

# Globe

+GF+

THE GLOBAL MAGAZINE  
FOR GF EMPLOYEES

ISSUE 4 · 2019

## Finding Inner Peace Through Art

Export Sales Manager  
Inna Reva travels a lot for  
work. She uses painting  
to find new energy > 12



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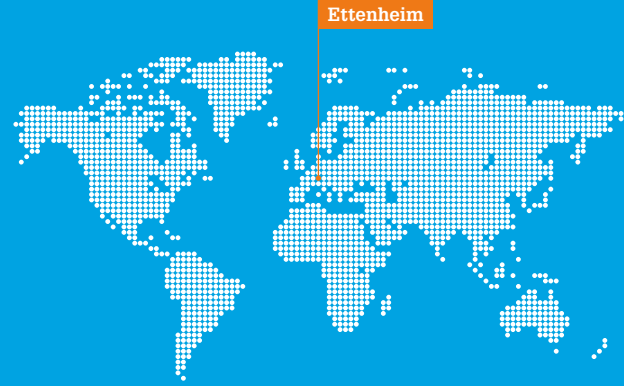
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# HELLO!



## Markus Schmotz

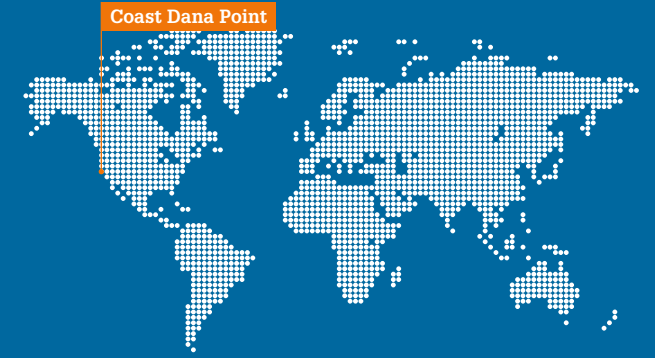
Ettenheim (Germany)  
9 October 2019,  
4:30 p.m.

I'm giving a BOB awareness course at our fluoropolymer facility today. My class just put the principles they learned successfully into practice in a simulated production process. In the back you can see my co-instructor Jonathan Folberth (left) and the team from the plant.

Markus Schmotz is Global Operational Excellence Leader at GF Piping Systems in Schaffhausen (Switzerland).



You can find further submissions to HELLO! online at [globe.georgfischer.com](http://globe.georgfischer.com)

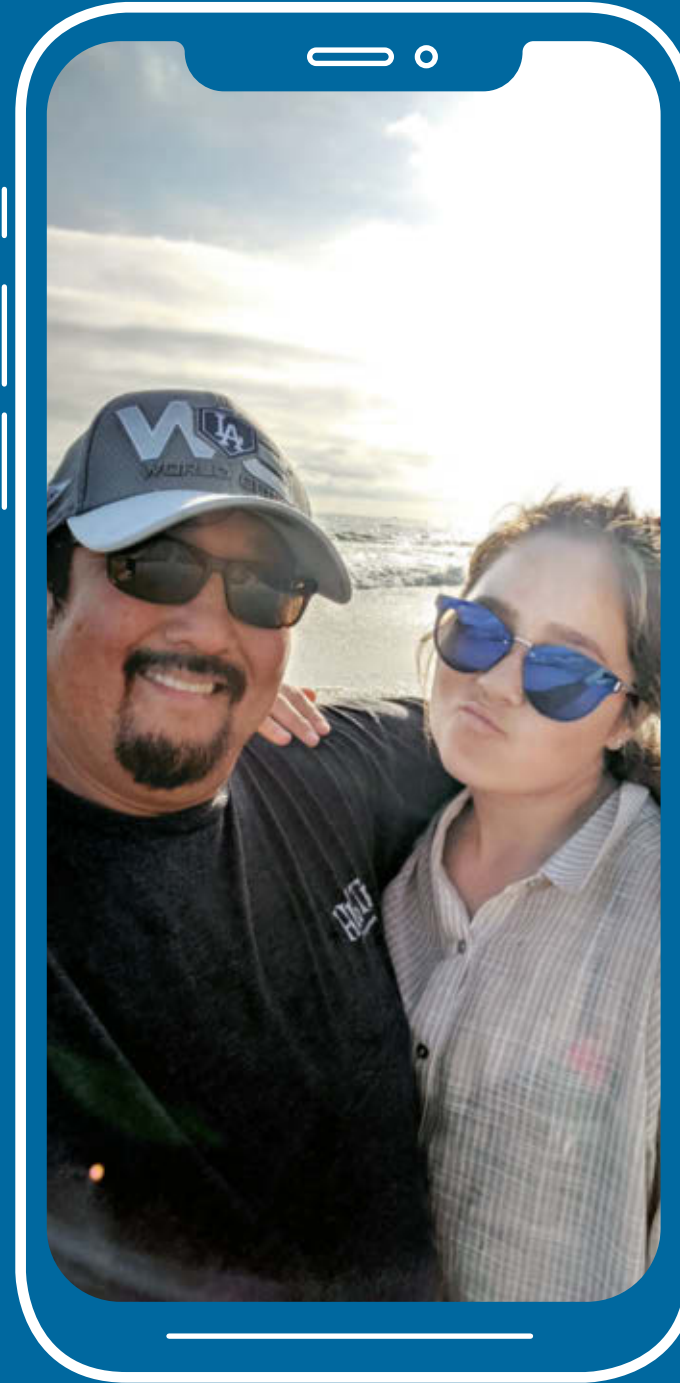


## Eric Matsubara

Coast Dana Point, CA (US)  
9 October 2019,  
4:30 p.m.

In the picture, you see me next to my daughter. She enjoys the summer break from her first year of college – today with two of the things she misses the most from home: her Dad and the beach.

Eric Matsubara is Technical Support Leader at GF Piping Systems in Irvine, CA (US).



## JOIN IN AND WIN!

What are you doing on **15 January 2020** at **11:45 a.m. local time?**

Send your snapshot with "Hello!" in the subject line and a short description to: [globe@georgfischer.com](mailto:globe@georgfischer.com)

All entries will be included in our competition on page 40.

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The new process controls the electrostatic discharge in wire-cutting EDM machines in real time. This prevents wire breakage. Globe will show you how it works! **20**

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Deborah Mercolli Lazzarini lives in the "Mediterranean soul" of Switzerland. Novazzano is where history meets future technologies. **38**

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### OUR GOALS

#### Part of Our DNA

Innovation is firmly established at GF and it is the key to survival. Every division comes up with their own way to make thinking ahead a regular occurrence.



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### ONE DAY WITH

#### Service Engineer

Luboš Dejdar at GF Machining Solutions in Brno (Czech Republic) makes sure things work.

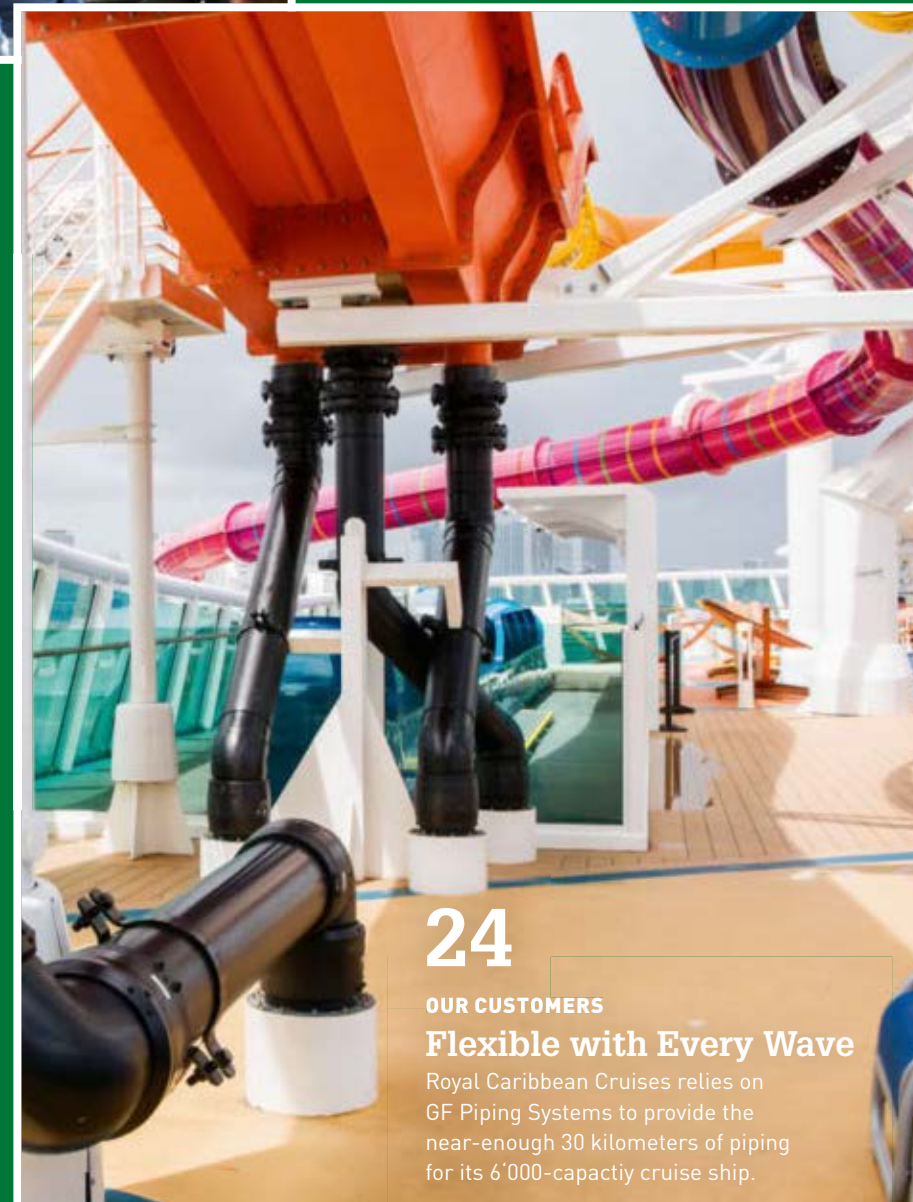


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### OUR MARKETS

#### Big Machines, Big Solutions

GF Casting Solutions Leipzig (Germany) is highly successful in the off-highway segment. Its extensive product portfolio, ranging from cast wheels to powertrains to cross members, is to thank for this.



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### OUR CUSTOMERS

#### Flexible with Every Wave

Royal Caribbean Cruises relies on GF Piping Systems to provide the near-enough 30 kilometers of piping for its 6'000-capacity cruise ship.

# EDITORIAL

## Stay Curious

### Dear colleagues,

The countdown to the new year is ticking. For many of us, that means one thing above all: stress. Projects have to be completed and new plans have to be devised. We rarely take the time to look back at the previous year in the midst of all this hustle and bustle.

In this issue of Globe, we want to show you everything we have achieved together in 2019 and remember the special moments. The opening of the new GF Machining Solutions headquarters in Biel (Switzerland) was one of them. You can read all about the modern site on page 32. Plus, the three division heads tell us which GF innovations they are particularly proud of and what ideas they have in the pipeline for next year on page 28.

In the Cover Story, Inna Reva shows us how creative ideas occur in everyday life. The sales expert at GF Piping Systems in Turkey came across painting by accident. Inna loves trying out new things and creating things by hand – all without any prior knowledge. Flick to page 12 to find out how she does it and what her secret is.

Inna has been kind enough to pick out her favorite motifs for us. I'll leave it up to you whether you want to frame the cards or send them to your colleagues to wish them a Happy New Year. My personal wish for 2020 is that we not only take the postcards into the new year, but also the spirit of Inna's curiosity and openness.

I hope you enjoy reading this issue and that you get a wonderful 2020 off to a great start!

**Lena Koehnen**  
Project Manager Globe



## IN BRIEF



In Irvine, CA (US) the Walk for Water took place for the fourth year in a row.



In Easton, PA (US) runners got together to show respect for disadvantaged people.



In Albershausen (Germany) young and old came together to make a stand.

In Schaffhausen (Switzerland) participants were in an especially good mood in the sunny weather.



In Jakarta (Indonesia) many people joined the solidarity run.



## On The Buckets, Ready, Go!

More than 1'000 people participated in this year's charity run GF Piping Systems Walk for Water and together set a sign of solidarity for the right to clean water. Numerous employees, partners and sponsors took part. Following three successful events at the US site of GF Piping Systems in Irvine, CA, five GF sites took part in September 2019: also employees in Jakarta (Indonesia), Albershausen (Germany), Easton, PA (US) and Schaffhausen (Switzerland) carried water buckets for a good cause. This is inspired by

the burden that millions of women and children carry every day to collect drinking water. The starting fees and sponsorship money raised a total of CHF 350'000. GF increased this amount to CHF 500'000, which will be given in full to the aid organization Water Mission for projects in Indonesia and Malawi. Around 2.2 billion people worldwide have only limited access to clean water. Changing this is a central concern of GF Piping Systems and the Clean Water Foundation of GF. ■



Clean shapes and modern structures define the new administration building in Pitești.

## New Building in Pitești

The GF Casting Solutions site in Pitești (Romania) has a new administration building. The two-story edifice was officially opened at the beginning of October 2019. The site in the south of Romania has belonged to GF since October 2017, together with the site in Scornicești, about 60 kilometers away. After a year of planning and a further year of construction, colleagues from human resources, accounting, logistics, procurement and the technical departments were now able to move into the new spaces. The reception for visitors and additional meeting rooms are also located in the new administration building. ■



The entrance rooms are designed to feel bright and friendly. GF employees welcome customers and visitors, primarily from the automotive industry, at the reception desk.



More pictures and videos on the news in brief at [globe.georgfischer.com](http://globe.georgfischer.com)

## PRODUCT IN FIGURES



# 5.44

meters in diameter: If you were to stand at the base of this Pelton turbine, you would have to look up about two stories to see its tallest buckets. The former steel foundry of GF in the Mühlental valley in Schaffhausen (Switzerland) produced two single-cast turbines for the New Colgate hydroelectric power plant on the Yuba River in California (US) between 1966 and 1967. 93 tons of liquid steel were needed to cast each wheel. The final weight of each wheel amounted to 44.5 tons. With these dimensions, the GF Pelton turbines became the largest of their kind in 1967. Transportation to the customer in Heidenheim (Germany) was difficult, as it had to be carried out in several stages – but only during the night because of their massive size. The 22 buckets of the Pelton turbines – which are still in operation – are 1.16 meters wide and gather 46 cubic meters of water per second, which hits the turbine at a slope of 413 meters. ■

**Wheel material:** Stainless 13 percent chrome steel

**Customer:** Turbine producer – J.M. Voith GmbH, Heidenheim (Germany)

**Operation site:** New Colgate Powerhouse, Yuba River, California (US)

**Turbine output:** 226'000 hp at n = 180 rpm

**Order date:** 16 June 1966

**Production time:** approx. 11 months



Thomas Hary (left) and Paul Czaj (right) are bringing much enthusiasm and expertise to their new roles as CFOs.

## CFO Positions Newly Filled

Thomas Hary has been CFO of GF Piping Systems since 1 October 2019. He was succeeded as CFO of GF Casting Solutions by Paul Czaj, previously Head of Controlling Business Unit Light Metal Europe/Americas. Thomas Hary has held various positions at GF since 2005. Paul Czaj also started his career at GF more than 10 years ago and has gained valuable experience in various positions. ■

## Sustainability Conference in Asia

The 2019 sustainability conference brought together around 40 GF employees from across Asia in September. At a GF Machining Solutions site in Beijing (China), the participants discussed current measures that contribute to achieving the Sustainability Targets 2020. Furthermore, they identified additional areas for improvement. The two-day conference showed once more the importance of collaboration and of sharing best practices in the area of sustainability among locations and divisions. ■



At the beginning of August 2019, GF Piping Systems announced the acquisition of the US service provider Global Supply Co. Inc. (Hallandale). The company specializes in services for the shipping industry. Global Supply Co. Inc. was founded more than 40 years ago and currently employs 20 people in Hallandale, FL. The acquisition will enable the division to further expand its presence in the US marine segment. The company will be renamed GF Marine USA and will continue to focus its existing team on the market for ship retrofiting. ■

## EMO Highlights 2019

Again this year, GF Machining Solutions was present at EMO in Hanover (Germany), the world's largest and most important trade fair for metal processing. From 16 to 21 September, the division showcased a vast range of advanced solutions including Milling, EDM, Laser texturing, Additive Manufacturing as well as intelligent software and connectivity products. Among the exhibited highlights were the new digital rConnect Dashboard solution, the horizontal fast wire EDM solution Agie Charmilles CUT AM 500, the DMP Flex 350 from GF Machining Solutions and 3D Systems, and the Mikron MILL S 400 U with Automated Machine Calibration. ■



Solutions for the growth industries of medical technology as well as communication and information technology were met with great interest.

## TWO POINTS OF VIEW

### What Role Do Social Networks Play in Your Life?

Social networks make a lot of things easier. For example, they help me to organize certain aspects of my life. In my free time I train a soccer team, and I'm able to very easily plan and arrange training sessions, games, and excursions with my team via Facebook, WhatsApp, and other messaging services. These networks also allow me to stay in contact with old friends, and sometimes even find new ones. Many customers who I've gotten to know through work have ended up becoming friends because it's so easy for us to stay in contact thanks to social networks.

However, the boundary between my professional life and private life often becomes blurred because of digital networks. I post vacation photos and photos of my family on my Instagram profile, but I also use this network as inspiration for my work and to share GF's successes.

I admit that I sometimes have to force myself to put away my cell phone, especially at the breakfast table in the morning. You can't let yourself forget that personal contact is always the most important kind. Despite all this, social networks are an excellent tool if it's not possible to chat in person, or if all you need to do is engage in a short exchange. ■



For a sales professional like myself, social networks make my day-to-day work a lot easier. I use social networks to communicate with my colleagues and customers instead of formal communication methods like e-mails and telephone calls. It's definitely faster, more direct, and more efficient. Digital platforms also offer a range of options for getting in touch with potential business partners, as this kind of communication feels a lot more personal.

In China, we use the WeChat messenger, which is very similar to WhatsApp. Many people share photos and information about their personal lives on this platform. Increasing numbers of people also use WeChat as a communication channel in their professional lives. I use it to stay in contact with business partners, colleagues, and friends.

But it also has its downsides. You can waste a lot of time on social networking because you get caught up in replying to messages or end up reading too much information. To avoid this, I have set a specific time each day for digital communication. This allows me to focus on important professional matters, without getting distracted by social networks. ■



Riku Tuomainen has worked at GF Piping Systems in Vantaa (Finland) for two years. He spends a lot of time travelling to the capital of Helsinki and Espoo, Finland's second-largest city, in his role as Area Sales Manager to chat with customers about their individual requirements and how GF can fulfill them.



More images of Riku Tuomainen and Maggie Jiang at [globe.georgfischer.com](http://globe.georgfischer.com)

The team of GF Piping Systems in Schaffhausen ensures reliable quality control for weld beads by means of the WBI Tool: Peter Waefler, Product Manager, Robert Reiz, Project Leader, Alessandro Anello, Technical Designer, and Benedikt Engesser, Project Engineer (from left).



## MADE IT! NEW TOOL DEVELOPED

# Better to Be Objective

As small as a computer mouse and packed with state-of-the-art camera and lighting technology: The Weld Bead Inspection Tool from GF Piping Systems assesses the quality of infrared-weld beads more reliably than ever.

When an infrared butt fusion process is used to join plastic piping components together, a weld bead is produced, which is also called a fusion bead. Experienced welders or quality control managers assess the quality of the bead with the naked eye to see whether it is perfectly fused and as uniform as possible. Specialists need to be well trained and highly experienced to carry out this important task. But there are fewer and fewer qualified workers with this expertise. "Some of our customers from the semiconductor and pharmaceutical industries expressed the need to assess the quality of weld beads more objectively," says Peter Waefler, Product Manager for Joining Technology at GF Piping Systems in Schaffhausen (Switzerland).

### Assessment via image analysis

With this in mind, a team of GF began to develop a solution two years ago, in cooperation with the University of Applied Sciences Rapperswil (Switzerland). "Our approach was based on a Design Thinking process," Waefler explains. Design Thinking means that the development focuses on customer needs from the very beginning and feedback is provided on concepts, prototypes, and during the test phase. At the end of 2019, GF Piping Systems launches the Weld Bead Inspection Tool (WBI Tool) on the market as a product series. There has never been a tool like it before that can assess a weld bead and provide a seal of approval quickly and objectively. The WBI Tool is packed with state-of-the-art technology within a tiny space. A camera, a light source, a

mirror, a circuit board, and a motor are needed to capture the fusion bead. And yet the WBI Tool is as small as a computer mouse. The WBI Tool is available in two sizes so it can check the connections of pipes in a range of sizes from diameter 20 to 225 millimeters. Here's how it works: The WBI Tool is placed precisely on the weld bead with the aid of semicircular clamps. The key component of the WBI Tool is the camera, which is brought into position with a motor. The LED light source illuminates the bead from behind, and the mirror directs the light toward the camera. The camera now takes several pictures of the weld bead in quick succession from different positions and uses them to compose an optimized, undistorted image.

The shape of the bead is the critical factor in the assessment of a weld bead. For example, the wall offset, width, height, and area may only fall within predefined tolerance limits that apply equally to all beads. Within seconds, an algorithm calculates the measuring points defined from these criteria on the image; the results are logged and reported by a software program. There must be at least four measurements per weld bead securing the 360-degree view. If all values fall within the predefined criteria, the weld bead is given a satisfactory rating and an "OK" will appear on the tablet.

The market feedback for the WBI Tool has been very positive since its market introduction: the team was recipient of the second prize in the Innovation Award at this year's Schaffhausen Regional Association of Industry and Commerce event in March 2019 for the WBI Tool. ■



### KEY FACTS ABOUT THE WBI TOOL

- **Series production:** The WBI Tool, along with its adapters, is the first product series manufactured by GF Piping Systems using a 3D printing process.
- **Advantages:** The WBI Tool enables automatic quality assurance and the results are digitally documented.
- **Patents:** Various patents relating to the fixture and the evaluation process have been filed.



At least four measuring points are needed in order to assess the entire weld bead: above, below, behind, and in front. An average of eight measuring points are defined in order to measure the bead. Larger pipes may even require double this number.



More pictures at  
[globe.georgfischer.com](http://globe.georgfischer.com)

COVER STORY  
PAINTER INNA REVA

Inna takes in her surroundings as she strolls through the streets of Turkey's bustling metropolis Istanbul. She captures everyday scenes, unique façades, and interesting shapes that she comes across in her sketchbook. Maybe they'll even pop up in her next oil painting...

# Discovering the Power of Art

For Inna Reva, painting is like mediation, bringing some peace into her hectic life. As Export Sales Manager at GF Piping Systems, the native Ukrainian visits distributors, construction companies, and installation companies in Eastern Europe several times a month. Her passion is developing sales strategies for new customers and sales regions.

**W**ith a gentle clack, Inna Reva carefully unfolds the wooden support, and there it is: her easel. Reaching to a shelf, Inna fetches a canvas stretched on a frame and carefully places it in the holder. She shifts it a little to the side. The light of the morning sun shines directly on the bare, white surface, which is just waiting for Inna to embellish it with colors and shapes.

The Ukrainian native has been Export Sales Manager for the industry, utility, and building technology market segments at GF Piping Systems in Istanbul (Turkey) for seven years. She spends five to ten days a

month on business trips. She travels to Ukraine, Azerbaijan, and Georgia to inform her customers – including distributors, construction companies, and installation companies – about the latest innovations in piping systems for drinking water and wastewater, as well as district heating pipelines. This is a multifaceted job that involves a lot of time pressure, but at the weekends Inna dedicates herself to her hobby: painting. Her small apartment in Beylikdüzü – a neighborhood on the European side of Istanbul, located some 40 kilometers from the bustling center of the metropolis – becomes her atelier on Sundays. Inna spreads out carefully stowed-away utensils like her palette, paintbrushes, and oil paints on the dining table. And thus her living room transforms into her artist's studio. >



## KEY FACTS

**Name:** Inna Reva  
**Position:** Export Sales Manager  
**Division:** GF Piping Systems  
**Location:** Istanbul (Turkey)  
**Part of GF since:** 2013

› “For me, painting is like meditation, because it’s when I can truly be at peace after a working week full of appointments,” says Inna.

**A lucky coincidence**

She discovered the power of art about two and a half years ago during a customer call. “That was an incredibly stressful day,” Inna recalls. To concentrate better during the conversation, she got a pencil and started drawing shapes on a pad without really paying attention to what she was doing. “After I hung up, I saw animals running across the pages with decorative elements wound around them,” she remembers. “I was totally surprised by how lively the drawings looked.” Not long after this, Inna went on a business trip to Belarus. As she strolled through the streets of Minsk, she came across an art supplies shop. On a whim, she purchased some paints, paintbrushes, pencils, and lots of paper. Back in Beylikdüzü, Inna experimented with graphite sticks, watercolor pencils, and finally oil paints. Reading a whole lot of theory before putting it into practice is not really Inna’s thing. “I learn something by doing it,” she says.

**The beauty of oil painting**

Inna fell in love with oil painting. “The luminescent power and gentle shimmer of the dried paint is something that amazes me, time and time again,” enthuses the 36-year-old. There are also plenty of options for altering the paint colors by mixing them on the palette or directly on the canvas. Each time she does this, the green that she creates by using yellow and blue paint looks a little different, acquires an unexpected nuance, or becomes a new shade of the same tone.

Inna painted her first oil paintings in 2017 as a present for her parents in Ukraine. Her subject was the family dog Badik, a French bulldog. Before sending the paintings by mail, she showed the pictures to her friends and colleagues. They were so impressed by them that they also wanted to have paintings done by Inna. “I’m not a painter,” Inna thought back then, “but I’ll give it a shot.” Since then, she has completed ten oil paintings, and Badik the bulldog has been joined by strong, valiant lions and colorful bouquets of flowers. Inna gets inspiration for her paintings on her walks by the Sea of Mar-



Inna feels at home in Istanbul. She enjoys painting in peace and quiet by the Bosphorus, or browsing in shops for new paints in the busy old town.



Her love of art and colors fuels Inna’s sense of joie de vivre, recharging her batteries so that the Sales Manager can dedicate herself fully to new products.

—  
**“Painting is a good test of patience and teaches you empathy.”**

**Inna Reva**  
Export Sales Manager at  
GF Piping Systems

mara, in the hustle and bustle of Istanbul, in museums, and even in her projects for work. “I meet so many interesting people between my customers and my colleagues, and I travel a lot. It all feeds into my creativity,” she says.

**A passion for piping systems**

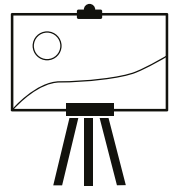
Inna speaks just as passionately about her job as she does about oil painting. She is particularly proud of the Silenta product, a sound-insulated wastewater drainage system made from mineral-reinforced polypropylene. Why is that? “Silenta is an ultra-modern, flexible system that can be used both above and below ground,” Inna explains. She is a true expert in piping systems. After completing a degree in electrical engineering in Zaporizhia

(Ukraine), she worked as a project manager for a manufacturer of plastic pipes. Then she distributed radiators, boilers, and pipes as a regional sales manager for Hakan Plastik in Kiev. This working relationship allowed Inna to come to Turkey in 2012 to work as Export Sales Manager for Hakan Plastik in Istanbul. She has worked for GF Piping Systems since its acquisition by GF in 2013.

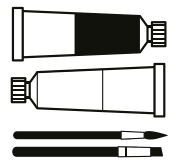
A shuttle service organized by GF Piping Systems collects her from home at seven in the morning, and brings her back from the office in the evening. It takes about one hour to reach the central district of Kağıthane, where the Turkish headquarters of GF Piping Systems are located. By Istanbul standards, this is a fairly normal commute. Inna uses the time to check her calendar, and to prepare for

internal meetings and calls with customers. Plenty of research is waiting for her when she arrives at the office. Recognizing trends and observing the market and competitors are essential parts of her job. “I love developing sales strategies for different regions and our products, and making new contacts,” Inna says. And she does this with great success. Piping products from GF Piping Systems are used in the Orbi Twin Towers and Marriott hotels in Batumi (Georgia), as well as the Sea Breeze Resort in the Azerbaijani capital Baku. Despite her passion for piping systems, her life in Turkey didn’t have the easiest start. While she made friends quite quickly – in an after-work fashion design course and among her work colleagues – it took her a while to speak the language. As most of her customers

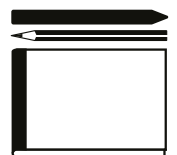
**OIL, ACRYLIC, AND PENCIL**



**1 Oil paints** Inna loves the luminescent power and shading of oil paints. That’s why she uses them to create most of her pictures.



**2 Acrylic paints** She recently discovered acrylic paints, which have been around since the 1950s. Acrylic paint dries faster than oil paint, is suitable for many materials, and is odorless. This makes it perfect for use in enclosed spaces.



**3 Soft graphite** Inna prefers to use soft graphite for her sketches. She scribbles impressions and ideas in her trusty notebook, which she carries everywhere.





Exchanging ideas with her colleagues is very important to Inna. Here, they are evaluating new components together.



**THREE PLACES WHERE INNA FINDS INSPIRATION**

- Inna often visits the Istanbul Museum of Modern Art. The permanent exhibition shows paintings, sculptures, and installations from contemporary Turkish artists, while work by international artists features in its temporary exhibitions.
- In Georgia, Inna goes to shops selling colorful jewelry, mosaics, and ceramics made using the minankari technique, a traditional form of enameling.
- Inna is inspired by designs at the National Carpet Museum in Baku (Azerbaijan).



The museum building itself is worth a visit, shaped like a rolled-up carpet and located on the promenade by the Caspian Sea.



More pictures and a video of Inna Reva are available at [globe.georgfischer.com](http://globe.georgfischer.com)

As a qualified engineer, Inna knows a lot about piping systems. She gets to grips with display pieces herself to prepare for customer presentations.

› came from Eastern Europe, she spoke Russian, Ukrainian, or English with them. "I just couldn't find any connection to Turkish, even though I love learning languages and becoming better acquainted with new cultures," Inna says.

After a year of living in Turkey, she simply started talking – without so much as taking a language course or cramming grammar. Since then, she has become a confident speaker of the local tongue, and speaks it with both Turkish customers and her colleagues. Inna claims that her art helps her as much as her language skills. "Painting is a good test of patience, and immersing yourself in a subject teaches you empathy. As a sales manager, I need both of these things for my job." Inna is also patiently pursuing a new

personal project. She would like to design a diary with painted images and quotes or poems that make people happy. She diligently sketches in her notebook, which she always brings with her on business trips, on walks, and to museums. It is only on Sundays, when she stands at her easel with the morning sun shining through the window, mixing oil paints on her palette, that she leaves her sketchpad in her bag. Then Inna devotes herself entirely to painting. ■

**3x3**

1. A vacation full of relaxation or sight-seeing?
2. In this place my creativity truly soars:
3. My first car was a...



**Alejandro Maya**  
Assistant Controller  
GF Piping Systems  
Apodaca (Mexico)

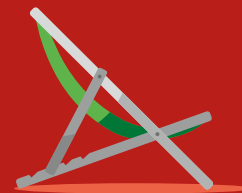
**1. Sight-seeing vacations** for sure!

**2. In nature: At a quiet river surrounded by trees,** close to my house.

**3. ... a VW Sedan 1993 (Beetle)** when I started university.



**Tanja Basso**  
Service Team Milling  
GF Machining Solutions  
Schorndorf (Germany)



**1. Relaxation.**

**2. At home at my big dinner table.**

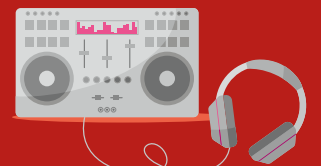
**3. ... a green Golf 1** nicknamed "frog."



**Kenney Pope**  
Inside Sales  
GF Piping Systems  
Dallas, TX (US)

**1. I love both:** relaxation and discovering new places.

**2. Anywhere music is present.** I spent 15 years as a radio DJ and now own my own weekend DJ business.



**3. ... a 1969 Ford Ranger truck.**



**Here are the new questions:**

1. For me, innovation means...
2. My wish for 2020:
3. Breakfast at home or in the office?

Take part and send your answers along with a portrait photo and "3x3" in the subject line to: [globe@georgfischer.com](mailto:globe@georgfischer.com). All entries will be included in our competition on page 40.



You can find further submissions to 3x3 online at [globe.georgfischer.com](http://globe.georgfischer.com).

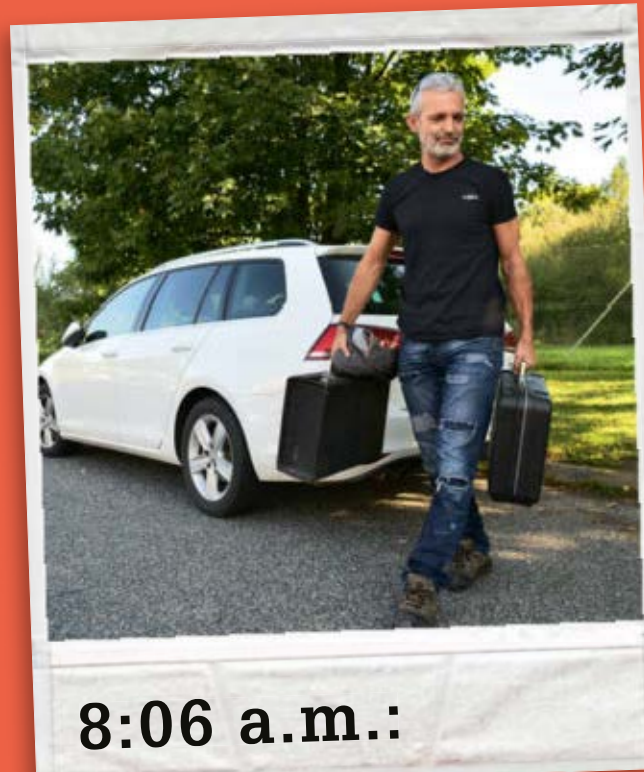
ONE DAY WITH  
LUBOŠ DEJDAR



**Name:** Luboš Dejdar  
**Position:** Service Engineer for wire-cutting and die-sinking EDM and Milling machines  
**Division:** GF Machining Solutions  
**Location:** Brno (Czech Republic)  
**Part of GF since:** 2011

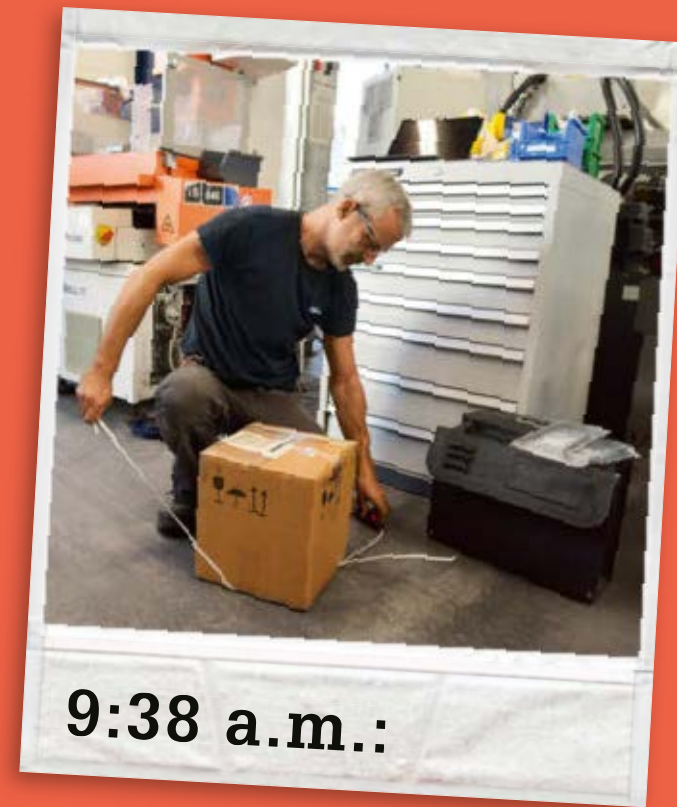
## A Passion for Engineering

Luboš Dejdar makes things work. The Service Engineer at GF Machining Solutions in Brno (Czech Republic) repairs and maintains customers' EDM and Milling machines. Even in his spare time, Luboš loves to tinker with things.



8:06 a.m.:

The working day begins. From his home town of Trebovice, Luboš drives his company car directly to a customer – a supplier to the automotive industry – in Kurim. The village is located about 14 kilometers south of Brno, where the headquarters of GF Machining Solutions Czech Republic is located.



9:38 a.m.:

The customer needs a new water pump for his DRILL 11 hole-drilling EDM machine. When it comes to GF machines, Luboš always knows what to expect, so he can prepare himself perfectly for every customer appointment and, like today, bring the spare parts with him.



10:37 a.m.:

Luboš Dejdar has been looking after some customers and their machines for many years. On days like today, his experience is particularly valuable. Although nowadays many problems can be solved with software, this time Luboš has to take a look at the hardware and the inside of the machine itself.



1:19 p.m.:

After about three hours, the defective pump has been replaced. Now, Luboš tests whether the machine is running properly. He also reorders spare parts for a water purifier as he discovered further broken components during the repair.



2:05 p.m.:

After his customer appointment, Luboš goes to the office in Brno. There he meets his colleague Iva Smýdová, who organizes all his appointments. Together they determine the urgency of the next assignments and assess the already completed repair and maintenance work.



5:38 p.m.:

In his spare time, Luboš uses every free minute at home to do handicrafts, build and paint. Boats are his passion and Luboš knows all about them. This evening he gives this boat its finishing touches.



8:10 p.m.:

After having finished his handicraft work for today, Luboš passes the end of the evening at a campfire in the garden with his family.



More pictures of the day with Luboš Dejdar at [globe.georgfischer.com](http://globe.georgfischer.com)

**THAT'S HOW IT WORKS!**  
INTELLIGENT SPARK PROTECTION SYSTEM

# On the Trail of Sparks

Wire erosion is the ideal manufacturing process for particularly small parts, such as tiny gear wheels for watches or other workpieces with many corners, edges, and points, because it is very precise. However, the more complex the final shape of the parts, the more the wire is stressed in the Electrical Discharge Machining (EDM) machine. The reason for this is more frequent electrical discharges and thus increased punctual spark formation. This is why GF Machining Solutions has developed Spark Track. Powered by the Intelligent Spark Protection module, the new process controls the discharges and thus prevents wire breakage.

### The erosion wire

The so-called erosion wire is wound on a spool. It is usually made of brass or copper, as these metals conduct electricity very well.

## 2 microseconds

is the time required for the spark to jump from the wire to the workpiece (0.000002 seconds).

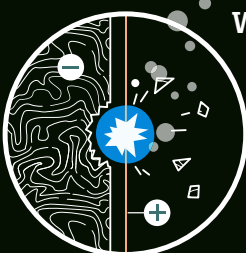
### The machine's heart

The wire is energized via the upper and lower electrodes. This results in two partial currents whose intensity the sensor measures separately. The software then determines the difference between these two values. The ISPS module evaluates the data. If previously defined limits are reached for this workpiece, the machine automatically receives the signal from the module to adjust the current.

+GF+

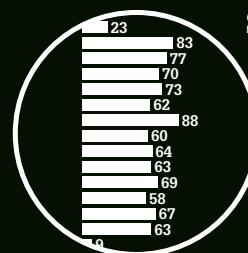
### Screen display

The illustrated demonstration piece contains very difficult geometries: bevels, protrusions, points. There, sparking is particularly high. On the screen, there is real-time control of the energy density on the wire. The ISPS module detects when sparking becomes too intense. Wire breakage is thus prevented even with complex shapes.



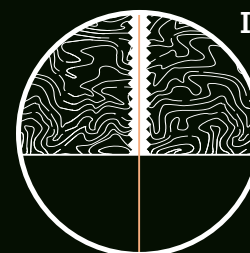
### Wire Erosion

Wire erosion is a precise wire cutting process in metalworking. It works in the so-called negative polarity: the wire is negative, the workpiece is positive. In the process metal is separated by electrical discharge via the wire and the resulting sparks.



### Spark Track

When wire eroding, the sparks occur randomly. The electrical discharge always takes place at the point of the lowest resistance. Thanks to Spark Track, the sparks can be monitored and the average process power can be controlled.



### ISPS

Via the sensor, Spark Track collects and secures the discharge location and strength of the sparks. Its module Intelligent Spark Protection System (ISPS) analyzes this data. When the spark quantity defined for the machining of the respective workpiece is reached, ISPS adjusts the machine setting in good time.

### CUT 2000 X

One of GF Machining Solution's EDM machines with Spark Track technology is the AgieCharmilles CUT 2000 X. It features an automatic wire changer with two-wire coil. Depending on the requirements, wires with different diameters can be used on the workpiece.





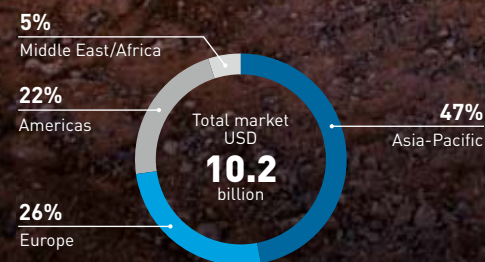
**GROWTH MARKETS**

**107 billion**

EUR is the projected global volume of the agricultural machinery market in 2019. The sector is responding increasingly to calls to protect the environment and is making major strides in reducing the use of fuel and the amount of CO<sub>2</sub> emissions. This opens up further growth potential.

Source: 2019 IKB study, vdma.org

**Higher Construction Spending**  
Over 50 percent of the world's population now live in cities – and this number is rising. According to several studies, average annual construction spending is forecast to grow by roughly 2.8 percent to more than USD 10 trillion by 2030.



**OUR MARKETS**  
OFF-HIGHWAY

# Big Solutions for Big Machines

**Axles and drives** for construction machinery, power generation systems, and rail equipment are a few of the custom components that GF Casting Solutions produces for all sectors in the off-highway segment in Leipzig. The plant is well-equipped to serve the global market thanks to these products.

**T**he bucket of a wheel loader can carry roughly two metric tons of sand, soil, or rubble. The vehicle needs strong axles to lift these heavy loads. These are supplied by GF Casting Solutions in Leipzig (Germany). The local production plant produces axles, cast wheels for German agricultural machinery manufacturer Claas, and power unit components for all sectors in the off-highway market. This includes construction and agricultural equipment, engine, rail, and power generation equipment, and machinery used in the production of plastics, textiles, and paper.

**An active player on the global market**

The Leipzig facility produces approximately 360 different components. These range, from lightest to heaviest, from a rotary transmission for diggers (57 kg) to a link for wheel loaders (1'250 kg). They are all made on one of the biggest automatic molding lines in the world, measuring 2.5 by 1.6 meters. At present, the plant and its some 260 employees serve more than 70 customers, including Volvo Construction Equipment, Liebherr, and MAN. While the majority of customers are based in Germany, clients are also based in Scandinavia, the Americas, China, and throughout the rest of Europe. "We export roughly 50 percent of what we produce," explains Norbert Pomplun, Key Account Manager Off-Highway at GF Casting Solutions in Leipzig. The facility in eastern Germany aligns its activities to the latest trends and developments on the global market. For example, by 2100 the global population is projected to rise

to 12 billion people who all need to be fed. Not only that, they need to be housed, also in the growing number of megacities with populations of over ten million. This means that agricultural and construction machinery will be a key market in the future, too.

**A partner you can trust**

"The challenges in the off-highway market are different to those in the passenger car market," states Norbert Pomplun. While lowering the amount of gas and diesel that vehicles consume is important in both cases, the approaches are different. One focuses on employing lightweight parts, while the other focuses on improving the payload to weight ratio. Pomplun projects that "our market will continue to grow in the long term." Similarly, e-mobility and autonomous vehicles are slowly gaining traction in the off-highway segment. This presents technical challenges for agricultural and construction equipment makers. "We are working with Volvo Construction Vehicles to design new electric drive units." The first prototypes are now being tested. GF Casting Solutions is valued in the off-highway segment as a reliable partner with a strong focus on quality. One proof for this is the 2019 Claas Supplier Award it received. The award is presented annually at the Claas' International Suppliers' Day to honor the best partners. The division stood out for its innovative elbow, a single-piece cast part that replaces the welded components that were typically used in the past. ■



**DIVERSE PORTFOLIO**

**Cast wheels (see above), drive units, cross members:** GF Casting Solutions in Leipzig produces cast parts for commercial vehicles, construction machinery, agricultural/forestry equipment, wind/solar power systems, and for engine/machine making.



**Norbert Pomplun** joined GF Casting Solutions in Leipzig (Germany) 13 years ago. He started out as a sales manager before being promoted to Head of Sales. Since 2015 he has worked as Key Account Manager and he is responsible for all products and customers. His motto is: "Either I find a solution, or I make one."

More pictures at [globe.georgfischer.com](http://globe.georgfischer.com)

**OUR CUSTOMERS**  
ROYAL CARIBBEAN CRUISES

# Flexible with Every Wave

With a fleet of 26 ships, Royal Caribbean Cruises is the second largest cruise line in the world. The company has been using products from GF Piping Systems for 14 years. The piping installed on a cruise ship can be up to 30 kilometers long.

**S**hips are unique," says Mike Beutler. The Senior Product Manager for Marine Products at GF Piping Systems in Little Rock, AR (US), is fascinated by how ships move and gently bend with the waves. "All the materials and equipment need to be tailored precisely to the requirements of the high seas, from the steel hull and the engine room to the piping." GF Piping Systems has just the right solution for this, as one of the biggest cruise lines in the world can confirm.

Royal Caribbean Cruise Ltd. (RCCL) operates 26 cruise ships from its company headquarters in Miami, FL (US). These ships are among the biggest in the world. An ocean liner about 350 meters in length can carry up to 9'000 passengers and crew members. RCCL has been using products from GF Piping Systems for 14 years. There are suitable GF systems – iFit, Instaflex, Sanipep, Fuseal SeaDrain – to address every need on board, from supplying drinking water to carrying wastewater from toilets or showers. GF products are also used in the swimming pools and water parks on the cruise ships.

## Specifically tailored to the marine sector

Leon Pacheco, Ship Superintendent at RCCL in Miami, speaks highly of the comprehensive range of products that GF Piping Systems has to offer: "We not only appreciate GF's products but also the reliable service and repairs >

## INCREASED APPLICATION AREA

The "white" in the product name SeaDrain White refers to the color of the components. The components of the predecessor systems were blue or black. As the publicly accessible spaces on the cruise ships must be white, SeaDrain White can now be used across larger areas.



RCCL Ship Superintendent Leon Pacheco (left) and Mike Beutler (right), Senior Product Manager Marine at GF Piping Systems, work closely together. Despite the fact that Mike Beutler's office in Little Rock, AR, is roughly 1'500 kilometers from RCCL's corporate headquarters in Miami, FL, they see each other several times a year.



About 28 kilometers [18 miles] of pipes are installed on a ship with a capacity of 6'000 people to convey fresh water and wastewater. Leon Pacheco and Mike Beutler are a seasoned team when it comes to planning and maintenance.

About six million passengers went on ocean cruises operated by RCCL in 2018. GF products are also used in the swimming pools and water tanks on its cruise ships.

**RCCL IN FIGURES**

**77'000**

Number of Royal Caribbean Cruises Ltd. employees worldwide (as of 2018).

**8'820**

Capacity of the biggest RCCL cruise ships (passengers and crew). These include "Symphony of the Seas" and "Harmony of the Seas."

**2.5 years**

Time needed to build and subsequently launch a ship for 6'000 people.

› the team provides. Everything is delivered from a single source. It pays off in terms of the durability and cost-effectiveness of our ships."

RCCL and GF Piping Systems also work closely together on new products. Following a two-year development phase, RCCL will be installing SeaDrain White on its ships from January 2020. "The special thing about it is that we developed it together with RCCL – for RCCL and other marine customers," says Beutler. "Our customers contributed just as many valuable experiences and ideas to the development of this product as we did ourselves." SeaDrain White is one of the first thermoplastic drainage systems for wastewater with both mechanical and welded connections. This provides dynamic flexibility during the piping system installation. In previous systems, such as the predecessor product Fuseal, the pipes were blue or black. SeaDrain White is produced in a white color and is the first GF Piping Systems solution developed exclusively for the marine sector.

Beutler conducted multiple customer interviews during 2018 in order to optimize the old system for use in shipbuilding. Over a period of six months, problems and

concrete suggestions for improvement emerged out of nearly 40 interviews with experts from RCCL and other cruise lines. "Royal Caribbean Cruises has been using our product Fuseal for many years. Their experience and knowledge provided us with specific insights that fed into this solution," says Beutler. The customer interviews were followed by a year and a half of development until SeaDrain White was ready to be launched into the market. The system consists of over 50 percent new, marine-specific components and will be ready for global distribution from January 2020.

By working together on SeaDrain White, GF Piping Systems and RCCL further strengthened their already successful partnership. "GF is always there for us, no matter what we need," says Pacheco, and he means it literally. He and Mike Beutler meet regularly in Miami, despite the long distance between their work locations. "Leon can call me any time he needs something," adds Beutler. And that's exactly what he did when a ship was in need of repair and the replacement parts were not delivered on time. Beutler was at a conference in Texas, but flew to the Cayman Islands the next day to assist with the instal-

lation. What began as a small repair job turned into three days of challenges. "We react quickly to our customers' needs," Beutler notes.

**Looking beyond the horizon**

The close cooperation between RCCL and GF Piping Systems will continue after SeaDrain White. Arrangements are being made for technical experts from RCCL and a dozen GF colleagues from various sites, such as GF Signet in El Monte, CA (US), GF JRG in Sissach, and GF Piping Systems in Schaffhausen (both Switzerland), to gather for a Design Thinking workshop in January 2020. They participate in interview sessions to gain insight on how GF Piping Systems could further assist RCCL in the coming years. There are great ideas in store. "My vision is that the energy generated by our partnership will be the driving force behind our next innovative product line," says Beutler. ■

✚ More pictures at [globe.georgfischer.com](http://globe.georgfischer.com)

**"The people at GF understand our industry"**

**Leon Pacheco** works as Ship Superintendent at Royal Caribbean Cruises in Miami. He and his team ensure safety and reliability, as well as ship compliance, and work on overall fleet optimization.

**What are the biggest challenges in the construction and operation of cruise liners?**

At the moment we are working on the standardization of ship systems and the standardization of material selection. Even with the existing ships, we replace them because we have so many different systems on board, such as the tap water for showers, the drinking water supply, or the water in the pool. Some of our ships were built in the 1990s. At that time, technology and installation were different – as were public health requirements.

**How has the partnership with GF Piping Systems developed?**

Over the past few years, we have been exploring in depth the direction we should take to meet the specific needs of our industry. That's why I was in contact with GF to get advice on one of our products. We always try to work with the manufacturer to find out what is best for our applications.

**What do you appreciate about the cooperation?**

The people at GF understand the industry and the need for new materials or components. Let's take the new product SeaDrain White. When we transfer this joint process of product innovation on to other areas of the marine sector, everyone working in the industry benefits from it. We have not yet gone in depth into all GF product lines. But I'm sure that if we look closely, we can find out together where improvements in development or model changes are required.

**Leon Pacheco** stands fully behind GF Piping Systems' products because "GF listens to us."



**OUR GOALS**  
CAPITAL MARKET DAY



"We strongly believe that innovations are a key source of our growth," CEO Andreas Müller stated during his speech at the GF Capital Market Day 2019 in Biel (Switzerland) in front of 50 financial analysts and journalists.

# A part of our DNA

**Innovation is key** to the survival of Swiss companies who have to contend with a strong Swiss Franc and wish to be successful on the international market. At GF, innovation has been a tradition for more than 200 years.

**F**irst it was cast iron and malleable cast iron fittings. Today, solutions for clean drinking water, lighter and lower-emission cars and engine components, and energy-efficient high-tech machinery that point the way to the future. Innovation has always been part of GF's DNA, and is now an important pillar of Strategy 2020. "With our innovations, we are addressing the requirements that are evoked or accelerated by megatrends – in the present and in the future," says GF CEO Andreas Müller. "This is our response to today's challenges, such as those associated with population growth, the digitalization trend, and clearly heightened environmental awareness."

GF Piping Systems, GF Casting Solutions, and GF Machining Solutions are well-positioned in their markets for these challenges. Every three years at the Capital Market Day financial analysts, investors, and journalists are given an insight into the latest state of research and development. At the Capital Market Day 2016, GF demonstrated how the company intends to reshape and

implement the innovation process in the future – by shortening development times with the help of Design Thinking.

**Innovations by divisions**

At the Capital Market Day in Biel (Switzerland) at the end of September 2019, more than 50 guests were shown the progress of the massive research and development undertaking. At the newly opened innovation and production center of GF Machining Solutions, GF presented innovations mainly focused on efficiency and sustainability. GF Piping Systems presented the Hycleen Automation System, a measuring and control system for drinking-water installations. It sustainably reduces bacteria in drinking water and saves energy costs. The division also presented the Smart Actuator, an intelligent powertrain for the new Ball Valve 546 Pro. GF Casting Solutions focused on one component in particular: an additively manufactured turbine rear vane. Guests also saw three other lightweight components for aircraft engines, a Cross Car Beam for the Jaguar I-PACE, and an e-engine housing for the Audi e-tron.

GF Machining Solutions offered a glimpse of the additive manufacturing process for complex, lighter products through several exhibits and applications. Using a MILL P 500 U, the division also demonstrated how a Milling machine can be operated in real time via 5G data transmission.

CEO Andreas Müller was already looking to the future at the Capital Market Day 2019. "Design Thinking as a method for the identification of customers' needs is essential in the future. By applying it, we can develop innovative, digitized solutions even faster. Design Thinking is part of our innovation process and part of our learning culture at GF." Where this will lead should become apparent, at the latest, at the next Capital Market Day in 2022. ■

✚ More picture of the Capital Market Day at [globe.georgfischer.com](http://globe.georgfischer.com)

## "It clearly differentiates us in the market"

**W**ith only one cable for electricity and data, it's simple to install. The Hycleen Automation System prevents harmful bacteria from multiplying in the piping, and ensures perfect drinking water quality.

**What makes the system so groundbreaking?**

Joost Geginat: At GF Piping Systems, we see it as a revolution for drinking water installations in hotels, hospitals, and residential buildings, as well as cruise ships. It ensures safe water supply and the automated operation of drinking water installations. Hycleen offers us exciting growth opportunities worldwide.

**How does the customer benefit from this innovation?**

The state-of-the-art circulation control system is quick and easy to install and operate. In addition, it allows all customer data to be logged, evaluated and displayed on a 10-inch touch screen. All system data is remotely monitored.

**What makes it so unique?**

For me it is very special, as it was our first step towards developing digital solutions. Certainly, we can be proud of the development. It clearly differentiates us in the market. It also addresses a key need of today's society – securing safe supply of drinking water – and supports two of the United Nations' sustain-

able development goals: good health and wellbeing, as well as clean water and sanitation.

**What additional innovations is your division currently developing?**

We are working on connectivity. Beside the hardware, we have many challenges related to software, updates and services, which will make our customers' lives easier. In accordance with our Strategy 2020, we will add value to our core product lines. In this regard, we can be proud of the development. It clearly differentiates us in the market. It also addresses a key need of today's society – securing safe supply of drinking water – and supports two of the United Nations' sustain-



**Joost Geginat**, Head of GF Piping Systems, with a valve from the Hycleen Automation System at the Capital Market Day.



**Carlos Vasto**, Head of GF Casting Solutions, shows a Turbine Rear Vane, part of an airplane turbine, at the Capital Market Day.



## “We are driving the technologies of the future”

**T**he division GF Casting Solutions manufactures mainly parts for the automotive and aerospace industries. One of them is a Turbine Rear Vane (TRV). This airplane turbine part is one of the largest additively manufactured parts on the market.

**What is special about the TRV?**  
Carlos Vasto: The TRV represents the Additive Manufacturing portfolio GF is offering with the new AMotion Center facility in Stabio (Switzerland). Thanks to the joint expertise of GF Casting Solutions and GF Machining Solutions, GF offers a unique combination of part development, 3D-printing and manufacturing post-processes – all Nadcap-certified, which is the basic requirement for supplying the aerospace industry.

**What is the benefit for customers?**  
It is about saving time, gaining design freedom and reaching all

quality standards. The TRV is printed in only 48 hours with a 60-micron layer thickness. In addition, it is perfectly executed with a combination of our technologies: First the GF Machining Solutions workflow-optimized DMP Factory 500 printing solution, then the new horizontal EDM, which is specially developed to start the post-manufacturing process of big parts in 3D printing. The combination of our know-how is unique in the additive manufacturing world. Added to this is our many years of expertise in precision casting technology.

**What makes this new 3D printing technology so special?**  
With the acquisition of GF Precicast almost two years ago, GF Casting Solutions entered new markets: aerospace and energy. Precision casting technology combined with Additive Manufacturing is what differentiates GF in this dynamic and fast-growing market. The 3D metal- and sand-printing

increasingly determines the DNA of GF Casting Solutions’ change process – it proves that GF is driving the technologies of the future.

**What can we expect from your division in the remaining strategy cycle until 2020?**  
We continue to focus on operational excellence and innovation. Our key market is the mobility of the future: from automotive, aerospace, and off-highway to the energy segment. Our goal is to make mobility more sustainable through innovative design, the use of new materials and the introduction of new processes for lighter and more fuel-efficient components.

## “We are investing heavily in digital development”

**T**hrough permanent data monitoring, the new Part Inspector Application from GF Machining Solutions enables customers to optimize their Wire EDM manufacturing process.

**What is the idea behind the Part Inspector Application?**  
Pascal Boillat: We are combining our latest technology from machine tool development with the possibilities of the Internet of Things. Let me explain it using our Wire EDM technology as an example. Our EDM Research and Development team developed a new pulse generator, which measures and controls spark distribution along the wire. In parallel, our new digital team developed solutions to acquire high-frequency data. They help to analyze and monitor the data and to stream the information to our

new GF Cloud environment for visualization and further documentation.

**How do customers benefit from this solution?**  
By combining these two innovations, we can offer them new products and services. The Part Inspector Application helps our customers, especially in the aerospace and medical technology segments, to evaluate the quality of their production processes. In addition, the customers’ machining performance reaches a new dimension in quality.

**What makes this product special?**  
We see it as a role model for how we would like to address the market. Based on perfect machine hardware we continue to develop our technologies and offer new

digital products to the market within relatively short innovation cycles. That’s why it is particularly important that we invest heavily in our digital developments.

**What further innovations can we expect from your division in the remaining strategy cycle until 2020?**  
Next year we want to extend the Part Inspector Application to Milling. This will enable our customers to benefit from improved surface roughness and lower costs for cutting tools. To improve our solutions, we will continue to focus on new opportunities in process monitoring and real-time control. By focusing on advanced manufacturing and combining all our technologies, we are strengthening our role as an attractive innovation partner.



**Pascal Boillat**, Head of GF Machining Solutions, presents a Fir Tree Disk for an aerospace turbine at the Capital Market Day. This part is manufactured even more precisely thanks to the new EDM technology Spark Track.



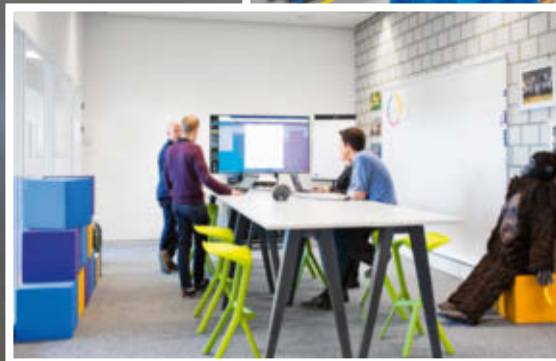


## OUR LOCATIONS

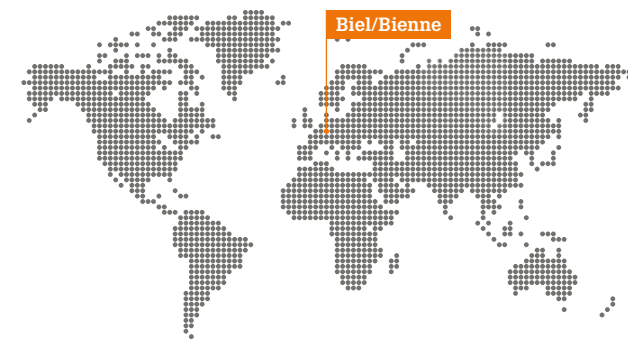
### BIEL/BIENNE (SWITZERLAND)



**Lots of space for new ideas:**  
GF Machining Solutions now unites the entire Swiss Milling and Laser machine production in one 44'000-square-meter campus in Biel.



**The project rooms** are brightly illuminated and provide space for cross-departmental collaboration and creative meetings.



# Three Under One Roof

**This September**, GF Machining Solutions opened its all-new campus in Biel/Bienne (Switzerland). The site is home to the division's headquarters and a modern innovation and production facility – a center for future innovations.

**M**anufacturing in Switzerland was going downhill. That was the widespread conclusion after the value of the Swiss franc soared in 2015. But while most companies were making plans to move manufacturing abroad, the Executive Committee of GF approved an investment to grow at home, setting in motion what has become the new GF Machining Solutions location in Biel/Bienne today.

### In the heart of industry

The division's Swiss Milling and Laser production and assembly come together in one 44'000-square-meter state-of-the-art campus. The former sites in Nidau and Ipsach – both near Biel/Bienne – and the Luterbach site were all transferred to the new location, where some 450 employees now come to work. While office employees began moving to Biel/Bienne in early June 2019, the official opening took place on 13 September. More than 300 guests came to Biel/Bienne to celebrate, including representatives from politics and business and GF customers from all over the world. Pascal Boillat, Head of GF Machining Solutions, declared in his speech: "From this new site, we will consolidate our position as a global player and offer the best solutions to customers worldwide while underlining our Swiss roots."

One highlight of the new GF Machining Solutions location is the 2'800-square-meter showroom. This multifunctional space showcases the division's technology portfolio for customers and serves as a venue for Academy events. "We want our customers to experience us as a complete solutions provider," says Boillat. "This means offering different technologies that can be linked with Automation solutions. The new showroom is significant for our brand."

### Challenges along the way

The site in Biel/Bienne will fill orders for Step-Tec Spindles, Mikron Mill machines and advanced manufacturing machines – all on more than 13'000 square meters of space for production and assembly. "We are set up in a modern way – there is a clear flow from the arrival of goods through manufacturing to shipping the machine," explains Boillat. Bringing three locations together improves quality for GF customers through modern infrastructure and streamlined manufacturing. But the project had its own challenges. "We had standard roadblocks during construction," says Boillat. The biggest challenge was managing a transition in production because machine production could not simply be put on hold due to the move. "Half our warehouse had been relocated and was supporting production in Biel, while the other half re-



**Benigna Carnal**

In February 2014, Benigna Carnal had her first day at the former Nidau site. Today in Biel/Bienne, she oversees order processing in Milling from order receipt to delivery. Benigna likes the modern and spacious building in Biel/Bienne and the exchange with her colleagues, who now all work under one roof. She loves nature and regularly goes jogging with her husband.



**Jonas Meier**

Jonas Meier has been with GF Machining Solutions for 19 years, previously at the Nidau and Ipsach plants. In Biel/Bienne, he works as Head of Application Milling in Application Technology. He particularly likes the new location because of the way various GF Machining Solutions technologies are now physically combined. He enjoys spending his free time with family and friends in the mountains.



**Sabine Messina**  
Sabine Messina has been working for GF Machining Solutions since June 2018 – first as a marketing specialist in Nidau, and since March 2019 as a social media manager. She particularly likes the employee restaurant in Biel/Bienne with its inviting sun terrace. Sabine loves reading crime novels and dining in a good restaurant.



**Gábor Fehér**  
Gábor Fehér is Head of Production in Biel/Bienne, where he especially likes the modern new building. In 2015, he joined Step-Tec in Luterbach. In Biel/Bienne, he is responsible for personnel management and ensures that production runs smoothly and cost-efficiently. He enjoys his free time with his family and also likes hiking, swimming and reading.

Around 300 guests were shown around the new production site when the new headquarters officially opened in September 2019.



› maintained in Nidau as production continued there,” recalls Boillat. Machines were still coming off the line in Nidau after the first Mikron HSM 200 U LP was completed in Biel/Bienne. The coordination challenge kept Boillat and his team busy, but he felt confident about it throughout the process.

**Focus on innovation**

With sales of GF Machining Solutions’ Milling machines almost doubling since 2010, the new Biel/Bienne location envisions a production facility better suited to today’s demand as well as to future innovations. “We are insourcing the production of our HPM 1150 and HPM 1350 machines, for which we previously did not have the production capacity in Switzerland,” says Boillat.

The Biel/Bienne location also serves as an innovation center for the company, using Design Thinking methods that benefit from the perspectives of all departments on site. Designated project rooms offer ample creative and organizational space to teams throughout the duration of their projects. The new showroom allows customers to experience first-hand the modern technologies and machines from GF Machining Solutions that can easily be linked with Automation – and how the machines are produced more efficiently from start to finish. With its new campus in Biel/Bienne, GF Machining Solutions proves that manufacturing in Switzerland is on its way up. ■

**Mikron HSM 200 U LP:**  
The first machine manufactured in Biel/Bienne. It is designed to deliver the highest precision and surface quality.



**AT A GLANCE**

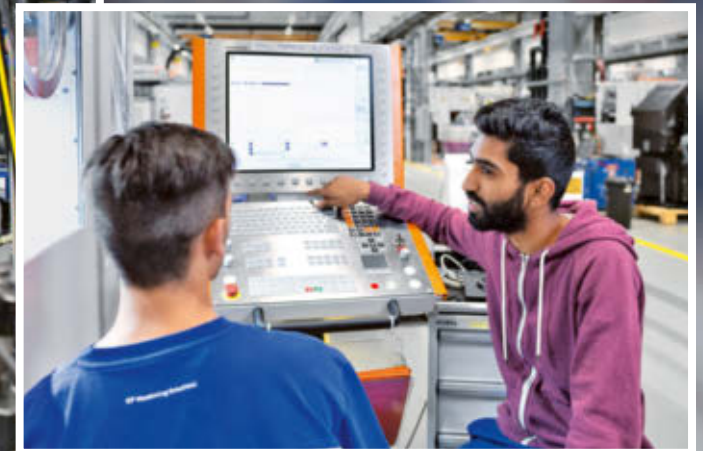
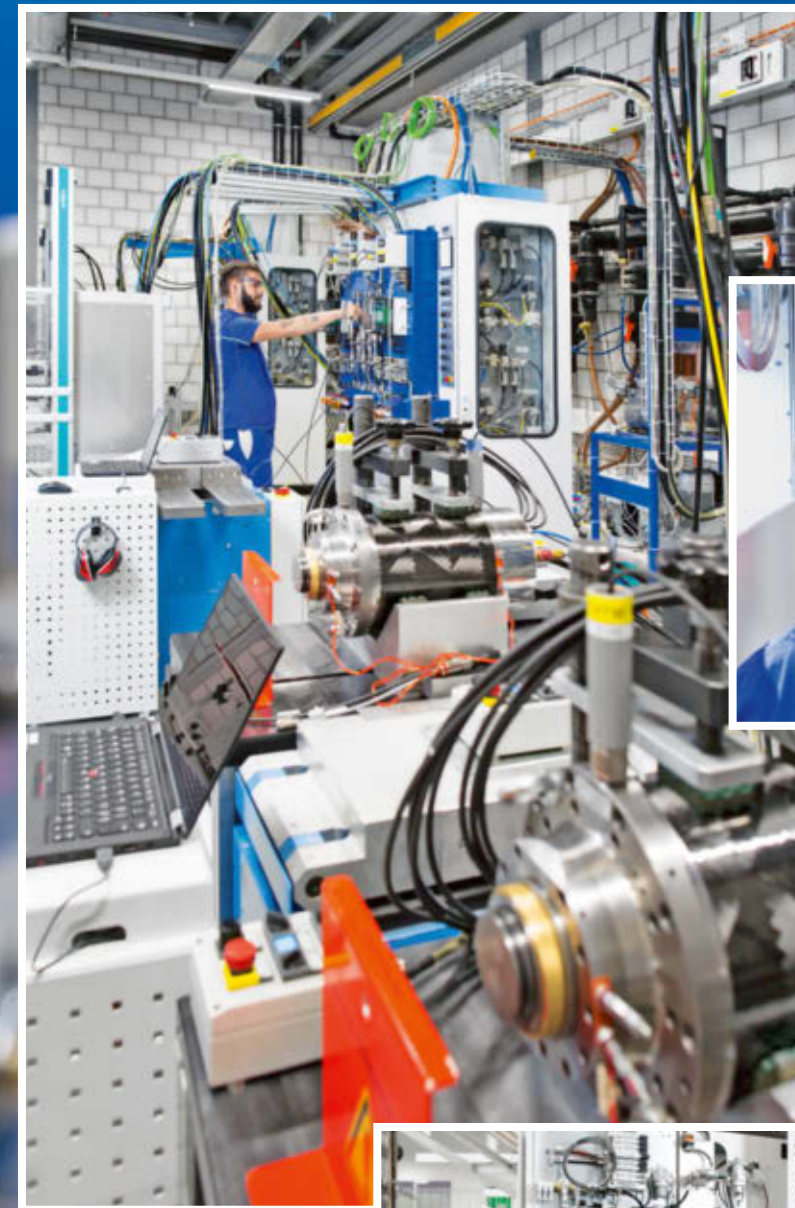
**Location:** GF Machining Solutions in Biel/Bienne (Switzerland)

**Opening:** September 2019

**Employees:** approximately 450

**Production:** Step-Tec Spindles, Mikron Mill and advanced manufacturing machines

**Competencies:** Research and Development, manufacturing, assembly, demonstration, training



**Testing lab for Step-Tec Spindles (left):** This is where employees use complex software to ensure the quality of the Spindles.

**Accurate and concentrated:** The campus in Biel/Bienne brings together high-tech and handcraft, such as here in the assembly of a Milling machine (right).



More pictures at [globe.georgfischer.com](http://globe.georgfischer.com)

**HEART AND SOUL**  
HELPING CHILDREN

Donations help, but attention and beautiful experiences are just as important for the children. That's why Valentina Pincotan spends time with them in playgrounds or organizes trips to the zoo.

**JOIN IN  
AND WIN!**

Are you committed to social causes?  
Does your colleague help those in need?  
Then we would like to hear your story:  
[globe@georgfischer.com](mailto:globe@georgfischer.com)  
All entries will be included  
in our competition on page 40.

**Happiness Should  
Be Shared**

For Valentina Pincotan, there is nothing better than putting a smile on other people's faces. She wants to share her good fortune in being healthy and well-off with those who are struggling. Valentina's mother worked in an orphanage for children with disabilities. When she was a girl, Valentina would often accompany her. This made her realize at an early age what a lucky environment she was growing up in. Her family didn't have much money, but she had loving and caring parents, a roof over her head, and food on the table.

Thanks to this experience, since 2007 Valentina has been looking after girls and boys from poor backgrounds in her hometown

Arad (Romania). She takes them to playgrounds or to enjoy some ice cream. Occasionally, she invites them for an excursion or meal. "I like to give them a family feeling," she says. She has created a Facebook group to encourage people from the region, colleagues, and friends to donate clothes and food for the children. "Some also donate money, which I use to buy school supplies," she says.

For festive occasions such as Easter or Christmas, Valentina asks her community to pack boxes of clothes or toys. Accompanied by supporters and her six-year-old daughter, she hands out the gifts to orphanages and people in poor neighborhoods. "I want to show my daughter that happiness in life is much more valuable when you share it." ■



Valentina Pincotan has worked for GF Precicast in Arad (Romania) since 2014, initially as an Administrative Assistant. In 2016, she moved to the logistics department, where she is mainly responsible for time management and accounting.

More pictures at  
[globe.georgfischer.com](http://globe.georgfischer.com)

**TAKE AWAY**  
RECHARGE YOUR CREATIVITY

**Second Wind for  
Clear Thoughts**

Routine and stress impact our daily lives. Creativity therefore often takes a back seat. But there are simple techniques we can use to clear our heads and develop new ideas.

**JUST ASK**

As children we are all very creative. A NASA study found that 98 out of 100 five-year-olds are extremely resourceful in solving a broad range of problems. Thinking like a child and asking seemingly simple, basic questions creates a solid foundation for creative problem solving: Why is that? Who did this? Why is that not possible?

**CHANGE  
YOUR ROUTINE**

You can expand your mental horizons by breaking your routine. This is because unfamiliar processes trigger your right side of the brain, which is responsible for feelings and creativity. Walk the last few meters to the office or break room backwards or operate the PC mouse with your off-hand. At first, this might feel strange, but it will get your synapses going.

**TAKE BREAKS**

If you are interested in a specific topic, you want to know all about it as soon as possible. At first, there is a great rush of ideas, but eventually the flood of thoughts stagnates. This is the time when you should take a break and do something completely different: listen to music, watch the sky, or jump on a trampoline. By letting go, you are giving your head time to process the thoughts and ideas that are on your mind.

**USE LANGUAGE**

Language and logic make a great team to stimulate creativity. Try forming sentences with words that start with the same letter, such as "Betty builds beautiful bridges before baking barley bread." This can be tricky, but it's fun and stimulates the imagination.

**A CHANGE OF SCENERY**

Whether you work with a computer or operate machines – at work, you and your colleagues often see the same things or take the same paths day after day. Try changing your surroundings. Even a short walk during your next lunch break can inspire you or may give you new ideas!



MY HOME  
NOVAZZANO



**JOIN IN  
AND WIN!**

Would you like to present your home to your GF colleagues? If so, please send an e-mail with "My home" in the subject line to [globe@georgfischer.com](mailto:globe@georgfischer.com). All entries will be included in our competition on page 40.

Novazzano has a 1'704-meter-tall neighbor in the form of Monte Generoso. From its peak, hikers can let their gaze wander over Lake Lugano and its peninsula with Monte San Salvatore (912 meters).



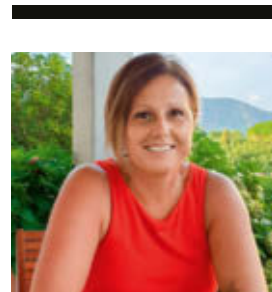
## My Oasis of Quiet

Us locals in Ticino have been calling our canton the Mediterranean "soul" of Switzerland for quite some time now since we get so many hours of sunshine. That's also why Ticino has been dubbed the country's "sun trap." Novazzano (Switzerland) is a small place in Mendrisio, the southernmost district of Italian-speaking Ticino on the Italian border. I've been living there since I was young. And now, I live in Novazzano together with my husband and my daughter. Our home is sandwiched between the Valle della Motta and the Monte della Croce – these "green lungs" make sure there is plenty of fresh air. For me, the area is an oasis of peace and quiet.

Over time, several high-tech companies have settled into the area between Novazzano

and the city of Chiasso – GF Precicast is one of them, and it is the largest employer in the region. I've been working there for twenty years. People from the region itself as well as people from nearby Italy work at GF Precicast and the other companies there. They come to Switzerland every working day as cross-border commuters.

We now also have several employees from the USA, Iran, and other parts of the world. My work in the HR department means I speak to them every day. It gives me the chance to learn about other cultures and what people consider to be important in both their professional and personal lives. These discussions with my colleagues are something I particularly enjoy in my job. ■



**Deborah Mercogli Lazzarini** has lived in Novazzano since 1976. After completing a qualification to become a commercial clerk, she joined the HR department of GF Precicast as a clerk in 1999.

MORNINGS  
**FIORE DI PIETRA**



From Novazzano you can choose from a number of things to see and do on foot or by bike. I would definitely recommend climbing Monte Generoso (1'704 meters). At the peak of the mountain, you'll find a stunning building designed by world-renowned Swiss architect Mario Botto that was recently completed in 2017: Fiore di pietra (stone flower). It features a restaurant with a 360° panoramic view of the Bernese alps (Switzerland) to the north and the Po Valley (Italy) to the south.

## One day in Novazzano

AFTERNOONS

**FOSSIL RECORDS OF  
A LONG-LOST WORLD**

If you're interested in archaeology, you can take in the marvels of one of the most important fossil sites in the world at Monte San Giorgio (1'097). Visitors have the chance to explore a pre-historic world that existed more than 200 million years ago and the exceptional well-preserved fossil records they will find there. The fossil site was included on the UNESCO World Heritage List on the Swiss side in 2003 and on the Italian side in 2010.



More impressions of Novazzano can be found at [globe.georgfischer.com](http://globe.georgfischer.com)



EVENINGS

**ENJOY A GLASS  
OF MERLOT**



Ticinese grotti are traditional rustic restaurants housed in stone structures, where patrons can sample typical regional dishes like polenta and stewed meat, marinated game and pickled fish, or a delightful mushroom risotto, accompanied by a bottle of Merlot produced locally in the region. And if you're looking for culture and sophistication, we have plenty to offer. The nearby cities of Lugano (Switzerland) and Como (Italy) are great places to spend a lovely evening looking out over the two famous lakes.

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## COMPETITION

# Take Your Chance!

Win a Garmin GPS fitness watch, a Philips wake-up light, or a GF laptop bag. A prize draw will be held among all employees who send in entries under the sections **Hello!**, **3 × 3**, **Heart and soul**, and **My home**.

Send an e-mail to [globe@georgfischer.com](mailto:globe@georgfischer.com) with the appropriate subject line. We look forward to hearing from you. The winners will be announced in the next Globe.

### Here are the winners of the last competition:

**1st prize:** Alejandro Maya (GF Piping Systems in Mexico)  
**2nd prize:** Ayu Primasari (GF Piping Systems in Indonesia)  
**3rd prize:** Joachim Nuebling (GF Piping Systems in Japan)

Further entries which could not be included in the printed magazine can be viewed online at: [globe.georgfischer.com](http://globe.georgfischer.com)

The closing date for entries is the end of January 2020.



**1.**  
**Garmin  
Forerunner  
645 Music**  
with GPS and  
music player



**2.**  
**Philips HF 3520  
wake-up light**  
Wake up naturally with  
a simulated sunrise



**3.**  
**GF laptop  
bag**  
Designed to fit  
15" laptops

### Conditions of entry

The competition is organized by GF. All employees of GF are entitled to take part. The winner will be established by means of a draw among all submissions entered within the deadline. Cash payment, payment in kind, or an exchange of prizes are excluded. Participants agree to their name being published if they win. Any recourse to legal action is excluded.

## More on Globe Online!

You can conveniently enjoy reading the magazine for GF employees on your smartphone or tablet, too. Scan the QR code or enter the link to get started!



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