be answered, but the paths that lead to answers are extremely diverse.”

Evaluating megatrends

To identify new business areas, the team analyzes megatrends and their potential impact on GF, focusing on increasing water scarcity, the need for renewable energy generation and storage technologies, digitalization and hyperconnectivity, circular economy, population growth, and urbanization and the aging of society.

Based on these, but also on input from internal and external players, ideas are collected in the “ideation” phase for initial evaluation. The range of topics includes nuclear fusion or redox flow batteries, which are increasingly important as stationary intermediate storage facilities, but also ideas such as leasing or the circular economy. In the subsequent “analysis” phase, the team evaluates which of the new business opportunities are most promising for GF. These are then further developed in the “exploration” phase, which involves analyzing feasibility and the long-term prospects for success. “Which players are working on this, which is the leading technology or which one is being developed? We try to understand how the market

1. Simone Beutel,
Head of New Ventures,
together with the col-
leagues on her team.

works and identify the business potential for us,” Simone says. “We then approach companies to jointly determine what they need. This creates the basis for us to develop new solutions and services.”

At present, there are a number of topics in the next phase, “acceleration.” These are considered capable of development and are therefore being driven resolutely forward. Concrete examples include partnerships in the hydrogen sector (see also page 26), floating wind turbines, fish farms, and desalination plants for alternative water extraction, as well as direct lithium extraction, which promises an efficiency increase, reduced environmental impact and higher flexibility.

Battery production: initial orders

The new business field of battery production is also well advanced, as a result of the current trend towards the electrification of vehicles, where the first orders have already been won. The batteries required for this are manufactured in climate-controlled rooms where humidity is very low. “We have the appropriate COOL-FIT solutions,” Simone says. “They are more energy efficient than comparable post-insulated metal piping systems and weigh very little.” The latter is important because air-conditioning units in factories are usually mounted on the roof. Many production sites are in the planning stage, but there are still few specialized solutions and little experience to draw from. “The market is just developing, and we’re an early contender,” Simone says.

To help GF gain an optimal starting position in this new business area, Marthinus Venter, an expert in battery production, was hired to build a network with his team of four regional business developers. Simone continues: “The potential sales volume is gigantic, even when you only look at COOL-FIT. And this does not yet take into account other opportunities, such as in water treatment.”

For Simone, pioneering at GF means being open to new things and focusing on the positive aspects, while having a realistic picture of the market. “We have a great culture. If anyone has a good idea, they are given plenty of freedom to implement it. Mistakes and problems are part of this process. When they show up, we find a way to resolve them.” ■



BUILDING
MARKETS

When it comes to developing a market once it has been identified, there is probably no one who can tell you more about this than Mujia Zhang, the Delegate of the CEO for China. More than two decades ago, he started to develop the Chinese market for GF. Today, it has become the most important market for all three divisions.

First steps in China

Mujia worked for a renowned Swiss company in the 1990s before joining GF in 2002. “GF had a vision for China, and it was my job to make it happen through concrete steps. No plant, no team and no clear plans – there were quite a few challenges. My first measure was to close the Zhangjiagang plant. It did not provide the basic ingredients I needed to grow the business in terms of location, facilities and talents. I traveled extensively to find a strategic location for a new plant and finally opted for Suzhou because it offered a solid infrastructure, a positive business environment, favorable logistics and, back then, a growing labor market.”

Mujia’s hiring strategy was also new. By giving talented people with no previous experience the opportunity to establish GF in China, he was able to build a loyal and strong team in the long term, without paying high salaries right from the start. “It’s important to me to understand the true potential of people themselves and not just rely on their past experiences. I want the team to learn and grow together with the company.”

For Mujia, pioneering in China means continuously developing the business. “When we started, GF had a clear technological advantage. Today, it →

The New Ventures team has reviewed 32 ideas since it was founded in 2021. **It has already approved – or is working on – 17 of these ideas.**

is increasingly challenging to maintain this leading position, because everyone is quickly learning, investing and catching up. We have to adapt our design and development processes to local needs, because Chinese customers demand a fast service in addition to good quality.”

Startup Autobahn innovation platform

The sense of exuberance as Mujia experienced it in China is also no stranger in California’s Silicon Valley. That’s where the Plug and Play innovation platform is based. GF is maintaining a strategic partnership with its Stuttgart-based offshoot Startup Autobahn, which illustrates yet another facet of the company’s pioneering spirit. “In the past, innovations always took place behind closed doors to prevent others from stealing your ideas,” says Sabine Tunzini, Innovation Manager at GF. “Today, pioneering is characterized by a different mindset. You can only keep pace with the speed of the market by opening up and sharing your expertise.”

Startup Autobahn specializes in mobility. The platform matches start-ups with companies to promote innovative ideas and strengthen collaboration. GF has been one of 32 partners since 2022, gaining access to events, exhibitions, innovation days and roundtables. These provide start-ups with a platform to present their solutions, or to find customers or sparring partners. The underlying idea is that, if companies are able to draw on the know-how of hubs, universities or other partners, they usually accomplish a higher level of innovation more quickly and at a lower cost than if they had to build everything from scratch by themselves.

670

57

57 employees formed the base team of the new GF plant in Suzhou in 2005.

670 employees work for GF Casting Solutions China today (as of April 2023).

While events like meetups, roundtables and the Startup Autobahn EXPO mainly promote networking, the main benefit of the partnership is what’s called the dealflow, which means that Plug and Play matches start-ups and companies on a one-to-one basis. In February 2022, for example, GF put out a request to monitor the carbon footprint of its products. What GF was looking for was a software application that could cover these parameters: raw materials, transport routes and every production step. Two weeks later, Plug and Play sent a list of 22 companies that could provide appropriate solutions. The GF departments for innovation and sustainability reviewed the list and had the solutions of six start-ups presented to them a few weeks later.

Eleven weeks after the original request, the contract was signed with Berlin-based start-up Carbmee, which now supports GF with its carbon management solution. “Thanks to this collaboration, we could develop a solution

1: Mujia Zhang, Delegate of the CEO for China

2: Madeline Schmeiser, Partner Success Manager at Startup Autobahn (Plug and Play)

3: Sabine Tunzini, Innovation Manager

quickly,” Sabine says. “In the future, CO₂ monitoring will be the norm and, especially in the automotive sector, a prerequisite for getting any orders at all.” Now GF has become one of the first automotive cast parts suppliers to boast TÜV certification. The monitoring also allows GF to find out how it can further reduce its footprint, either by using other types of energy or by sourcing alternative raw materials.

“My impression is that GF has always broken new ground and has evolved to be successful in the long term. Otherwise, the company wouldn’t have been around for close to 220 years,” says Madeline Schmeiser, Partner Success Manager at Plug and Play. “Today, the foundation is being laid at GF for pioneering achievements covering the next 20 to 30 years. The employees I know are passionate about being a part of the long-term success of the business, shaping the collaborative culture and driving it forward.” ■

RETAINING MARKET SHARE

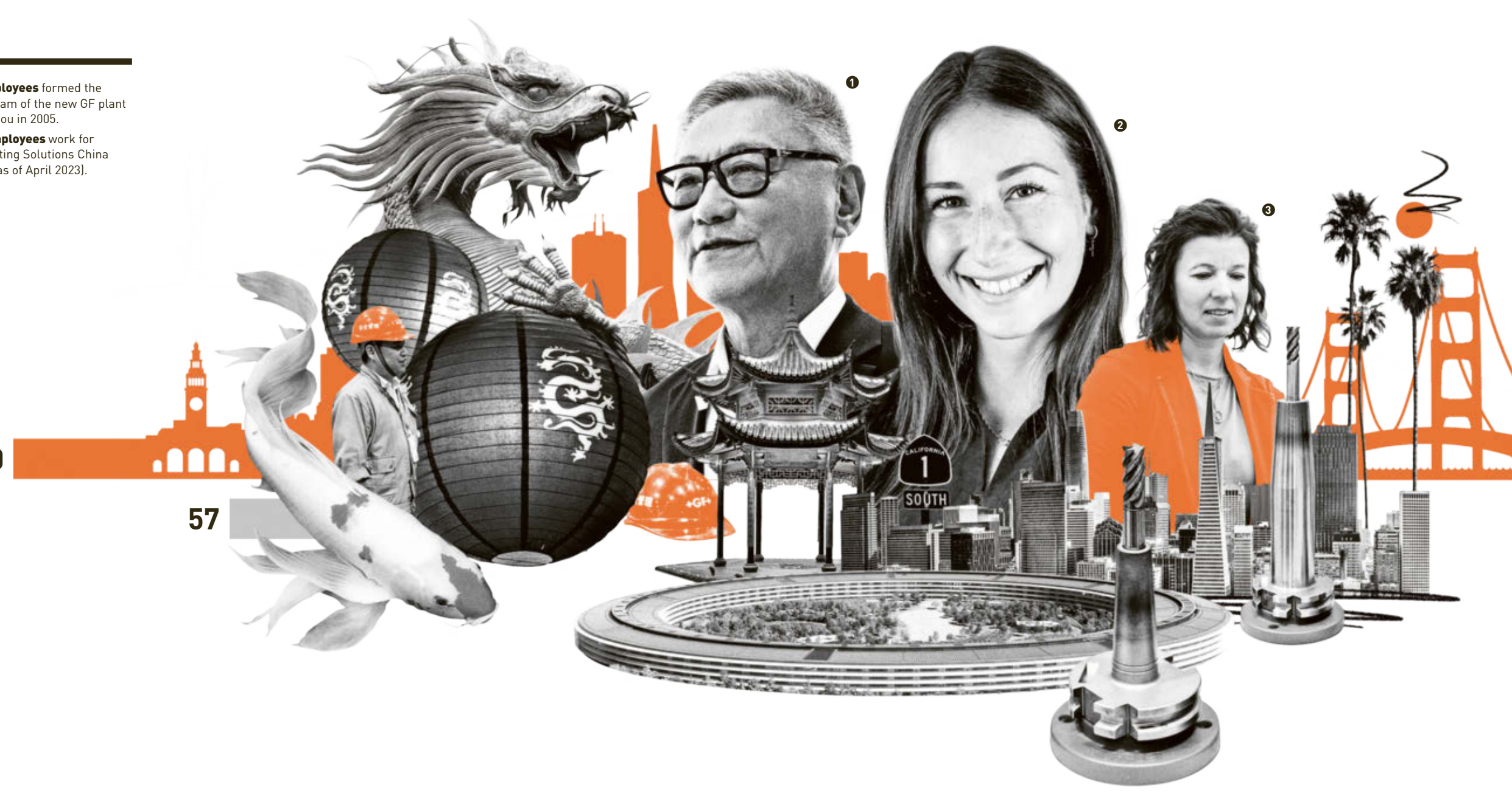
Once you secure market share, one of the biggest challenges is to maintain it. The key to success is driving innovation and continuously improving products and services. At GF, this is often done in collaboration with customers. “For me, pioneering spirit means using creative methods to come up with new ways of doing things, as well as listening carefully to customers and colleagues,” says Marco Lirsch, Sales Engineer at GF, Germany (Southwest region). “While I can’t reinvent the wheel every day, I might be able to make it run a little better.”

Customers as sparring partners

One of Marco’s most important customers is toolmaker Fritz Stepper GmbH, a multi-award-winning innovation leader. Marco took over his current area of responsibility in Germany from his father in 2017, so the relationship with Stepper dates back several decades and it’s →

“When we started, GF had a clear technology advantage. Today, it is challenging to maintain that lead.”

Mujia Zhang
Delegate of the CEO for China



based on a strong foundation of mutual trust. “Stepper has very high demands when it comes to precision and performance, and the company inspires us to keep growing and making better machines. We regularly exchange experiences and information: In which direction is the market headed? What new features are in demand?” Marco says.

The high-precision CUT X 350 wire-cutting EDM machine, for example, is a GF bestseller. “But customer demands are constantly on the rise,” Marco says. “Customers expect the precision to get even better, and the same goes for repeatability to make production faster and more cost-effective. Also, the younger generation takes an almost self-explanatory user interface for granted.”

That’s why GF recently revamped the machine’s control system. “Stepper users gave us feedback on what’s important to them, what they would like to see, and where they see room for improvement. They explained to us, from the user’s point of view, how the control menu should be structured and how it should integrate with the company network.” This wish list was considered during development, Marco says. “Experience has shown that the needs of this important customer perfectly match the expectations of the global market.” This means that other customers also benefit from GF’s collaboration with Stepper. “Testing new generations of machines takes us to new regions all the time,” Marco says. “And that works for me, since discovering new things and adapting and growing personally are important aspects of my job.”

1: Marco Lirsch,
Sales Engineer
Germany (Southwest
region).

2: Mame-Kouna Top,
Business Developer
Service & Success.

3: Parag Patil, Head
of Digital Products &
Digital Business.

Customer service rethought

Retaining customers and continually improving the relationship with them is also the goal of Mame-Kouna Top, Business Developer Service & Success, and Parag Patil, Head of Digital Products & Digital Business. The My rConnect platform they developed takes customer service to a new level, enabling fast digital support for all GF machines in operation. With the newly developed Success Packs, customers can book various service packages in a subscription model, according to their needs. Speedy access and extended remote support, for example, are services that guarantee customers a one-hour response time and extended remote support around the clock. In addition to reactive support in case of issues, proactive support is also part of the portfolio, with a yearly preventive maintenance or a machine warranty extension. These GF services help customers to keep their machines in top condition.

If an issue arises, customers can go to the web-based platform and create a service ticket via phone or computer. “For connected machines, our service agents can then log on directly to the customer’s machine via the digital platform to do the diagnostic remotely – no matter where they are, even if they’re on the road,” Mame-Kouna says. What’s called the Process Inspector creates digital twins for jobs being processed at the customer site, allowing agents to view a 3D representation of the finished job and the tasks it is performing – in real time. “You can check all the details of the software and find out what’s causing the problem.”



Previously, customers would call and the GF agent in charge tried to understand the situation – a process that took a long time and was not user-friendly. Every region had its own services and technologies. Field service personnel had different levels of knowledge, and the service cost was different in each region. “Now we have a single digital offering for everyone that costs the same anywhere and can be booked with great flexibility.”

Mame-Kouna and Parag are proud to have pioneered this system, which they perfected together with a number of pilot customers. “We were the first provider to standardize our service offering with the vision of extending it to all our machines and technologies in the near future. This allows us to provide better support and maintain even closer ties with our customers,” Mame-Kouna says. And there is one more feature Parag wishes to highlight: the

“While I can’t reinvent the wheel every day, I might be able to make it run a little better.”

Marco Lirsch
Sales Engineer Germany (Southwest region)

platform not only makes things easier for customers. It also reduces the workload of service personnel, who no longer have to visit customers on site, significantly reducing the overall amount of travel.

The GF Strategy 2025 follows the overall objective of achieving growth for customers by providing high-value solutions. This is not possible without a pioneering spirit. Consistent further development is essential to remain innovative and competitive.

Keeping the spirit alive in all its facets over many years is an ongoing challenge for a company with 15’000 employees. The many examples shared in this story show how we can and do succeed. This is because we embrace the same pioneering spirit that gave rise to the small foundry built in Schaffhausen in 1802. And just as Johann Conrad Fischer once did, creative leaders at GF and their motivated teams are taking GF into the future today.



CEO CORNER

Embracing GF’s pioneering spirit

48



It used to take up to 48 hours for a problem to be checked by a service employee (who traveled to the customer for this purpose). Today, after the introduction of the Success Packs, it takes just 1 hour for the problem to be checked via the digital platform.

When is the last time you felt like a true pioneer? For example, by taking a new direction, or seeking out a new challenge? You don’t have to be an extreme athlete in the Antarctic (see page 18) to push the boundaries of what is possible. The small but significant changes, new and courageous ideas that each individual brings to the table, are enough for that. Maybe a new way of looking at a problem. Or a solution no one came up with before.

When I landed in Sydney in 1999 as a young GF leader (with my wife and one-year-old son), I was faced with many new challenges - personal, professional, social ones. I had a new “everything” and had to learn a lot – an experience that taught me the value of embarking on an adventure and charting new territory with courage and optimism. The GF goal to become better every day is the essence of the pioneering spirit that has permeated this company since its foundation. Our journey is a fusion of tradition, expertise and innovation. Year after year, across all divisions, we provide our customers with what they need to be successful. Our employees, past and present, set new benchmarks, take targeted risks and shape our industry (see page 16).

Let’s celebrate our culture of empowerment and continue to create an environment where the pioneering spirit that we have had at GF over decades continues to drive us forward.

Andreas Müller
CEO GF

INFOGRAPHIC

A tradition of daring

GF founder Johann Conrad Fischer was the company's first pioneer. The pioneering spirit he exhibited lives on in people who continue to develop clever ideas: courageous, creative and innovative solutions that are always just a little ahead of their time.



1827
Johann Conrad Fischer's invention in 1827, which he patented, was called "hammerable" (malleable) cast iron. The process marked the starting point for GF's upward growth in the age of industrialization. In 1864, Georg Fischer II was the first in Europe to use malleable casting to manufacture pipe fittings.

1880
First cafeteria. In the 19th century, production in the United Kingdom became ever more mechanized – and this gradually spread. Workers in the new factories had to be fed, including GF workers in Switzerland. The company opened one of the country's first works cafeterias in Mühletal in Schaffhausen (Switzerland) in 1880.

1933
Cookware with cult status. In response to a slump in demand during the global depression, GF released new products and reshaped its customer orientation. Inspired by meetings with customers, GF traveling salesman Alfred Dietzi encouraged GF to become the first Swiss company to produce enamel-lined cast-iron cookware. The pots and pans sold well, staying in the range until 1968, and remain popular with collectors today.

1944
A pioneer in recycling. GF first concerned itself with recycling way back in the 1940s. During World War II, as raw materials became scarce, GF championed scrap collection campaigns in Switzerland to help feed scrap iron back into production. For example, a huge "tower of scrap" (pictured below) was created for the Mustermesse trade fair in Basel in 1944.

1948
A revolutionary machine. GF did not halt development during World War II, but courageously invested in its locations and innovations. Right after the war, GF engineered and built the first contouring lathe. This revolutionized the production of machine tools, making it possible to manufacture complicated workpieces easily and in less time.



1963
New trends. Plastic has been a popular material in industry since the 1950s. Chemicals technician Rudolf Merz developed Tangit in 1963. A solvent cement, it made it easy to join PVC components, and helped GF achieve a market breakthrough in PVC fittings.

1987
Growth in the United States. GF acquired the California-based company Signet Scientific at the end of the 1980s. The company had set industry standards in 1969 with the first plastic paddlewheel sensor. The acquisition marked GF's entry into measurement and control technology.



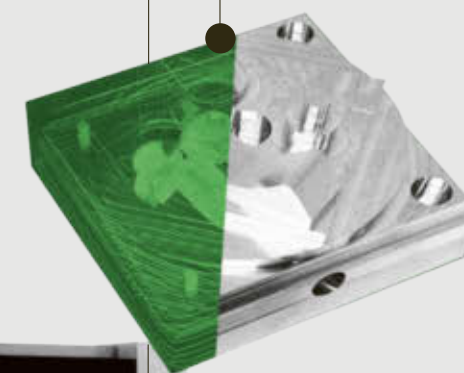
1970s
New material for the future. With Belgian chemical company Solvay, GF developed PVDF (polyvinylidene fluoride). PVDF can withstand high pressure and temperature. It had a breakthrough in the promising semiconductor industry, as it could be used in chip manufacturing for transporting ultra-pure water.



1992
New solutions. A GF team, by now with efficient computer support, worked on an innovation that remains a bestseller today: the ELGEF Plus product range. It was launched in 1992 as the world's first polyethylene system made of PE100. The electrofusion process is used to join the pipe fittings, making for a particularly leak-proof and durable connection.

2009
Future-oriented technology. GF Machining Solutions adds laser ablation, then a novel technology, to its portfolio. Laser technology replaced the need for chemicals or grinding devices in machining tasks. It offered increased precision and was better for the climate.

2050
Pioneers of the future. GF aims to become a leader in innovation and sustainability by 2050, helping to shape future-oriented technologies such as the creation of digital twins. By 2050, GF wants to generate 70% of its sales with products and solutions that offer customers social and environmental benefits.



“Take a leap of faith”

INSIDER'S VIEW



Anja Blacha

Anja Blacha is the first German woman to have climbed K2, and the youngest German to have climbed the Seven Summits. She also wrote history as the first woman ever to ski solo and unsupported from the Antarctic coast to the South Pole. GF is Anja Blacha's sponsor.

When you think of a pioneer, it doesn't get much better than someone who set out alone to ski to the South Pole. Anja Blacha, a 32-year-old expeditioner, philosopher and speaker, tells us what it means to push the limits.

Anja, you recently went to Canada. Can you tell us a bit more about that trip?

Anja Blacha: It was a training trip to learn how to navigate the Arctic environment – rough ice, open waters, polar bear defense – to test new equipment, and manage cold temperatures. Within the first few days, my body was already suffering significantly from the cold, and I had a couple of gear failures.

Does that happen a lot when you are out in the wild on your own?

Well, when you go on a serious polar expedition, you cannot afford to have such issues arise. You need to be well prepared and have contingency plans. However, instead of figuring it all out in theory, it helps to put things into practice and learn from mistakes to get your system tuned. Even so, circumstances can change, so you need to adapt your response to them, and

be creative in how you solve problems with limited means. I never think that nature is against me, even when it's below 40 degrees Celsius or when I'm trapped in a snowstorm. While I can't know in advance exactly what will hit me, I need to count on the fact that I know, or know how to figure out, what to do if something does.

What pushes you to go on such incredible and even extreme journeys?

It's a combination of curiosity and the desire to learn more, both about myself and the environment around me. It is also about achieving something new, something I cannot be sure I am actually capable of until I try. Confidence follows courage.

We can all be pioneers in our daily lives. How?

To be a pioneer you need to follow a broader vision that takes you beyond,

into the unknown. Just as I break trail in new terrain, you might open a different line of thought in your daily life, develop a better approach to a persistent problem, or work on something entirely new. Pioneers not only dream of their vision at night, but also put it into practice during the day. Hence, progress in unfamiliar terrain requires constant adjustment, persistence and creative problem-solving. It's a lot of hard work, but it's the way to lead forward into the future. Identify your goal, prepare well and then take the leap of faith and follow through. ■



Curious now?

Want to see some more images? Just scan the QR code.



Starting off with 100 kg on the sled: Extreme athlete Anja Blacha mastered 1,400 km to the South Pole in 58 days.

YOUR VIEW

Why is pioneering new ways important for you?

Letting go of the old and opening up to the new seems like a risk – until we dare to take the step and experience the possibilities that appear before us. Four GF employees talk about how the pioneering spirit enriches their lives.

Anna Deréky:

“To break new ground, we need the mindset to think big. What is needed for a sustainable, equitable and cooperative future? The starting point is the present. How do we work today, who are the winners or losers, are we satisfied with the existing situation? Instead of settling for compromises, we can change direction and drive innovation to overcome existing bottlenecks.”

Position: Change Manager Transformation, Corporate IT
Division: Corporate
Location: Schaffhausen (Switzerland)
Joined GF in: 2022



Adrian Burlacu:

“Starting to work at GF was the beginning of something new and amazing for me. It gave me the opportunity to break free of norms and explore new horizons involving innovation, creativity and mental fortitude. This spirit drives me to look beyond the ordinary and brings out the best in me. It really makes me think outside the box, helping me to find innovative approaches.”

Position: Quality Controller
Division: GF Casting Solutions
Location: Arad (Romania)
Joined GF in: 2014



Wen Peng:

“A pioneering spirit is the way to cope with our changing world. It can keep my thinking in synch with it, make me more confident and open, and improve my work efficiency. Based on the legacy of existing GF technology, breaking new ground can differentiate our products from those of our competitors, improve their competitiveness, and better meet our customers' requirements.”

Position: Head of R&D
Division: GF Machining Solutions
Location: Changzhou (China)
Joined GF in: 2007



Margot Pennewaerde:

“In any job, it is important to stay curious and eager to learn. I don't want to get stuck, but to keep improving. We should always try out new things to find ways to work better and more efficiently. And it's also just more fun this way, because being in an evolving environment keeps you on your toes.”

Position: Technical Support Engineer
Division: GF Piping Systems
Location: Sint-Pieters-Leeuw (Belgium)
Joined GF in: 2021



Overcoming fears

How Allen Zhong learned to tackle challenges, instead of simply ignoring them

Page 23

Bringing ideas to life

The Susty Fund encourages employees to get more involved in sustainability

Page 24



↑ Renate Stadelmann: "By working together, we pulled it off very nicely."

Renate Stadelmann

Position:

Business Transformation Leader

Division:

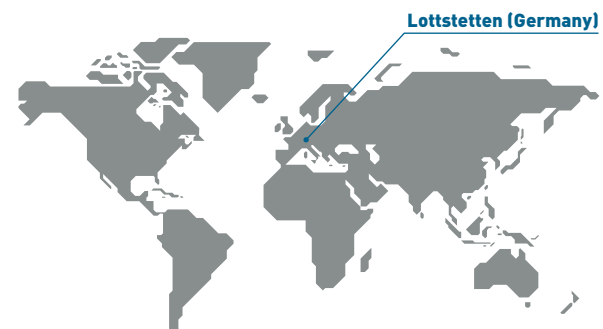
GF Casting Solutions

Location:

Schaffhausen (Switzerland)

Joined GF in:

2021



The local newspaper in Renate Stadelmann's hometown of Lottstetten (Germany) published an article about the need for accommodation for Ukrainian refugees back in May 2022. She and her husband Thilo exchanged a glance, and their mind was made up. "It was immediately clear that we would reach out," says Renate. "We couldn't offer an apartment, but we did have a guest room and plenty of space in our family." Besides their three-year-old son Janis, the family is also hosting Emily, an au pair from Brazil.

A few days later, Liudmyla moved in with her daughter Mariia. An employee of the local support group brought the women to the Stadelmanns' home. The two had little luggage with them. At first they were very quiet, but it didn't take long to break the ice. Mariia immediately got along with Emily, who was 18 years old at the time. Liudmyla cooked Ukrainian dishes, trying to make herself useful around the house.

Liudmyla and her 17-year-old daughter had fled Chernivtsi in western Ukraine. Liudmyla's older daughter Alexandra had chosen to remain in Ukraine, because her husband was fighting at the front. They had only been married a few months when the war broke out. What's more, Liudmyla's ailing mother was still in Ukraine. "We were able to communicate well from the very beginning because Mariia already spoke very good German, so we could better understand their family situation," Renate recalls. →

Volunteering raises spirits

HIDDEN HERO: Renate Stadelmann took in a family from Ukraine and helped them get a fresh start. What started out as simply helping others in need turned into something much bigger.

CARE



↑ And now there were seven (from left): Thilo (holding Janis) and Renate have opened their home to Alexandra, Mariia and Liudmyla from Ukraine; Emily is the au pair from Brazil.



Renate, a Business Transformation Leader at GF Casting Solutions in Schaffhausen (Switzerland), has hosted people several times who were no longer safe in their homes. "I love my job and really enjoy working," she says. "Our GF values, especially the one focused on caring, align with how I lead my own life. Being there for others and treating them as you would want to be treated yourself is a principle I uphold even when I'm not at work."

Liudmyla found it difficult to deal with not having both daughters in a safe place, and she was worried about her sick mother. She had planned to return home to care for her mother as soon as she could. When her older daughter Alexandra finally came to visit in early June, Renate and Liudmyla were able to convince her to stay, which left Liudmyla with one less thing to worry about. And it was one more person for Renate to help. "Alexandra meant that all at once there were seven of us in our single-family house," she recalls. "It didn't go unnoticed. The weekly groceries had doubled and there were twice as many things to do around the house. But by working together, we pulled it off very nicely."

A sense of duty turns into a sense of family

The Stadelmanns' house acted as a surrogate home to the refugees from May 2022 to January 2023. They all felt very close during this period, enjoying some deep conversations and a lot of laughs, too, in spite of all the sadness about what was happening in Ukraine.

"The three of them have achieved so much in such a short amount of time. It was a wonderful gift to be a part of this with them."

Renate Stadelmann, Business Transformation Leader at GF Casting Solutions

↑ Much more than a safe space: the Stadelmanns enjoyed a new sense of family, whether playing games, doing chores, or having deep conversations.

"Something much bigger developed from the initial thought of acting out of duty to help: we had a family. We've really grown close to each other," Renate realized in retrospect.

The time really flew by. Mariia earned her high school diploma by attending online classes in Ukraine from Germany. She and her sister Alexandra taught German to refugees as part of a course to help new arrivals adjust to the language and life in Germany. Liudmyla learned German in no time and was soon giving talks on relief efforts for Ukraine. As a musician, she held concerts to raise money. And she organized the transport of relief supplies. In September, Mariia moved to Konstanz to study at university. Alexandra joined her there in December, because she had quickly found a job at a regional media company thanks to her training as a marketing specialist. Then, at the end of January, Liudmyla returned to Ukraine. "The three of them have achieved so much in such a short amount of time. It was a wonderful gift to be a part of this with them," says Renate.

And she hopes that one day she will have a home large enough so friends can simply drop by at any time and stay for longer periods, if necessary. "Not just when they are in a bad situation. After all, the worst thing is when someone you've grown close to moves on. If we owned a large farm, they could come back and visit us any time they wanted." ■

WHY SHE IS MY HERO:

"It's a sign of humanity and compassion when you provide a home for those in need."

Julia Burchardt
Social Media Manager,
GF Casting Solutions



And how about you?

Which colleague is your hidden hero? Send an e-mail with your explanation to: globe@georgfischer.com.

MY BEST LESSON

Do the thing that you fear

Allen Zhong has learned that challenges don't just go away if you ignore them. They can only be overcome if you tackle them head on.



Allen Zhong

Position: Head of Production
Division: GF Casting Solutions
Location: Suzhou (China)
Joined GF in: 2015

For generations, there was a stereotype that people from southern China must know how to swim because of all the rivers and lakes in that region. But growing up near the water didn't help Allen Zhong become a swimmer – it made him afraid of it. "My parents wouldn't let me go swimming," he says. "There were always stories that kids sneaked out to swim in rivers and tragedies happened. So, from an early age, I believed that water was dangerous."

Nowadays, most kids in both the north and the south of China swim safely in pools. Allen, who works as Head of Production at the GF Suzhou

plant, didn't want his daughter to grow up with the same fears. He enrolled her in swimming school when she was eight years old. As her most loyal playmate, Allen was itching to have a go, too. In the beginning he was scared, but as he carried on bringing her to the swimming course, he started to relax. He began by observing his daughter's coach, and then tried swimming on his own. "I had a slow start in the first couple of weeks, but eventually I decided that I had to put my head down and just do it." Thanks to his determination, Allen managed to learn to swim through regular observation and some training videos. It was hard work, but being finally able to enjoy swimming with his daughter has absolutely been worth the effort – his connection with her is now even closer.

At work, Allen follows the same strategy that helped him learn to swim: he immerses himself in the problem. He leads a team of over 300 people across process engineering, logistics and production. Last year, the scrap rate of the rear shock tower GF is producing for Mercedes-Benz unexpectedly shot up to nearly 20% due to porosity after machining. All of a sudden, there was a risk of not being able to deliver the required quantity on time.

Allen says that everyone involved was under tremendous pressure because they initially struggled to locate the problem. "We were heading in the wrong direction because we were aiming for an easier solution," he says. "But we had to realize that in this case taking pills was not enough to cure the

disease. We needed to perform surgery." A crisis team from various departments improved the functionality of the venting system to fix the porosity, which was a much more complex workaround than had been anticipated. The redesign, which took a lot of hard work, turned out to be a success – the scrap rate went down to under 2%, allowing GF to fulfill the order according to schedule.

"In our line of work, we are always facing unexpected challenges," Allen says. "But life has taught me that there's no better way to handle them than by confronting your fears head on. That way you'll begin to discover your true potential." Do what you are afraid of, he says. And, as shown by Allen's experience with learning to swim, it's never too late to start. ■

"Only when you face your fears will you discover your true potential."

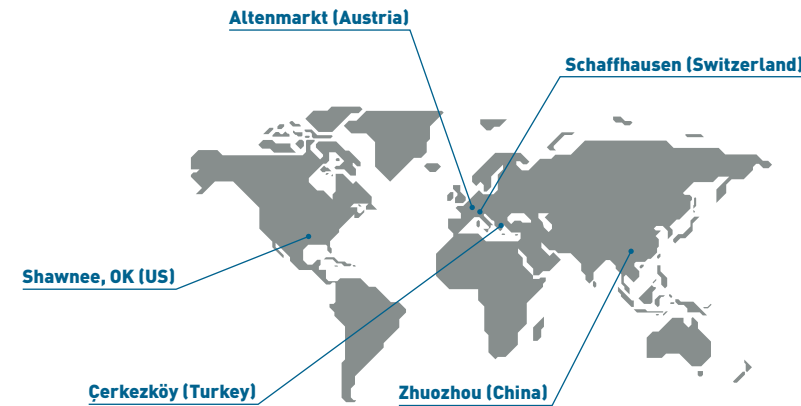


And you?

What life experience would you like to share with your colleagues? Write to us at: globe@georgfischer.com

Bringing ideas to life

A STRONG TEAM: Last year, GF launched the Susty Fund, an initiative that encourages employees to get involved in sustainability.

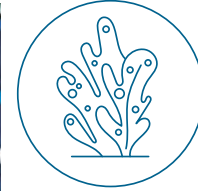


At GF, sustainability is not just a buzzword, but an incentive to “become better every day” while caring about the impact of our business on society and the environment. With the Susty Fund, GF is breaking new ground by giving employees the means and opportunity to drive their own sustainability initiatives.

The Susty Fund awards money to promising projects proposed by GF employees. The range of eligible projects is huge. Here we present a selection of the 17 projects that are currently receiving funding and introduce the teams behind them – true GF pioneers who now have the chance to put their ideas into action.



The pictures capture key moments at this year’s GF Sustainability Conference where the 17 winners of the Susty Fund were announced.



RESEARCH Alginate packaging

Liane Jehle, sustainable packaging expert at GF Piping Systems in Schaffhausen (Switzerland), is proposing an innovative and sustainable packaging material made of alginate film. This biodegradable plant-based material already has many applications in the medical and food industries. The goal is to use a polymer derived from algae, a renewable resource, for packaging to protect GF Piping Systems’ fittings from dust and UV rays. “By actively involving employees and their creative ideas, the Susty Fund shows how much GF is interested in implementing sustainability in a holistic way,” says Liane.



VOLUNTEERING Trash pick-up event

As part of the project called “Beautiful Chinaust: action taker,” employees can volunteer in an annual trash cleanup around the plant in Zhuozhou [China] on World Environment Day. All employees are welcome to take part. “The Susty Fund enables us to cultivate environmental concepts within Chinaust, so employees can be encouraged to take action and protect the planet,” says Shelley Huang, Executive Assistant at GF Piping Systems of the Business Unit Asia.

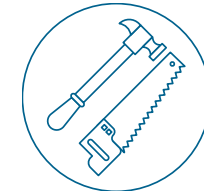


DIVERSITY Metal turns colorful

Hasan Skopljak, a third-year apprentice at GF Casting Solutions in Altenmarkt (Austria) has put forward the idea of a summer festival to highlight the benefits of having diverse teams. The proposed festival would reflect the mix of cultures, languages and nationalities of the people Hasan works with. The village-like summer festival will have market stalls offering a variety of dishes from different countries. At other booths, visitors can learn more about the countries and languages, popular destinations and sports – a benefit people can experience and share. “The Susty Fund is allowing me to implement the ‘Metal turns colorful’ project and highlight the issues of diversity and inclusion in the metal industry to create a more equitable and diverse future,” Hasan says.

From **84**

applications, the jury selected 17 projects. The ideas can now be realized with money from the Susty Fund.



PROPERTY UPGRADES Reusing wood pallets

Wood waste accounts for most of the waste landfilled at GF Central Plastics in Shawnee, OK (US). The proposal for a repair service was born in the spirit of the circular economy: A team of two could repair damaged wooden pallets and keep them in service as long as possible. Lewis Chambers, Safety and Environmental Manager at GF Central Plastics, estimates that the site could reduce the amount of waste going to landfills by 70% within two years. At the same time, it can save money on new pallets and reduce CO₂e emissions from pallet deliveries. “When you work in sustainability, GF is a company you want to work for. You’re constantly challenged to improve safety and the environment at the site,” says Lewis, who worked on the idea with John McMunn, his colleague in quality assurance. “For all employees, the Susty Fund is an opportunity to have their voices heard.”



GREEN BUILDING Landscaping of factory site

GF Hakan Managing Director Betuhan Besler and Head of Quality and Sustainability Baran Bilgili propose the repurposing of previously untended areas around the Çerkezköy plant in Turkey. Their project involves planting trees and expanding green spaces to improve biodiversity and reduce the site’s Scope 1 CO₂e emissions in line with the Sustainability Framework 2025. “The Susty Fund is a good example of how GF encourages us and gives us the opportunity to make our ideas a reality,” Baran says.

GF Susty Fund

Have a good idea for greater sustainability? Then be a pioneer and join in!

What it’s all about:

Your initiative contributes to the Sustainability Framework 2025, is innovative and transferable to other divisions? Can you develop an implementation schedule and quantify the costs to be covered? Then scan the QR code and submit your project proposal!



Saving nerves, time and money

Spare parts can now be identified via an app

Page 29

In the heart of the car industry

GF has opened a state-of-the-art site in China

Page 30

75

percent of the mass in the universe is in the form of hydrogen.

Small molecule, great potential

At **33 kWh/kg**, the energy density of hydrogen is particularly high.

OUR MARKETS: Green hydrogen is poised to play a key role in the energy transition. GF Piping Systems is preparing for a rapidly growing business.

There are times – on particularly sunny or windy days – when some countries in Europe, such as Germany and Spain, produce more power from renewable sources than they consume.

This excess often goes to waste, because efficient solutions to store it for later are still lacking. “Renewable energy is great, but it is not always available when and where we need it,” says Rachel Bros de Puechredon, GF Piping Systems Senior Business Development Manager for hydrogen. “We want to be able to use clean energy even when there is no wind or sun.”

Multi-talented green hydrogen

There is no doubt that the urgently needed and much-discussed green energy transition requires storage options for renewable energy. So-called “green hydrogen,” produced using renewable electricity, has proven to be one of the most flexible and powerful options for decarbonizing energy-intensive sectors, such as the steel industry, transportation, and

Hydrogen has an **atomic mass of 1.008** [u], making it the lightest element in the periodic table.



Rachel Bros de Puechredon

Position: Senior Business Development Manager

Division: GF Piping Systems

Location: Schaffhausen (Switzerland)

Joined GF in: 2022

heat generation, as well as many other applications. “There can be no energy transition without hydrogen,” Rachel says. “We need hydrogen as a new energy vector.”

Governments around the world are pumping billions into projects to generate, transport and use green hydrogen. According to the Hydrogen Council, an international industry trade group, an estimated \$700 billion will need to be spent in the next eight years to reach the hydrogen generation goals that countries have set for 2030. For 2022 alone, investments of \$240 billion have already been committed to hydrogen ventures. This represents nearly 700 large-scale project proposals worldwide.

Massive demand

There will be a growing demand for GF polymer piping systems, because they are needed across the entire hydrogen value chain to safely and reliably transport a variety of different fluids and gases. The same is true for water treatment plants. The water used to generate green hydrogen must be ultra-pure. Since fresh water is a scarce resource, proposals often foresee extracting it from seawater. For this purpose, the corrosive water must initially be desalinated before it is further →

That's the beauty of it – in many ways, this business is already part of GF Piping Systems' DNA."

Rachel Bros de Puechredon, Senior Business Development Manager at GF Piping Systems



treated – a process for which GF Piping Systems already offers solutions. Hundreds of such plants are needed globally: a huge potential market for GF Piping Systems, and a huge innovation challenge. "Every hydrogen device needs a system around it, and not just pipes – they need a variety of different valves and actuators, measurement and control sensors, to make it safe," Rachel says. "That's the beauty of it – in many ways, this business is already part of GF Piping Systems' DNA."

↑ There are many ways to use green hydrogen. It can be used to power vehicles such as buses, in industrial processes, or to generate heat in buildings.

New market, new challenges

The opportunity is massive, but so is the challenge. Standards for some of the necessary solutions haven't even been written yet, and some of the technical hurdles – corrosion-resistant polymers, pipes, and containers capable of transporting hydrogen at high pressures – are still to be solved. "It's a huge new market," Rachel

says, "so we, as a company, need to be able to scale up." Just as green hydrogen is a new business for GF, Rachel is a new addition to the company, tasked with orchestrating a vision for how GF will work with green hydrogen in the future. "It's a whole new customer landscape and a new industry for GF. We need to move quickly and prepare for what's coming. The learning curve might be steep, but we have a huge opportunity to grasp," she says. ■

The hydrogen revolution

Experts around the world are working to make green hydrogen the clean energy carrier of the future. Here's where the research is now, in three figures.

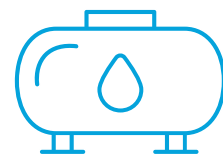
700 billion dollars

By 2030, it is expected that projects worth \$700 billion, will be completed and implemented. Europe and North and South America are the top three regions for this.



2 million m³

The daily amount of water needed by 2030 to produce green hydrogen, according to Global Water Intelligence, a publisher and events organizer for the water industry. Many of the planned projects rely on solar energy for the necessary electricity, and seawater could be an important source of water, which translates into an increased demand for desalination plants, in addition to industrial-scale electrolyzers.



60 million

All hydrogen-powered vehicles use high-pressure tanks. More than 60 million of them will be needed in Europe by 2030, estimates the Clean Hydrogen Partnership, a public-private partnership supported by the EU. All tanks will have an internal barrier coating of polymer to mitigate hydrogen permeation.

INNOVATOR'S INSIGHT

Mobile Parts Finder saves nerves, time and money

One photo is all the Mobile Parts Finder needs to identify the spare part you are seeking. Volker Reichmann presents the new app for field service technicians at GF Machining Solutions.



1 Finding spare parts via the app
During maintenance or repair of a customer's machine, GF Field Service comes across a defective part that needs to be replaced.



2 Photograph or description
The service person takes a photo of the part they are looking for with a smartphone that has Mobile Parts Finder installed. Alternatively, they can also enter search terms.



3 Bullseye!
The app matches the photo or search terms with its dataset of about 35'000 spare parts and returns the spare part number you are looking for.

The challenge

To maintain or repair customers' machines, our service technicians often must order spare parts on site. But the parts do not have a number stamped on them, and it is not always possible to identify them from the manual. In such cases, the back office staff also gets involved in clarifying the matter. Even so, sometimes the wrong part is ordered by mistake and must be returned, and the search starts again. This takes a toll in terms of nerves, time and money.

The process

It was particularly important to us that the app does what the name suggests and gives service staff on site what

they need for our customers. The basis for this is provided by a data set comprising about one-third of the approximately 35'000 parts we have in stock. We have photographed and described all of these, one by one.

The result

Now our service technicians can take a picture of the spare part they are seeking or briefly describe it on site. The Mobile Parts Finder delivers the result in seconds. Some 600 service technicians have already downloaded the app. The next step is to keep expanding the data set. Field service technicians support us by taking photos of parts on site and sending these to us on an ongoing basis. ■

Volker Reichmann

Position: Senior Project Manager
Division: GF Machining Solutions
Location: Biel (Switzerland)
Joined GF in: 2002





At the heart of China's car industry

ON SITE: GF set up a local production site in Shenyang to be close to key customers of GF Casting Solutions. But the new facility has much more to offer than just its proximity to China's automotive hub.



Shenyang (China)

Population: 7.2 million (approx.)

Economy: primarily chemicals, high-tech, vehicle and mechanical engineering

Landmarks:
 → Shenyang Imperial Palace, Qing Dynasty mausoleums
 → The Shengjing Grand Theater (left)

Shenyang is a hub of modern manufacturing, especially for the auto industry. According to the municipal government, the city aims to boost the annual production of cars to 1.5 million by the end of 2023, more than 20% of which are going to be cars with alternative drives. Three of GF's key customers – BMW, Volvo and Hongqi – have plants in or close to the city. In addition, there are many more carmakers in the nearby northeast region, such as Volkswagen, Audi, Beijing Benz and FAW.

That's why GF Casting Solutions has chosen Shenyang as the location for its third and newest production site in China. GF's current sites are both in Jiangsu province (Shanghai area) on the east coast, about 1'500 kilometers away. Being closer to a cluster of important customers will effectively cut transportation costs and improve delivery quality. More face-to-face interactions, for example at workshops or other customer events, will also increase business development prospects for GF.

Premium facility for lightweight parts

Although the Shenyang plant was commissioned as early as July 2020, it was not officially inaugurated until April

2023 due to strict COVID-19 measures, which were not suspended until the end of 2022. The huge presence of customers, media representatives and members of the GF Executive Board at the official inauguration event and as part of a China tour that included all the GF sites in the country demonstrates the enormous importance of Chinese production for GF.

The Shenyang plant produces some of the most complex lightweight parts for cars, such as cross members and rear side members, according to Xuefeng Luo, Chief Operating Officer of GF Casting Solutions in China. "We needed a state-of-the-art facility to produce cutting-edge products," Xuefeng says. And points out that, in addition to first-class equipment, the plant also has strict safety management – through a combination of procedures, equipment and process control. The sophisticated system proves its worth, for example, in the production of magnesium die castings. "The components have excellent strength-to-weight ratios, yet making them also requires particularly precise and safe handling due to the flammable nature of the materials."

In addition to the high safety standard, the internal logistics are also noteworthy. The new design of the route-planning system effectively reduces the manual labor needed to move things around in the plant. That ensures production to run smoothly. The facility, which spreads over 48'000 square meters and houses about 70 employees, is a highly automated powerhouse – with five automatic die-casting cells currently in use, including a state-of-the-art machine with a clamping force of 4'400 tons. Every year, it can deliver millions of parts for GF customers.

Exemplary systems in place

To Xuefeng, the Shenyang plant is an exemplar of GF's Strategy 2025, which focuses on intelligent and sustainable solutions, operational excellence, and a performance and learning culture. It not only supplies customers with sustainable products, it also has high environmental standards itself. LEED Silver certification for the buildings is in the final stages. They feature a slew of environmentally friendly systems, including solar panels, rainwater collecting equipment and wastewater treatment systems. With these systems in place, the



↑ Xuefeng inspects the first-class equipment of the plant that manufactures aluminum and magnesium components.



↑ Xuefeng gives a tour of the state-of-the-art plant in Shenyang, which features many elements of futuristic interior design.



Xuefeng Luo

Position: Chief Operating Officer (COO)
Division: GF Casting Solutions
Location: Suzhou (China)
Joined GF (again) in: 2022

"GF is known to offer valuable training and learning opportunities for career development."

Xuefeng Luo, Chief Operating Officer at GF Casting Solutions in China

plant will be soon annually be able to treat 2'000 tons of wastewater, generate 720'000 kWh of solar power, and save 160 tons of rainwater.

The new site is also expected to attract more skilled talent, thanks to its operational excellence and high-standard working conditions which reinforce GF's reputation in the market. "GF is known to be a workplace that cares deeply about employees and offers valuable training and learning opportunities for career development," Xuefeng says, who recently rejoined GF after leaving in 2011. He says the company's culture of performance and learning played a huge role in his decision to return. "I'm very impressed by the fact that GF has always been a leader in this fast-evolving industry, and I believe the culture is an integral part of its success."

Xuefeng expects the Shenyang team to help further improve GF's position in China. "We may see more challenges and uncertainties in the next decade, but I'm very confident that GF will continue to excel in helping our customers succeed."



Care to see some photos?

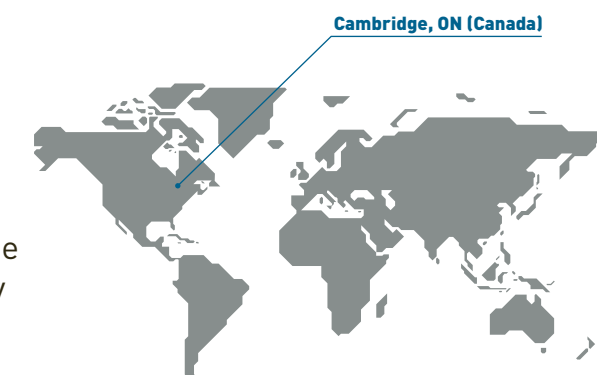
Scan the QR code to view some pictures of the GF site in Shenyang (China).



More economic than ever
Energy certificates prove the high efficiency of GF machines
Page 36

A thrilling ride thanks to GF
A GF product is making waves in a German amusement park
Page 37

A shared road to success



OUR CUSTOMERS: After starting business in 2007 with one GF milling machine, today Canadian machining company Miltera is more of a GF partner than a GF customer, thanks to a uniquely productive collaboration.

The factory floor at Miltera Machining Research Corp., a machining company in Cambridge, Ontario, could easily be mistaken for a GF Machining Solutions showroom. The Canadian company boasts 27,000 square meters of the company's full range of cutting tools. A System 3R automation solution, one of GF's newest and most powerful tools, operates around the clock, producing parts for customers in the aerospace and automotive industries, among others. The benefits of "lights out manufacturing" – industry speak for unmanned operations – are so significant to the growth of Miltera that CEO Mike Blackburn is currently in the process of having a second System 3R automation cell installed.

From its early days, Miltera has relied heavily on GF machines. Shortly after founding the company in 2007, Mike acquired his first GF machine, a 5-axis Mikron HSM 600 U. "This was the beginning of a long and intense relationship with GF," Mike says. Today, Miltera's sweet spot is a combination of turnkey solutions and small-batch, highly specialized machine part production. Miltera's clients include companies in just about every industry. "We've got the whole gamut of manufacturing going on here at any given time," Mike says.

But Miltera is more than a loyal GF customer. Along the way, GF machines have become a key part of Miltera's business. The two companies have developed an exceptionally close partnership, one that is based on mutual trust. Years of working together have also forged a friendship between Mike and GF Machining Solutions Canada Head of Sales Sean Smith.



↑ When the Miltera team develops processes on GF machines for its own customers, every step is executed to perfection. In the background: Mike Blackburn (left) and Sean Smith (right).

↑ Mike Blackburn of Miltera (left) and GF employee Sean Smith (right) appreciate each other, both as business partners and as friends.

GF has over time come to consider the Canadian company a reliable external partner, and even supplies prototype linear motor cutting tools to Miltera for feedback and testing. “For the first XSM 400 U LP that was built, we were in possession of serial number 3,” Mike remembers. Today Miltera has a full range of Mikron Milling machines, along with other Milling solutions from GF.

While Miltera relies on an array of GF machines to make parts, that is just the beginning. When customers are ready to buy their own GF machines, Miltera service personnel help set up workflows and specifications so that customers can seamlessly begin manufacturing for themselves. This customer-oriented approach is the key to Miltera’s success, and ensures that GF and Miltera are constantly developing new approaches together. The basis of their relationship is great trust in each other, and in the value of GF machines.

New ways to collaborate

Miltera’s relationship with its customers often starts with prototyping. When companies need a complicated part manufactured in a limited production run, they come to Miltera. “We can develop the entire process – from how we make a part to tooling techniques and cutting fluid specifications – then test it on our machines,” Mike says. With its arsenal of GF machines, Miltera can mill parts smaller than a fingernail and up to a meter across.

Sometimes that is the end of the story. But often a manufacturer is so happy with what GF Machining Solutions and Miltera have done, or the volume demand for the part has increased enough that they want to manufacture it in-house, justifying the price of a new Milling or EDM machine. But what to do when a brand-new GF machine arrives?

“We develop the entire process for the customer, then test it on our GF machines.”

Mike Blackburn, CEO at Miltera

More than 30

GF customers visited Miltera’s 2’700-square-meter facility in 2022 to see GF machines in action.

↓ Better than any showroom: GF customers can put our machines to the test at Miltera.

For most companies, producing a new part themselves means buying an expensive new machine, then a long settling-in period of prototype production runs and system optimization before manufacturing begins in earnest. “It’s very difficult for the customer to figure out what they need if they don’t yet have a machine. That means months of testing and development while they’re making the machine work,” Mike says. Meanwhile “the machine sits and does nothing for six months, with its warranty running out.”

It is in situations like these where Miltera’s turnkey expertise comes into play. Rather than leaving the customer on their own to set up a new tool, the close relationship between Miltera and GF saves both time and money for the end users of GF machines. “With our partnership, we’re able to go far beyond the usual,” Mike says. “We make the prototype on our machine, and bridge the gap between a prototype and getting the machine.” After the customer buys one of GF’s manufacturing solutions, typically the same one that Miltera was using to produce the part, “we’re able to directly transfer what we’ve developed to their machine,” Mike says. “When the machine arrives, we’re even able provide training for the customer on how it works, and support them going forward.”



Mike Blackburn

Position: CEO
Company: Miltera
Location: Cambridge, ON (Canada)



Acting as a bridge for the customer

Over the years Miltera has also become a trusted partner for GF in another way, acting as a key resource for Sean and GF’s sales team. “The focus is on finding the right solution for the customer, whether that’s Miltera producing the part for them or acting as a bridge while they are buying and setting up their own machine,” Sean says.

On Miltera’s shop floor, Mike and Sean are able to show interested buyers more than just a product demo. Mike and his staff can explain to buyers the challenges of an actual production run, with real tolerances. More than 30 GF customers visited Miltera’s Cambridge facility in 2022, and Sean – whose office is just a short drive away – is a familiar presence at the company.

← Customers can even produce small batches of prototypes on the GF machines at Miltera.

↑ Thanks to automation, the Miltera production facility operates around the clock. Sean and Mike watch the robot in action.

“The focus is on finding the right solution for the customer.”

Sean Smith, Sales Manager Canada at GF Machining Solutions

Unique support for the GF sales team

A sale can be a win-win – GF sells a machine, while Miltera often gains a customer for its prototype and turnkey services. “It’s a great opportunity to show the customer how well you can do the job on a GF machine,” Mike says. “We’re able to be a resource to the sales team at GF for a customer that can’t yet quite justify buying that machine.”

For Sean, that close and personal relationship is vital. “It’s a phenomenal way to get into a company. I can bring that customer here and not only can they see a live shop making parts, but they can also talk to Mike about how it might work on their floor,” Sean says. “They walk in here and see parts being manufactured to tight tolerances and machines that really do make money and do what we say they do. That’s pretty powerful.” ■



Sean Smith

Position: Sales Manager Canada
Division: GF Machining Solutions
Location: Toronto, ON (Canada)

Joined GF in: 2018



Automation advantage

Thanks to the new System 3R from GF Machining Solutions, Miltera is able to machine more parts while maintaining its reputation for high quality.

Last year, Miltera CEO Mike Blackburn installed an automated System 3R Fanuc Milling system from GF Machining Solutions that incorporates four different machines, all fed by a 165-kilo robot. The system is capable of running “lights out” – industry speak for unmanned operations after everyone has gone home for the night. The GF system incorporates software that can be adjusted to run different jobs, making it possible to use a single machine for a wide variety of tasks.

With skilled machinists ever harder to find, the turn to automation has major advantages for GF customers – enough that Miltera is installing a second cell on its shop floor.

DID YOU KNOW?



More efficient than ever

GF Machining Solutions now has the energy certificates to prove that the newer generations of machines consume less energy than their predecessors. We also reveal the value of maintaining a good connection to customers in this regard, and offer three more facts about the certificates.



Rising energy costs in particular are driving the demand for energy-efficient machines. GF Machining Solutions now has seven energy certificates to prove that various series of Milling, EDM and laser machines feature high ratings for energy-efficiency. **The certificates make it possible to compare the different models,** as consumption values are precisely quantified according to the internationally recognized ISO standard.



Receiving ISO certification needs special measuring equipment, trained personnel, and a huge time investment. The precise energy consumption is determined after one week of continuous operation. The data is then compared with that of the previous generation. **This depends on whether or not customers help out.** GF does not have the earlier models in stock, so the data for them is measured using machines still operated by customers.



The energy certificates indicate either consumption per hour (according to the ISO standard) or per part. **The machines of the Form P series reduce energy consumption by up to 43% compared to the previous generation.** Various features work together precisely to make this happen – from the intelligent standby mode to the new IPG generator that enables smoother control of spark power.



The certification process is a victory for the climate, because GF Machining Solutions has been able to reduce the emissions associated with operating the machines. On the one hand, customers can continue to produce while remaining competitive, while on the other hand, the certificates help them receive government subsidies. **In one case, a customer was able to reclaim €300'000 of the purchase price.**



Good for the climate

The energy savings of the Form P series are equivalent to more than one year of greenhouse gas emissions from a typical passenger car driving 26'184 km.

THERE'S GF IN IT

A bigger splash

Europa-Park in Rust, Germany, is the largest theme park in Europe, with more than 6 million visitors every year. The theme park rides run smoothly thanks to solutions from GF.



Butterfly Valve 565

- When comparing the Butterfly Valve 565 to the alternative metal valve, production of type 565 emits **26%** less greenhouse gas emissions (GHG).
- **Approximately 80 plastic butterfly valves** are installed in Europa-Park. They are mainly used in water treatment systems for rides and fountains.

It is light, uncomplicated and ensures that everything runs smoothly in the background at Europa-Park in Rust, southern Germany. The butterfly valve 565 from GF Piping Systems is installed in the filter systems of several water attractions at Europe's largest amusement park, such as Josefina's Magical Imperial Journey and Atlantica Super Splash (pictured). This valve

ensures that the water pipes can be opened and closed as required without any complications. All the components used in the rides need to be both durable and easily replaceable, to not interrupt ongoing operations – crucial at a park that receives more than 6 million visitors a year. Also, while the previous butterfly valves made of metal needed more maintenance and were more sus-

ceptible to corrosion due to their material, the Butterfly Valve 565 is significantly more durable. There is no material wear because it is made of corrosion-free plastics. In addition, the plastic butterfly valves are **60%** lighter than the metal alternatives. They require less energy to manufacture and are easy to install. This not only reduces costs, but also protects the environment. ■



TIME MACHINE

1926

Location: GF factory school in Schaffhausen (Switzerland)
Training profession: Pattern maker
Foundation of the school: 1918

Early talent factory

Seemingly unimpressed by the photographer's presence, budding pattern makers go at it at their workbenches. Most apprentices began their four-year training at GF at around 16 years of age. Our photo shows several cohorts making wooden patterns for cast component molds. Precision was essential and painstakingly checked by the instructor (the gentleman with mustache and tie). GF founded the factory school, which had its own classrooms and workshops, as early as 1918. This was even before the introduction of state-regulated vocational training. In its early days, some 40 apprentices a year were trained in various professions. In the 1950s, the number of trainees rose to an impressive 80. ■

AFTER WORK

A passion for art

Fabio Forti works for GF Machining Solutions in the canton of Ticino in Switzerland, and in his spare time he creates works of fine art. Sometimes GF is his source of inspiration.

I cannot imagine a life without art. I have been painting and creating pieces for 25 years and I love the freedom that art gives me. Everything I encounter in everyday life flows into my art, including my work at GF. One of my artworks is now hanging in the lobby of the new GF building at the Zandone (Switzerland) location. I put the fragments together

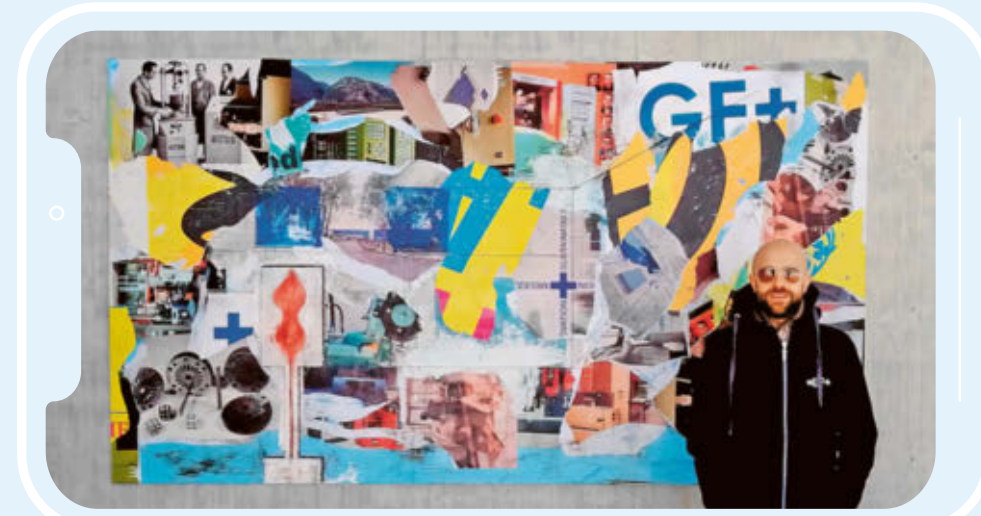
using a technique called *décollage*. The people, the machines, the products, the company environment: each photo stands for a chapter in the history of GF Machining Solutions, a journey to which I bear witness and in which – as an employee – I take part. “Be passionate about everything you do” is the message I carry within me and that I want to convey in my art. ■

Fabio Forti

Position: Wire-cutting EDM Global Application leader
Division: GF Machining Solutions
Location: Losone (Switzerland)
Joined GF in: 2002

And how about you?

What do you do after work? Send your photo (good resolution: approx. 2 MB) together with a short description of it to:
globe@georgfischer.com



IMPRINT

Issue #02/2023

Publisher
 Georg Fischer Ltd.
 Beat Römer, Corporate Communications
 Amsler-Laffon-Strasse 9
 8201 Schaffhausen, Switzerland
 Phone: (+41-52) 631-1111
 globe@georgfischer.com

Project team
 Marta Falconi (Editor-in-Chief),
 Isabel Prose (project management),
 Carsten Glöse (editorial team – Corporate),
 Susanne Düggelin (editorial team – GF Piping Systems),
 Ramona Bernegger (editorial team – GF Casting Solutions),
 Johanna Lüder (editorial team – GF Machining Solutions)

Production

Axel Springer Corporate Solutions GmbH & Co. KG
 Nicole Langenheim (project management),
 Anika Berger, Olivia Kullik, Rüdiger Schmitz-Normann (editorial team),
 Jennifer David (art direction),
 Sibel Soyocetin (photo editing)

Printing: Chinese edition
 DE Druck Europa GmbH

Printing: other editions
 optimal media GmbH

Image captions

Cover: Illustration: Klawe Rzczy, photos: Stefan Meyer, Mick Ryan, Ines Janas, Verena Müller, Martin Maier, private, Getty Images (8), iStock (6); p. 2-3: private (2), illustration: Uli Knörzer; p. 4-5: Illustration: Klawe Rzczy, photos: Stefan Meyer (2), Mick

Ryan, Ines Janas, Verena Müller, Robert Lowdon, Getty Images (4), iStock (2), Adobe Stock (1), private, illustration: Uli Knörzer; p. 6-7: GF, Tobias Gerber, Daniel Meyer, Abhijeet Gurjar, illustration: Julia Zimmermann; p. 8-15: Illustration: Klawe Rzczy, photos: Stefan Meyer (6), Mick Ryan (3), Ines Janas (4), Verena Müller (2), Martin Maier (2), Getty Images, (9) iStock (16), Adobe Stock (2), GF, private; p. 16-17: Illustration: Klawe Rzczy, Eisenbibliothek (11); p. 18-19: Anja Blacha (2), private (4) p. 20-22: Stefan Meyer (3), private; p. 23: Illustration: Uli Knörzer (2); p. 24-25: Thomas Oehninger (16), Getty Images; p. 26-28: Getty Images, private, Imago Images; p. 29: private, illustration: Clara Philippzig; p. 30-31: Adobe Stock, Mick Ryan (2); p. 32-35: Robert Lowdon (8); p. 36: Getty Images; p. 37: GF (2); p. 38: Eisenbibliothek; p. 39: private; p. 40: JBL, 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 the #03/2023 issue is the beginning of September 2023.



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 other GF employees? Write to us!



Your feedback

In your opinion, what was the best thing about this issue? What could we improve? We are looking forward to your message.

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

globe@georgfischer.com



The Globe team (from top left to bottom right):
Isabel Proske, Susanne Düggelin, Julian Liew, Marta Falconi
Johanna Lüder, Carsten Glose, Ramona Bernegger

Solution for the One GF picture puzzle, page 7:

The fountain with integrated GF logo is located in front of the plant in Ratnagiri (India). GF Piping Systems has been represented there since 2008.



Competition

All employees who send us an e-mail at globe@georgfischer.com by 1 September 2023 with ideas for the sections Hello!, Hidden Hero, My Best Lesson or After Work will be included in a prize drawing to win a portable, waterproof Bluetooth speaker from JBL.

Take part and, with a bit of luck, find yourself in the next issue of Globe!

This issue's winner is:

Alejandro Maya, GF Piping Systems, Apodaca (Mexico)

Conditions of entry

Georg Fischer Ltd (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-de>).



Globe is also available online!

The latest issue of Globe is also available online in German, English and Chinese at:

globe.georgfischer.com.